

## HEAFOD ('head') and BRÆGEN ('brain') in Old English medical texts

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**ABSTRACT** Based on the comprehensive *Dictionary of Old English (DOE)* and the reading of the relevant Old English (OE) texts, this chapter illustrates the occurrence of two central medical terms, *heafod* 'head' and *brægen* 'brain', in OE medical texts. After a survey of OE medical texts and their editions in the first part, the second part presents the data arranged according to the main sub-meanings of the two items as presented in the *DOE*. Most of the quotations are taken from the *DOE*, with some additions by the author. The translation of the quotations enables the non-specialist reader to follow the argumentation of the author.

**KEYWORDS** brægen, heafod, historical linguistics, OE medical texts

### **FOREWORD**

I have known Annemarie Peltzer-Karpf for more than 40 years, in the course of which we always had sympathy and respect for each other although our scientific interests were fairly different. This did, however, not mean that we had no interest for our mutual areas of research; therefore, I immediately agreed when asked to contribute to this book for Annemarie. Because of the great difference between our fields of

interest, the only common denominator seemed to be the *hardware* of language (i.e., the head and the brain), and I thought the occurrences of the words *heafod* and *brægen* in Old English medical texts might be of interest to Annemarie and the readers of this book. Since my special field of research is the botanical – and not medical – vocabulary in OE texts (cf. Bierbaumer, 1975, 1976, 1979, and e.g., Biggam, 2003), I have refrained from adding any comments on the remedies connected to the two terms<sup>1</sup>. For readers interested in Anglo-Saxon medicine I have included, as a kind of introductory reading, Grattan and Singer (1952), Cameron (1988) and Cameron (1993) in my references.

## 1 THE OLD ENGLISH MEDICAL TEXTS

What mainly encouraged me to write this chapter is the fact that the Old English medical texts, in particular the Old English *Læceboc* (*Lb*), today known as *Bald's Leechbook* (Cockayne, 1864–66, vol. II), depend on classical as well as Germanic sources and thus give a fairly reliable picture of the medical knowledge at the end of the first millennium. Cameron (1983b, p. 153) sums up:

Bald's *Leechbook* [...] is (together with the accompanying third book of recipes) the oldest English medical work to survive in anything like complete form, and it is also the oldest to survive in a European language other than Greek or Latin. It is not merely a collection of recipes, but a treatise which attempts to handle all aspects of diseases.

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<sup>1</sup> Since I am currently supervising a doctoral dissertation with the aim of producing an annotated translation of the most important OE medical text *Læceboc I* and *II* (for various reasons) into German, I am optimistic that this will provide the necessary basis for interesting links with modern psycholinguistic approaches. On a more general level, this dissertation will also provide a link with the German-speaking scientific community. That this is necessary can be seen from the fact that the most recent comprehensive work on the early history of medical literature in German mentions the Old English *Leechbooks* in only one sentence (Riecke, 2004, vol. I, p. 16).

For the Germanic sources the most definite proof seems to be the occurrence of the evidently Germanic names of the owner and compiler of *Lb I* and *II* (Bald and Cild, see below) and the names of the two apparently Anglo-Saxon *læcas* (OE *læce* ‘doctor’<sup>2</sup>) Oxa and Dun: *Lb I xlvi*: *Læcedomas wiþ þeoradlum... Oxa lærde þisne læcedom...* (‘Recipes against inflammations... Oxa taught this recipe...’); *Lb II lxxv*: *Wiþ lungenadle læcedom dun tæhte. saluie...* (‘against lung-disease a recipe that Dun taught: sage...’). For an in-depth discussion of the Latin sources I refer to D’Aronco (2005), and concerning the role of the names mentioned above to Banham’s article “Dun, Oxa and Pliny the Great Physician. Attribution and Authority in Old English Medical Texts” (2011).

1.1 **Læceboc (Lb) (eds. Cockayne, 1864–66, vol. II; Leonhardi, 1905; Deegan, 1988; reprints of Cockayne’s edition: Singer, 1961; CUP, 2012)**

The *Lb* only survives in *MS Royal 12 D xvii*. As mentioned above, the *Læceboc* (Cockayne distinguishes between *Lb I*, *Lb II* and *Lb III*) is the most important OE medical text, not only because of its length and quality but also because of the fact that at the end of the first two parts we find a Latin colophon that mentions the names of the owner and of the compiler, which are definitely Anglo-Saxon and most probably *læcas*: *Bald habet hun[c] librum/Cild quem conscribere iussit...* (see translation below). What strikes me, however, is the fact that the colophon, which one would expect in some prominent form and place, is almost hidden (not divided from the OE text) because it is placed at the beginning of a

<sup>2</sup> OE *læce* = ‘doctor’, cf. BT (Bosworth-Toller Anglo-Saxon Dictionary), s.v. *læce* I; the word *læce* also denotes the ‘leech’ in its modern sense: BT, s.v. *læce* II: a leech (species of worm). *Læce sanguisuga vel hirudo* Ælfc. 23. The word *læce* ‘worm’ is originally a distinct word from *læce* ‘doctor’ but later assimilated to it (cf. Onions, 1966: s.v. *leech* 1 and *leech* 2). There is no indication in the OE medical texts that leeches were used for blood-letting, this was carried out by using cupping glasses or horns: cf. e.g., *Lb II, LIX*: *Wiþ þære healf deadan adle [...] hwilum þu teoh mid glæse oþþe mid horne blod of þam saran stowan adeadodum* (‘For the half dead disease [...] at whiles draw blood with a cupping glass or a horn’). Hankins (1992, p. 1) confuses the OE word *læca* as in *ag-læca* ‘demon, monster’ (Hall, 1960, s.v.) with *læce* (‘doctor’).

new folio (fol. 109a) which contains the beginning of *Læceboe III*. This and the fact that the MS looks quite unused might indicate that it was not owned by a practitioner (Bald) but goes back to an older exemplar.

### 1.1.1 *Læceboe I and II (Bald's Leechbook)*

*Lb I* consists of 88 chapters, which are briefly described in a table of contents. The first chapter contains recipes against diseases of the head and the chapters 2–30 follow the order introduced by the late-Greek physician Alexander Trallianus *a capite ad calcem* ('from head to heel'), that is, against headache, ailments of the eyes, ears, teeth, throat, chest etc.

*Lb II*, also with a table of contents, consists of 67 chapters that mainly deal with diseases of inner organs. At the end of *Lb II* we find the Latin colophon mentioned above; the full text of the colophon does not only give the names of the owner and compiler, but it also shows that Bald apparently had a collection of books at his disposal:

Bald is the owner of this book, which he ordered Cild to write; earnestly here I beg everyone in the name of Christ that no deceitful person should take this book from me, neither by force nor by stealth nor by any false statement. Why? Because no richest treasure is so dear to me as my books which the grace of Christ attends (transl. Wright, 1955, p. 13).

### 1.1.2 *Læceboe III (ed. Cockayne, 1864–66, II)*

*Lb III*, also with table of contents, consists of 76 chapters, which were added by the scribe immediately after the colophon concluding *Lb II*. It differs from *Lb I* and *II* in that it has no systematic structure and contains many magical elements.

## 1.2 **Lacnunga ('medicaments') (ed. Cockayne, 1864–66, III)**

The text only survives in *MS British Museum Harley 585*. It is a collection of herbal recipes and magical formulas going back to various Roman, Greek and heathen Germanic sources.

1.3 **Herbarium Apuleii (HA) (ed. Cockayne, 1864–66, I; De Vriend, 1984; van Arsdall, 2002)**

The *HA* survives in three Old English and one Early Middle English manuscripts, the most important one being *British Museum, Cotton Vitellius C iii*. The OE *HA* was translated around the year 1000 from a Latin text of the 5<sup>th</sup> century. It contains names and use of medical plants and instruction for their use.

1.4 **Medicina de Quadrupedibus (MQ) (ed. Cockayne, 1864–66, III; De Vriend, 1984)**

The *MQ*, which survives in the same manuscript as the *HA*, is a translation of three Latin texts, that is, *Liber de taxone* ('book about the badger'), *Liber medicinae ex animalibus* and one treatise about the healing properties of the mulberry tree (cf. De Vriend, 1984, lxii).

1.5 **Peri Didaxeon (ed. Cockayne, 1864–66, III; Löweneck, 1896)**

The text survives in a manuscript of the second half of the 12<sup>th</sup> century, but due to its partly Old English character it was included by Cockayne as a late Old English text. The standard of knowledge displayed in this text is far below that of the texts written before the Norman Conquest.

1.6 **Old English glossaries and glosses**

The numerous Old English glossaries, interlinear glosses and individual glosses contain many Latin-Old English terms, the majority of which (ca. 6500) are botanical (cf. Bierbaumer, 1979); medical terms (denoting parts of the body and diseases) are much rarer and can best be seen in *Aelfrics Grammatik und Glossar* (Zupitza, 1880).

## 2 OCCURRENCES OF ‘HEAFOD’ AND ‘BRÆGEN’ IN OLD ENGLISH MEDICAL TEXTS

The occurrences are quoted (with permission of the editors) from the monumental new *Dictionary of Old English* (*DOE*, Cameron et al., 2016). Translations are either entirely mine or adapted (i.e., modernized to make comprehension easier) versions of Cockayne’s translations. The adaptations were either made by myself or, where existent, taken over from modern translations (e.g., Hankins, 1992). Where the text specimens exceed the quotations in the *DOE* in length, they are, for practical reasons, always taken from Cockayne.

Altogether (including the non-medical texts) there are 1800 occurrences in OE of the word *heafod* and more than hundred entries of compounds with *heafod* as first or second element. There was another word for ‘head’ in Old English, i.e., *hafola* (cf. *DOE*, s.v.), which I have not included here because it occurs only in poetic texts (17 occurrences, 13 of them in *Beowulf*). *Brægen* has only 35 occurrences because it mainly occurs in medical texts (*DOE*, s.v.).

### 2.1 **heafod**

According to Pokorny’s *Indogermanisches etymologisches Wörterbuch* (1959, p. 529f), *heafod* belongs to the Indo-European root *kap-ut* ‘head’; original meaning ‘cup-like’; related words are Latin *caput* ‘head’, Old Norse *hofuþ* and *haufuþ*, Gothic *haubiþ*, Old High German *houbit*, Modern German *Haupt*. According to Kluge (1967, s.v.), *Haupt* was the dominant word in German until the Modern High German period, when the word *Kopf*, related to English *cup*, ousted *Haupt* as the primary word. The development of OE *heafod* > Modern English *head* is shown in Pinsker (1974: §§ 49,63A2): OE *heafod* > 11/12<sup>th</sup> c, *hevd(es)* > 14<sup>th</sup> c *heed* > 16<sup>th</sup> c > [he:d] spelling <HEAD> shortened [hed], spelling HEAD remained.

#### 2.1.1 *Head of a human being*

Lch I (Herb) 1.2.: ‘gif mannes *heafod* tobrocen sy genim þa ylcan wyrte betonican, scearfa hy þonne & gnid swyþe smale to duste... þige hit þonne

on hatum beore, þonne halap þæt *heafod* swyþe hraþe æfter þam drince (Lat. ad capitis fracturam).’

TR(ANSLATION): ‘if a man’s head be broken, take the same plant betony, scrape it then and rub it very small to dust... swallow it in hot beer, then the head heals very quickly, after the drink.’

### 2.1.2 *Head of an animal*

Med 1.1. (B) 10.2.: ‘to slæpe, wulfes *heafod* lege under þone pyle (Lat. de lupo ad somnum caput lupi suppositorium sub pulvino, dormiet aeger)’

TR.: ‘to sleep, lay a wolfe’s head under the pillow’

Lch II (2) 65.1.1.: ‘gif hors ofscoten sie... writ... þam horse on þam *heafde* foran Cristes mæl & on leopa gehwilcum þe þu ætfeolan mæge ’

TR.: ‘if a horse is elf-struck [= struck by a sudden disease]... write upon the horse’s forehead Christ’s mark, and on each limb which you may feel at’

AntGl 2 182: ‘brunda heortes *heafod*’

TR.: ‘brunda, head of a hart’ (prob. from ISID. Etym. 15.1.49 Brundisium autem dictum [est] Graece quod brund caput cervi dicatur)

### 2.1.3 *Referring to a part of the head*

AEGram 63.12 (not medical): ‘haec frons þis forewearde *heafod*’

TR.: ‘this forehead’

Lch II (1) 1.17.13: ‘rude getrifuladu mid sealte & mid hunige, smire þæt *heafod* forweard mid þy’

TR.: ‘bruised rue with salt and honey; smear the forehead with it’

AEGram 74.6.8. (not medical): ‘hoc occiput se æftra dæl þæs *heafdes*’

TR.: ‘the rear part of the head’

Lch II (2) 64.1.6: ‘Eal swa same se petra oleum he is god anfeald to drincanne wiþ innan tiedernesse 7 utan to smerwanne on wintres dæge for þon þe he hæfþ swiþe micle hæte... 7 he is god gif hwam *seo spræc ofþylþ*

nime þonne 7 wyrce cristes mæl under his tungan 7 his an lytel swelge. Gif mon eac of his gewitte weorþe þonne nime he his dæl & wyrce Cristes mæl on ælcra lime, butan cruc on þam *heafde* foran, se sceal on balzame beon & oþer on þam *heafde* ufan.’

TR.: ‘Similarly also petroleum is good to drink unmixed for inward tenderness, and to smear outwardly on a winter’s day, since it has very much heat... and it is good if for *anyone his speech fails*, then let him take it, and make the mark of Christ under his tongue and swallow a little of it. Also if a man become out of his wits, then let him take part of it, make Christ’s mark on every limb, except the cross on the forehead, that shall be of balsam, and the other also on top of his head.’<sup>3</sup>

#### 2.1.4 Referring to headache

The *DOE* gives more than ten passages.

Lch I (Herb) 3.4: ‘wiþ *heafdes* sare genim fifeafan þa wyrte... gegnid swyþe smale & bind on þæt *heafod*, þonne biþ se ece lytliende’

TR.: ‘for head’s sore, take five leaf the wort [plant]... rub it very small, and bind it on the head; then the ache will be diminishing’

Lch II (1) 1.16.1: ‘wiþ langum sare þæs *heafdes* oþþe þara earena oþþe þara toþa... geseoþ cerfillan on wætere, sele drincan (cf. Phys. Plin. 1.1.: diu permanente capitis dolore)’

TR.: ‘for chronic disorder of the head or of the ears or of the teeth... see the chervil in water, give it to drink’

Lch II (3) 1.1.1: ‘wiþ þon þe mon on *heafod* ace genim niopowearde wrætte, do on readne wræd, binde þæt *heafod* mid’

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<sup>3</sup> The text passage quoted here is longer than the one in the *DOE* because of its relevance for the topic of this essay (‘loss of speech’) and, of course, because it is part of the chapter on the recipes which are said to have been sent to King Alfred by the patriarch of Jerusalem: *þis eal het þus secgan Ælfrede Cyninge domne Helias, patriarcha on Gerusalem* (‘All this Dominus Helias, patriarch at Jerusalem, ordered to say to King Alfred’).

TR.: 'in case a man has ache in the head; take the lower part of crosswort, put on a red band, bind the head with it'

2.1.5 *Referring to migraine (headache affecting one half of the head, cf. Lat. hemicranium)*

Lch II (1) 1.10.1: 'wiþ healfes *heafdes* ece, laures coppan getrifula on eced mid ele, smyre mid þy þæt wenge (cf. MARCEL. Medic. 2.19: aduersum eterogranii molestias)'

TR.: 'for a half head's ache, bruise in vinegar with oil the clusters of the laurus, smear the cheek with that'

Lch II (3, Head = contents) 1: 'wiþ heafodece & wiþ ealdum heafodece & wiþ *healfes heafdes* ece'

TR.: 'for head ache, and for old head ache, and for ache of half the head'

2.1.6 *Referring to the head as the seat of thought (non-medical texts)*

CP 18.131.24: 'þæt *heafod* sceal wisian þæm fotum, þæt hie stæppen on rihtne weg... ut recta pedes ualeant itinera carpere, haec... caput debet... prouidere)'

TR.: 'the head shall direct the feet that they step on the right way'

AECHom I, 40 527.81: 'on halgum gewrite biþ gelomlice *heafod* geset for þæs mannes mode: for þan þe þæt heafod gewissað þam oþrum leomum swa þæt mod gediht þa geþohtas... in scriptura... sacra saepe caput pro mente ponitur, quia sicut capite reguntur membra, ita cogitationes mente disponuntur'

TR.: 'in the Holy Scripture the head is frequently used for the mind of man: because the head directs the limbs in the same way as the thoughts are directed by the mind'

2.2 **brægen**

According to Pokorny (1959, s.v.) *brægen* belongs to the Indo-European root *mregh-m(n)o-* 'brain- pan, brain', Greek *brexmos, brexma* 'forehead', OE *brægen* n. 'brain', Old Frisian *brein*, Middle Low German *bragen, bre-*

gen, Modern High German *Brägen*. According to Kluge (1967, s.v.) *Brägen* is Low German.

### 2.2.1 *As a substance: The brains*

Lch II 1, Cockayne II, p. 176 (not in *DOE!*): ‘Se maga biþ neah þære heortan 7 þære gelodr[e] 7 geadortenge þam *bræge[ne]*, of þam cumað þa adla swiþost of þæs magan intingan 7 o[f] yflum seawum wætan atterberendum.’

TR.: ‘The stomach [C.: ‘maw’] is near the heart and the spine, and in communication with the brain, from which the diseases come most violently, from the circumstances of the maw, and from evil juices, humours venombearing.’

Lch III 2, DE GENERATIONE HOMINIS (MS. Cotton Tiberius, A.iii. fol. 38 b): ‘Her onginþ secgan ymbe mannes gecynde. Hu he on his modor innoþe to men gewyrþeþ. ærest þæs mannes *brægen* biþ geworden on his moder innoþe, þonne biþ þæt *brægen* utan mid reaman bewefen on þære syxtan wucan. On oþrum monþe þa ædran beoþ geworden...’

TR.: ‘Here begins the description of man’s nature, how in his mother’s womb he grows to be man. First the man’s brain is formed in his mother’s womb, then the brain is furnished on the outside with membrane in the sixth week. In the second month the veins are formed...’

Lch II (1 Head) 1.3.: ‘& hu mon scyle gebrocenes heafdes tiligean & gif þæt *brægen* ut sie’

TR.: ‘and how one must tend a broken head, and how if the brain is out’

Lch II 1 61ff: ‘Genim wiþ tobrocenum heafde betonican... 7 gif þæt *brægen* utsige, genim æges þæt geoluwe 7 meng ly[t]hwon wiþ hunig 7 afyl þa wunde 7 mid acumban besweþe 7 forlæt swa þonne, 7 eft ymb þry dagas gespæt þa wunde and 7 gif se hala [f]erþe wille habban readne ring ymb þa wunde, wite þu þonne þæt þu hie ne meahht gehælan. Wiþ þon ilcan: genim wudurofan 7 wudumerce 7 hofan, 7 wel on buteran, 7 seoh þurh hæwenne clap, do on þæt heafod, þonne gangað þa ban ut.’

TR.: ‘For a broken head take betony... and if the brain be exposed, take the yolk of an egg and mix it a little with honey and fill the wound and

swathe up with tow, and so let it alone; and again after about three days syringe the wound, and if the hale sound part will have a red ring about the wound, know thou that thou mayest not heal it. For the same, take woodruff and woodmarch and hove, and boil in butter and strain through a coloured cloth, apply it to the head, then the bones come out.<sup>4</sup>

### 2.2.2 *An ingredient in medical recipes*

Med 1.1.5.1: 'wiþ oferslæpe, haran *brægen* on wine geseald to drence (Lat. ad submeiulos cerebrum leporis ex vino)'

TR.: 'for oversleeping, a hare's brain in wine given for a drink'

Med 1.1.9.2: 'wiþ hærpæna sare & teorses, bares *brægen* meng wiþ hunig & wriþ on'

TR.: 'for sore of the testicles [Cockayne: 'coillons'] and of the penis [C.: 'yard'] mingle a boar's brain with honey, and bind it on'

### 2.2.3 *With reference to functions of the brain (resting place for the soul, centre of sensation, communication and thought)*

Sol I 41.3 [non-medical text]: 'ic þe secge on þrim stowum heo byþ, on þam *brægene*, oþþe on þære heortan, oþþe on þam blode (Ref. to places where the soul resides during sleep)'

TR.: 'I tell you it is in three places, in the brain, or in the heart, or in the blood'

Lch II (2) 27.2.1: 'sio wamb sio þe biþ cealdre oþþe wætre gecyndo oþþe misbyrdo, him cymþ *brægenes* adl & ungewitfæstnes him biþ.'

TR.: 'The womb which is of a cold or moist nature or malformation [C.: 'caprice']; on the man comes disease of the brain and loss of his senses.'

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<sup>4</sup> Deegan (1988, p. 226) in her commentary on this passage says that "Nowhere in the Old English medical texts is there any mention of trepanning for head wounds, although we know from archaeological remains that this was practised in England. I actually do not think that in the text passage quoted any kind of trepanning the wound was involved. The physician apparently only relied on the 'bone extracting' powers of the herbs used."

CP 18.139.16 [non-medical text]: ‘þæt feax þonne on hira heafde getacnaþ þa uterran gēpohtas, þæt grewþ & scinþ ofer þam *brægene*’  
TR.: ‘the hair then on their head signifies the outer thoughts; that grows and shines over the brain’

2.2.4 *Faran forwendum brægenum* ‘to go (about) with turned brains, to experience giddiness/vertigo’

PeriD 13.9.11: ‘ad tornionem capitis þis ys þe læcecræft be þan manne, þe hym <þingþ>, þæt hyt turnge abotan hys heafod and farþ furwendum *brachenum*: nim man rudan and ceruellan and enneleac and cnuca þa wurtan togadere (cf. PS.PETR.SAL. Pract. 10, 8.7 ad vertiginem capitis vel quod versatum cerebrum habet)’

TR.: ‘For giddiness of the head. This is the leechcraft for the man to whom it seems that his head is turning about and who goes about [C.: ‘fareth’] with turned brains. Let one take rue and chervil and onion, and pound the worts together.’

In his first footnote to his edition and translation of *Peri Didaxeon*, Cockayne (vol. III, p. 82) says that because so “many variations from the true inflexions and true construction occur in this piece, that it would be unreasonable to take special note of them.” From my own studies of the botanical lexicon of *Peri Didaxeon* (Bierbaumer, 1976, s.v. *cicena mete*), I can provide three examples demonstrating the author’s apparent lack of knowledge/and or lack of resources: the translation *cicena mete*, ‘chicken-weed’ (*Stellaria Media* L.), is induced wrongly by the similarity of the respective Latin words: *gallicano* (geographical term) *absinthio*: confusion with *gallus* ‘cock’, *pulegium* (OE *dweorgedwostle* ‘pennyroyal’) and *herbe polline* (‘pollen’) confusion with Lat. *pullus* ‘hen’.

### 3 CONCLUSION

As can be seen from the text just quoted (*Peri Didaxeon*: Late Old English/Early Middle English, 2<sup>nd</sup> half 12<sup>th</sup> century), the quality of the language of the text is much inferior to that of all the other texts cited before. This is

quite clearly a consequence of the Norman Conquest through which the West Saxon *standard* developed since Alfred the Great's (2<sup>nd</sup> half 9<sup>th</sup> century) era had come to an end and was replaced by Anglo-Norman culture and institutions. By *standard* I mean not only the West Saxon language (which was in fact the first English standard language), but the West Saxon culture in general and medical knowledge in particular. Cameron (1983a, 1983b) stresses the fact that we have no reason to assume that the Anglo-Saxon *læce* was in any way less competent than his Greek and Roman predecessors. We should, however, bear in mind that the standard of medicine in Western Europe of the second half of the first millennium A.D. was not as high as the one in Ancient Egypt and in Ancient Greece and Rome (Hippokrates, Galenus). Moreover, we should also mention that Arabian medicine became known in Europe only from the 12<sup>th</sup> century onwards. Furthermore, I would like to point out that an inclusion of the medical literature in German can also contribute to our understanding of Old English medical texts, however, such an endeavor was beyond the scope of this article.

#### ABBREVIATIONS AS USED IN THE DOE

AECHom	Aelfric's Catholic Homilies
AEGram	Aelfrics Grammar and Glossary
CP	Gregory the Great: Cura pastoralis
Lch I (Herb)	Herbarium-Apuleii (Pseudo-Apuleius: Herbarium)
Lch II (1) (2)	Bald's Leechbook: Læceboc I and Læceboc II
Med.1.1.	Medicina de Quadrupedibus
PeriD	Peri Didaxeon
Sol I	Solomon and Saturn

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