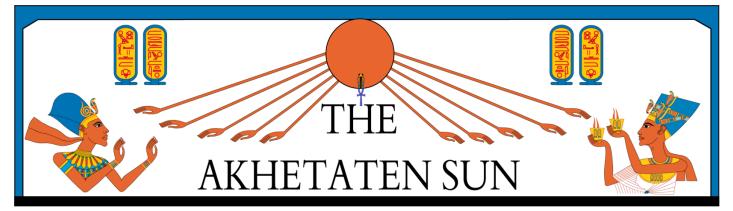
ISSN 2689-2227



Volume 30, Number 2 December 2024

Published twice per year since 1993

Copyright 2024, The Amarna Research Foundation

Table of Contents

page

1

37

Article -- Author

The Workmen's Village at Amarna *David Pepper*

Appendix: - House-by-House finds in 1921-22 David Pepper

Officers and Directors

President – Floyd Chapman Vice President – David Pepper Secretary – Anita McHugh Treasurer – Laura Engel Membership – Jill Taylor Pepper Publications – David Pepper Director – Merrie P. Wycoff Director – Robyn Stefflin Director – Rodney Shuff Founder – Robert Hanawalt

The President's Papyrus

Greetings Amarnaphiles,

The good news I'd like to share today is that the Amarna Project has a new Director, Dr. Anna Stevens, and the future for work at Amarna now looks bright.

Furthermore, she plans to continue where Barry left off, and continue submitting articles about the continuing progress of the Amarna Project.

In the interim, once again our very own David Pepper has risen to the occasion and submitted an article about the Workmen's Village that I think you will find very interesting and informative.

In closing, let me remind you how happy we are that you have chosen to become a member and support this organization.

Thank you for your patience with us during this very difficult time of transition.

With best wishes always, Floyd

The Workmen's Village at Amarna

by David Pepper

Around 1348 BCE, King Akhenaten erected boundary stelae all around a site for a new capital city in Middle Egypt. He called his new city *Akhet-Aten*, The Horizon of the Aten. It was located in Middle Egypt, about half way between Cairo and Luxor. (Figure 1)

Palaces, buildings, temples, and houses were quickly erected. (Figure 2) The city grew to have some 50,000 inhabitants¹ before it was abandoned a few years after Akhenaten's death, when Tutankhamun seems to have moved his royal court to Memphis.²

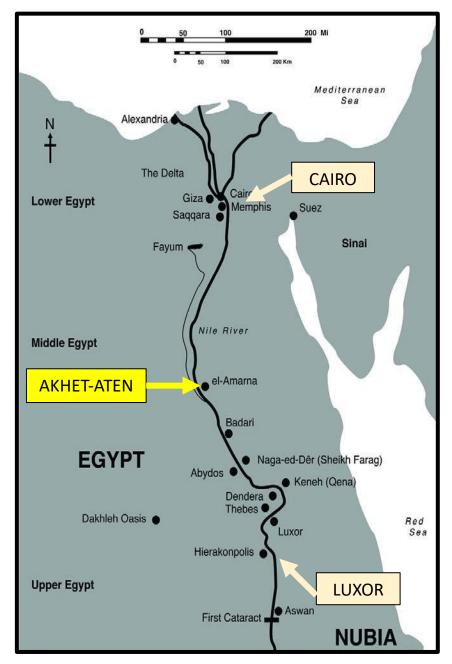


Figure 1: Map of Egypt

Akhetaten was built in a dry desert 'bay', spanning a length of about 8 miles (12 km) northto-south, and 3 miles (5 km) east-west. Most of the city hugged the eastern bank of the Nile, with a few structures built in the desert east of the city. These remote places included the Workmen's Village, located about a mile east of the city, and around 2 miles from the Nile river bank. The Workmen's Village was nestled up near the South Tombs, which were built into the cliffside south-east of the village. The wadi leading up to the Royal Tomb began just a mile or so east of the Workmen's Village. These facts led T.E. Peet who first excavated four houses in the village in 1921, to name it the "Grave Digger's Village," and to postulate that its residents may have been considered 'unclean' and thus have been located far from the rest of the city.³ Later excavations under C.L. Woolley uncovered much of the village, its walled compound, and its surrounding buildings and chapels. Woolley re-named it the "Eastern Village." Today, it is referred to as the Amarna Workmen's Village.

The Workmen's Village was called '*set maat*', or "the place of truth," like its counterpart at Deir el-Medina.⁴ It was home to the artisans and craftsmen who painted and furnished the Royal and Noble's tombs at Amarna.

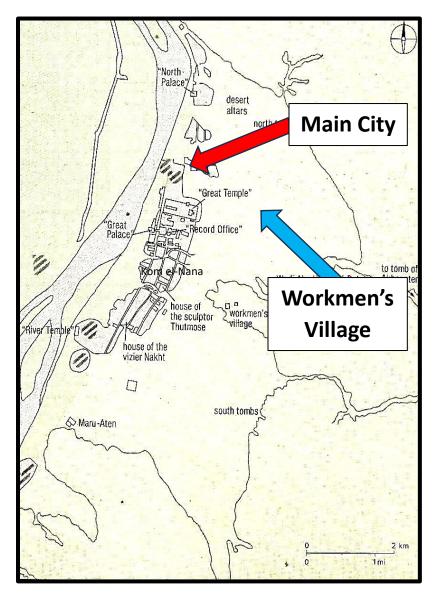


Figure 2: Map of Amarna

Have you ever wondered why the modern name for the site where Akhenaten built his capital city, is now known as 'Tell el-Amarna'? Well, in the 18th century CE, a tribe called the Beni Amran settled beside Akhetaten's ruins. The settlers district became known as "Amarneh." They called their village el-Til. So the locals across the river began to refer to this village as Til el-Amarneh (meaning el-Til village of the Amarneh). Early western explorers confused the name *Til* with the word *Tell*, an ancient mound, and so named the site Tell el-Amarneh (now spelled Tell el-Amarna).⁵

Figures 3 and 4 show how the walled village looked in 1922 when it was under excavation, and how it looks recently, with sand now covering the site and its spoil heaps.

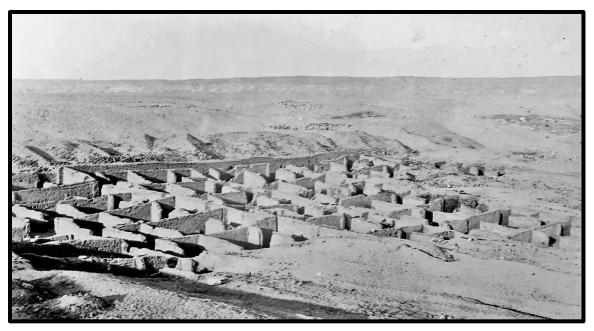


Figure 3: The Workmen's Village in 1922



Figure 4: The Workmen's Village, 2021 photo by Thais Rocha da Silva

Before 1921, Ludwig Borchardt had surveyed near the area in 1907 and declared it was a cemetery. A plan of the Village was drawn by excavation architect Francis Newton as it was being uncovered in 1922, under the direction of C.L. (Leonard) Woolley. (Figure 5) Woolley determined it was a walled village with 74 houses. Only 34 of the houses in the village were excavated in 1921-22. Five additional houses were also excavated between 1979 and 1986, they are colored green on the plan.⁶

Access into the village was through a gate along the south wall, which led into the South Place. It had a limestone threshold with a pivot socket hollowed out into the limestone.

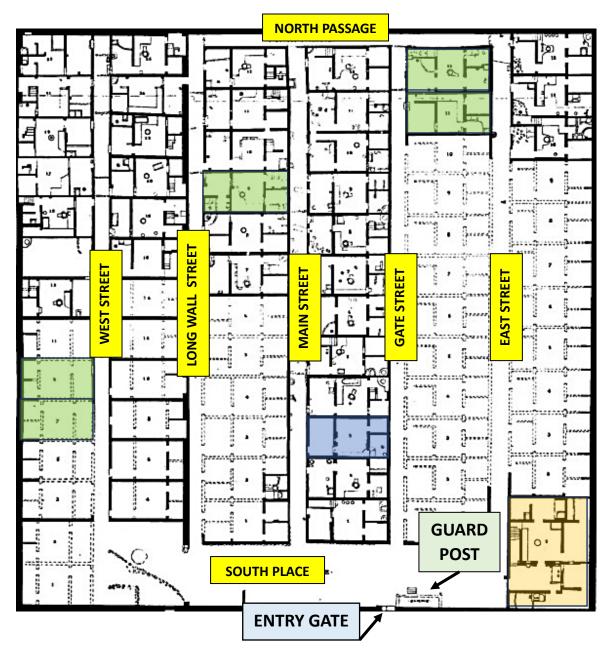


Figure 5: Plan of the Workmen's Village drawn by Francis Newton

In the gate's pivot socket was found a wooden pivot block set in the limestone threshold. (Figure 6) This wooden block was drilled out to accept a round pin, which would have been the pivot at the bottom of the gate. It was probably oiled to reduce friction and prolong the life of the pivot. There would also have been a wood door hinge above the gate drilled out to accept the gate's top pivot pin.⁷

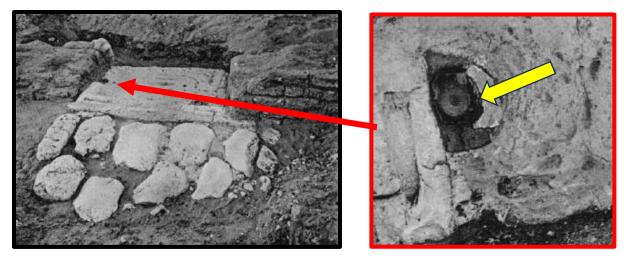


Figure 6: Entry gate into the Village (left) and its wooden pivot (right)

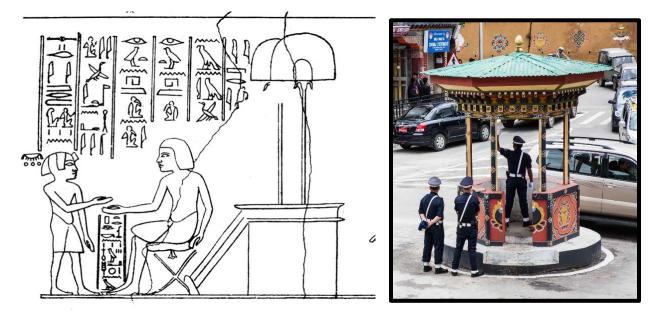


Figure 7: Left, a policeman greets child; a raised police kiosk is behind him, Amarna Tomb of Ay. Right, is a modern-day Police Kiosk

The gate may have been monitored by a police guard-post just inside the wall, but the excavators, on finding steps leading up to a platform which Woolley described as a 'shrine." However, a drawing at Amarna from the tomb of Ay shows a similar platform that is a police observation kiosk.⁸ (Figure 7 left)

The Workmen's Village excavators named the north-south running streets, and the two adjoining north and south areas, the North Passage, and the South Place. (See Figure 5)

The South Place was the entry plaza that accessed all the north-south streets. The remains of a gate providing access to West Street was found by the excavators, but it seems to have been abandoned at some point, and a half wall ran at an angle to provide a fenced off area for animals at the south end of West Street.

The excavators found animal droppings and straw, as well as a midden of trash in the fenced off area of West Street.⁹

The North Passage provided a narrow access to the four eastern streets. At the end of Gate Street in the North Passage, along the 7 ft. (2.2 m) high wall, was a round-topped niche cut into the wall. It was 2.3 ft. (0.7 m) above the ground, 1.8 ft (0.6 m) high, and 1.2 ft. (0.4 m) deep with a raised sill across it's front edge. Wooley speculated that its purpose was to either hold a lamp, or a figurine.¹⁰

The walled village seems to have been built in two phases. The first phase was the construction of the eastern part, consisting of East Street, Gate Street, Main Street, and Long Wall Street.¹¹ These streets are about 6 ft. (2 m) wide.

There is a supervisor's house in the south east corner of the eastern part of the Village (colored orange on Figure 5), and within the original walled compound were 47 "row houses," attached to each other with common north and south walls. Each of these houses had an entry on the eastern side of the north-south streets.

At some time later an annex was added to the west, with an access gate from South Place through Long Wall Street. The West Annex had just one street, West Street, and 26 "row houses", with common walls, similar to those in the original eastern part of the village. In the West Annex, however, the 12 houses on the eastern side of the street and the 14 houses on the western side of the street all had entries facing each other across the road. Eventually, however, an additional entry gate along the South Wall was added to provide access from outside the village to the western annex. It is not known why this was done.

During excavation of the village, ring bezels found in the village show it was occupied from early in the reign of Akhenaten to well into the reign of Tutankhamun. Abandonment may have begun when Tutankhamun relocated to Memphis in year 3 of his reign. Afterwards, the western annex may have been occupied as a police barracks, but that is just the speculation of the excavators.¹²

Peet excavated four houses in the village in 1921, giving them

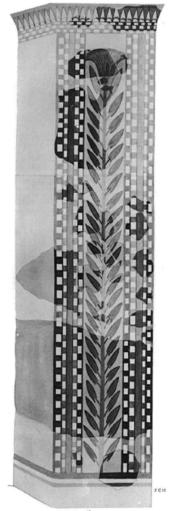


Figure 8: Support pillar in Living Room of #9, Main Street

building numbers 501, 502, 511, and 512. But these houses were later renamed to reflect their address along the streets when much more of the village was excavated in 1922. On the 1922 plan by Newton it shows that 41 houses in the village were not excavated at that time. (Figure 5)

Most of the houses seem to have been single-story dwellings, with stairs accessing the roof. The roofs were probably shaded with canopies to create additional work space. Stairs to the roof were placed either in the front courtyard (designated by Woolley as a Type B house), or in the small room at the back called the kitchen by the excavators (a Type A house) (Figure 9).¹³ All of the excavated houses had at least a couple of bottom stair treads remaining showing where the roof access was. Two-story buildings, for example at #9 Main Street, had a support pillar in the center of the living room.¹⁴ (e.g. Figure 8)

The village houses were built to a common plan. Their frontage on the street was 16.5 ft. (5 m) and their depth 33 ft. (10 m). Thus, the lot was about 540 sq. ft. (50 sq m). The uncovered front courtyard (called the 'hall' by the excavators) was 16.5 ft. (5 m) by 13 ft. (4 m). The covered part of the building towards the back of the lot was 16.5 ft. (5 m) by 19.5 ft. (6 m), or 323 sq ft. (30 sq m), which is about the size of a modern standard hotel room.

The plan of the villages shows that there was some variation in the room configuration of the houses, but basically the first room in the budling was a 16.5 ft. (5 m) by 10 ft. (3 m) reception/living area. The interior rooms were enclosed by two north-south cross walls. Doorways were cut into the front and middle cross walls. The rear half of the enclosed building was further divided into two parts by an east-west wall running between the center cross wall and the rear wall of the building. The excavators named one of these small rooms, the kitchen, and the other the bedroom, based on objects found in these rooms (e.g. cooking materials, and bed platforms).¹⁵

The layout of the two back rooms varied from house to house. Type A houses had the stairs running up to the roof starting in the kitchen and Type B houses had stairs to the roof in the front courtyard. (Figure 9)

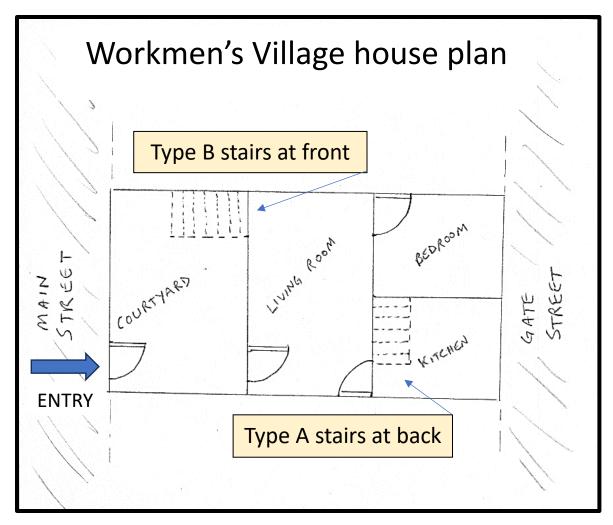


Figure 9: Typical house plan, Workmen's Village

It is possible that some of the houses functioned as workshops, perhaps beside a residential house next door. Items found showed that some were involved in diverse trades, such as weaving, ceramics, jewelry, and model making.



Figure 10: Roof cross-section at #11 East Street

Roofs were well made using wooden beams, brush, and mud plaster. A cross section of a collapsed roof at house #11 East Street, showed layers of construction to both insulate the house and keep water out. (Figure 10) The cross beams were made of acacia wood, blue arrow, with a perpendicular tamarisk twig layer covered with brush, red arrow. (Figure 10) On top of the brush, a layer of mud plaster covered the roof, about 5" (13 cm) thick, yellow arrow. Repairs were made by adding yet another layer of mud plaster.¹⁶

Figure 11 is a photo of the brush layer on the collapsed roof found at #11 Gate Street.



Figure 11: Remains of collapsed roof at #11 Gate Street

Ventilation windows were located high up on the front and back walls. These served to provide light during the day, and allowed ventilation at night, and when interior fires were lit for cooking and heating.¹⁷ (Figure 12)

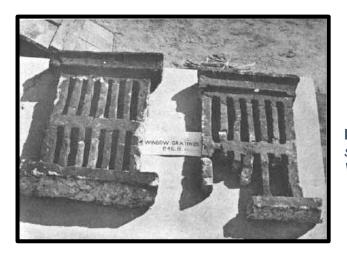


Figure 12: Window grill from main city, similar to ones found in the Workmen's Village.

Figure 13 is a reconstruction I have done of one of the Workmen's Village houses (with stairs to the roof from the front courtyard), based on the description in Woolley's report.

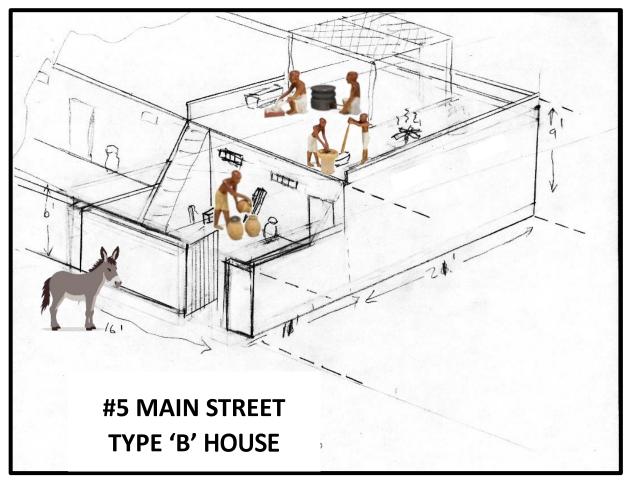


Figure 13: A reconstruction of #5 Main Street, by this author.

The walls (including the perimeter wall) were constructed of adobe mud bricks. The interior walls inside the houses were plastered smooth and often white-washed. Traces of paint still adhered to the plaster showing that some houses were decorated with colorful friezes.

Figure 14 is a plan and reconstruction of the two-story house at #8 Gate Street, excavated by Barry Kemp in 1985.¹⁸

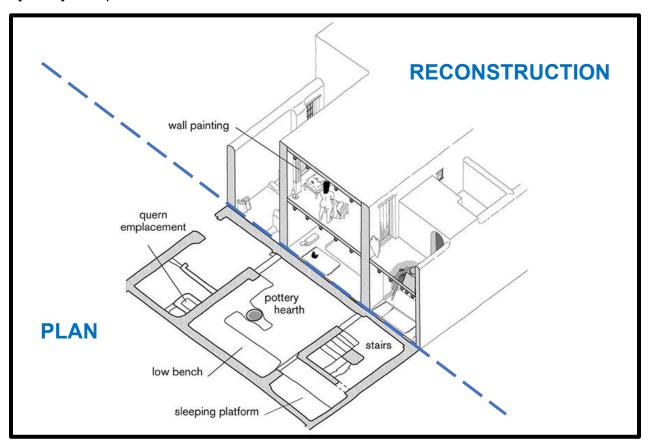


Figure 14: Plan and reconstruction of #8 Gate Street, a type A House

During Kemp's excavation he found that the ground floor living/reception room had a collapsed upper story over it. The upper room was decorated with a painting previously known to be in bedrooms used by child-bearing women. So, Kemp proposed the upper room was the women's quarters of the house.¹⁹ It was ventilated by a window with shutters.

In an article published in the Akhetaten Sun, Vol. 28 No. 2, Thais Rocha de Silva commented on the objects found by Kemp's team at #8 and #9 Gate Street: "The artefacts retrieved from Gate Street 8 and 9 show that various activities were carried out in the rooms, simultaneously or alternatively ... Evidence from Gate Street 8 and 9 also suggests a process of sharing facilities, with cooperation between the two houses."

Kemp also comments that his excavations showed that some of the "houses" may not have been residential, but may have functioned as workshops or storage facilities.²⁰ To substantiate this he cites evidence also found at Main Street #9 and #10, and East Street #10 and #11. Da Rocha also mentions that evidence found shows these houses were modified over the years, " ... like house #24 that changed the main entrance from West Street to Long Wall Street. Other examples include Main Street #10 and #11, which were joined by removing the wall in the Front Room. East Street #10 and #11 shared a staircase that led to the roof, indicating a possible shared roof between these two houses."

One house, at #3 Main Street had two images of the god Bes outlined on the wall in the courtyard (Figure 15).²¹ Bes was the god of music, merry-making, and childbirth.

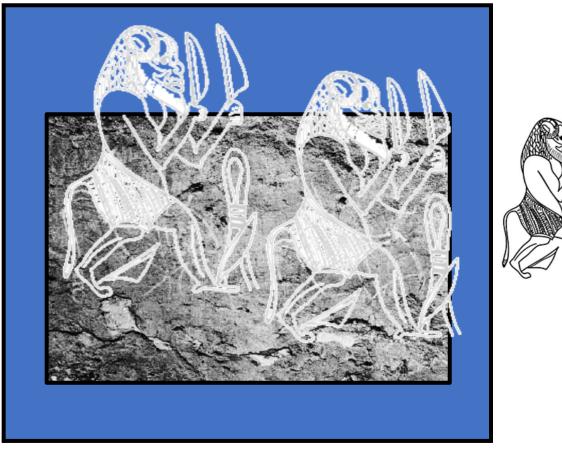


Figure 15: Painted plaster wall at #3 Main Street showing the god Bes.

Some of the interior walls showed several layers of whitewash/paint had been applied. Redecorating for new owners? Or, perhaps it was for regular maintenance of smoke covered walls? Paint brushes were found at #11 Gate Street that still have traces of white plaster clinging to them (Figure 16).²² They are currently at the Colorado History Museum.



Figure 16: Paint brushes

As the Egypt Expolration Society unearthed objects in the village each was recorded on a registration card, and some were even photographed. It was apparent that the village had been abandoned relatively quickly, as many tools and useful items like ropes and jars were left behind, some dropped in the middle of the streets during a hurried exit. Items commonly found by the excavators were spinning and weaving supplies, seats and stools, partially made tomb models, baskets, dolls, jewelry, rings, amulets, and pottery.

Wooden objects were especially well preserved, since the village's location was on higher desert ground far from water, and hence no termites.

Each house in the Village had a wall along the street with a wooden entry gate leading into the front courtyard. Other door openings in the house probably had wooden doors, or perhaps privacy curtains instead.

Several wooden door bolts were found which would have been used to lock the gate/door from inside, thus providing security for those inside the house.²³ The door bolts (e.g. Figure 17), are very similar to those which have been found sealing tomb doors. The door bolt is also the model for the hieroglyphic letter "Z'

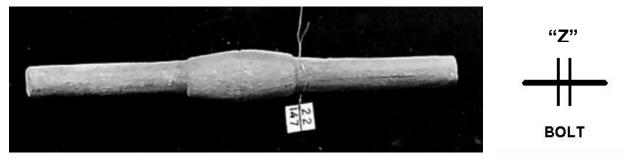


Figure 17: Wooden door bolt, found in Main Street opposite House #4

Measurements during the construction of small items (like boxes, chairs, tables, etc.) were made using a wooden cubit rod, one cubit long (18 in. or 46 cm), which was marked off in subdivisions of palms (6 in a cubit) and digits (4 to a palm). For longer measurements, a rope knotted at cubit intervals was used. A measuring rope on a spool was found at Gate Street #12.²⁴ (Figure 18)

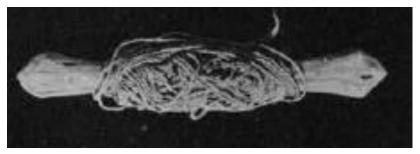


Figure 18: Measuring rope on a spool, #12 Gate Street

In order to create items at the Workmen's Village, craftsmen would not only need tools, but a place to work, a stool to sit on, and perhaps a raised table or two to fabricate items from stone or wood. Tomb scenes and stelae from Amarna show craftsmen sitting on stools at low tables. (e.g. Figure 19)²⁵



Figure 19: Sitting on a stool eating from a low table.

Figure 20 shows a low stone table found in 1932 by Pendlebury's team in the Great Palace, State Apartment, Broad Hall.²⁶

Figure 21 is probably some form of offering table, but is unusual as it has 5 recessed cups for some kind of libations. It was found in 1922 in the Main City at House M.50.13

Several stone stools were found in the Workmen's Village in 1922. Two stone seats were found at #3 Main Street (Figure 22), and another at #11 Main Street (Figure 23).



Figure 20: Stone work table found in 1932

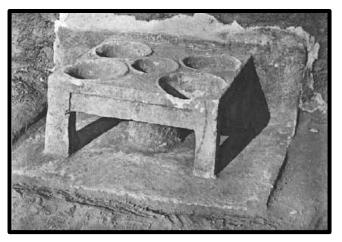


Figure 21: Offering table (?) From M.50.13

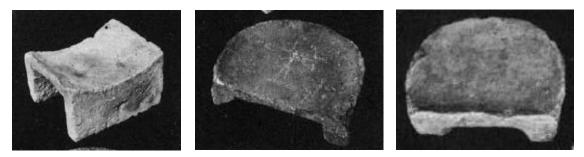


Figure 22: Seats found at #3 Main Street

Figure 23: Seat from #11 Main street

Figure 24 depicts a carpenter using a bow drill to build a wooden chair. He is sitting on a stone stool.²⁷



Figure 24: Carpenter making a chair, sitting on a stone stool, Tomb of Rekhmire.

TOOLS:



Figure 25: Ancient Egyptian tools, British Museum.

The ancient Egyptians used a variety of tools, as seen in Figure 25, a display at the British Museum. Amarna was no exception, and tools for carpentry, masonry, weaving, model-making, and building construction have been found there.

Bronze items like knife blade, saw blades, chisel blades, awls, axes, needles, and fish hooks have been discovered. In addition, wooden handles, sometimes broken and discarded, have been unearthed.

A wooden mallet, EES registration 22/102, was found in the courtyard at #8 Main Street, along with 2 bronze blades. (Figure 26)



22/102

Figure 26: Wooden Mallet found at #8 Main Street

A wooden tool handle, registration 22/30 (Figure 27), was found in the street opposite #11 Main Street, along with a bow drill, circular tray, and 3 ply rope.#11 Main Street



Figure 27: Tool handle found at #11 Main Street

Was it a chisel? I have added a blade found at Amarna.



Or, was it an Awl? With another blade found at Amarna.





A wooden tool Handle, registration 22/47 (Figure 28), was found at #12 Main Street in the bedroom, along with three wooden spindles and a whorl, and some 2 ply rope.



22/47

Figure 28: Handle of a saw or knife found at #12 Main Street

Was it the handle of a saw? Again, the saw blade was found at Amarna.



Or, the handle of a knife? Ditto for the knife blade, found at Amarna.



An axe Handle, registration 22/101 (Figure 29), was found at #8 Main Street, along with the wooden Mallet, and bronze blades mentioned above.



Figure 29: Axe handle found at #8 Main Street

Below is axe handle 22/101 with an axe head 22/526 superimposed, which was found at Main City House P47.31. (Figure 30)



Figure 30: 22/110 with axe head 22/256 added

And, three ply rope, 21/383 (Figure 31), was found at #3 Main Street, along with five complete spindles, parts of a loom, and a small manger.



21/383

Figure 31: *Three-ply rope found at #3 Main Street*

PERONAL GROOMING:

A wooden Kohl Pot, 22/12 (Figure 32), was found in the living room at #10 Main Street, along with stone tables, an inlaid wooden box, an adze handle, and bowls and saucers.





Figure 32: Kohl Pot found at #10 Main Street

A comb, 22/107 (Figure 33), was found in the living room at #8 Main Street, along with a stone table, a bronze boring tool, a wooden pounder, and jars and pots.



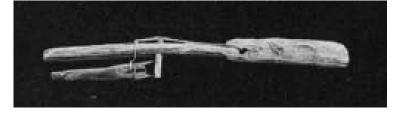
22/107

Figure 33: Comb found at #8 Main Street

TOMB MODELS

Incomplete parts of model ships were found at three different locations in the Workmen's Village.

Model boat rudder, 22/44 (Figure 34), was found in the living room at #12 Main Street



22/44

Figure 34: *Model rudder found at* #12 *Main Street*

Model boat oar, 22/62 (Figure 35), was found in the courtyard at #12 Long Wall Street



22/62

Figure 35: *Model oar found at #12 Main Street*

A model boat hull, 22/6 (Figure 36), was found at #11 Main Street

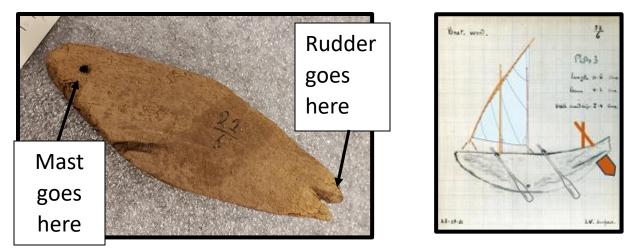


Figure 36: Model boat hull found at 11 Main Street, and side view

SPINNING AND WEAVING

Evidence found whil excavating the Workmen's Village shows that spinning and weaving was a common activity.

Most ancient Egyptian clothing and mummy bandages were made of linen. Linen is made from the stems of the Flax plant, *Linum usitatissimum* (Figure 37). Flax is a tall plant that grows to about 1.2 m (4 ft) tall. After harvesting, the stalks are threshed to remove the seeds and then soaked in water for a few days (a process called retting) to allow the long fibers in the stems to separate. The sticky long fibers are then spliced together to form an unbroken thread which is fed onto a spindle which is spun, twisting the flax fibers into thread. Several threads can be spun together to get more than one ply threads which are stronger than the single ply.

Drop spindles are spindle sticks which have a whorl attached. The whorl adds weight and is used by whirling it over the thigh to get a rapidly spinning stick that twists the flax into thread and wraps it around the spindle stick. (Figures 38 & 39)



Figure 37: Flax

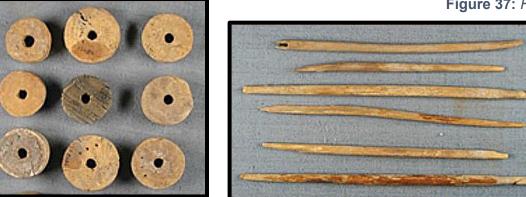


Figure 38: Whorls, left, and spindles, right, 21/264, found at #3 Main Street



Figure 39: Assembled drop spindle found at #3 Main Street

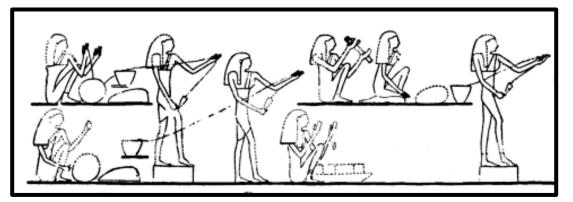


Figure 40: Spinning scene from the tomb of Djehuti-hotep, el Bersha

Spinning, or *set kha* in ancient Egyptian, is illustrated in Figure 40.²⁸ The two women sitting on the left are splicing the flax fibers together from balls of fibers on the floor in front of them. The fibers are then sent through the water-filled spinning bowls behind the standing ladies at the left and right who have one leg raised to whirl the drop spindles against their thighs to create skenes of linen thread. Figure 41 is a spinning bowl found at Amarna, and Figure 42 shows strands of linen thread still clinging to a drop spindle found at #11 Gate Street in the Workmen's Village.



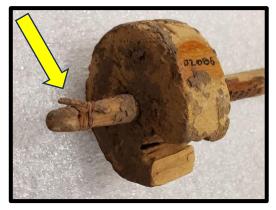




Figure 42: Linen thread on drop spindle

The weavers model shown in Figure 43 is from the Theban tomb of Meketre. Bottom right is a woman splicing the fibers, which are fed through a spinning bowl (out of sight below her). In front of her are two women using drop spindles. On the left are two women winding the finished thread onto pegs to dry the thread prior to weaving. Pegs like these were found on the wall opposite #3 Main Street. And, in the center are two women weaving on a horizontal loom.

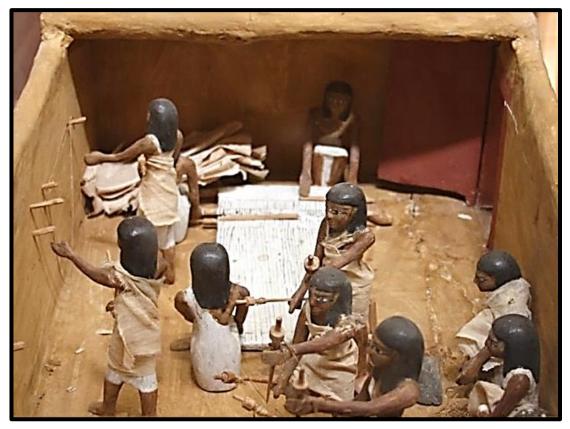


Figure 43: Model of weavers, tomb of Meketre, now in Cairo

Horizontal looms, staked out on the ground, were used prior to the New Kingdom. In villages like Deir el-Medina, and at the Workmen's Village at Amarna, space was at a premium, so vertical looms, as seen in the tomb of Nefer-Renpet (Figure 44) took up a lot less space than a horizontal loom.²⁹ These looms stood in sockets in the ground (Figure 45), and were attached to a wall at the top (as shown in Figure 46).³⁰



Figure 44: Vertical Loom, tomb of Nefer-Renpet, Thebes

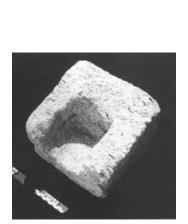


Figure 45: Loom socket, found at #3 West Street

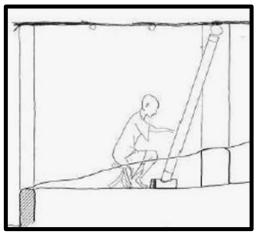


Figure 46: Excavator's drawing of Vertical Loom location #3 West Street.

Socket blocks for vertical looms were discovered in, or on the road in front of, 15 houses (East-12, Gate-8,9,12, Main-3,7,8,9,11,12, Long Wall-10,12, West-3,8,21).

On a vertical loom, the warp threads (the long, vertical threads) were kept taught by tying them to weights (e.g. Figure 47).³¹ These 'warp weights, (Figure 48) were often tied onto several adjacent warp threads. One of the weights, 21/322 (Figure 48, top), found at #12 Gate Street still has several linen threads attached.

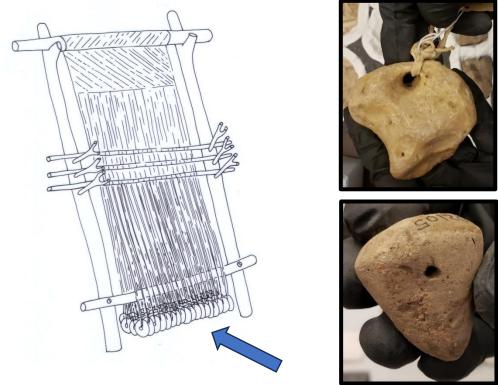


Figure 47: Vertical loom

Figure 48: warp weights

On a vertical loom the cloth is woven from the top downwards, the opposite way it is done on a horizontal loom.

The finest single-strand linen cloth woven in Egypt was "royal linen", reserved for the elite. Semi-transparent (e.g. Figure 49), it was the finest cloth woven in Egypt.



Figure 49: Royal linen on torso of Nefertiti, Louvre



Figure 50: Bandaged mummy

Linen mummy wrappings were very long (Figure 50).³² They had 30-40 layers of bandages, stretching for a total of up to mile in length³³. Production of linen just for bandaging these mummies must have been at an industrial scale.

Tiny gloves were found in Tutankhamun's tomb (Figure 51). They were used by him as a child, perhaps when he was at Amarna. They were made of linen.



Figure 51: Tutankhamun's gloves, now in Cairo

Two sandals were found at #8 Main Street in the kitchen: 22/120, an adult sandal, and 22/119, a child's sandal. (Figure 52) A wooden pattern for a shoe found at #7 Long Wall Street indicates sandal making was probably undertaken in the village (Figure 52, center).

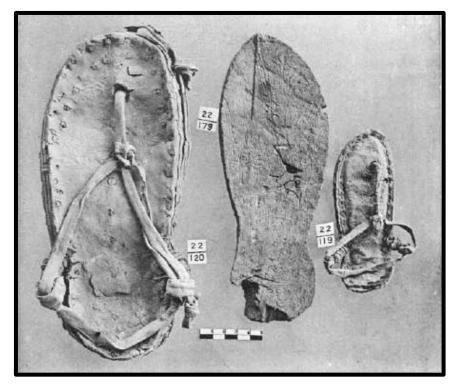


Figure 52: Sandals found in the village

POTTERY

A kiln was found in the "yard" north of #13 West Street, designated on the plan as an empty lot between houses #13 and #15. Peet and Woolley described the lot as "useless for building, being a rock shelf, 32" (0.8 m) high at east end and sloping up to west: it therefore remained empty and served as yard to No. 13. In the northwest corner a circular furnace, standing 37" (0.95m) high, with an inside diameter at the bottom of 24" (0.6m), built of bricks and mud backed with rough stone; at 26" (0.7m) from bottom the bricks projected inwards to support a floor of the kiln. Under the floor of the kiln the surface was heavily burnt and blackened;³⁴ but above this the bricks were burnt bright red."³⁵ A similar kiln, from the house of Ramose in the Main City, is shown in Figure 53.³⁶

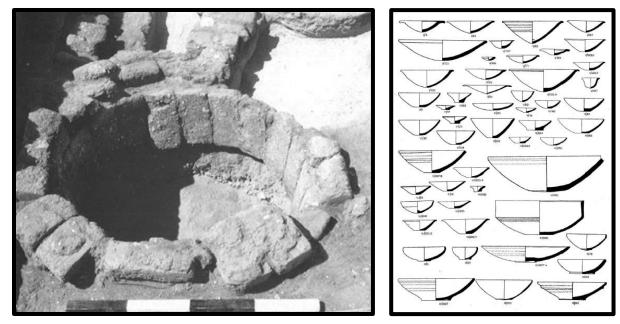


Figure 53: Kiln found in P47.20, the Main City house of Ramose

Figure 54: *V-type bowls found in* 1921 at Amarna

Pottery at Amarna was made from either silt clays or Marl clays. Silt deposits in the Nile basin produce clays that range from brown to greyish-brown to red. Marls are formed from limestone and other minerals, and they range from pale green to light grey. Both of their matrix can range from fine particles to coarser clay with fillers.

Pottery can be made by pinching, hollowing, or pressing clay over a core. Tools may or may not be used in this process. Other methods of manufacture include making from a coiled ring, or throwing on a potter's wheel.

Votive offering bowls were placed in chapels and temples to hold offerings for the gods. They might hold food or spices, or have a wick in them to burn perfumed oils.

In the village, Petrie type VI28 and VI29 offering bowls were found at #13 West Street. Various V-type bowls classified by P.L.O. Guy (who worked for Peet and Woolley) are depicted in Figure 54.³⁷

Note however, most offering bowls at Amarna have been found discarded at the Kom el Nana (a sunshade dedicated by Nefertiti), or at the Great Aten Temple. Offering Bowls at the Colorado History Museum are shown in Figure 55.



Figure 55: Offering bowls found at Amarna

Discovered nNext to the kilns at Amarna have been found clay mixing bowls, water jars, and hardened samples of raw clay material.

Bread making equipment was found In the Kitchen at #10 East Street. Figure 56 is a 1922 photo taken in that location demonstrating the grinding and preparation of bread. The man in the center is crushing emmer wheat grains with a pestle found in the village. A water jug sits beside him. The woman on the left is crushing dates to be added to the bread, and the child on the right is sweeping the floor with a broom.

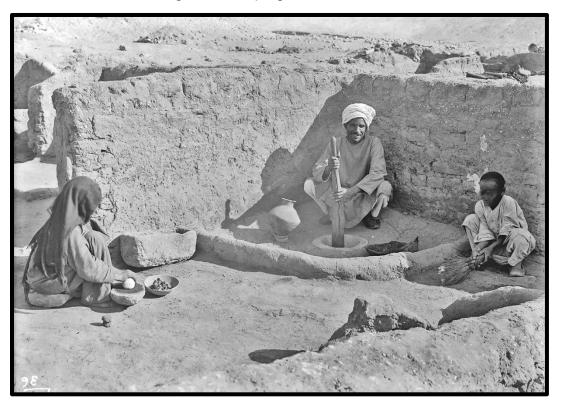


Figure 56: A demonstration in the cooking area at #10 East Street, 1922.

Figure 57 shows the outdoor kitchen excavated at #3 Main Street. The blue arrow points to the stoking hole, where straw and dung fuel would have been lit and allowed to reduce to glowing coals. The bread pot or tray would have then be introduced from the top (yellow arrow), a lid put on the top of the oven, and the bread cooked in the steamy interior.

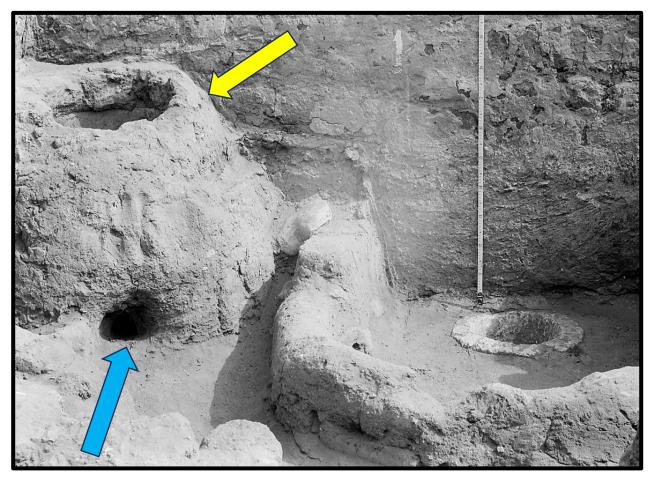
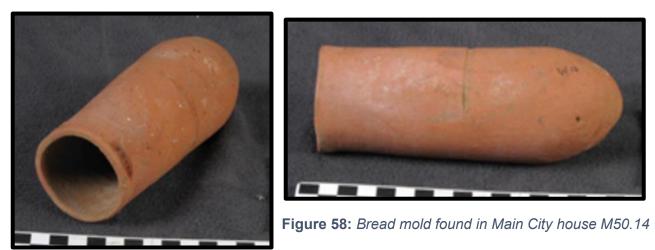


Figure 57: : Baker's oven in the courtyard of #3 Main Street.

There is evidence that bread dough was sometimes allowed to rise and packed into pots (Figure 58), but other discoveries have shown that unleavened pita-style flatbread was often baked.



Pots like the one shown in Figure 58 were quite often decorated with slip, perhaps to make them waterproof.

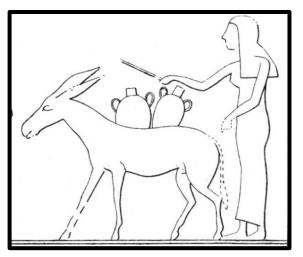


Figure 59: Donkey carrying water jars, tomb of Mahu

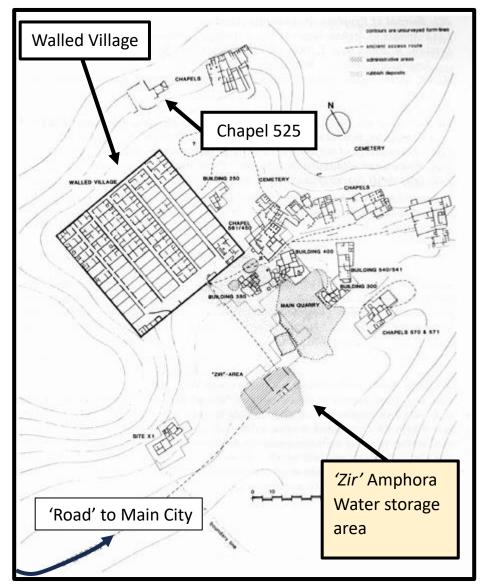


Figure 60: 'Zir' storage area

The Workmen's Village is located on higher desert ground far from the Nile, so there is no natural water supply (as is also the case at Deir el-Medina). Therefore, water had to be brought to the village. A scene in the Amarna tomb of Police Chief Mahu shows a donkey carrying water in large amphorae (called *zir* in Arabic). (Figure 59)

Upon reaching the village, the *zir* were stored in a cache (now called the zir storage area Figure 60), and villagers could come and refill smaller jars to take home for their daily water use. Large water pots in their homes and workshops were then filled from these transport jars, sometimes half-buried in the sand, and sometimes supported by clay ring-stands. Barry Kemp wrote: "The villagers had at least three separate water requirements: for domestic use within their houses, for their animals kept in pens on the east and southeast of the village, and for watering their plants in the small garden plots. The *Zir* area would have supplied all three."³⁸

The water jars in homes and shrines were sometimes decorated in the 'Amarna Blue" style, as seen on the vessel in Figure 61, which was found in Chapel 525, next to the walled village.



Figure 61: Large 'Amarna Blue' water-storage jar at the Colorado History Museum

Chapel 525 was one of 23 chapels surrounding the Workmen's Village. (see Figure 60) It was built by Ptah-may, "the Praised one of the Aten", who dedicated it to the worship of the god Shed.³⁹

Peet and Woolley wrote, "The chapels vary considerably in plan, but the essential features always present in the finer examples are an outer court, an inner court, and a shrine with niches or recesses ... [In Chapel 525] Eight steps with a low balustrade lead up from the inner court to a raised platform extending across the whole breadth of the chapel and apparently constituting the shrine. On this platform, at the top of the stairway, stood an inverted truncated conical pedestal, height 33 cm., diameter 34 cm. at top, which is broken."⁴⁰ (see plan, Figure 63 bottom, and section, Figure 63 top) '

A reconstruction of Chapel 525 is shown in Figures 62. And, an excavation photo of the forecourt of the chapel is depicted in Figure 64.

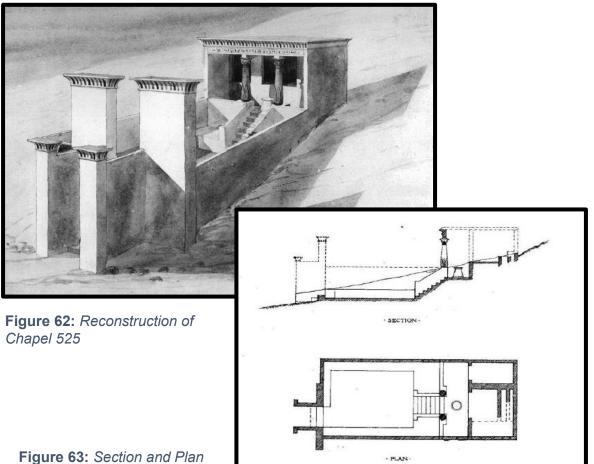


Figure 63: Section and Plan of Chapel 525



Figure 64: Forecourt of Chapel 525, 1922

Shed was an Egyptian deity whose name means "the savior". He was a god that ordinary Egyptians worshipped to save them from illness, misfortune or danger.

In the upper register on the stela from the chapel (Figure 65), Shed is facing to the right, wearing the sidelock of youth. His right hand holds a staff, and in his left a bow. Isis stands facing him. Her right hand holds out the sign of life to Shed's nose.

Between the two deities, is a large scorpion. In front of Shed is written "Shed, the great god; may he give every good and pure thing to thy *ka*, even all kinds of food."



Figure 65: Stela dedical to Shed, found in Chapel 525

Side views of the stela are placed are placed left and right of the stela in Figure 65.

Additional, stelae, amulets, and inscriptions found at Amarna show the gods Ra, Shu, Tefnut, Isis, Hathor, Bes, and Tauret were tolerated at Akhet-Aten. (e.g. Figure 66)

Perhaps only Amun was banished during Akhenaten's reign?

Figure 66: Woman venerating Tauret, 21/424, found at N.49.21



RINGS

Faience rings were also fired in ovens at the village. Shown in Figure 67 are three clay ring molds in the Phipps Collection at the Colorado History Museum, which have had their faience rings removed. Faience is a form of glass paste that becomes a very hard ceramic after firing.



Figure 67: Clay ring molds, used to fire Faience ring, at History Colorado

Figure 68 is a ring mold also at the Colorado History Museum which has been prepared by sealing the faience frit inside the mold, and then the mold was pierced with vent holes to draw off moisture during firing. But the ring does not seem to have been extracted from the mold. Perhaps because the mold cracked during firing?





Figure 68: Clay ring mold, History Colorado Figure 69: Ring bezel, Penn Museum

A faience ring bezel found at Amarna is inscribed, *neb kheperu Ra*, King Tut's throne name (Figue 69). Similar rings with Tut's name were found in the Workmen's Village.

The ring shown in Figure 70 was found on Main Street in the village.

Figure 70: Faience ring found on Main Street, Workmen's Village



WOODEN OBJECTS

Since the village was located far to the east of the Nile on a dry desert hill, termites were not present. Closer to the Nile in the Main City and its suburbs, termites found and destroyed most objects made of wood, a situation common in other parts of Egypt. Thus wooden objects from ancient Egypt are fairly rare. A complete bed was found in 1921 overturned on Main Street opposite house #3 (Figure 71). It's an example of something hurriedly dropped when the village was being cleared out. The bed frame was made of wood, with reed slats. Underneath was a straw mattress, stuffed inside a linen duvet. Unfortunately, the entire bed disintegrated as the excavators were trying to lift it out of the sand.

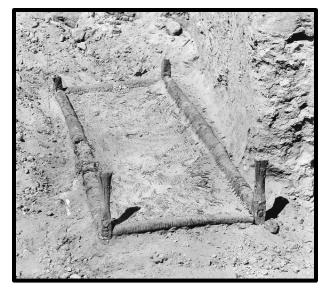


Figure 71: Bed found by #3 Main Street





The bed was similar in design to a gilded wooden bed found in Tutankhamun's tomb (Figure 72).

Another wooden object found in the bedroom at #22 West Street is the cone-shaped object depicted in Figure 73. Described as a "top" it is probably not a child's toy, as it is not uniform in shape, and would not spin very well. It may be part of an unfinished finial made to cap a piece of furniture



Figure 73: Wooden object from #22 West Street

The pestle used in the demonstration shown in Figure 56 was made of wood, and is 37" (1 m) long (Figure 74). It was found at #6 Main Street.

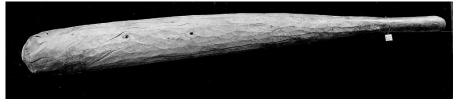


Figure 74:Wooden pestle found at #6 Main STreet

Found opposite #7 Main Street was a wooden hoe, 21" long, which may have either been a tomb model of a large hoe, or perhaps for tending a small garden plot (Figures 75 & 76).

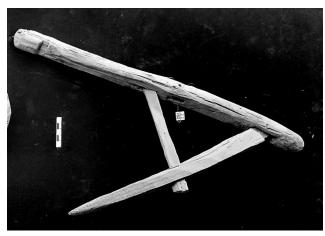


Figure 75: Wooden hoe found at #7 Main Street



Figure 76: Hoeing, Beni Hasan tomb

The ancient Egyptians planted small gardens in desert areas utilizing "waffle gardens", rows of small beds lined with mud sides and bottoms which could hold water in the dry soil. (Figures 77 and 78)

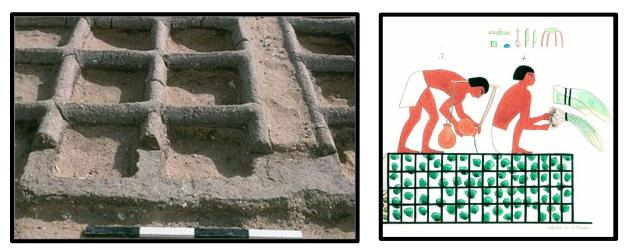


Figure 77: Waffle garden, found at the Kom el-Nana Figure 78: Waffle garden, Beni Hasan

Two artifacts described by the excavators only as "wooden objects, perhaps part of a loom" were found at #3 Main Street (Figure 79). They are each about 12" long, and have a slot at the end opposite the eye to fit into something. Perhaps they were at the top of the loom to brace it to posts sticking out from the wall?

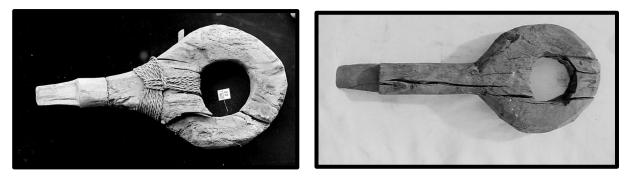


Figure 79: Wooden objects found at #3 Main Street, left id 22/188, right 21/348

The V-shaped object of wood shown in Figure 80, was found in the courtyard of #3 Main Street. According to Peet & Woolley, it's tied on to the mouth of a calf when it is desired to wean him; the pricking of the sharp point leads the mother to repulse the calf when he attempts to feed. Such objects are supposedly still in use in Egypt and elsewhere.⁴¹

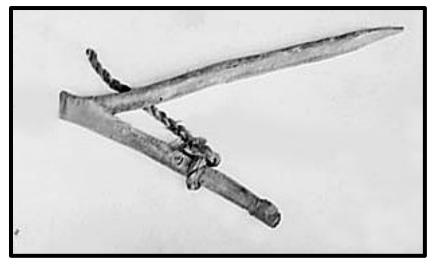


Figure 80: Wooden calf-weaning device

A twenty one inch long (0.5 m) T-shaped handle was found in the bedroom at #12 Main Street (Figure 81), along with a fragment of 2-ply rope. Their purposes are unknown.

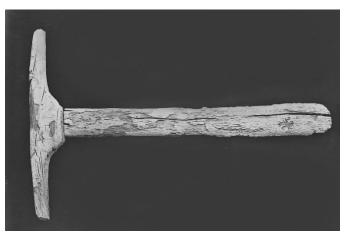


Figure 81: T-shaped wooden handle found at #12 Main Street:

A wooden Hathor head, 22/73, was found in the courtyard at #12 East Street (Figure 82). Wooley described it as "not a cult object, but probably the decorative part of a box." It was found with several amulets and rings depicting the god Horus.



Figure 82:*Wooden Hathor head, found at #12 East Street*

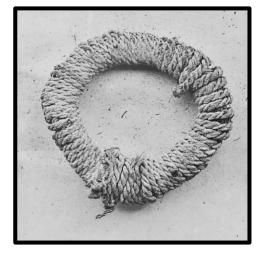


Figure 84: Head ring found at #11 Long Wall Street

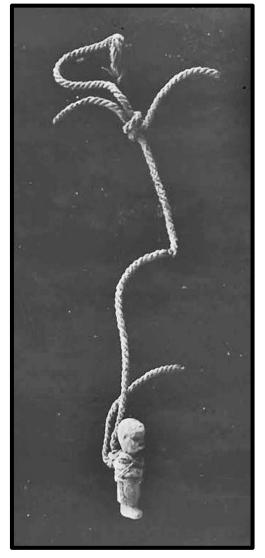


Figure 83: Amulet found at #11 Long Wall Street

At #11 Long Wall Street the excavators found an amulet of a baby wrapped in linen, 22/83 (Figure 83). Among other objects found at this location were a blue-glazed faience ring with an image of Bes, a ring-bezel cartouche of Tutankhamun, and a head ring (Figure 84) about 6" (16cm) in diameter.

CONCLUSIONS:

The variety of items left behind and found within the village show that its occupants had basic skill levels. They were not the 'grave-diggers" that Peet first supposed, nor were they the skilled craftsmen that seem to have resided in the Main City (based on the more sophisticated artifacts found there). The laborers who dug out the tombs probably resided in the nearby Stone Village, which was probably more suited to the temporary housing of conscripts, slaves, and prisoners who often did the hard excavation labor.

So who would the villagers have been? It is difficult to compare them to the residents of Deir el-Medina, as most of the evidence from there was left later, in the Ramesside Period.⁴² Kemp wrote that so little is known about what went on at Deir el-Medina, that some of the craftsmen and artisans who worked there early in Akhenaten's reign (years 1-5) could have been transferred to Amarna (and likely were), but it seems likely that they would have resided n the workshops attached to the large estates in the Main City, based on the higher quality of work discovered there. One of the homes, West Street 2/3 had a gridded outline painting of the king, implying that a draftsman may have lived there. So, it is likely that the village housed those with basic skills who may have carried out plastering, outline gridding, and outline sketching in the tombs. Other scenes that remained in fragments of plaster from the walls in the village showed they painted friezes and figures to decorate their houses, but little has remained over the millennia.

The supervisor's house at 1 East Street is quite small compared to the large estates that were built in the city, so it is probable that this individual only had a minor title like, "chief of the village", or perhaps "supervisor of craftsmen".

If the village was not filled with high-status individuals, then why was it walled and (probably) guarded? Desert roads encircle the village, and it appears that police guard posts were set up on the roads, especially east of the city. Were the inhabitants of the village conscripted and forced to be there? Or, perhaps there were desert marauding tribes in the eastern hills who would steal almost anything? Deir el-Medina was also a walled compound, and Ramesside writings found there do not describe either a prison-like environment, or an area that needs significant protection. So, perhaps it was just convention to house craftsmen together to ensure they remained focused and productive.

The other curious aspect of the village is that it seems to have been built in two phases. Kemp thinks the Western Annex was added later, and that it must have housed poorer people (from the evidence of trash heaps and animal pens). He believed the more prosperous original Eastern Annex confined their animals to buildings surrounding the walled village. Based on findings in the village of dated jar labels which span Akhenaten's years 7-17, and years 1 and 2 of the next (unnamed), king Kemp points out that goods from other parts of Egypt were no longer being sent to Amarna, but that only supports the idea that Tutankhamun probably abandoned the city and moved the court to Memphis early in his reign.

Ring bezel cartouches found in the village, however, name Tutankhamun (71%), Smenkhkare (24%), and Akhenaten (5%). In the South City (the British control sample of 1921-22) the bezels named Akhenaten (37%), Smenkhkare (22%), Tutankhamun (19%) and uncertain (12%). This probably implies that the Workmen's Village operated throughout Tut's reign and was not abandoned until Horemheb.

Another factor at play may have been political. During Akhenaten's reign the depictions and inscriptions of Amun were attacked by the Atenists. This may have spawned resentment, and perhaps the need to guard Akhenaten. After Tutankhamun returned to the old religion and abandoned the city, the followers of Amun may have begun destroying images and inscriptions of the Aten. This destruction seems to have peaked during Horemheb, when wholesale dismantling of Akhetaten began. Finally, the discovery of the wooden top of a standard in the Main Chapel next to the village (Figure 85) supports the scenes of police patrols in Mahu's tomb (Figure 86).⁴³ The police were an integral part of life at Amarna.



Figure 85: Left and center, the standard top found in the Main chapel at the Workmen's Village. Right, Mahu greets a standard-bearer

The roads around the Workmen's Village and the City itself show that patrols were needed, and that the city, the Workmen's Village, and the tombs needed protection. Perhaps that is one of the reasons the village was surrounded by a wall.

Figure 86 depicts Mahu standing at an outpost inspecting his troops who have built a fire in a brazier to keep warm and alert during their nightly patrols.⁴⁴

In this final scene, Figure 87, Mahu presents two prisoners captured by his men to the Vizier, Nakhtpaaten, for judgment.⁴⁵ The text above him states: "Examine these men, O prince, who the foreigners have instigated to spy on us."

Perhaps this was the reason the Workmen's Village needed to be guarded.

Whatever the reason for the city and village's abandonment, we are fortunate that so many artifacts were left behind for modern archaeologists to discover!

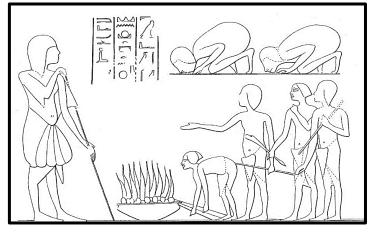


Figure 86: Mahu inspects his troops guarding the city

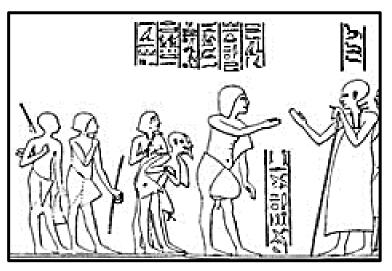


Figure 87: Mahu presents prisoners to the vizier

APPENDIX – HOUSE-BY-HOUSE FINDS in 1921-22

EAST STREET

#1 EAST STREET (Overseer's house)

Courtyard – Palm trunk column (to support a second story, roof beams, Tauret amulet, mud seal impression, and over 70 pots found in this house

Front rooms – 2 wooden spindles, pottery, double fireplace, string of small beads, stone pounders, cage for a small animal, pottery

Reception Room – Hearth, rectangular bath, pots sunk in floor, broken pot holder ring, more pottery, fragment of a wooden comb, wooden knob, reed basket, palm-leaf ring, shoe leather, jar sealings, clay plumb-bob, glass beads, fragment of molten glass, more pottery

Bedroom –Bench, hearth, brush, glazed ring bezel with cartouche of Akhenaten, stone offering table, wooden box lid, pottery

#10 EAST STREET

Courtyard – Hearth with cooking hob

Living Room – Another Hearth, a divan, two large pots

Bedroom - three-legged seat, large storage jar, blue glazed scarab

Kitchen - Storage bins, bread-making area, bronze borer, wooden leg of model chair or bed

#11 EAST STREET

Courtyard – Stone ring-stand (for a pot), stone trough, Blue glazed ring bezel, wooden spindle whorl, clay figure of monkey and child, fallen roof material

Living Room – Divan, stone table, storage jar sunk in floor, bronze needle, 3 pendants of glass, blue glazed pendant, limestone stela, pottery fragments

Bedroom –Blue glazed ring, ear-stud, storage jar fragments

Kitchen – Bin lined with pots, fireplace, bread-making enclosure, circular sone table, blue glazed ring bezel, limestone polisher

#12 EAST STREET

Courtyard – Stone mortar, sockets for a loom, stone trough, mortar, palm-fiber sieve, Wooden spindle whorl, wooden Hathor head from a box, blue glazed ring with eye of Horus bezel, fragments of a blue and yellow glass vase, storage jar fragments decorated with lotus, pot

Living Room – Divan, 4 storage jars partly sunk in floor, blue glazed ring bezel showing duck and papyrus, blue glazed ring bezel with eye of Horus, blue glazed pendant, small ring, fragments of a wooden comb, wooden weaving-stick

Bedroom –Blue glazed figurine with fragments of a nude female, eye of Horus amulet, small blue beads, white stone ring

Kitchen – charcoal in hearth, fragment of a flat baking dish

GATE STREET

#11 GATE STREET

Courtyard - Not excavated

Living Room – Remains of roofing, wooden pegs, rope rings, basket fragment, limestone vase-stand

Bedroom –Head of a female figurine, fragment of fringed cloth, figurine of an ape with a basket of fruit, part of a wooden bowl, fragment of coarse linen, limestone offering tray

Kitchen – Oven with poker still inside, shallow platters for baking bread, mass of fuel for oven, broken water-pot, quern, brush, wooden kohl-stick, bone polisher, lip-stud, leg of a bed, much pottery

#12 GATE STREET

Courtyard - Not excavated

Living Room – Herth in center of room, wooden mallet fragments, slotted piece of wood (a lock?), inscribed wooden handle, hook-shaped piece of wood, leather covered yoke fragments, oval basket, wooden model of a boat, fragments of a pottery pilgrim-bottle, shaped stick with string wrapped around it, 4 small hops, coarse matting, wooden warp-spacer, loom weight

Bedroom –(used as an oxen-stall) stone manger trough, chopped hay, tethering peg driven into floor, cow-dung, wooden objects, bag made of palm leaf

Kitchen – Painted clay figurine, sieve, fragments of two more sieves, steering oar for a model boat, painted amphora, two wooden spools, potshard with chariot painted on it, mud sealing with cartouche of Thutmose III, wooden figure of an animal, scepter or stick top, clay figurine, fragments of wooden comb.

MAIN STREET

#1 MAIN STREET

Courtyard - Stone table

Living Room – Blue glazed ring with Ibex, storage jar, flat bread tray, amphora

Bedroom - Painted cheeker-work squares from roof

Kitchen - Hearth, oven, bread-making area, debris from roof

#2 MAIN STREET

Courtyard – Curved wooden peg, 3 bone borers, wooden comb, wooden chair leg shaped like lion's paw, blue glazed ring bezel with Tutankhamun cartouche, wooden steering oar from model boat, stone ring, circular mat

Living Room – Hearth, divan, basket, limestone offering tray, dish, 3 blue glazed ring bezels Tutankhamun cartouche

Bedroom – Ball of thread, copper borer, wooden kohl-stick

Kitchen – Hearth and pottery

#3 MAIN STREET

Courtyard – Fresco of Bes on wall, loom support sockets, cooking pot, 5 complete spindle-whorls with fragments of others, pegs for winding thread, sticks with notched ends, square of wood, piece of a wooden plow, fragments of a blue glazed plaque, wooden calf weaning device, pottery in whole house

Living Room – Remains of roofing, divan, 3 layers of wall fresco, plain wooden box coffin with human bone and linen fragment, fragment of clay figurine

Bedroom –Nothing found

Kitchen – Two storage jars, yellow glazed thistle bead, blue glass lotus bead

#4 MAIN STREET

Courtyard – Hearth, green glazed ring bezel with cartouche of Akhenaten, blue glazed amulet eye of Horus, blue glazed ring b=zel, eye of Horus, green glazed scarab fragment, ring of twisted wire, tripod stone seat

Living Room – Fragments of cavetto cornice, 2 stone tables, wooden spindle whorl, wooden bolt pin, fiber paint brushes, 2 types of matting, wooden eraser – mushroom type, mud seal impressions, fragment of two-strand rope, sherd with graffito, wooden anthropoid sarcophagus, empty tilted on side

Bedroom -- Alabaster thumb-ring

Kitchen – Pot=lined oven, blue glazed ring bezel Tutankhamun cartouche, wooden kohl-stick, wooden notched peg, wooden weaving-stick, end of a goat horn cut to make a handle, coarse rope head-ring, fragment of basket ringstand, fragments of warp and weft fabric, clay sealings

#5 MAIN STREET

Courtyard – Stone trough, alabaster vase, wooden spindles and whorls, 2 wooden door-bolts, fragments of matting, fragments of 3-ply rope, jar sealings, pots

Living Room – Divan, hearth, pot holes in floor, stone bath, blue glazed Tauret amulet, 3 glazed ring bezels one bearing Akhenaten cartouche, other two flowers, tripod stone seat, offering table, wooden head-rest fragment, bronze borer fragment, woven basket fragment, basket-work tray, mud sealings, sherd with graffito, lump of greenish-blue paint material, pottery

Bedroom – Mud sealing on a piece of rope, flat baking dish, pottery fragments

Kitchen – Pot-lined baking oven, hearth

#6 MAIN STREET

Courtyard – Bread-making area, wooden pestle, hearth, Clay bin, broken clay dish, column base to support 2nd story, stone trough, granite quern, limestone offering table, wooden bolt, fragment of turned wooden stool-leg, wooden comb, floor broom, basket ring-stand, pottery vessels, fragment of baking dish, green clay amphora, large water pot, large bowl

Living Room – Oblong stone table, wooden weaving-stick, wooden box lid, string of beads, clay crucible, large storage jar, green clay amphora, pots and saucers

Bedroom – Model of a stool leg, twist of coarse rope, mud jar sealings, fragment of red clay saucer, pots

Kitchen – Traces of oven & jar sealings

#7 MAIN STREET

Courtyard – Hearth, part of a clay doll, wooden chopping-block, wooden stool fragments, fragments of matting, pottery, storage jars

Living Room – Stone pot-stand, loom sockets, wooden weaving-stick, wooden chopping block, wooden round box lid, fragment of axe handle, wooden rectangular box lid, bronze needle

Bedroom –Pomegranate bead of black and white glass, 2 limestone rings, knotted coil of fiber

Kitchen – Nothing found

#8 MAIN STREET

Courtyard – Hearth, pot base in floor, stone trough, quern of red sandstone, circular stone bowl, 2 bronze blades, fragments of wooden stool with wickerwork seat, sieve, wooden mallet, axe=haft, fragments of tanned leather, coarse matting from roof, part of large amphora and clay bowl

Living Room – Divan, 2 stone tables, stone bath with a large jar sunk in floor, scarab, bronze borer, wooden eraser, wooden pounder, wooden comb, wooden latch, fragments of painted pots, matting from roof

Bedroom –Base of basket, 2 flat plates, amphora, fragments of pots

Kitchen – Oven, wooden peg, wooden box lid, wooden pounder, adult and child's sandals, cow's horn, goat's horn, bundle of linen, fragments of crucibles and pots

#9 MAIN STREET

Courtyard – Oven, bin, fireplace, loom sockets, stone trough, circular stone bowl, 2 tripod stone seats, oblong stone table, wooden pestle, 4 wooden spindles and whorls, fragments of storage jars and pots

Living Room – Hearth, storage jar sunk in floor, wooden handle, wooden axehaft, fragments of loop-woven basket, sherd with graffito, pottery fragments

Bedroom –Receptacle for a lamp, limestone plaque of Amun ram, fragment of a clay uraeus, 5 clay "magic balls" with seal impressions, wooden weaving-stick, limestone jar stopper, broom bound with string, twisted fiber head-ring, basket ring-stand, fragments of leather

Kitchen – Ovens with charcoal, wooden weaving-stick, fragment of small wooden box

#10 MAIN STREET

Courtyard – Hearth, stone jar stand sunk in floor, peg driven into floor, tripod stone seat, 2 wooden combs, wooden spindles, wooden thirl-pin, fragment of wooden lock, large basket and basket tray, pottery vessels

Living Room – Pot sunk in floor, niche for lamp in wall, column base to support second story, circular stone table, stone offering table, fragment of inlaid wooden box, lid of a painted box, adze handle, wooden kohl=pot, 6 sticks tied together with string, wooden polisher, basket, rope ring, shallow granite bowl, box lid, pottery saucers, and leather fragments, wooden weaving-sticks

Bedroom – Niche for lamp, bed supports in wall

Kitchen – Pot-lined oven, hearth, granite pounder, head-ring made of twigs, stone spindle whorl, jar sealings, roof material and painted plaster

#11 MAIN STREET

Courtyard – Box hearth, tethering block, limestone mortar, 2 limestone troughs, broken stone ring, wooden chopping board

Living Room – Manger, tethering stone, 3-ply hemp chord attached to tether, trough cut in floor full of barley winnowings, large palm-fiber mat, fragments of large painted pot

Bedroom –Lamp recess, mud jar sealings, clay button, fragments of linen cloth, dom nuts, pot

Kitchen – Partition screen, pot-lined oven full of ashes, blue-glazed bezel, clay uraeus

#12 MAIN STREET

Courtyard – Box-hearth, stone trough, stone mortar, limestone mold, 2 spindle whorls, fragment of wooden box, fragments of matting

Living Room – Hearth, divan, low curtain-wall, storage jar sunk in floor, circular stone table, blue glazed ring bezel, alabaster finger ring, wooden stud, wooden chopping block, rudder of model boat, stick with string, wooden drill-handle, stone jar stopper, 2 baskets, rope head-ring, base of basket, fragments of cloth, stone stela, pots

Bedroom –3 complete wooden spindles and one whorl, wooden knife-handle, T-shaped wooden object, fragment of 2-ply rope, clay ring-stand

Kitchen – Manger in cupboard below stairs, 3 shallow pot holes, rectangular stone table, limestone trough, limestone mold, wooden jar-stopper, wooden peg, wooden weaving-stick, quantity of charcoal, twist of 3-ply rope, fragment of matting, broken stone ring

#1 LONG WALL STREET

Courtyard - Not excavated

Living Room - Not excavated

Bedroom - Legless stone seat

Kitchen – Hearth, stone pounder, bronze borer, bronze fish-hook, wooden stud, wooden razor-handle, wooden weaving-stick, rope slip-knot, linen bundle containing seeds, wooden object

#2 LONG WALL STREET

Courtyard - Not excavated

Living Room - Not excavated

Bedroom - Not excavated

Kitchen – Box hearth, bread-making area, bin full of barley husks

#7 LONG WALL STREET

Courtyard – Decorative painted panel, manger, stone mortar, alabaster kohl-pot, blue glazed pendant, blue glazed Tauret amulet, mud jar sealing, many pots

Living Room – Divan, legless stone stool, blue glazed ring bezels, one with a nefer sign, the other Tutankhamun's cartouche, 2 wooden jar-stoppers, mud jar sealing

Bedroom –Socket stone (for a loom?), brown stone ring bezel, bone scraper fragment of kohl-stick, mud jar-sealings of Tutankhamun, clay cup, pots

Kitchen – Pot-lined oven, hearth, blue glazed ring bezel of a flower, sherd with graffito, remains of large storage-jar

#8 LONG WALL STREET

Courtyard - Screen wall, jar-stand set in floor, niche for lamp, pot

Living Room – 3 stone column bases to support a second story, limestone Horus amulet, wooden top, clay uraeus, mud jar-sealing, green clay pot, bowl

Bedroom –Limestone stela, 3 wooden spindle whorls, fragment of twig headring, mud jar sealing, lump of green paint, fragments of painted pot

Kitchen - Hearth

#9 LONG WALL STREET

Courtyard – Dived in two rooms with window onto street, fragment of wood inlaid with blue paste, clay ring-stand, bin, stone mortar, hearth, amphorae, bronze needle, fragments of storage-jar

Living Room – Bowl-lined hearth, stone bowl with a Hathor head, kohl-stick

Bedroom –2 pot-holes, ashes over entire floor, clay ball found with stampings

Kitchen – Nothing found

#10 LONG WALL STREET

Courtyard – Painted walls plastered over, bin, fireplace, stone mortar, socket stones for a loom, semi-circular tripod stone seat, blue glazed ring bezels, blue glazed bead, bronze blade, fragment of wooden comb

Living Room – Ash filled pot base sunk in floor, limestone mortar, bronze chisel, sherd with graffito

Bedroom -- Stone bath, figurine

Kitchen – 2 blue glazed ring bezels, one with goat and dish, the other with lotus, fragment of clay model bed, pot

#11 LONG WALL STREET

Courtyard – Painted decoration on walls, plastered over, bin, stone mortar, amulet of a baby wrapped in linen wearing wooden amulet, flint pounder, 2 blue glazed ring bezels, one with cartouche of Tutankhamun, the other the figure of a goat, blue glazed Bes amulet, side of a wooden box, rope head-ring, jar sealing, pot

Living Room – Divan, circular stone table, Dom nuts in a hole in the floor, rectangular stone table, blue glazed ring bezels, wooden pin, bronze stud, bronze fish-hook, brush, fragment of basket-lid, fragments of leather, fragments of roof

Bedroom –stone ring, wooden pivot-block, basket, knot of 2-ply rope, fragments of linen cloth, jar-sealing, Dom nuts

Kitchen – Barley husks and Dom nuts

#12 LONG WALL STREET

Courtyard – Box hearth full of ashes, socket stones for a loom, wooden model boat oar, wooden spindle whorl, fragments of three large stone jars, bronze needle, 2 plumb-bobs, clay disk, mud doll, fragments of matting and leather, branch of Dom palm, fish bones, jar fragments

Living Room – Divan, pot holes in floor, green glazed amulet of Bes between two Taurets, fragment of large painted jar, pots

Bedroom – Fragments of leather and morticed wood

Kitchen – Trough, fire-place, barley husks, sheep's skull, fragments of stone rings, fragments of wooden lock, drill handle, remains of a cake

WEST STREET

#13 WEST STREET

Courtyard – Manger, Granite polisher, fragments of unfinished alabaster rings, bronze drill, wooden pestle, wooden comb, inlaid wooden kohl-pot

Living Room – Divan, hearth, limestone table used for boring, two disks of alabaster, bone scraper, glazed Horus ring, wooden polisher, wooden kohl-stick, pot

Kitchen – Pot-lined oven, alabaster core from tube-bored vase, bone scraper, bronze nail, foot of wooden head-rest, two lumps of green paint

Yard to the North – Furnace, stone grinding slab, unfinished alabaster ring, stone with graffito, 2 glazed ring bezels, cartouche of Tutankhamun, green glazed thistle bead, Bes amulet, bronze borers, wooden drill handles, wooden kohl-stick, wooden spindle whorl, clay doll, fragment of clay uraeus, sherd with graffiti, goat's horn, fragment of shoe leather, fiber ring, small dead fish, pots

#15 WEST STREET

Courtyard - pot

Living Room – Divan, stone bath, rectangular limestone table, pot sunk in floor, 3 glazed ring bezels, fragments of painted pots

Bedroom - Niche for lamp, sherd with graffito

Kitchen - Fireplace, bin

#16 WEST STREET

Courtyard – Box hearth, bread-making area, stone mortar, stone trough, stone offering table, fragments of large stone jars, and amphora

Living Room – Rectangular stone table, semicircular tripod stone seat, stone trough, fragments of 3 glazed ring bezels with decorative designs, pottery fragments

Bedroom -- Dom nut

Kitchen - Pot-lined oven, fireplace, stone mortar

#17 WEST STREET

Courtyard – Box hearth, stone bowl sunk in floor, ,model stone offering table, glazed ring bezel, wooden roundel, fragments of storage jar, amphora, bowls, and saucers

Living Room – Small limestone column, unfinished limestone ring, bone button

Bedroom – Open to living room as wall removed. Nothing found.

Kitchen – Stone polisher, glazed Bes amulet, wooden object

#18 WEST STREET

Courtyard – Fireplace, stone bath, Semicircular tripod stone stool, fragments of stone ring, fragments of 2 glazed ring bezels, clay crucible

Living Room – Bowl-lined hearth, pot hole in floor, Jar sunk in floor, ring jarstand, glazed ring bezel with Tutankhamun cartouche, painted wooden plaque, crucibles, bowls, pottery fragments

Bedroom – Nothing found

Kitchen – Hearth, shallow bin, stone mortar, quern of hard stone

#19 WEST STREET

Courtyard – Bread making area, hole in wall to the living room, fragment of glazed ring bezel

Living Room - Circular stone table, painted clay chalice

Bedroom - Wall removed

Kitchen – Cupboard under stairs, pot sunk into floor, alabaster disk with handle (vase cover?)

#20 WEST STREET

Courtyard – Box hearth, fireplace, bread-making area, lamp-shelf, rectangular four-legged stone seat, offering table, stone quern, stone bath (broken), pottery fragments, plaster painted bright blue (probably from ceiling)

Living Room – Lamp niche, mud seal impression, pottery

Bedroom - Neck of vase sunk in floor as pot stand, gazelle horn, pot

Kitchen – Peg hole in south wall, pot-lined oven, stone head-rest, 2 wooden polishers, pot

#21 WEST STREET

Courtyard - Box hearth, bin,

Living Room – Circular stone table, bowl of coarse red clay, red clay amphora, fragments of storage-jars

Bedroom – Layer of ashes, 2 storage jars

Kitchen – Fragment of glazed ring bezel

#22 WEST STREET

Courtyard – Box hearth, bread making area, stone mortar

Living Room - Divan, bowl-lined hearth, circular stone table, pot

Bedroom - Blue glazed head, wooden top, fish bone, mud ball

Kitchen – L-shaped cupboard

#23 WEST STREET

Courtyard – Blue glazed scarab bead, bone stylus, fragments of painted pots

Living Room – Shed built in corner, glazed lotus bead, fragments of water jar, straw on floor, may have been goat stable

Bedroom – Lamp niche, brick bin, glazed ring bezel, mud jar-sealing, goat's horn

Kitchen – Box hearth, cupboard, glazed ring bezel, Tutankhamun cartouche, bone smoother, fragments of wooden comb, fragment of pot

#24 WEST STREET

Courtyard – Modified to open onto Long Wall Street, limestone spindle whorl, jar sealings, pottery fragments

Living Room – Storage jar, worked alabaster

Bedroom – Blue glazed scarab bead, wooden disk, 2 wooden jar-stoppers, fragment of alabaster pot

Kitchen – Hearth, bin, stair cupboard, fragments of alabaster vase

#26 WEST STREET

Courtyard – Tethering stone, stone trough, socket stones for a loom, glazed ring bezel, pot

Living Room – Divan, clay jar sunk in floor, pot hole in floor, glazed ring bezel, piece of matting

Bedroom – Nothing found

Kitchen – Cupboard under stairs, burnt ash covered room



Figure 88::Long Wall Street, 1922



Figure 89: The "other" Workmen's Village at Deir el-Medina

ENDNOTES

- ¹Kemp, Barry, *The City of Akhenaten and Nefertiti*, Thames & Hudson, 2012, p. 272
- ² Pepper, David, *After Akhenaten, What Happened to His Royal Court?*, Museum Tours Press, 2023, p. 27
- ³ T. E. Peet & C.L. Woolley, *The City of Akhenaten I (TCofA I)*, Egypt Exploration Society, 1923, p. 52.
- ⁴ Stevens, Anna, *Tell El-Amarna*, UCLA Encyclopedia of Egyptology, 2016, p. 24
- ⁵ Peet & Woolley, *TCofA I*, Ibid. p. v
- ⁶ Kemp, Barry, *The Amarna Workmen's Village in Retrospect,* JEA 73 pp. 21-53
- ⁷ Peet & Woolley, *TCofA I*, Ibid. p. 54
- ^a Davies, Norman de Garis, *The Rock Tombs of El Amarna (RTofA), Part VI*, Egypt Exploration Society, 2004 PI. XXX
- ⁹ Peet & Woolley, *TCofA I*, Ibid. p. 54
- ¹⁰ Peet & Woolley, *TCofA I*, Ibid. p. 67
- ¹¹ Peet & Woolley, *TCofA I*, Ibid. p. 53
- ¹² Kemp, Barry, The Amarna Workmen's Village in Retrospect, Ibid. p. 48
- ¹³ Peet & Woolley, *TCofA I*, Ibid. p. 56
- ¹⁴ Peet & Woolley, *TCofA I*, Ibid. Pl. IX
- ¹⁵ Peet & Woolley, *TCofA I*, Ibid. p. 55

- ¹⁶ Peet & Woolley, *TCofA I*, Ibid. p. 57
- ¹⁷ Peet & Woolley, *TCofA I*, Ibid. p. 56
- ¹⁸ Kemp, Barry, The City of Akhenaten and Nefertiti, Ibid. p 185
- ¹⁹ Kemp, Barry, The Amarna Workmen's Village in Retrospect, Ibid. p. 26
- ²⁰ Kemp, Barry, Amarna Reports IV, Chapter 2, p. 46
- ²¹ Peet & Woolley, *TCofA I*, Ibid. p. 75
- ²² Peet & Woolley, *TCofA I*, Ibid. p. 73
- ²³ Found at #4, #5, & #6 Main Street, Peet & Woolley, *TCofA I*, Ibid. p. 77
- ²⁴ Peet & Woolley, *TCofA I*, Ibid. p. 74
- ²⁵ Fitzwilliam Museum, University of Cambridge
- ²⁶ Pendlebury, *The City of Akhenaten II*I, Egypt Exploation Society, 1951, PI. XXXVII Fig 3
- ²⁷ Davies, Nina de Garis, *Making a Chair, Tomb of Rekhmire*, Tempura on Paper, Metropolitan Museum of Art, N.Y.
- ²⁸ Crowfoot, Grace M, *Methods of Hand Spinning in Egypt and the Suden*, Bankfield Museum Notes No. 12, Halifax, p 23
- ²⁹ Roth, H. Ling, Ancient Egyptian and Greek Looms, Bankfield Museum, Halifax, 1913, Fig. 16A. <u>https://www.gutenberg.org/files/25731/25731-h/25731-h.htm</u>
- ³⁰ Murohy, Elizabeth, The Workmen's Village and Production at Amarna, Brown University 2011, chrome-extension: //efaidnbmnnnibpcajpcglclefindmkaj/https://www.brown.edu/Departments/
 - Joukowsky_Institute/courses/greatheresy11/files/15574639.pdf
- ³¹ <u>https://en.wikipedia.org/wiki/Warp-weighted_loom#/media/File:Warp-weighted_loom_twill.jpg</u>
- ³² Jerusalem Post, *Lady Chenet-aa's mummy reveals its secrets to team of researchers*, Nov 11, 2024,

https://www.jpost.com/archaeology/archaeology-around-the-world/article-828599

- ³³ <u>https://www.facebook.com/photo/</u> ?fbid=2269851809896885&set=a.1531642883717785
- ³⁴ https://www.ucl.ac.uk/museums-static/digitalegypt/pottery/production.html
- ³⁵ Peet & Woolley, TCofA I, Ibid., p. 87
- ³⁶ Borchardt & Ricke, *Die Wohnhauser in Tell El-Amarna,* 1980, Raum 10
- ³⁷ Peet & Woolley, *TCofA I*, Ibid., PI. XLVII
- ³⁸ Kemp, Barry, *The Amarna Workmen's Village in Retrospect*, Ibid., p. 24
- ³⁹ Peet & Woolley, *TCofA I*, Ibid., p. 97
- ⁴⁰ Peet & Woolley, *TCofA I*, Ibid., p. 92
- ⁴¹ Peet & Woolley, *TCofA I*, Ibid,, p. 75
- ⁴² Kemp, *The Amarna Workmen's Village in Retrospect*, Ibid, p 43.
- ⁴³ Davies, Norman de Garis, *RTofA, Part VI*, Ibid, PI. XVII
- ⁴⁴ Davies, Norman de Garis, *RTofA, Part VI*, Ibid, PI. XXVI
- ⁴⁵ Davies, Norman de Garis, *RTofA, Part VI*, Ibid, PI. XXVI



Chose one of our 5 popular prepackaged tours lasting from 8 to 15 days. These were designed with multiple options to suit every budget. Or create your own trip using our custom tour options, allowing you to build your tour by choosing the specific sites you want to see.

No matter how you decide to travel, Museum Tours' expert staff will help ensure the trip of a lifetime!

Get started now! Visit **www.museum-tours.com** or call 1-888-932-2230 (U.S. only)

A. W. MARY AMAR AND A AN

Honorary Trustees of the Amarna Research Foundation

Bob Brier, PhD Senior Research Fellow, C.W. Post Campus Long Island University, Brookville, NY

Rita E. Freed, PhD Norma-Jean Calderwood Curator Egyptian, Nubian & Near Eastern Art, Museum of Fine Arts, Boston

W. Raymond Johnson, PhD Director Epigraphic Survey, Retired Oriental Institute, University of Chicago

Dietrich Wildung, PhD Director, Retired, Egyptian Museum, Berlin

Richard Wilkinson, PhD Director Egyptian Expedition, Retired, University of Arizona

The Amarna Research Foundation, Inc. 3886 South Dawson Street Aurora, CO 80014

e-mail: <u>RTomb10@comcast.net</u> website: <u>www.TheAmarnaResearchFoundation.org</u>