

## Advance Information

Frankfurt Book Fair 2021

**Nicholas Reeves** is a world renowned Egyptologist and expert on ancient Egypt. Having worked at the British Museum and the Metropolitan Museum of Art, and excavated extensively in Egypt, he brings a lifetime's knowledge to bear on this subject. Currently affiliated with the University of Arizona, he is the author of books including *Akhenaten: Egypt's False Prophet* and *The Complete Valley of the Kings*, both published by Thames & Hudson.

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## The Complete Tutankhamun

100 Years of Discovery

Nicholas Reeves

**A fully updated and revised edition of a classic bestseller. This is the definitive guide to Tutankhamun and his tomb – what it contained, why, and what it means today.**

### Marketing points

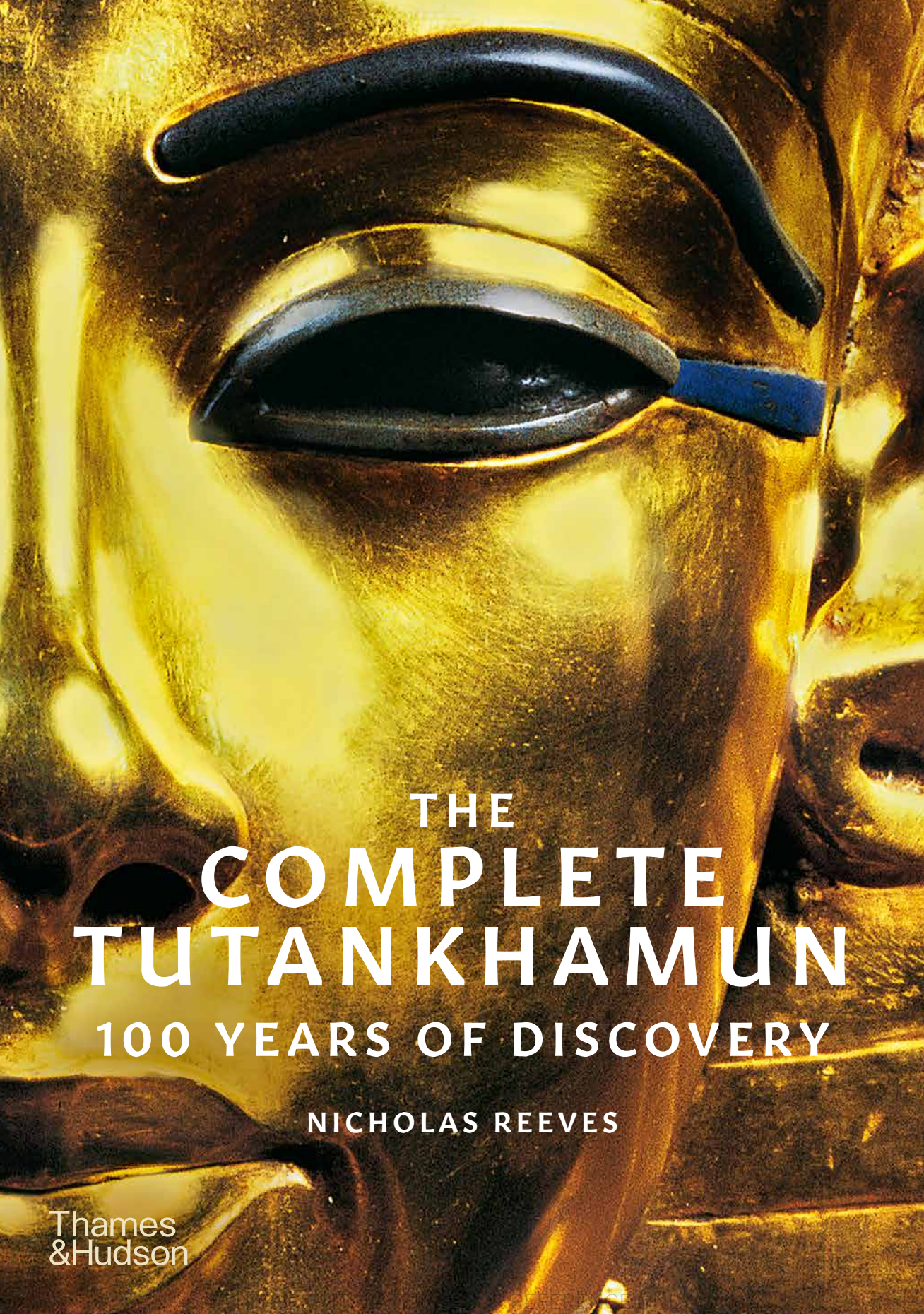
- **2022 will mark the centenary** of the rediscovery and opening of Tutankhamun's tomb by Howard Carter.
- **The most comprehensive guide** to what was actually in the tomb when it was found.
- **Object-by-object analysis** based on the very latest cutting-edge scientific research and interpretation.
- **Contains over 400 images**, including the most up-to-date colour photography, scientific scanning and specially commissioned diagrams.

### Description

With its breathtaking treasures, the Tomb of Tutankhamun continues to exert a unique hold on the popular imagination. A century after its discovery on 4 November 1922, Howard Carter's great find has lost none of its drama or fascination. The narrative of that discovery remains as gripping as ever, and new advances, being made to this day, allow us to see the Boy King and the events of his time with greater clarity than ever before.

Extensively revised, updated and rewritten, this classic account by renowned Egyptologist Nicholas Reeves is now accompanied by the most recent photographs, scans and analysis. Extracts from Carter's original notes and diaries are accompanied by new and accurate plans and sections of the tomb, as well as its wider setting within the Valley of the Kings. Imagery generated by laser scanning enables, for the first time, remote examination of the decorated walls and their physical base; while high-resolution photographs of the tomb's treasures reveal a level of definition that Carter could scarcely have dreamt of. Nor have the tomb's human remains been neglected: thanks to CT-scanning, aDNA analysis and other techniques, we are gaining fresh and important insights into both the king's physicality and his lineage. With previously unpublished illustrations, clear charts, diagrams and tables, the book represents the most comprehensive and authoritative reference on the site and its contents available.

If you buy one book on Tutankhamun – and many will – this is the single authoritative guide to what you need to know about the Boy King, his life and his death.



THE  
**COMPLETE  
TUTANKHAMUN**  
100 YEARS OF DISCOVERY

NICHOLAS REEVES

Thames  
&Hudson



**THE COMPLETE  
TUTANKHAMUN**



THE COMPLETE  
**TUTANKHAMUN**  
100 YEARS OF DISCOVERY

NICHOLAS REEVES



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**FRONTISPIECE** One of the life-sized Guardian Statues that guarded the Burial Chamber.

**OPPOSITE** The king's canopic chest, carved from a single block of translucent calcite.

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# PREFACE

**'... as my eyes grew accustomed to the light, details of the room within emerged slowly from the mist, strange animals, statues, and gold – everywhere the glint of gold. For the moment – an eternity it must have seemed to the others standing by – I was struck dumb with amazement, and when Lord Carnarvon, unable to stand the suspense any longer, inquired anxiously, "Can you see anything?" it was all I could do to get out the words, "Yes, wonderful things."'**

**HOWARD CARTER**

When it first appeared in 1990, *The Complete Tutankhamun* was the only fact-based volume concerning this young Egyptian king to deal in a comprehensive, systematic and analytical fashion with his famous tomb. Testifying to the demand for such a resource from archaeologists and public alike, the book would remain in print for an astonishing thirty years.

Time, however, does not stand still, and a new edition is overdue. There is much on which to report, with the past three decades witnessing extraordinary advances on every front. Thanks to the survey work of Kent Weeks and his Theban Mapping Project team, Egyptologists now have ready, online access to new and accurate plans and sections of not only the tomb but also its wider setting within the Valley of the Kings; imagery generated by the laser scanning of Adam Lowe and Factum Arte and made available online permits for the first time remote, sub-millimetric interrogation of the decorated walls of the Burial Chamber and their physical base; while the skills of Araldo De Luca and Sandro Vannini have produced photographs of the tomb's treasures at a level of definition which, even in 1990, could scarcely have been dreamt of. Nor have the tomb's human remains been neglected: thanks to the use by Zahi Hawass and his team of CT-scanning, aDNA analysis and other techniques, we are gaining fresh and important insights into both the king's physicality and his lineage.

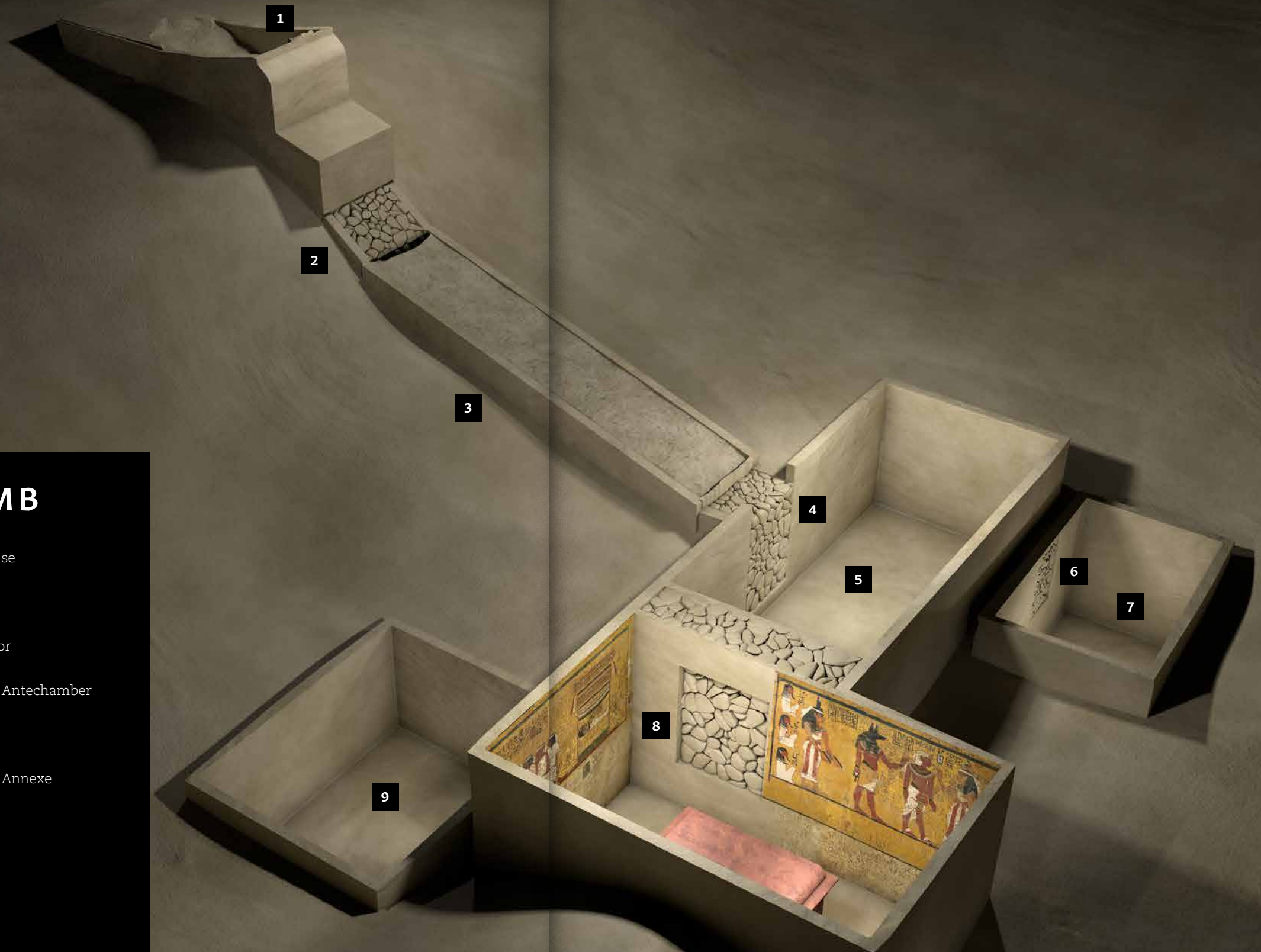
To these recent advances in documentation may be added the outstanding conservation efforts of the Grand Egyptian Museum on the 5,000-plus burial objects, and of the Getty Conservation Institute within the tomb itself. We encounter Tutankhamun's art today as it has not been seen for more than 3,000 years, and we know correspondingly more about it. Further, specialist volumes on the tomb and its contents have appeared in print and online, along with a mass of individual papers – all of which draw heavily, and inevitably, upon Howard Carter's own detailed records, which are themselves now accessible online. Most astonishing of all, from the Valley of the Kings itself we have a completely new source of primary evidence – the largely undisturbed and intriguing storage chamber KV 63, which promises on eventual publication to shed further light on Tutankhamun's burial, situated just across the wadi path.


A century after its discovery on 4 November 1922, Carter's great find has lost none of its drama, fascination or potential. The narrative of that initial moment of discovery remains as gripping as ever; and new discoveries, being made to this day, allow us to see the young king and the events of his time with greater clarity than ever before. But it is the future that holds the most intriguing prospect, with the realization that Tutankhamun may not be alone within KV 62. Advances in the architectural and artistic analysis of the long-forgotten tomb combine with geophysics to raise the possibility of further, unexplored chambers, and perhaps even, within these chambers, the intact burial of Queen Nefertiti herself.

Nicholas Reeves, 2022

# THE TOMB

- 1 Rubble-filled Staircase
- 2 Blocked Doorway
- 3 Rubble-filled Corridor
- 4 Blocked Doorway to Antechamber
- 5 Antechamber
- 6 Blocked Doorway to Annexe
- 7 Annexe
- 8 Burial Chamber
- 9 Treasury





PART IV  
**THE  
PHARAOH'S  
BURIAL**

The realization that the tomb had been robbed in antiquity was tempered by the discovery that the robbers had not penetrated beyond the outermost gilded shrine: Tutankhamun still reposed within his sarcophagus and coffins, just as the priestly burial party had left him thirty centuries before.

Egyptologists had a shrewd idea of what to expect: a papyrus in Turin preserved a plan of the burial of Ramesses IV in position, his stone sarcophagus surrounded by five shrines and a linen pall; while a document (Papyrus Amherst) dating from the 20th Dynasty provided a graphic description of a king's mummy lavishly adorned with jewels and accompanied by his weapons.

In an interview with *The Times* on 18 December 1922, Lord Carnarvon gave free rein to the ultimate archaeological fantasy. 'I shall expect [the sarcophagus] to be of alabaster... I expect it will be filled with flowers and will contain the royal regalia. In the sarcophagus I shall first expect to find the ordinary wooden coffin. Inside there will probably be a second coffin of thin wood, lined with finely chased silver. Inside this, again, there will be a coffin of thin wood, richly gilt. Then we shall find the mummy. It will be, I conjecture, encased in sheet gold about the thickness of the tin used for making tobacco-boxes. The mummy will have gold bracelets at the wrists, gold rings at the ankles, a gold collar and breastplate, and a gold plate on the side where the abdomen was opened. His fingernails and toenails will be inlaid with gold. Enclosed with him in the coffins will probably be other precious royal objects. I shall also expect to find the richly ornamented vessels in which the heart and other internal organs are preserved, and it will, no doubt, have a finely worked portrait of the king on the lid.'

No one could have guessed how much reality, for once, would exceed even the wildest speculation.





## THE COFFINS

'The sarcophagus lid trembled, began to rise. Slowly, and swaying uncertainly, it swung clear.

'At first we saw only a long, narrow, black void. Then across the middle of this blackness we gradually discerned fragments of granite which had fallen out of the fracture in the lid. They were lying scattered upon a dark shroud through which we seemed to see emerging an indistinct form...'

**JAMES HENRY BREASTED**

### FIRST COFFIN (no. 253)

**PAGES 124–25** Howard Carter delicately brushes away the decayed remains of the linen shroud that covered the face of the second coffin.

**PREVIOUS** The entrance to the Burial Chamber, with three-quarters of the sealed and plastered blocking removed to reveal the brilliant blue and gold of the outermost shrine. A Guardian Statue stood on either side of this doorway.

**OPPOSITE** The second coffin in situ, the face covered by a linen shroud.

As the broken lid of the stone sarcophagus was slowly raised by means of Carter's elaborate pulley system on 12 February 1924, the shrouded form of the dead king at last came into view. As the two sheets of covering linen (nos 252 and 252a) were rolled back, the crowd of assembled dignitaries let out an audible gasp: a magnificent anthropoid coffin stood revealed, head to the west, its perfect, gold surface shimmering magically in the heat of Burton's arc lamps. How different from those battered hulks recovered by Émile Brugsch from the royal cache at Deir el-Bahri some forty years earlier! And from its size – a massive 2.24 m (7 ft 4 in.) long – it was clearly the outermost of a nest of such coffins, contained one within another like so many Russian dolls. Frustratingly, though, for the moment the archaeologists could go no further: there were other matters which needed urgently to be addressed – not least the conservation demands of those many objects already removed from the tomb.

Work on the burial itself would not resume until an eventful year and a half later. The coffin rested safely still on its low, leonine, gilded wooden bier (no. 253a), despite the strain of the ton and a quarter weight it had endured for more than 3,200 years. Alongside,

in the bottom of the sarcophagus, was a group of fragments that had clearly been adzed from the lid's toes at the time of the funeral – a surprisingly rough-and-ready solution to an error in measurement, needed to permit the sarcophagus lid to sit properly. Not impossibly, the projection had been responsible for the lid's transverse break. Later analysis of these wooden chippings revealed the structure of the coffin to be cypress, and confirmed that its surface detail had been modelled in a layer of gesso itself overlaid with gold foil. On the coffin generally, this precious-metal coating varied in thickness according to its location, from a heavier foil for the face and hands to the finest gold leaf for the rest. It varied also in colour, the hands and face having been crafted in a somewhat paler alloy that now conveyed, in Carter's words, 'an impression of the greyness of death'.

Coffin lid and base combined to present the form of a recumbent, mummified image of the dead king as Osiris. He is shown wearing a broad collar and wristlets modelled in low relief, and the arms are crossed on the chest to clutch in left and right hands the twin symbols of kingship: the crook and the flail. From pharaoh's forehead rise the 'Two Ladies', long misidentified as Wadjet, the divine cobra of Lower Egypt – poised as if to spit fire at Pharaoh's enemies – and Nekhbet, the vulturine goddess of Upper Egypt; as we now better understand, they in fact represent the sister goddesses Nephthys and Isis. A small wreath tied around this emblem at the time of the funeral was composed of olive leaves and flowers resembling the blue cornflower, bound onto a narrow strip of papyrus pith. The olive leaves had been carefully arranged to show alternately their green front and silver back surfaces.

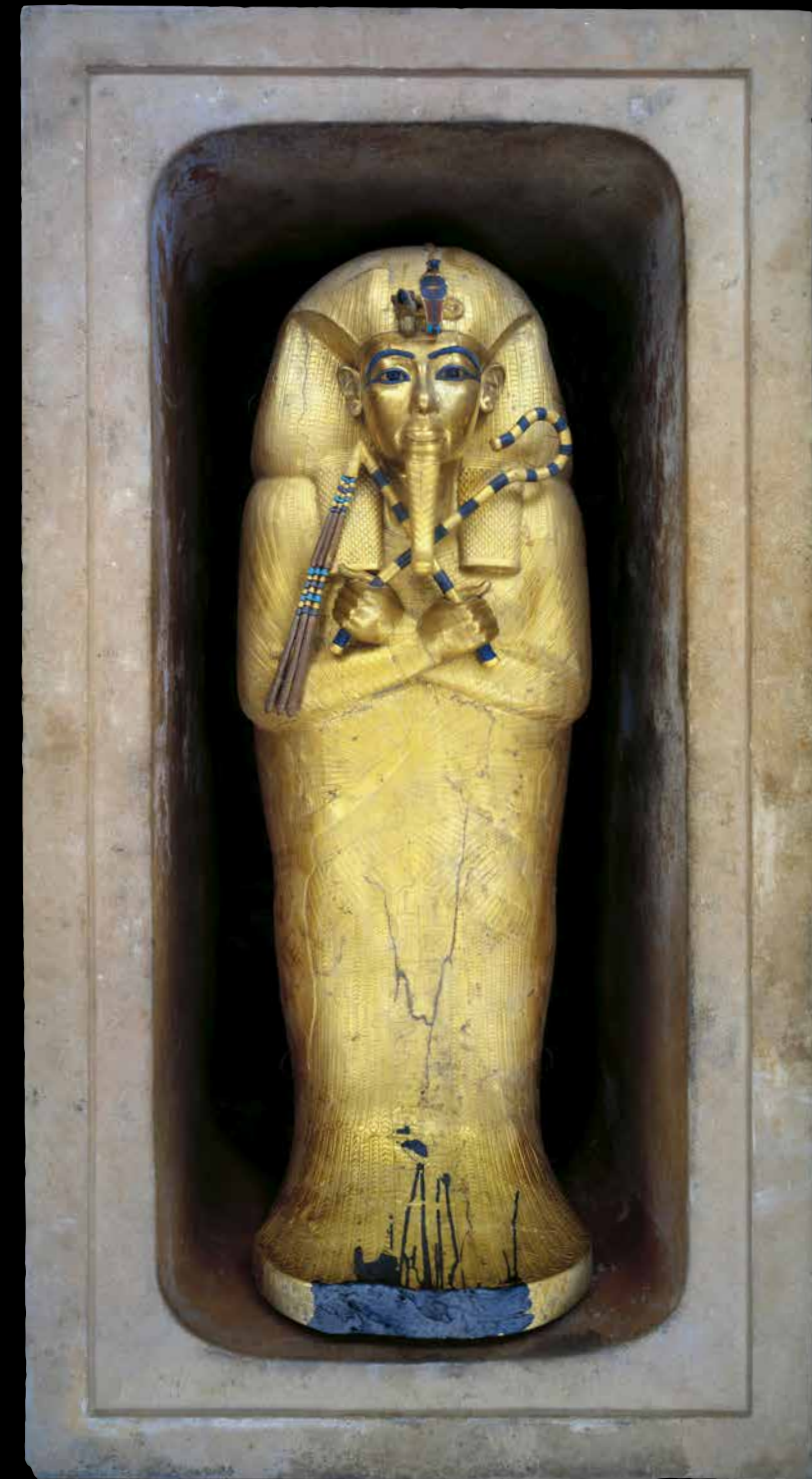
The underlying decoration of both lid and base, modelled in subtle, low relief, was a *rishi* – feathered – pattern, with two finely modelled humanoid images of Isis and Nephthys superimposed on either side of the legs, their wings extended upwards and around in a protective embrace of the deceased king within. Between the two stand two columns of hieroglyphic text containing invocations on Tutankhamun's behalf by Nut, Isis and Nephthys, while the flat of the feet carries a representation of Isis alone, kneeling upon the hieroglyph for 'gold' and referenced in ten vertical lines of surrounding text. Further speeches of the various gods are found on the 'heel' and upper sides of the coffin trough.

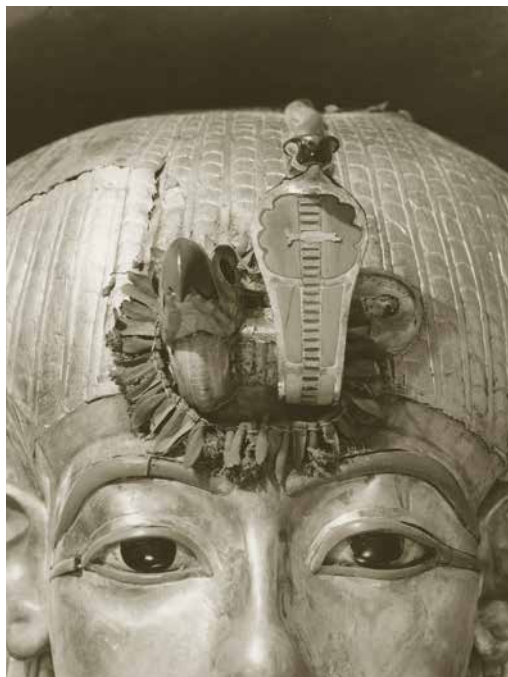
The face of this coffin reproduces Tutankhamun's standard physiognomy as this is encountered elsewhere in the tomb – most meaningfully in the two large Guardian Statues of the king and his *ka* (nos 22 and 29), each of these modelled with such close attention



**ABOVE** Tutankhamun's coffins, varying slightly in size, were accommodated one within another around the gold-masked mummy.

**OPPOSITE** A priceless treasure: the outermost coffin, entirely overlaid with decorated gold foil.





**LEFT** The head of the outer coffin. Tutankhamun wears the vulture and uraeus on his brow, representing Nephtys and Isis, sisters of Osiris, respectively.

**BELOW** An image of the winged goddess Isis, chased with supreme delicacy and skill beneath the foot of Tutankhamun's innermost, solid gold coffin.



**BELOW** The unusual headdress on Tutankhamun's outer coffin (right), a combination of the tripartite wig (left) and king's khat (centre), reveals it to have been adapted from an earlier design.

to detail as to be a virtual simulacrum of the king's earthly presence. Nevertheless, the coffin is very clearly a re-used piece, with the mask of its original owner simply replaced.

The method employed to decorate the coffin's surface – by cutting the design into a thick layer of plaster that was subsequently gilded – meant that an earlier relief decoration could be removed in its entirety with relative ease by simply scraping down to the wooden core and replacing it with what we see now. The process itself leaves no trace, and the sole detail today that alerts us to the fact that the outer coffin is a re-used piece is its unusual headgear. Not readily altered, a moment's reflection reveals this to be not a single headdress of unique form, but a combination of two quite separate headdresses of standard type: a kingly *khat* worn physically on top of a wig of tripartite form – the latter, at this period, a style more closely associated with women than with men.

What this combination of headgear clearly conveys is the coffin's hybrid nature—a compromise manner of representation we encounter again in the design of the second coffin. The outer coffin's underlying, lappeted wig identifies its original owner not as a king at all, but as a *queen*, though no ordinary holder of this rank: from the superimposed *khat* and other regal emblems, very clearly this coffin had been intended for use by a queen with pharaonic aspirations – and the sole individual who fits the bill is Nefertiti in her capacity as Akhenaten's coregent, Neferneferuaten.



## SECOND COFFIN (no. 254)

The original design of the outermost coffin's lid had included four silver handles, two on each side to enable it to be safely lowered into position at the time of burial. Now, on 13 October 1925, three millennia after that lid's final closure, these same handles would be employed to raise it. According to Carter, 'It was a moment as anxious as exciting.' But thankfully, without too much difficulty, the tenons parted and the anthropoid form of the anticipated second coffin was at last revealed.

Here, once again, the surface was concealed beneath a decayed shroud of linen (no. 254b), itself obscured by floral garlands (no. 254a) not dissimilar to those that had been found by Davis in pit KV 54 (p. 38). Around the protective deities on Pharaoh's brow, over the shroud, was a small wreath of olive leaves, blue lotus petals and cornflowers (no. 254a (1)).

As eventually revealed, this second coffin was even more magnificent than the first. Measuring some 2.04 m (6 ft 8 in.) in length, it too had been constructed from wood (unidentified) richly overlaid with gold foil. The use of inlay, however, was here far more extensive and impressive, though adding to the conservation headache by showing a disconcerting tendency to fall out. Lapis-blue glass (somewhat decayed) had again been employed for the stripes of the *nemes*-headcloth, eyebrows, cosmetic lines and beard, while the gilded wood uraeus on the brow had been fitted with a head of blue faience and inlays of red, blue and turquoise glass; the companion, vulture head, also of gilded wood, had a beak of dark black wood (probably ebony) and eyes of obsidian.

Dominating the image were those prime symbols of Egyptian kingship, the crook and the flail (held in the left and right hands respectively), each implement encased in shining gold foil and inlaid with lapis-blue and turquoise glass and blue faience. A broad 'falcon collar' showed at the king's throat, picked out with insets of brilliant red, blue and turquoise glass, with two similarly inlaid bracelets modelled at the wrists; below these, enfolding the entire upper torso in their wings, were depicted a magnificently inlaid Isis vulture and Nephthys serpent – a perfect counterpoint to the *rishi* carpet of regularly arranged, vivid colour occupying the royal legs and coffin's sides, each feather richly inlaid with jasper-red, lapis-blue and turquoise glass.

As with the outermost coffin, Tutankhamun's second coffin shows no obvious evidence of re-use, but close inspection reveals a

**OPPOSITE** The facial features of the second coffin differ markedly from those of the first (no. 253) and the third (no. 255), and there is every reason to believe, as with other objects from the burial furniture, that Tutankhamun was not its intended owner.



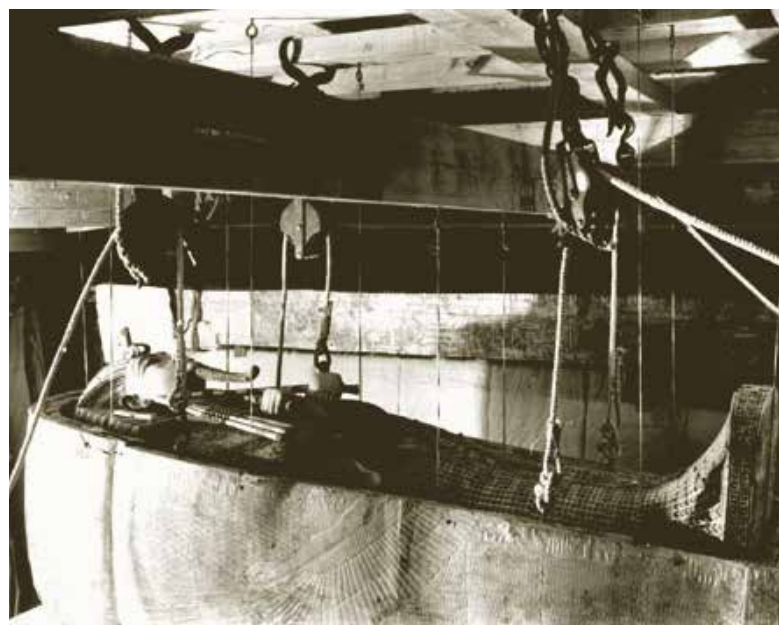


number of curious features. Two of the cartouches are noticeably more sunken than their surrounding texts, and significantly longer than necessary to accommodate the hieroglyphs of Tutankhamun's names. Further, the coffin mask bears only a passing resemblance to the facial features we normally associate with Tutankhamun. Instead, a close similarity may be detected with the stoppers of the calcite canopic chest (nos. 266c-f) (pp. 4, 162) and, on a smaller scale, the four gold canopic coffinettes (nos. 266g1-4) whose palimpsest inscriptions reveal that they had originally been prepared for the co-regent Neferneferuaten (p. 160). Interestingly, a granodiorite head in Berlin (ÄM 21 358), now known to originate from the female half of an Amarna dyad of Akhenaten and Nefertiti, shares precisely the same physiognomy – yet another indication that Nefertiti and Neferneferuaten were one and the same person.

Another revealing link between the second coffin and the KV 62 canopic coffinettes is their shared idiosyncratic design: while the coffin and coffinettes' heads and upper torsos follow the standard pharaonic pattern, the simple, unencumbered *rishi* pattern of their lower halves is that seen in coffins prepared for queenly use. A close temporal parallel is the KV 55 coffin – a piece we know, from its texts, to have been designed for Akhenaten's secondary wife, Kiya, before it was later, and with minimal alteration, taken over for the use of Akhenaten himself (p. 20).



**ABOVE** One of the ten inscribed silver tenons attaching the lid and base of the second coffin.

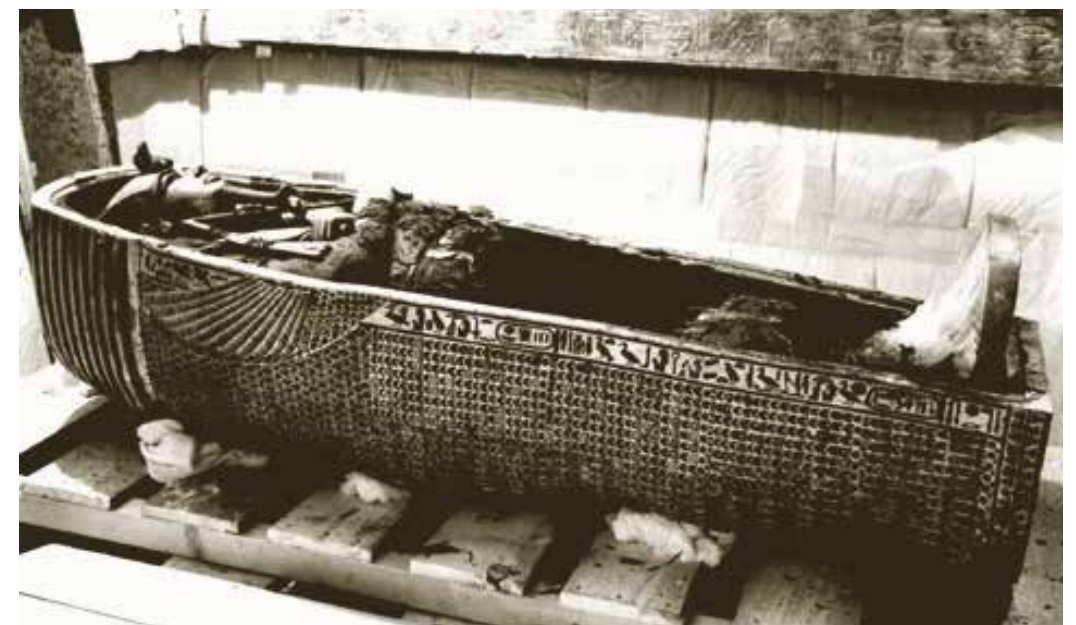


Nested like Russian dolls: the second coffin (no. 254) is removed from the outermost coffin shell (no. 253) by means of an elaborate pulley system (**LEFT**); and the third coffin (no. 255), still partly covered by a decayed linen shroud, sits within the second (**OPPOSITE**).

**OVERLEAF** The second coffin (no. 254), overlaid with gold foil and richly inlaid with faience, glass and semi-precious stones in an elaborate design.

This half-and-half configuration of Tutankhamun's middle coffin (and coffinettes) is directly comparable with that encountered on the outer coffin, with its kingly *khat* worn over a queenly tripartite wig; in other words, the design of no. 254 subtly references that same nebulous 'middle ground' occupied by Nefertiti in her capacity as Akhenaten's junior coregent – a status neither that of a regular queen, nor (yet) that of a full pharaoh.

Why were these feminine aspects of the second coffin and coffinettes not remedied by those tasked with adapting these items for Tutankhamun's subsequent, kingly use? As with the headdress of the outer coffin, the answer seems to have depended on sheer practicality: compared with the relatively straightforward application, carving, and gilding of a new gesso skin (in the case of the first coffin), or the smoothing and recharging of a soft gold surface (a treatment which may have been meted out to the third coffin), there will have been neither the time nor the enthusiasm for the complex remapping of the thousands of inlays of Neferneferuaten's second coffin and canopic coffinettes. It seems that Tutankhamun's undertakers were content to compromise in the matter of such arcana, and in the end simply hope for the best.





### THIRD COFFIN (NO. 255)

Unlike the outermost coffin, the lid of the second had not been furnished with handles, and its removal was further hampered by the fact that the ten gold-headed silver nails holding it in place could not be fully withdrawn while it lay in the close-fitting outer-coffin shell. The problem was addressed with Carter's usual sang-froid. The pins of the second coffin were withdrawn sufficiently for 'stout copper wire' to be attached; 'Strong metal eyelets' were then screwed into the top edge of the outer coffin, and the two entities separated by lowering the outer coffin trough back down into the sarcophagus and leaving the second suspended. With planks inserted beneath to provide an artificial 'floor', supported by the sarcophagus walls, removal of the fragile second coffin's lid could begin. It was accomplished in like manner: eyelets were screwed into the side of the lid at four points, the silver pins securing its ten inscribed silver tenons were pulled free, and the coffin lid, after some initial flexing, lifted from its base.

Removal of this lid revealed a third anthropoid coffin. The body was tightly tucked in from neck to feet with a shroud of red linen (no. 255b), which had been folded three times, and fine linen was packed in place above the *nemes*-headdress, but the face was left eerily exposed. The breast was found to be decorated with an exceptionally fragile broad collar of blue glass beads and various leaves, flowers, berries and fruits including *Punica granatum* (pomegranate) and *Salix* sp., sewn onto a papyrus backing (no. 255a).

'Mr. Burton at once made his photographic records. I then removed the floral collarette and linen coverings. An astounding fact was disclosed. The third coffin . . . was made of solid gold! The mystery of the enormous weight, which hitherto had puzzled us, was now clear. It explained also why the weight had diminished so slightly after the first coffin, and the lid of the second coffin, had been removed. Its weight was still as much as eight strong men could lift.'

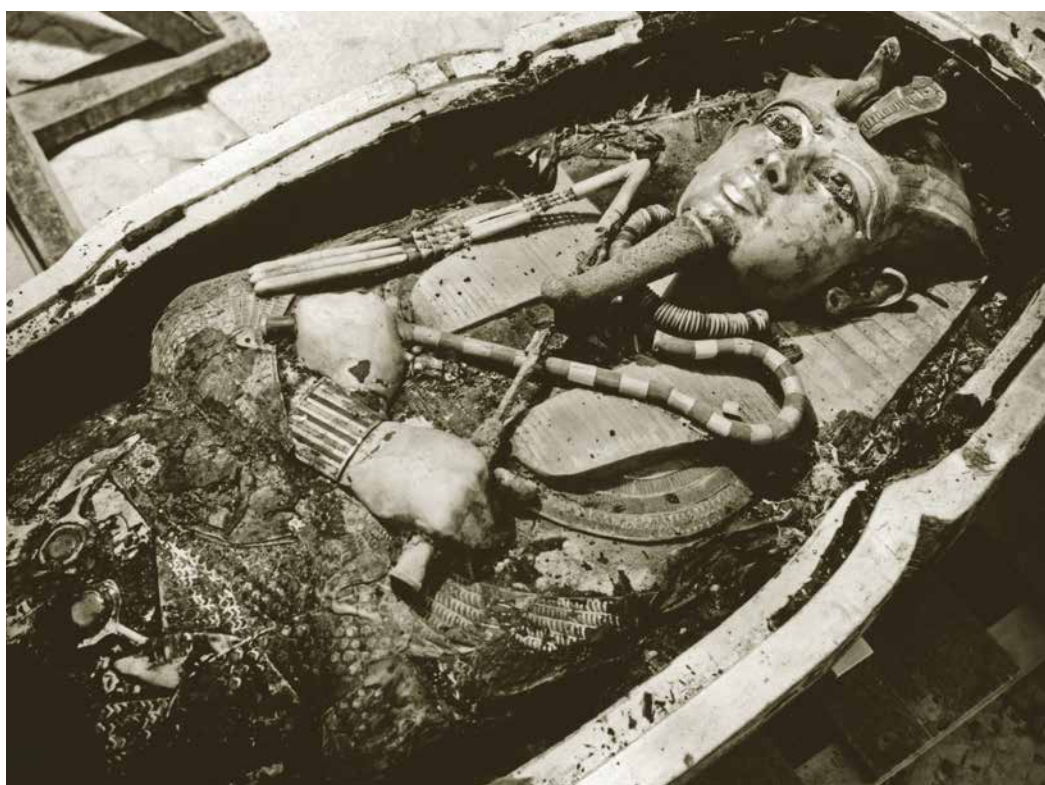
The third coffin's initial appearance was very far from the exquisite beauty we see today. Removal of the linen shroud and papyrus collar revealed that its surface had been covered 'with a thick black pitch-like layer which extended from the hands down to the ankles'. Carter estimated that two bucketfuls of this anointing liquid had been

**OPPOSITE** The king's breathtaking innermost coffin, made of solid gold and embellished with chasing and inlay.





**OPPOSITE** Carter patiently chips away at the hardened black unguents poured liberally over the innermost, gold coffin (no. 255, **BELOW**).



poured over the coffin, filling in the whole of the space between it and the trough of the second coffin; this liquid, on cooling, had set solid, bonding the two firmly together. The removal of this resinous layer proved a difficult task:

‘This pitch like material hardened by age had to be removed by means of hammering, solvents and heat, while the shells of the [second and third] coffins were loosened from one another and extricated by means of great heat, the interior being temporarily protected during the process by zinc plates – the temperature employed though necessarily below the melting point of zinc was several hundred degrees Fahrenheit. After the inner coffin was extricated it had to be again treated with heat and solvents before the material could be completely removed.’

Eventually, success was achieved and the archaeology could begin. The third coffin proved to measure some 1.88 m (6 ft 2 in.) in length, and was revealed to have been beaten from heavy gold sheet of the highest purity, varying in thickness between 0.25 and 0.3cm. When the coffin was eventually weighed in 1929, it tipped the scales at 110.4 kg (234¼ lbs); its scrap value alone was then estimated at £13,500 – equivalent at the time to more than US\$119,000; today, its bullion worth would be in the region of £5.3 million, or US\$7 million.

Yet it is not these figures that impress so much as the coffin’s breathtaking beauty, heightened by the oddly ethereal quality bestowed upon the face by its empty, now decomposed eye sockets, framed by graceful, understated eyebrows and cosmetic lines of lapis-lazuli coloured glass. As with the second coffin, the headdress is the *nemes*, though here with the pleating subtly indicated in relief rather than by inlays of coloured glass. In contrast, the beard – seemingly attached in the same manner as that on the Gold Mask (p. 147) – is inlaid, again with lapis-coloured glass. Attached at the neck are two heavy necklaces of disc beads, fashioned from red and yellow gold and dark blue faience and threaded on what appears to have been grass bound with linen tape. Each string of beads had lotus flower terminals inlaid with carnelian, lapis and turquoise glass. Below these necklaces was the falcon collar of the coffin itself, fashioned separately from the lid and inlaid with eleven rows of lapis, quartz, carnelian, feldspar and turquoise glass to imitate tubular beadwork with an outer edge of inlaid drops.

As on the first and second coffins (nos 253 and 254), the king's arms are shown crossed upon the chest, with bracelets of sheet gold inlaid in a similar fashion to the collar with lapis, carnelian and turquoise-coloured glass. The crook and the flail are held in the left and right hands respectively, their copper-alloy cores originally overlaid with gold foil, dark blue faience, polychrome glass and carnelian. Most of the decoration of the flail had decayed, like the Egyptian-alabaster whites of the eyes, a casualty of the slow combustion set in train by the thick black resin with which the coffin had been so liberally anointed.

Below the hands had been attached a further sheet of thick gold overlay, fashioned after the outline of the protective sister goddesses Isis and Nephthys, in vulture and winged-serpent form. Both creatures spread their wings protectively around the upper part of the royal body, and are richly and colourfully inlaid with red-backed quartz and lapis- and turquoise-coloured glass. Around the legs, the decoration of both lid and trough takes the form of richly chased figures of Isis and Nephthys, this time with human (albeit winged) bodies protecting the lower right and left sides respectively, again on a *rishi* background. Two vertical columns of exquisite identifying text are chased down the front of the coffin lid from below the navel to the toes, with the usual figure of Isis kneeling upon the hieroglyph for 'gold' (*nub*) chased upon the soles.

For a variety of reasons, no details of the gold coffin's interior were recorded until 1987, when these surfaces were examined by Horst Beinlich and Mohamed Saleh for their *Corpus der Hieroglyphischen Inschriften*. Still disfigured by black residue, particularly within the trough, a chased Nut imagery and inscriptions (from Book of the Dead chapters 17, 26, 27, 130, 151 and 166) could nonetheless be clearly traced. Moreover, an interesting constructional feature was revealed: the coffin base is in fact 'double-skinned' – a trough within a trough. At a later stage, a section of the inner 'skin' behind the head had been removed in order to allow the Gold Mask (no. 256a) to fit.

Unlike the first and the second coffins, the style of Tutankhamun's innermost, gold coffin is fully pharaonic: its mask appears to carry the standard facial features of Tutankhamun himself; the headdress is of regular pharaonic type; and two pairs of goddesses enfold both the upper torso and the legs in prime kingly fashion. No reworking of the texts may so far be discerned either on the coffin's exterior or interior, and, even though some adjustment (see above) had been required to accept the gold headpiece, the physical fit of the king's mummy itself appears to have been good.



**ABOVE** The elaborate detail of the innermost coffin, after conservation work to restore the decayed decoration of the crook and flail.



**ABOVE** A telltale fix: the earlobes of the third coffin were originally drilled through, and later covered by gold foil, a sign that the coffin was originally intended for a female owner.

Had this coffin, like its fellows, originally been intended for an earlier ruler – specifically, for Akhenaten's co-regent Neferneferuaten? One possible pointer towards re-use is the gold panel that conceals the coffin's upper torso, decorated with winged deities: beneath this panel may be discerned an earlier version of what appears to be this same decoration chased directly into the coffin surface. While this overlay may conceal features considered inappropriate for Tutankhamun's use, given the malleability of high-carat gold, the greater likelihood is that this over-panel may have been purely structural and akin to the coffin's innermost gold skin – a practical, late-stage addition required to strengthen the piece and prevent inadvertent flexing and deformation when moved.

In fact, there is only one small but crucial detail of Tutankhamun's inner coffin that would identify it as an appropriated piece: Carter's comment that 'The ears [of the innermost coffin are] pierced, [the] holes when discovered *being closed with gold foil*' (italics mine). As we shall consider, precisely the same form of ear-lobe closure was employed by Tutankhamun's undertakers in an attempt to 'defeminize' the Gold Mask (p. 149). Within the lobes of an artwork, fully drilled holes (rather than the notional indentations normally encountered in kingly sculptures) are present for one reason alone, and that is for the physical attachment to the artwork of some form of ear ornamentation. Since, at this period, a male king never wears such jewelry after puberty, KV 62's adult-sized gold coffin must originally, therefore, have been intended for use by a woman, who would have worn earrings from cradle through to grave. Since both the Gold Mask and the canopic coffinettes (no. 266g; p. 160) display these same drilled earlobes and preserve palimpsest inscriptions attesting to their original, intended ownership by Neferneferuaten, the same attribution would seem likely for the third coffin also.

## THE GOLD MASK AND OTHER ORNAMENTS

'Before us, occupying the whole of the interior of the golden coffin, was an impressive, neat and carefully made mummy, over which had been poured anointing unguents as in the case of the outside of its coffin – again in great quantity – consolidated and blackened by age. In contradistinction to the general dark and sombre effect, due to these unguents, was a brilliant, one might say magnificent, burnished gold mask or similitude of the king, covering his head and shoulders, which, like the feet, had been intentionally avoided when using the unguents.'

HOWARD CARTER

**OPPOSITE** The decayed face of the innermost coffin, beneath which lay concealed the Gold Mask.

The lid of the innermost coffin, like that of the outer, had been fitted with loop handles; it was attached to its base by means of eight gold tenons, four on each side, which dropped into sockets in the trough. Here they were retained by thick gold pins which, since the available space between the second and third coffins was so narrow, had to be removed piecemeal. Finally, the moment was at hand: 'The lid was raised by its golden handles and the mummy of the king disclosed.'

Superbly modelled, the king's portrait mask (no. 256a) stands without parallel as a masterpiece of the Egyptian metalworker's craft. The reborn king wears the *nemes*-headcloth with bound queue, or plait, falling down at the back; on his brow sit the vulture- and cobra-manifestations of Isis and Nephthys. Beneath, the king's eyes, fashioned from quartz and obsidian, convey a distinctly life-like impression, as so often in Egyptian art depicted with red discoloration (caruncles) on the outer as well as the inner angles. As tradition dictates, they are presented adorned with formal-style *kohl* make-up, originally applied to protect against the sun's glare but by Tutankhamun's time increasingly employed for its beautifying effect.

Structurally, a close examination reveals the mask to be composed of eight distinct parts: a front and back panel; a conjoined uraeus and vulture; face; ears; beard; and collar panel – each element variously beaten to shape from sheet metal or else separately cast,

and jointed, soldered, riveted, or merely pressure-fitted into place. Embellished with abundant inlays of both glassy material and a range of semi-precious stones, the mask's primary material is, of course, gold, and of a very high carat.

Overall, the mask measures some 54 cm (21 in.) in height, while Carter recorded its weight at 10.23 kg (22½ lbs); other sources claim between 9.2 kg (20¼ lbs) to 11 kg (24¼ lbs), this variance perhaps dependent upon whether the beard and three-strand necklace (below) had been present or removed at the time the piece was placed on the scales.

The mask's integral broad collar, with falcon-headed terminals, is inlaid with lapis lazuli, quartz, green felspar, obsidian and coloured glass. Over it were hung two separate necklaces. The first of these, with lotus flower and uraeus terminals, consists of three strands, the top and bottom composed of large disc beads of yellow and red gold and dark blue faience, the beads of the centre strand of yellow gold alone. The second, which was suspended from the neck on a decorative gold band made up from odd trappings originally prepared for Neferneferuaten (see below, no. 256b), had hung from it a scarab of black resin inscribed with Book of the Dead spell 29b. A divine beard, again of gold, is attached beneath the chin, its plaits indicated by inlays of faience which, when found, had faded to a grey-blue.

The back and shoulders of the mask are chased with two lines and ten columns of hieroglyphic text containing a version of Book of the Dead spell 151b – the same extract as that which had had to be partially removed from the interior of the third, gold coffin trough (no. 255) in antiquity to allow the mask to fit within (see above). This text identifies the component parts of the mask with a succession of deities (Ptah Seker, Anubis, Thoth, and others) who were each to play a role in the protection of the king against the manifold dangers that he would face in his transition from this world to the next.

Although it has been suggested that the maker of Tutankhamun's mask may have been a royal goldworker by the name of Ameneminet, owner of a tomb at Saqqara (Loret no. 2), this is hardly likely: not only will the royal court have employed many such craftsmen, but there is clear inscriptional evidence to identify the mask as a creation of the reign of Tutankhamun's father, Akhenaten. Like the bulk of the funerary equipment employed by Tutankhamun, it had originally been designed for the burial of his co-regent Neferneferuaten (i.e. Nefertiti). It had been adapted quite simply, by soldering and riveting into place a new, Tutankhamun-type portrait face (with inlays of lapis rather than glass) and by disguising the original, fully drilled lobes –

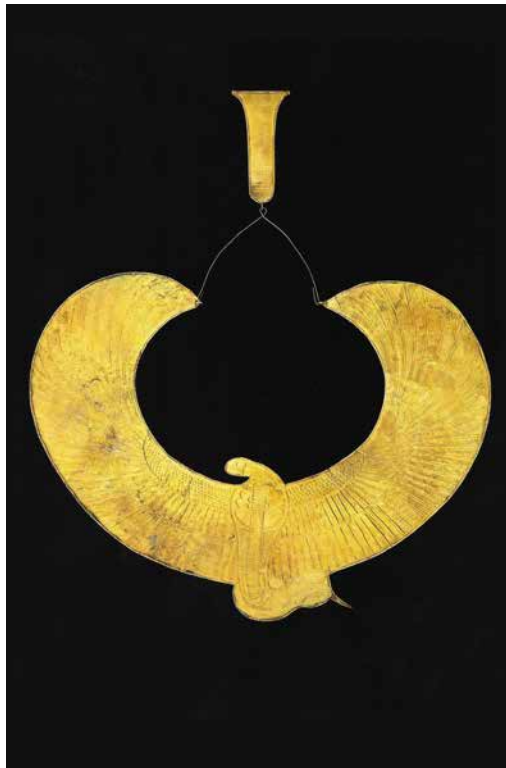
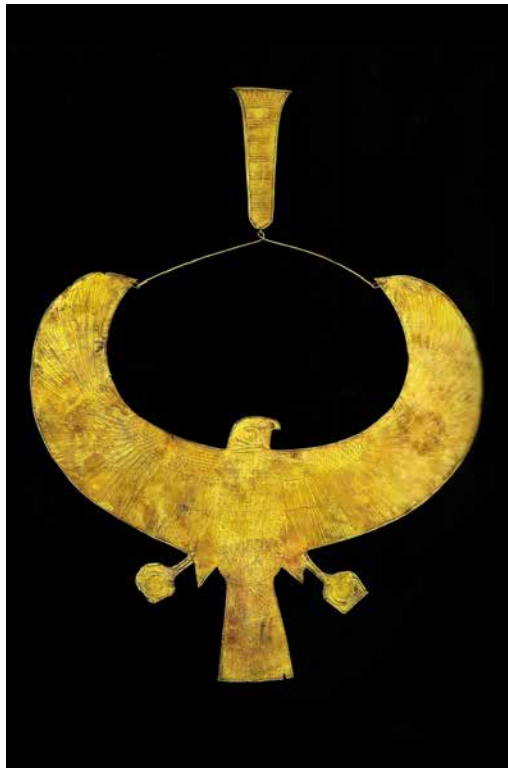
**OPPOSITE** The gold death mask of Tutankhamun, one of the finest and most iconic treasures of the ancient world.





**LEFT** The back of the Gold Mask, inscribed with spell 151b of the Book of the Dead to ensure the king's safe passage to the afterlife.

**BELOW** Gold collars in the shape of a falcon (**LEFT**) and winged cobra (**RIGHT**). These pectorals were draped around the king's neck to guard against any harm that might come to him during his transition to the afterlife.



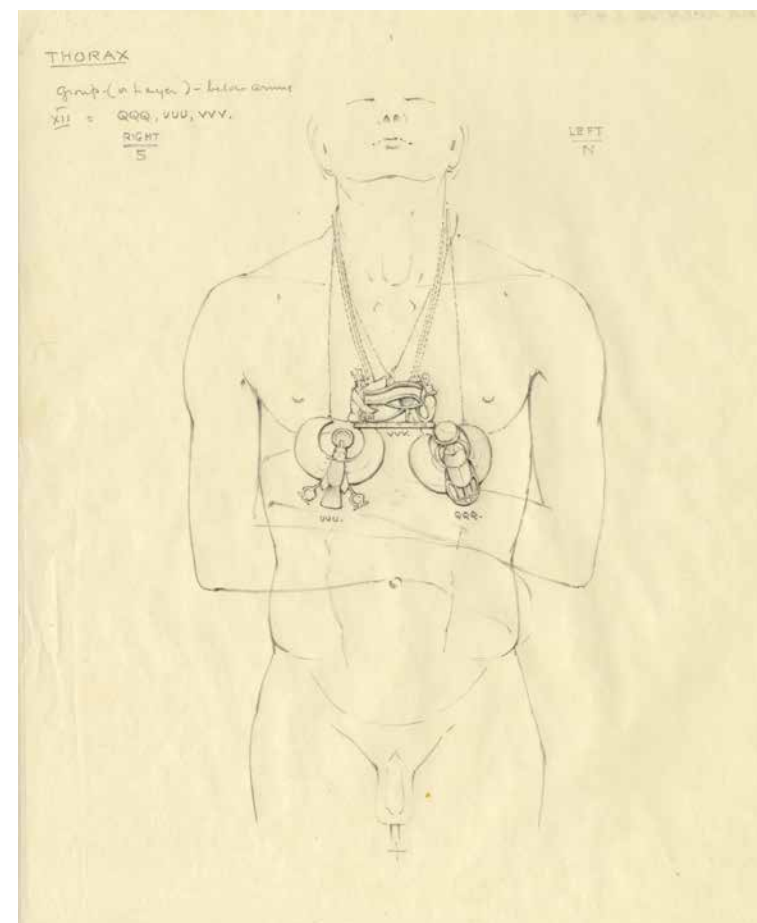
designed to carry earrings, worn by women – with dished plugs of gold foil.

The adaptation is proven by clear traces of a palimpsest detected on the mask's right shoulder, beneath Tutankhamun's prenomen, Nebkheperure: the visible traces unquestionably spell out Neferneferuaten's prenomen – 'Ankhkheperure-beloved-of-Neferkheperure'.

## OTHER ORNAMENTS

The mask, perhaps the best-known image from the tomb, is but one element in the outer ornamentation of the royal mummy. As the wrappings of the mummy were gradually removed, over 150 magnificent items of jewelry, amulets and other objects were brought to light (nos 256c–4v). Fashioned and positioned according to the dictates of the Book of the Dead, they would ensure the king's

**RIGHT** Carter's sketch of three pectorals, in the shape of a vulture, scarab, and the *wadjet* (or Horus) eye, bandaged in with the royal mummy. Dozens of such amulets were revealed in the unwrapping of the mummy.





# THE ROYAL MUMMY

'The youthful Pharaoh was before us at last: an obscure and ephemeral ruler, ceasing to be the mere shadow of a name, had re-entered, after more than three thousand years, the world of reality and history! Here was the climax of our long researches! The tomb had yielded its secret; the message of the past had reached the present in spite of the weight of time, and the erosion of so many years.'

Howard Carter

**OPPOSITE** Autopsy by committee: Douglas E. Derry makes the first incision in the wrappings of the royal mummy (no. 265), watched by Lacau, Carter, Lucas, Saleh Bey Hamdi and other interested parties.

Fitting closely within his anthropoid case of solid gold, the head protected by its magnificent portrait mask (no. 256a) and the curves of his form on earth skilfully reproduced by means of padding, the king (no. 256), some 1.85 m (6 ft) in height, appeared truly to have achieved his goals of health, strength, vigour and eternal life. A second glance hinted at a less positive reality: the outer shroud, held in place by linen bands (five (?) transverse and one longitudinal), had clearly suffered from the resin-based libations that had been so liberally poured over the corpse before the mummy and coffins were lowered into the sarcophagus. Owing to the free application of these same resins (which in places were still viscid), both body and mask were found to have stuck fast to the interior of the coffin. There was to be no simple lifting-out of the mummy from its coffin for controlled study elsewhere; the excavators would have to examine it where it lay.

## THE UNWRAPPING OF THE KING

The autopsy began on 11 November 1925 in the outer corridor of the tomb of Seti II (KV 15). It would be undertaken by Douglas E. Derry, Professor of Anatomy at the Egyptian University in Cairo, and Dr Saleh Bey Hamdi of Alexandria, in the presence of Carter, Alfred Lucas, Harry Burton, and various Egyptian and European officials and dignitaries. The brittle surface of the shroud was first coated with a layer of paraffin wax; Derry then made a longitudinal incision down the middle, permitting the decayed wrappings to be turned outwards in large pieces and gradually removed. Slowly, patiently, the unwrapping proceeded, though with an ever-increasing sense of foreboding.

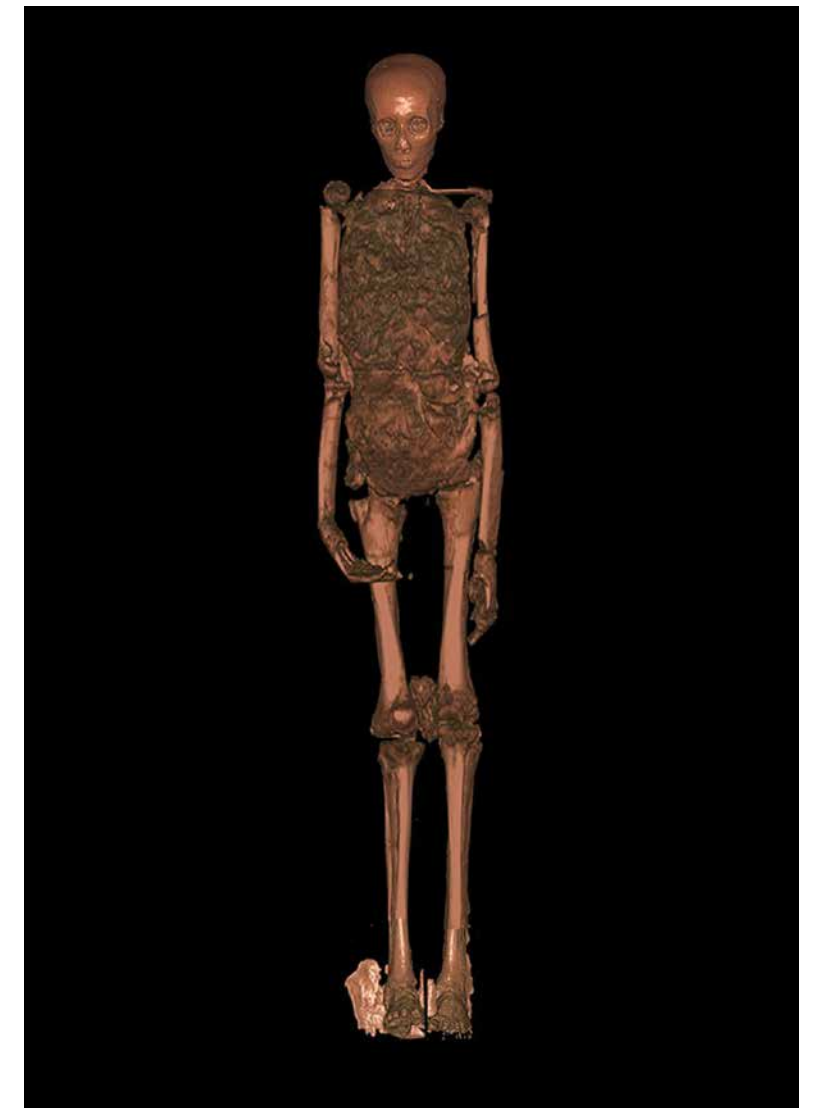
The blackened, carbonized appearance of the outer shroud had been a sad augury of what was to come; Carter's hope that they might find the wrappings in better condition after several thicknesses had been removed proved vain. Except for one or two areas where the linen was somewhat better preserved, the inner wrappings had been reduced to the consistency of soot – according to Lucas, the chemist, as the result of 'some kind of slow spontaneous combustion in which, almost certainly, fungoid growth plays a part'. No comprehensive record could thus be made of the system of binding the corpse. Of the few specific details which could be salvaged was that all the fingers and toes had been individually wrapped, as indeed had all



**LEFT** Sketch of the skull of Tutankhamun, after the mummy wrappings had been removed, published in London's *Daily Mirror* in 1926.

the limbs; that the front of the body had been packed with sheets of linen that reached down as far as the knees and were held in place by transverse bandages; and that more elaborate methods of binding were observed in the perineum (between the anus and scrotum) and over the thorax. All in all, however, the technique appeared to conform to 'the mode of binding . . . usually practised upon mummies of the New Empire'.

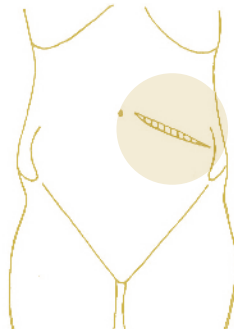
**RIGHT** The first CT scan of the royal mummy was performed in 2005. The scan found a fracture on the left thigh bone, indicating that Tutankhamun may have suffered a broken leg shortly before his death.



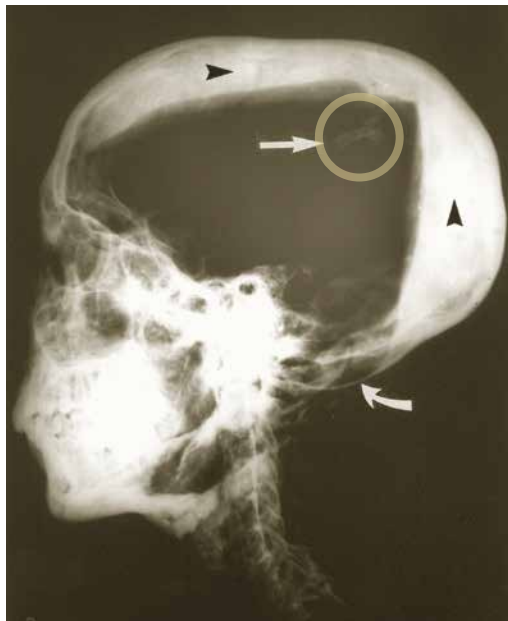
## THE BODY

The first parts of the mummy to be completely divested of their bandages were the shrunken and attenuated lower legs. By 15 November the team had progressed as far as the neck. The king's sexual organs had been revealed, the penis bound in the erect position and his scrotum flattened against the perineum; no pubic hair was visible, and it could not be established whether or not the king had been circumcised. A ragged embalming wound 8.6 cm (3½ in.) or more in length was visible, uniquely positioned 'parallel to a line drawn from the umbilicus to the anterior superior iliac spine [i.e. navel to hip bone] and an inch above it'; no embalming plate was in evidence. The arms were flexed at the elbow, and the forearms arranged in parallel one to the other, the left above the right.

By 16 November the piecemeal removal of the main parts of the body, to permit their closer anatomical examination, had been completed, leaving the excavators free to turn their attention to the problem of the head – stuck 'so firmly' into the mask with resin, in Carter's view, 'that it would require a hammer and chisel to free it'. Fortunately, such extreme measures were not to prove necessary: 'Eventually we used hot knives for the purpose with success', and the king's 'beautiful and well formed features' were finally revealed.



**ABOVE** Diagram showing the peculiar positioning of Tutankhamun's embalming wound, running from the navel to the hip-bone on the left-hand side of the body.



**LEFT** An evaluation of this radiograph of Tutankhamun's cranium concluded that damage to the skull could be explained by mummification methods and trauma inflicted during the archaeological investigations. Opaque layers of resin are indicated by arrowheads, and the bone fragments that were probably dislodged during the 1925 autopsy by a straight arrow.

# THE COMPLETE TUTANKHAMUN

NICHOLAS REEVES

