

CROCODILE, GOD OF THE NILE



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THE VENERATION, MUMMIFICATION AND USE OF THE CROCODILE
IN ANCIENT EGYPTIAN MEDICINE AND MAGIC



LEFT

No one really expected any surprises when this three-metre-long (10 feet) crocodile mummy was scanned in 2016 to create a 3D virtual model that visitors could explore.

The mummy entered the collection of the Rijksmuseum in 1827, but not a lot is known about where it came from. The Faiyum or Kom Ombo are possible candidates as both were centres of worship for Sobek, the crocodile god.

RIGHT

A study in the 1990s had revealed that the enormous adult was, in fact, two adolescent crocodiles. The two had been mummified and then laid out—tail to snout—to be wrapped up together to resemble one big croc.

Thanks to new CT technology that converted a new 2016 scan into a 3D image, dozens of baby crocodiles appeared (in blue in this image). The Rijksmuseum's giant crocodile had now become 49 individual mummies.



A new and exciting exhibit in 2016 which allows visitors to perform an interactive virtual autopsy of a crocodile at Leiden's National Museum of Antiquities (Rijksmuseum van Oudheden) set the motion for an astonishing find.

Advanced three-dimensional CT scans of a crocodile mummy held at the museum since 1828 were conducted by the Swedish visualization company *Interspectral*, with remarkable results.

An earlier scan of 1996 had already revealed that the 3-metre-long crocodile mummy was, in fact, two adolescents wrapped up and bound together. The latest images, however, recorded an unprecedented further 47 individually mummified crocodile hatchlings within the wrappings.

We know that the ancient Egyptians mummified animals such as cats, falcons and baboons amongst others, but why was the crocodile of particular importance? What led to its veneration, mummification and use of the crocodile in ancient Egyptian medicine and magic?

Despite the crocodile mummy having spent nearly two centuries on display at the Dutch National Museum of Antiquities in Leiden, the 37 crocodile hatchlings beneath the bandages had gone undetected.

Each baby crocodile had been individually wrapped in linen bandages before being placed around the two adolescent crocodiles and all bound together with palm rope.

Crocodiles usually lay between 40 to 60 eggs at a time, so it is possible that these baby crocodiles emanated from the same clutch of eggs laid by a single mother.

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THE NILE CROCODILE

A DIVINE MAP

The Book of the Faiyum is an exquisitely illustrated papyrus created during Egypt's Ptolemaic and Roman Periods (ca. late 1st century B.C.–2nd century A.D.).

The Faiyum at this time was experiencing an influx of immigration from Greek soldiers who were being given land grants in the fertile region. It thrived, and much of the credit went to the crocodile god, Sobek.

Nineteenth-century scholars thought the papyrus depicted the legendary Egyptian labyrinth. We now know that it depicts the Faiyum region and its religious life. The long central oval depicts the Faiyum's Lake Moeris itself.

Inside the lake, images of various gods including Sobek-Re and Osiris allude to stories of creation, as well as the sun god's nightly regeneration.

Around the lake, forty-two deities are depicted, each representing an important cult site in Egypt.

The crocodile is the most feared predator of the Nile and one of evolution's greatest survivors. Fossil remains reveal that not only was its prehistoric ancestor around during the time of the dinosaurs, but it hunted and ate them too. It was probably the crocodile's ability to hide under water that saved it from extinction and live through continental drifts and ice ages. It is a remarkable reptile that can go without food for great lengths of time. The crocodile is a master of camouflage and an opportunist eater that will consume almost anything it can by trapping its prey between its jaws and dragging it under the water.

Although the Egyptians prudently feared the crocodile, they also revered this magnificent creature for understandable reasons. The Nile crocodile is, in fact, the second largest crocodile in the world reaching up to a staggering five metres (16 feet) in length and weighing up to a massive 775 kilograms.

In ancient times the crocodile inhabited the entire length of the Nile and was also found in Lake Moeris in the Faiyum. By the 1950s, however, Egypt's crocodile population was driven to the brink of extinction by hunting and habitat loss. The construction of the Aswan High Dam in the 1960s was a death blow downstream. Increased irrigation and even more loss of wetland habitat has meant that the Nile has no place for the Nile crocodile. The waters behind the dam, however, are relatively undisturbed by human activities and the crocodile's numbers have had a chance to slowly recover.

Awareness of the crocodile's anatomy, breeding and survival methods would have been extensive because not only did the Egyptians mummify crocodiles, there is also evidence that priests reared them at Faiyum and Kom Ombo which were the main cult centres of the crocodile god Sobek.

The Nile itself was believed to have come into existence from the sweat of Sobek and one tale states that he laid his eggs on the bank of the river initiating the creation process. This explains Sobek's link to the rebirth of the deceased into the afterlife: he became the symbol of fertility, rebirth and strength of the pharaoh.

Sobek makes an appearance as early as the Old Kingdom in the pyramid texts, and his worship continues until the Roman period reaching heights of prominence in the 12th and 13th dynasties.

**"I am he who emerges,
the Lord of water.
I am Sobek,
Lord of the Winding Waterway."**

Coffin Text, Spell 285

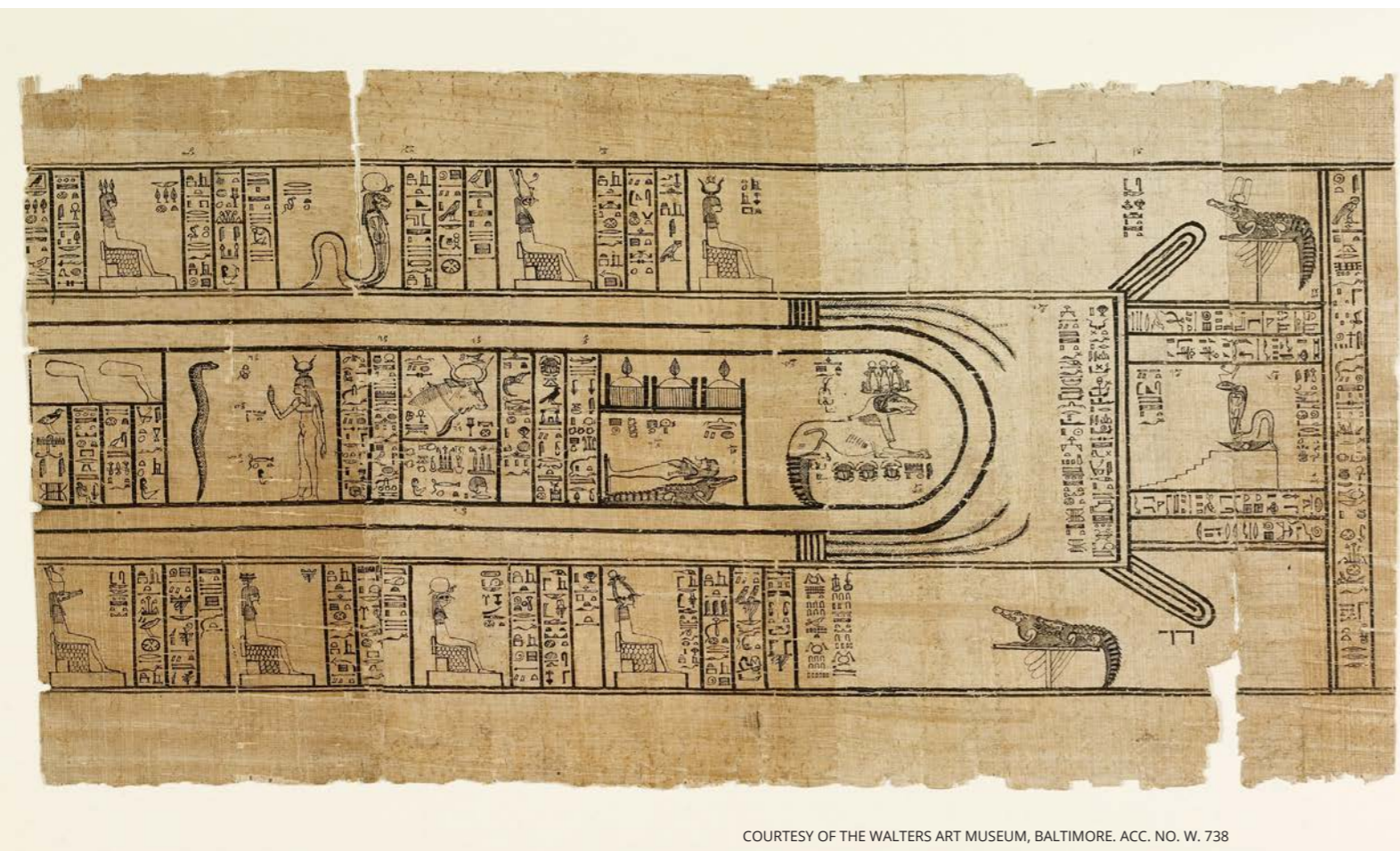
In observing crocodile behaviour the Egyptians would have admired the great lengths the crocodile mother goes to in order to protect her hatchlings from predators and harm's way. Studies have revealed that the female crocodile can actually hear and recognise sounds of distress from within the egg and responds to them accordingly. The unborn crocodiles even communicate with each other from within the egg and synchronise the time to hatch to protect themselves from predators during their early vulnerable state. Once hatched, remarkably the mother carries the youngsters in her mouth without causing them any injury and gently eases them into the water. They remain with their mother for two years.

LITTLE NIPPER

At Medinet Madi in the Faiyum—the site of one of the cults dedicated to Sobek—archaeologists have discovered a crocodile nursery that included an incubation area for eggs and a shallow basin of water in which the baby crocodiles could swim.

While some crocodiles lived to a ripe old age, pampered with juicy morsels, many others were sacrificed as hatchlings and mummified to be votive offerings.

This baby crocodile comes from Egypt's Late Period (Dynasties 25–31, 747–332 B.C.). It is now cared for in the University of Chicago's Oriental Institute Museum.



COURTESY OF THE WALTERS ART MUSEUM, BALTIMORE. ACC. NO. W. 738



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FERTILITY & BIRTH CONTROL

THE DOMAIN OF SOBEK

Sobek wielded a potent combination of generative and protective power. His riverside temple at Kom Ombo, around 55 km (30 miles) north of Aswan, abounds in vigilant reliefs of women giving birth and nurturing infants. This was particularly important in a time when childbirth was risky for both mother and child.

The Kom Ombo temple was at the heart of the town of Pa-Sebek, "the Domain of Sobek", the largest and most important centre of worship of Sobek in Egypt during the Ptolemaic and Roman eras (332 B.C.– A.D. 395); It was built in the 2nd century by Ptolemy VI on the site of an earlier temple by the 18th Dynasty's Thutmose III.

The unique symmetrical double temple had two sections: the southern one dedicated to Sobek, the northern to the falcon god Horus-the-Elder.

Pictured below is the famous birth scene at Kom Ombo. The relief can be found on the southern wall of the "Hall of Offerings"—the middle vestibule before the sacred sanctuaries.

The connection of the crocodile with the life-giving Nile and its devotion in caring for its offspring would have made it an understandable choice as a God of fertility. The word "sbk" itself is believed by some scholars to have originated from the verb *sbk3* (𓂏𓂏𓂏), meaning "to impregnate". This also explains why the recent crocodile scans revealed hatchlings individually wrapped with the larger crocodiles. Crocodiles would have been mummified as votive offerings to Sobek, but according to Herodotus, some were even pets.

There is an apparent dichotomy regarding the crocodile though. On the one hand, it was connected with fertility and rebirth, yet it also played a role in preventing pregnancy and thus life. The Kahun Gynaecological Papyrus (ca. 1825 B.C., reign of Amenemhat III and now in the Petrie Museum), mentions a pessary of crocodile dung to be inserted into the vagina and used as a contraceptive. It sounds absurd to us but crocodile dung has a similar pH to modern day spermicides so had a chance of being slightly effective.

What could possibly have made the ancient Egyptians think of using crocodile dung though? Although excrement of a variety of animals was used for an array of medical treatments, the association of crocodile dung with contraception could possibly be explained by a closer look at the crocodile's reproductive process.

Crocodile mating takes place under water, for several days. The pair will engage in hours of foreplay which includes splashing in the water, dancing, rubbing bodies and snouts. The male then lies over the female's back and wraps his hind legs and tail under her.



© JEFFREY ROSS BURZACOTT

What's interesting here is that this position enables them to align their cloacal vents which are used for both reproduction and waste excretion. It's plausible that in rearing and mummifying crocodiles Egyptian priests and practitioners would have been aware of the dual function of the cloacal vent and hence the crocodile became associated with fertility but its excrement as a contraception.

Furthermore a recent study of Australian saltwater crocodiles has shown that crocodile sperm is very similar to human sperm and must mature once it leaves the testes. Crocodile studies are actually helping in finding causes of male infertility in humans.

We know that female crocodiles are not exclusive and a single clutch is often the offspring of several males. Cryptic female choice is a relatively new study, and it will be interesting to see if the female crocodile has the ability after copulation to choose which male crocodile sperm she allows to fertilise her eggs. Ongoing reptile studies are already demonstrating the ability of female crocodiles to store sperm to use for fertilisation at a later time.

Perhaps the ancient Egyptians knew more than we give them credit for. Although crocodile dung certainly isn't something we would choose as a contraceptive, some Egyptian remedies of the past are being revisited, such as the use of honey in treating wounds.



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LIFE AND POWER

Jean François Champollion was a driven man. Within a year of discovering the workings of the ancient Egyptian hieroglyphic system, he published "Panthéon égyptien, collection des personnages mythologiques de l'ancienne Égypte, d'après les monuments," with illustrations of the mythological characters from ancient Egypt (such as that on the left), by Léon-Jean-Joseph Dubois. This image shows one of the forms of Sobek: the fusion of man and crocodile.

Here Sobek holds the ankh of life in his right hand, and in his left, a sceptre, symbolising divine power and authority.

Champollion was truly brilliant, but he hadn't quite got all the individual signs worked out yet. He labelled this god "Sovk".

A CROCODILE PART FOR WHATEVER AILS YOU

Contraception however, was not the only reason the crocodile makes an appearance in medical papyri. An interesting example is found in the Ebers Papyrus (now in the University of Leipzig in Germany) in which the fat of a crocodile together with that of a snake, cat and ibex are mixed up and smeared on the head of a bald person to aid hair regrowth. This was highly unlikely to work, even with the placebo effect but it's interesting that hair loss has always been a worry to humans.

Another remedy which includes the crocodile is Ebers 378. "Earth of the crocodile" (dung possibly) was prescribed to drive out the raising up of the water in the eyes. Crocodiles are known to shed tears while feeding, hence the term "crocodile tears", meaning fake tears (the crocodile is unlikely to be tearing-up with remorse while consuming its prey). It is more likely that the tears are a result of hissing and huffing, which often accompanies feeding, forcing air up through the sinuses. Perhaps the ancients observed this and felt a crocodile product could help with over-watery eyes in humans. It's highly improbable that it actually worked.

We know that the ancient Egyptians were sometimes injured or even killed by crocodiles, so unsurprisingly, remedies for crocodile bites also feature in the medical papyri such as Ebers 436 and Papyrus Hearst 239: "Another remedy for the bite (peseh) of a crocodile on all limbs of a man. You should bandage it with fresh meat on the first day."

Bandaging with fresh meat on the first day was a standard Egyptian remedy for any major flesh wound. Identical or very similar wording appears in at least 13 cases in the Edwin Smith medical papyrus (now at the New York Academy of Medicine).

CROCODILE MAGIC

Further use of the crocodile in magic can be found on what are known as apotropaic wands, designed to turn away evil influences. These wands were mostly made of hippo ivory and decorated with images of crocodiles and other fearsome predators. They were inscribed with a formula promising protection from evil spirits. Crocodiles also feature on rectangular and cylindrical rods made in ebony or glazed steatite. Three-dimensional figures of turtles, lions, crocodiles and other magical animals were sometimes attached to the top side of these rods. The decorated rods were probably used to establish the magicians' authority over the creatures depicted on them. The party to be protected was always either a woman or child.

A MAGIC WEAPON

Magic "wands" appeared only for a short time in the late Middle Kingdom, and then disappeared. No one knows why for sure.

This ivory rod, 12 cm long, is related to a group of objects known as apotropaic wands. Other examples have been found with a demon on top, connected to the rod by a dowel. This rod has indentations that suggest that it too brandished a similarly terrifying figure.

Incised on the sides are usually fearsome beasts, such as the crocodile and lion below, or nasty part-animal demons, often wielding knives.

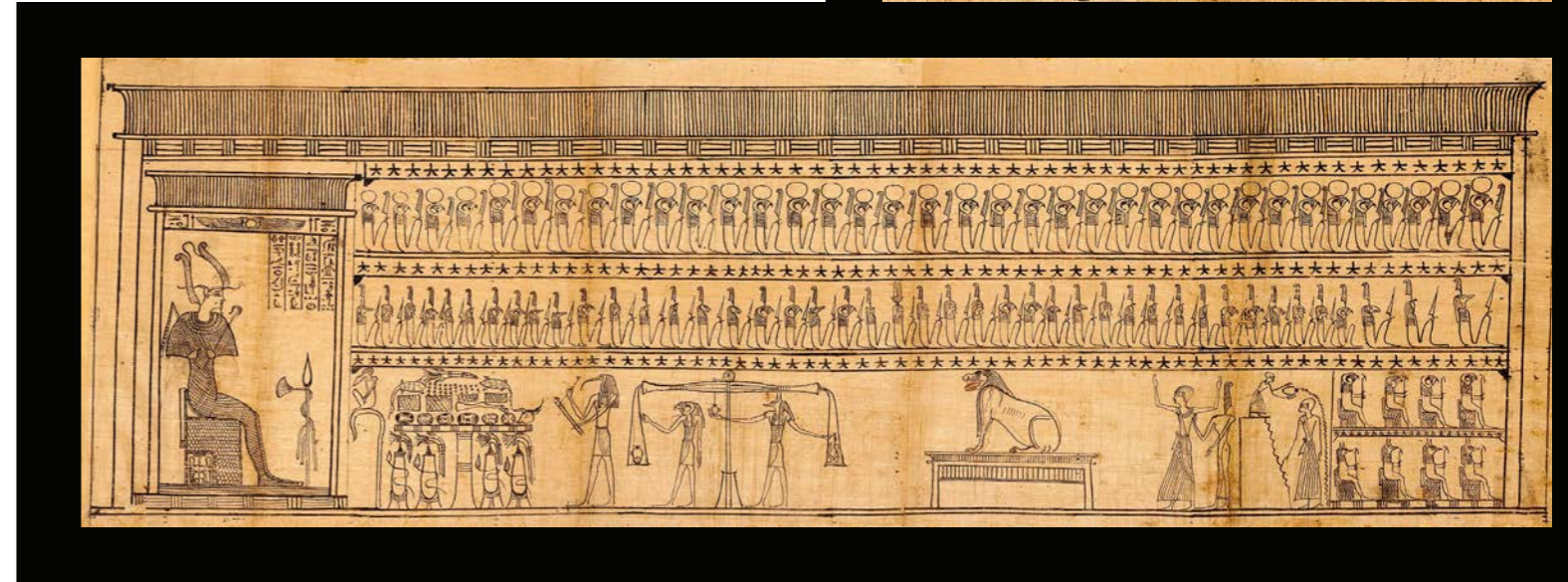
Such "wands" were designed to drive off malign spirits which could endanger women in childbirth and newborn babies. A priest is understood to have used such objects to encircle the mother and child and thus extend over them the protection given by the animals and demons represented.



COURTESY OF THE PETRIE MUSEUM OF EGYPTIAN ARCHAEOLOGY, UCL. ACC. NO. UC58831

JUDGEMENT

The crocodile also played an important role in Egyptian magic. Every dead Egyptian had to enter the underworld, and one of the primary purposes of funerary magic was to help the deceased deal with the demons she or he would encounter there. When the place of judgment was reached, the heart of the deceased was weighed against the feather of Maat, which symbolised truth and justice. A monster known as Ammut, part hippopotamus, part crocodile (head), part lioness, squatted by the scales ready to devour the souls of the deceased who failed the test.



JUDGEMENT DAY FOR IMHOTEP

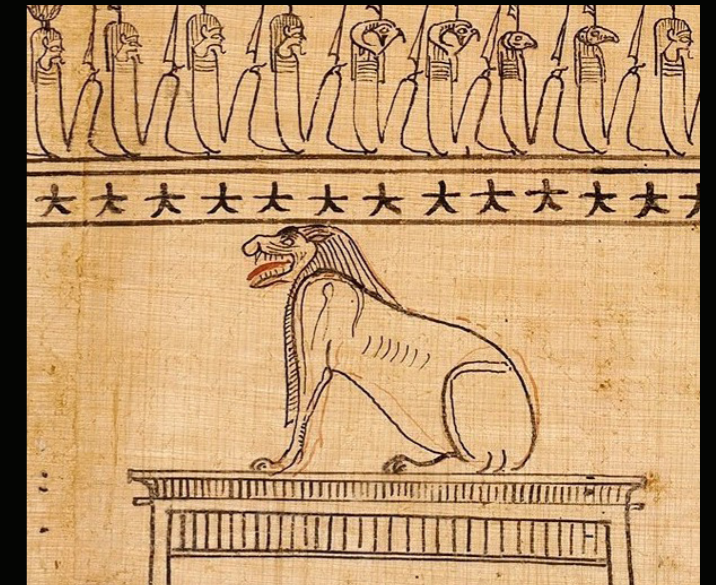
One of the most important features in the "Book of the Dead" is "The Weighing of the Heart", where, to become one of the blessed dead, Imhotep must appear before Osiris to prove that he has lived a blameless life.

Imhotep was a Priest of Horus, probably from Meir in Middle Egypt during the early Ptolemaic Period (ca. 332-200 B.C.).

In the papyrus, Imhotep is first purified with water so that he may enter the Hall of Judgement. The goddess Ma'at (the embodiment of the perfect order of the universe) then leads him into the Hall.

Horus and Anubis weigh Imhotep's heart against a figure of Maat. Thoth records the outcome. If Imhotep's heart is heavy with wickedness, the scales will fail to balance, and his heart will be devoured by the ever-eager demon Ammut, and Imhotep will die forever.

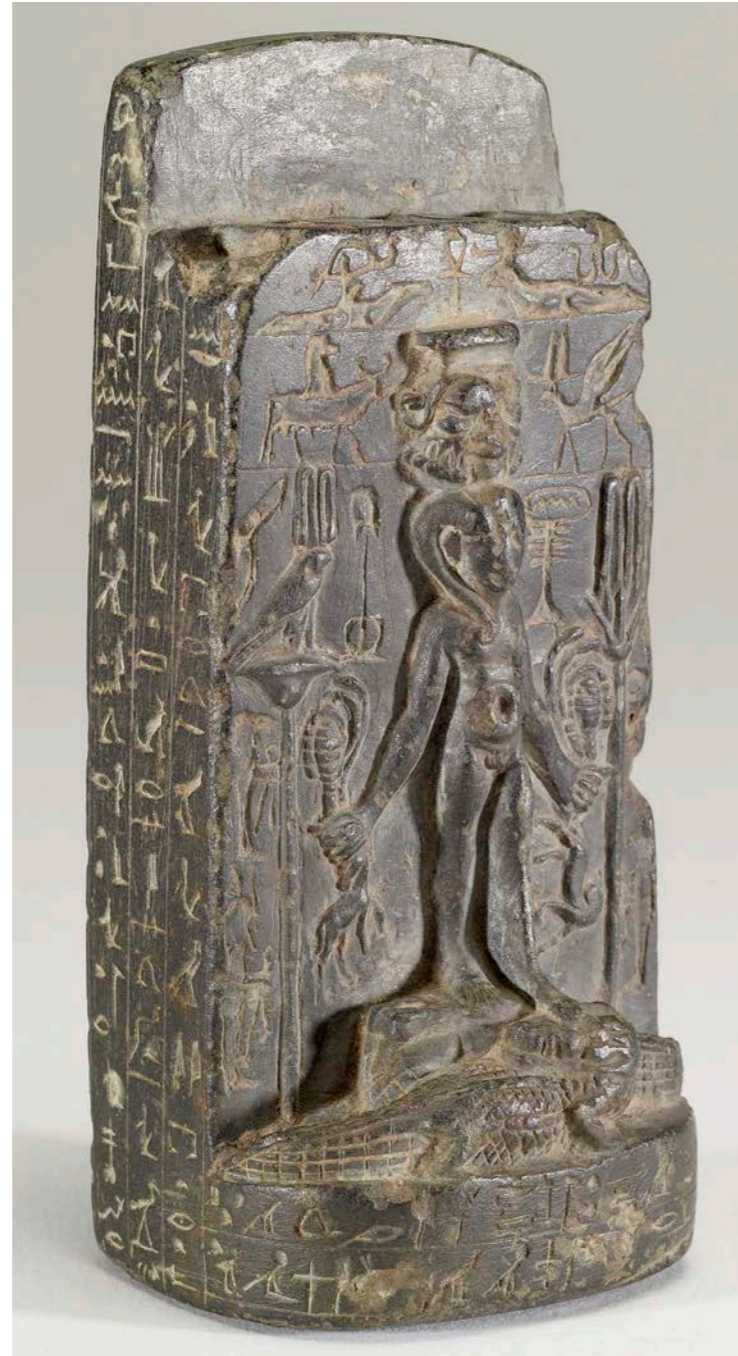
Of course, the papyrus is designed to perpetuate a happy ending, and the scales balance; Imhotep will join the company of Osiris for eternity.



METROPOLITAN MUSEUM OF ART, NEW YORK. ACC. NO. 35.9.20a-w

THE CROCODILE MEETS HIS MATCH

Further protection from attack by certain animals, particularly the crocodile, can be found in the form of stelae known as cippi which were found in many shrines in both temples and homes in the Late Period of ancient Egypt (ca. 747–332 B.C.). A typical cippus shows Horus-the-Child with the side lock standing on the backs of crocodiles holding a variety of dangerous animals and thus symbolising his victory over malign forces.



COURTESY OF THE WALTERS ART MUSEUM, BALTIMORE. ACC. NO. 22.173

POWER OVER CHAOS

With the protective god Bes above him, Horus-the-Child, the son of Isis, clutches a scorpion and a lion in one hand and snakes and an antelope in the other while he stands on two crocodiles.

The amulet is inscribed with magical spells to ward off stings and bites from deadly animals and arachnids, representing wild nature and chaos.

KEEPING SPOUSES FAITHFUL

The crocodile even appears in some popular literature from ancient Egypt. Papyrus Westcar has a story about chief lector priest, Webaoner, who transformed a wax crocodile into a real one and used it to hunt down his wife's lover.

There is an echo of the Webaoner story in a spell to keep a man's wife faithful to him in one of the Graeco-Egyptian papyri. The magician is to make a crocodile out of clay and put it in a lead coffin. He must write in the coffin a name of power and the name of his wife. Presumably, the fearsome crocodile was to prevent any lover approaching his wife.



COURTESY OF THE WALTERS ART MUSEUM, BALTIMORE. ACC. NO. W. 738

CONCLUSIONS

The ancient Egyptians had good reason to fear, revere and mummify the magnificent crocodile. Despite its reputation, the crocodile is a devoted mother that ferociously protects its young. It's been around for a long time, outliving the dinosaurs and still clinging on along the Nile.

The crocodile was an interesting contributor to ancient Egyptian pharmacopoeia, and while it's easy for us to dismiss some ancient remedies as bizarre, the Egyptians had their own rationale and logic based on observations, trial and error. They did their best to make sense of the chaotic yet beautiful world around them. Their use of magic and spells is really not that different from our use of prayers and holy water, for example, to aid healing.

In times of desperation there appears to be an innate human need to turn to supernatural means of assistance. It's worth noting that magic wasn't used in isolation in ancient Egypt. The doctors, priests and magicians worked together in providing healthcare, and thus the crocodile appears in remedies, prayers and spells, all in the hope to help the living and the deceased.

A BEST SELLER!

The Book of the Faiyum was clearly an important text for the ancient Egyptians—at least 30 copies have survived through the ages, including an unillustrated hieroglyphic version inscribed on the walls of Kom Ombo Temple.

In the Book, Sobek becomes assimilated with Ra, the sun god. Sobek-Ra is now the crocodile god who brings the sun to the Faiyum.

Of course, you don't need to understand ancient Egyptian mythology to appreciate the Book of the Faiyum; even the tiniest illustrations are rendered with incredible detail.

Sofia Aziz is an independent researcher who has written articles on ancient Egypt for several magazines and journals. She holds a First Class Honours degree in Human Sciences and a certificate in Egyptology. Her main area of interest is in biomedical and forensic studies in Egyptology.