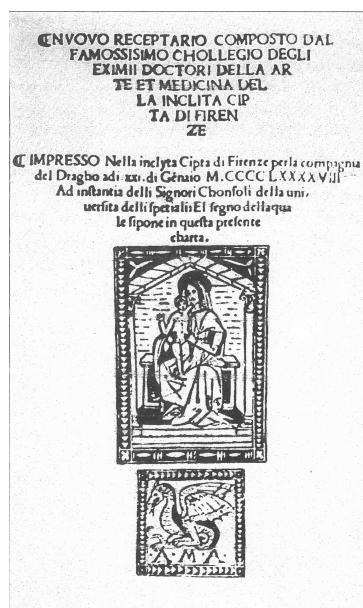


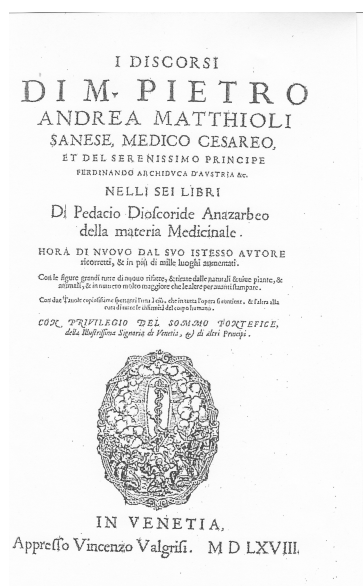
Italian Pharmacopoeias. A general survey.
Giovanni Cipriani, University of Florence

The first pharmaceutical manual on the preparation of herbal remedies, oils, syrups, pills and unguents, *Luminare Maius* by Giovanni Giacomo Manlio Del Bosco, was published in Pavia in 1494, “die 9 Aprilis”. It was not a pharmacopoeia, *stricto sensu*, but a practical instrument, a real spring of light for physicians and apothecaries that, notwithstanding his limits, became soon a standard source in several cities for over a century.



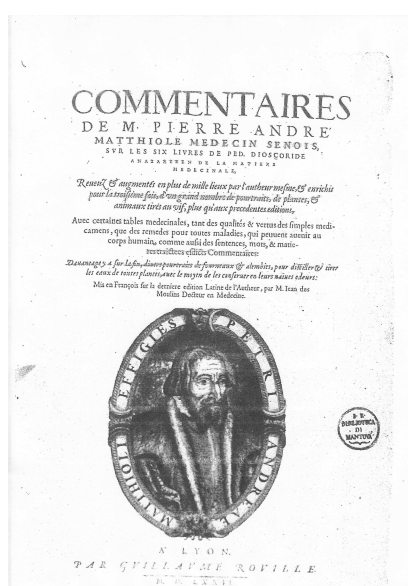
The first true Italian pharmacopoeia had his birth in Florence five years later, by order of the local Guild of Physicians and Apothecaries: the *Ricettario Fiorentino*. This interesting work was published “in folio” in 1499, the 21 of January. The date on the frontispiece is 1498 but the year in Florence, until 1750, had its beginning not the first of January but the 25 of March, the Lady Day, at the moment in which the angel told to Mary she had a baby, so this date is “Florentine Style” and 1498 must be read 1499, according to our calendar. All the apothecaries of the Florentine State were compelled to use this official, pharmaceutical textbook, in order to have remedies made in the same way everywhere and, for the first time, we see a description of the ideal, physical figure of a pharmacist:

“D’ingegno et di corpo destro, di buoni costumi, non avaro e fedele”. Also the architectural characters of a “spezieria” were well delineated: “Posta in un luogo ove non possino venti o sole”, far from “fumi o mali odori”, rich of rooms, “acciocché possa comodamente preparare e conservare ogni sorte di medicina”, with a garden or a terrace “dove dia el sole, acciò possi seccare e imbiancare alcune sorti di medicine”.



Another interesting manual, not a pharmacopoeia but a real source of knowledge for physicians and apothecaries, is the edition, by Pietro Andrea Mattioli, of the treatise of medical matter by Pedanius Dioscorides, printed in Venice in 1544, “per Niccolò de’ Bascarini da Pavone”. The title was clear:

Di Pedacio Dioscoride Anazarbeo libri cinque dell' historia et materia medicinale tradotti in lingua



volgare italiana da M. P. Matthiolo sanese.

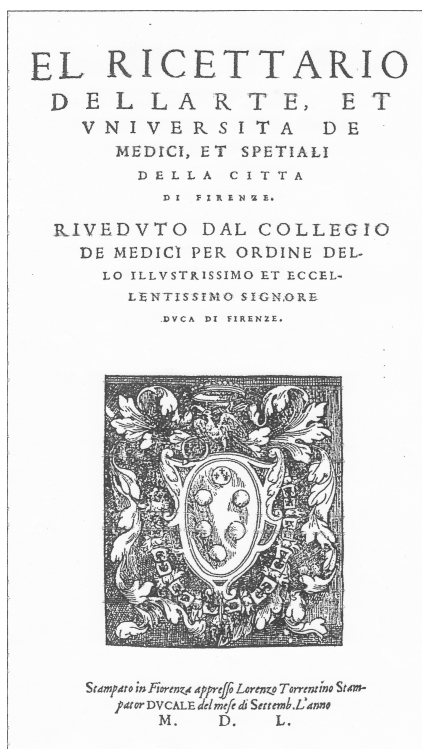
The work was published also in Latin and the edition of 1554 is rich of 562 little woodcut images of plants. With such a large number of images and with clear and exhaustive explanations, this text was really necessary for the best preparations of herbal remedies and had a large diffusion not only in Italy but also in all Europe. Reprinted many times, translated in the most important foreign languages, it's a main point of Galenics.

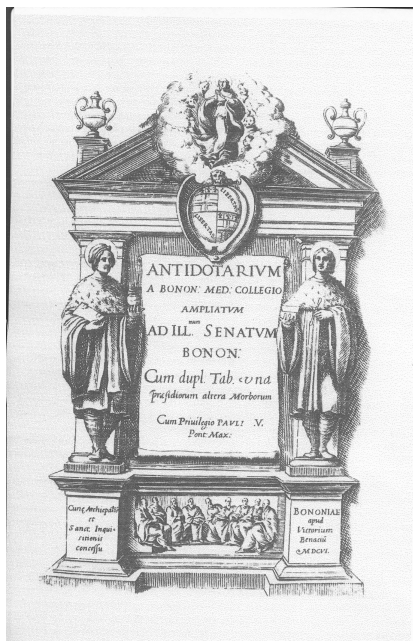
After few years we see a real pharmacopoeia in Mantua, where it was compiled an official *Antidotarium ex multis optimisque authoribus collectum, castigatum et accurate digestum*, printed in Venice by Valgrisi in 1559. The work was more simple than *Ricettario Fiorentino*, or than the learned pages of Pietro Andrea Mattioli. In the same Venice we find another exceptional manual: the *Fabrica de gli Spetiali* by Prospero Borgarucci, again published by Valgrisi, a clever printer, in 1566. Borgarucci made a rich fresco of all pharmaceutical techniques and in the frontispiece his words were really eloquent: *Dove s'insegna di comporre perfettamente tutte le sorti de medicamenti che più si costumano nella medicina, cioè conditi, conserve, sape, giulebbi, siroppi, lambitivi, decottioni, infusioni, elettuarii, pilole, trocisci, collirii, polveri, olii, unguenti, ceroti et empiastri*. His sources were: *Diversi antidotari di medici antichi et moderni*, but the most important aspect, well present in all the volume, it was the attention to *Regole et modi di prepararli et conservargli, con la*

dichiaratione di molti semplici che nelle compositioni de medicamenti sono compresi, con la correzione delle dosi, pesi, misure et succedanei et con tutto quello che a un perfetto spetiale saper si conviene.

The perfect apothecary was not a dream and in Florence we see two new editions of *Ricettario Fiorentino*. In particular the edition of 1550 of the famous pharmacopoeia, printed by Torrentino, the official printer of the Florentine state, is exceptional for the new acquisitions, after the

Spanish conquest of Mexico and Peru and offers the proof of the close link between policy and pharmacy. Not by chance we see, under the title, the rich coat of arms of Medici family. The edition of 1567, printed by Giunti in Florence, is marvelous for the frontispiece, with the portraits of Cosma and Damianus, standing in elegant dresses and the delicious little angels that are preparing remedies with different instruments.





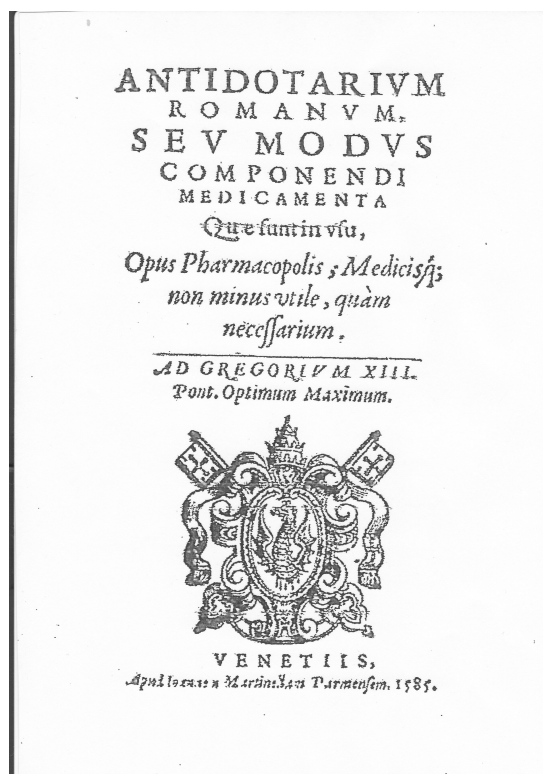
Also in Bologna we see in 1574 an interesting *Antidotarium*, that was compiled with the work of Ulisse Aldrovandi, the most important naturalist of that time. The book, rich of succedaneous elements for preparing remedies, had a new, magnificent edition in 1596 in Bologna, “Apud Victorium Benacium”, in the architectural frontispiece, under the coat of arms of the town, Cosma and Damianus were standing and inside the volume were present two tables: *Una praesidiorum. Altera morborum.*

Bergamo too wanted to have an official pharmaceutical textbook so, in 1580, appears *Pharmacopoea seu de usitatorum medicamentorum componendorum ratione, liber,*

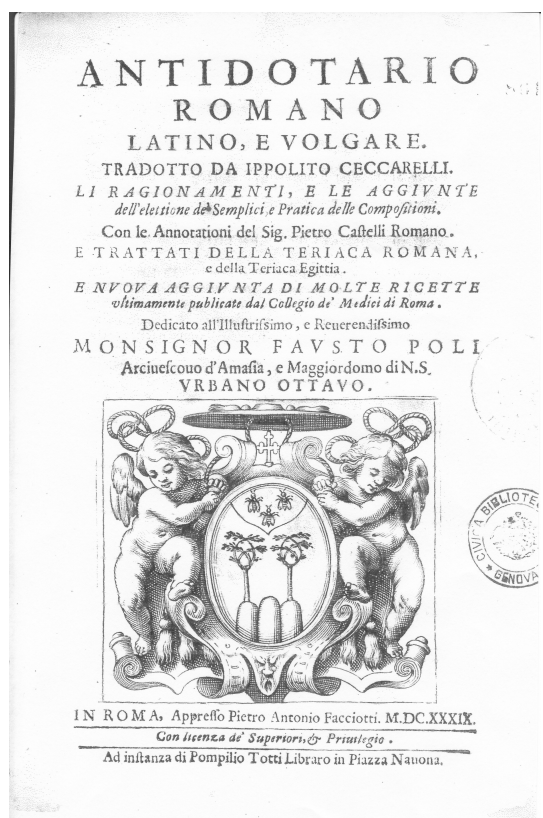
printed in the Lombard town with the presses of Ventura Comini, by order *Collegii medicorum Bergomiensium*. In the volume the concept of public health is clearly expressed. The figure of the apothecary is always more linked to the laws and to the rules of the state in which he works.



It's not a surprise to find so many pharmacopoeias in the sixteenth century. In the years of the Emperor of the Holy Roman Empire Charles V and of his son Philip II, King of Spain, we see the birth, or the reinforcement of several principalities in Italy, as the Duchy of Florence and the correlated necessity of a stronger civil organization inside each state. The world of diseases and the world of remedies had political links and it was better to give the concrete idea of the presence of the state everywhere, in particular in what was related to the life and to the death of the people. The cases of the terrible plague of 1527 and of 1576 are really eloquent in this sense.



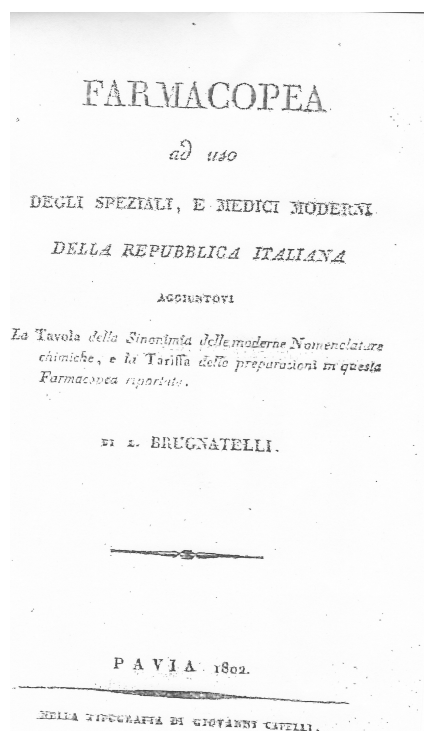
Rome was waiting for a practical instrument on the preparation of remedies and, at last, in 1585, thanks to Pope Gregorius XIII Boncompagni, we see the *Antidotarium Romanum seu modus componendi medicamenta quae sunt in usu*. The work was printed in Venice, the most important typographical centre in Italy and on the frontispiece appeared, in woodcut, the coat of arms of the Pope: a dragon and the words *Opus pharmacopolis medicisque non minus utile quam necessarium*. Gregorius XIII had the project to regulate, as in the others Italian states, the different and complex ways for preparing remedies and the volume was born with this purpose. Also in the church, step by step, science was coming. Latin language was a little far from daily life so this work was translated by Ippolito Ceccarelli and published by Facciotti in Rome, in 1639, with the treatises of Roman and Egyptian “theriaca”.





A new pharmaceutical manual on the preparation of herbal remedies, oils, syrups, pills and unguents was compiled by Giuseppe Donzelli, Baron of Digliola, in the second half of seventeenth century. His rich *Teatro farmaceutico dogmatico e spagirico* had a large fortune and was printed, for the first time, in Naples in 1667. This model was followed by a Venetian apothecary: Antonio de Sgobbis who made a real universal pharmacopoeia, with the meaningful title: *Nuovo et universale teatro farmaceutico*. The work was printed in Venice in the same 1667, with a marvelous frontispiece in which were present the masters of the past: Ippocrates, Galenus, Mesue and, with allegorical images, all the operations for preparing remedies. Pharmacy was really, without time, the symbol of public health. It's impressive the number of bibliographical quotations present in this volume. De Sgobbis offers to us the image of the progress of

pharmaceutical science. The old concept of the four elements at the basis of human body: blood, phlegm, bile and black bile is now weaker, as the influence of stars and planets. The lesson of Galileo Galilei has been well understood in his essential lines.



The age of Enlightenment was near, with the triumph of chemistry and of the experimental method, thanks to Nicolas Lemery, Antoine Laurent de Lavoisier and Jean Antoine Chaptal. A new official pharmaceutical textbook was necessary in Italy and appears in Siena the *Ricettario Sanese*, published in the Tuscan town by Bindi, in 1777 and in Florence, in 1789, a new edition of *Ricettario Fiorentino*, by order of the Granduke Pietro Leopoldo. This edition, of the oldest Italian pharmacopoeia, is really interesting because the text was "ridotto all'uso moderno" and totally rewritten. After few years we see in Brescia, in 1798, the *Apparatus medicaminum*, by Francesco Marabelli, a manual for hospitals and in Ferrara, in 1799, the famous *Pharmacopea Ferrarese*, by Antonio Campana. This pharmacopoeia had an incredible success. Reprinted many times, for large part of nineteenth century, also as pocket book, this precious text was used in different Italian

states. Chemistry was now the basis of all pharmaceutical processes and soon appeared the magistral work by Luigi Valentino Brugnatelli.

Brugnatelli, professor of chemistry in Pavia, friend of Alessandro Volta, made a new, interesting pharmaceutical textbook that was printed, in the same Pavia, by Capelli, in 1802. The title was clear: *Farmacopea ad uso degli speciali e medici moderni della Repubblica Italiana*. The adjective “modern” is the real image of the French Revolution and its heritage, in that moment in the hands of Napoleon Bonaparte. The text, simple and clear for the preparation of every kind of remedies, rich of useful plates, had the honor of a French translation and as *Pharmacopée Générale*, appeared in France in 1811. A real triumph for Italian pharmacy.

The street had been opened and in 1826 Giovacchino Taddei made a new pharmacopoeia in four volumes. The precious contribution was printed in Florence, by Pezzati, with the meaningful title: *Farmacopea generale sulle basi della Chimica Farmacologica o Elementi di Farmacologia clinica*. A new discipline was born: Pharmacological Chemistry and the world of the ancient apothecaries, with their herbal remedies, were at sunset. Giuseppe Orosi, in 1849, publishing in Leghorn, by Mansi, his *Farmacologia teorica e pratica, ovvero Farmacopea Italiana*, inflicted the final blow to the past of Italian pharmacy. In the words of the title there was already the ideal perspective of the political unity of the country and in 1861 this long dream was reality.

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