

# FURNITURE INDUSTRY THROUGH THE REAL MODELS AND SCENES IN THE ANCIENT EGYPTIAN ART: CHAIRS, STOOLS MODELS LA INDUSTRIA DEL MUEBLE A TRAVÉS DE MODELOS Y ESCENAS REALES DEL ANTIGUO ARTE EGIPCIO: MODELOS DE SILLAS, TABURETES

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### Abstract

This paper aims to shed light on the furniture industry in ancient Egypt through scenes left by the ancient Egyptians on the walls of tombs about their real industries and through real models and pieces that have been found in many archaeological sites in Egypt, which were eventually spread around and are currently displayed in various museums all over the world. It also illustrates the different shapes and types of ancient Egyptian Furniture in terms of daily or funeral usage, as well as the different designs of the ancient Egyptian Furniture and decorations especially floral ornaments, papyrus and lotus plants, animals motifs, feet decoration or design of geometric shapes, rectangular or square pieces, as well as some furniture pieces with hieroglyphs signs.

One of the most important and most popular models of Egyptian Furniture are the chairs and stools; this paper sheds light on the design of chairs and stools in the different dynastic eras, providing many objects that have been found in different archaeological sites and still in good condition so far to show us the ingenuity of ancient Egyptians in the sculpture and design of furniture pieces, which lasted several centuries, such as Furniture of Queen "Hetepheres", Princess "Sat Amon" and King "Tutankhamun" and others.

**Keywords:** Ancient Egyptian Art, furniture industry, chairs, stools, Papyrus, Tutankhamun, Cairo, Beni Hassan, Museum, New kingdom, Tomb, carpenter.

### Resumen

Este artículo pretende arrojar luz sobre el mundo de la industria del mueble en el Antiguo Egipto, a través de escenas que los egipcios dejaron plasmadas en las paredes de sus tumbas, y a través de modelos reales y piezas que han sido encontradas en diferentes yacimientos arqueológicos en Egipto, y que se encuentran hoy en día expuestos en diferentes museos por todo el mundo; de la misma manera, pretende ilustrar las diferentes formas de los muebles en el Antiguo Egipto, en base a su uso diario, o uso funerario. También describe los diferentes y diseños y decoraciones del mobiliario del antiguo Egipto, con predominio de adornos florales, papiros, flores de loto y motivos de animales, decoración de los pies, diseño piezas geométricas, piezas rectangulares o cuadradas, y también jeroglíficos plasmados en algunas piezas de mobiliario, entre otros.

Uno de los modelos más representativos del Mobiliario Egipcio son las sillas y los taburetes; podemos acercarnos al diseño de sillas y taburetes en las diferentes eras dinásticas, gracias a los objetos encontrados en varios yacimientos arqueológicos, y que aún están en buenas condiciones y nos muestran la ingenuidad de los Antiguos Egipcios en cuanto a la escultura y diseño de piezas de mobiliario, que han durado cientos de años, resistiendo el paso del tiempo, como por ejemplo Mobiliario de la Reina "Hetepheres", la Princesa "Sat Amon" y el Rey "Tutankhamon", entre otros.

**Palabras Clave:** Antiguo Arte Egipcio, industria del mueble, sillas, taburetes, Papiros, Tutankhamon, Cairo, Beni Hassan, Museo, Nuevo Reino, Tumba, carpintero.

# 1. Introduction

By analyzing the sources (archaeological scenes), we can know how the ancient Egyptians made the furniture they used, and the most important of these sources are real works which time has saved for us As a proof of the achievements of the civilization in this important and vital field, as well as the scenes left by our ancient Egyptians on the walls of tombs and steales (plates). One of the most relevant scenes concerning the furniture industry is in the famous tomb of "Rkh-mi-Ra"1 in the western Thebes from the reign of King "Thutmose III", New Kingdom.

It's important to know that the kinds of ancient Egyptian furniture have varied depending on the objectives and purposes of their use, whether it was furniture to be used on a daily basis, like beds, headrests, chairs, stools (benches), sofas, footholds, tables, boxes, and reservoirs or as funerary furniture, like funerary beds, rectangular coffins, wooden statues, etc...

# 2. **Types of Furniture in Ancient Egypt**

It is hard to distinguish which furniture of the types mentioned above belongs to the daily use and which to funerary use in the other world. It can be definitely said that most pieces of Egyptian furniture have been found in tombs where their owners can use in their afterlife. There is a large amount of furniture that must be buried throughout Egyptian history. This is mainly because ancient Egyptians used furniture throughout their lives, and then it was put in their tombs after they died, after being renovated or restored to make new furniture<sup>2</sup>.

It is noteworthy that the furniture which was in the houses and palaces was lost, and the remaining pieces are damaged. There are only a few models, some of which outdated and obsolete; many models were destroyed by robbers, and just a few have survived. Besides that there are great collections of furniture which is now displayed in several museums all over the world, such as the Egyptian museum where "Hetep-Heress'" (the wife of King "Sneferu" and mother of King "Khufu") and "Tutankhamun's" furniture, as well as lots of models in The British, Louvre, Metropolitan, Egyptian museum in Berlin and others. There is no doubt that some of the models were found in tombs, which prove that: even if the deceased did not use furniture in their daily life, there were basic pieces of furniture in houses and palaces to show us the greatness of ancient Egyptians and the accuracy of such furniture<sup>3</sup>.

The process of providing furniture with ornaments and decorations was inspired by a religious connotation and received great attention. Furniture was often camouflaged with gold and inlaid with ivory and colored glass, precious stones, or covered with strips of rare wood and precious stones. The Egyptian manufacturer made wood strips not exceeding 4 mm in thickness; to cover the surfaces of furniture which were made of cheap wood, they used different ways in furniture industry to make it strong and solid in order to make it permanent and everlasting.

The decorations were often complemented by hieroglyphic inscriptions and decorations with flowers, papyrus flowers, Lotus flowers and images of gods<sup>4</sup>. The papyrus umbel was the most common decorative feature, projecting (highlight) the shapes of the ends, or using it as a handle. Even though objects have rarely survived, there are several representations that prove the frequent use of papyrus in all stages of Egyptian history. The projecting ends of the horizontal frames of Egyptian chairs, which rested on animal shaped legs, are the most common examples of this application of the papyrus head.

Kantor suggested the possibility of using papyrus head and floral ornament for furniture in the First Dynasty. On "Narmer's" mace head which now exist in the Egyptian museum in Cairo has splayed projections and rests on animal feet<sup>5</sup>. There are other scenes that represent the influence of marsh plants like papyrus or lotus on furniture decorations that are two plates from Helwan area dated to the Second Dynasty. The first scene is for a lady called "*Dwat*" and the second one for another lady called "*Ka* \_ *Ht*" tomb number (9) from Helwan where there is a chair whose back is ornamented with papyrus flowers<sup>6</sup>.

The Third dynasty also has great models of chairs and beds painted on the walls of "Hesy's" Mastaba (Fig. 1.a), four heads are shown on his chairs, but later on, it became usual to add this decoration only to the backs of the chairs<sup>7</sup>. This Mastaba provides us with a virtual catalogue of furniture types used during this dynasty, it has a great variety<sup>8</sup>. These features were almost common in the Old Kingdom, (Fig. 1.b) but it became less usual during the Middle Kingdom and it

appears in the New Kingdom only as an exception, not as a rule. Beds, though less commonly shown, were also equipped with these papyrus projections ornament (Figs. 1.c)<sup>9</sup>. These ornaments and decoration have continued thereafter and appeared within the Fourth, Fifth and Sixth Dynasties even after the Old Kingdom until the Middle kingdom<sup>10</sup> but some of them were just reproductions of the Old Kingdom furniture<sup>11</sup>.

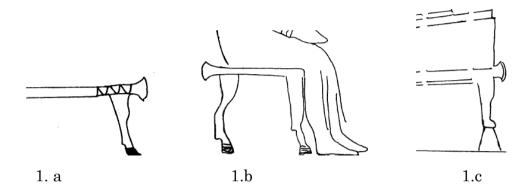


Fig.1. Ancient Egyptian furniture decoration with plants and flowers (Papyrus model)<sup>12</sup>

## 3. Furniture Industry Scenes from the tomb of "Rekh-mi-Ra"-Eighteenth Dynasty

In this tomb there are some specific scenes related to wood Industries, either basic or secondary (sub) scenes. For instance, one of them shows some wood products on the right side of the scene (Sub upper) like a handle fan, a wooden pillow, smooth table. We can also see a chapel in the shape of a rectangle; a painter and a sculptor are working on its decoration, the painter is drawing a design on the side of the chapel, meanwhile the sculptor is digging and unloading the details of the scene with a semi-hammer (fig.2). This kind of chapel's wood has been found in abundance in the tomb of "Tutankhamun"<sup>13</sup>.

Behind the people that are working in the chapel, there is another group of workers observing how the woodworking tools are being used. In the scene of the upper side a carpenter is refining a wooden block and passes his hand over it to check on the quality of refinement (fig.3). In the sub-bottom scene on the right we can see another worker who is preparing a piece of wood using (Adze) to smooth the surface as an alternative modern wood smoothing tool (fig.4) - there are real models for this Adze in ancient Egyptian civilization-the carpenter here is sitting on a stool without back with three legs (fig.4) which was commonly used by workers whose work did not require standing or squatting on the ground. The carpenter uses a wooden block<sup>14</sup> to carry out his work.

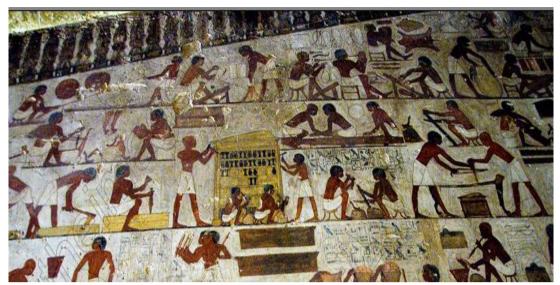


Fig.2. Furniture Industry through the tomb's scenes "Rekh-mi-Ra". Scene shows some work related to carpentry and furniture industry and design<sup>15</sup>.



Fig.3. Furniture Industry through the tomb's scenes "Rekh-mi-Ra, a cabinetmaker in the upper side to the left is refining a wooden block16.



Fig.4. Furniture Industry through the tomb's scenes "Rekh-mi-Ra, a cabinetmaker is preparing a piece of wood using (Adze)<sup>17</sup>.

Here we will focus our attention on the most important types of living or daily furniture namely:

# 4. Chairs and Stools

The Chairs are the most common pieces of furniture in ancient Egypt, at the beginning they were carved from stone creating cubic parts, and then the bases were made of wood, their seats made of smooth flint, then they put a piece of leather or cloth on it, and later it became concave. The oldest types of chairs were those without backrest (support) in the back and then after the years, they added a backrest and two arms to the chair. Chairs were mainly made for noblemen, and the legs were designed in different animal shapes, like the lion (head or leg) (fig.5). They had plant ornaments or were painted with pictures of enemies, which was a tradition that symbolizes that the king puts his feet on his enemies<sup>18</sup>.



Fig. 5. Tutankhamun's chair in the shape of lion's feet- Egyptian Museum in Cairo-Hall 35.19

In the Middle Kingdom the chairs evolved, and the back became curved. (Leaning back) in order to make them more comfortable when sitting. In the workshops of the New Kingdom the chair's back looks Italic and curved. The most famous chair is the throne of Tutankhamun (golden chair), which is undoubtedly the best example, designed with creative images, made of silver, garnet and faience inlaid with glass and studded with precious stones etc.., we will talk about it later with more details.

### Chairs and Stools Design in the Old Kingdom

Carpenters in the Old Kingdom made luxurious chairs for kings and others less luxurious for nobles. The king's chairs are carved in lion legs shape and based on the grooved heels and equipped upper portions of the front with heads carved either lioness or lions with copious hair and made the height of these legs sometimes less than its background counterpart. Plants design sculpted refers to the unity of the two parties Upper and Lower Egypt. Chairs were also made with bull legs (fig.6), cow legs or in the form of straight bars.

Concerning chairs and stools in rectangular or square shape or in the form of hieroglyphic sign (P) (fig.7) are designed by furniture designers either from one piece of wood or more pieces. This made them vary in height and their external sides were decorated with carved wooden pieces. The same design of chairs was for pregnant women as well but in a small square shape<sup>20</sup>.

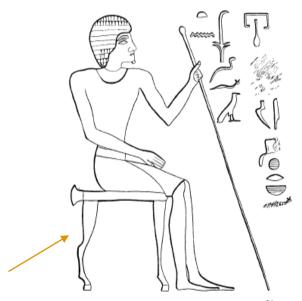


Fig.6. Stool in the shape of bull feet<sup>21</sup> Tomb of Zefa-Nesut, Giza.

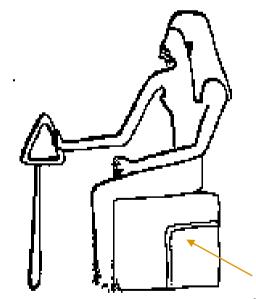


Fig.7. Square stool in the shape of hieroglyphic sign (P) <sup>22</sup> Lintel of False-door, Chapel of Imby, Giza.

Styles of furniture changed significantly during the Old kingdom, from the beginning we can see King "Djoser" form three dynasty, is depicted in sculpture as seated on a throne that is represented undecorated, presenting almost a basic

diagram of a chair<sup>23</sup>. In fact there are a lot of these models in ancient Egyptian art which are not made from wood, whether in the Old Kingdom or later.

Among the most famous models of the Old Kingdom furniture, the furniture of Queen "Hetepheres"<sup>24</sup> (Fourth Dynasty, Old Kingdom, c. 2566-2500 BC) discovered by Reisner in1925 at the bottom of a deep shaft close to her son Khufu's great pyramid at Giza. "Reisner" found that much of the wooden furniture had been damaged and rotted away. Only powder remained scattered alongside the gold sheet and the inlay pieces across the tomb floor. Reisner's team was able to reconstruct much of the queen's furniture from the position and rest of these remains. This took many years of patient industry. As the work progressed replicas were made and are now exhibited<sup>25</sup>.

The most important of these replicas were two armchairs that were found in the tomb. However, unfortunately, only one could be reconstructed (fig.8). Each of them had legs ending in the paws of a lion and stood on copper drums and shoes. The back support of the reconstructed armchair shows that it was made with a miter frame that was covered by gold and enclosed a plain, solidwood panel. The chair's arms were semicircular in part and the vertical front posts were raised with a matted pattern. The spaces below the arms were filled with a spray of three tied papyrus flowers, carved in the round and covered with gold sheet. A cushion may have been placed on the wooden seat, which was made from another solid panel<sup>26</sup>.



Fig.8. Hetepheres's Furniture, 4<sup>th</sup> dynasty, Egyptian Museum in Cairo, Hall 37.

Chairs and Stools Design in the Middle Kingdom:

The carpenters of the Middle Kingdom designed different chairs, including chairs with a cup shape; sometimes the underside edges were striated and supported by clips of the circular section geared by tenon and formed some of its seats with concave wooden planks. Chairs were carved into animal legs, either bulls or lions as aforementioned and sometimes equipped with conical heel stools. Also there are folding stools were made in two pieces; they were connected together by moveable bronzing link where they joint. Each piece was often structured in tow pivots (axes) and rarely in four pivots to increase durability (solid) <sup>27</sup>. We'll talk about this kind of stools later.

The cemetery of Bani Hassan, in El-Minya on the east bank of the Nile between Cairo and Luxor, is one of the most important places which included many models of furniture in the Middle Kingdom. These tombs were built for the nomarchs of the Sixteenth Nome of Upper Egypt. The scenes of the tombs represent carpenters working on different pieces relevant to the furniture industry<sup>28</sup>.

In tomb 569 at Beni Hassan found three similar legs, are preserved in the museum of the School of Archaeology and Oriental Studies, University of Liverpool. Unfortunately the back and seat rails have been lost. With measurements taken from the stool in tomb 569 and from the three legs in Liverpool, it has been possible to draw a scaled diagram of this seat (fig.9)  $^{29}$ .

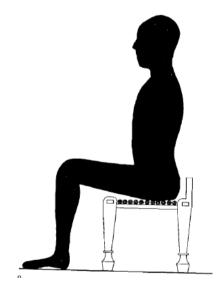


Fig. 9. Seated ergonomic on a Middle Kingdom stool30.

These Middle Kingdom chairs were smaller than chairs used today. Because the average height in ancient Egypt in the Middle Kingdom was roughly 1.70 meters about 40 mm shorter than the average modern European male. Both the tibia and femur were smaller and the hip height less which is clearly reflected in the design of the chairs and had a clear impact. It is curious that Egyptian carpenters used the minimum or lowest possible seat height when designed chairs (fig.10). Perhaps they were following a special system in design or governed by the social class of its intended owner or there was pressure on them to conserve timber. However, a lower seat height gives a more comfortable sitting<sup>31</sup>. The legs can be extended in front of the body.

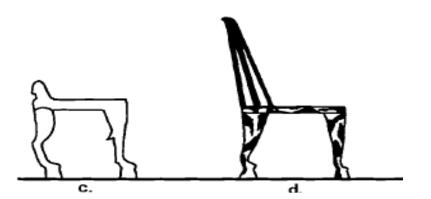


Fig.10. Middle Kingdom furniture illustrated on steale in the collection of the Egyptian Antiquities Museum, Cairo: c, stool, General Catalogue 20010; d, chair, General Catalogue 20232<sup>32</sup>.

Chairs and Stools Design in the New Kingdom

Concerning the New Kingdom many different furniture models have been found, such as: chairs, stools, pots, dishes, beds etc.., and others show the

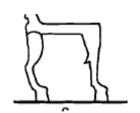


Fig.11. stool in the shape of Hieroglyphic sign "*Hm*"

influence of plants on designs, where the designer produced the most beautiful types of furniture. The Eighteenth dynasty furniture kept in the reign of "Amenhotep III" and "Tutankhamun" show traditional forms and motifs that settled early in the history of ancient Egypt<sup>33</sup>. The designers followed the artistic methods pursued by their peers in the Middle Kingdom and formed, produced different types: Netting chairs and stools made of cedar wood, ebony and with two seats at the same time, one with square bottom and the other

round top. They also made folding stools; the bottom of the chair was carved and ornamented with different parts of ducks like: necks, heads, open mouths and tongues. The chairs in the shape of hieroglyphic sign "Hm" (fig.11) were made with four straight legs and were slightly<sup>34</sup>curved<sup>35</sup>.

One of the most beautiful pieces of furniture was represented in the tomb of "Yuya" and "Thuya" and it shows the princess's chair "Sat- Amun"(fig.12) in the marshes. The chair was decorated with gilded decoration. The outer frame depicted Queen "Ty" and the princess "Sat- Amun" on a boat of papyrus in the marshes, the Queen was depicted sitting on a chair with a backrest and high armchair, and holding in her right hand a sign of "anx" in the left the scepter" nxx". In front of her we see Princess "Sat- Amun" wearing a long kilt with buds of Lotus hanging over her head<sup>36</sup>. The top of chair's legs was decorated or carved with perfect design resembling the prince's head.



Fig.12. Princess's chair *Sat- Amun*", 18<sup>th</sup> dynasty, the tomb of "*Yuya*" and "*Thuya*"number, KV 46, Egyptian Museum in Cairo, General Catalogue 51113<sup>37</sup>.

In fact this kind of chairs with high armchair was common during New kingdom and the designer were use this panel of armchair from inside and outside to present or depict a lot of events, for example from the reign of "Thutmose IV" – New Kingdom, there is an arm panel from a ceremonial chair depicts him with "Sekhmet" and "Dhwty" in a relief, on one side, the king is shown as a sphinx subduing the enemies of Egypt (fig.13)<sup>38</sup>. The front edge of the panel is missing.



Fig. 13. Arm panel from a ceremonial chair, *Thutmose IV* – New Kingdom, Metropolitan Museum, number  $544826^{39}$ .

There is no doubt that the most beautiful and best designs of all come from the reign of King "Tutankhamun", which are now in the Egyptian Museum in Cairo, we have a great collection of chairs for example, but not limited to:

The chair of state (figs.14-16): The Throne of "Tutankhamun" is an epitome of the skills and workmanship in the New Kingdom. Probably, this throne or chair of State is familiar to many people. Yet, in fact, it is more beautiful when you see it in the museum<sup>40</sup>. The delicacy and accuracy of the inlaid precious and semiprecious stone work is quite extraordinary and perfect, and the carving and designing of the figures of the King and Queen, which are in low relief, are really wonderful in power and expression.

Originally, between the seat and the legs there were figures or decorative work of some kind, probably of gold, but they have been torn away by robbers. From the struts supporting and strengthening the legs jagged ends show where the figures have been roughly broken off. Of course great care and lot of effort has been put in dealing with this amazing object, because some parts of it are in a most delicate condition<sup>41</sup>.

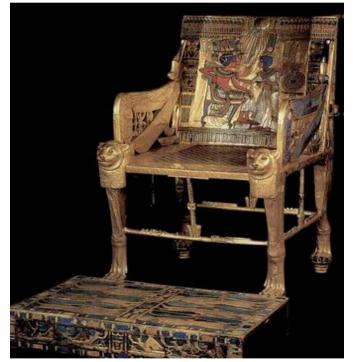


Fig.14. The Throne of "Tutankhamun", Egyptian Museum in Cairo-Hall 3542.

This throne was designed with wood laminate with gold and silver foils, decorated with semiprecious stones and glass with different colors. The armchair of the throne was designed as double winged serpents adorned with a white Crown guarding and protecting the king "Tutankhamun"<sup>43</sup>. Covered with silver and gold leaf, encased with color tinted ivory, faience, semi-precious stones like cornelian, turquoise, lapis lazuli and translucent calcite<sup>44</sup>. Legs of the throne in the shape of lion's legs) the feet are of leonine type) at the top of the legs there is a lion head, they have eyes inlaid with white quartz and crystal, between them a piece of wood decorated with "sematawy" which refers to the symbol of unity in ancient Egypt<sup>45</sup>.

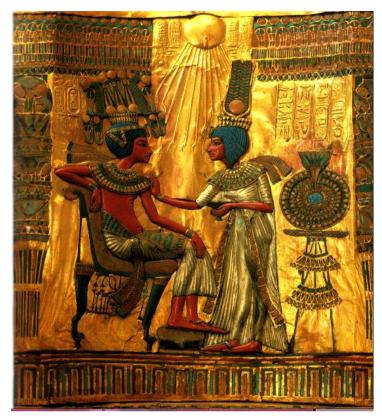


Fig.15. The Backrest of the Throne of "Tutankhamun". Nikolas Reeves& Wilkinson Richard, The Complete Valley of The Kings, tombs and treasures of Egypt's Greatest Pharaohs, USA, 1996, 83

The backrest of the throne is decorated with wonderful artistic design. The queen "Ankhesenpaaten" appears kissing the King "Tutankhamun" in his throne showing affection and love. The queen is leaning on his shoulder and on the other hand she is holding a bottle of perfume, wearing a loose and long dress. At the right and left ends of this scene we can see huge columns of floral ornament with papyrus and lotus flowers which were usually used in design and were represented in the scenes normally depicted in furniture. Also the king is sitting on the chair with high backrest and different colors.



Fig.16. Tutankhamun's chair of state, Egyptian Museum in Cairo, hall 35, this chair was used for official state meetings. Made of wood and encased with sheet gold. Decorated with images of Tutankhamun and his wife, in the back it also shows the impact of flower ornaments.



### Models of chairs and stools design of the New Kingdom

Fig.17. Hatnefer's Chair – Metropolitan Museum N<sup>o</sup>. 36.3.152. Eighteen dynasties, New kingdom, reign of "Thutmose II"–Early Joint reign, 1492–1473 B.C. This chair was found in front of the entrance of the tomb of "Senenmut"<sup>46</sup>. The chair designed without armchair. We can see the decoration includes a row of protective symbols of signs: *Dd* column which refers to the idea of stability, *TiT* sign refers to Protection of Goddess ISIS and in the middle the god Bes. The legs are in the shape of the lion's paws.



Fig.18. Reniseneb's Chair, Metropolitan Museum No. 68.58, Eighteenth Dynasty, New Kingdom. The chair is made of wood, ebony and ivory<sup>47</sup> and it looks very strong as if it was made yesterday. The chair for the scribe Reniseneb is designed without armchair. The legs are in the shape of the lion's paws. On the backrest we can see a man sitting on a chair with the same design showing a lotus flower.



Fig.19. Three-legged stool, from Thebes, 18th Dynasty, New kingdom about 1550-1300 BC, The British Museum, number 2473<sup>48</sup>.



This stool is possibly a craftsman's seat because these types were probably used by craftsmen to sit on while they worked, and there are many examples of them in tomb paintings. The seat is made of a single shaped piece of wood, with three separate legs mortised into it. Examples of this type of stool have actually been found in tombs next to the workmen's village at Deir el-Medina. More elaborate stools, similar to those found in the tomb of "Kha", the foreman of the workmen at Deir el-Medina in the reign of

"Amenhotep III", would have been used by the elite. This stool is from a Theban tomb49.



Fig.20. Round-legged stool, from Thebes, Perhaps mid-late 18th Dynasty, New Kingdom, The British Museum, London, Nº.2472, about 1400-1300 BC.50

The elaborate nature of this stool suggests it was made for an elite official and nobles. A similar example was found in the tomb of "*Kha*" but with three legs as we mentioned the foreman of the workmen at Deir el-Medina in the reign of "Amenhotep III". We see that the seat is designed with a simple curve from all sides to give comfort to the person sitting on it. The cylindrical legs are incised and inlaid with small pieces of ivory in lotus petal and drop shapes. We can see some grooves in the legs from the bottom, which reveal that the stool was made of leather. The braces between the legs end in ivory ferrules, to cover the wood joints.

The seat of the stool (central part) has disappeared, but it is clear that it consisted of a piece of leather which was glued onto the frame. Much simpler stools have been found next to the workmen's village at Deir el-Medina and were probably used by craftsmen to sit on while they worked<sup>51</sup>.

Another design of stools in Ancient Egypt "Folding Stool"

The first models of the folding stool date from the Middle Kingdom. It was designed to be used in an easy and practical way, for example to carry it around for hunting in the marshes, being light and convenient to handle when folded. When unfolded, the frame proves to be very rigid (solid). Middle Kingdom folding stools were designed simply based on two interlocking frames held together with a pair of bronze pivots<sup>52</sup>. The author would like to say that this kind of these chairs still used in Egypt nowadays for the same purposes travelling; because it's light and easy in use.

The best models of folding stool came from the New Kingdom and were more elaborate. The vertical spindles often end with goose heads that are inlaid with ivory neck feathers and eyes. The beak of the goose formed the scribed shoulders of the tenon. This tenon projected as the goose's tongue and was mortised into the floor rail. Both floor rails are also carved with the head of a goose, inlaid with ivory eyes. Many Egyptologists believe that the high-back chairs often depicted in banquet scenes that were very common in tomb's scenes, evolved from the stool through the addition of an increasingly higher back<sup>53</sup>. The ancient Egyptians enjoyed seat pads, mattresses and cushions that were often quite plush and stuffed with dried leaves.

Many seats of these stools were made of skin and glued to the structure with a paste which has eventually changed into a brown crystalline material. Some seats were made from cord which passes through holes along the edge of the seat rails and is then woven across to form wide flexible webbing. Despite these seats were designed to be folded, some of them were made with solid wooden seats, shaped and painted to simulate an animal skin. A number of these stools are illustrated in Theban tombs of this period and a good example was discovered in the tomb of "Tutankhamun"<sup>54</sup>.

The seats of these stools were made from a thick panel of wood which was carved to a dish shape. Three curved legs were jointed at angles into the underside of the seat. Sometimes the leg tenon would pass through the seat to give durability but in these circumstances the surface (the center) of the seat was heavily plastered to conceal the mortises and also the poor-quality timber from which it was often manufactured. $^{55}$ .



Fig.21. Tutankhamun is sitting on a folding stool, detail of a relief of the little golden shrine, found in his tomb. The Scene represents him in artificial marshes hunting birds with his wife<sup>56</sup>.

Eventually there are a lot of models of folding stools designed without seat, made of Wood, inlaid with ebony and ivory, dated back to the Middle and new kingdoms in the Metropolitan Museum<sup>57</sup>.

### 5. Conclusion

This paper included the chairs and stools as the most important models of furniture in ancient Egypt; showed that they were designed in varied forms whether, geometric shapes (square and cubic) at the beginning, and then the Egyptian cabinetmaker added a backrest or with armchair which aimed to be more comfortable for the person who set on, this armchair had sometimes a panel from wood between the upper part of the arm and the seat, cabinetmaker was exploit it to depict religious festivals' scenes like " jubilee" and "Heb-Sed" festivals or the owner of the chair with holy deities.

According to the abovementioned of chairs it can be said that there are two specific models of furniture, chairs and stools in ancient Egypt. The furniture was designed and decorated through the real models and the scenes of tombs. It is noteworthy to point out the existence of daily furniture (furniture of daily usage), the most models of this type lost. The other type of furniture is the funeral, which were found in tombs for using by the deceased in his new life and this is was an essential reason to put a lot of models of furniture in the tombs during the ancient Egyptian history. There was another important type of chair that is "folding chair" which were designed to be used in an easy and practical way which still used so far in Egypt for the same purposes. The most important of aforementioned was the furniture of queen "Hetepheres" dated to the Old Kingdom, Beni Hassan's furniture from the Middle Kingdom and" Tutankhamun's" furniture from the New Kingdom, all of them displayed in the Egyptian Museum in Cairo. In addition to lots of scenes on the walls of tombs that depicted how to make, design and decorate different models of furniture, such as, the scenes in the tomb of "Rekh-mi-Ra", New Kingdom period, which depicted a cabinetmaker in a different work related to carpentry and furniture design.

It is noteworthy that the wood was not the only material for furniture industry, but there were furniture made from stone, such as, the throne of the king "Djoser", Third Dynasty, and "Khafre" Fourth Dynasty, in the Egyptian Museum in Cairo. These kinds of these chairs were used to depict the political events on the sides of the chair, such as, the unity of Egypt, through the union of papyrus and lotus plants. In addition to other raw materials, trees, such as sycamore wood and cedar, etc...

The decoration of these chairs and stools was very important and accurate, which were often inlaid with precious metals and ivory, also it was change according to the social level or rank for the owner of the chair. This decoration were varied between flowery and animal decoration such as papyrus and lotus, feet or paws or head of a lion, a bull -legged as well as the form of hieroglyphic sign "Hm".

Such furniture attracted museums all over the world to display lots of its pieces to show the ancient Egyptian ingenuity in making, design and decoration.

### NOTES

<sup>&</sup>lt;sup>1</sup> Rekhmira, Vizier, Eighteenth Dynasty, New Kingdom, c. 1479-1400 BC., Reklirnira came from a family which had produced a number of civil servants of the highest rank. He was Vizier of the south to King THUTMOSE III and King IMENHOTEP II, was a man of taste and high culture; the reliefs and paintings are of a superlative quality. He was buried in the Valley of the Nobles at Thebes (TT 100). The paintings in his tomb show much of the daily life of the highest official in the state. Is shown receiving tribute from Nubian envoys; Rice M., *Who's who in Ancient Egypt*, London and New York, 1999, P.171; Davis N. de Garis, *The Tomb of Rehk-mi-Re at Thebes*, New York, 1943.

<sup>.18، 17،</sup> ص2010 عبد الحليم نور الدين، *الأثاث في مصر القديمة*، محاضرة بمكتبة الإسكندرية، قاعة الاوديتوريوم،<sup>2</sup>

Nur El-Den A. Halim, Al-Athath Fe Misr Al-Kademah, Bibliotheca Alexandria, 2010, pp.17, 18.

<sup>.152،</sup> ص1920 محمد أنور شكري، *العمارة في مصر القديمة*، الهيئة العامة للتأليف والنشر، القاهرة، <sup>3</sup>

Shukri Mohamed A., *Al-Emarah Fe Misr Al-Kademah*, the General Authority for publishing, Cairo, 1902, p.152. <sup>4</sup> عبد الحليم نور الدين، *الأثاث في مصبر القديمة*، ص

Nur El-Den A. Halim, Al-Athath Fe Misr Al-Kademah, pp.36, 37.

<sup>&</sup>lt;sup>5</sup> Kantor, H. J., *Plant Ornament in the Ancient near East*, Chicago, Illinois, 1945, P.46, 47; this really becomes a certainty when we note the papyrus-ended palanquin from "Sahure's" temple from fifth Dynasty, Old Kingdom; Ibid, P.46; Cf: Junker H., *Giza* I, Wien and Leipzig, 1929, p.175, Fig.31.

<sup>&</sup>lt;sup>6</sup> منشوره، كلية عبد الحميد سعد عزب، *الأحراج في مصر الفر عونية منذ عصر ما قبل الأسرات وحتى نهاية الدولة القديمة*، رسالة ماجستير غير <sup>6</sup> 314، 314، شكل 561، ص1993 الأداب، جامعة طنطا،

Azab Abd El-Hamid S., Al-Ahrag fe Misr Al-Froanea monzo ma kbl Al-Osrat Hata Nehayt Al-Daola Al-Kademah, Unpublished Master Thesis, Faculty of Arts,, Tanta University, 1993, pp.560, 561, figs. 313, 314.

<sup>&</sup>lt;sup>7</sup> Kantor, H. J., *Plant Ornament in the Ancient near East*, Chicago, Illinois, 1945, P.46, 47.

<sup>&</sup>lt;sup>8</sup> Peck William H., *the Material world of Ancient Egypt*, Cambridge, 2013, 84.

<sup>9</sup> Kantor, H. J., *Plant Ornament in the Ancient near East*, p.46, 47; It is possible that the papyrus head and floral ornament was already being used for furniture in the First Dynasty. On Narmer's mace head which now exist in the Egyptian museum in Cairo has splayed projections and rests on animal feet. This really becomes a certainty when we note the papyrus-ended palanquin from Sahure's temple from fifth Dynasty, Old Kingdom; Ibid, P.46; Cfr: Junker H., Giza I, Wien and Leipzig, 1929, p.175, Fig.31. .314، 313، شكل 561، 560 عبد الحميد سعد عزب، الأحراج في مصر الفرعونية، ص<sup>10</sup> Azab Abd El-Hamid S., Al-Ahrag fe Misr Al-Froanea, pp.560, 561, figs. 313, 314. . 233، ص1984 محمد محمد الصغير، *البردي واللوتس في الحضارة المصرية القديمة*، هيئة الآثار المصرية، قطاع المتاحف العام، القاهرة، <sup>11</sup> El Saghir Mohamed M., Al-Bardy Wa Al-Loutas Fe Al-Hadarah Al-Misryah Al-Kademah, the Egyptian Antiquities Authority, sector of public museums, Cairo, 1984, p.233. <sup>12</sup> Kantor, H. J., *Plant Ornament in the Ancient near East*, figs. II.89, II90, II.91. .18، 17، ص2010 عبد الحليم نور الدين، الأثاث في مصر القديمة، <sup>13</sup> Nur El-Den A. Halim, Al-Athath Fe Misr Al-Kademah, pp.17, 18. 19: 18 عبد الحليم نور الدين، الأثاث في مصر القديمة، ص<sup>14</sup> Nur El-Den A. Halim, Al-Athath Fe Misr Al-Kademah, p.18, 19; https://sc.theimagefile.co.uk/?Action=VF&id=915063819; Davis N. de Garis, the Tomb of Rehk-mi-Re at Thebes, p.36, 51, 52. <sup>15</sup> https://sc.theimagefile.co.uk/?Action=VF&id=915063819, Accessed 28/9/13. <sup>16</sup> https://sc.theimagefile.co.uk/?Action=VF&id=915063819, Accessed 28/9/13. <sup>17</sup> http://www.impetusinmundum.de/pictures/5311.uhtml; Accessed 30/9/13; from Egypt, Upper Egypt; Thebes, Sheikh Abd el-Qurna, Tomb of Rekhmire (TT 100). . 33 عبد الحليم نور الدين، الأثاث في مصر القديمة، ص<sup>18</sup> Nur El-Den A. Halim, Al-Athath Fe Misr Al-Kademah, p.33. <sup>19</sup> Mey Zaki, the Legacy of Tutankhamun, Art and History, Farid Atya Press, Egypt, 2008, p.97. .248, 247 محمد راشد حماد، نجارة الأثاث في مصر القديمة، ص<sup>20</sup> Hammad M. Rashid, Negaret Al-Athath Fe Misr Al-Kademah, p.247, 248. <sup>21</sup> Hassan S., *Excavations at Giza*, Oxford, 1932, p.64, fig.116; p.94, fig.158. <sup>22</sup> Hassan S., *Giza*, p.93, fig.157. <sup>23</sup> Peck William H., the Material world of Ancient Egypt, Cambridge, 2013, 84. <sup>24</sup> Hetepheres I: Probably the daughter of the last king of the Third Dynasty HUNI, Hetepheres was the sisterwife of SNEFERU and the mother of KHNUMKHUFU, Rice M., Who's who in Ancient Egypt, p.67. <sup>5</sup>Geoffrey Killen, *Egyptian Woodworking and Furniture*, United Kingdom, 1994, p.30. <sup>26</sup> Geoffrey Killen, *Egyptian Woodworking and Furniture*, p.31. .248، ص2009 محمد ر الله حماد، نجارة الأثاث في مصر القديمة، <sup>27</sup> Hammad M. Rashid, Negaret Al-Athath Fe Misr Al-Kademah, p.248. <sup>28</sup> Geoffrey Killen, *Egyptian Woodworking and Furniture*, p.37, 38. <sup>29</sup> Ibid, p.38. <sup>30</sup> Geoffrey Killen, Egyptian Woodworking and Furniture, fig.47. <sup>31</sup> Ibid, p.38. <sup>32</sup> Schäfer H. and Lange H., Catalogue Général des Antiquités Égyptiennes du Musée du Caire, Grab und Denkseine des Mittleren Reichs No. 20001-20780, Theil IV, Berlin, 1902, Taf. I (20010); Taf.XVIII (20232); Geoffrey Killen, Egyptian Woodworking and Furniture, P. 39, Fig.48. أيمن محمد أحمد، *الأحراج في مصر القديمة منذ نهاية الدولة القديمة وحتى نهاية الدولة الحديثة*، رسالة ماجستير غير منشورة، كلية الأداب<sup>33</sup> . 377، ص2010جامعة الإسكندرية فرع دمنهور، Ayman M. Ahmed, Al-Ahrag fe Misr Al-Kademah monzo Nehayt Al-Daola Al-Kademah Hata Nehayt Al-Daola Al-Hadetha, Unpublished Master Thesis, Faculty of Arts, Alexandria University, Damanhur Branch, 2010, p.377. .250، 249 محمد راشد حماد، نجارة الأثاث في مصر القديمة، ص<sup>34</sup> Hammad M. Rashid, Negaret Al-Athath Fe Misr Al-Kademah, pp.249, 250. <sup>35</sup> Geoffrey Killen, *Egyptian Woodworking and Furniture*, Fig.48c. <sup>36</sup> Davies M. Theodore, The Tomb of Iouiya and Touiyou the Finding of the Tomb, Printed in Great Britian by Bath Press, 2000, 43, 44, fig.4; Quibel, The Tomb of Yuaa and Thuiu, Catalogue General des Antiquités Égyptienne du muse du Caire, No 51001- 51191, IFAO, Le Caire, P.52, 53,pls.XXXV, XXXVI, No.(51112);

The second piece is a chair to the princess, "SAT \_ Amon" it decoration with lotus flowers, where it appears at the back of the chair the winged sun disk at the top, at the bottom shows the boat where "SAT \_ Amon" is sitting on symmetric scenes to receive offerings; Davies M. Theodore, *The Tomb of Iouiya and Touiyou the Finding of the Tomb*, p.38, fig1.

<sup>37</sup> For more information about this chair, see; M. Eaton-Kraus, Walter Segal's Documentation of CG51113, the Throne of Princess Sat-Amun, *JEA* 75, 1989, 79-88.

<sup>39</sup> <u>http://www.metmuseum.org/collections/search-the-collections/544826</u>, Accessed 1/10/2013.

Egyptian Museum's CATALOGUE, Ministry of culture, Supreme Council of Antiquities Press, Cairo, 1999, p.116. <sup>41</sup> Thomas Hoving, *Tutankhamum the untold story*, New York, 2002, p.178; The point of this throne lies in the

<sup>41</sup> Thomas Hoving, *Tutankhamum the untold story*, New York, 2002, p.178; The point of this throne lies in the inclined backrest, where the inlaid decoration shows us a scene associated with the court at Amarna during the last years of Akhenaten. The scene on the backrest represents an isolated pavilion with pillars covered with floral patterns and flowers opening in the rays of the sun god the Men, flanked by cartouches bearing the names of King Tutankhamun as they were written towards the end of Akhenaten's reign. The king is wearing the white crown composed of a number of feathers, conical in shape and with a great number of serpents, each surmounted by a solar disk; the crown is inlaid with coloured glass paste. The king is looking directly at his wife Queen Ankhsenamon standing with slightly bent back in front of him, wearing a headdress with two long feathers and a circle of *uraei* and narrow horns. The queen's short wig is inlaid with lapis lazuli; Mey Zaki, *the Legacy of Tutankhamun, Art and History*, p.96.

<sup>42</sup> Mey Zaki, *the Legacy of Tutankhamun*, p.95; for other models of *Tutankhamun*'s chairs: Smith W. Smith W. Stevenson, *Arte Y Arquitectura del Antiguo Egipto*, Madrid, 2000, pág. 326, figura 345 y 346.

كتالوج المتّحف المصري، ص116<sup>43</sup>

Egyptian Museum's CATALOGUE, p.116

<sup>44</sup> Mey Zaki, *The Legacy of Tutankhamun, Art and History*, p.96; Michael Woods and Mary B. Woods, *The Tomb of Tutankhamen*, USA, 2008, P.32

كتالوج المتحف المصري، ص45.116

Egyptian Museum's CATALOGUE, p.116

<sup>46</sup> Upper Egypt; Thebes, Sheikh Abd el-Qurna, Tomb of Hatnefer and Ramose (below TT 71), outside entrance, Dimension: H. 53 cm (20 7/8 in); w. 50 cm (19 11/16 in); d. 42 cm (16 9/16 in) H. of seat 24.5 cm (9 5/8 in); <u>http://www.metmuseum.org/Collections/search-the-</u>

<u>collections/543868?rpp=20&pg=1&ft=chair+Acient+Egypt&pos=3</u>, Accessed 30/12/12; For another model similar to this type from the same period, link: <u>http://www.metmuseum.org/Collections/search-the-collections/548636?rpp=20&pg=1&ft=chair+Acient+Egypt&pos=2</u>; another model ornamented with lotus flower in the back of the chair;

http://www.bmimages.com/preview.asp?image=00548458001&imagex=332&searchnum=0001

<sup>47</sup> Thebes. Dimension h. 86.2 cm (33 15/16 in); <u>http://www.metmuseum.org/collections/search-the-</u> <u>collections/547687</u>, Accessed 5/12/12; Peck William H., *the Material world of Ancient Egypt*, 86, fig.34.

<sup>48</sup><u>http://www.britishmuseum.org/explore/highlights/highlight\_image.aspx?image=ps312801.jpg&retpage=15683</u>
, Accessed 30/9/213, Dimension Height: 26.800 cm, Width: 39.300 cm, Length: 40.500 cm; Geoffrey Killen, *Egyptian Woodworking and Furniture*, p.46, fig.54.

<sup>49</sup><u>http://www.britishmuseum.org/explore/highlights/highlight\_image.aspx?image=ps312801.jpg&retpage=15683</u>, Accessed 30/9/213, Dimension Height: 26.800 cm, Width: 39.300 cm, Length: 40.500 cm; Geoffrey Killen,

*Egyptian Woodworking and Furniture*, p.46, fig.54; for another model of Chair from New Kingdom, Thebes, check: Geoffrey Killen, *Egyptian Woodworking and Furniture*, p.47, fig.56.

<sup>50</sup>http://www.britishmuseum.org/explore/highlights/highlight\_image.aspx?image=ps271486.jpg&retpage=15684, Accessed 30/9/2013, Dimension Height: 37.500 cm; Geoffrey Killen, Egyptian Woodworking and Furniture, P.45, fig. 53; for another model in the same design from wood and The surface has been painted white, check: William Material fig.35; Peck Η., the world of Ancient Egypt, 87, http://www.bmimages.com/preview.asp?image=00514979001&imagex=1&searchnum=0003; Accessed 1/10/2013.

<sup>51</sup>http://www.britishmuseum.org/explore/highlights/highlight\_image.aspx?image=ps271486.jpg&retpage=15684

, Accessed 30/9/2013, Dimension Height: 37.500 cm; Geoffrey Killen, *Egyptian Woodworking and Furniture*, P.45, fig. 53.

<sup>52</sup> Geoffrey Killen, *Egyptian Woodworking and Furniture*, p.47.

<sup>53</sup> Ibid, p.47.

<sup>54</sup> Geoffrey Killen, *Egyptian Woodworking and Furniture*, p.47.

<sup>55</sup> Ibid, p.46.

<sup>56</sup> Carter H., *The Tomb of Tutankhamen*, London, 1972, p.14.

<sup>&</sup>lt;sup>38</sup> <u>http://www.metmuseum.org/collections/search-the-collections/544826</u>, Accessed 1/10/2013.

كتالوج المتحف المصري، وزارة الثقاقة، مطابع المجلس الأعلى للأثار، القاهرة، 1999، ص11<sup>40</sup>

<sup>57</sup><u>http://www.metmuseum.org/collections/search-the-collections/544795#fullscreen</u>, Dimensions: (32.5 x 40.5 x 34.5 cm); for other models for folding stool without seat, New kingdom, Thebes, British Museum, London, N°.29284, check: Geoffrey Killen, *Egyptian Woodworking and Furniture*, p.46, fig.55; another model from Eighteenth Dynasty, New Kingdom, about 1550–1295 B.C, Dimensions (32.5 x 40.5 x 34.5 cm), Metropolitan Museum, number 12.182.49;check: <u>http://www.metmuseum.org/collections/search-the-collections/544795?img=1</u>

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