

IWONA DYMARCZYK  <https://orcid.org/0000-0002-1568-7736>

Museum of Pharmacy, Jagiellonian University  
idymarcz@cm-uj.krakow.pl

## *Medicines from the first pharmacopoeia listed on the apothecary majolica vessels from the Mateusz B. Grabowski collection at the Museum of Pharmacy in Kraków*

### ABSTRACT

This article concerns medicinal preparations from the first European pharmacopoeia listed on the cartouches of apothecary majolica vessels (16<sup>th</sup>–18<sup>th</sup> century) from the Grabowski collection at the Museum of Pharmacy in Kraków. The materials for comparison are three 16<sup>th</sup>-century works: *Ricettario Fiorentino* (1550), *Pharmacopoea* by J. Placotomus (1560) and *Dispensatorium* by V. Cordus (1563). The inscriptions on the apothecary jars for which they were meant comprise greatly important information carriers about medicine in the old days. Their deciphering can also be helpful when dating these objects.

**Keywords:** old medicines, museum, pharmacy, majolica, Mateusz B. Grabowski

**Słowa kluczowe:** dawne leki, muzeum, apteka, majolika, Mateusz B. Grabowski

The Museum of Pharmacy in Kraków has a unique collection of pharmacy majolicas made in Italian manufactories between the 16<sup>th</sup> and 19<sup>th</sup> century. Most of them, as many as 48 containers, arrived at the museum from London in 1976, as a gift from the exiled pharmacist Mateusz Bronisław Grabowski. The collection of Grabowski's ceramics, apart from majolicas, also contains 32 faiences of Dutch and British origin (17<sup>th</sup>–19<sup>th</sup> century) and 3 porcelain containers (France, 19<sup>th</sup> century), totaling 83 objects (Fig. 1).<sup>1</sup>

---

<sup>1</sup> Attribution and dating of all majolicas are given according to: I. Dymarczyk, *Aptekarz i majoliki. O Mateuszu B. Grabowskim i jego krakowskiej kolekcji ceramiki aptecznej* [The apothecary and his majolicas: About Mateusz B. Grabowski and his Collection of Apothecary Ceramics from Kraków], Kraków–Poznań 2015.



**Fig. 1.** Mateusz Bronisław Grabowski, 1954. Photo S. Lipiński. Archive of the Pharmacy Museum in Krakow

The Master of Pharmacy Mateusz Bronisław Grabowski (1904–1976), pharmaceutical inspector of the Warsaw Voivodeship, soldier of the 1939 September campaign and the Polish Armed Forces in the West, London entrepreneur, patron of the arts, art collector. In 1975, he donated about 400 works to the Museum of Art in Łódź and to the National Museum in Warsaw and a year later, a collection of pottery ceramics to the Museum of Pharmacy in Kraków.

Majolicas (or faiences) – baked clay, coated with tin – lead glaze, obtained using a technique originating from the Middle East, widespread on the Iberian Peninsula, and later in Italy, where in the Renaissance, they became one of the symbols of the art of this period. The most important ceramics centers were: Faenza, Urbino, Deruta, Venice, Rome, Montelupo and Savona. Majolicas were very expensive, which is why orders for sets of containers for medicine accentuated the high status of pharmacists during those times.

The purpose of apothecary containers was determined by their characteristic shapes such as: pitchers (for liquid medicines), vases (for liquid and semi-liquid medicines), jars (for semi-liquid and solid medications) and inscriptions on their cartouches (usually in Latin) regarding the name of the medicines for which these containers were meant. Some containers not described can also be found, which could have belonged to the home pharmaceutical kits of a wealthy owner. On later majolicas from the 18<sup>th</sup> century, empty spots are left to enter the name of the drug only at the pharmacy, according to current needs.

The aim of the article is to present the names of medicines placed on the cartouches of the containers from the Grabowski collection, included in the first few European pharmacopoeias. The first “urban” pharmacopoeia appeared in 1498 in Florence, under the title *Nuovo receptario composto dal famosissimo Chollegio degli eximii Doctori della Arte et Medicina della inclita citta di Firenze*, known as *Ricettario Fiorentino* or the *Florentine pharmacopoeia*. Other European cities followed Florence. From 1511, Barcelonan

pharmacopoeias were in force in Barcelona, and in 1546, the authorities of Nuremberg issued a pharmacopoeia titled *Pharmacorum conficiendorum ratio*. *Vulgo vocant Dispensatorium*, in short form, popularly known as Dispensatorium or the Nuremberg pharmacopoeia. This work was created by Valerius Cordus (1515–1544), a German physician, chemist and botanist. In 1560, Johann Placotomus (Brettschneider) (1514–1577), a professor of medicine in Królewiec, and then head of the municipal pharmacy and city physician in Gdańsk, published a pharmaceutical textbook entitled *Pharmacopoea in Compendium Redacta* in Antwerp. The term pharmacopea comes from this work, i.e. a list of drugs authorized for pharmaceutical trade in a given area.<sup>2</sup>

In this study, the Venetian edition of *Dispensatorium* by Cordus from 1563<sup>3</sup> and the reprint of the pharmacopoeias of Placotomus<sup>4</sup> and Ricettario Fiorentino<sup>5</sup> were used. The work of Valerius Cordus proved to be the most useful, because it takes the medical recommendations of preparations into account, given in accordance with the humoral theory in force until the end of the 18<sup>th</sup> century. In order to omit the commentary of the original descriptions, in this article, their updated version has been introduced. It is sometimes the case that the same preparations listed on the pharmacopoeias, slightly differ in composition, that is why the main components of the medicine are given (in the second case, in the original form). The names of plant ingredients have been supplemented with the Latin name of the species from which the given substance is derived. Most of the drug names on the discussed majolicas refer to multi-ingredient preparations, so-called complex medicines (*composita*), such as: ointments, syrups, oils, juices and forgotten confections, canned foods, jams, and “pharmaceutical vodka.”

Ointments (*unguenta*), counted among the most ancient forms of medicine, are obtained by mixing the medicament with an ointment base. These are medicines intended for external use. Among inscriptions on the majolicas from the Grabowski collection, we may find the names of three ointments listed in selected pharmacopoeia. Appropriate containers called *albarello* (a type of pharmacy jar with a narrowing in the middle) were used for them (Fig. 2).

On the band at the bottom of the container, we see the inscription: VNGV[ENTUM] APOSTVLOR[UM], that is ointment of the Apostles, which according to the Avicenna recipe (11<sup>th</sup> century), contained 12 ingredients, including 6 ammonium resins: gum ammoniac (*Dorema ammoniacum* D. Don.), bisabol myrrth (*Opoponax chironium* Koch.), olibanum (*Boswellia sacra* Flueck), bdellium (*Commiphora africana* A. Rich.), galbanum (*Ferulla galbaniflua* Boiss et Buhse) and myrrh *Commiphora myrra* Nees). The remaining ingredients are: verdigris (*Flores aeris*, syn. copper hydroxyacetate); litharge (*Lithargyrum*, syn. lead oxide); long Aristolochia (*Aristolochiae longae* L.); white wax

<sup>2</sup> A. Drygas, *Narodziny leku. Dawne terapie. Lek i jego formy, sposoby wytwarzania i dystrybucji* [The birth of medicine: Old-time therapies. Medicine and its forms, manners of its production and distribution] [in:] *Historia Medycyny* [The history of medicine], ed. T. Brzeziński, Warszawa 2000, pp. 196–200.

<sup>3</sup> V. Cordus, *Novum Valerii Cordi Dispensatorium*, Venetia 1563.

<sup>4</sup> J. Placotomus, *Pharmacopoea in Compendium Redacta*, Apud Viduam Martini Nutij, Antwerp, 1560, facsimile, Christian De Backer, Gent 1973.

<sup>5</sup> *El Ricettario del'Arte, et Universita de Medici et Spetiali della Citta di Firenze*, Florence 1550, facsimile, Christian De Backer, Gent 1973.

(*Cera alba*), turpentine (*Terebinthina*) and olive oil (*Oleum olivarum*). A valuable preparation for the treatment of ulcers and wounds healing with difficulty.<sup>6</sup>

The inscription: V[nguentum]· de· minio<sup>7</sup> appears on one of the Ligurian majolica (Fig. 3). This is an ointment with red. lead (*Minium*, syn. lead tetroxide), combined with rose oil (*Oleum rosarum*) and white wax (*Cera alba*). This ointment, alike the previous one, was used as an anti-inflammatory agent.



**Fig. 2.** Albarello, majolica, Italy, Pesaro (?), 2<sup>nd</sup> half of the 16<sup>th</sup> c.<sup>8</sup>, height 19 cm, inv. no. 5934. Photo A. Olszowski

The next container<sup>9</sup> was designated for: Ung[uentum] Bianco Canf[orato], syn. *Unguentum Album Camphoratum*,<sup>10</sup> a white camphor ointment, containing: white lead (*Cerussa*, syn. basic lead carbonate), camphor (*Camphorum*), rose oil (*Oleum rosarum*)

<sup>6</sup> V. Cordus, *op. cit.*, p. 335; J. Placotomus, *op. cit.*, p. 225; *El Ricettario...*, p. 176.

<sup>7</sup> V. Cordus, *op. cit.*, p. 358 (under the name *Unguentum e minio magistrale*); J. Placotomus, *op. cit.*, lack; *El Ricettario...*, p. 172 (as *Unguento di Minio*).

<sup>8</sup> Other attribution and dating of this object: Deruta or Castel Durande, 1<sup>st</sup> half of the 17<sup>th</sup> c., also applies to the jug from the same set of apothecary containers in the Fig. 7. See: Z. Bela, *The Grabowski Collection in Krakow Museum of Pharmacy*, „Opuscula Musealia” 2015, No. 23, pp. 243–262.

<sup>9</sup> Albarello, majolica, Italy, 17<sup>th</sup>–18<sup>th</sup> c., height 20 cm, inv. no. 5951.

<sup>10</sup> V. Cordus, *op. cit.*, p. 365 (under the name *Unguentum album Camphoratum*); J. Placotomus, *op. cit.*, p. 223b; *El Ricettario...*, p. 170 (under the name *Unguento Bianco secundo Avicenna*).

and white wax (*Cera alba*). It was an anti-inflammatory, desiccant and cooling agent. On the next three majolicas, the names of apothecary electuaries (*electuarium*) can be found, preparations with a semi-liquid consistency, composed of powdered plant ingredients, syrups, jams or honey (Fig. 4).



**Fig. 3.** Albarello, majolica, Italy, Savona, Girolamo Salomone workshop, 17<sup>th</sup> c., height 21 cm, inv. no. 5923, object signed. Photo A. Olszowski



**Fig. 4.** Albarello, majolica, Italy, Venice, the end of the 16<sup>th</sup> c. or the beginning of the 17<sup>th</sup> c., height 21 cm, inv. no. 5930. Photo A. Olszowski

Inscription: *Benedicta*,<sup>11</sup> probably meaning a laxative electuary, also used to make pills called *Pilulae Benedictae*. This patent medicine comprised 24 ingredients:<sup>12</sup> turpeth (*Convolvulus turpethum* L.), sugar (*Saccharum*), scammony (*Convolvulus scammonia* L.), spurge (*Euphorbia* L.), hermodactyl (*Colchicum variegatum* L.), dog rose (*Rosa canina* L.), cloves (*Eugenia caryophyllata* L.), spikenard (*Nardus indica* J. Bauh.), ginger (*Zingiber officinale* Roscoe), saffron (*Crocus sativus* L.), saxifrage (*Saxifraga* I.), long pepper (*Piper longum* L.), gum ammoniac (*Dorema ammoniacum* D. Don), cardamom (*Elettaria cardamomum* L.), selery seeds (*Apium graveolens* L.), rock salt (*Sal gemmae*),

<sup>11</sup> The name *Benedicta* may also refer to *Herba Benedicta*, thus wood avens (*Geum urbanum* L.). See: Sz. Syreński, *Zielnik* [Herbarium], Kraków, 1613, p. 266.

<sup>12</sup> The first to give the original name according to the pharmacopoeia: V. Cordus, *op. cit.*, pp. 203–204. Also: J. Placotomus, *op. cit.*, pp. 181–182; *El Ricettario...*, p. 119 (as *Benedetta Semplice*).



galangal (*Alpinia officinarum* Hance), nutmeg flowers (*Myristica fragrans* Hout.), caraway (*Carum carvi* L.), fennel (*Foeniculum vulgare* Mill.), asparagus seeds (*Asparagus officinalis* L.), butcher's broom seeds (*Ruscus aceleatus* L.), purified honey (*Mel despumatum*) and gromwell seeds (*Lithospermum officinale* L.). A laxative, also recommended in melancholy.

On the containers from Grabowski's collection (Fig. 5),<sup>13</sup> the following inscription regarding the medication called *Trifora Magna* (correctly *Tryphera magna*) appears twice. This is a electuary comprising 26 ingredients: opium (*Papaver somniferum* L.), cinnamon (*Cinnamomum verum* L.), cloves (*Eugenia caryophyllata* L.), galangal (*Alpinia officinarum* Hance), spikenard (*Nardus indica* J. Bauh.), zedoary (*Curcuma zedoaria* Christm.), ginger (*Zingiber officinale* Roscoe), Arabian costus (*Costus arabicus* L.), common styrax (*Styrax officinalis* L.), calamus (*Acorus calamus* L.), chufa sedge (*Cyperus esculentus* L.), Florentine iris (*Iris florentina* L.), peucedanum (*Peucedanum* L.), mandrake (*Mandragora officinarum* L.), Alpine valerian (*Valeriana celtica* L.), dog rose (*Rosa canina* L.), pepper (*Piper* L.), anise (*Pimpinella anisum* L.), celery (*Apium graveolens* L.), Macedonian parsley (*Athamanta macedonica* [L.] Spreng), fennel (*Foeniculum officinale* L.), carrot (*Daucus carota* L.), black henbane (*Hyoscamus niger* L.), cumin (*Cuminum cyminum* L.), basil (*Ocimum basilicum* L.), purified honey (*Mel despumatum*).<sup>14</sup> This electuary was recommended for stomach pains, mental disorders, insomnia and pneumonia. Apothecary preparations called confections (confectiones), which were prepared by coating medicinal substances with sugar, were also very popular at that time. On one of the containers (Fig. 6), there is an inscription: CONF[ECTIO] [H]AMECH meaning Hamech's confection, prepared in two varieties: maior and minor (according to the recipe of the 9<sup>th</sup> century Arab medic – Mesue).

The *maior* form contained 23 ingredients: myrobalans (*Terminalia* L. and *Phyllanthus* L.), rhubarb (*Rheum palmatum* L.), agar (*Rhodophyta*), colocynth (*Citrullus colocynthis* [L.] Schrad), common polypody (*Polypodium vulgare* L.), absinthe (*Artemisia absinthium* L.), thyme (*Thymus vulgaris* L.), senna (*Senna* Mill.), viola (*Viola odorata* L.), dodder (*Cuscuta epithimum* L.), anise (*Pimpinella anisum* L.), fennel (*Foeniculum officinale* L.), dog rose (*Rosa canina* L.), drug fumitory (*Fumaria officinalis* L.), domestic plum (*Prunus domestica* L.), raisins (*Vitis vinifera* L.), pulp of cassia (*Cassia fistula* L.), pulp of tamarind (*Tamarindus indica* L.), manna (*Manna fraxinea* L.), sugar (*Saccharum*), scammony (*Convolvulus scammonia* L.), fumitory juice and seeds (*Fumaria officinalis* L.), spikenard (*Nardus indica* J. Bauh.). This drug was intended for the treatment of skin diseases such as scabies, leprosy and also burns.

*Minor* form (21 ingredients): myrobalans (*Terminalia* L. i *Phyllanthus* L.), dodder (*Cuscuta epithimum* L.), fumitory juice and seeds (*Fumaria officinalis* L.), absinthe (*Artemisia absinthium* L.), thyme (*Thymus vulgaris* L.), calamint (*Calamintha* Mill.), common polypody (*Polypodium vulgare* L.), agar (*Rhodophyta*), licorice (*Glycyrrhiza glabra* L.),

<sup>13</sup> The second container intended for the same preparation: albarello, majolica, Italy, Pesaro (?), 2<sup>nd</sup> half of the 16<sup>th</sup> c., height 23 cm, inv. no. 5935, from the same set of containers as the albarello with inv. no. 5934 (Fig. 2).

<sup>14</sup> V. Cordus, *op. cit.*, pp. 127–128; J. Placotomus, *op. cit.*, p. 181b (as *Triphora magna*); *El Ricettario...*, p. 133.

small bugloss (*Anchusa arvensis* L.), French lavender (*Lavandula stoechas* L.), wall germander (*Teucrium chamaedrys* L.), yellow bugle (*Ajuga chamaepitys* L.), bedeguar (*Rosa canina* L.), anise (*Pimpinella anisum* L.), domestic plum (*Prunus domestica* L.), jujube (*Ziziphus jujuba* Mill.), Assyrian plum (*Cordia myxa* L.), raisins (*Vitis vinifera* L.), purified honey (*Mel despumatum*), scammony (*Convolvulus scammonia* L.). This was a confection used as a laxative, also recommended for melancholy, skin diseases, i.e. scabies, leprosy, etc.<sup>15</sup>



**Fig. 5.** Albarello, majolica, Italy, Venice or Bassano, 18<sup>th</sup> c., height 18 cm, inv. no. 5971.  
Photo A. Olszowski



**Fig. 6.** Albarello, majolica, Italy, Venice or Rome, 16<sup>th</sup>/17<sup>th</sup> c., height 22 cm, inv. no. 5932.  
Photo A. Olszowski

On another container,<sup>16</sup> we can see the name: MIVA CITON[IORUM] SIM[PLEX] or common quince confection. According to Mesue's recipe, it contained quince juice purified with sugar<sup>17</sup> (*Cydonia*, syn. common quince [*Cydonia vulgaris Pers.*]). This was a preparation used for improving digestion.

<sup>15</sup> V. Cordus, *op. cit.*, p. 198; J. Placotomus, *op. cit.*, p. 186; *El Ricettario...*, p. 123 (as *Lattouaro Amech di Mesue*).

<sup>16</sup> Pharmaceutical jug, majolica, Italy, Deruta or Castel Durande, 1563, height 24 cm, inv. no. 5927, from the same set of containers as inv. no. 5926 (Fig. 12).

<sup>17</sup> V. Cordus, *op. cit.*, p. 283; J. Placotomus, *op. cit.*, lack; *El Ricettario...*, p. 85 (as *Miva Semplice*).

The next four pitchers were designed to store syrups (*syrupus*), i.e., sugar solutions with dissolved medicinal substances.

Inscription: SY[RUPUS] D[E] LVPVLIS<sup>18</sup> meaning humulus syrup, which included purified humulus juice (*Humulus lupulus* L.) and fumitory juice (*Fumaria officinalis* L.), flavored with sugar. A remedy for clearing the bile ducts.



**Fig. 7.** Apothecary jug, majolica, Italy, Pesaro (?), 2<sup>nd</sup> half of the 16<sup>th</sup> c., height 23 cm, inv. no. 5933. Photo A. Olszowski



**Fig. 8.** Apothecary jug, majolica, Italy, Urbino, beginning of the 17<sup>th</sup> c., height 21 cm, inv. no. 5975. Photo A. Olszowski

Another apothecary jug<sup>19</sup> presents the inscription: Sy[rupus] rosato solutivo (correctly *Syrupus Rosatum Solutivum*), denoting a diluted rose syrup, obtained from a brew of rose with sugar and honey.<sup>20</sup> According to later sources, it was a mild laxative releasing agent, recommended for infants.<sup>21</sup>

<sup>18</sup> V. Cordus, *op. cit.*, p. 282; J. Placotomus, *op. cit.*, lack; *El Ricettario...*, p. 97 (as *Siroppo di Luppoli*).

<sup>19</sup> Pharmaceutical jug, majolica, Italy, Venice or Rome, 1585, height 22 cm, inv. no. 5936, object from the same set of containers with jug inv. no. 5938 (Fig. 11).

<sup>20</sup> Among the selected pharmacopoeia, this name only appears in: *El Ricettario...*, p. 94 (as *Siroppo Rosato solutivo*) and the species of the plant from which it comes is not given.

<sup>21</sup> *Pharmacopoea Wirtenbergica*, Stuttgart 1786, part 2, p. 197.



Inscription: SY[RUPU]S D[E] BIZA[N]TIIS (correctly *Syrupus de Bizantinus*)<sup>22</sup> regarding Byzantine syrup, which according to the recipe by Mesue – Arabic medic living in the 10<sup>th</sup>–11<sup>th</sup> century – contained: endive juice (*Cichorium endivia* L.), celery juice (*Apium graveolens* L.), hop juice (*Humulus lupulus* L.), common bugloss juice (*Anchusa officinalis* L.), sugar (*Saccharum*) and water. This medication was used for liver diseases improving bile duct patency.



**Fig. 9.** Apothecary jug, majolica, Italy, Albisola, 17<sup>th</sup>/18<sup>th</sup> c.<sup>23</sup>, height 20 cm, inv. no. 5939, object signed. Photo A. Olszowski



**Fig. 10.** Apothecary jug, majolica, Italy, Nove, Pasquale Antonibon workshop, mid-18<sup>th</sup> c., height. 19 cm, inv. no. 5941. Photo A. Olszowski

Inscription: Sir[upus] De Liquirit[ia]<sup>24</sup> – syrup from licorice, syn. *Syrupus Glycyrrhizae* – syrup of Glycyrrhiza. Medicine according to Mesue, containing: licorice root (*Glycyrrhiza glabra* L.), Venus hair fern (*Adiantum Capillus veneris* L.), hyssop (*Hyssopus officinalis* L.), rose water (*Aqua rosarum*), maltose, honey and water. This was a drug recommended for pneumonia, cough and in general – for inflammation of the respiratory tract.

<sup>22</sup> V. Cordus, *op. cit.*, p. 256 (as *Sirupus Dinarii sine de Bisantiis simplex*); J. Placotomus, *op. cit.*, p. 135 (as *Sirupus Bizantinus*); *El Ricettario...*, p. 97 (as *Siropp di Bisanti semplice*).

<sup>23</sup> Other attribution and dating of this object: Alcora (Spain), 1<sup>st</sup> half of the 18<sup>th</sup> c. See: Z. Bela, *op. cit.*

<sup>24</sup> V. Cordus, *op. cit.*, p. 272 (as *Sirupus de glycyrrhiza*); J. Placotomus, *op. cit.*, p. 140 (as *Sirupus E Glycyrrhiza*); *El Ricettario...*, p. 97 (as *Siroppo di Glycyrrhiza di Mesue*).

Inscription: SYR.[UPUS] QUINQ.[UE] RAD[ICUM] APER.[IENTIUM]<sup>25</sup> – syrup from five roots, a mild laxative. The following roots comprise the medicine: celery (*Apium graveolens* L.), fennel (*Foeniculum officinale* L.), parsley (*Petroselinum sativum* L.), butcher's-broom (*Ruscus aculeatus* L.), asparagus (*Asparagus officinalis* L.), sugar (*Saccharum*) and spring water. The medicine was supposed to clear the bile ducts.

In the everyday practice of ancient pharmacies, medicinal honeys (mellita) were prepared, comprising honey combined with decoction, juice or fresh vegetable raw material and concentrated to the consistency of honey.



**Fig. 11.** Apothecary jug, majolica, Italy, Venice or Rome, end of the 16<sup>th</sup> c., height 22 cm, inv. no. 5938. Photo A. Olszowski



**Fig. 12.** Apothecary jug, majolica, Italy, Deruta or Castel Durande, 1563<sup>26</sup>, height 24 cm, inv. no. 5926. Photo A. Olszowski

The collection comprises two containers for medicinal honey. For single-ingredient honey, so-called simple containers<sup>27</sup> with the following inscription were intended: *Oximel*

<sup>25</sup> V. Cordus, *op. cit.*, p. 251 (as *Sirupus e quinque radicibus*); J. Placotomus, *op. cit.*, p. 145 (as *Syrupus E Quinque radicibus*); *El Ricettario...*, p. 93 (as *Siroppo di cinque radici*).

<sup>26</sup> Other attribution and dating of this object: probably Venice, 2<sup>nd</sup> half of the 16<sup>th</sup> c. See: Z. Bela, *op. cit.*

<sup>27</sup> Albarello, majolica, Italy, 17<sup>th</sup>/18<sup>th</sup> c., height 20 cm, inv. no. 5950.

*Zuccarino* (correctly *Oximel*)<sup>28</sup> or honey-vinegar, syn. *Oximel simplex* – simple honey-vinegar. According to the recipe for the preparation of the drug, purified honey, “the most pungent” vinegar and “the purest” water, should have been used to make the medicine. The preparation was recommended to improve digestion.

Inscription: *Oximelcomp[ositum]*<sup>29</sup> – honey vinegar, preparation made of: celery root and seeds (*Apium gravrolens* L.), fennel root and seeds (*Foeniculum officinale* L.), parsley root (*Petroselinum sativum* L.), butcher’s-broom root (*Ruscus aculeatus* L.), asparagus root (*Asparagus officinalis* L.), vinegar (*Acetum*), purified honey (*Mel despumatum*). A diaphoretic and agent for restoring the patency of the liver, spleen and kidneys.

Another form of the drug representing the names of medicines listed on the discussed containers were oils (*Olea aetherea*), which in 16<sup>th</sup> century pharmacies, were still obtained via so-called digestion or maceration at elevated temperatures, a method consisting of exposing a medicinal raw material submerged in olive oil to the sun for a period of 30–40 days<sup>30</sup>.

The inscription: *OL[EUM] ABSINTII*<sup>31</sup> or wormwood oil. This agent was obtained from small absinthe (*Artemisia pontica* L.), syn. Roman wormwood; it had cholagogic, laxative action, and was mainly recommended in the eradication of internal parasites.

There is an inscription on one of the other albarello:<sup>32</sup> *Oelio aneti* (correctly *Oleum Anethi*),<sup>33</sup> meaning oil from dill fruit (*Anethum graveolens* L.), used as a carminative, analgesic, antipyretic, sleeping pill, was also supposed to remove tumors and abscesses.

So-called vodkas (aquae), that is, old-time extracts from medicinal plants, less often from raw materials of animal or mineral origin, were mainly obtained by distillation using steam. Of the selected pharmacopoeia, only Placotomus takes the chapter titled *De Aquis Destillatis*,<sup>34</sup> i.e. distilled water, into account. The inscriptions regarding this form of medicines appear on two Ligurian hydria vases from the same set of pharmaceutical container and on the pitcher from 1617 (Fig. 15).

Inscription: *Aquæ. Capil[o]r[um], Ven[er]i[s]* (correctly *Aqua Capilorum Veneris*) – water from the Venus hair fern, syn. water from the maidenhair fern, water extract from the fern (*Adiantum Capillus veneris*. Medicinal use – respiratory diseases).<sup>35</sup>

<sup>28</sup> V. Cordus, *op. cit.*, p. 285; J. Placotomus, *op. cit.*, p. 143; *El Ricettario...*, p. 92 (as *Oxymele semplice secundo Galeno*).

<sup>29</sup> V. Cordus, *op. cit.*, p. 285; J. Placotomus, *op. cit.*, p. 143; *El Ricettario...*, p. 92 (as *Oxymele composto di Mesue*).

<sup>30</sup> J. Szostak, *Farmakognozja, farmacja galenowa i aptekarstwo w renesansowych zielnikach polskich* [Pharmacognosy, galenical pharmacy and pharmacy in the Polish Herbaria Renaissance], Warszawa 2006, p. 277.

<sup>31</sup> V. Cordus, *op. cit.*, p. 390; J. Placotomus, *op. cit.*, p. 215a; *El Ricettario...*, p. 162 (as *Olio di Assentio*).

<sup>32</sup> Albarello, majolica, Italy, Venice, the end of the 16<sup>th</sup> c. or the beginning of the 17<sup>th</sup> c., height 21 cm, inv. no. 5931, from the same set of apothecary containers as the albarello with the inv. no. 5930, see: Fig. 4.

<sup>33</sup> V. Cordus, *op. cit.*, p. 387 (as *Oleum Anethinum*); J. Placotomus, *op. cit.*, p. 215a.; *El Ricettario...*, lack.

<sup>34</sup> J. Placotomus, *op. cit.*, pp. 45–46.

<sup>35</sup> Sz. Syreński, *op. cit.*, p. 588.

Inscription: Aquæ. Plantag[inis]. (correctly Aqua Plantaginis) – water from plantain, water extract from plants from the plantain family Plantaginaceae, e.g. narrow leaf plantain (*Plantago lanceolata* L.). Medicinal use: anti-inflammatory, anti-haemorrhagic, anti-diarrheal.<sup>36</sup>

Inscription: A[QUA]DĪ CARDOS[ANT]IO – water from holy thistle, syn. *Aqua Cardui Benedicti*. Raw material: blessed thistle (*Cnicus benedictus* L., syn. *Carduus benedictus* L.). This preparation had a wide spectrum of usages, including headaches and earaches as well as for problems of the respiratory tract.<sup>37</sup>



**Fig. 13.** Pharmacy vase, majolica, Italy, Savona, Pesceto workshop, 17<sup>th</sup>/18<sup>th</sup> c., height 42 cm, inv. no. 5918, object signed. Photo A. Olszowski



**Fig. 14.** Pharmacy vase, majolica, Italy, Savona, Pesceto workshop, 17<sup>th</sup>/18<sup>th</sup> c., height 42 cm, inv. no. 5919, object signed. Photo A. Olszowski

Placotomus, in the chapter *Succi et liquores* (Juices and liquids), mentions a preparation called *Aloe hepatica*, syn. *Aloe succotrina*<sup>38</sup> or hepatic aloe, evaporated juice from the leaves of various aloe species (e.g. *Aloe vera* L.). A laxative and choleric agent.

<sup>36</sup> *Ibidem*, p. 1133.

<sup>37</sup> As so-called "Carduus water", see: Sz. Syreński, *op. cit.*, p. 562.

<sup>38</sup> V. Cordus, *op. cit.*, a preparation appears with the name *Aloen simplex*, p. 399. J. Placotomus, *op. cit.*, p. 42; *El Ricettario...*, p. 12 (as *Aloe Hepatico*).



Inscription: Aloe paticho (correctly *Aloe hepatica*) appears on the container presented below (Fig. 16).

## Conclusions

The inscriptions on the pharmacy containers are one of the carriers of information about medicine from the old days, but they can also be helpful in determining the attribution



**Fig. 15.** Apothecary jug, majolica, Italy, 1617,<sup>39</sup> height 32 cm, inv. no. 5921. Photo A. Olszowski



**Fig. 16.** Albarello, majolica, Italy, Faenza or Palermo, around 1600, height 27 cm, inv. no. 5924. Photo A. Olszowski

and dating of these relics. As can be seen from the above statement, only 20 out of 48 majolicas from the Grabowski collection were intended for preparations included in selected pharmacopoeias from 1550, 1560 and 1563. Let us note that the preparation included in the pharmacopoeia of Placotomus is not always mentioned in the Florentine or Nuremberg, or vice versa, pharmacopoeias. That is why several sources have been used.

Considering that most of the mentioned specifics were still used for 200 years, i.e. until the end of the 18<sup>th</sup> century, the inscription on the object can not be the only determinant

<sup>39</sup> Other attribution and dating of this object: Lisbon or Coimbra, 1706, see: Z. Bela, *op. cit.*



of the time of creation of these objects. Confirmation of this thesis may be the fact that only 12 majolicas were included in 16<sup>th</sup> century products, the dating of the others was established as later times.

Not all apothecary inscriptions on majolicas from the 16<sup>th</sup> century are confirmed in the entries of the cited pharmacopoeias. Such an example is a vase with the inscription DIASORBITO[N].<sup>40</sup> This name has also not been found in several other medical sources. However, it is known that the prefix dia- was used in the naming of medicines from those times and meant a remedy with a great content of the component contained in the second part of the word, and therefore Dia-sorbiton – a drug based on rowan fruit.

In recognizing the time and place of creation of the ceramic objects, of great importance are the signatures of the factory placed on the bottom of the dishes, except that in the case of majolicas, they do not appear too often. Among the containers mentioned, only four objects are signed. Due to numerous copies or replicas on the art market, the attribution and dating of majolicas resulting from the signatures should be supported by such research methods as: evaluation of the material, form and painted decoration of the objects.

With the advances in medical and pharmaceutical sciences, the presented specifics have ceased to have therapeutic significance. In recent years, researchers have become increasingly interested in old-time pharmacy recipes, perhaps the inspiration for these activities will also be inscriptions on antique containers in which the “mysterious” specifics were once stored.

One of the scientific disciplines interested in these issues is museology. As can be seen from the above text, the ability to find links between a pharmaceutical inscription on a historic object and its assessment as an object of artistic craft, turns out to be useful in determining the time of this object’s creation. This applies, first of all, to pharmaceutical containers, but also to furniture, i.e. so-called repositories designed for herbs and other objects, on which there are inscriptions of the names of drugs and their components.

## Bibliography

- Bela Z., *The Grabowski Collection in Krakow Museum of Pharmacy*, „Opuscula Musealia” 2015, No. 23, pp. 243–262.
- Cordus V., *Novum Valerii Cordi Dispensatorium*, Venetia 1563.
- Drygas A., *Narodziny leku. Dawne terapie. Lek i jego formy, sposoby wytwarzania i dystrybucji* [The birth of medicine: Old-time therapies. Medicine and its forms, manners of its production and distribution] [in:] *Historia medycyny* [The history of medicine], ed. T. Brzeziński, Warszawa 2000, pp. 196–200.
- Dymarczyk I., *Aptekarz i majoliki. O Mateuszu B. Grabowskim i jego krakowskiej kolekcji ceramiki aptecznej* [The apothecary and his majolicas: About Mateusz B. Grabowski and his collection of apothecary ceramics from Kraków], Kraków–Poznań 2015.
- El Ricettario del’Arte, et Universita de Medici et Spetiali della Citta di Firenze*, Florence 1550, facsimile, Christian De Backer, Gent 1973.
- Pharmacopoea Wirtenbergica*, Stuttgart 1786.

<sup>40</sup> Small pharmaceutical vase, majolica, Italy, Montelupo, 16<sup>th</sup> c., height 16 cm, inv. no. 5925.

- Placotomus J., *Pharmacopoea in Compendium Redacta*, Apud Viduam Martini Nutij, Antwerp 1560, facsimile, Christian De Backer Gent 1973.
- Syreński Sz., *Zielnik* [Herbarium], Kraków 1613.
- Szostak J., *Farmakognozja, farmacja galenowa i aptekarstwo w renesansowych zielnikach polskich* [Pharmacognosy, galenical pharmacy and pharmacy in the Polish Herbaria Renaissance], Warszawa 2006.