

HISTORY OF PHARMACY

DURING THE

*Middle Ages in*

*the West*

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Tlemcen: April 2026

# THE MIDDLE AGES IN THE WEST

(Influence of Latin, Arab and Byzantine civilizations.)

**Three phases will follow one another:**

## **1) From the fifth to the tenth century:**

- The art of healing in the hands of the religious:.
- The birth of the School of Salerno (Italy)

## 2) From the eleventh century: The awakening of the Christian West

- the arrival in Italy and Salerno in 1065 of the African Constantine
- He had translated the works of Hippocrates and Galen into Latin from the Arabic versions and restored the study of Greek medical science in Europe
- Toledo (Spain) remains the last centre of Arab culture in Europe, with all the riches of its libraries.



### 3) In the thirteenth and early fourteenth centuries:

Around 1200, Salerno went into decline,

Baghdad was ruined by the invasion of the Mongols.

Professors and students in exile facilitated the creation of the first universities in the West:

Bologna (1088), Salerno (1140), Padua (1222), Paris (1220), Montpellier (1272).

*"Arab decline and Western development"*

## *4) from the fourteenth to the fifteenth centuries*

At the start

\* Medical science is stagnating

- Return to magical symbols to prayer
- Influence of astrology

then

\* Enriching the therapeutic arsenal due to the explorers' travels

## 📖 Renaissance period

- The dissemination of major works by the printing press.
- Alchemy gives way to chemistry
  - a real development of pharmaceutical botany.
- drugs from America reach Europe.
  - The first pharmacopoeias are published



***Issogne Castle (Italy, Valle d'Aosta): one of the frescoes of the trades, here the apothecary (circa 1400)***

# Therapeutics in the Middle Ages

# *1/ Bleeding*

- Bleeding (phlebotomy) is a blood sample taken from a patient in order to improve his or her condition. Known since ancient times, it is practiced to "draw corrupt or superfluous blood" as a curative or preventive measure.
- it was especially from the sixteenth to the eighteenth century that it occupied a preponderant place among therapeutic practices.
- The incision is made with a lancet or leech application

# Among the available therapeutic means

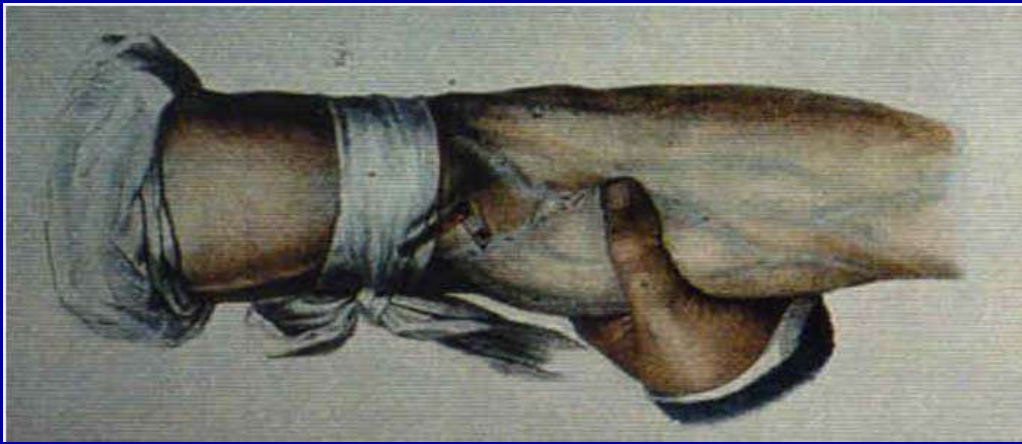
## *Bleed*



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"Avez-vous la fièvre quartaine  
Des cors aux pieds ou la migraine  
Mal à l'esprit ou mal au corps  
Mal au dedans mal au dehors  
Purgé saigné prenez force clisteres  
Vous creverez ou bien vous sortirez d'affaires"

---



Que fallait-il faire, en effet, pour savoir si la saignée a une influence favorable sur la marche de la pneumonie, et connaître le degré de cette influence? Evidemment, rechercher, si, toutes choses égales d'ailleurs, les malades saignés le premier, le deuxième, le troisième, le quatrième jour de l'affection, guérissent plus promptement et en plus grand nombre, que ceux qui ont été saignés plus tard. Il

## RECHERCHES

SUR LES EFFETS

# DE LA SAIGNÉE

DANS QUELQUES

MALADIES INFLAMMATOIRES,

ET SUR

L'ACTION DE L'ÉMÉTIQUE ET DES VÉSICATOIRES  
DANS LA PNEUMONIE ;

**PAR P. CH. A. LOUIS.**

Médecin de l'hôpital de la Pitié, Président perpétuel de la Société médicale d'observation,  
Membre de l'Académie royale de Médecine de Paris,  
Correspondant de celle de Marseille, de l'Académie impériale médico-chirurgicale  
de Pétersbourg, de la Société de Médecine d'Édimbourg,  
Membre de la Légion d'honneur.

BIBLIOTHÈQUE  
MÉDICALE  
COLL. REG.

PARIS.

**J. B. BAILLIÈRE,**

LIBRAIRE DE L'ACADÉMIE ROYALE DE MÉDECINE  
RUE DE L'ÉCOLE DE MÉDECINE, 13 BIS.

LONDRES, MÊME MAISON, 219, REGENT STREET.

1835.

## -2/purgation

Technique of evacuating medicine based on irritation of the intestines with the help of laxatives.



*The clystery (apothecary of Château-Thierry) which is used to administer a purgative rectally to induce evacuation enema from the bowel*

**Works and problems**

**From the Middle Ages to  
the Renaissance**

# a/variety of ingredients and multiplicity of galenic forms

## Widely used during this period

### Simple, produits animaux et minéraux à usage thérapeutique - Moyen Age & Renaissance

	<i>Catégorie</i>	<i>Exemples</i>	<i>Indications thérapeutiques</i>
<b>Ingrédients</b>	<b>Les simples : origine locale</b>	Gousse d'ail, racine de guimauve, racine de belladone, racine de valériane, rhizome d'hellébore noire, écorce de bourdaine, feuille de digitale, feuille de sauge, feuille de thym, fleur de pavot, fleur de passiflore, etc.	Analgésique, antiseptique, antispasmodique, astringent, calmant, carminatif, cicatrisant, cholagogue, diurétique, émétique, émollient, expectorant, fébrifuge, fortifiant, purgatif, somnifère, tonique, vermifuge, etc.
	<b>Les simples : origine exotique</b>	Fruit de benjoin, écorce de cannelle, écorce de gaïac, clou de girofle, myrrhe, racine de salsepareille, écorce de quinquina, racine d'ipécacuanha (ipéca), thé, etc.	
	<b>Origine animale</b>	Axonge, sang, os, foie, intestin, fiente, musc, testicules, cornes, etc.	
	<b>Origine minérale</b>	Pierres précieuses (topaze, émeraude, saphir, or), (à partir du XVI <sup>e</sup> siècle) céruse et litharge (sels de plomb), antimoine, sels de mercure	
<b>Formes pharmaceutiques</b>	<b>Usage interne</b>	Vin, breuvage, chocolat Infusion, tisane, bouillon, potion, sirop, électuaire Poudre, pilule, tablette	
	<b>Usage externe</b>	Cataplasme, emplâtre, liniment, collyre, gargarisme Lavement, suppositoire, pessaire, huile	



Wellcome Images



- **b/ Problems with preparations due to inaccurate measurements of medicinal weight (lack of recognized standard weight)**

TABLEAU COMPARATIF DES PRINCIPAUX POIDS MÉDICINAUX DE L'EUROPE.

NOM DU PAYS.	NOMBRE d'onces à la livre.	VALEUR de la livre.	VALEUR de l'once.	VALEUR du dragme ou gros.	VALEUR du scrupule.	NOMBRE de grains au scrupule.	VALEUR du grain.
		grammes.	gramm.	gramm.	gramm.		gramm.
Autriche. . . . .	12	420,828	35,069	4,3836	1,4612	20	0,07306
France. . . . .	16	500,000	31,250	3,9063	1,3021	24	0,05425
Angleterre. . . .	12	372,931	31,078	3,885	1,295	20	0,0647
Hollande. . . . .	12	369,041	30,753	3,8442	1,2814	20	0,06407
Nuremberg, Saxe et une grande partie de l'Alle- magne. . . . .	12	357,964	29,830	3,7288	1,2429	20	0,06215
Russie. . . . .							
Suède. . . . .	12	356,370	29,697	3,7122	1,2374	20	0,06187
Cologne et Prusse	12	350,796	29,238	3,6548	1,2183	20	0,06091
Espagne. . . . .	12	344,822	28,735	3,592	1,197	24	0,04981
Toscane. . . . .	12	339,520	28,293	3,5369	1,1789	24	0,04912
Rome. . . . .	12	339,191	28,266	3,5332	1,1777	24	0,04907
Piemont. . . . .	12	307,418	25,6182	3,2023	1,0674	20	0,05337

*Development of  
Weight Equivalency Table  
Medicinal Varieties: Varieties of  
units of measurement in European countries (nineteenth century)*

**c) problem of reproducibility and reliability of manuscripts (deletions),  
therapeutic recipes (antidotary, pharmacopoeia) ... until the  
development of the printing press**

**Example**

*Book of Herbs by Mattheus Plaetarius  
(twelfth century), basis of the antidote:*

*This type of monograph could be copied  
(with possible errors) multiple times  
and will serve as the basis for the antidotary Nicodemi  
(fifteenth century) which will be a reference work  
for apothecaries for several centuries*



# d/Theriac: a multipurpose antidote based on the old concept of polypharmacy

## 470. THÉRIAQUE.

### ● THERIACA.

<b>R<sup>z</sup></b> Racines d'Acore vrai ( <i>Acorus calamus</i> ) six gros	24
— de Costus arabicus ( <i>Costus arabicus</i> ) six gros	24
— de Gingembre ( <i>Zinziber officinale</i> ) six gros	24
— d'Iris de Florence ( <i>Iris florentina</i> ) douze gros	48
— de Quintefeuille ( <i>Potentilla reptans</i> ) six gros	24
— de Rhapontic ( <i>Rheum raponticum</i> ) six gros	24
— de Valériane ( <i>Valeriana officinalis</i> ) quatre gros	16
— Nard celtique ( <i>Valeriana celtica</i> ) quatre gros	16
— de Spicanard ( <i>Valeriana jatamansi</i> ) huit gros	52
— de Méum ( <i>Meum officinale</i> ) quatre gros	16
— de Gentiane ( <i>Gentiana lutea</i> ) quatre gros	16
— d'Aristoloché ( <i>Aristolochiarotunda</i> ) deux gros	8

# CODEX,

## PHARMACOPÉE FRANÇAISE

PAR ORDRE DU GOUVERNEMENT

PAR UNE COMMISSION COMPOSÉE DE  
MM. LES PROFESSEURS DE LA FACULTÉ DE MÉDECINE,  
ET DE L'ÉCOLE SPÉCIALE DE PHARMACIE DE PARIS.



PARIS,  
BÉCHET JEUNE  
LIBRAIRE DE LA FACULTÉ DE MÉDECINE DE PARIS,  
4, PLACE DE L'ÉCOLE-DE-MÉDECINE.

1857.

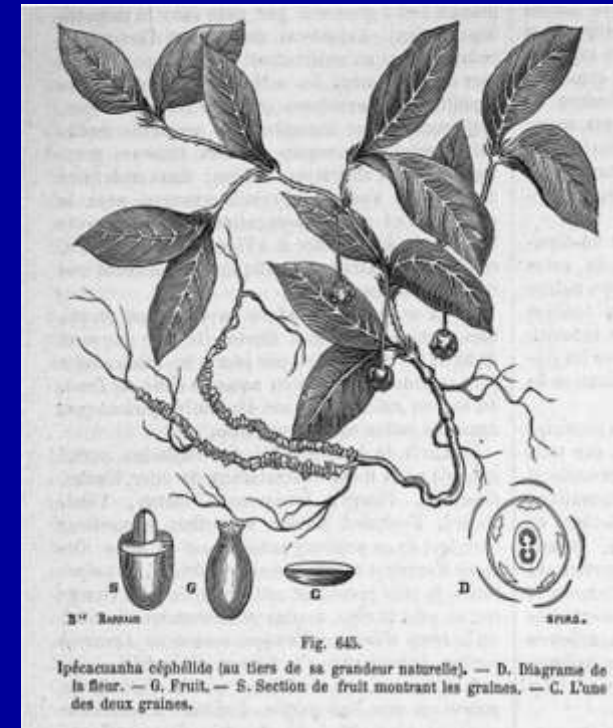
61  
418  
C 59

# e-Inventory of available remedies: therapeutic impotence with a few exceptions =

cinchona (febrifuge, tonic, etc.)

Ipecacuanha (emetic, expectorant, anti-amoebic dysentery)

Bark of  
Quinquina



*Ipecac root imported into Europe from the Brazilian Mato Grosso for  
its indication in dysentery (amoeba) and as an evacuating emetic*

**f- "King's medicines": are medicines**

essential provided free of charge (first initiative

Institutionalised Assistance Centre (Helvetius)

**- Emergence of the modern concept of the basket of care (essential medicine WHO).**

- Emergence of a field of competition between caregivers:

*The apothecary's shop (the dispensary) is often*

*transformed into a place of "unauthorised medical consultation",*

*more accessible than the doctor's office.*

- Competition between licensed caregivers and informal sector caregivers: empiricists, charlatans, healers, churchmen
- opposition on uroscopy (visual examination of urine) between learned knowledge (doctor trained at the faculty) and technical knowledge (apothecary or surgeon trained "in the field")

## - Alchemy:

*\*At the beginning is a philosophy (dark, dusty, and messy laboratory).*

\*then became a common practice of apothecaries and surgeons who are increasingly involved in medicine.

\*then basic (technical) pharmaceutical chemistry (medicinal) with O<sub>2</sub> essential ratio:

+ practice of experimentation (to show but not to demonstrate and verify)

+development of these instruments.

\* finally there was the birth of "chemistry" (alchemy will never be a science)

**Thank you  
for  
your  
Attention**