

BIBLIOGRAFIA

- P. G. W. ANNIS: *Naval Swords. British and American Naval Edged Weapons 1660-1815*. London, Arms and Armour Press, 1970, 80 pages, 57 ills., bibliography.

During the last years the Arms and Armour Press in London has issued several little books dealing with various kinds of weapons such as rapiers, pistols, Japanese armours, French uniforms, etc. It is a useful series, no doubt of great interest to arms collectors, enthusiasts of uniforms, military effects, etc.

Now the British specialist in maritime weapons, Mr. P. G. W. Annis from the Royal Maritime Museum has published a fine little book in this series. It deals with a topic, which has been rather neglected in arms literature before: *the naval edged weapons*. Collectors of this category of weapons now have got an aid, when looking for information. Collectors and other interested peoples had to search in catalogues and occasional publications more or less treating peripherally this subject. The author has chosen the period between 1660 and 1815, the days of the Restoration under the reign of the kings Charles II and James II until the defeat of Napoleon. It is just the epoch in which the particular naval weapons were created, the time which meant the basis for the later true regulation weapons, such as swords and daggers for the British navy whether for officers or for the crew. The merchant marine to some extent followed the military customs. The reason why the author has treated this period is that it—as he himself says—covers the appearance of a formal naval organization and growth with special types and shapes adequate for naval use. The British navy in these centuries was in steady growth. In North America—though a little behind Britain,—maritime traditions more or less were similar to the British ones. North American seamen often were employed in the British navy and mercantile marine. Uniformity of weapons came up in both countries almost contemporary. A distinction between British and American weapons often is rather difficult, and sometimes there is almost no difference. In other cases there is here more similarity with e.g. French than with British types. The revolutions and wars of the 18th century Europe stimulated the development not only in the armies at land but even in the navies. Much inspiration was given by the French Revolution in 1789. Some special features characterized the development in general (as seen in various European countries) and in

particular in the two countries here concerned. However, the particular British style was never abolished. Probably the new influence from France is particularly noted in North America, where French origin is easily seen on some types. Regulation pattern swords came up early in the 19th century. The individuality among the officers in their choice of private or duty weapons came to an end after the defeat of Napoleon. A series of comparatively peaceful years gave possibilities for further development in the 19th century.

The author treats both British and American weapons, but—as he says—with the greatest importance attached to the British navy, and sometimes referring to the merchant crew and its weapons, which followed those of the navy. In the introductory chapter he traces up the history of the weapons, and here several interesting points are to be noted. There are explanations to the kinds of material used, the blades, most of them from Germany, and the scabbards, when there were scabbards at all. The «hunting hanger» is described as a naval weapon in spite of its «hunting devices». It is documented in contemporary portrait paintings. The long slightly curved French shape was in favour in England and America. Even George Washington wore such a hanger. Small-swords could be found worn among the officers, but it was particularly in Spain that elegant small-swords were in use in the navy. There are fine and elegant naval swords for officers, with nice hilts and with such devices as anchors and ropes. But even swords with lion's heads are to be found. There are dagger types corresponding in style and material to the swords and sabres. For once the simple types of hangers and cutlasses with their plain iron mountings, painted black in order to protect them against the salty air of the sea, are taken at hand. In regard to naval weapons the possibilities for decoration are far more limited than on weapons for the armies. But anchor and rope belong to the most significative devices. There is a description of the sword-knot, its material and use, with correction of former misinterpretations. The presentation swords are worthy of attention. Many fine and valuable presentation swords were given as rewards to well-merited officers and seamen. A beautiful specimen was given in 1797 to Admiral, Viscount Duncan in reward for his victory in the naval battle at Camperdown, by the City of London. Its translucent and polychrome enamel plaques, one with a reproduction of his flagship «The Venerable», is very fine.

City of London made quite a lot of elegant small-swords for rewards, and so did the Assemblies of various West Indian Islands as well as the Honourable East India Company. The author has illustrations of several of the presentation swords, some of them given by the Patriotic

Fund at Lloyds, with an explanation of this Fund and its system of rewards in four categories. There is a fine scabbard of the so-called Trafalgar Pattern together with some interesting sabres presented by this Fund which was established in 1803 by Lloyds in London. The book terminates with a list of the principal collections of naval weapons in England and United States, and as the last part it has a short chapter about the wearing of the naval sword. The book has a fine and carefully selected series of illustrations and the various types are excellently documented by portrait paintings of high rank officers from the Royal Navy as well as some well-known persons from the merchant navy. In these portraits are demonstrated not only the various types and shapes in use, but even the manner of wearing swords as well as daggers. To each illustration there is a long and explicative caption with much information about the matters represented and with their history.

With the encreasing interest for naval matters and weapons no doubt this book will find its way to the book-shelves of many collectors and other interested readers.

A. BR. H.

CLAUDE BLAIR: *A Royal Swordsmith and Damascener: Diego de Çaias*, in: «Metropolitan Museum Journal», vol. 3 (1970), pages 149-198, 76 ills. Appendix with list of objects by or decorated in the manner of Diego de Çaias and Damianus de Nervē.

The new «Museum Journal» from Metropol. Mus. of Art in New York in its number 3 contains a most interesting article by the deputy keeper of the department of metal work in Victoria and Albert Mus. of London, Mr. Claude Blair. It is an erudite article about the Spanish Renaissance sword-maker and damascener Diego de Çaias (modern Span. Zayas), his probable pupil and his workshop. The elaborate article no doubt has been a true detective work the author having investigated almost all imaginable possibilities to follow this artist in regard to life, art and style, collaborators, school, etc. To many arms investigators the name of Diego de Çaias was merely a name among other names of arms' makers, though particularly connected with the precious mace, formely in Coll. Spitzer, now in Metropol. Mus. of Art, New York, and a few other pieces. The artist's name has been mentioned in various books or articles, e.g. by Boenheim, in his: *Meister der Waffenschmiedekunst*, as belonging to an eminent goldsmith, no doubt from the important center in Valladolid. Baron Ch. Davillier in 1879 drew attention to him in his book about Spanish goldsmith-work, treat-

ing the mace now in Metropol. Mus., then in Coll. Spitzer. He placed him among the goldsmiths and damasceners of Valladolid or Toledo.

On account of his name de Çaias or Zayas, he or his family was sometimes thought to come from the village of Zayas near Soria. There is however no evidence for that. Apparently he cannot be connected with the family of Çaias from Ecija in Andalucía. (In the 16th century the name is known e.g. at the court of Felipe II, whose state-secretary was Gabriel Zayas.) Thus the name of Zayas doesn't say anything about his origin. (An apprenticeship in Toledo or Valladolid cannot be documented, but there may be some probability for it.) To the very little, which hitherto had come to our knowledge about him (last by Stephen Grancsay in his article about the ear-dagger in Metropol. Mus. 1940). Claude Blair has now succeeded in an important augmentation of our knowledge, investigating archives, inventories, accounts, etc., and by examining in details the works signed by the artist.

His thorough analysis of style and topics represented upon the various weapons, has made it possible to exhibit a series of beautiful works, some of them signed by the master, others ascribed to him with certainty, others again to a collaborator Damianus de Nervē (almost identical in style) and to a theoretical workshop: de Çaias/de Nervē.

Where Diego de Çaias started his career is impossible to tell until some day or other an investigator happens to find the name in Spanish archives. Çaias may have worked at the courts of Carlos V and Felipe II in Valladolid and Toledo and have learned his art in Toledo. When prince Francis of France, was dauphin he spent some years together with his brother Henry (later king Henry II) as the hostages of Carlos V in the castle of Pedraza. The young princes may here have seen works by de Çaias, met the artist personally and invited him to work at their court in France. Though highly probable this however is purely guesswork. His name occurs for the first time in a list of wages for members of the household of king Francis I's sons in 1535, here called «faiseur d'espées». His name appears twice in French documents. In 1542 he no doubt was forced to leave France together with other foreigners on account of a new royal decree, ordering the expulsion of aliens because of the war between France and the Holy Roman empire. In the following years we find him working for the English king Henry VIII. His name is to be found in accounts and inventories as Diego de Cayas Hispanus or Diago de Cayos Spaynard, or simply as Dego. As late as in 1547 he is mentioned in the inventories of the king's possessions, made after the death of king Henry VIII. A series of works by Diego are named here, such as swords and rapiers, wood-knives and daggers. Apparently he has left this service at the English

court between sept. 1549 and nov. 1552. It seems impossible to trace his name after this last date. He may have returned to the continent (no doubt he did so) and worked either at the Spanish court, or more probably in Flanders, in Antwerp (Gabriel Zayas worked here with Flanders).

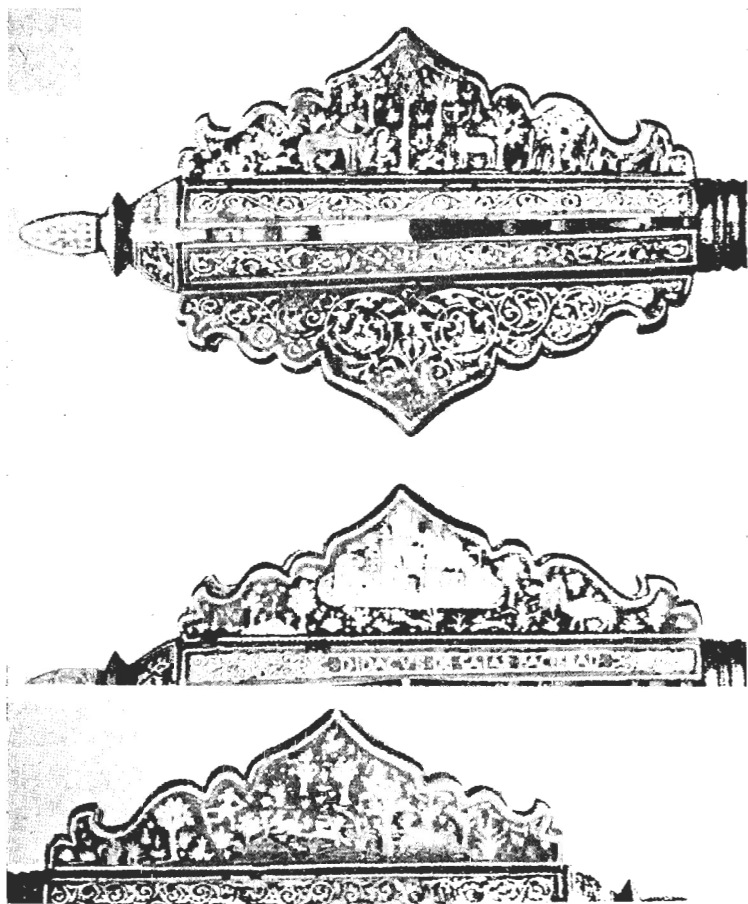
From the scarce documentation it appears that he was a fully fledged master sword-cutler at the same time as he was a damascener. As a damascener his art is something extraordinarily distinguished, not least in his beautiful landscapes, his representations of human figures, all kinds of animals and birds, walled towns and harbours, all of it made as «ataujía», inlay with fine gold-and silver wire in the hatched surface of iron or steel, just the technique particularly cultivated in Spain since the days of the Hispano-Arabs in Andalucía, and particularly in Toledo. (This technique has been performed in some of the gold-smith workshops in Toledo almost up to recent time, though not of the same quality as in the days of the Renaissance). The technique employed by de Çaias is just that used in Toledo. It is found on all his works. His signature is known from three works, while some other pieces for various reasons can be ascribed to him without any doubt at all.

The oldest known work by him is the signed ear-dagger in Metropol. Mus. New York. Next come the signed mace of the French king Henry II in the same mus. and the signed quillon dagger in Hist. Mus. in Dresden (E 85). Not signed, but with certainty documented as works by him, are the excellent mace of king Henry in Musée de l'Armée in Paris, the precious wood-knife in the Royal Coll. of Windsor Castle, once belonging to the English king Henry VIII, and probably the painted ear-dagger, seen on the portrait-painting (by an unknown painter) representing king Edward VI as Prince of Wales, also in Windsor Castle.

On basis of the rather Moresque style of the signed ear-dagger it looks very probable that the two fine ear-daggers in Bargello Mus. in Florence are works by him too, just as the excellent piece in Biblioteca Ambrosiana in Milan (mentioned as lost during the 2nd world-war, in GLADIUS, III, 1964) and the ear-dagger in Musée de l'Armée, former in Coll. Paulhac.

The signed dagger in New York has the signature: *Çaias Me Fe*. It is probably made before 1530, and before his name occurs in France. Precious above all are the two maces in Metropol. Mus. and in Musée de l'Armée. The particular, highly distinguished style is of a remarkable quality, artistically and technically. His semi-Oriental elements, almost Persian or Mesopotamian, and his Western elements, are combined in an elegant and very individual manner. There are beautiful

landscape scenes with trees, shrubwork (even palms), plants and flowers. Hunters appear—both of Moorish and Western types—with crossbows and spears. Animals and birds are seen together with purely decorative elements. Of particular interest are the semi-Oriental towns, fortresses, elephants with howdah-like towers on their backs, camels, harbours with various types of ships, e.g. the harbour of Marseilles, the Vision



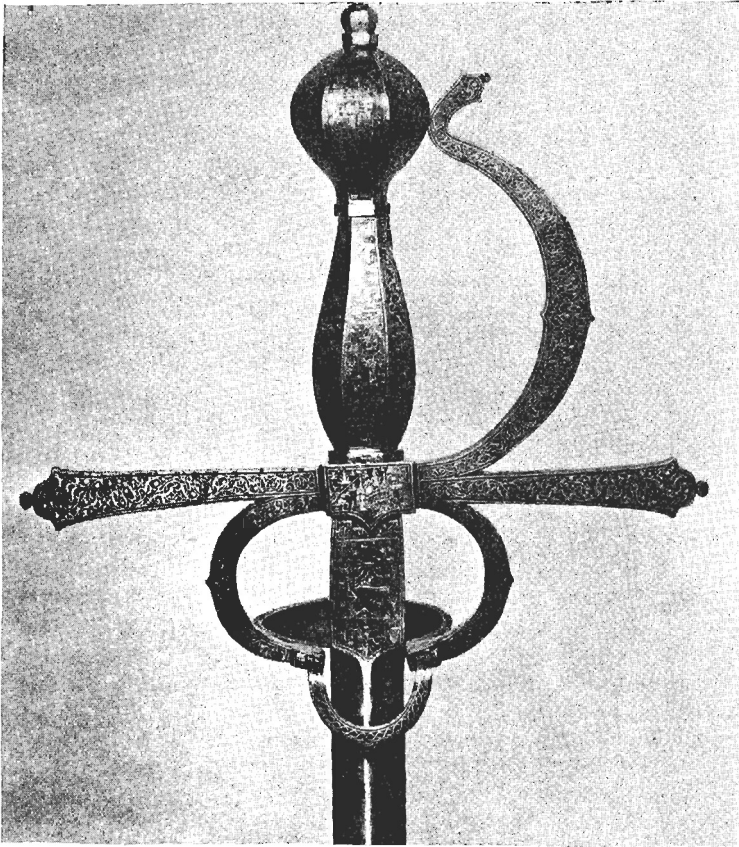
Details of decoration from mace-head of king Henry II of France. Damascened with gold and signed by Diego de Çaias: «Didacus de Çaias Faciebad». Ca. 1536-1542. (Metropol. Mus. of Art, New York.)

of Saint Hubertus, etc. There are Western towns besieged by Oriental armies, warriors with Spanish adargas, an abundance of topics. The details of the landscapes with little streams, water-mills and fishes, pools with swimming ducks, forests with boar—deer—and rabbit hunters a falconer with hawk on his wrist, etc., all these details are marvellously made and the works appear as true masterpieces of minor art. Among the decorative elements such as various kinds of foliage and scroll-work Kufic letters occur in senseless compositions, of pure decorative character. The style on the two maces is very sophisticated, and the treatment of the motives, the figures and their movements are made with a sure and unerring hand. The sources of this style must be looked for in Islamic probably Hispano-Moslem art. Mr. Blair suggests, as a possible source, motives from Islamic miniatures in general. Though without evidence for it there no doubt are reasons for such a suggestion. The general impression at first sight is somewhat Oriental. There is an air of Persia or Baghdad in the scenes. An examination of the details, however, show both Oriental and Occidental elements in a particular mixture. Towns and town-walls sometimes are very Spanish, like those seen as background-scenes in late Medieval and early Renaissance paintings in Spain. Many of the decorative elements are to be found in Hispano-Moslem decorative art. The Nazrid coat of arms with its Kufic letters—in use long after the conquest of Granada—and the decorative cartouche with Kufic letters on the mace in Paris, bear witness about the artist's traditions from Hispano-Moslem decorative art. Probably it will be very difficult to find special models or prototypes. The Hispano-Moslem inheritance, however, doesn't deny itself. *Didacus de Çaias Faciebad* is the signature on the mace in Metropol. Mus. The maces have mottoes. One of these in connexion with the cypher of Henry II of France leaves no doubt about its owner. Maybe it was made for him between 1536 and 1541. (The representation of the harbour of Marseilles and his marriage with Catherine de Medici here.) The elegant rapier in Musée de l'Armée (J 70), probably was made by him for king Henry too. The eminent skill of Diego is evident in his wood-knife for the English king Henry VIII in Windsor. The long elegiac inscription, referring to the siege and conquest of Boulogne by king Henry in 1544, corresponds well with the representation on the other side of the ricasso on this precious wood-knife: the siege of Boulogne, with a lot of fine details, from the town and cathedral on the little mount, the trenches, fascines, cannons, and many other details. It is interesting to compare this representation with the drawing made by Joseph Grimm before 1788 after a wall-painting, which former existed in the dining-hall on Cowdray House, Sussex, the castle

of Sir Anthony Browne (1500-1548), who personally participated in this siege. The wall-painting was destroyed by fire in 1793. There is a striking similarity between the drawing and the representation on the wood-knife. This wood-knife no doubt is one of the pieces mentioned in the inventories of 1547. The rendering of the ear-dagger on the portrait by an unknown painter, and representing king Edward VI as Prince of Wales, looks convincingly as a work by de Çaias.

The signed quillon-dagger in Dresden may have been a work made by the artist during his time at king Henry's court, but no informations have been found in the Saxon Armoury in Dresden about it. In spite of its Oriental horsemen and other Oriental features this dagger looks more «European» than the other works. The signature is: Diego de Çaias Faciebat.

It is so close to the wood-knife that there must be some reason for believing it made in England. The beautiful rapier in Kunsthist. Mus., Vienna, from the old Imperial Armoury, looks so convincingly a work by de Çaias, that one would feel quite sure of him as the maker, if it was not for its signature: *Damianus de Nervē me Fecit*. Details about this artist have not appeared. And it is till now the only known signature with his name. His style is so close to that of de Çaias that if it was not for the signature one would ascribe it without any hesitation to de Çaias. Such details as trees and plants, landscapes, hunting motives, the Oriental horsemen with their Hispano-Moslem adargas, elephants with their howdahs and other details, are identical. The same fountain with its spouts in shape of intertwined snakes occur on the ricasso of the de Çaias dagger in Dresden and on the rapier of de Nervē in Vienna. Certainly there must have been a very close connexion between these two artists—no doubt master and pupil. Some differences in the general development indicates that Nervē is the younger of the two, such as his use of the burgonet-like helmets, the Roman type of armour and other details representing a more general European Renaissance and less Hispano-Moslem features. Some pieces not signed and without any special documentation, which can ascribe them to either the de Çaias or to Nervē, however, can be ascribed to a teoretical de Çaias/Nervē workshop. Though not documented at all it looks very probable. The author divides the weapons known by him in three main groups according to the main elements, development in style, etc. To the first group no doubt belong the fine rapier in Mus. f. deutsche Geschichte, Berlin, with the precious damascened hilt and with the etched blade signed by Hans Coellaert the Elder of Antwerp. The barrel of a wheel-lock gun with the arms and other details of Philippe de Croy (1521-1595) with carvings on the stock in Flemish manierist



Rapier signed by Damianus de Nervē. Mid-XVI century. (Waffensammlung, Kunsthistorisches Museum, Vienna. A 586.)

style, probably from Antwerp and made between 1551-1556. The objects of group II differ a little from the first mentioned, but still there are so many of the original elements that they give evidence of a continuation of the workshop until at least about 1560. There is a rapier in Dresden and a purse-frame in Cleveland Mus. of Art from about 1560, which must have been made for prince Alfonso II d'Este (1533-1597). The Dresden rapier with its inscription suggests in regard to letters German or Flemish origin. There seems to be much reason

for a possible connexion with Antwerp as a center for de Çaias and Nervē, operating here after about 1550. The third group seems to be a continuation of the new elements from group II. For the moment it only comprises a few objects, among which a fine rapier in Dresden (Hist. Mus., E 612) is the most important piece. Typical de Çaias/Nervē style is found on the rapier in Glasgow. On the sunken border of the breastplate of the precious parade-armour made for Maximilian II about 1555-1559, either in Paris or in Antwerp there is an extraordinarily fine gold damascening in a style, which is so close to the de Çaias/Nervē workshop that it may seem reasonable to ascribe this part to the third group of objects from this workshop, made by either de Çaias or by Damianus Nervē. If this armour really should be a work from Antwerp there will be further reasons for placing the de Çaias/Nervē workshop in this town. Considering the importance of Antwerp as an artistic center, its connexion with England, and not least with Spain in the time of Carlos V and Felipe II it would be no wonder, if a Spanish artist settled here.

A little group of damascened objects such as rapiers, a sword-stick, daggers, some fine little caskets, a parade-shield may have come from this workshop too.

In total Claude Blair has collected 37 objects with connexion to the de Çaias/Nervē workshop three signed by de Çaias himself, some few pieces ascribed with certainty and documented as his works, one signed by Damianus Nervē, others ascribed to their common workshop. Step by step the author has made a detailed analysis of the works and followed the development of an important Spanish Renaissance damascener from his signed works passing over his pupil to a common workshop for master and pupil. It is an important augmentation to the scarce knowledge about this artist and his follower, starting with his «ataujía» in Hispano-Moslem traditions mixed with Renaissance elements and terminating with a beautiful Renaissance style of more general European character. The erudite article is illustrated with an abundance of excellent illustrations, which stimulate the interest for exploring the fine miniatures on ancient arms and armours.

A. BR. H.

- A. CHÂTELAIN: *Architecture militaire médiévale; principes élémentaires*. Paris, Union Rempart (65 Av. de la Grande Armée, Paris-16), 1970, 27 p., illustr.

Cette étude, que l'auteur trop modestement qualifie de simple «notice», est excellente et digne de la plus ample diffusion.

Dans un vingtaine de pages on trouve condensé les principes de for-

tificación qui ont présidé à la construction des forteresses médiévales et la publication rendra de grands services «à tout amateur passionné par l'art de la fortification au Moyen-Âge et à tout travailleur bénévole qui désireux d'intervenir dans un chantier de sauvetage de monument de cet ordre, a besoin d'en connaître les éléments constitutifs». C'est dire que l'on ne se trouve point face à un travail d'érudition mais à une sorte de résumé didactique, et c'est précisément ce caractère qui nous en fait conseiller vivement la lecture.

Quelques petites bavures peuvent être relevées. Par exemple, à la p. 5, il est dit que l'arbalète apparut dès le XII^e siècle. En réalité, Végèce (Liv. II, chap. 15), au IV^e siècle, mentionne déjà des corps d'arbalétriers (arcuballistae) dans les légions gallo-romaines et les deux bas-reliefs déposés au Musée du Puy, datant du I^{er} ou du II^e siècle ont conservé l'image de ces arbalètes primitives. Elle apparaît aussi figurée dans une miniature du *Commentarius in Ezechielem* de l'évêque Haimon datant du X^e ou XI^e siècle, et sa description est faite par Anne Comnène (*Alexiade*, Liv. II, chap. 8, § 6) d'après l'arme qu'elle voit aux mains d'un des croisés en 1096. A la p. 6, l'auteur dit que contre l'eschelade, les défenseurs projetent «... de l'huile bouillante». Or, l'huile, plutôt rare alors, n'a du être employée qu'à titre exceptionnel et ce n'est que l'eau bouillante qui a du être utilisée le plus souvent. Enfin, à la p. 14, l'auteur remarque que les fenêtres, les meurtrières et autres ouvertures n'étaient jamais superposées le long d'une même ligne verticale afin d'augmenter le champs de tir et de ne pas affaiblir l'édifice, Cela est vrai dans le cas des châteaux classiques mais de ceux-là seulement. On pourrait citer de nombreux cas de bâtiments appartenant aux XIV^e et XV^e siècles (p. e., le donjon de Largôet-en-Elven) où de tels percements ont eu lieu, ce qui naturellement a affaibli la construction.

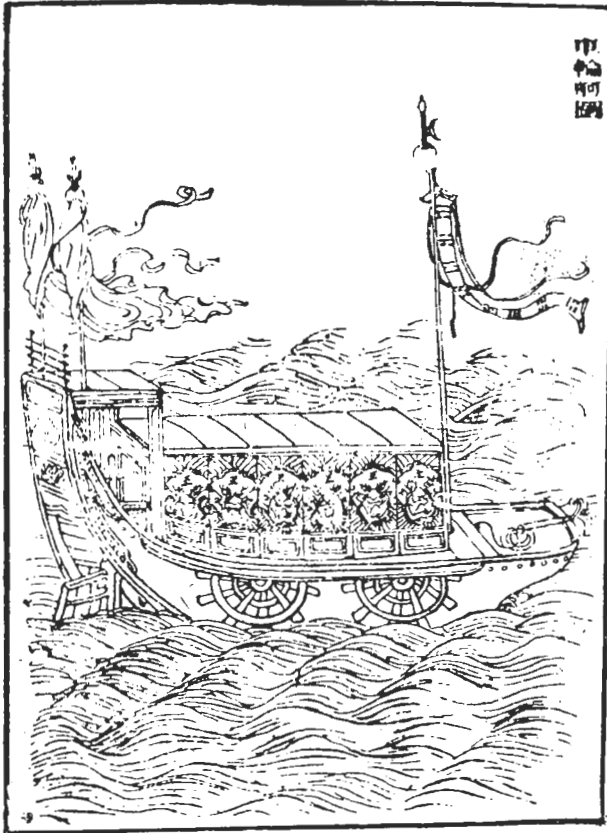
Mais ce sont là de simples vétilles, faciles à faire disparaître lors d'une prochaine réédition. Elles n'enlèvent rien à la valeur d'une publication que nombre d'archéologues liront avec profit et qui est accompagnée d'illustrations aussi claires que précises et d'une bibliographie sommaire.

J.-F. FINÓ

JOSÉ DIN TA-SAN & FRANCISCO F. OLESA MUÑIDO: *El poder naval chino desde sus orígenes hasta la caída de la dinastía Ming (Siglos VI a. C.-XVII d. C.)*. Colaboradores, Pao Tsen-Peng & Francisco Morales Belda. Barcelona, Ariel, 1965, 275 pp., ill.

It is a wrong idea that the Chinese never were a sea-going people. From the famous Muslim geographer *al-Idrisi* we know the presence

of Chinese merchants on the shores of 12th century East Africa, and *Chêng Ho*, the Vasco da Gama of China, crossed the Indian Ocean and arrived at Eastern Africa and the Red Sea at the same time as the Portuguese came to China (+1513) and the Spanish to the Philipines (+1521).



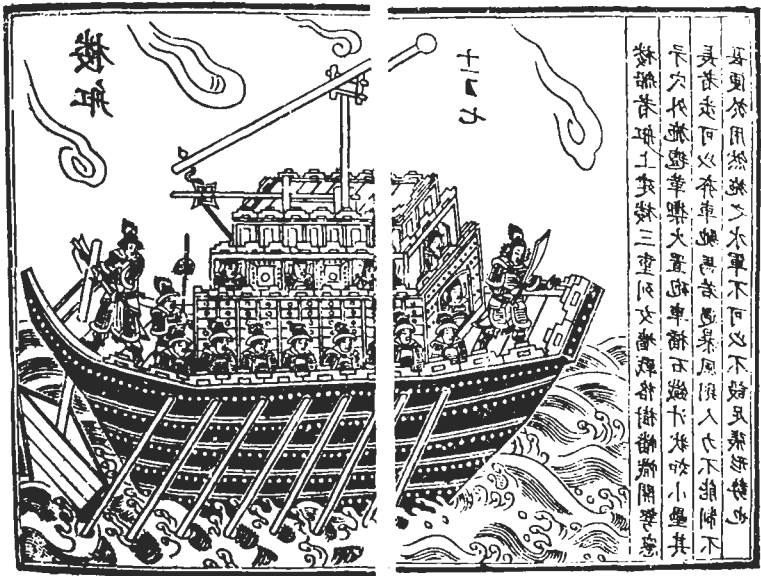
Chig Chuan, or Chig Luen Guo, «paddle - wheel ship». The fluvial monitor of Ancient China.

From the latest Chow time (ca. -700) there already existed archives in China where the important historical events were entered. From these registers we know that the inhabitants of Central China were menaced by invasions of barbarians, which debilitated China and occasioned civil wars in the reign. The old annals tell us that in the

wars those from the North fought on horseback and those from the South on board ships. At this moment (ca. —550) the Chinese for the first time in their history used boats in fluvial battles. A short glance at the map of these regions explains the high development that got in these campaigns the techniques of the fluvial battles.

As the Chinese and the Occidental navies hardly have had any contacts till the fall of the Ming dynasty (+XVIIth century) it is interesting to see the contrasts in the development of what took place contemporaneously in China and in Europe and to compare the different realizations. This is the intention of the book, which is the result of a collaboration between Chinese and Spanish investigators: Din Ta-San, naval officer, and Francisco F. Olesa Muñido, professor at the Spanish Maritime War Academy and at the University of Barcelona, in co-operation with Pao Tsen-Peng, through many years director of the Naval Archive in Nanking, and Francisco Morales Belda, professor at the Spanish Maritime War Academy. The authors have divided the history of the Chinese sea power into 6 periods (chapters). Each chapter brings: 1) a summary of the history of the period with the political, social and economic characteristics; 2) the development of the navy, its organization, arms, etc., and 3) a comparison with contemporaries in the Occident.

The Chinese sea power, in its origin, was fluvial, originating from the Yellow River, the heart of China, in distinction to the Phoenician and Greek sea powers, that were coastal. In the period of the dynasties *Chin* and *Han* (—221/+221) began an expansion of China, and the *Hsui-Tsin*, «the water forces» (=combined fluvial and maritime forces) got an important maritime mission. The dynasty *Tang*, which was the most powerful since the Han time, not only organized numerous land forces and conquered huge territories, but it also was victorious at sea, v.g. in +644 and +645, when the Chinese conquered Corea with an expedition force of more than 500 war ships, 400 transport-vessels and 100,000 men. Already at this time the Chinese navy had various classes of war ships: *Lo-Chuan*, «battleships, or towerships»; *To-Chien*, «combat-junks»; *Meng-Chung*, «destroyers»; *Tzo Guo*, «fast ships»; *Pu Chien*, «gunboats»; *Huo Fang*, «fireships», besides converted merchantmen, transport-vessels, etc. Some of the towerships of most tonnage had five decks and shipped 800 men. From the 8th century the Chinese had paddle-wheel ships (*Chig Chuan*), which may be compared with the modern fluvial monitors. In Europe no practical use of the paddle-wheel system was made until the +16th century in Spain. From the +3rd century the Chinese ships were fitted with multiple masts, but the Europeans not until the +15th century adopted a system



Lo Chuan, «towership». The battleship of Ancient China.

of three masts (which led to the development of the full-rigged ships). Before the year +1102 the Chinese began the use of the sea-compass in the navigation, a century before its appearance in the West. In the battle of *Tsai-Schich* (+1161) the Chinese naval artillery for the first time used explosive shots. In Europe the naval artillery first appears in the battle of Arnemuiden (+1338), but here, and many years henceforward, the Europeans only used solid shots. It has been said that these, and many other technical developments, if traced back to its origin, can be shown, with probability or certainty, to have emanated from Asian, usually Chinese civilization.

The European naval construction first contacts China in the +16th century, through the +17th century the contacts intensify and from thence we find European influence in the Chinese naval construction.

E. F. H.

JOSÉ MARÍA DE LA FRAGUA: *Museo Militar y Castillo de Montjuich. Guía Breve del Museo y Resumen Histórico del Castillo*. Barcelona, Patronato del Castillo de Montjuich, 1970, 62 pp., 52 ill., one in colour, 2 maps. *Glosario de Voces de Fortificación*.

The historical Castle of Montjuich in Barcelona some years ago was made the domicile of a military and historical museum for collections of weapons, most of them of Spanish manufacture, others from various other European countries as well as a group of exotic weapons. Besides the weapons the museum contains collections of tin figures and models of castles, while some galleries are dedicated to important periods of the history of Cataluña.

In 1960 the castle with its glacis, formerly the seat of artillery and infantry garrisons and depots of munitions, in a meeting of ministers under presidencia of His Excellency the Chief of Spain, Generalissimo Francisco Franco, was presented to the City of Barcelona. A patronate was appointed and during the course of rather few years a considerable part of the buildings, turning towards the Mediterranean, was restored and organized in order to place in its vaulted galleries arms, armours, tin figures, cannons, etc., from about the 16th century to recent time. During these years the director of the museum, Lieutenant-Colonel of Artillery D. José María de la Fragua y Sorrondegui, published several booklets about temporary exhibitions. Now the same director has issued the present little guide as a help and adviser to the visitor.

The history of the present castle goes back to 1640, when under a rebellion against king Felipe IV, a fortlet with four bastions was constructed of earth and stone on Montjuich, in only 30 days. This plain building was kept well preserved until 1697, when it was enlarged and improved. During the War of Succession it came to play an important part in the history of Spain. With alternating fortune, passing from one hand to another, it finally was handed over to the troops of the Borbons by the duke of Berwick in 1714. During the years 1753-1779 it passed through various reconstructions and renovations, but from this time onwards only such works were done which served to complete and improve the fortifications with their bastions, lunettes, horn-works, sally-ports, moats, barbettes, ravelins, etc.

It is a young museum, still not crowded, but with many fine and interesting objects and with good possibilities for augmentations. It has been no easy job to create this museum. After its reconstruction

inside it appears with its ancient rooms and galleries, such as a very long vaulted hall (141 m length) and a series of smaller galleries. When the visitor with the present guide in hand has passed through all the galleries, he has made a walk of about 650 meters.

The contents of the galleries have been procured by collaboration with the Ejército Español in its various branches, Museo del Ejército in Madrid, the Art Museums of Barcelona and some private collections, as well as the Associations of tin-figure collectors and the Asociación Española de Amigos de los Castillos. Besides the permanent exhibition-galleries there are rooms and vitrines for alternating temporary exhibitions. The first galleries are dedicated to exotic weapons, such as helmets, knives and swords from old Japan and India, a mail—and lamel—brigantine from Cochinchina, used as late as in the campaigns in 1859-1863. A fine collection of tin-figures, comprising about 20,000 objects of officers, soldiers, cavalry, artillery, cannons, etc., from the 1920' ties, was created by D. Arturo Llovera, and there are some other collections of tin-figures in the same gallery. Various categories of Spanish weapons, such as fire-arms with the characteristic miquelete-locks, are finely represented, amongst others precious pistols from Ripoll, richly decorated, guns and rifles of various periods, such as wheel-lock, flint-lock, etc., and with fine intarsia work in ivory, bone and mother of pearl and with maker's marks. Among the swords there are cup-hilt rapiers with chiselled cups, corresponding left-hand daggers, a fine, richly damascened espada de lazo with the blade signed by Tomás de Ayala, polearms, spurs and stirrups. Italian helmets, such as capetes and morrions, are represented as well as Italian armours and breast-plates. Even Persian helmets and shields with gold damascening are represented. Among the artillery-pieces there are several bronze cannons founded in Barcelona in 1720, 1727, etc., a mortar from 1737, and another from Sevilla from 1795. Beside the reproductions of seals from the great medieval periods of Cataluña (Jaime I, Pedro el Grande, etc.) there are many later pistols, deposited by private families as well as historical objects from the wars of Succession, Liberation, from the famous battles at Tetuán in 1860 under General Prim, and not least an interesting gallery from the liberation of Cataluña during the Civil War in 1936-39, with a fine selection of arms used here, Spanish and of various nationalities. The last gallery contains weapons from modern time, some of foreign nationality and many of Spanish manufacture, from Fábrica Nacional de Armas de Toledo and other Fábricas Nacionales. The little guide, terminates with a short history about the Castle of Montjuich and a description of its various parts and recints.

It is a handy little guide, short, concise and with many fine illustra-

tions. The originators and organizers of this young and interesting museum merit all possible praise for their work.

A. BR. H.

MICHAEL MÜLLER-WILLE: *Ein neues Ulfberht-Schwert aus Hamburg. Verbreitung, Formenkunde und Herkunft. Mit Beiträgen von Hans Drescher (Harburg), Rudolf M. Kloos (München) und Gunter Müller (Münster)*. «Offa 27, Berichte und Mitteilungen», Kiel 1970, pp. 65-91, 1 Tafel, 10 Abb. im Text.

Die Anzahl der Klingen mit Ulfberht-Namen in ihren Seiten vermehrt sich stets dank der archäologischen Funde und der modernen technischen Methoden (Röntgenologischen und metallographischen Analysen, etc.). Dennoch sind die Probleme über Herkunft, Meister, Werkstatt, Heimatsort, Zeitbestimmung, etc., noch nicht gelöst.

Der Fund in 1957 bei Baggerarbeiten in der Elbe im Stadtbereich von Hamburg von einem Schwert mit eisentauschiertem Ulfberht-Namen in der einen Klingenseite und geometrischen Ornamenten in der anderen, hat zu der vorliegenden Abhandlung Anlass gegeben.

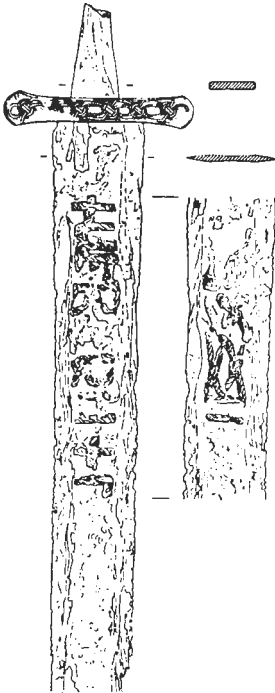
Das Fundstück befindet sich im Museum für Hamburgische Geschichte zugleich mit einem anderen Ulfberht-schwert, das schon vor vielen Jahren in der Elbe gefunden ist. Das neue Fundstück wurde beim Verfasser dieser Abhandlung gründliche Untersuchungen unterworfen.

Von dem ganzen Schwert ist nur etwa 54 cm erhalten. Die Klinge ist jetzt 48 cm lang und oben 5 cm breit. Spitze fehlt. Von der Griffangel ist nur etwa die Hälfte (6 cm), erhalten, der Knauf fehlt, aber die Parierstange (Länge 10,3, Breite an den Enden 1,9, in der Mitte 1,25 cm) existiert mit seinen sehr schönen und sorgfältig ausgeführten, silbertauschierten Ornamenten. Das Band- und Ringmuster, mit Punkten ausgefüllt, ist den Mammen-, Jellinge- und Ringerikestilen recht ähnlich. Obwohl die Ornamente vom grössten Interesse sind und als Hilfe für eine Zeit- und Ortsbestimmung bedeutungsvoll sind, ist jedoch die Klinge mit seiner Eisentauschierung im vorliegenden Fall die wichtigste.

Nach eingehenden Untersuchungen und Analysen meint der Verfasser, dass die Klinge in einem Schwert mit Knauf vom Typ R (Jan Petersen) montiert war. Dies ist recht wahrscheinlich, denn die Parierstangen vom Typ R haben gewöhnlicherweise dieselbe Form wie hier. Der Typ gehört dem 10. Jh., und das Hamburger-Schwert darf man zweifellos, wegen seiner Ornamenten, am Ende des 10. Jh. ansetzen.

Um das Schwert sowie auch möglicherweise den Meister zu placie-

ren, hat der Verfasser nicht nur frühere Literatur durcharbeitet, sondern auch eine umfassende Examination der Fundstätten unternommen, in Nachsuchung mehrerer und sicherer Auskünfte über diese berühmte frühmittelalterliche Werkstatt. Der Verfasser hat ein recht grosses Fundverzeichnis zusammengestellt über die von ihm aus Museen und Literatur bekannten Ulfberht-Klingen. Zugleich giebt er in seinem Verzeichnis die verschiedenen Marken, Ornamente und Zeichen von der anderen Klingenseiten. Im ganzen hat er 98 Schwerter gesammelt, sagt aber, dass



Ulfberht-Schwert mit Inschrift und silbertauschierter Parierstange. Aus der Elbe bei Hamburg. (Mus. f. Hamburg. Geschichte.)

sein Verzeichnis nur als vorläufig zu betrachten ist. Obwohl sicherlich viel mehr Schwerter mit Ulfberht-Namen existieren (Kirpičnikov kennt 115), ist es doch eine ganz imponierende Reihe. Man sollte doch meinen, dass eine so grosse Zahl von Ulfberht-Klingen, deren Fundörter bekannt sind, was neues und sicheres über diese Klingenwerkstatt oder über den Meister bringen konnte. Dies ist aber noch nicht der Fall. Eine Examination von der Verbreitung der Fundstücke giebt als Resultat, dass die

Ulfberht-Schwerter weit verbreitet sind. Sehr viele stammen aus Skandinavien, speziell aus Norwegen (Westseite, Oslofjord), ein paar Schwerter sind aus Schweden bekannt. Von hier gibt es aber noch mehrere, denn moderne röntgenologische und metallographische Untersuchungen haben gezeigt, dass viel Material mit Ulfberht-Namen vorliegt. Ganz viele kennt man aus Finnland (Südwestlichem Bereich). Reich an Funden ist auch die südöstliche Baltische Küste, Estland, Letland, Litauen und Insel Ösel, sowie auch Ostpreussen. Von dem mittleren europäischen Kontinent sind nur wenige Stücke gekannt. Ein Stück stammt aus Meuse, ein anderes aus Schelde, zwei aus Elbe (Hamburg), einige sind aus Rheinland, ein Stück aus der Schweiz, und ein paar Exemplare aus Böhmen, Kroatien, Polen. Russland hat recht viel Material dargebracht, aus dem Ladoga-gebiet, an den Ufern des mittleren Dnjeprs, und weiter bis zum Schwarzen Meer (Cherson), Novgorod und mittleren Volga-gebiet. In Westeuropa sind sie nur aus Irland (ein paar Funde) und aus Südost England bekannt. Merkwürdigerweise sind augenscheinlich keine Exemplare in Frankreich gefunden. Interessant ist es auch zu konstatieren welche Schwerter aus Gräbern stammen und welche Gewässer- oder Siedlungsfunde sind. Südeuropa hat bis jetzt keine Ulfberht-Schwerter geliefert. Die Zeitstellung dieser Schwerter ist durch die angehörigen Knäufe und Parierstangen recht sicher gegeben. Aber die Zeitstellung der Klingen in sich bietet spezielle Probleme dar. Die meisten Schwerter sind mit Griffen gefunden. Hier zeigt es sich, dass die mit Namen versehenen Klingen in einer Vielfältigkeit von Typen montiert sind, in Total 16 verschiedenen Typen (nach System Jan Petersen). Am häufigsten sind die folgenden Typen: H(+I), S, T, V und X, weil R, Y und Z ihnen folgen. Von anderen Typen hat man nur ein paar Exemplare oder ein Einzelstück von jedem gefunden: z.B. von E, K, M, N, O, samt ein paar Mittelalter-Typen. Das älteste Stück ist vielleicht um etwa 800 anzusetzen. Ein Teil der Klingen gehören dem 9. Jh., die meisten aber dem 10. und 11. Jh., einige sogar dem 12. Jh. Der Verfasser analysiert die Inschriften und die Ordnung der Buchstabenreihen, die Formen der Buchstaben und ihre Zusammensetzung, die Anbringung der Kreuze (vor- nach dem Namen oder zwischen den letzten Buchstaben).

Auch findet man mitunter andere Namen, so ein Schwert mit dem Namen oder Wort Hiltipreht (noch von einigen anderen Schwertern gekannt), oder eine Nachahmung des Namens Ingelri (Ingelfrii). Der Ulfberht-Name hier ist vielleicht auch eine Nachahmung, denn Nachahmungen von dem Ulfberht-Namen existieren. Es handelt sich wohl um eine Fälschung aus einer anderen Werkstatt, ganz wie viel später die Solinger-fabriken die Toledo-fabriken nachahmten, oder wie man die

Genueser—und andere berühmten Werstätten nachahmten. Die andere Klingenseite trägt in der Regel auch geometrische Ornamente wie Flechtbänder, Sanduhr-rhomben, senkrechte Striche, Bogen-Striche, Kreuze, ja auch ein paarimal Krückenkreuze.

Die Vielzahl der Zeichen deutet darauf an, dass die Klingen mit Ulfberht-Signatur nicht alle aus der selben Werkstatt herausgegangen sind, denn die Marken kommen auch mit anderen Namen vor (Nred, Cerolt, Leutlrit, Adalfríid). Die Untersuchungen legen klar, dass ein ausgedehnter Handel mit Ulfberht-Klingen stattgefunden hat, besonders nach Nord und Nordost Europa, obwohl auch Klingen nach den Britischen Inseln exportiert wurden. Aus welchem Ort dieser Handel ausging ist jedoch recht schwierig auszufinden. Augenscheinlich wurden sie schon um etwa 800 gemacht, die meisten stammen indessen aus dem 10.-11. Jh., und einzelne aus dem 12. Jh. Die Tätigkeit ging also wahrscheinlich durch etwa 300 Jahren vor. Durch diesen langen Zeitraum hat man also die berühmten Qualitätswaren gewünscht. Der Ulfberht-Name muss eine Garantie-Bezeichnung gewesen sein. Hierauf deutet ja auch die Nachahmungen.

Aus welcher Gegend der ursprüngliche Meister her stammt, lässt sich stets nicht mit Sicherheit sagen. Weder Archäologie, noch Epigraphie oder Namenskunde geben sichere Anhaltspunkte. Man darf doch schließen, dass der ursprüngliche Meister oder seine Werkstatt im niederfränkischen Gebiet beheimatet war (eine ganze Dynastie).

Dr. Hans Drescher, Harburg, giebt einen Beitrag mit technischen Untersuchungen über Tauschierung mit Eisen und Silber und referiert mehrmals zur Beschreibung des Theophilus: *Diversarum artium sedula*. Er hebt hervor, das Masssystem des Gefasses, wo die Proportionen der Parierstange und des Griffes mit den technischen Einzelheiten der Herstellung vielleicht einen Beitrag zur typologischen Klassifizierung dieser Schwerter liefern können. Rudolf M. Kloos, München, behandelt die Beschriftungen und kommt zum Resultat, dass der zeitliche Ansatz der Inschriften liegt etwa von zweiter Hälfte des 8. Jh. bis früh im 9. Jh. obwohl man die Schriftzeichen viel später finden kann. Eine lokale Eingrenzung liefern die Inschriften nicht.

Dr. Gunter Müller, Münster, behandelt den Namen Ulfberht. Eine Analyse und ein Vergleich mit anderen Namen geben keine Anhaltspunkte. Doch ist eine niederfränkische Herkunft im weitesten Sinne höchst wahrscheinlich.

Aus den Verzeichnissen Müller-Willes geht deutlich hervor, dass die Tätigkeit der Ulfberht-Werkstatt eine ganz bedeutende war. Nicht nur muss eine importante Werkstatt existiert haben, aber ein ausgedehnter Handel mit den berühmten Waren fand durch etwa 300 Jahren statt.

(Hier darf man vielleicht an die Exportverbote der Karolingischen Kaisers erinnern.) Der Export war wesentlich gegen die nördlichen Länder gerichtet, sowie gegen Russland. Die 97 Reproduktionen von Klängeninschriften liefern ein gutes Studienmaterial für weitere Untersuchungen über Klängeninschriften und Marken aus dem frühen Mittelalter. Die Ulfberht-Werkstatt und ihre Nachfolger waren wirklich bedeutungsvolle und grosse Wirksamkeiten. Berühmt waren sie auch. Es ist ein verführerender Gedanke, diese Werkstätten als eine Art Vorläufer für die späterhin so berühmten Solinger-Werkstätten aufzufassen, die bis Neuzeit fortgesetzt haben, und die eine weltumfassende Exportation seiner Klängen bis in die Neuzeit unternommen haben. Obwohl bis jetzt die Ulfberht-Werkstätten, ihr Gründer, Lokalisierung, teilweise auch Zeitbestimmung, so viele Probleme darbieten, ist es doch wahrscheinlich, dass ihr Heimatsort in der Niederfränkischen Gegend zu suchen ist. Hier fand man ja auch die alten Traditionen von den provinzial-römischen Werkstätten, und hier findet man ihre Nachfolger, die Solingerindustrie.

Vielleicht wird ein zukünftiger, zufälliger Fund—archäologischer oder in der Literatur—die Lösung geben, wie vielleicht auch einmal für die Ingelrii-Klängen, und die anderen mit Signatur versorgten, mittelalterlichen Schwerter.

A. BR. H.

FRANCISCO MORALES BELDA: *La marina vándala. Los asdingos en España*. Barcelona, Ariel, 1969, 167 pp., 15 plates.

— *La marina de Al-Andalus*. Barcelona, Ariel, 1970, 137 pp., 22 plates.

The Vandal *Stiliche* was in fact the emperor, without title, of the Roman Empire in the last moments of its life. He was hated because he was of barbarian origin and because he favoured the Arians. In 408 he was murdered by his enemies. At once the position of the Roman Empire became critical. Gaul, Spain and Britain were in the power of the barbarians, and Africa, the granary of Rome, proclaimed its independence and stopped the convoys destined for Rome. In 410 the Visigoth *Alaric* captured Rome, but the Visigoths only could stay hardly a week in a city which lived at the expense of Africa. It was *Alaric's* plan to go to Sicily and cross into Africa in order to dominate Rome definitively, but a storm in the Strait of Messina destroyed his ships, which he had put together with much difficulty, frustrated his plan and changed the history of Western Europe. Instead of Africa the Visigoths settled in Southern Gaul and were used by Rome to clear Spain

of the barbarians who had invaded it in 409. The only barbarians who resisted were the *Asding Vandals* in Baetica (Andalusia), who triumphed over an imperial army and conquered all Southern Spain, to a high degree by means of their navy forces.

Usually the barbarians only desired land where they could settle, only the Vandals and the Heruls appear as sea-going people. Before the Vandals came to Spain they were horsemen. In 421 they defeated a Roman army led by *Castinus*. But in Spain they had to improvise a navy and short time later they conquered the Balearic Islands and Carthago. They only stayed some 30 years in Spain. In may 429 they founded an empire in Africa, and *Zeno*, the emperor of Byzantium (474-491), had to recognize the Vandal possession of all Northern Africa, Sicily, Sardinia, Corsica and the Balearic Islands. Since Rome lost the domination of the Mediterranean and till the Islamic navy appeared, the Byzantine and the Vandal empires were the only maritime powers in the Mediterranean.

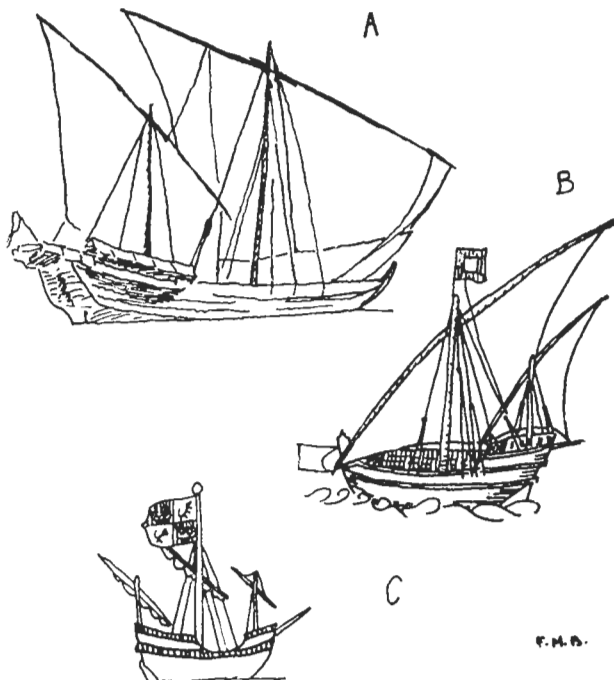
In 467 a Byzantine armada was defeated by the Vandals, but in 533 the Byzantine general *Belisarius*, the best general of the time, with all the forces that the empire could muster, conquered Carthago, and this was the end of the Vandal empire. The Visigothic kingdom in Spain never was a sea-power, and since the Vandals left Spain (429) and till the first Islamic expedition from Tanger to Tarifa (711) there was no naval power in Spain.

The end of the Byzantine domination of Africa was the beginning of the Muslim predominance in the whole of the Mediterranean. In 655 the Byzantine armada suffered a terrible defeat in the battle near the coasts of Lycia, a Muslim victory which opened the Mediterranean to Islam.

* * *

The Muslims who crossed into Spain met with the same demands as did the Vandals: the lack of a navy. *Al-Walid*, the caliph of Damascus, warned *Musa ben Nusayr*, the governor of Ifrikiya, of the dangerous naval expedition, but the Muslims succeeded in crossing the Strait by means of ships which the governor of Ceuta, the last Byzantine base in Occident, put at their disposal, and in short time the Muslims conquered most part of Spain, without any resistance from the Hispanic inhabitants. The Muslim conquest rather seems a coup d'état than an occupation. *Al-Andalus* is the arabic name of the Muslim part of Spain. The first 130 years Al-Andalus used private ships for its navy, ships of hispanic mediterranean type, but after the invasion of the *Mağus* (Scan-

dinavian pirates) 'Abd al-Rahman II, the caliph of Córdoba, began the building of ships and organization of a more powerful navy so that the caliphate of Córdoba dominated the Western part and the oriental caliphate the eastern part of the Mediterranean. From the 9th century Al-Andalus kept patrol ships in the Atlantic. In the Taifa epoch



The last steps in the development of the caravel. A: An East Indian «pangaio». B: A Portuguese caravel. C: A caravel with cuddy.

F. M. S.

(1031-1492) the Al-Andalus navy resolved itself into autonomous navies, later on christian navies, which in course of the Reconquista grew more powerful and at last mastered the African and Oriental navies, a development culminating in the Discovery of America (1492) and the battle of Lepanto (1571), the climax of a very lengthy conflict with Rome and Constantinople.

* * *

These two books have almost the same disposition. The author treats the Vandal and the Al-Andalus navies in all their aspects: political

and military history, finances, raw materials, industry, human material, etc. He gives an extensive bibliography, a chapter about the prime sources, and at last a conclusion. The representation, in the shape of numbered paragraphs, is very concentrated and not easily read. For the study of the military and naval history of the period the present books are important.

E. F. H.

‘ABD AL-RAHMAN ZAKY: *The Egyptian Army in Moslem Period I-II*. Vol. I: *The Moslem Period from 640-1250*; vol. II: *The Moslem Period from Ain Galaut to Rosetta, 1250-1807*. Cairo 1970, 2 vols., ill., line-drawings, maps, bibliography. (In Arabic.)

In 1968 the Egyptian scholar Dr. A. Rahman Zaky, a specialist in Oriental military history and art of war, as well as in arms and armours, issued first vol. of a series planned to comprise in total four vols., and dealing with the history of the Egyptian army, its organization, battles and equipment through the ages. The first vol., which treated the armies of Ancient Egypt from the days of the earliest Pharaohs to the end of Roman time, was mentioned in *GLADIUS*, vol. VII, 1968, pages 106-111. Now the same author has issued the next two vols., one which treats the Moslem armies after the Arab conquest, in the period from 640 to 1250, terminating with the Cruzade of the French king Saint-Louis, his invasion of the Delta and his defeat, and the second volume dealing with the Moslem armies in Mamluk and Turkish time, between ca. 1260 to 1807, terminating with the French invasion under Napoleon, the battles at the Pyramids, Abukir, and the English failure at Rosetta when the country was restored to the Turks.

The first vol. consists of six chapters, the second of four. It must be said at once that it is a highly interesting and erudite book, but as a matter of fact rather unaccessible being written in Arabic.

The book traces the whole history of war in Egypt through the ages and through the many alternating periods, prosperous as well as bad, Golden Ages as well as failures. There are descriptions of battles and the tactics used, with corresponding maps as well as descriptions of the categories of weapons employed.

The *Byzantine* period of Egypt started under the reign of Arcadius (395-408). During the reign of Justinianus (527-565) his general Narses destroyed several temples (at Philae) and sent precious spoil to Constantinople. In the following century the *Persians* invaded the Valley of the Nile (in 619), but they only held it for a short period. The *Arab conquest* took place in 640, when one of the chiefs of the

caliph Omar ibn el-Khattab, 'Amr ibn el-As with his troops invaded Egypt and captured Pelusium, where he slew the garrison. Egypt by then became a province of the Arab empire. 'Amr ibn el-As too seized Babylon in 641. He was the founder of Fostat, and in 642 he conquered *Alexandria*, the capital of Egypt. Even Nubia was invaded. From 641 to 868 Egypt was ruled by Arab governors, representing the *caliphs of Damascus*, first the *Omayyad* dynasty from 660-750, then the *Abbasids* from 750 to 868. Gradually an Arabization took place. This became particularly perceptible during the reign of the Abbasid caliph *Mamun* (813-833), when many of the Copts turned over to Islam, and the Arabic language spread among the Egyptian Copts. During the caliphate of *al-Madina* Damascus and Baghdad underwent important developments. However, the country still was not independent. The first step towards independence was made by *Ibn Tulun*, who was the founder of a rather short-lived dynasty, from 868 to 905. In chapter II the author gives a description of the Tulumid army, its organization and its equipment. In 905 a return to the Abbasid rule took place, but it did only last until 935, when *Muhammad the Ikhshid* and his followers came to rule until 969. They organized the «Ikhshid» army. With another short-lived dynasty of Turkish origin, prepared under the influence of an Abyssinian eunuch, *Kafur*, the way was opened for the *Fatimid* invasion in a country which at that time was rather weakened. The Fatimids came from North Africa and ruled Egypt from 969 to 1171. They represented a religious sect different to that of the Abbasids of Baghdad. They founded in 969 *Cairo* as their capital. The *Azhar Mosque* (970-972) was their work. Later on it was transformed to a university. During their period of government Egypt passed through extreme periods, some of them very splendid, others very bad. The contrasts were strong, from hard persecutions to tolerance, through poverty and through periods of opulence. An important feature of this dynasty was that the *Cruzades* from the Occident now started in a successful manner owing to the separatism and discord in the Islamic world. Chapter IV of the book treats the armies of the Fatimids, and their organization. Further there is a description by the Persian scholar and traveller *Nasir-i-Khusraw*. Next follows a part dealing with the commanders of the armies together with a description of the various types and categories of weapons in use. Beside the types of body-protection, helmets, etc., there is a description of the characteristic Arab swords with their long, straight and double edged blade, the cruciform hilts with the particular shape of cross and quillons as well as the cap instead of a pommel. Axes, javelins and the long cavalry lances are treated. The shields mostly were of the little round and light types.

The Egyptians were fond of their lance-armed cavalry which was very skilled in managing the long lances. In contrast to the Turks whose mounted archers were highly feared by the Crusaders for their swiftness, the Egyptians had archers afoot, most part of them from Nubia. During the reign of the Fatimids military architecture had a good period. The author treats the military architecture of Cairo with its solid walls and characteristic gateways and towers. To the military architecture the period of the Fatimids was important. Various hard battles took place, such as battles against the Carmatians and the Byzantines. One of the Fatimids conquered Jerusalem in 996, but it was lost to the Crusaders in 1099 the year of the battle at Ascalon. In the 12th century the Crusaders invaded Egypt and several important battles took place, such as that at Bilbeis in 1164, at Babein in 1167 and the expedition by sultan Nur al-Din under the general Shirkuh in 1168, or that of king Amalric and the Byzantines against Egypt in 1169. The last part of Fatimid time meant a decline and a fall of Egypt until it came under the powerful hands of the strong sultan *Salah al-Din* (1169-1193). His family, the *Ayyubid dynasty*, continued ruling Egypt until 1240. The author gives a detailed description of the Ayyubid armies, their organization and various important elements. To Egypt it was a highly important period with a great military development. Part of this chapter deals with the weapons used in the armies of Salah al-Din, for attack and for defense, his war-engines of many kinds, Greek fire, incendiaries and naphtha pots, and the possibilities of gunpowder or a kind of gunpowder. Salah al-Din had an excellent arsenal, well known from the contemporary literary sources and from his master of this arsenal, and by no means inferior to those used by the Crusaders. This sultan was the founder of the Citadel of Cairo, and he established an excellent defensive system of castles. Among the famous castles here treated are those of Sinai and Rodah, and outside Egypt those of Bosra, Tabor and Damascus. The Red Sea was an important link in the chain of Egypt's defensive system, and Salah al-Din let construct warships for his navy. With the Crusaders he concluded an armistice in 1179, and it was renewed in 1184. But it was broken by the Crusaders, who lost their kingdom of Jerusalem after the decisive battle at Hittin, and Salah al-Din conquered one place after the other from the Christian knights. Under Philippe-Auguste and Richard Lionheart the third Crusade was arranged, but the Crusaders did not succeed. The battle at Hattin and the liberation of Jerusalem in 1187 as well as the other famous battles and sieges are analyzed, e.g. Saint-Jean d'Acre, Aisuf in 1191. Among the important battles and sieges under the Ayyubids after the death of Salah

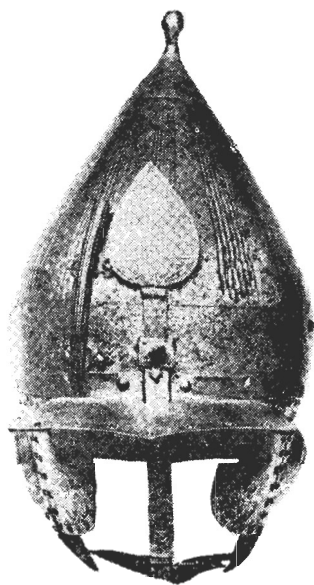
al-Din (1193) those of Damietta in 1218-1221 the first battle at Gaza in 1239 and the second in 1244 are treated.

Shortly after the Crusade by the French king Saint-Louis took place, which ended with the decisive battle at el-Mansurah, the defeat and the capture of the king. The chapter (VI) deals with the Crusaders' marching in the Delta towards el-Mansurah, the operations at the Nile and the final retreat of the French king, as it is known both from the descriptions by Joinville and from Arab sources. There is a description of the ransom and of the departure of the king and queen in may 1250. The tactical analysis of the battle at el-Mansurah is interesting, just as is the treatment of the conflicts between the Ayyubids and the Mamluks in the battle at el-Abbasah and the great victory of the Mamluks.

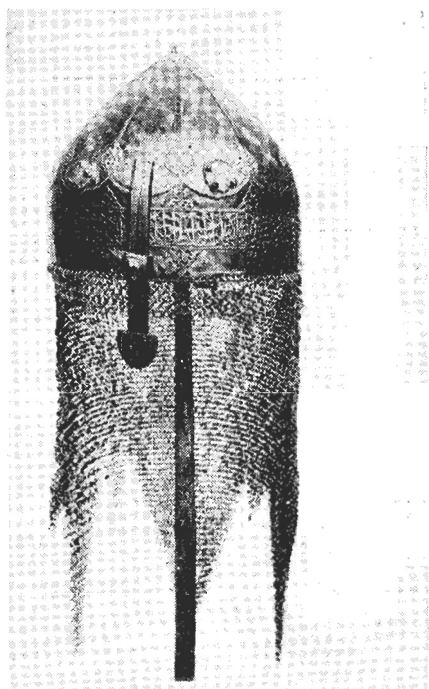
Vol. II of this work treats the period from 1250 to 1807. It starts with the new dynasty in Egypt, the *Babrite Mamluks* (name given to them from their domicile on the island Bahr or Rodah in the Nile near Cairo), from about 1250 to 1382. The dynasty of the Mamluks, whose name signifies «the Slaves», is one of the strangest in the annals of humanity. Originally these Mamluks composed a mounted body-guard to the Ayyubid sultans, but they ended with wresting the power into their own hands. As to origin they were purchased from Asia, Crimea, the Balkans and several other territories comprising those of the Mongols, Turks, Slavs, etc. They finally came to be the masters and elected their own sultans, in total 25 in the course of 132 years. Intrigues as a rule put an end to the life of a sultan after a rather short period of reigning. Nevertheless the Mamluk period of Egypt signifies a most splendid period in the annals of Medieval Egypt. The first chapter of this vol. treats the end of the Ayyubids, the army as it was during the Bahrite Mamluks, the battle of Abbasah II (1256), that of Salheiah II (1258). There were regular and irregular troops beside the normal Egyptian forces. The training and moral education of these troops are described; the command, their arms and armours, etc., are treated. There was an important manufacture of and trade with weapons in Egypt in this period. Of particular interest is the part dealing with gun-powder and firearms.

The existing Arab manuscripts of these centuries contain important information. In this period occur various battles with the Mongols, e.g. in 1260 such as the decisive battle of 'Ayn Galut against the Mongols, the battles of sultan *Baybars* against the Crusaders 1261-1277 or those under the reign of sultan *Qalaun al-Mansur* (1279-1290), the liberation of Akka in 1291, *Qalaun* and his son *al-Nasir Muhammad* against the Mongols. A special treatment is given to the battles at Homs in

1281 and at Marj-el-Soffar in 1303. In 1365 the Cypriote knights turned their forces aggressively against Alexandria. From this expedition originate some of the important Occidental swords taken as war-spoil by the generals of the sultan. After having been furnished with Arab inscriptions, telling their history, the amirs and date for the spoil they were hung on the walls in the great armoury hall of the arsenal. Now some of them are to be seen in various European and American museums and collections.



Helmet of Sultan Muhammad al-Nasir. XIIIth century. (Porte de Hal, Brussels.)



Helmet of Sultan Qansub of Egypt. XVIth century. (Museo Stibbert, Florence.)

In 1382 the *Circassian Mamiuks* followed. They remained ruling Egypt until the Turks under *Selim I* in 1517 conquered Egypt. The change of dynasty however did not change the policy. The most important struggles were first against the Mongols under Timurlane and later

against the Ottoman Turks. In regard to the first enemy they succeeded in stopping the foreign and more redoutable enemy, but the Mamluks finally had to succumb to the arms of Selim. He made Egypt an Ottoman province after the defeat in Marj Dabiq in 1516. Some important names have fame from these periods, such as the sultan *Qaitbey* the Great (1468-1496) and his particular military policy. Names and dates of a series of military commanders from the Circassian time exist. Against Timurlane they fought in Syria in 1399 and 1401. During the reign of *Barsbey* (1423-1426) the famous invasion of Cyprus took place where Pierre de Lusignan was taken prisoner at Kheirokita. It is wellknown among arms-interested on account of the knightly swords taken as war-spoil and afterwards—like those from 1365—placed in the armoury-hall in Alexandria. Now they are in museums and collections. The Arabic inscriptions placed after order of the sultan, tell their history with date and names of emirs. *Qaitbey* lead a defensive policy in regard to Alexandria and Rosetta. He had wars with the Turkomans and the Osmanli (1467-1496). The sultan al-Ghuri in his defensive policy let construct fortresses, amongst others those at Aqabah and Nekhel at Sinai. The Egyptian politics and the meeting with the Portuguese on the Red Sea and the Indian Ocean is treated in the following chapter, which terminates with the final decay of the Circassian Mamluks in the battle at Marj Dabiq in Syria 1516, at Ridanieh and Wardau in 1517. The Mamluks had expelled the Crusaders from Syria and Palestine, and they had beaten the Mongols in four important battles. They had formed a vast Islamic empire, and they had erected splendid foundations, which—still remaining—give proof of a magnificent medieval civilization. After the defeat in 1516/1517 the new ruler, Selim I, appointed a pasha over Egypt with a council of seven Turkish chiefs to control 24 Mamluk amirs or beys, one for each of the 24 provinces erected by Selim. The power of the Turks however generally did not mean much in Egypt. But it was a period of stagnation and decline of commerce. The amirs ruled rather independent until 1771, when *Ali Bey al Kabir* with his great national ambitions expelled the Turkish ruled pasha and made himself king of Egypt. In 1772 his son-in-law murdered him, and two beys now divided the country into two regions, one for each of them, until a Turkish army under Murad in 1790 seized Cairo.

Chapter III deals with the French expedition to Egypt under Napoleon in 1798, with the battle at Embaba in 1798 (the Pyramids), the defeat of the Mamluks, and the naval battle at Abukir, where Nelson's British navy destroyed the French navy, the national resistance and the revolts in Cairo. A hard battle was delivered at Heliopolis in 1801.

Owing to internal difficulties and external co-operation between the British and the Turks, negotiations were entered, and finally the French agreed in an evacuation of their troops in september 1801. Egypt was restored to the Turks.

The last part, chapter IV, of the book treats the British expedition coming to Egypt in 1807. It landed in Alexandria. This happened under the first years of the new Viceroy, *Muhammad Ali*, who had been appointed by the Sublime Court to rule the country. The expedition, where the Egyptian resistance turned out victorious, was met with by three failures at Hammad and Rashid (Rosetta). At last the British agreed in a withdrawing of their troops. Egypt was left to the government of Muhammad Ali, whose dynasty came to rule until 1952. But this period will be treated in the vol. now in preparation.

Each of the present two vols. terminates with a bibliography partly of books and articles in Arabic, partly of European and American literature. There are many maps representing the various battles mentioned and their tactics, and particularly vol. II has many illustrations of arms and armours, e.g. of helmets, mail shirts, shields, swords, axes, lances, etc., as well as engines of war. It is an elaborate work, in total of 525 pages, and the topic is interesting and of importance not only to the development in the Orient, but even to the Occidental development. It gives evidence of the increasing interest in the Islamic world for investigations in their own history of war and of ancient arms and armours. To the history of the Crusades and the following periods it adds an important chapter.

A. BR. H./E. F. H.