

PHARMACOPOEIAS FROM THE DUCKY OF NAPLES TO KINGDOM OF THE TWO SICILIES

Raimondo Villano

Chronology

Duchy of Naples (from 763 up to 1137); Duchy of Naples (until 1195: Norman); Kingdom of Sicily (until 1266: Swabians), Kingdom of Naples (until 1442: Anjou, Durazzo family), Kingdom of Naples (until 1646: Aragonese, Spanish); Neapolitan Republic (until 1647), Kingdom of Naples (until 1713: Spanish); Kingdom of Naples (until 1734: Austrians), Kingdom of Naples (until 1799); Republic Naples (1799), Kingdom of Naples (until 1806), Kingdom of Naples (until 1815: French) Kingdom of the Two Sicilies (up to 1860).

1. Introduction

Various ancient works could be considerable as a kind of forerunner Pharmacopoeia of the Duchy of Naples, among them we will just mention the **Antidotarium**, attributed to Donnolo (this mentions it at the end of *Sēferha-Mirqāōt*, § 20), but in fact, it is an obvious interpolation aimed at integrating the remedies of the book with those of the anonymous. Of Donnolo, *Shabbēṭay Bar Abrāhām* (913-ca1004), however, a physician and man of science jew twelve kidnapped by the Saracens in Capua, please note the **Sēfer ha-Mirqāōt**, by no means derivative or compilation, and in fact, a original compendium of pharmacological experience gained by the author in about forty years of practice. The book is rich in medicinal formulations for remedies, potions, powders, plasters, ointments and clutches (the latter known as '*Seplasia*', right from the famous square of the city of Capua, a flourishing market of perfumes and ointments on the outskirts of Naples).

2. Antidotario Salerno

Nicolò Praepositus Salernitanus (authoritative man and responsibility in the prestigious medical school of Salerno), physician-pharmacist operates at about 1140, leaving the School and to future generations the final draft of **Antidotarium**: Treaty concerning the medical, pharmaceutical and therapeutic, containing a collection of 139 recipes hospitaller daily practice with the adoption of weights and measures based on all antidotaries and pharmacopoeias following (with a current range from gram to pound through the scruple, the drama, the ounce) and with the 'introduction of new drugs, including anesthetic spongia soporific, henbane, and mandrake. This text is considered the first collection of recipes of European medicine and for many centuries has been the official source, to which they refer, for doctors and pharmacists. Emperor **Frederick II**, in fact, raises the **Antidotarium Nicolai** official pharmacopoeia in Europe: it is the first example of a kind of imposed by a Pharmacopoeia. The work also inspires and influences a huge amount of various herbaria, recipe books, abstracts and antidotaries that follow, until the early years of the eighteenth century.

3. Subsequent evolution

In the following centuries the spread, facilitated by the introduction of printing, forms, antidotaries, texts, treaties or summaries that describe the medicines and their preparation makes it theoretically possible for any doctor or druggist prepare the same medicine in practice, however, this often occurs in different ways, with different methods and ingredients, precisely because of the frequent discrepancy between the recipes. They feed well, confusion, fraud and adulteration, often dangerous for the sick.

The recognition of official introduced in the domains with the florentine Ricettario Fiorentino published 1498, well justifies its consideration as a prime example of Pharmacopoeia, according to modern concepts, this text inspired by the pharmacopoeias subsequently published in each city, and then, in the: fact , are first cities to have an own Pharmacopoeia and, then, the regional states and, then, proceeding in Europe, the movements of unification, the individual nations.

4. Pharmacopoeia of the United since the sixteenth century

From the sixteenth century and the “*Ricettario fiorentino*”, are available in the United Neapolitan many works, including “*Antidotario Catanese*” in the middle of the sixteenth century; “*Petitorio Napolitano*” in 1614; “*Messina Pharmacopoeia*” 1629; “*Napolitano Antidotario*” of Almo Collegio apothecaries by Francesco Savi in 1642; “*Napolitano Antidotario*” by Joseph Donzelli, 1642; “*Napolitano Antidotario*” by Francesco Greco di Mesagne of 1642; “*Amussis Medicamentaria*” by Andrea Vetrano, written for the apothecaries of Palermo and published in 1655; “*Dispensatorio or Antidotario Catanese*” in 1658; “*Napolitano Petitorio*” by Joseph Donzelli of 1663; “*Catanense dispensatorium*” by Nicolò Catanuto of 1666; “*Theatre pharmaceutical dogmatic and spargirico*” by Joseph Donzelli published in Naples in 1667; “*Antidotarium Panormitanum Pharmacochymicum*” in 1670 by Nicolò Gervasi (in Palermo, however, are also used *Pharmacopoeia Londoner* and the *French Codex*); “*Pharmacopoeia for use by pharmacists, doctors and modern in Italy*” by L. V. Brugnattelli, published in Palermo in 1811; “*Pharmaceutical Neapolitan Cookbook*” by Domenico Cotugno, published in Naples in 1811; “*Cookbook Pharmaceutical Napoletano*”, 1823; “*Napolitano Cookbook pharmaceutical price of medicines*”, published in Naples in 1855 by the General Protomedicato Kingdom.

5. Antidotario Catanese

You collect neatly fruitful results of a centuries-old love for the art of medicine and society: in **Catanatense Dispensatorium, sive Antidotarium**, *Ea continens medicamenta, quae apud nostros Medicos usitatoria habentur Simplicia itidem quae principalium vice, (si ea desiderantur) a cienteia, ex industria recentans, A Nicolao Catanuto Pharmacopola Catanense concinnatum*, which we consider here the issue Catanae, former Typographia Iosephi Bisagni, in Palatio illustrious Senatum, 1666.

It is a detailed and treated in the title is the reference to a substitute, who are a constant primary Dispensatorium (despite the terms “*si ea desiderantur*”). The structure of the *Dispensatorium* Catanuto resumed early experiences caused, for example, the collection of Jerome Varii *Secreti Brea* (always Catania) printed in 1618 in Messina and work “*Discourses panels which taught diligently to Disciples of Art, Art of Spetiararia*”, edited by Anthony de Francisci in Palermo in 1625.

The scheme of *Dispensatorium*, no index, classifies drugs, such as practice period, not for therapeutic category but according to pharmaceutical forms; individual *Setiones* are confidential, therefore, the various electuaries, ointments, plasters, etc..

In detail, the *Dispensatorium* is structured as follows: *Sectio Prima (De Electuaris solidis, speciebus et Pulveribus* (pp. 1-28); *Sectio Secunda (De Electuaris mollibus*, 29-126); *Sectio Terzia (De Saccharis, seu Conservis* 127-134); *Sectio Quarta (De Syrupis, Rob, Iulepis, Aquis et Decoctis* 135-194); *Sectio Quinta (De Pilulis, Trochiscis, Sief et Suppositoriis* 195-216); *Sectio Sexta (De Unguentis, Ceratis et Emplastris* 217-262); *Sectio Septima (De Oleis* 263-287); *Curiosis Tyronibus Chemicam profiteri cupientibus* 288-300).

Of particular interest appears the *Appendix* of *Sectio Septima*, in which there is a call to the use of chemical remedies, although they are complex operations main art Chemistry of time, ie the *digestio*, the *putrefactio*, the *circulatio* and *fermentatio*. There are many requirements derived mainly from Mesue, Poder, Menander, but also original recipes drawn from local practices, such as *Pulvis to destillationem Francisci Manfredi, Theriaca Andromaci* the same Canuto prepared in 1663 by the bishop of Catania Cardinal Astalli. In the *Dispensatorium*, in addition, reports are given realistic conditions of the art pharmaceutical and health in Catania revealing collusion, corruption and distortion health management, confirmed by an anonymous “*Report on the Observance of the Constitutions Protomedicali on the situation in Palermo*” in that time (this document in the funds of the Library Senatorial Palermo) commissioned by the Viceroy around mid ‘600; come to the surface, in fact, many “*crafty creative*” covered by omertose powerful factions aimed at unscrupulous gain at the expense of the health of poor people “*Many of those laid off for profit, even theft, make medicines in their own way, take them and sell to the sick, with the promise of healing, profit from money to patients and relatives, and credulous of the fame of these so-called doctors approved by the upper found defrauded and the patient becomes incurable or dead. (...) There is a lack of control inspections, and so they have the freedom to sell what he pleases, and commit crimes with exorbitant prices and compositions and medicaments, and not because they fear punishment and bring rise in recette medicines and syrups to their way to get rid of adulterated material that can be found in shops, changing several times the quality of medicines ordered by physicians with great harm to poor sick (...) Remain in their shops the*

simple and compound medicines aged, and without virtù anziché burn. But not having fear, sell them with great harm to poor sick (...)

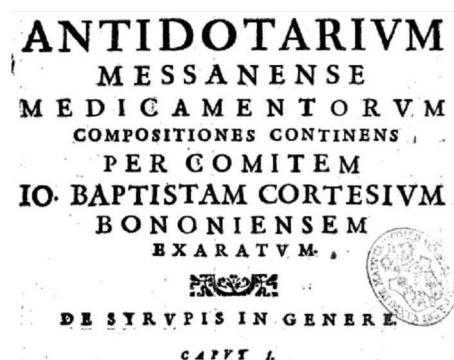
6. Antidotaries Messina



Among the antidotaries Messina are annoverabili: the folio of the bolognese Giovan Battista Cortesi "*Pharmacopoeia sive Antidotarium Messanense, in quo tum simplicia tum composita medicamenta, usu recepta accurate examinantur*", published in Messina at *Typographia Petri Brex* in 1629; the *Antidotarium* of illustrious Pietro Paolo Pisano seven times in Messina chief physician and also Director of the Hospital of Santa Maria della Pietà), published in 1643, very popular and also printed by the famous printer Arriving in Venice.

In particular, it is significant the **Pharmacopoeia sive Antidotarium Messanense** of Cortesi, which divides the interior into medicaments (*spoilage, solvents and invigorating*) and external or local: the *altering* (liquids: syrups; solid-liquid: electuaries; waters) are active to restore functions of the four humors, the *electuaries* (or *lattovari*) are *soothing* or *purgative* (cathartic), and made in the form of *decoctions, infusions* or *bolus* (pills without mineral components), purify the mood as *cholagoghi* or *flemmagoghi* or *melanogoghi*. The *Pharmacopoeia*

of Cortesi, in fact, often referring to *Grabadin*, the *Antidotario* of Mesue, but also to neoterici (such as, for example, Falloppia, Valeriola, Mercuriale, Quercetano), tends to locate the *virtues* (or forces) of remedies simplified able to restore the moods and often uses excerpts from *simple*.



MEDICAMENTA quae in Pharmacopoeijs omni tempore afferuntur, ut plurimum à Me-

pellat, quasi praeiux quaedam essent portiones purgationibus praecurantes, quod praeparandis ad purgationem humoribus exhiberentur.

alongside: page number, line number and column.

In the section '*Medicamentorum compositiones continens*' *Caput* 1 is dedicated to '*De syrupis usually*' while *Caput* II is devoted to '*De syrupis in species*', which include syrups: vinegary of Mesue against bilious fevers; chicory Nicolò Fiorentino, against obstructions liver; Capel Venus (macerated with licorice), the ailments thoracic and visceral obstructions. At *Caput* III is '*De syrupis solutivis*'; to *Caput* V is '*De electuariis solutivis*', where figure, for example, the extract of Cassia (in decoction with various flowers including those of Viola and Mallow) used for enemas with virtue soothing for abdominal pains. At *Caput* VI it comes to VI '*De Aquis*' (*calide*, including: Ambrosianae, Sabinae,

Serpylli;

frigidae, including: Acetose, Borraginis, Buglossi, Succu Citri, Cicorij, cucumeris, gourds, Cerasorum, lactucae, Limonum, Melonum, Nynphaeae, Plantaginis, Papaueris albi et rubri, Rosarum, Solani, Sorborum, Violarum; *tempered*, including: Agrimoniae,

INDEX AVCTORVM QVI IN HOC OPERE CITANTVR.

A
Binoxar.
Aetius.
Albertus Stecchini.
Alphonius Ferus.
Alexander Maffaria.
Alexander Trallianus.
Amatus Lusitanus.
Andreas Laurentius.
Andreas Martholius.
Andreas Vesalius.
Andromachus.
Antidotarium Bononiense.
Antidotarium Florentinum.
Antonius Chalcidius.

Augustinus Snesianus.
Aucenna.

B
Artholomeus Castellius.
Messianensis.
Bartholomeus Montagnana.
Bernardus Deffenius.

C

Caffor Durans.
Collegium Bergomense.
Consilius Ouidius.
Christophorus Georgius de Hostenis.



Altheae, Asparagus, Fumariae, Filicis, Mercurialis, Primulae, Prunellae, Tamaricis, Valerianae, Verbenae; *capitales*, including: Basiliconis, Calendulae, Maioranae, Melissa, Primroses, Rosmarini, Serpylli, Florum tiliae Arboris; *thoracicae*, including: Bardanae, Chamomillae, Hyssopi, Tamaricis, Urticae; *destillate usuales*, including: Acaciae, Acetose, Shamrocks, Agrimoniae, Altheae, Asparagus, Eupatorii, Auicennae, Fragariae, Fragorum former fructu, Fraxini, Fumariae, Fungorum, Hedere, Quercus foliorum, Raparum, Rosmarni, Rutae, Sambuci, Saxifragie, Tamaricis; *caponis* (also in the *composite* formulation and *Quercetana*): one head with meat stripped, washed bugloss with water, then with addition of preserves of violets, tears of lives, nettle, used according to the Quercetano for various internal and external diseases, ocular and to recover forces; various *elixirs*, including that Thadai Florentini, what maius Quercetani and the *elixir life* Florananti Leonardi, made of nutmeg, white and black pepper, juniper berries, bark of apple, basil, rosemary, mint, marjoram, bay berries, etc.; *theriacalis communis*: mixture, digestion and dry distillation in steam bath Teriaca Alexandria, Myrrh and Brandy useful in plagues, for sweating and as friendly; *theriacalis bezoardica*; *Alia water*, including: *theriacalis*; *vitae*; *vitae Ghini*; *vitae Gisneri*; *ocularia Quercetani*, etc.. At Caput VII is 'De Apozematibus seu Decoctis', the Caput VIII is 'De Infusionibus', the Caput VIII is 'De Iulapiis'; jumping to Caput XI find 'De Pilulis seu Catapotiis'; XIII to 'De Trochischis', to Caput XIII is 'De Electuariis' (in the prologue which specifies that 'à Graecis Eklègmata & ab Arabibus appellantur Lock') for many purposes, including draining chest, lungs and arteries, the Caput XV figure 'De Eclegmatis'; Caput XVI to you analysis is 'De Medicamentis particulariter euacuantibus', the Caput XVII is 'De Electuriis Opiatis', the Caput XVIII 'De Antidotis pretioribus' including one i figure the same author: *Antidotus, seu Electuarium D. Ioannis Baptistae Cortesij*; Caput XIX is dedicated to 'De Conservis', including: the tonic preserve marjoram to true violets, against apoplexy and special antidote; the Caput XX 'De Conditis' while at the XXI 'De Extractis', including: extractum Rhabarbari Paracelsi tartaric soaked in water in a water bath and then decoction heat; the Caput XXI are 'De Iure galli & de Vinis medicatis' always with a detailed description of the procedures preparations (for exemple, for *de iure galli* 'ex Mesue sententia, eligitur gallus rufus, agilis (...)', while *de vinis medicatis* 'ut medicamenta iam dicta in dolio accomodato ponantur, deinde affundatur tanta musti expressi, & percolati quantitas, ut plusquam medietatem dolij repleat, tum affundatur tantum musti actu calidi, quo ex toto dolium impleatur, tandem permittatur perfecta fieri in dolio ebullitio (...)'; the Caput XXIII is 'De Balneis' within which a paragraph is devoted to 'De Thermis'; Caput XXIII deals 'De Perfusion, & Ineffu' in which a paragraph on 'De Thermis'; XXV is 'De Stillicidiis' at the XXVI 'De Vinaceis' (meaning any product resulting from the vine plant, root, berry, marc, etc.); at XXVII to 'De Oleis', which is also mentioned in the Oleum pretiosum descriptum Matthiolo (oil-based common a hundred years 'finissimus et vetustissimus' and green leaves of St. John's wort and mint); the XXVIII 'De Linimentis & mucacinibus'; XXX to 'De Ceratis' which 'in hac Mamertina Civitate, & in toto Siciliae Regno sunt usualia (...) more Grecorum, que Paulo chiracopa & ex aliquibus (...) de his loquitur Galeno 7. de compositione medicamentorum per genera (...)'; XXXII to 'De Cataplasmatibus'; to XXXIII 'De Cataplasmatibus, Empasmatis, & Diapasmatis'; XXXIV to 'De Sinapismis' (classified into strong, medium and weak) including, in addition to mustard, is quote: pyrethrum, pigeon dung, corn syrup, beaver, euphorbius oil, oil, vinegar; at the XXXV 'De Dropace, seu Picatione', caustic medicament (eg, based on lime and pigments golden) soft simple or compound for use topical or plasters; to XXXVI 'De Scutis', topical or poultices' 'que ventriculum speciali dote respiciunt', including, for example, the 'Scutum pro Ventriculo frigido' on the basis of various elements including cinnammomo, nutmeg, ose, marjoram, peppermint powder; to Caput XXXVII is 'De Frontalibus', medicaments indicated 'in doloribus capitis (...) & cephalaeam caput patitur (...) aliquando autem contingit materiam facientem dolorem esse calidam, & proinde ad illius ad estinguendum ardorem, & etiam ad conciliandum somnum (...) sanguinem corrumpunt, & mentem exagitant ...', etc.; they are divided into : *frontale refrigerans* (including opiates, wax soaked herbs); *frontale temperatum* (including lettuce, Bettonica); *frontale ad capitis fervorem & somnum conciliandum* (as rose jam, ointment 'populeone'); Caput XXXVIII is dedicated to 'De Fomentis' and, finally, the Caput XXXVIII is 'De Epithematibus'.

Follows, then, a kind of table of substances mandatory in pharmacy, the 'Catalogus rerum omnium quae asservari debent Messanae a pharmacopolis in suis officinis ad usum medicum', containing some hundreds of elements belonging to categories systematically classified into specific parts: *ex Plantis et Arboribus* (*Folia, Flores, Semina, Radices, Fructus, Succis, Liquores, Gummi, Cortices, Ligna*,

Aromata); ex Animalibus (Pinguedines, Medullae, Ossa, Pili, Excrementa, Sanguis, et Lac); ex Terra (Metalla, Lapides, Gemmae, et Terrae); ex Mari, et Aquis (Sal, Spuma, Bitumen, Spongea, Coralli, Succinum, Margaritae).

On page 315, then, begins the chapter on the preparation of medicines simple ‘*De preparatione simplicium medicamentorum*’ who begins by ruling that two architects depends on the protection of health: : ‘*Medicus & Pharmacopoeus*’. Follow a detailed list of procedures for preparation according Mesue (Coctionem, Lotionem, Trituram, Purgationem, Solationem, etc..) and chemical (Calcinatio, Digestio, Fermentatio, Destillatio, Circulatio, etc..) and a chapter on the substitutes ‘*vulgò quid pro quo dictis*’.

ERRATA SIC CORRIGVNTVR.

Pagina	Columna	Errata	Correcta
1	2	horum	verum
3	1	in syr. de acetosft. citri	addatur lib. v. iuleb. ros.
9	2	aut	autem
11	1	descriptis	descriptus
13	1	vbi	delectatur
24	2	fyculis	seculis
33	2	eundam	eundem
46	1	dianicu	diacnicu
54	1	pantiqua	antiqua
76	1	venena	venerea
83	2	supradi&a	supradi&æ
94	1	qua	quæ
96	2	vehiculi	vehicula
96	2	faciebant	faciebant
98	1	odoren	odorem

Another important section is ‘*De Ponderibus & Mensuris*’, followed a Appendix that is use in medicine milk natural (*De Lactis Temperie*, *De Animalibus Lac Producentibus*, *De Conditionibus Lactis*, *De Indicationibus*, *De Quanto*, *De Modo*) and Syrup of the Coral Sea. The work is concluded in an ‘*Index Medicamentorum quae in hoc Antidotario continetur*’ and even a meticulous *errata corrige* ‘*Errata sic corriguntur*’ which contains page numbers, column, errors and corrections.

5. Farmacopee Palermitane

The “**Pharmacopoeia Gervasi, Nicola Antidotarium Panormitanum Galen – chymicum**”, written by the Sicilian chemical Nicholas (or Nicholas) Gervasi (1632-1681), published in Palermo *Ex Typographia Petri de Isula* in 1670, reprinted in 1700 and in 1743 (under the title *Gervasio redivivus, seu Nicola Gervasii Dispensatorium Panormitanum*, Schelenz refers to *Tyronum Pharmacopoeiarum Antidotarium Panormitanum Galenospagyricum* published in Palermo in the same year as this work) is used as a guide by students.

The book contains many recipes sudddivise in 30 sections: *De electuariis pretiosis [et] confortativis*; *De medicinis opiatīs et narcoticis*; *De confectionibus catharticis*, *De conservis, et conditis*; *De Lohoch Diacodion solidum ex Zuulferio*; *De iulepiis et syrupis*; *De decoctionibus et infusionibus*; *De trochiscis et Siel*, *De pulveribus, et speciebus, et trageis*, *De catapotiis, seu pilulis*, *De elixiribus*, *De aquis destillatis*, *De tincturis*, *De extractis*, *De quintis essentiis*, *De foeculis*, *De Floribus, et sublimationibus Flores Martis*, *De magisteriis*, *De spiritibus*, *De crocis*, *De salibus*, *De rotulis*, *De claretis, et Vinis medicatis*; *De acetis tam simplicibus, compositis quam*, *De cataplasmatīs*, *De miscellaneis chymicis*, *De balsamis*, *De unguentis*, *De emplastris*; *De Oleis destillatis*.

The work also contains descriptions of plants in Sicily (the Gervasi, among other things, reorganized the Botanical Garden of Palermo modeled on those of Padua and Bologna) and passages related to the medical properties of gemstones.

The “**Pharmacopoeia for use by pharmacists and doctors of modern Italy. First Edition Sicilian over the last Milan with many additions and increased synonyms of names of chemical nomenclature**



French” by L. V. Brugnattelli evolution of the Milanese, is published in Palermo for prints Solli in 1811 as a pantry for the chemistry course at the University.

The work contains an overview of both classical medicine preparations and wide use of both innovative formulations that require modern laboratory instrumentation. In this regard, a section of the book is devoted to the description of the equipment for both principali chemical operations (distillation, sublimation, melting, digestion, filtration, decantation, crushing, separation of fine particles from coarse to porfirizzazione, spraying and stacciamento) both procedures and instruments pharmacy practice



(tables of new techniques and innovative laboratory equipment). In the discussion of the book, then, are ignored preparations considered “*extravagant*” in the components and “*ridiculous*” in the names, they are deleted, and then, for example, patches of the nail, the Marquis antipileptica dust, oil philosopher, etc. .. For the formulations provided, however, the author reports observations and provides jobs and a tariff with prices updated “*discrete and reasonable*”.

6. Antidotari and Petitori Neapolitans



In 1614 in Naples is published the **Petitorio**, a sort of Pharmacopoeia of the United indicates that the list of medicines required but is grossly inadequate, and, moreover, it is handwritten with at least two scribes a situation that, in practice, generates frequent questions and uncertainties and favors often abuse, incidents and controversies.

In 1640 the highest medical authorities of the United commission the Donzelli (Naples, 1596-1670), Baron of Digliola, medical, physical and chemical, to compose a *Antidotario* or *Petitorio* official site of unreliable edition of 1614: therefore, a prescription pads recognized by law, smoothing methods, compositions and metric systems, and which all must refer.

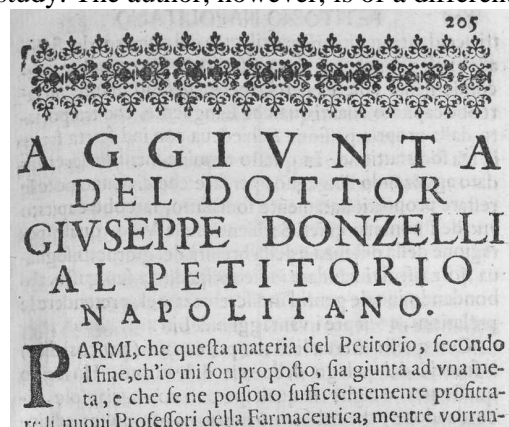
The Donzelli fulfills the commitment and in 1642 published the *Antidotario napolitano*,

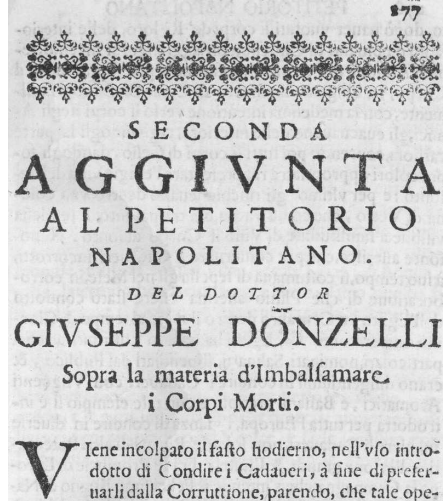
“Explained and illustrated by Dr. Joseph Donzelli Neapolitan Baron Digliola ...: for that is what you must, must keep every druggist of this city, and kingdom in his own pharmacy, and show the royal visits, which will be the chief physician : with two additions, in a ... is it can be used in a well-ordered and in the pharmacy is proposing a way to embalm the corpses of human bodies: and finally, there is a Sermon on the dignity of the Royal General chief physician. And in this fifth edition expanded with various drugs, not yet known in Italy ... and correct” [XXV-6-13], including: the classic Dichiaraxioni of fees Mesue (Mesue the Elder, *Yūhhannā ibn Māsawaih*, medical Syriac of the ninth century) in four chapters discussed and glossed by the author, the list of medicines requirements and the recipes also accompanied by various comments, explanations and suggestions Donzelli. The book is reprinted, even in Naples in 1649 with the title of **Antidotario Neapolitano correctly** and in 1653. In 1663 the public a new Donzelli **Petitorio napolitano**, made the previous year and reprinted in Naples in five editions until 1668, which not only contains some new components shows the new trend of Donzelli: a pedagogical spirit seems to animate his scientific . The work is not only to contain the recipe official wants to be primarily a tool of instruction that introduces the scientific knowledge in the field of pharmaceutical medical knowledge. It is, therefore, a popular work intended for a broad audience as well as a preview of his masterpiece: *The theater pharmaceutical dogmatic and spagyric*, work with a long gestation projects.

Petitorium in the edition of 1663, published in Naples for Type Novelli de Bonis, so begins the introduction Donzelli: “*I demand to introduce this volume, if not learned, at least fond of, and that I serve as Alphabet Pharmaceuticals, for your introduction to this profession with the help of this Opera arrive safely in the know with others and maybe you do not imaginable quality (...)*”. The work begins with a ‘Table’ in alphabetical order of preparations and a “*Petitorium Pharmacopoeorum reformatum simplicia*” always in alphabetical order. In the *Proemio* the next Donzelli shows that in the past often “*all matters serious and most mysterious men were from large, in some profession, written with enigmatic terms, so that worthily have been kept as secrets of the utmost importance and full of mysteries wonderful and beautiful*” and, therefore, should also follow this practice, more so in view of the fact that they are the brainchild applied to much time to study. The author, however, is of a different opinion, believing that having to adhere to the “*debt of Christianity*” of charity towards the neighbor, and therefore declares to bind its own efforts to be as understandable as possible for everyone.

This is followed by a discussion on the names of the Apothecary (3, lib. 19.c.16): *Pharmacopoeus* to the Greeks “*as composed medicines*” and who sells them is given the name of *Pharmacopola*, the Latins, however, is said *Medicamentarius*; some also occur in improperly at the end *Aromatarius*, because of aromatics that “*handle*”, while it is appropriate for the grocers that the aromatic sell them; by Ulysses Aldovrando the *Speziale* is defined *Myrapola*; by Galen, then, has used the term

Unguentarium (“*Unguentarios Medicorum Ministros*”) while in the seventeenth century Apothecaries are also referred *Odoramentarij*: in this respect the author points out that both terms are better attributable to perfumers. So also the greek word of *Pigmentarius* best suited to define those who exercise the art of cosmetics. As for the name *Apothecary*, finally, Donzelli considers it very improper being attributable to anyone with a “*shop*” open to the public. The same applies to the corresponding name of French *Apothicaire* or for the Spanish one of *Boticario*. Followed by a **definition** of the Celsus **Pharmaceuticals**, “*ars que docet medicamenta seligendi, preparandi & miscendi*” and an author on the **Pharmacopoeia** which is “*first and foremost they pietatis Studiosus, Divine Nominis cultor*”; deepens is, then, the form of the oath, earnings Hippocratic precepts and Christians, on the obligations of *Spetiale* (“*do not give poison, old stuff, or false, nor love, hate, or gain*”) and its essential qualities: “*good-looking, clean, decorated with decent clothes not pompous, it stimulates vanity will use fun, but not gall: and especially should not be a player*”. The Donzelli, again, focuses on the “*dignity and nobility of Speziale perfect*” and emphasizes the separation of the professions of doctor and *Spetiale*, the latter, in particular, stresses its inexperience in Pharmaceutical unless “*did not carry out practical for at least four years in a Spetieria*” (7. Lib.’s prep. of medicaments). It follows, then, that part of the preparations, divided by topics under ‘*Epittime different*’ are, for example, confortative for the heart and friendly, the stomatal and cold to the liver, various teas, sachets and powders (including those *starnutatoria* or worms), plasters, suppositories, poultices, etc., the ‘*Artificial or real*’ are listed in alphabetical order. Following tables “*weights Neapolitan*” and “*checks of the ancients*”, a chapter is devoted to the ‘*choice of simple*’ and medicaments of *Petitorio*, not in alphabetical order (including: *Aloe succotrino et hepatic Mirabolani, Riobarbaro, Agaric, Turbit, ScamONIO, Tamarinds, Cassia, Aloe, Senna, Frankincense, Myrrh, Ammoniac, Of Gems and Stones pretiose*, etc.). Follow treatises on ‘*Confections*’ of: *Friendly, Alchermes of Mesue, Diambra of Mesue, Teriaca Andromaco, Cinnamon, Opobalsamo, Mitridato, Diacatholicon Arnaldi, Diafenicon of Mesue, Electuary rosé Mesue, Hiera picra Galen Extract, Cassia enemas, Loch Mesue, Preserved Rose shutters, Infused with Rose Syrup, Chicory Syrup, Syrup Cranberry juice, Syrup Capel Venus, Mel Rose solution, Aggregation Pills, Pills Agaric of Mesue, De Tribus of Pills Galen, Avicenna Fumoterra pills, Empiastro hot Gallia Mesue, Rosé Mesue ointment, Ointment of gold Mesue oil, St. John’s Wort oil, Sweet almond oil, Nutmeg, etc..*





In the next “Adding Dr. Joseph Donzelli to Petitorio Napoletano” (p. 205) the author states that “for the first his intellect was surrounded by pulling forward the great work of my theater” but turn to him numerous invitations to make the Precepts of Pharmaceutical and recognizes the same author, that “this matter of Petitorio, according to the order that I have proposed has reached a goal that can sufficiently benefit the new Professors of Pharmaceutics, how they should be assigned to it eagerly the application and imitate the study, that I have done for their benefit”. The Donzelli also about art apothecary

states that “in any profession must strive to make the man more than perfect in the art of Pharmacy (...) Everything that followed here, is a matter for the Council, and the compliance that adds to the name of Spetiale perfect” (p.206). Then, starting with non-alphabetic, a number of preparations (including: Pack of Cinnammomo Mesue, *Tiphora magna Nicolai*, Opiate laudanum, Laxative blessed by Nicolo Salerno. Syrup Sandalwood citrine, Giulebbo large gems of the King, syrup of ivy Earth, syrup of poppies Donzelli, syrup Altea Farneli, syrups Lily, Artemisia, Mallow, Peppermint, Pills Alefangine of Mesue, pills Mesue of Lapis Lazuli, Trochisci of Gaul nutmeg, Tochisci Ramish of Mesue, Trochisci Viper, Trochisci Edicroi Andromaco, Trochisci of cerasifera, Water teriacale common Quercetano Empiastro myrrhed, Empiastro Copper Mercury, Empiastro of Skin of Aries, Empiastro of Betonica, Empiastro of Hemlock, the Apostles of Mesue Ointment, Ointment Egiziaco of Mesue, Ointment of Lead, Oil Pomeranian Mesue oil, terrestrial earthworms, Olive Mesue anise oil, Blueberry, Elderberry Oil, Oil of Rue, Wormwood Oil, etc.). proceedings in which herbs are often added Comment with references and notes about the opinions expressed by the College of Spetiali of Naples (pp. 207-276).



There is, then, a “Second Added to Petitorio” dedicated embalming of corpses, where Donzelli pressed that this operation has a certain repugnance with the feeling of the Holy Church warns that “*memento homo, quia cinis es, & in cinerem reverteris*” which, however, the author adds that “time eater of everything, but no has yet been able to abolish this custom ancient” (pp. 277-318).

The next chapter is devoted to the “Sermon on the dignity of the chief physician restricted” (pp. 319-ff.), where Donzelli invited to pay their respects and comply with the health authorities in charge of virtuous highlighting the merits.

The work ends with an “Amendment to the Errors of the Press”.

Another official work in the Kingdom of Naples is the **Antidotario Napolitano** “again reformed and corrected dall'almo College de 'Apothecaries ... where they contain all the recipes of medicines ... that must necessarily hold all the apothecaries of this City and the United faithful ...”, published in 1642 by the “Magnificent doctor” Francis Greek Mesagne. This work, recently discovered (just 4 years) at the National Central Library of Rome, which is a real treatise of spices and recipe book that describes in detail the preparation of drugs. Moreover, numerous recipes drawn from the Greek are also accompanied by a review of the same famous medical apothecary Donzelli and the work is being carried out as a result of task to update and re-publish an edition of Petitorio 1609. Of *Franciscum Graecum Messapiensem* currently nothing is known, except that it is very influential person, because of the 8 members of the Board of Naples Spetiali entrusted him with the preparation of a antidotario official of the Kingdom.

7. Farmacopee non ufficiali

All these official pharmacopoeia is accompanied by a large number of pharmaceutical texts, written by scholars private real pharmacopoeias unofficial, often interesting or even important works, among which are to be counted:

Antidotarium di Phoenicis Petrus Paulus, volume with a nice cover completely engraved in copper, “in quo describuntur omnia composita medicamenta, quae in petitorio aromatariorum continentur”

(Neapoli, apud Octavium Beltranum; Neapoli apud Pharmacopolium D. Mariae Pietatis, 1631. Pp. 16-97-7);

Tariffae rerum aromaticarum (Neapoli, apud Octavium Beltranum, 1632. Pp.16);

Ricette e rimedi, paper manuscripts of seventeenth-century hand (different spellings), written in the vernacular, for a total of 16 sheets, with treatment of: cancer of the spleen, “remedy against the tarantula”, cinchona bark from Peru, remedies kidney stones, “recipe gutta gumma”, “oil Bernardo Pica” remedy for blisters, cure for ringworm, “consult written by a doctor in Rome ... retention of urine”, “cure for cancer from Father F. cherub of Eboli Provincial P. P. Capuchin”;

Teatro farmaceutico dogmatico e spargirico, perhaps already completed in 1663 but published in Naples from 1667 to 1763, is the most important scientific work of Joseph Donzelli, a tool for study and dissemination of science in ever-widening circles: a large Treaty contains a lot of recipes, chemical processing, pharmaceutical, botanical observations, pharmacological and herbal. The work is published in Latin by a spread abroad, is reprinted in Rome in 1677 with the additions of the author's son, Thomas, and has numerous editions: twenty-two only in the city of Rome, Naples and Venice until

1763. In some respects, also, can be traced in a nutshell work developments and probabilistic gassendiani which will have a significant role in the culture of the second half of the century, the sharp criticism of the traditional medicine does not refuse to block all the old teachings but attacks from positions skeptical defense bigoted and conservative traditionalism with a vengeance, so do not reject all traditional content but it essentially rejects dogmatism ruling on the ground that medicine and chemistry are not based on absolutes and that the only compass for the student and the method empirical.



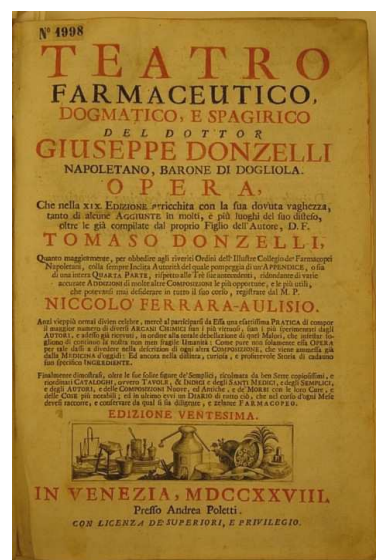
The Donzelli, also distinguishes between chemistry and alchemy, critical authors who use “terms very darks” and also in the linguistic choices manifests this commitment justifying the “lowliness of style and language” and proclaiming himself an advocate of the use of “native language” than any other scholarly language (in Theatre: address “scholars readers”).

At the same time Donzelli resumes vigorously polemic against the traditionalists and conservatives, defenders of Aristotle and Galen, which launches vehement accusations. His scientific thought is connected on the one hand to the naturalistic tradition Renaissance (recognizes, in fact, Paracelsus among his teachers mutuandone the principle of “archeus”), but it is clear in this as in his other works breaking with every conception and hermetic initiation of science. The Donzelli belongs to a generation of scholars and Southern intellectuals who, in accepting and pondering the lesson of Galileo and Bacon and meshing on earlier traditions, lay the foundations for growth and openness to Europe of the Neapolitan culture in the second half of the seventeenth century. His commitment to a new science in favor of experimental transcends the merely technical, scientific and engages the broader debate in favor of experimentation and innovation that permeates deeply all the new currents of thought in the Kingdom of Naples.

8. Nineteenth century and pre-unification

In 1811 was released the “**Ricettario pharmaceutical napoletano**, ie, *List of simple and compound remedies that ought to be obbligativamente We provide each pharmacy in the Kingdom of Naples ... Legal and pricing of prices of medicines*” by Domenico Cotugno, published at the expense of the Congregation of pharmacists under the title of Ss Pellegrino and Emiliano in the printing of the Monitors of the Two Sicilies (p. 102).

Another “**Ricettario pharmaceutical napoletano**” was published in 1823.



In 1845, following approval under the auspices of the Commission Protomedicale, is published in Naples by the Minister of State for Internal Affairs “**Code Pharmaceutical Neapolitan**”, compiled by the College of Pharmacy Dean Napolitano presided over by Mr. Gaetano Angioni.

The Italian territory in the second half of the nineteenth century, is still divided into several states, including the Kingdom of the Two Sicilies. To the unification and the birth of the Kingdom of Italy, each State has its own Pharmacopoeia valid in its territory: some official, that is ordered by the authorities and recognized by the rulers or governors, other private but are recommended by the Authority or from local Universities.

In 1855 was published in Naples in the Kingdom of the Two Sicilies from Protomedicato General at Typography Agrelli the “**Ricettario pharmaceutical napolitano with price of medicines under the auspices of the protomedicale Committee presided by knight Franco Rosati**” (p. 84).

9. Unitary period

In pre-unified Italy in the administrative heterogeneity makes it difficult for pharmacists applying weights and measures, each State having its own, so be released at various tables of comparison, such as **Comparison tables of between metric weights and weights medicines in use in the provinces of Lombardy** from 1862, and it seems difficult even to decipher and shipping of recipes because of the **different official names and dialects of drugs and**, consequently, there are numerous **Dictionaries** **Synonymy** refers to drugs.

Since 1861, the year of birth of the Kingdom of Italy, until 1892, the role of the Official Pharmacopoeia is exercised by the **Sardinian States Pharmacopoeia** for 1861 to 1870 and subsequently, until 1892, the Code of Pharmaceutical Roman edition 1868, ordered and approved by His Holiness Pope Pius IX, which is official in the territories of the Papal States, and is much more comprehensive and scientifically rigorous than others. Besides these two, there are many other Pharmacopoeias in Italian territory until the publication of the first edition of the Official Pharmacopoeia of the Kingdom of Italy in 1892, one of the most important is its **Pharmaceutical Code Neapolitan** compiled by the College of Pharmacy Neapolitan chaired by Dean Gaetano Angioni and published in Naples upon approval, under the auspices of the Commission Protomedicale by the Minister of State for Foreign Affairs in 1845.

Acknowledgements

This work was supported by: Italian Academy for the History of Pharmacy (Piacenza, Italia); Institut for the History of Pharmacy at the University of Berna (Berna, Switzerland); International Society for the History of Pharmacy ISHP (Vienna, Austria).

Appendix

Supplementary data and info related to this article can be found at <http://raimondovillano.com> (after international official publication in english version).

References

- Cortesi G.B., *Pharmacopoeia seu Antidotarium Messanense*, Messanae, ex Typ. Petri Breae, 1629, pg. 187, 303;
- Greco Francesco, *Antidotario Napolitano di nuovo riformato e corretto dall'almo Collegio de' Spetiali*, 1642;
- Savi Francesco, *Antidotario Napoletano dell'Almo Collegio degli speziali*, Napoli, 1642;
- Regni Siciliae capitula. Venetiis, apud Ioannem Iacobum Hertz. Unito a: *Pandectae reformatae et de novo factae*. Pp. 62. Due parti in un volume. Importante raccolta delle celebri costituzioni del regno emanate tra il Duecento e la seconda metà del Cinquecento. 1655;
- Donzelli Giuseppe, *Petitorio napolitano spiegato, et illustrato dal dottor Giuseppe Donzelli napolitano : nel quale si contiene quanto deue, per obbligo tenere ciascheduno spetiale di questa città, e regno nella sua spetiaria, e mostrare nelle regie visite, che si faranno dal protomedico : con due aggiunte, in vna ... si contiene quanto puo vsari in vna bene ordinata spetiaria e nell'altra si propone il modo di balsamare i cadaueri de corpi humani : et aggiuntoui in fine vn Discorso della*

- dignità del Regio General Protomedico*, [XXV-6-13], Napoli, per Nouello de Bonis Stampator Arciuesc., 1663;
- Donzelli Giuseppe, *Teatro farmaceutico dogmatico e spargirico*, Napoli, 1666/1763;
 - Arrosto A., *Farmacopea Messinese, ordinata dal Protomedico Generale Sostituto Barone Pietro Alojsio*, 1810;
 - Leveen J., *Apharmaceutical fragment of the 10th Century in Hebrew, by Sh. A.*, in *Proceed. of the R. Soc. of medicine*, XXI, 1927;
 - 1877-1977. *Un secolo di autonomia della clinica ostetrica e ginecologica dell'Università di Messina*, *Archivio Storico Messinese*, 3s., 28 (1977), p. 219-231;
 - *I 350 anni del primo trattato di farmacoterapia a Messina. La "Pharmacopoeia seu antidotarium messanense" di G.B. Cortesi*, *Archivio Storico Messinese*, 3s., 30 (1979), p. 115-127;
 - Fiaccadori Fiaccadori, *Dizionario Biografico degli Italiani*, Volume 41, 1992;
 - Messina Pietro, Donzelli Giuseppe, *Dizionario Biografico degli Italiani*, Volume 41, 1992;
 - Dollo Corrado, *Fra tradizione e innovazione. L'insegnamento messinese della medicina e delle scienze nei secoli XVI e XVII*, *Studi, Annali di Storia delle Università italiane*, volume 2, 1998;
 - Dollo Corrado, *Filosofia e medicina in Sicilia*, Rubbettino Editore, pag. 458, 2005.