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HERBALS
OF THE FIFTEENTH CENTURY
INCUNABULA LISTS I

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For William Osler
J. Arnold C. Klebs
July 1918

INCUNABULA LISTS

I. HERBALS

(Index on page 31)

BY ARNOLD C. KLEBS, M.D.

SO MANY incunabula have found their way across the Atlantic into our libraries that the European bibliographer has begun to come to us for missing links in his collections. Every book-lover therefore welcomes the wise decision for the general stock-taking of our incunabula in a Union List, and no doubt this will be equally valued by the student of literature. Everyone interested and in contact with incunabula should try to help in the undertaking in whatever special line he may be working, but mainly by calling attention to copies, many of which may still be hidden away, unsuspected and unrecognized. I propose to do my share by submitting lists of certain incunabula editions which have engaged my attention, selecting particularly those for which the concordance of bibliographic references has not yet been established, as in Peddie's handy *Conspectus*, or only inadequately for present needs, as in Burger's *Concordanz*. This deference to practical bibliographic needs may atone for the somewhat arbitrary choice of a certain class of books, the subjects of which I believe to be well worth a closer study.

Some books inspire awe, others a familiarity which not infrequently breeds contempt. The former seem to hold forever an immaculate integrity, while the latter,

bethumbed, besmeared, and torn, soon become unsightly relics. Books with these signs of hard usage form a profitable subject for study. They reveal, perhaps not dominant currents of mind, but valuable undercurrents. Size of edition alone does not tell the whole story, as its increase or decrease often is caused by passing book-fashions of the day. It does not form a true index of what literature is becoming, so to say, flesh and bone of a generation, stimulating the few to a deeper study, the many to a point of view, to action and possible achievement.

We are apt to forget that some of the precious incunabula upon which we bestow infinite and reverent care are but the rare survivals from a perilous career in the days of their prime. Tossed about by the eternally destructive schoolboy, facing rain or shine strapped to the surveyor's kit, consulted on the battlefield by the surgeon, in woods and hills by the herbalist, or in the smoky laboratory of the apothecary or alchemist, they were part and parcel of active humanity and suffered accordingly. What of them has come to us is often in a sad condition, most trying to the conscientious bibliographer or librarian who wishes to indentify the issues. From this type of book I propose to make my lists and I shall begin with the herbals, which under various names have been a constant source of confusion and bewilderment.¹

¹ The difficult task of comparing and identifying copies in libraries sometimes more than a thousand miles apart would have been impossible without the courteous help of those in charge of the books. My warm thanks for such

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MACER FLORIDUS

An enumeration of herbs and their healing powers in Latin hexameters. Whether its authorship can be traced to Aemilius Macer, whose herb-lore is mentioned by Ovid (*Tristia* iv. 10), or whether it is the product of Salernitan enterprise, its immense popularity from at least the tenth century on almost to our own times is attested by numerous reproductions in manuscript and print. While we know that manuscripts, both in Latin and in translations, reached practically every European country, the extant editions, all Latin, originated in Italy and France.

1. *Non-illustrated editions*.—Only two very rare ones exist, from Italian presses, both dated and signed, neither one of which appears to be represented in our libraries. They are: Napoli: Arnold of Brussels, 9 May, 1477. Fol. HC*10420; Milano: Antonius Zarotus, 19 Nov., 1482. 4°. *Reichl. V. 179: H. 10421.*

2. *Illustrated editions*.—All undated and unsigned, but evidently from French presses at the close of the fifteenth century. Eight different editions or variants can so far be distinguished. Those described here have a family

valuable assistance are due particularly to Mr. Charles Perry Fisher of the College of Physicians in Philadelphia, to Mr. George Parker Winship, to Dr. George T. Moore of the Missouri Botanical Garden in St. Louis, to Misses Greene and Thurston of the Morgan Library in New York, to our ever-obliging editor, Mr. Josephson, and to all those who with great liberality have allowed me access to incunabula collections, especially to Colonel McCulloch of the Surgeon General's Library and to Dr. Putnam of the Library of Congress in Washington.

resemblance, being all small quartos with leaves (often missing) printed with the characteristic Burgundian Gothic type (dart-like *s* and *f*), early in vogue also in England and the Netherlands. Two sets of woodcuts are used in each, a larger one of a monk writing in his cell, repeated up to three times, and a series of from 59 to 66 cuts of the 77 (numbered) plants discussed in the poem. Only lengthy and elaborate description would allow the identification of the various issues from fragmentary copies. These are here avoided in the belief that by taking into account certain typical features of the work (not usually appearing in reference books) a sufficient characterization may be possible.¹

Macer floridus de viribus herbarum carmen

a) [*Lyon or Paris, n.b. 1491*] *Quarto*.

JPM. 541 (Paris: Le Petit Laurens c. 1500)

52 leaves. Sign: *a-f⁸g⁴*. 33 lines. Types: G. 2 sizes (worn); text: G. 82 (A open above. M 37). No woodcut initials, spaces with guide letters. Woodcuts (new): 2 of monk, 66 of plants.

1a: Macer floridus De viribus herbarum || Famosissimus medicus ⁊ medicoꝝ || Speculum. *Below woodcut of monk, repeated on 1b. 52b. blank.*

St. Louis: Missouri Botanical Garden. (Complete copy.) New York: Morgan Library. (Lacks leaf 1. Pollard's entry supplies the only description. Its misprints on 52a 'tutus' for 'doctus' in copy.) Washington: Surgeon General's Library. (Lacks 17 leaves, including first.)

¹ For method of entry see these *Papers*, X (1916), 153. The abbreviations for references cited are the familiar ones of Peddie's *Conspectus*. For the designation of types I follow the example of BMC. IV. Gothic, Semi-Gothic, Roman, are noted by G, SG, and R, the number indicating millimeter-measurement of 20 lines.

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b) [Lyon or Paris, b. 1500.] Quarto.

No reference.

Same collation as a)

1a: Mace[r] floridus / De viribus herbaꝝ || Famosissimus medicus et medicoꝝ || Speculum. *Woodcut of monk same as in a.*
Boston: Arnold Arboretum (complete copy).

c) [Paris?] Quarto.

Reichl. 608: Paris c. 1500. (A doubtful and improbable edition. Reichling's copy may have lacked 2 leaves of quire a.)
50 leaves. Sign: a⁶ b-f⁸ g⁴. 33 lines. Types: G. Otherwise identical with a.

d) [Lyon or Paris, b. 1500] Quarto.

HC. *10417 (Cöln). [Pr. 8490 must be error here, probably g, because of interlaced M.]

52 leaves. Sign: a-f⁸ g⁴. 33 lines. Types: G. 2 sizes (new), text: G. 82 (A closed above. M₃₇). Lombard initials over 2 lines and few smaller ones (1 line) in marginalia. Woodcuts (worn): 3 of monk, 64 of plants.

1a: Macer floridus || *Woodcut of monk, repeated on 1b. and 52a.* Below: De viribus herbaꝝ. || 52b: blank.

Washington: Surgeon General's library. (Complete copy.)

e) [Paris?] Quarto.

Reichl. 972 (Paris c. 1500)

Collation same as c, of which it is a variant.

1a: Macer floridus || de viribus || herbarū. || *Woodcut of monk repeated on 1b. and 52a.*

f) [Paris?] Quarto.

H(?)C.10418 (Paris 1490); Pr. 8489 (after 1500? earlier than c).

Collation same as a, of which it is a variant.

1a: [M] Acer floridus De || viribus herbaꝝ. || Famosissimus medicus 7 medicoꝝ || speculum. || *Woodcut of monk repeated on 1b.*

g) [Lyon or Paris b. 1500] Quarto.

No reference.

44 leaves. Sign: a-e⁸f⁴. 38 lines. Types: G. 2 sizes (worn); text: G. 82 (A closed above. M 37). Lombard initials over 2 lines. Woodcuts (worn): 3 (?) of monk, 59 of plants.

[1a: Woodcut of monk, repeated on 1b?] 2a: Incipit libellus Macri de viribus || herbarum. Et primo de arthemisia. Below first woodcut of plant. [Same block turned.] 44b. line 2: Macer adest disce: quo duce doctus eris. Below woodcut of monk (repeated?).

Philadelphia: College of Physicians. (Lacks leaf 1.)

h) [Genève: Loys M. Cruse, b. 1500] Quarto.

No reference.

52 leaves, last blank (?). Sign: a-f⁸g⁴. 31 lines. Types: G. 3 sizes. Largest for title, smallest for marginalia; text: G. 98 (A closed above. M39 feathered on straight front stroke, Proctor: 'interlaced'). Lombard initials over 3 lines and few smaller ones (1 line) in marginalia. Rubr. marks. Woodcuts (worn): 2 (?) of monk, 62 of plants.

1a: MAcer floridus De || viribus herbar || Below: Woodcut of monk repeated on 1b. 51b: Text ends. 52: blank (?).

Washington: Surgeon General's Library. (Lacks last leaf.)

NOTE.—It did not seem advisable in the present state of our knowledge about French incunabula to assign these editions to definite presses. Proctor, who gives two of the issues to Paris without convincing reasons, has not helped to solve the further question as to the printers. Pollard assigns *a* to Paris, Le Petit Laurens, which is possibly correct, although it may as well go to any of the other printers who were exploited by Jean Petit or Antoine Verard. Personally I feel inclined to suspect the origin of the books in Lyons, but it cannot be profitable to enter into the reasons at present. A closer study of the illustrations will undoubtedly add to our information. I shall discuss this subject in con-

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nection with my other lists, which will also help to fix the date of printing. Contrary to Proctor's doubt about the date, a comparison with other similar works forces one to the conclusion that all the editions enumerated were printed before 1500, but not before 1491.

APULEIUS BARBARUS

Unknown author of an important herbal of which many manuscripts were in circulation from the sixth or seventh century on (Anglo-Saxon version already in the eleventh century). Probably the earliest extant work with illustrations of plants, next to the famous codex of Dioscorides (early sixth century). The author seems to have been neither Roman nor Greek, hence his epithet, and there is not the slightest evidence that he had anything in common with Lucius Apuleius of Madaura in Numidia (born about 125 A.D.), flourishing in Carthage and Athens, author of the *Golden Ass*, whom some appreciate as the "evening star of the Platonic and the morning star of the neo-Platonic philosophy," while Melanchthon accused him of "braying like his own ass." The herbarium has an important place in the history of botany and medicine, because of its age, its wide distribution, and also because in the course of its career it served as the gathering-point for the interpolation of additional knowledge. For this reason the extant edition is given here, although only one copy of this rare book seems to exist in this country. Its illustrations, crude formalized pictures of plants, are, with possibly one exception, the earliest ones in a printed book.

Weigel's contention that they were engraved in metal (bent borders), not in wood, has a great deal of force and adds to the interest of the book. Two variants seem to exist:

Apuleius Barbarus: Herbarium and Marcum Agrippam.

Roma: Joannes Philippus de Lignamine [n. b. 1483]. Quarto.

108 leaves, first and last blank [a⁶; b-n⁸o⁶] 27 lines. Type R: 114 R: 131 cuts of plants. Woodcut wreath on 7a.

Arrangement: (1) Dedicatory epistle, 1-3b or 4a. (2) Table, 4b-6b. (3) Text of 132 chapters, 7a-107a. (4) Quire register in 2 cols., 107b.

a) H*1322. BMC. IV. 131.

Dedicatory epistle (1) to: F. DE GONZAGA CARDINA.
|| MANTVANVM . . .

b) C.II. 532. H*1322 (note). Weigel (1866) I. p. 111.

Dedicatory epistle (1) to: D. IVLIANO DE RV || VERE
RO. SE. EPISCOPO CARDINALI || SABINENSI . . .

Boston: Mrs. J. Montgomery Sears. Lacks (1), a few leaves of (3) and (4).

NOTE.—Lignamine had a press in his house, but probably never printed himself. He was courtier and physician to Sixtus IV. In his somewhat loquacious dedicatory epistles he usually gives interesting information. Since Cardinal Gonzaga died in October, 1483, it is very likely that the dedication to the nephew of the pope, Cardinal Giulio della Rovere, was substituted during the printing. Therefore variant *b* is the later, and the date of printing 1483 or 1484 can be fixed with fair accuracy. Mrs. Sears's copy, which seems to be the only one in America, must be variant *b*, because Lignamine's epistle ends on 4a, blank in both Hain's and the British Museum copies.

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The Hortus Sanitatis family:

**HERBARIUS, GART DER GESUNDHEIT,
HORTUS SANITATIS¹**

Despite the prolific varieties of entries indulged in by bibliographers and authors, it will help our understanding of this most important group of fifteenth-century herbals if we adhere strictly to the tripartition as indicated in the title. We have to reckon with about forty issues of books belonging to this family. Each one bears the distinctive individuality which marks it as belonging to one of the three groups. Minor variations of the text, additions of tables and indexes, and the modifications of the woodcut illustrations are apt to confuse one who for the first time approaches these books, especially as the rarity of the volumes precludes their ready comparison. The lists below will show that we have in American libraries some excellent specimens of these herbals but not nearly all. It ought to be our ambition to secure every one and, if not obtainable in the original, at least to get photographic reproductions.

In order to make clear the significance of these books let us remember that a herbal in the sense of the fifteenth

¹ Various cited and entered, mostly without distinction, under the following headings: *Herbarius latinus* (Maguntinus, Passavinus, Patavinus), *Herbarius latinus cum figuris*, *Herbarius in dietsche*, *Herbolario*, *Arbolayre*, *Grand Herhier en francoys*, *Gart der Gesundheit*, *Aggregator practicus de medicinis simplicibus*, *Kruidboek*, *Hortus* or *Ortus sanitatis*, the smaller and the larger *Hortus*, *Herbarius zu teutsch*, the German *Herbarius* or *Hortus*, *Jardin de santé*, etc. Also assigned to definite authors as: *Arnoldus de Villanova*, *de virtutibus herbarum* or *Johannes de Cube* (Cuba, Kaub on the Rhine).

century is not a botanical treatise, as its name might imply, but a medical book intended for both people and physician. In a way it marks a reaction against the expensive apothecary shop, calling attention to the valuable herbs free to all, in fields and woods, and similarly also to remedies derived from animals and minerals. A popular medicine book it might be called, but by no means in the sense we attach nowadays to this sort of literature, for it served undoubtedly also in the technical education of the time. We are apt to forget that almost the entire structure of our modern science rests on such humble beginnings and in our intensely specialistic preoccupation we tend to overlook the powerful influence of the popular element. It appears as something new, immensely fresh and vigorous, this assertion of a popular desire for enlightenment, for greater freedom from mere erudite tradition, from privileged classes, gilds, etc. Increasing in intensity from the thirteenth century on it is directly responsible for the invention of printing, which was to fulfil the demand for a more rapid mode of multiplication and a wider distribution.

Thus these books gathered what the monastic student had "milked," often uncritically, as in the *Macer floridus* and the *Apuleius*, from the brains of the ancients, and added to it what a wider experience with and a closer observation of the surrounding nature had brought to light. But not only the collection of facts but also their systematic arrangement is the new characteristic of these books, significantly marking the onset of inductive science.

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Only a painstaking study of the sources can allow us to apportion the share which classic erudition, mediaeval symbolism, and folk intuition contributed to these books. This is another important task which, however, does not concern us here. The bibliographer must primarily distinguish the differences, the origins, and the distribution of the various editions of these books. Light on the cultural interrelations of the times and an apportionment of the share of racial and national contribution at the onset of modern scientific endeavor should result from such research.

The common characteristics of the three members of the Hortus family are that they contain at least one illustrated part and several non-illustrated parts, mainly tables and indexes. All of them have woodcuts of plants, some have other pictures. The Herbarius is the prototype; the Gart der Gesundheit, though based on the Herbarius, is a new creation in the vernacular, distinguished by original concepts, both textually and artistically, while the Hortus proper, combining both the virtues and vices of the former, is more ambitious in scope, more complex because of added material—an elaboration of the Herbarius, but less lucid and original than the Gart der Gesundheit. The finer distinctions will be brought out in the lists below. Some of the issues are cited from reliable authorities, which are always indicated, so that adjustments of the entries can be made upon inspection of the volumes. Assignments to different headings will, I trust, not be necessary in these cases.

Herbarius Latinus

Arrangement of text and woodcuts: (1) Title page, (2) Preface beginning: Rogatum plurimorum etc., (3) Medicinal weights; *Illustrated part*, (4) Alphabetical table of herbs, (5) Particula I de virtutibus herbarum, 150 illustrated plants; *Non-illustrated part*: (6) Index of 96 drugs, discussed in (7) Particula II to VI under headings indicating their action or derivation.

In the following two lists the undated and dated editions are given separately. Woodcuts of plants up to the number of 150 prevail, only the dated issues b. and f. have a few other historiated woodcuts in addition.

Undated Editions

a) Herbarius latinus. [Middle Rhine, Palatinate]

[Speier: J. & C. Hist.] Quarto.

Choul. Inc. 2. p. 14; H.*8448=HC. 8443 (Typis Reyserianis), C (Veldener); JPM. 190 (Aggregator); VB 2056; GL 1890 (Schoeffer).

172 leaves. Quires: [a⁴ | b-u⁸ | x-y⁸]. 32-34 lines. Type G. Woodcuts: 150 numbered plants (new) with Latin and German names. Title on 1a.

2a: [R]Ogatu plurimorum inopum num || . . .

NOTE.—Hain described an imperfect copy under one heading, from secondary sources under another. The concordance of both is evident. Another edition indicated by Choulant (5 p. 15) is probably identical with this. Certain misprints suggest that alterations were made during the impression, not a new edition set up.

New York: J. P. Morgan Library. In this copy the last two quires are bound behind the first quire, simulating a different arrangement of the contents. This was overlooked by the cataloguer.

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b) *Herbarius latinus*. [Danube, Bavaria][Passau: *Joh. Petri*]. Quarto.

H*8447 (imp.); VB 1940; Col. Upps. 692; Pell. 1310 (Arnaldus de Villa Nova, Passau: *Joh. Alacraw & Mair*, copy seems to lack two tables).

74 leaves. 22 lines. Types: G. 92(150). Woodcuts: 150 numbered plants (new) with Latin and German names.

2a: rOgatu plurimor̄ || inopum nūmer̄ egentium appote
|| . . .

c) *Herbarius latinus*. [Lower Rhine, Brabant, Burgundy][Louvain]: *Joh. Veldener* [about 1484]. Quarto.

Choul. Inc. 4. p. 15; CA. *916 (Kuilenburg); Pell. 1309 (Arnaldus, Kuilenburg); Pr. 9299 (*Herbarius & Aggregator*, Louvain); HMT. 116(35)2b; Conway, woodcutters Netherl. xv. C. p. 213.

174 leaves. 27-30 lines. Type G. Woodcuts: 150 plants (worn) with Latin and Netherlandish names. Pr. D. 2 shields in floral border on ra.

2a: [R]Ogatu plurimor̄ īopū nūmor̄ egētiū ap || . . .

NOTE.—Veldener printed this edition after having issued at Kuilenburg the translated version of the same book with the date 1484 (see below *Herbarius in dietsche*). He returned during this year from the latter place to Louvain and there can be little doubt that the Latin issues were intended for the academic market in this town, if not actually printed here.

d) *Herbarius latinus*. [Lower Rhine, Brabant, Burgundy][Louvain]: *Joh. Veldener* [about 1485-1486]. Quarto.

Choul. Inc. 3. p. 14 (Antwerpen, van der Goes); CA. 917 (Kuilenburg); Pr. 9298 (Louvain); Col. Stockh. 517 (Louvain); Conway (ab. 1486).

174 leaves etc. same as the previous issue, but ra. blank(?).

2a: rOgatu plurimor̄ īopū nūmor̄ egē || tiū appotecas . . .

NOTE.—The first leaf of this edition seems to be lacking in most copies. It is quite possible therefore that copies of this reprint were issued with Veldener's device and border on the title page.

e) *Herbarius latinus*. [France or Burgundy]

[Paris: Jean Bonhomme, about 1485]. Quarto.

From Cl. I p. 195; Pr. 8050 (*Aggregator practicus de simplicibus*).

? leaves. 28 lines. Signatures. Type G. Woodcuts: 150(?) plants with Latin and French names.

2a: [R]Ogatu plurioꝝ iopū nūmoꝝ egētiū ap || . . .

NOTE.—Claudin gives facsimile pages but no full description. Pel-lechet omitted the edition entirely although there is a copy in Paris (*Ecole sup. de pharmacie*). Whether the book is signed by Jean Bonhomme or not is not clear from Claudin's and Proctor's entries.f) *Herbarius latinus*. [Italy, Venetia][Venezia: Simon Bevilaqua] for *Luc. Ant. de Giunta*. Quarto.Reichl. II, 404 (*Arnoldus de Villanova*).

172 leaves. Type R. Woodcuts: 150 numbered plants (worn) with Latin names. P.D. with "L.A." and red printing on 1a.

2a: ARNOLDI de noua uilla Auicenna. | ROGATV . . .

NOTE.—Seems to be a variant of the dated Venezia edition of 1499. May have a colophon on last leaf which was missing in Reichling's copy. Probably xvi. Century, apt to be mistaken for one of the incunabula editions.

g) *Herbarius latinus*. [Italy, Venetia]

[Venezia: Alessandro de Bindoni]. Quarto.

Kristeller Pr.D. 194.

154 leaves. Type R. Woodcuts: 150 numbered plants (worn) with Latin names. Pr.D.: Justice with 2 shields and 2 lions, with "A.B."

2a: ARNOLDI DE NOVA VILLA Auicenna. || ROGATV plurimorum inopu nu || . . .

NOTE.—Alessandro printed between 1507 and 1522. This edition, the same as the previous one, closely resembles the incunabula editions. In all of them the original Vicenza woodblocks were used. Of the text part II is missing in this last issue, also weights and table are placed at the end.

Washington: Surgeon General's Library.

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h) **Herbarius in dietsche.** [Translation. Netherlands]

Antwerpen: Willem Vosterman. Quarto.

From Choul. Inc. 14 p. 17; HMT. 233 p. 90.

174 leaves. 30 lines. Type G. Woodcuts: 150 plants with Latin and Netherlandish names. Pr.D.

2a: Dye prologhe des ouersetters. || wt den latijn in dyetsche || . . .

NOTE.—Evidently a reprint from Veldener's Kuilenburg edition of 1484, issued after 1500.

*Dated Editions*a) **Herbarius latinus.** [Middle Rhine, Palatinate]

Mainz: Peter Schoeffer, [14]84. Quarto.

Choul. Inc. 1 p. 13; HC. 8444; Pr. 121 (Bodl); BMC. I. 39 (1490?, H 8443?); Pell. 1311 (Arnaldus); Sudh. 83a.

174 leaves. Woodcuts: Q 150 numbered plants (new) with Latin and German names. Pr.D.: 2 shields on branch (sometimes red printing) on 1a.

2a: [R]Ogatu plurimoz inopū nūmoz || . . .

NOTE.—The first leaf with the title, printed either in black or red, or in both colors: Herbarius. Ma- || guntie impressus. || Anno 7^c. lxxxiii. || is lacking in most copies. The printer is identified only by the device printed below the title. The British Museum Catalogue describes (2 copies) evidently this edition, although it is identified with the undated Middle Rhine issue. The description contains several mistakes in the collation and no reason is given for the improbable date of 1490.

St. Louis: Missouri Botanical Garden. (Lacks leaf 1.)

b) **Herbarius in dietsche.** [Lower Rhine, Lek, Burgundy]

Anonymous translation into Netherlandish idiom [old Dutch, Flemish?]

[*Kuilenburg: Joh. Veldener*] 1484. Quarto.

Choul. Inc. 13 p. 17; H 8449; CA. *918; Pr. 9158; Poll. Hawkins. 479 (Aggregator, Kruidboek, in index Herbarius); see also HMT. 34(115)2b and Conway p. 203.

208 leaves. Quires: [x⁸ | a-t⁸u⁴ | A-E⁸F⁴]. 25 lines. Types: G. 113 (120?). Woodcuts: 150 numbered plants (new, mostly reversed). 'Tree of Jesse,' 'Fall of man,' large 'G' and Pr.D. 2 shields of which one blank.

2a: Dye prologhe de [!] ouersetters výt || den Latýn in dýetsche. *The translator's prologue ends and the work begins*
on 3b: [M]Ant veellyen mids der armoeden de apote || ken . . .

NOTE.—The contents of this work are the same as those of the prototype (Middle Rhine), with the addition of a preface by the translator. The additional woodcuts were previously used by Veldener in his quarto edition of the 'Spiegel onser behoudenis' of 1483 (they are half blocks from the earlier folio edition). They as well as the printers' device identify printer and place.

Providence: Hawkins Collection, Annmary Brown Memorial.

c) **Herbarius latinus.** [Danube, Bavaria]

Passau: [Joh. Petri], [14]85. Quarto.

H.*8445; Pell. 1312 (Arnaldus); Pr. 2829; BMC. II. 616 Choul. Inc. 6 p. 14.

174 leaves. 32 lines. Types: G. 92(150). Woodcuts: 150 numbered plants with Latin and German names.

2a: [R]Ogatu plurimoꝝ || iopū nūmoꝝ egētiū appotecas
re= || . . .

Chicago: John Crerar Library. (Imp.)

d) **Herbarius latinus.** [Danube, Bavaria]

Passau: [Joh. Petri], [14]86. Quarto.

H.*8446; Pell. 1313 (Arnaldus); Choul. Inc. 7 p. 14. [BMC. II. 616 see next entry].

174 leaves. 32 lines. Types: G. 92(150). Woodcuts: Same as previous edition (worn).

2a: rOgatu plurimoꝝ || inopum nūmoꝝ egencium appote ||

. . .

e) **Herbarius latinus.** [Danube, Bavaria]

Passau: [Joh. Petri], [14]86. Quarto.

From BMC. II 616 (incorrectly equated with H.*8446).

174 leaves etc. same as previous issue.

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2a: [R]Ogatu plurimor || inopum nūmor egentium appote
|| . . .

NOTE.—This is probably only a variant of the previous issue.

f) **Herbarius latinus.** [Italy, Venetia]

Vicenza: *Leonardus Achates de Basilea & Gulielmus de Pavia socii*, 27 October 1491. Quarto.

HC. 8451 (Herbolarivm); C. III p. 264 (33 lines) = C 649a p. 315 (35 lines and other slight differences); [Pell. 1314 see next entry].

172 leaves. 34 lines. Type R. Woodcuts: 150 numbered plants (new) with Latin names, two men sitting, facing each other, holding flowers, one with cap at desk (Arnoldus), the other with crown and staff (Avicenna). Floral border with laurel wreath and blank shield. 5-line initial.

2a: Below woodcut and inside of border: ARNOLDI DE NOVA VILLA AVICENNA. || ¶ INCIPIT Tractatus de uirtutibus herbarum. || R OGATV PLVRIMORVM INOPVM || nūmorum egentium appotecas refutantium || . . .

NOTE.—In later editions the title woodcut with the two men was omitted but the names were kept. This gave rise to the confusion about the authorship. The woodcut does not seem to have been made for this work because the printer used it more than a year earlier in the Italian version of the Petrus de Crescentiis, *Opus ruralium commodorum* (Vicenza: 17 February 1490), with certain changes.

Boston: Boston Medical Library.

g) **Herbarius latinus.**

Same place and printer as above.

From Pell. 1314 (Arnaldus).

156 leaves. 33 lines, otherwise same as above.

2a: Same woodcut. Below: ARNOLDI DE NOVA || VILLA AVICENNA. || INCIPIT tractatus . . .

NOTE.—May be error, but possibly also a different edition in which the second part is omitted.

h) Herbarius latinus. [Italy, Venetia]

Venezia: Simon Bevilacqua, 14 December 1499. Quarto.

HC.*1807 (Arnoldus de Villa Nova: De virtutibus herbarum sive [!] Avicenna); Pell. 1315 (Arnaldus); Pr. 5415.

172 leaves. 28-37 lines. Types: R (few G). Woodcuts: 150 numbered plants (old blocks) with Latin names.

1a. Title: Incipit Tractatus de || virtutibus herbarum

2a: ARNOLDI de noua uilla Auicenna. ROGATV plurimorū inopū || nūmorum egentium appote- || . . .

NOTE.—Both Hain and Pellechet have some different spellings in their descriptions (variants?).

Washington: Surgeon General's Library (2 copies, one with tinted pictures).

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OUTWARDLY the Herbarius is most easily distinguished by its quarto size from the other members of the Hortus family, which are all folios. The fact that in some of the editions of the following work, the Gart, the name "Herbarius" also appears on the title-page has led to some confusion which English bibliographers have tried to obviate by adding to the title "Herbarius" the subtitle "Aggregator," also to be found in the Preface. I believe this will not clear but rather obscure the matter because this name "Aggregator" rightly belongs to another book (H*6395), which, although it has nothing in common with our Herbarius, has already been confused with it. A good nomenclature must avoid such conflicting ambiguity, even in subtitles. The plain title "Herbarius" is the best designation for the books listed above. We need an equally distinct and clear title for the next member of the family, the more important work in the vernacular. "Gart der Gesundheit," for reference purposes plain "Gart," I believe, serves this purpose best. At least one bibliographer (Sudhoff) has adopted it and at any rate the Preface calls it plainly by that name, so that we may well afford to ignore another title on the first page. If Choulant had consistently used this

title instead of the misleading names "smaller" or "German Hortus" (suggesting that it is a translation of the Latin work which it is not), probably the confusion about the Hortus family would never have arisen. For reasons which I shall give at the end of this series I am not in favor of appending the name of a supposed author, Johann of Caub, to this book, although there is no objection to his figuring as editor. The reasons are perhaps not as strong as those which I gave for dropping the name of Arnoldus de Villanova as author of the *Herbarius* (see XI, 91), but I believe they merit consideration.

While the *Herbarius* is distinguished from the *Gart* by language and size, the most conspicuous feature of distinction between the *Gart* and the *Hortus* is the language only. The size, which Choulant adopted as the criterion, is very nearly the same for some of the editions of both books, and therefore to speak of "smaller" and "larger" is very misleading, although the *Hortus* contains on the whole a greater amount of text and more illustrations. The nomenclature which I have adopted ought to remove these books for once and all from the class of "troublesome entries," and I hope that the following characterization of the different editions will allow the ready identification of copies without tedious consultation of reference books.

Gart der Gesundheit (Edited by Johann of Caub)

Usually referred to as the "smaller" or the "*German Hortus*"

Contents, arrangement and sequence of text: I. Preface beginning: "Oft und viel hab ich bei mir selbst," etc.; II. Main text, illustrated, in 435 numbered chapters, describing remedial agencies, alphabetically ordered, of vegetal (380),

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animal (26), or mineral (29) nature; III. First table of contents, grouping remedies according to their action or derivation; IV. Chapter on urinoscopy (diagnosis); V. Second table of contents, grouping remedies under names of diseases or symptoms; VI. Third table of contents, list of the Latin chapter headings as they appear in the main text. To the above is added in some editions a fourth table which lists alphabetically the German synonyms.

Illustrations. Full-page cut before the text of the book: **A** (in 6 variations), 3 sitting savants, 2 of whom bearded, attended by others in varying numbers, in background 2 trees (1 palm) or pharmacy wall with shelves, heraldic shield above. Smaller cut before the text of IV: **B** (in 5 variations), a physician holding flask and a patient (woman or male cripple) with a hamper. (For exceptions see ed. 11 and 15 below.) Text cuts still smaller (except in first two editions, where they are larger), picture mostly herbs. Their number varies from 379 (368 plants, 11 animals) to 392; one edition (11) has 542 (addition of genre pictures).

Collation and typography: Folios of 224 to 370 leaves, all with signatures, except ed. 1. Text of ed. 1 and 2 printed in 1 column, the rest in 2. Types: Gothic 93 to 120 text, larger for headlines, etc.

Editions: 15, of which 4 are undated. These are assigned to definite places in the chronological order of the dated editions.

1) **Gart der Gesundheit.** [Middle Rhine, Palatinate]

Mainz: *Device of Peter Schoeffer, 28 March 1485.* Folio.

358 leaves. No sign. 1 col. (tables 2). Type: G 93 text. Colophon and Pr. D. red.

Illustrations. Cut A1: Savants (3) and attendants (10), palm to right, shield blank. B1: Woman to right, flat bonnet. Text cuts (full to one-third page): 379, plants 368, animals 11 (Elephant repeated).

2a: [O]fft vnd vil habe ich by mir selbst betracht die wüdersam || werck des schepfers. . .

H*8948 (Hortus); Sudh. 67; BMC. 35 (Hortus); Choul. Inc. I p. 55; Schreiber V 4332 (Joh. von Cube).

Variant: As discovered by Mrs. Sears in one of her copies, the text of the larger part of one chapter (401 Tapsia) has been reset in order to accommodate the oblong cut in the correct upright position, it being placed transversely at the bottom of the page in the other (earlier) make-up. Other minor variations in spelling suggest that the revision was fairly general.

Washington: Surgeon General's Library (imp. illum. Missing Chaps. 72, 343-345, 420-435 and the entire III and IV). Boston:

Mrs. J. Montgomery Sears (2 perfect copies, 1 illum., the other variant not illum.).

2) **Gart der Gesundheit.** [Danube, Lech, Bavaria]

Augsburg: [Joh. Schönsperger], *Montag nechst vor Bartholomei*, [22 Aug.] 1485. Folio.

370 leaves, last blank. Sign: a-zA-VTV⁸X¹⁰. 1 col. (tables 2?). Type G 120 text.

Illustrations. Cut A2: copied from A1 with addition of Augsburg pinecone in shield. B2: reversed copy of B1: woman with larger bonnet to left. Text cuts: Copies, some reversed, from ed. 1. Initial "O" (39:38 mm.) on 2a. (Zainer?).

2a: Oftt und vil hab ich beÿ mir selbs betracht dÿe wū || dersame werck des schepfers. . .

H*8949 (Sorg); Sudh. 68 (no tract. urin.); BMC 365; Choul. Inc. 2 p. 56 (Sorg); Schreib. V 4333.

New York: T. B. DeVinne (illum., imp.).

3) **Gart der Gesundheit.** [Danube, Bavaria]

Augsburg: Joh. Schönsperger, *Sct. Bonifacius tag* [5 June] 1486. Folio.

258 leaves, last blank. Sign. 2 cols. Type G.

Illustrations: Cut A5: group in pharmacy, savants (3, bareface to right) and attendants (2), apprentice with mortar in rear. No shield, jars on shelves with town arms. B2: woman with bonnet to left. Text cuts; 394 reduced and reversed copies from preceding eds.

2a: [O]Fftt vnd vil hab || ich bey mir selbs || betracht die wū || dersamen werk || . . .

From H*8951; Sudh. 69; Choul. Inc. 6 p. 58; Schreib. V 4335 (some smaller cuts copied from ed. 6).

4) **Gart der Gesundheit.** [Danube, Bavaria]

Augsburg: Joh. Schönsperger, *Mittwochen nach dem weysen suntag* [7 March] 1487. Folio.

258(?) leaves, last blank. Sign. 2 cols. Type G.

Illustrations. Cuts same as 1486 (ed. 3): A5 and B2.

2a(?): Oftt vnd vil || habe ich bey || mir selbs be || trachtet die || wüder-samē. . .

From Schreib. V 4337; Choul. Inc. 7 p. 58; Sudh. 70; H 8950 (1486).

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5) Gart der Gesundheit. [Danube, Bavaria]

Ulm: Conrad Dinckmut, Samstag vor Judica [31 March] 1487. Folio.

248 leaves, last blank. Sign: a-zA-D⁸E⁶ || F-G⁸H¹⁰. 2 cols. Type G 109 text.

Illustrations. Cut A3: savants (3) and attendants (9), palm to left, shield with Ulm arms. B3: woman bareheaded to left. Text cuts: 392.

2a: [O]Fft vñ vil hab || ich bey mir se || lbs betrachtet || die wundersamen || . . .

From H*8952; Sudh. 71; BMC 535; Choul. Inc. 8 p. 58; Schreib. V 4338 (derives cuts from ed. 6 and 3). Muther I 46 (cuts different from ed. 3).

6) Gart der Gesundheit. [Upper Rhine, Alsace]

Undated [Strassburg: Joh. Grüninger, c. 1488.] Folio.

224 leaves, last blank. Sign: a-zA-C⁸[D-E⁸]. 2 cols. Type G 93 text. Headlines with chapt. nos. Spaces for initials.

Illustrations. Cut A4: savants (3) and attendants (9), palm to left, blank shield. B3: woman bareheaded to left. Text cuts: 384, some with chapt. nos. cut on block. Lower ends of plants curled (spirals).

2a: [O]Fft vnd || vil habe || ich by mir selbst || betracht dy wū || dersam werck || . . .

From BMC 103 (Cube: Hortus. Grüninger c. 1485, 2 imp. copies); Sudh. 80; Choul. Inc. 3 p. 57 (same blocks as ed. 10); C. II 3178 (Mainz); Schreib. V 4334 (Grüninger 1486, some of the cuts of this ed. considered as models for ed. 3 and 5).

7) Gart der Gesundheit. [Danube, Bavaria]

Undated. [Augsburg: Joh. Schönsperger, 1488.] Folio.

258 leaves, last blank. Sign. 2 cols. Type G.

Illustrations. Cuts: A5 and B2, same as ed. 3 and 4.

2a: [J]Ch hab oft || vnd vil bey || mir selbs be || trachtet die || wundersamē || . . .

From H*8945 (Augsburg); Choul. Inc. 9 p. 59; Sudh. 77; Schreib. V 4339 (cuts from ed. 4, "enluminés à l'aide de patrons").

8) Gart der Gesundheit. [Danube, Bavaria]

Augsburg: Joh. Schönsperger, Montag vor St. Thomas [15 Dec.] 1488. Folio.

262 leaves, last blank. Sign: [*⁴]; a-vw-zA-D⁸E⁶F⁸G-H⁶J⁸. 2 cols. Type G.

Illustrations. Cuts A5 and B2 from ed. 3, as also the Text cuts.

1a. Title. 2a-4b: Alphabetical table by German names. 5b. Cut A. 6a. sign. a²: [J]Ch hab oft || vnd vil bey || mir selbs be || trachtet die || wundsamē || wercke des || . . . 8a. Text begins.

From H*8953; Choul. Inc. 10 p. 59; BMC. 366 (woodcuts copied from Ulm ed. 5); Sudh. 72; Schreib. V 4340 (cuts from ed. 7).

9) Gart der Gesundheit. [Upper Rhine, Alsace]

Undated. [Strassburg: Joh. Grüninger, c. 1489.] Folio.

224 leaves, last blank. Sign. 2 cols. Type G.

Illustrations. Cuts: same as ed. 6 (copies?).

2a: [O]Fft vnd || vil habe || ich bey mir sel || best || betracht || dye wunder= || . . .

From H*8946; Choul. Inc. 5 p. 57 (Strassburg or Mainz); Sudh. 78 (Mainz); Schreib. V 4336 (Strassburg: Thom. Anshelm? c. 1487. "Contrefaçon presque exacte" of ed. 6. Cutting cruder).

10) Gart der Gesundheit. [Upper Rhine. Switzerland]

Undated. [Basel: Michael Furter, c. 1490.] Folio.

224 leaves, last blank. Sign: a-2A-C1-2⁸. 2 (tables 3) cols. Type G 93 text.

Illustrations. Same cuts as ed. 6: A4 savants (3) and attendants (9), palm to left, blank shield. B3: woman bareheaded to left. Text cuts: also the same with chapt. nos. cut on the blocks of all except those for chapt. 387 and 415 to 435. Initial floreated letters, white on black ground, square, at beginning of most chapt.

1a: blank. 1b. Cut A. 2a: OFt vnd vil || habe ich bey mir sel / || bst betracht die wun / || . . .

H*8947; Choul. Inc. 4 p. 57 (same blocks as ed. 6 but worn. Strassburg or Mainz); Schreib. V 4341 (Basel, c. 1491, "réimpression presque exacte" of ed. 6).

Amara, Iowa: Dr. C. H. Herrmann (illum., blank leaf and last of text missing).

11) Gart der Suntheit. [Baltic, Hansa]

Lübeck: Stefan Arndes, 1492. Folio. [Low German version with additions.]

354 leaves. Sign. 1 (and 2) cols. Type G.

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Illustrations. Cuts: no A. B5 male cripple on right with hamper. Sun above. Text cuts: larger copies from 370 cuts of ed. 1 or 2, in addition nearly 150 smaller cuts (several genre pictures) from Hortus sanitatis ed. 1 (see below); also some original cuts. In all 542 cuts.

Contents: Same division into V Parts. Addition to II. 253 new chaps. (107 vegetal and animal, 146 mineral, precious stones), making a total of 688 chaps. Some rearrangement of the order. Colophon at end of Pt. IV.

1a: Hiir heuet an de lustighe vnde || nochlige gaerde der suntheit. [Translation of preface beginning: Aken unde vele hebbe ik by mysuluen overdacht . . .] 338b. sign C4: Colophon. 339a-354a: Part V ends: . . . ghelauet sy nu || vnde ewichliken Amen. 354b. blank.

From Sudh. 81; Schreib. V 4345; Choul. Inc. 29 p. 70; H. 8957.

NOTE.—The additions, textual as well as illustrative, are derived largely from Hortus sanitatis (1).

12) Gart der Gesundheit. [Danube, Bavaria]

Augsburg: Joh. Schönsperger, *Afftermontag nach Tiburtius* [13 Aug.] 1493. Folio.

262 leaves, last blank. Sign: same as ed. 8. 2 cols. Type G.

Illustrations. Cut A5: same as ed. 3; B4: woman to right with larger bonnet. Text cuts: the smaller, several additions, also genre pictures. Initials.

1a. Title: Herbarius zu teutsch || vnnd von allerhandt || . . . 2a-4b: Alphabetical table by German names. 5b: Cut A. 6a. sign. a2: Of ft vnd vil || habe ich bey || mir selbs be || trachtet die wundersamē || weercke[!] des || . . . 8a: Text begins.

From Sudh. 74; H*8954 note; Choul. Inc. 13 p. 61; not in Schreiber.

NOTE.—Parts of the make-up of this ed. were used in the following ed. 13 and 14 (see notes there).

13) Gart der Gesundheit. [Danube, Bavaria]

Augsburg: Joh. Schönsperger, *Afftermontag nach Tiburtius* [13 Aug.] 1493. Folio.

262 leaves, 5th and last blank. 2 cols. Sign. same as ed. 8 and 12.

Illustrations. Cuts same as ed. 12. Initials.

1a. Title: Herbarius zu teü || sche vnd von aller || handt. . . 2a-4b: Alph. table same as ed. 8 and 12. 5: blank. 6a. sign. a2: UJl vnd oft || habe

ich bey || mir selbs be || trachtet die || wüdersamē || wercke des ||. . . 7b: Cut A. 8b: Text begins.

H*8954; Sudh. 73; Choul. Inc. 11 p. 59 (April 1493); Schreib. V 4342.

NOTE.—This ed., although bearing the same date as ed. 12, represents a new issue. It contains unchanged the make-up of sign: d, h, k, p-J from ed. 12. (Sudh.)

Philadelphia: College of Physicians (illum., blank leaves missing).

14) **Gart der Gesundheit.** [Danube, etc.]

Augsburg: Joh. Schönsperger, *Afftermontag vor auffart* [10 May] 1496. Folio.

262 leaves, last blank. Sign. same as ed. 8, 12, and 13. 2 cols. Illustrations. Cuts same as ed. 12. Initials.

1a. Title: Herbarius zu teutsch || vnnd . . . same as ed. 12. 2a-4b. Alph. tab. same as ed. 12. 5: blank. 6a. sign. a²: VJl vnd oft || habe ich bey || mir selbs be || trachtet dye || wüderamē || . . . 7b: Cut A. 8a: Text begins.

From H*8955; Sudh. 75; Choul. Inc. 12 p. 60 (April-June 1496); Schreib. V 4343.

NOTE.—This ed. contains unchanged the make-up of sign: e, f, g, k¹⁻³ k⁶⁻⁸ from ed. 12 (Sudh.).

15) **Gart der Gesundheit.** [Danube, etc.]

Augsburg: Joh. Schönsperger, *Montag nach Himmelfart* [13 May] 1499. Folio.

Collation not given. Illustrations. Cut C: magister (black shoes), and 4 students on 1a. (copy from cut used in undated Hortus Sanitatis ed. 2 and 3, described below). This copy was also used in Augsburg reprint of Brunswick, Chirurgia, Dec. 1497 (H*4019).

Preface: UJl vnd oft || habe ich bei= || mir selbs be= || trachtete die || wundersa= || men. . .

From Schreiber V 4344; (Panzer D. A. 1. 240, 473; Sudh. °76; Choul. Inc. 13 p. 60).

Hortus or Ortus Sanitatis

Referred to as the "*larger Hortus*"

Contents, arrangement, and sequence of text: Preface beginning: "Omnipotentis eternique dei," etc.; main text in six tractatus (traicties) which separate the subject matter of the "Gart" into natural kingdoms, subdivided into chap-

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ters, each of which discusses under the heading "Operationes" the therapeutic effects. Thus I. De herbis, 560 chapt.; II. De animalibus, 164 chapt.; III. De avibus, 122 chapters; IV. De piscibus, 106 chapt.; V. De lapidibus, 144 chapt.; VI. De urinis.

Two tables of contents in 5 divisions, corresponding to the first 5 tractates: First table, grouping remedies under names of diseases or symptoms, second table (tabula generalis), listing the chapter headings. In both tables the arrangement is alphabetical inside of the divisions. Modification of this arrangement only in ed. 5.

Illustrations. Full-page cuts (from 3 to 7) serving as frontispiece and pictorial prefaces to divisions of the book. Text cuts, throughout smaller to fit into the columns, reach and sometimes exceed 1000.

Collation and typography: Folios of 360 to 476 leaves, all with signatures and printed in 2 columns. Types: Gothic of several sizes.

Editions: 5, of which 4 are undated. All in Latin except one in French. Chronologically the undated editions follow the dated one in a now definitely established order.

1) **Hortus sanitatis.** [Middle Rhine, Palatinate]

Mainz: Jacob Meydenbach, 23 June 1491. Folio.

454 leaves, last blank. Quires: 8s and 6s alternating irregularly. Sign: A-Za-m [1-248] | n-z z; aa-ll [249-408]; i-v [409-422] | A-E [423-454]. Type G 92 text.

Illustrations. (1) Cut A6: Savants (3) and attendants (6), palm to left, 2 shields blank (see "Gart"). 6 other full-page cuts, different from other editions: (2) 3 men and earth animals, (3) 2 men and air animals, (4) 2 men and water creatures, (5) jewellers shop 12 persons, (6) apothecary shop 9 persons, (7) physicians and patients 8 persons. Text cuts: 1066 (530 plants, 164 animals, 122 birds, 106 water animals, 144 precious stones, etc.).

1a. Title: Ortus sanitatis. 1b: Cut A.

HC*8944; Choul. Inc. 14 p. 61; JPM. 32; BMC. 44; Schreib. V 4247; Muther pl. 150 facs.

Washington: Surgeon General's Library (illum.). Chicago: John Crerar Library. Boston: Arnold Arboretum. Mrs. J. Montgomery Sears. New York: J. P. Morgan.

Undated Editions

Most readily distinguished, in case the first leaf is missing, by examination of the signatures or the full-page woodcuts, which are the following: C: magister

(white shoes) sitting and 4 students; **D**: human skeleton; **E**: apothecary sitting and physician, 2 shelves, 2 stars; **F**: patient in bed, 3 physicians; **G**: 4 text cuts; **H**: author presenting book to king and 7 attendants. In the following descriptions these cuts are indicated in the order in which they appear in the editions.

2) **Hortus sanitatis.** [Upper Rhine]

[Strassburg: *Joh. Prüss, c. 1496.*] *Folio.*

360 leaves. 2 cols. Quires alternate regularly 8s and 6s, (sign. dd is 4). Sign: a-z Aa-Ii [1-202] | A-O PqrsT U-Z z [203-332] | aa-ee [333-360].

Illustrations. Cuts: C, D, E.

1a. Title in 9 lines: Ortus Sanitatis || De herbis z plantis || . . . 5th line ends: . . . bus ||

H*8942; Choul. Inc. 16 p. 63 (note of purchase: 2 fl. rhen. 1500, 31 jan.); Schreib. V 4249; Muther I, 541 (Grüniger).

Washington: Library of Congress (imp., some leaves mis-bound). Boston: Arnold Arboretum (not illum.).

3) **Hortus sanitatis.** [Upper Rhine]

[Strassburg: *Joh. Prüss, c. 1497.*] *Folio.*

360 leaves. 2 cols. Sign: a-z Aa-Ii [1-202] | A-U [203-332] | aa-ee [333-360].

Illustrations: Cuts: Same as ed. 2.

1a. Title in 9 lines: Ortus Sanitatis || De herbis et plantis . . . 5th line ends: . . . (tibus) ||

H*8941; Choul. Inc. 15 p. 62; JPM 63; BMC 124; Pr. 1447 (Cöln: H. Quentell); Muther I 541 (Grüniger); Schreib. V 4248.

Washington: Surgeon General's Library (First leaf defective and pasted over. Ms note signed "Major, British Museum" to the effect that edition is to be considered as of Venetian origin). Boston: Arnold Arboretum (Contemp. Ms note of purchase. 12 Kal. Nov. [21 Oct.] 1497. 2 guld. Probably Dr. J. F. Payne's copy referred to by Pollard in JPM cat. Acquired Sept. 1902). New York: Dr. G. F. Kunz.

4) **Hortus sanitatis.** [Upper Rhine]

[Strassburg: *Joh. Prüss, c. 1499.*] *Folio.*

360 leaves. 2 cols. Sign: a-z A-I [1-202] | K-Z Aa-Ff [203-332] | Gg-Ll [333-360].

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Illustrations. Cuts: E (reduced), G, D, E.

1a. Title in 9 lines: ORtus SANitatis || De herbis et plantis. . . 5th line ends: . . . (tibus ||

HC 8943; Choul. Inc. 17 p. 64; JPM 113; Pr. 1448 (Cöln); Muther 542; Schreib. 4250; cf. BMC I. p. xxvi.

Philadelphia: College of Physicians (imp.); St. Louis: Missouri Botanical Garden. New York: Dr. Abraham Jacobi, J. P. Morgan.

Undated French Translation

5) Hortus sanitatis translate en francois. [Isle de France]

Paris: Antoine Verard [publisher, c. 1500.] Folio. Sometimes in 2 vols. Copies on vellum.

476 leaves. 2 cols. Quires: 8s, 6s and one 4. Sign: a-z z aa-yy, numb: i-clxxvi; a-c [1-292] | A-X AA-GG, numb: i-clxx; aaa-bbb [293-462] | A-B [463-476].

Illustrations. Cuts: H, D, E. Caligraphic initial "L" (Macfarlane 9) on 293. Verard's device at end. Cut H had appeared already in Crescentius: prouffits ruraulx. Paris: Jean Bonhomme, 15 Oct. 1486. D and E are copies of the original Grüninger cuts, as also the text cuts.

1a. Title: ORTVS SANITATIS || TRANSLATE DE LATIN || EN FRANCOIS || 1b. line 3: Le prohesme de || lecteur . . . 276(yy⁴) blank. 292(c): Finist la table || des herbes. 293a(A¹): LE TRAICTIE DES BESTES. OYSEAVLX || . . . 293b: Cut D. 294a(A²): Le prologue || [P] Our ce que es choses devāt || dictes layde divine. . . 462(bbb⁸): blank. 476a(B⁸) Colophon: Paris || en la rue saint Jaques pres petit pont a lenseigne saint iehan leuāgeliste || . Ou au palais au premier pillier devant la chapelle ou len chante la messe || de messeigneurs les presidents. || 476b: Verard's device.

From HC. 8958 and Macfarlane 140, which differ somewhat, suggesting the existence of variants. Cf. Claudin I. p. 191, also J. F. Payne in Tr. Bibl. Soc. Lond. 1903. vi. 120. Dr. Payne considers all the woodcuts derived from the German cuts, with 1 or 2 exceptions.

Grant herbier en francoys (Arbolayre)

More than 20 editions of this book, probably all without date, issued from several allied presses in Paris (folios and quartos). All resemble each other, but only two can be assigned with certainty to the fifteenth century, surely after 1485. They complete the series of illustrated herbals and have to be considered as imitations of the earlier books. Their prototype is the "Gart,"

and in the first edition, which appeared as "Arbolayre," very likely the identical blocks which had served for one of the Upper Rhine editions were again used. Some Hortus cuts were also copied. In style the pictures resemble those of the Macer floridus, which were probably derived from them. The text differs entirely from the other editions. It is a copy from one of the many fifteenth-century French Mss of Platearius: Circa instans (Secrets de Salerne).

Arbolayre. [Saône or Rhône, Burgundy]

Undated. [Besançon or Lyon.] Folio.

212 leaves, last blank. 2 cols. Sign: A-X y z Aa-Ff. Type G. Illustrations: There seems to be at least one full-page cut on 1b. The number of text cuts is uncertain. The first plant picture (Aloe on 25b) has the Roman numeral 36, corresponding to the serial number of the "Gart" editions (see ed. 6, 9, 10). Initials.

Contents in following order: Title, Table of remedies in groups of diseases, Preface, Text of plants in alphabetical order, Epilogue.

From Pell. 1101 [Lyon, Jac. Maillet 1490]. Claudin (iv. proofs) assigns book to P. Metlinger, Besançon before 1490. Cf. Choul. Inc. p. 74, also Dorveaux: Liv. des simples medecines. Par. 1913, p. xviii.

Grant Herber. [Isle de France]

Undated. Paris: Pierre Le Caron. Folio.

170 leaves: 22 with sign. ā ē ī ō, 148 with sign: A-Z z, numb: i-cxlvii [cxlviii].

Illustrations: Probably no full-page cuts. Text cuts: 297 of plants, several repeated. Initials. Pr. D. below colophon (facs. Cl.).

Contents seem to be the same as Arbolayre, arranged in the same order.

From Pell. 1102 (copy without title-page, hence placed under Arbolayre); Cl. II. p. 83 facs. Cf. Dorveaux (op. c.) calls attention to complete copy at Bibl. Ste-Geneviève, Paris, not seen by Pell. Has in title "Le Grant Herber," substituted for "Arbolayre" in earlier edition.

NOTE.—The Surgeon General's Library, Washington, possesses 2 copies of this book, both imperfect and without place or date. They differ from above edition by having Pr.D. below the title (and not at end). They are those of Jean Petit and Michel Le Noir of a time well inside of the sixteenth century. In these editions the tables are placed at the end, an arrangement which probably distinguishes all the later eds. from the incunabula.

CONCORDANCE OF NAMES AND INDEX TO THE
FIFTEENTH-CENTURY ILLUSTRATED
HERBALS DESCRIBED

(KLEBS: INCUNABULA LISTS. *PAPERS*. 1917-18, XI-XII)

Blackface names are the standard entries adopted

Aggregator practicus de medicinis simplicibus=Herbarius lat.....	12
Apuleius Barbarus: Herbarium	7
Arbolayre =earliest ed. of Grant Herbar (Gart.).....	30
Arnoldus de Villanova: De virtutibus herbarum=Herbarius lat., printed in Italy.	
Cube (Cuba, Kaub): Hortus=Gart	
Gart der Gesundheit	20
German Hortus=Gart	
Grant Herbar =successor to Arbolayre (Gart).....	30
Herbarius in dietsche=Herbarius lat. in Netherland. translation.....	15 h, b
Herbarius latinus	undated 12, dated 15
Herbarius lat. cum figuris=printed in Netherlands	13 c, d
Herbarius Maguntinus=Herbarius lat.....	15 a
Herbarius Passavinus or Patavinus=Herbarius lat.....	16
Herbarius zu teutsch=Gart	
Herbolarium=Herbarius lat. printed in Italy.....	17 f
Hortus family=Herbarius lat., Gart and Hortus san.....	9
'Hortus problem,' Note on.....	32
Hortus Sanitatis	26
Hortus san., the smaller=Gart	
Hortus san., the larger=Hortus san.	
Hortus san. translate en francois=Hortus san. French.....	29
Johann of Cube: Hortus=Gart	
Kruidboek=Herbarius lat. Netherland. translation.....	15
Macer floridus: De viribus herbarum	3
Ortus sanitatis=Hortus san.	

NOTE ON THE "HORTUS PROBLEM"

In a brief essay on the "Hortus Sanitatis" which appeared recently in these *Papers* (XI, 57) Mr. Bay stated that this work, beyond easily ascertainable bibliographic data, "presents one of the most puzzling problems in the history of book-making." The problem according to him consists in four uncertainties: (1) about the person of the compiler, (2) about the primacy of the Latin or the German version, (3) about the origin, literary as well as geographical, of the work, and (4) about the connection of Johannes Cuba with it. He comes to the conclusion that the "solution of this problem must come *from the books themselves*." An excellent hint from a bibliographer to bibliographers. To take his last uncertainty first, or rather (1) and (4) together, I must point out that he is in error when he states that Johannes Cuba's name does not occur in print in any edition previous to that of 1514. It does occur in *every* edition of the Gart at the end of chapter 76, and it is exactly this fact that has brought the name into the discussion about the authorship. No other evidence of his connection with the book from fifteenth-century sources has been brought to light. In the sixteenth century, however, his name is frequently appended to reprints of one or the other of these books, and the tradition, then formed, has been transmitted to us. That the work cannot have an author, but at best only an editor, is clear when we recognize its encyclopaedic character. That it is such, and not merely an uncritical

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and purely commercial compilation, I believe can be shown without difficulty, although space is wanting for it here. It would of course be interesting to know the man who incited and supervised an undertaking which inspired directly a great amount of original work. But mediaeval enterprises of this kind were not apt to be labeled as one-man jobs as they are now; they were, like the cathedrals of the day, the result of an intimate co-operation between craftsman and scholar, to whom the glory of self-advertisement had not yet made an appeal. Whether or not it is sound policy to project our own standards in these matters onto the products of the fifteenth century may be a debatable point, but the most we can concede to Johan Wonnecke of Caub as a possible share in the completion of the Gart is that he may have read proof and annotated a passage. He may have done more, he may have done less, and little does it matter as long as his name does not interfere with the nomenclature of the books as now established.

Point (2) regarding the primacy of the Latin or German Hortus offers really no uncertainty when we keep in mind that the German, i.e., the Gart, was first published in 1485 and the Latin Hortus six years later, in 1491. There was a time when it was thought that the undated *Hortus* editions might have served as the basis of an abbreviated German version, but we know now definitely that all of these editions appeared after 1491. A further supposition was, and this leads us directly to point (3) regarding origins, that both Gart and Hortus were based

on a manuscript original in Latin which, as in the case of the French herbals and in that of both *Apuleius* and *Macer floridus*, was simply reproduced by the press of some enterprising printer. This supposition can be proved only by the discovery of the actual manuscript; until then it remains pure speculation on analogy. It is indeed astonishing that no such manuscript has been found during the great sifting process which has taken place in almost all manuscript collections while the prototypes of the other printed herbals were readily discovered. *En passant* I may say that the manuscript which Mr. Bay mentions belongs to this latter class and has no similarity with the text of the Hortus. It would seem therefore quite possible that no Hortus manuscript exists and that the printed Hortus books are of purely autochthonous origin, i.e., the text collected, the pictures drawn and cut right there and then, in or near the printing-office, similarly as we know it was done in the case of the famous herbals of the next century. It is difficult to understand why this obvious explanation has not been proposed before, and I believe all the internal evidence is in favor of it.

This is really the only remaining "puzzle" in the "problem," and it will undoubtedly disappear when historical research throws full light on the cultural and intellectual activities which surrounded and influenced the work of the early printing presses. Carefully planned, not merely exhaustive, bibliographic analyses can further this important research. Applied to definite series of incunabula they provide the indispensable basis of uni-

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form and therefore comparable data. A great deal of the confusion in the Hortus series has been due to the lack of such a basis and the consequent uncertainty of nomenclature. I hope that my lists will prove to be a start in the right direction and that the same principle might be applied to other series of incunabula, practically all of which contain puzzling elements.

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