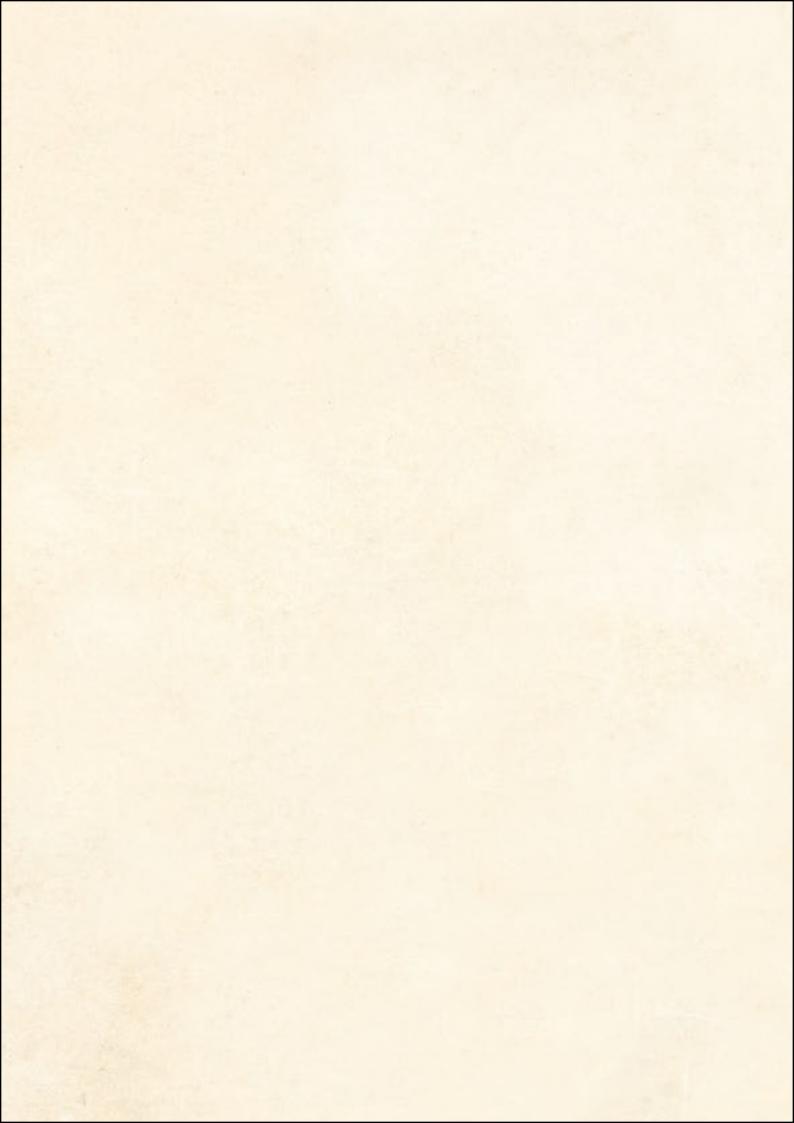


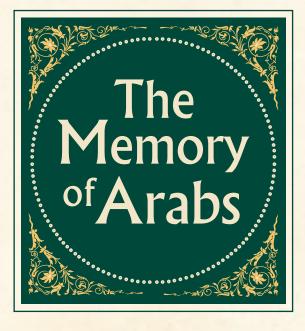
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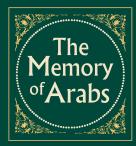




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### Foreword

In line with the Bibliotheca Alexandrina's (BA) mission to become a center of excellence in the production and dissemination of knowledge, an interactive hub between peoples and civilizations, assuming a prominent position in the field of research and scientific publishing, by issuing books, periodicals, and encyclopedias on various aspects of culture, the BA was able to assume its role as a leading international institution in the field of paper and digital publishing, and to create a state of cultural and academic mobility.

In this context, the library publishes the fourth issue of *The Memory of Arabs* magazine affiliated with the Memory of the Arab World project led by the BA Academic Research Sector. It is a scientific refereed journal that deals with the cultural and civilizational heritage of Arab countries. The first issue of the magazine was released at the end of 2018, with the aim of emphasizing the importance of restoring Arab memory to the current Arab present. Meanwhile, this issue is devoted to the topic of equestrianism and martial arts in the era of the Mamluk Sultans, expressing a side of the cultural events and activities organized by the BA.

The publication is made available to researchers and those interested through scientific studies and peerreviewed journals; this issue included some of the research presented within the works of an international conference held at the BA on 24 - 25 June 2019.

The topic of equestrianism in the Mamluk era was chosen as the focus of this issue of *The Memory of Arabs* magazine and continued to the next to shed light on military heroism in the face of attacks from the East and West, spanning a wide swath of the Arab world. The importance of these studies is that they clarify the prominent place of military sciences in the heritage of Islamic civilization. The research in the fourth issue of the magazine reviews the interest of the Mamluk sultans in military power and the equestrian arts, as well as their interest in educating and training their Mamluks in all aspects of such arts, the use of various weapons, and different methods of fencing.

Research topics in this issue vary to include assorted studies in both Arabic and English on equestrian and military plans, martial arts, and horsemanship in the Mamluk era, in addition to the Mamluks' interest in: choosing the finest types of horses distinguished by the quality and strength of their breeds; the arts of training and throwing depicted in sources and manuscripts concerned with the development of the arts of war; the leadership of armies, training soldiers, and organizing and managing battles; the use of weapons and various fighting tools, such as swords, spears, arrows, and military machines; racing fields and training in Mamluk Cairo; and the development of tactics and military plans in the Mamluk era.

> **Prof. Mostafa El Feki** Director of the Bibliotheca Alexandrina



# The Mamlūk Military Saddle in Archaeology and Art

Dr. David Nicolle



# The Mamlūk Military Saddle in Archaeology and Art

### Dr. David Nicolle\*

This paper focuses primarily upon two broken saddles, which were found amongst other fragmentary military material in the Citadel of Damascus.

The hoard was, in fact, discovered in 2001 in a sealed stairwell in Tower 4 by a team of Syrian archaeologists led by Dr. Aḥmad Taraqjī. Tower 4 is one of the southern towers of the Citadel. The material was thereafter stored in the Conservation Department of the National Museum of Damascus, Syria. More recently, I have been informed that the material from Tower 4 is now in a secure location in the National Museum. Like a smaller fragment, which was probably found in the castle of Qal'at Rahba overlooking the Euphrates Valley in eastern Syria, the saddle fragments from Damascus are believed to date from the 13<sup>th</sup> and 14<sup>th</sup> centuries CE. However, further carbon 14 tests will be needed to confirm and clarify such dating.

The entire hoard of material from Tower 4 was the subject of my research until the present crisis in Syria meant that this work had to be paused. It has remained "on hold" for several years, though I hope it might be resumed in the near future. If and when my research resumes, it will initially focus upon these saddles. So far, the saddle fragments have only been studied in a cursory manner, with a few photographs being taken under far from ideal conditions. No dimensions or weights have been measured, nor has the material of which the saddles are constructed been accurately identified. All this remains as work to be done. What is clear, however, is that at least two of the largest fragments go together to form what might prove to be an almost complete saddle. Before going any further, I want to offer my particular thanks to two of the many people who have assisted me in my research so far: Dr. Niall Christie for his help with

the inscriptions on these saddles and the other saddle fragment from elsewhere in Syria, and Mr. Sa'id Hunaidi, who must also be thanked for his on-going comments on how such Mamlūk-period saddles were used in practice. These comments were based upon his own research into the reality of many *furūsīyah* cavalry training exercises.

Back in 2012, I presented the early stages of my research into the evolution of the Mamluk military saddle to the CHESFAME Conference in Belgium. The resulting paper was published in 2016. Now I want to offer an updated-though still preliminary-analysis of the Syrian saddle fragments within an overview of the origins and development of this style of saddle, as indicated by archaeological and pictorial evidence of the time. Furthermore, these saddles need to be seen within the broader cultural and military phenomenon of furūsīyah. I will conclude by offering hypothetical reconstructions of the two main saddles and by repeating my own belief that actual physical reconstructions should eventually not only be made, but should also used on horseback by horsemen who have a thorough knowledge of the practical application of *furūsīyah* cavalry techniques.

Before looking at the saddle fragments from the Citadel of Damascus, and the smaller fragment from eastern Syria, it is necessary to describe the evolution of the medieval Islamic military saddle as it is so far understood. Of course this story goes back to the earliest origins of the saddle, but for our purposes it can start with what is generally regarded as the basic and earliest form of woodframed Turco-Mongol saddle in which the main wooden elements were laced together with rawhide thongs. A number of such elements, even including virtually complete saddles, have been found by archaeologists in what might be called the broader Eurasian steppes. All are associated with nomadic, semi-nomadic or quite recently settled peoples. As far as I am aware, no other elements of wood-framed saddles survive from within the Islamic world prior to the discovery of those saddle fragments in Mamlūk Syria.

Beyond the geographical, chronological and cultural frontiers of Islam, it is generally believed that saddles used by the Avars in south-eastern and central Europe were more advanced that those of the preceding Huns. They were of a wood-framed form, which incorporated two massive wooden plates connected by crescent-shaped saddle-bows; namely the pommel at the front and the cantle at the back. Most scholars maintain that such Avar-style saddles were probably adopted by the Byzantines, along with Avar stirrups, during the 6<sup>th</sup> and 7<sup>th</sup> centuries CE. However, my colleague Sa'id Hunaidi believes that slightly different wood-framed saddles were developed at the same time in these regions and that any significant variations between the Byzantine and the Avar or "nomad" saddle reflected differences in the riding and combat styles of those people who used them.

Somewhat later, considerably further east and in a remarkable state of preservation, are two wood-framed saddle from Khovd Sum in western Mongolia which probably date from the 11<sup>th</sup> to 13<sup>th</sup> centuries CE. At least one of them includes numerous surviving straps as well as its stirrups. They are understood to be kept in a local museum but have not, to my knowledge, been extensively publicized. What is clear is that the Khovd Sum saddle—which has been published—is similar in style to what is often called the "Sart Saddle", though also with certain differences.



Reed cutting (Al-funûn manuscript).



Military art: Incendiary weapon (Al-funûn manuscript).

This strengthens the belief that military saddles developed in different ways amongst the steppe cultures to the east and north-east of the medieval Islamic heartlands, and amongst peoples within the Islamic heartlands. For example, the so-called Sart type of saddle emerged in Islamic Transoxania and what would become the Khwārazmian Empire<sup>(1)</sup>. It was used from at least the 13th or 14th century CE until modern times in the Samarkand and Farghana areas of Uzbekistan in Central Asia. As such, the so-called Sart Saddle had been characteristic of this eastern Islamic region during the later medieval period<sup>(2)</sup>. Here, the archaic padded cushions which formed the seat of some much earlier Central and Inner Asian saddles had been replaced by a leather seat that covered the entire space between the pommel and the cantle, and also went over the two panels or boards. It was also characterised by the fact that, while the pommel was made of two pieces of wood, the cantle was made of a single piece of wood, or two pieces rigidly fixed together. The cantle thus formed a relatively flat or sweeping extension of the seat.

This so-called Sart Saddle would seem to have been either the same as, or a direct development of, the so-called <u>Kh</u>wārazmi saddle. Since around the 9<sup>th</sup> century CE, the latter had become the basic military saddle of the eastern and central regions of the Islamic world.

The leather seat and its main rawhide supporting element has been lost on the better known of the saddles from Khovd Sum. Whether such a technological development was directly associated with a wider adoption of stirrups, or merely permitted the development of such stirrups remains a matter of debate. A reconstruction of this saddle from Khovd Sum was published by K. Uray-Köhalmi. It shows the main seat support and some other leather elements having been replaced, though still with the leather covering removed so that these can be seen<sup>(3)</sup>. Lacking visible decoration, this saddle recalls Nizām Al-Mulk's descriptions of the plain zīn saddle of untanned leather or rawhide which were said to have been used by junior ghulāms under training in the 10th century Sāmānid army<sup>(4)</sup>. It also has only one quite slender girth, which suggests that its rider did not anticipate participating in close-combat "shock cavalry" tactics.

Four centuries later in Al-Andalus, Ibn Hudhayl recorded that Ibn Akhī Hizām, the 9th century CE military expert who is widely regarded as the "father" of classical Islamic furūsīyah, maintained that a cavalryman should never go to battle with only one girth<sup>(5)</sup>. The earlier Byzantine military saddle was also held by girths which consisted of four straps which, when buckled together, resulting in two girths<sup>(6)</sup>.

To ride for extended periods it is necessary to ensure that both the rider and the horse are comfortable. In this context Sa'id Hunaidi pointed out that it was easier to make the pommel in two pieces without causing discomfort for the horse or rider, whereas a two-piece cantle, even when joined, glued and sanded with care, could cause the rider discomfort with extended or continuous usage if there was any flexibility in the structure.

Nevertheless, the cantles of the saddle fragments found in Tower 4 of the Citadel of Damascus are either clearly made of two pieces of wood or seem to have been so. This assertion is, of course, subject to closer study. I believe that these fragments date from the Mamlūk Sultanate, probably from the second half of the 13<sup>th</sup> century or the very early 14<sup>th</sup> century CE. Available photographs show the panels and cantle of one of the largest fragments from above and from beneath, the supporting panels being quite obvious. Unfortunately, unless one of the two surviving pommels comes from the same saddle, this specimen remains incomplete. Closer study will also be required in order to determine whether there is evidence for the use of a single or a doubled girth.

It is also worth noting that the archetypal Khwārazmi saddle was described as being flat and wide, with the pommel and cantle only slightly raised. Interesting as this remark is, its usefulness is limited by the fact that it is not clear what the Khwārazmi style was being compared with. The saddle-tree or support of such a saddle was apparently called the *jahāz* in Arabic during the Mamlūk period. On the other hand, this word was also used for a simple wood-framed camel saddle, which suggests that the basic saddle-tree had a structural similarity with the basic camel saddle.

Mounted wrestling (Al-funûn manuscript).

Another photograph shows the front of the pommel of a wood-framed saddle from the Citadel of Damascus which might originally have been from the previous object where only the boards and cantle remain, or be the remains of a different saddle. The outer face or front of the pommel of a second or third wood-framed saddle from the Citadel of Damascus is decorated with embossed leather on which the decorative motifs include a harpy. However, this saddle pommel is not only raised but has a broadened summit. Several commentators have suggested that such a broadened shape provided additional protection to the rider's groin. It would also have enabled him to let go of the reins by looping them over such a pommel with less risk of losing them. The latter purpose may have been the more important and it may have been normal for the reins to be "dropped" in this way while a rider was wielding a spear with both hands, or had to let go of his reins for any other reason. In this context, it is important to understand that a fully trained cavalryman controlled his horse as much with his legs as with his hands via the reins.

Similarly, a horse-archer could shorten his reins by knotting them, then slipping them over a shaped saddle pommel so that both hands were free to shoot his bow, take arrows from his quiver, and so on. My colleague Sa'id Hunaidi suggested a third purpose in which such a raised and extended pommel provided the rider with stability if he was being strongly pushed from behind. The inner face of the same *qarabūs* or saddle pommel clearly shows that it is made of two pieces of wood. Sa'id Huneidi further noted that, based upon his own study of the reality of *furūsīyah* cavalry training exercises with spear or lance, the qarabūs is one of the points of reference, which are central to a practical understanding of *furūsīyah* manuals. All the rider's balance-movements are in relation to a central position or point which is the *qarabūs*. Furthermore, the horseman's weapons are used within that zone of balance and in relation to the qarabūs. Nothing will work properly unless the rider starts a move in relation to the *qarabūs*. This is mentioned in the *furūsīyah* manuals as a matter of fact but, as it was also considered to be common knowledge, it did not require or receive further clarification. It took Mr. Huneidi more than two years of trial and error before discovering that everything went well once there was good form and balance. The second thing that took time to learn was that this "human body code" was much more important than either the type saddle or indeed the horse.

Finally, it is worth noting that the *Nihāyat al-Su'l* cavalry training manual, dating from the early Mamlūk period but largely consisting of texts written several centuries earlier during the high point of 'Abbāsid power, stated that the *qarabūs* could also be used as a "support" if a rider was obliged to take off his mail hauberk while remaining in the saddle<sup>(7)</sup>.

The most striking of the saddle fragments from the Citadel of Damascus includes the cantle and broken panels of a wood-framed saddle from the Citadel of Damascus. Here, the cantle has painted decoration consisting of inscriptions and the so-called Lion of Baybars. However, the cartouches containing the Lion of Baybars seem to have been added at a later date than the inscriptions. In fact, they sometimes overlap parts of the inscriptions, suggesting that the latter were of less importance than they had been when first painted. This Lion of Baybars motif also appears on some of the rawhide and wood helmets or hard hats which were found in the same tower of Damascus Citadel, and in the same location in eastern Syria where a different saddle fragment was found.

The decoration on another substantial fragment, again with the so-called Lion of Baybars, shows that it is clearly from the same saddle. In fact, if these elements were put together we might have a virtually complete saddle. For this reason I would suggest that this is the prime candidate for reconstruction, to produce an exact replica which could then be used for practical riding tests.

The inscriptions on these particular fragments are of great interest, and here I am indebted to Dr. Niall Christie. The writing above the lions reads, "[...] *ibshar bi-jadd huşūl al-dahr wa-haqq man waşala mulk fawqa al-arḍ wa'l-mudūd yā'bā' fī'lmajd nandū bihi* [...] [at this point the words are partially covered by the heraldic lion, but continue] [...] *li-jahd maghaṭa bihi* [...]". The final part of the inscription is missing, but the readable text can be translated as, "[...] Be joyful at the good fortune of the coming of the age and the rightness of one who has achieved dominion over the land and the extents [of the realm]. O you fathers in majesty, we call to him [...] [covered by blazon] [...] for an effort through which he extended [...]". Next to the lions the text read, after the point where it is obscured by the heraldic blazon, " [...] wa'l-im [...] āfil wa'lsa'd al-fādil wa [...] [covered by the blazon] [...] al- [...] [a further gap] [...] lahu al-shāmil wa'lni'ma al-dā'imiyya [...]". This has been translated as, "[covered by the blazon] [...] And the [...] and abundant good fortune and [...] [a further gap] [...] universal [...] to him and everlasting blessing [...]". The inscription under the cartouches reads as, "Al-naṣr wa'l-salāma wa'l-tawfīq", which has been translated as, "Victory, safety and divinelygranted success".

A closer inspection of the interior of the pommel of this painted, wood-framed saddle might show whether this *qarabūs* or saddle pommel is made from one or two pieces of wood. At present this cannot be seen in the available photographs, but its remarkably good state of preservation includes what appears to be a smooth layer of gesso or strengthened plaster, comparable to that seen on many of the rawhide helmets which were found in the same location.

The exterior of half the cantle of a woodframed saddle from an unrecorded location in the Euphrates valley in eastern Syria was part of a much larger hoard of military equipment. This hoard was probably found in Qa'lat al-Rahba and I have told that this object is now in the National Museum of Qatar, Doha, or in a private collection in that country. The available photographs clearly show that the cantle originally consisted of two substantial pieces of wood, laced together with sturdy rawhide thongs. A carbon-dating test on the wood of this saddle fragment produced an optimum date of 1245 CE, with a 95% probability of a date between 1165 and 1290. So it is probably from the period Ayyūbid rather than the Mamlūk rule in this part of Syria. The fragment also retains enough of its embossed leather covering to show that it was once a finely decorated piece of horseharness.

The inscriptions have, however, proved to be very difficult to read. Nevertheless the straight inscription across the lower edge appears to include the phrase, "....man waşala mulk fawqa alard..." which might be translated as "...One who has achieved dominion over the land...". However, several holes have been punched through the inscriptions, presumably at a later date which again suggests that the writing was no longer considered important by the time those alterations were made. Another photograph, showing the interior of this half cantle of a wood-framed saddle, confirms that it was made of two pieces of wood, apparently joined together by rawhide thongs, but each also nailed to a horizontal board or panel.

#### Saddles in Mamluk and Related Art

For the purposes of this paper I have selected a number of images which I hope will show the variety of saddles used in the Islamic Middle East from the 13th to early 16th centuries CE, and the different ways in which they were illustrated. The earliest is an inlaid bronze candlestick base which, though purchased in Yemen, was probably made in early 13th century CE Mosul. It is now in the Museum of Islamic Art in Doha, Qatar. I believe that it was either made for, or was dedicated to the memory of, Ma'sūd Ibn Arslan Shāh Al-Malik Al-Qāhir 'Izz al-Dīn [Ma'sūd II] who reigned over Mosul and some surrounding territory, at least nominally, from 1211 to 1218 CE<sup>(8)</sup>. This particular rider, who is one of several highly detailed military figures, is wielding a long spear with his right hand. His riding position shows that his saddle is quite deep, with the pommel and cantle almost reaching his waist, while he rides with virtually straight legs and long stirrup-leathers.

A drawing of Sagittarius, in a Mamlūk copy of the *Kitāb al-Sufār* manuscript was made between 1300 and 1350  $CE^{(9)}$ . This drawing shows a saddle with a pronounced, almost vertical, pommel and cantle, plus stirrups which are level with the bottom of the animal's body. A manuscript of the



A Mamluk by Carle Vernet.

Sulwān al-Muțā by Ibn Zafar was also made in the Mamlūk state and dates between 1325 and 1350  $CE^{(10)}$ . Here, however, the perspective of the pommel and cantle of the saddle has been distorted, as was often the case in Islamic representational art from this period. Hence both the front and rear openings of the "tunnel" which ran right beneath the saddle to raise its seat clear of the animal's spine can be seen. Nevertheless, the pommel and the cantle are again both very pronounced.

One of the numerous decorated ceramic fragments from 14<sup>th</sup> century Mamlūk Syria is chiefly of interest because of its very rare portrayal of a horse-armor or caparison decorated with another well-known Mamlūk heraldic cartouche<sup>(11)</sup>. Nevertheless, the saddle is also worth noting because the ceramic artist has, by accident or design, shown a saddle with a pronounced pommel but a virtually flat though extended cantle.

There are, of course, many interesting representations of military and other saddles in Mamlūk art dating from the 15th century CE. One such is a copy of the *Kitāb al-Baytarah* made in the mid-15<sup>th</sup> century<sup>(12)</sup>. It is again very stylized, as a consequence of which the perspective of the pommel, if not of the cantle, has been distorted so that the front of the tunnel beneath the seat is visible. On the other hand, unlike the saddle on the preceding ceramic fragment, the pommel and cantle are both very tall.

A copy of the *Kitāb al-Makhzūn*, a Mamlūk *furūsīyah* manuscript dating from the 15<sup>th</sup> century CE, can be found in St. Petersburg<sup>(13)</sup>. In this slightly updated version of much earlier works on furūsīyah, the horse's saddle is virtually identical to that in the previous manuscript. More unusual and, for a variety of reasons perhaps more interesting, is a Mamlūk copy of the Persian Shāhnāmah made around 1510 CE<sup>(14)</sup>. There are numerous superbly illustrated copies of Firdawsī's epic poem dating from the later medieval and early modern periods, but the overwhelming majority were made in Iran, Transoxania, India or Turkey. This particular one was, however, made for one of the last Mamlūk sultans of Egypt and Syria. It incorporates a small number of distinctively Mamlūk elements, but whether the saddles and horse-armour should be counted amongst them is unclear.



Sabre and fencing with sparring weapons (*Al-funûn* manuscript).

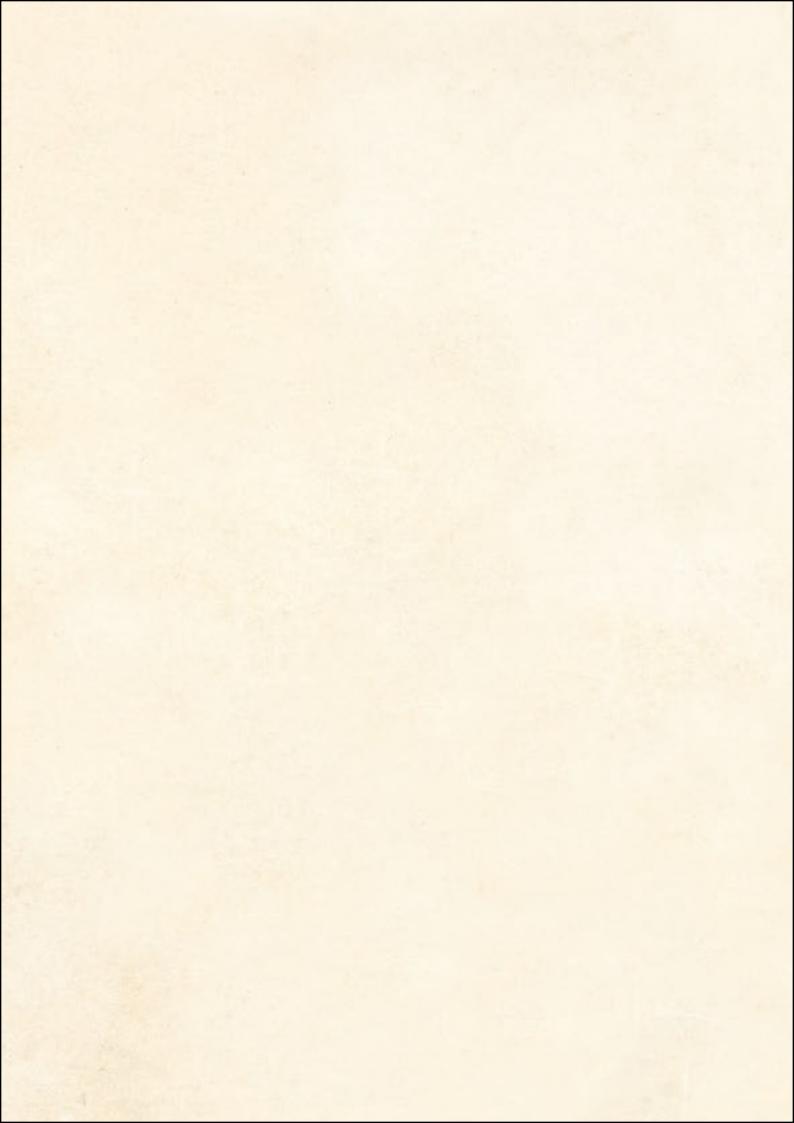
#### Reconstructions

I will conclude my article by referring to the artistic reconstructions of two of the broken saddles found in Tower 4 of the Citadel of Damascus. These pictures were made by Grahame Turner and are based upon my own references and opinions concerning the original appearance of the saddles in question<sup>(15)</sup>. The first shows a suggested reconstruction of the saddle with embossed and tooled leather decoration, but it is shown here without its leather seat and other coverings. By this means the internal wooden structure can be shown. The second is a suggested reconstruction of the more complete, but nevertheless broken saddle whose painted decoration includes the Lion of Baybars motif. In this case the internal wooden structure is covered by the saddle seat.

#### **Endnotes**

- \* Dr. David C. Nicolle is a British historian specialising in the military history of the Middle Ages.
- C. Uray-Köhalmi, "La périodisation de l'histoire (1)des armements des nomades des steppes", Études Mongoles 5 (1974): 151-152.
- (2)Ibid.: 153.
- Katalin Uray-Köhalmi, "Two Saddle-Finds from (3) Western Mongolia", Acta Archaeologica: Academiae Scientiarum Hungaricae 20, no. 1-4 (1968): 347-358.
- Nizām Al-Mulk, Siyāsat Nāma, edited by Sayyid (4) 'Abd al-Rahmān Khalkhāli (Tehran, 1932): 74; Nizām Al-Mulk, The Book of Government of Rules for Kings: The Siyar al Muluk or Siyasat-Nama, translated by Hurbert Darke (London: Routledge, 1960): 106-107.
- 'Alī Ibn 'Abd Al-Raḥmān Ibn Hudayl Al-Andalusī, (5) Gala de Caballeros, Blason de Paladines, translated by Maria Jesus Viguera (Madrid: Nacional, 1977): 139.
- François Aussaresses, L'armée byzantine : À la fin (6) du VI<sup>e</sup> siècle d'après le Strategicon de l'empereur Maurice, Bibliothèque des Universités du Midi 14 (Paris, 1909): 58.
- (7) Muhammad Lutful-Huq, A Critical Edition of Nihayat al-Sul Wa'l-Umniyah fi Ta'lim A'mal al-Furusiyah of Muhammad b. 'Isa b. Isma'il al-Hanafi (PhD. Diss., University of London. School of Oriental and African Studies, 1956): 32; David Nicolle, "The Reality of Mamluk Warfare: Weapons, Armour and Tactics", Al-Masāq 7, no. 1 (1994): 81-82.

- David Nicolle, "The Iconography of a Military (8) Elite: Military Figures on an Early Thirteenth-Century Candlestick: The History and Provenance of the Candlestick", Mamluk Studies Review 18 (2014 - 2015): 57-89; David Nicolle, "The Iconography of a Military Elite: Military Figures on an Early Thirteenth-Century Candlestick (Part II): Iconography of the Candlestick: The Horsemen", Mamluk Studies Review 19 (2016): 59-164; David Nicolle, "The Iconography of a Military Elite: Military Figures on an Early Thirteenth-Century Candlestick (Part III)", Mamluk Studies Review 19 (forthcoming).
- (9) British Library, Ms. Ar. 5323, London.
- (10)Freer Gallery, Ms. 54, iv, Washington.
- (11) Museum für Islamische Kunst, Berlin.
- (12)University Library, Ms. 4689, Istanbul.
- (13) Institute of Oriental Studies, St. Petersburg.
- (14)Topkapi Library, Ms. Haz. 1519, Istanbul.
- David Nicolle, Mamluk 'Askari 1250 1517, (15)illustrated by Peter Dennis, Warrior 173 (Oxford: Osprey, 2014).





# دوبرية علمية مُحتَّمة - العدد الرابع - ٢٠٢



