CHESTER BEATTY MONOGRAPHS
No. 7

SOME EARLY BINDINGS FROM EGYPT IN THE CHESTER BEATTY LIBRARY

BY
BERTHE VAN REGEMORTER

With 13 plates

DUBLIN
HODGES FIGGIS & CO. LTD
1958
CHESTER BEATTY MONOGRAPHS

Chester Beatty Monographs No. 1.
1951. Cr. 4to. Wrappers. 53 pp. £1. 16s.

Chester Beatty Monographs No. 2.
1951. Cr. 4to. Wrappers. 27 pp. 9s.

Chester Beatty Monographs No. 3.
1951. Cr. 4to. Wrappers. 12 pp., 20 colototype plates. £1. 10s.

Chester Beatty Monographs No. 4.
1952. Cr. 4to. Wrappers. 123 pp., 1 colototype plate. £1. 16s.

Chester Beatty Monographs No. 5.
1952. Cr. 4to. Wrappers. 88 pp. 18s.

Chester Beatty Monographs No. 6.
1956. Cr. 4to. Wrappers. 130 pp. £1. 12s.
CHESTER BEATTY MONOGRAPHS
No. 7

SOME EARLY BINDINGS
FROM EGYPT
IN THE
CHESTER BEATTY LIBRARY

BY
BERTHE VAN REGEMORTER

With 13 plates

DUBLIN
HODGES FIGGIS & CO. LTD
1958
DEDICATED TO THE MEMORY OF
JAMES V. S. WILKINSON
LATE LIBRARIAN OF THE
CHESTER BEATTY LIBRARY
PREFACE

It was a great joy for me when, a few years ago, I discovered that among the treasures of the Chester Beatty Library there was evidence of the origin of bookbinding which gives us a better knowledge of its slow evolution. If through this monograph the history of the binding of early codices reaches the numerous book-lovers interested in the subject, it will not have been written in vain.

The subject being new in many ways, I have been specially careful in examining the evidence and I have asked the advice of many scholars. They have all been very understanding and willing to help. I wish to convey to them here my most sincere thanks.

First of all, I want to thank Dr. Patrick O'Connor, former Keeper of the Natural History Department, National Museum of Ireland, who determined the exact kind of wood used for the boards. The Forest Products Research Laboratory, Princes Risborough, examined the British Museum wax-tablets to which I refer. Monseigneur Lefort of the University of Louvain read, translated, and dated the Coptic inscription on the paste-down of binding No. 5. Mr. T. C. Skeat, Assistant Keeper in the Department of Manuscripts in the British Museum, read and dated the texts on the wax-tablets Add. 33797 and Add. 34244. Sir Harold Bell, Mr. Colin Roberts, and Professor Claire Préaux, all three well-known hellenists, Mr. I. E. S. Edwards and Mr. I. G. H. James of the Egyptian Department of the British Museum as well as Mr. C. de Wit of the Musées Royaux d'Art et d'Histoire at Brussels, and Professor Paul Naster of the University of Louvain have all been helpful in their particular fields of science. The Laboratory of the Musées Royaux d'Art et d'Histoire at Brussels analysed the adhesives for me.

This list of thanks would not be complete if I did not mention the name of the late Librarian of the Chester Beatty Library, Mr. J. V. S. Wilkinson, who, with great kindness, took the trouble to revise the greater
part of my text. Every scholar who has worked in the Chester Beatty Library will fully appreciate my sincere regret that Mr. Wilkinson has not lived to see this monograph completed.

BERTHE VAN REGEMORTER

Kalmthout near Antwerp
September 1957
INTRODUCTION

The texts of the old rolls or *volumina* have been studied by many scholars. So have the texts of old codices and their paleography, but it is only comparatively recently that it has been realized that the general appearance of those codices, the way their quires are put together, the way they are bound, are of great importance also. Every part of a codex must be examined for clues to its provenance and to be able to confirm or disprove the date which the paleographer has ascribed to it.

Up to quite recently historians of bookbinding neglected very early volumes and, though as long as a century ago P. L. Jacob¹ told bibliophiles that Cicero in a letter to his friend Atticus asked him to send him two of his slaves who were good bookbinders,² nobody tried to find out what was expected of these craftsmen and what their work looked like. This lack of interest is easily explained by the fact that there was very little material for study. Since then much new information has become available, and although we do not know yet what was the work of Atticus’s slaves, we can form an idea of the appearance of the first codices. In describing some early bindings of the Chester Beatty Library I hope to be able to add something to the knowledge of their history.

The Codex form is very likely an evolution of the *volumen*. Some early codices are *volumina* cut into pages and the side sewing of them, as in Chinese and Japanese books, supports this hypothesis; but the *binding* with wooden boards is an evolution of the tablets. Martial’s satirical remark³ about the pine-wood protecting the codex from being frayed by the sleeves seem to confirm that the first codices were protected by wood, *bound* thus in wood.

When and where did this evolution take place? It would be rash to

---

³ *Ne toga barbatos faciat vel paenula libros*
   *Haec abies chartis tempora longa dabit.*
   (Book xiv, epigram 84.)
state positively. Recent excavations in Iraq\(^1\) as well as the careful study of some Neo-Hittite sculptures\(^2\) have brought us to the conclusion that the bound codex may have its far-away origin in Asia Minor, but up to now we do not know if it found its way westward to Greece, Egypt, or Rome. We have a vague idea of the date when it was used in Rome and besides Martial’s epigram the excavations of Castellamara di Stabia are most interesting in this respect. I was privileged to visit Stabia in 1952, thanks to Professore Libero d’Orsi, and to examine the recent excavations. In one of the villas of Stabia discovered a few years ago there is a room which was certainly the library. Three of the walls are decorated with frescoes, the fourth being open to the sea view. On the first wall is a medallion representing a young man holding a roll in his hand, on the second a young man with a tablet, on the third a young man with a codex. Is it a wooden codex or is it a wooden binding? We cannot judge, but the fact that the artist thought it necessary to give three different aspects of the way a written text was kept is a certain proof that the Romans of the first century A.D. considered that the codex was a thing of its own quite different from the two other forms.

In connexion with these frescoes, it is interesting to read what Professore Giovanni Pugliese Carratelli has written about a wooden codex found in Herculaneum.\(^3\) He describes it very carefully. Instead of having holes through the frame of each tablet of the codex, which would indicate the use of metal rings or leather thongs, the wooden boards were kept together by some thread passing very ingeniously through little channels drilled through the wood. This method may be considered as one of the early stages of binding and it shows the slow evolution from wooden tablet to bound codex.

There are other examples of little channels being drilled through the wood to allow a thread to be used for keeping together the leaves of a diptych. Two tablets of the British Museum, Add. MS. 34244 and Add. MS. 33797, as well as a diptych exhibited in the Egyptian Museum in Cairo (Room 29, Utensils of the Graeco-Roman Period, showcase 29), enable us to see exactly how it was done. It is difficult to assign a certain

---

date to either tablet. The Greek text on them gives no clue, but they are obviously of the Roman period in Egypt, i.e. of one of the first three centuries A.D. The diptych of the Museum in Cairo is of that period also.

There is a remarkable uniformity in the number of holes drilled through the wood of the British Museum tablets and their position and the number of holes and their position in the centre of the sections of the manuscript of the Gospel of St. John of the Bibliotheca Bodmeriana. Each time the position of the holes and their number is exactly the same. This manuscript is ascribed to circa A.D. 200 and the holes in the centre of the sections are the holes of the sewing. We may conclude that the sewing technique used in the third century A.D. and perhaps even earlier has its origin in the way the tablets were kept together by thread.

Four of the bindings, which I shall describe in detail later on, are made of carved wooden boards. They are deprived unfortunately of their text but tell us many things even so. Three of them are in plane-wood (platanus) and have the two boards. The fourth is in box-wood (buxus), there being only one board. The great interest of these boards lies in the fact that the interior has a recess, cut out very neatly, leaving a perfect frame, just as would have been done if it had been a tablet; but there is no wax in the recess nor has there ever been any. They are not tablets appropriated to their new function of binding, but they were intended for bindings from the first. Tradition in a craft is so strong that the carpenter who made them, being in the habit of making tablets, never thought of leaving them flat on the inside and so saving time and labour. These four bindings also show us an evolution in the way they were attached. Binding No. II is the most primitive one and this corresponds very well with the decoration carved in the wood, which, essentially Egyptian, is certainly pre-Coptic.

Three other wooden bindings show the next evolution in technique: the interior flat and a groove in the exterior parallel to the back. All three have traces of leather having been stuck to the interior of the board. This shows that the volume had been sewn and covered with limp leather before being put into the wooden binding. One of them, No. 2, has traces of leather also on the whole of the exterior. It must have been a leather binding. Two of them, No. 1 and No. 3, show that they

were what we call ‘half-bindings’, a leather spine coming only just over
the board, the groove intended no doubt to facilitate the sticking of the
leather on the wood. Two of these last bindings, Nos. 1 and 2, have ivory
insets of a quite classical design. Binding No. 3 stands alone and is most
important for the history of the decoration of books: it is the first example
which has reached us of the use of filigree leather on a binding. Up to
now the earliest known binding of this type was one found in Turfan
(Turkestan). It was on a Manichean book of the sixth or seventh century.
This gives us much subject for reflection. Was the beautiful leather work
done in Persia, in the Middle Ages and later, of Islamic origin? The
Chester Beatty very early binding, found in Egypt, changes the whole
aspect of the question.

Egypt has always known the cut leather technique. The Manicheans
perhaps learned it from the Egyptians when in that country and they
may have brought it to Middle Asia and Persia. There is strong reason
to believe that the filigree leather binding was popular in Egypt. We find
this technique in many of the Coptic bindings of the eighth to ninth
centuries, and besides these, we know of a striking example. The only
occidental binding decorated in this way is on the Ragydrundis Codex
in the library of the Dom in Fulda and belonged to St. Boniface. This
Latin manuscript of the eighth century is supposed to have been written
in a scriptorium of South Burgundy. The south of France, especially
Marseille and Lyon, was in constant contact with Egypt. Accordingly
I think we may presume that the filigree leather binding had its origin
in Egypt, even if the finest examples are found in other countries. Binding
No. 3 of the Chester Beatty Library leads us to change our former views
on the subject.

From the fourth and early fifth century onwards, the use of the codex
became more general. The craftsmen in the scriptoria were real experts,
and it is a pleasure to contemplate some of their work. Codices A, B,
and C, written at the end of the sixth century, or perhaps just about
A.D. 600, are examples of extraordinary interest. A and B are half­
bindings, the boards of uncovered wood, the back made of leather only,
and the whole kept together by an ingenious and difficult system of

1 See the tent over the mummy of Queen Isimkheb (XXIst dynasty), No. 3848 of the
Egyptian Museum in Cairo.
leather thongs. Codex C is a whole binding in leather with a painted decoration in ink. Binding No. 5 is of very nearly the same period, dating from before the Arab invasion. It is a whole binding of leather on papyrus boards.

The Egyptians, who were such experts in the preparation of papyrus for writing purposes, found an excellent way of making boards with papyrus of poorer quality, and their single or double boards of papyrus covered with leather make very strong bindings, and often very beautiful ones. Their sense of decoration on a flat surface, besides their innovation of using engraved metal tools to blind-stamp the leather, is admirable. Codices A and B as well as Binding No. 5 have ornaments of blind-stamped tools on the leather. They are amongst the very early examples of this technique, which has been for many centuries the only way of decorating bookbindings, both in Europe and in the Near East.

It is not only in the use of blind-stamped tools that we find a resemblance between some early occidental bindings and some early Egyptian ones. The base of the decoration of Nos. 10, 11, and 12 is worth studying. These carved wood bindings are small and almost square. They have a double or treble line marking the border. The middle part has a design based on the diagonals of the square, and a diamond formed by lines parallel to the diagonals. When we compare this Egyptian decoration with that of the medieval binding called ‘monastic’ as well as with that of some of the Carolingian bindings, we see that all of them have the same basic principle of ornament. Not many of the Carolingian bindings are decorated, but all those of the Salzburg Monastery, now in the National Library in Vienna, are, and their design is exactly as we have seen, little tools being put between the oblique lines instead of the carved ornament. This is also the design of all the so-called ‘monastic’ bindings and, strange to say, Greek bindings were decorated like that even up to the sixteenth century.

What we know of the romanesque period on the contrary is quite different. The beautiful English and French bindings of the twelfth century do not show Egyptian influence, but the old tradition reappears again with the early Gothic. It is most probable that the continuity did exist but that we have lost the train of evidence.

1 Franz Unterkircher, Libri, vol. 5, no. 1, pp. 41–53.
Before ending this introduction I must say a few words about the sewing technique. Codices A, B, and C must be examined in this respect. B and C are sewn with a thread going from the bottom of the section to the top, just as in modern binding. Codex A shows a quite different method. Two independent threads are used at the same time, one for the bottom of the quire and one for the top. Although made more or less around A.D. 600 this volume shows the technique of the very earliest codices in which the sewing originated directly from the tablet, and it is astonishing to think that it was made at the same time and in the same scriptorium as Codices B and C, where the sewing is more modern.

What is more astonishing still is that it is the oldest technique which was brought over to Europe by some of the Egyptian scribes. The Gospel of St. John, known as the Stonyhurst Gospel, which belonged to St. Cuthbert (seventh century), has still its original binding. Its sewing was done with two independent threads. The Fulda manuscripts (eighth to ninth centuries) in the Bâle University Library show the same technique. There is, of course, no doubt at all that there was a very strong Egyptian influence in some of the European scriptoria.
DESCRIPTION OF THE BOOKBINDINGS AND DETAILS ABOUT THEIR TECHNIQUE

Binding No. II (Frontispiece)

Two wooden boards of plane-wood (platanus). Each board is 95 mm. high, 82 mm. broad, the thickness of the wood is 9 mm. for one board, 10 mm. for the other. The edges are cut at right angles except on the side of the fore-edge, which is rounded. These round edges were near those of the leaves, the straight-cut one being near the spine. The inside part of

Fig. 1
the board has a recess measuring 63 mm. high and 55 mm. broad. Each board has two holes going through the wood just near the frame of the recess. They are B and C of the diagram. Two small channels are drilled coming from the edge (spine side) and ending just in the corner of the recess; A and A' and D and D' of the diagram.

Remnants of leather thongs are still to be seen in the channels A–A' and D–D', as well as in the holes B and C. The inclination of the leather in both those last holes makes me suppose that they were joined by a leather thong outside the board and very likely going around the codex; it must have been intended to increase the solidity of the binding. It reminds me of the large leather straps which protected Codices A and B.

The decoration is very primitive: a diamond on one board; diagonals and a diamond on the other besides a very simple border.

It is the oldest binding I have ever come across and although it is difficult to say, having no clue to the part of Egypt it comes from, nor to what text was in it, I presume it must not be later than the second or third century A.D.

Binding No. 12 (Plate No. 1 exterior and interior)

There is only one wooden board; it is of box-wood (buxus). The board is 102 mm. high, 96 mm. broad, and the thickness of the wood is 11 mm. The recess in the inside is 56 mm. by 50 mm. The border is on all sides 22 mm. The edges of the board are cut at right angles on all sides.

The technique is the same as for No. 11; two holes through the wood, just at the border of the recess, and two channels drilled from the edge of the board, one to the corner on top of the recess, the other from the edge to the corner at the bottom of the recess.

The carving is much neater and better than the one on No. 11. This is not astonishing, the wood being much more precious and better to work on. This single board has the diamond type of decoration.

Binding No. 10 (Plate No. 2)

Two wooden boards of plane-wood (platanus). Each board is 95 mm. high, 85 mm. broad, and the wood is 12 mm. thick. The recess in the
inside is 70 mm. by 56 mm. The border is on all sides 11 mm. The edges of the board are cut at right angles on all sides.

Although the general aspect of this binding is very much like that of bindings No. 11 and No. 12, we can observe a certain evolution in the technique. The two holes going through the wood are also to be seen here, only a little more in the centre of the board. They were probably necessary to pass the leather strap that went round the binding to fasten it, but we do not find here the two channels drilled from the edge to the corners of the recess. The edge of each board (spine side) has five small holes drilled in the wood. They do not go through and they are not deep. The holes of one board correspond with those of the other. They are not broad, only wide enough for thick thread to be stuck in them, probably coming from the spine of the codex and helping to keep the binding together. The Egyptians were clever about adhesives and certainly they were able with such simple means as five thick threads to ensure solidity in this primitive technique.

The decoration of this binding in carved wood is very similar to that of No. 11: a frame, diagonals, and a diamond on one board; a frame and a diamond on the other. However, this carving is much better, more carefully executed. There is a slight difference in the design. It cannot be asserted positively that the centre of the decoration is a real Christian cross, but it may be one of the first attempts to adorn the exterior of a codex with a cross. In that case this would be a Coptic binding.

**Binding No. 9 (Plates Nos. 3 and 4 exterior and interior)**

Two wooden boards of plane-wood (*platanus*). Each board is 166 mm. high, 129 mm. broad, and the wood is 13 mm. thick. The inside part has a recess of 110 mm. by 68 mm., leaving a frame of 30 mm. at the bottom, 26 mm. at the head, and 30 mm. on one side and 31 mm. on the other.

Three small holes have been drilled in the edge of the board, one near the head, one near the bottom, and one nearly equidistant from the top and bottom in the side near the spine of the book. They are not very deep, more or less 15 mm. Small pieces of leather are still stuck in them. These are the remains of thongs to keep the book in its binding.
The decoration is very peculiar. Long lines are carved deeply in the wood, probably with a gouge, vertically and horizontally at right angles, making six squares on each board. One of these squares has no decoration, but some papyrus is stuck on it. Upon this there may have originally been affixed some precious image or jewel which adorned the binding. This has been torn off, and the papyrus left, written in a rough hand, does not give us any clue, the text (in Greek) being incoherent. The other five squares have ornaments of concentric circles (annuli). They look as if they had been made with pointed compasses. This decoration is essentially Egyptian in its different parts. The straight lines, the concentric circles are characteristic of early Egyptian art.

The border of the top and bottom of the board is carved so as to imitate frayed leather. Leather was very often frayed instead of being turned in in Egypt. The book-marker of Codex A is frayed and so are the overlapping ends of many Coptic bindings both in the British Museum and in the Coptic Museum of Cairo, but those bindings are not as old as this No. 9, which I presume to be of the third or fourth century. The fact that the wood imitates frayed leather shows us how old this last technique must have been.

The inside parts of the two boards present a difficult problem. Both have insets of ivory in the frame, very irregular and with no pretension to being ornamental. They must have been put there for some purpose, but what this was I do not know and have no suggestion to make.

Binding No. 1 (Plate No. 5)

Only one wooden board of walnut (juglans). It is 226 mm. high, 132 mm. broad, the thickness of the wood being 9 mm. The inside part is flat, without a recess. One edge is cut at a right angle and must have been the spine side. At 6 mm. from this edge a groove 2 mm. deep is cut in the wood (see figure) and runs parallel with the edge. There are some traces of leather on the inside of the board, which indicates that the codex was sewn and covered with leather and that this was a luxurious binding put on top. The insets are of ivory and a leather back keeps the two wooden boards united. We can even now see how far the leather came on the boards, and the groove in the
wood certainly helped to make the leather stick. The layout with a base
a bit bigger than the top shows us that this was the front board. The
decoration of a classical design is worthy of attention. The central panel
(probably an ivory carving), 140 mm. high and 78 mm. broad, has dis­
appeared. It had a frame of ivory of which some parts survive. It is a
laurel garland and in one of the long sides the central part remains. From
a knot the garland runs upwards and downwards. There is no doubt
the whole was carefully conceived and made specially for this binding.

Besides the central panel, there is a horizontal ivory stroke inset on
top and at the bottom of the board; a stem ending in laurel leaves. The
leather was stuck to the boards after the ivory insets had been put in,
for we can see the difference of colour on the ivory of the horizontal lines.
Two holes, of which only one is visible on the outside of the board, had
been drilled through the wood, presumably to pass through leather
fastenings; but since one of the horizontal insets covers one of the holes,
the idea of putting fastenings was probably abandoned.

The design is so classical that it is difficult to admit a later date than
the third or fourth century for this binding. Did it cover a Christian
manuscript? We can easily imagine it on a classical work.

**Binding No. 2 (Plate No. 6)**

A single wooden board of cedar (*cedrus*). It is 257 mm. high and 165
mm. broad, the thickness of the wood being 10 mm. The inside is quite
plain. The edge which must have been the spine side is at a right angle
and the three others are rounded. A groove parallel to the spine is cut
in the wood at 6 mm. from the edge. It is 2 mm. deep. The profile is the
same as that of the groove of No. 1.

There are traces of leather stuck to the board both on the inside and
on the outside. This shows it was a full leather binding on wooden
boards, and although the leather covered the whole binding, there were
ivory insets, of which very little remains. Two horizontal lines in ivory
parallel to top and bottom decorated the binding. The end parts of both
are still there and they are carved in the shape of a leaf with the veins
nicely indicated. The hollows where the insets were put in are 3 mm.
deep. Adjoining the two horizontal lines are two hollows having the
shape of an eight-petalled daisy. In the centre of each daisy there is a small circle, drilled through the wood, which most probably allowed a leather thong to pass through it. The daisies must have been the ivory decoration of leather fastenings.

There is a close resemblance between binding No. 1 and this No. 2. The technique seems to have been the same, although No. 1 is an ornate half-binding and No. 2 more simple but a whole binding.

**Binding No. 3–3a (Plate No. 7)**

Two wooden boards in cedar (*cedrus*). They are 124 mm. high, 84 mm. broad, and the thickness of the wood is 9 mm. The inside is plain. The spine-side edge is at a right angle with criss-cross incisions probably for gripping the adhesive better, just as the ivory boards of the tablets found in Nimrud in 1953 had criss-cross lines for gripping the wax; the three other edges are rounded. A groove runs parallel to the spine side at 10 mm. from the edge. It is 3 mm. deep. It has the same profile as the one in binding No. 1 and in binding No. 2, although it is slightly deeper.

The technique of the binding, however, is different. If for No. 1 and for No. 2 we must suppose the durability depended on the adhesive used and admit that we do not know anything about the details of the preliminary operations, No. 3–3a is clearer. Two small channels are drilled in each board coming from the middle of the edge (spine side) and reaching the groove. When we put the two boards (3 and 3a) side by side, we observe that those channels do not correspond. On the first board, No. 3, the channel is 14 mm. from the top and the lower one is 35 mm. from the bottom. On the second, No. 3a, the first channel is 38 mm. from the top, the lower one is 12 mm. from the bottom. The distance from the top one to the bottom one is equal on both boards, 74 mm.

The explanation is simple. Just as we have seen that the tablet Add. MS. 33797 of the British Museum was attached by two independent threads, that the diptych of the Egyptian Museum in Cairo was put together with two independent threads, and that the Gospel of St. John of the Bibliotheca Bodmeriana was sewn with two independent threads,

---

we have here a binding whose two boards were kept together by two independent thin leather thongs, one going from A on board No. 3 to B on board No. 3a, the other going from C on board No. 3 to D on board No. 3a (see Fig. 2). The leather thongs passed first through the loops of the sewing outside the back and then through the channels of the wood, the extremities being tied together. Although this binding does not give the exact proof of what I advance, I am sure this must have been the technique adopted, for I have seen it used on the bindings of manuscripts of the Fulda Monastery (now in the Bâle University Library) which have the Egyptian technique of sewing with two independent threads.¹ This binding No. 3–3a and the Fulda manuscripts are the only examples I have ever come across of this way of attaching the binding to the book.

This example from the Chester Beatty Library is a half-binding. The

leather hid the two leather thongs and their tying, and extended for a length of 23 mm. on the board, which means 13 mm. beyond the groove. The leather must have been stretched very tightly on the wood for there are no traces of it inside the groove.

Besides the extraordinary way of keeping the volume in its boards, binding No. 3–3a is most noteworthy on account of a most rare decoration, leather filigree work with a golden ‘fond’. The leather was probably cut with a very sharp knife and the gold was liquid gold, not gold leaf. Both the cutting of the leather and the pencilling of the gold were done by a very clever hand (see Fig. 3). As I have noted in the introduction, this leather filigree work is certainly the oldest actually known. The groove in the wood parallel to the spine side dates this binding as very early, third or fourth century, more probably third than fourth, and much earlier, therefore, than what was considered till now as the oldest filigree work, i.e. the binding of a Manichean manuscript found at Turfan (Turkestan) and attributed to the seventh century. It is reproduced in Arthur V. Pope and Phyllis Ackerman, A Survey of Persian Art, plate 951B.

The board No. 3a has three holes bored through it. Two are broad enough to enable a leather thong to pass through. They correspond to two knobs on the second board (No. 3). This must have been the fastening of the binding. The third hole is much smaller and is bored in the left-hand corner at 12 mm. from the head and at 13 mm. from the side edge. We find exactly the same hole on the other board but here on the right-hand corner. I suppose a very narrow thong or ribbon to have passed through these holes to enable the book to be hung on a hook or rather to be attached to the girdle.

Binding No. 5 (Plate No. 8)

Leather binding on papyrus boards. Each board is 300 mm. high, 220 mm. broad, the back being 75 mm. wide. It was originally on double boards; the inside board has disappeared, except for some remnants
still sticking to the outside board. The spine and part of the front and back covers have a piece of strong, thin linen stuck inside. This reinforcement helped to keep the volume in its binding. It has been part of the technique of bookbinding in the Near East up to quite recently. The Greek binders used it up to the sixteenth century. The Syriac and Armenian bindings show this detail even later. Binding No. 5 had long leather straps fastening it. They have disappeared, but we can see that the board had been cut to allow them to be passed through. There was one at the top, two at the bottom, and two at the fore-edge side. There is also a small hole at the right-hand corner. This was certainly intended to take the loop by which the manuscript was suspended from a hook. There is a close resemblance between this binding and the beautiful ones in the British Museum, Oriental MSS. Nos. 5000 and 5001. It is also to be compared with the Pierpont Morgan Library Coptic bindings and with the bindings in the Coptic Museum in Cairo which are part of the same find (Hamouli, Upper Egypt, 1910). The Hamouli manuscripts are dated eighth to ninth centuries. The British Museum MSS. Nos. 5000 and 5001 are earlier. According to E. A. Wallis Budge they belonged to the library of a large monastery in the Thebaid and were probably copied by a scribe attached to the brotherhood towards the close of the seventh century. Chester Beatty binding No. 5 has a small piece of papyrus stuck to the inside which must be part of the pastedown. Two texts are written on it, one being a prayer, the other a list of deacons, both in Sahidic dialect and dating from before the Arab invasion. This small detail indicates that this binding is earlier than the two famous British Museum examples.

The whole surface of binding No. 5 is decorated. Both the upper cover and the lower one have a large border of narrow parallel horizontal and perpendicular lines and annuli leaving a central panel. This panel is adorned with a square and interlacing of parallel lines and annuli. Small tools are blind-stamped in the open spaces. A row of a tool (a lion) somewhat larger than the others runs along the top and bottom of the cover. The small tools have sharp outlines and were probably impressed with the aid of metal stamps, the leather being previously dampened. The lion stamp of the two long rows has an unusual shape and the outline is

---

1 Coptic homilies in the dialect of Upper Egypt, 1910.

21
not quite so clear. It may have been stamped by means of a seal. The shape is most rare in metal stamps but is met with occasionally amongst Mesopotamian seals. The design also is different from the more usual lion stamp. This one has the tail turned parallel to the back and the mouth is open, both characteristics which are not the Egyptian representation of the epoch.

It is a well-known fact that early Christian art in Spain was influenced by Oriental art. One of the sculptures of the tympanum of the Seo de Jaca (Aragon) is a lion crushing an asp (twelfth century), the lion representing divine mercy in the act of crushing evil. Under the lion’s paw of our blind-stamped tool is prey seized by him but it is not easy to determine exactly what it is. Could the circle in front of the lion’s breast and the little scroll between the paws be an unskilful representation of an asp, and is our small lion stamp evidence of the influence of the art of Asia Minor on Christian symbolism?

Codices A, B, and C (Plates Nos. 9, 10, 11, 12)

Although the binding of Codex C is very different from that of Codices A and B, I think we should not separate them as their text forms a unit and they were found together. They have been described already in detail in the Transactions of the Bibliographical Society, series ii–xx, 1939–40, pp. 214–39, by C. T. Lamacraft, who had been asked to do the restoration work.

These volumes were found by native diggers during the season 1924/5 at a site near Sakkara. They were in an earthenware jar which contained five Coptic manuscripts. Two of them were purchased by the University of Michigan and Sir Chester Beatty acquired the other three. They are written on vellum and are in excellent condition. Codex A contains the Pauline Epistles and the Gospel of St. John; Codex B the Acts of the Apostles and the Gospel of St. John; Codex C a portion of the Psalter (1–50) and St. Matthew i–ii. 1. Codices A and B are half-bindings, the spine in leather, the boards of box-wood (buxus). Codex C is a whole leather binding on boards of papyrus. The boards of Codex A are 155 mm. high, 125 mm. broad, and 6 mm. thick. They are bevelled. Codex B
has boards 125 mm. high, 106 mm. broad, and 3 mm. thick. The leather spine of Codex A has a most striking decoration. It consists of bands of horizontal lines goffered in the leather alternating with bands of blind-tooled stamps. Each band has a repetition of the same tool. We see one band with tools representing an amphora and on each side a bird. One represents a lion, another a lamb, yet another an antelope running. All those tools are very well engraved and the design is delicate. What is most remarkable in these two bindings (A and B) is that they were kept tightly closed by long wrapping-bands of leather ending in a bone slip. One band was fastened to the fore-edge side of the front board, the other was attached to the top-edge side. The leather band was nearly as broad as the board, but much narrower at the end. The part near the board was divided into eight straps at the front-edge side and into five straps at the top-edge side. These thongs were passed through small channels drilled through the wood and kept in place by some strong adhesive. The bands were long enough to go twice around the volume and the bone slip passed under them kept the whole very tight. It was as though the book were in a press, and it is certainly due to these wrapping-bands that the vellum of the manuscripts is in such good condition. Codices A and B are not only interesting on account of the leather bands which protected them, but the way the boards were attached is also quite unique. A leather hinge was divided for half of its width into thirty-five narrow thongs. The plain part was stuck to the book, the thirty-five narrow thongs being passed through as many small channels drilled through the spine side of the wood of the board. The Coptic volumes with painted wooden boards of the Freer Gallery of Art, Washington (06.297.B), are said to have this very extraordinary technique of the narrow thongs keeping the boards to the book, as has a small wooden binding belonging to the Bibliotheca Bodmeriana, in which, however, there are only five thongs instead of thirty-five. I was allowed by Monsieur Bodmer to have some of the adhesive which was used for the binding analysed. It is paste made of starch, wheat starch of course. I suppose that this would also be the adhesive used for Codices A and B. Perhaps beer was used instead of water to make the paste. This would have enhanced its strength still further. Leather hinges were used by the Egyptians both for chariots and for stools. The fact that they were
used also for bindings shows that the scribes copied the methods used by these clever craftsmen to protect their manuscripts. Codices A and B have a leather book-marker attached to the right-hand corner of the front board by a leather thong passed through a small channel drilled through the wood. This book-marker has a parchment lining. The leather side is decorated with blind-stamped tools, the parchment side with a pen-and-ink interlacing design. Besides the tooled ornament, the book-marker of Codex B has a Coptic cross pierced in the leather, under which gold foil has been placed. A fillet of gold foil is also to be seen at the top and the bottom of the leather back of Codex B. Many of the Coptic bindings found at Hamouli in 1910 have pierced leatherwork with gold underneath. Codex B is the oldest known example of this kind of work.

The remarkable feature of Codex C, a whole leather binding on papyrus boards, is the decoration in pen and ink, in panels, of strapwork, a Coptic cross adorning the central panel on both sides. The back was also decorated with a long panel of pen-and-ink strapwork. Five holes in the front board are evidence of a wrapping-band which has disappeared.

Although the technique used for Codices A, B, and C differs from one to the other, there is a similarity of conception in the decoration. A and B have blind-stamped tools which C has not, but the pen-and-ink drawings on the wrapping-bands and on the lining of the book-markers look as if they had been done by the same hand as the decoration of Codex C. The decoration in black and red ink on the bone slips with its annuli is also in the same style.

Codex C is 105 mm. high, 90 mm. broad, and 5 mm. thick.

Having examined the bindings here described and reproduced, can we draw the conclusion that we know exactly when the codex was used first and how it looked? I am afraid this would be presumptuous. Thanks to the Chester Beatty Library we know how some of the first bindings with wooden boards were made and how the primitive way of keeping the
boards together became a very clever technique. These first wooden boards have certainly a similar appearance to those mentioned by Martial and this tells us when they were being used in Rome.

I believe, however, that early bound codices were of two types, one with wooden boards and the other with a leather covering. It is difficult to say which is the older. Their evolution may have been simultaneous.

All the Gnostic manuscripts found in Nag Hamadi in 1947, which are now being studied and published, have limp leather bindings without boards and with a flap covering part of the front cover. They are supposed to be of different dates, ranging perhaps from as early as the end of the second century to the end of the fourth century. Having examined one binding of this group, already studied by Togo Mina and Jean Doresse, I saw that the sewn book was attached to the leather cover by means of two narrow thongs. This shows the influence of the technique of the diptych although the codex is without boards; we find the same influence in the Gospel of St. John of the Bibliotheca Bodmeriana, for it has the two-independent-threads sewing technique. It is of the beginning of the third century. The binding is lost, but the quires are whole. The back has never had any adhesive, and I am nearly sure the manuscript had a limp leather binding. Some other codices of a very early date in the Chester Beatty Library, yet unpublished and which I was able to examine, confirm the opinion that the leather binding and the one with wooden boards may both be an evolution of the same technique, the diptych sewn with two threads.

The quality of the wood used both for some diptychs and for some bindings gives us precious information. Add. MSS. 34244 and 33797 of the British Museum are both parts of a diptych. The text on the first seems to be an account of loaves issued on various dates. The second is probably an account of wine or oil supplied by various persons, certainly everyday-life texts of little importance. The wood of Add. MS. 33797 is Acacia arabica, quite common in Egypt. Add. MS. 34244 is made of beech-wood (fagus). Beech itself is not indigenous to Egypt but it is found in countries quite near, and according to Lucas (Ancient Egyptian Materials and Industries) beech was in use in Egypt in the third and fourth centuries A.D. We have every reason to believe that diptychs like those we have examined were in common use at the time, and it means
that the sewn diptych had made its appearance at a very early date. We have unhappily only three examples of this kind, the two in the British Museum and one complete (both sides of the diptych) in the Egyptian Museum in Cairo.

Bindings 9, 10, and 12 of the Chester Beatty Library are in plane-wood (*platanus*). This tree did not grow in Egypt and Lucas does not include it in the list of imported woods. We know, however, that the *platanus orientalis* grew abundantly in Asia Minor and Greece. It cannot have been precious during the Graeco-Roman period, and the bindings made of plane-wood were probably quite numerous. On the other hand bindings 1, 2, and 3, made of precious wood (cedar-walnut) with their insets of ivory or with filigree leather with underlaying of gold, show that special care had been taken to adorn them. They may have been among the first of their type, but to take them as examples to prove that this kind of binding was being done regularly in the scriptoria would be unwise. A new craft, however, does not develop very quickly, and in examining the different book-bindings of the Chester Beatty Library the possibility dawns on us that bound codices may be older than was supposed up to now.

All the bindings which have been studied in this monograph have been found in Egypt. We know very little about the development of the book in Asia Minor, nothing at all about it in Greece, and we are still at a loss about the work of the slaves of Atticus who were asked to work for Cicero. Excavations are now made with much more care and they are scientifically prepared. Let us hope that some providential find may bring us the answer to a problem not yet quite solved.
PLATES
Binding No. 1
Codex A, interior of the board
Bone slips found with the manuscripts
Reconstruction of the board, leather wrapping-bands, and book-marker of Codex B
Reconstruction of Codex C