

An Account on the Story of the Swiss Pharmacopoeias.

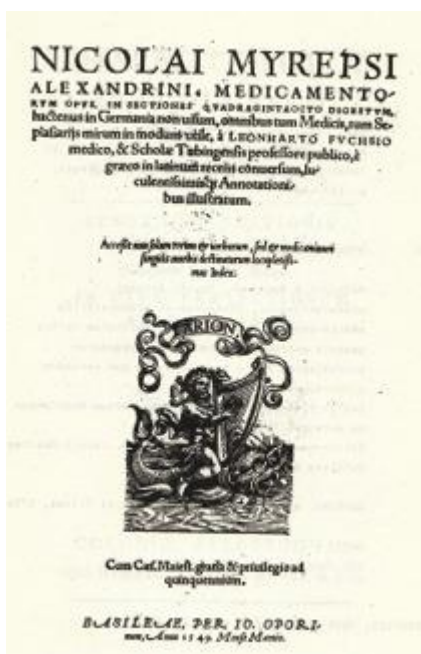
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The history of the pharmacopoeias in Switzerland has, in comparison with other European countries, certain peculiarities. Until the second half of the eighteenth



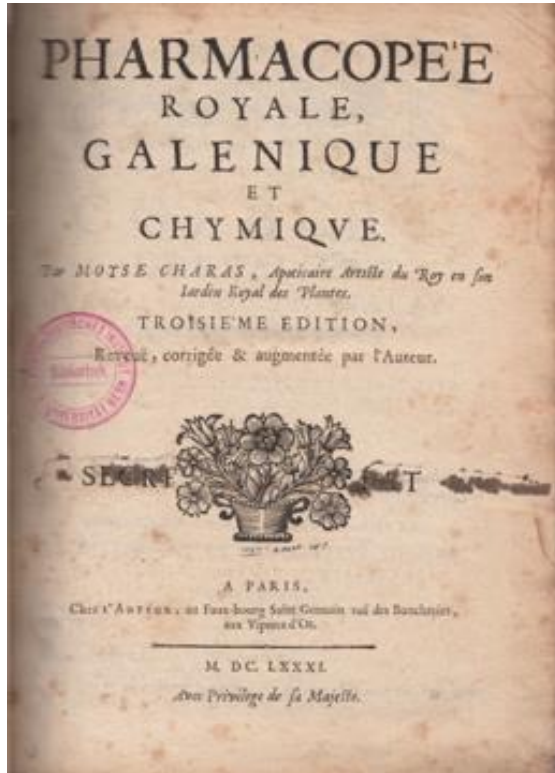
century, Switzerland knows no official pharmacopoeia in force for cities or regions. This is due to the weakness of the health system and in particular to the pharmacy in the various Swiss cantons. Only cities like Basel, Zurich and Bern have, since the sixteenth century, imposed foreign pharmacopoeias like those used in German cities, fore example those of Nurnberg and Augsburg. During the middle Ages, ancient and Arabian works, as the “**Antidotarium Nicolai**” of Salerno or the publications of Mesue were often prescribed.



Between the sixteenth and eighteenth centuries private pharmacopoeias are published in Switzerland works of the antiquity such as the "De Compositione medicamentorum liber" of Scribonius Largus published in Basel in 1529 or the "De Medicamentis empiricis ac rationalibus liber" of Marcellus Empiricus (Basel 1536) and then again in Basel in 1549, the "**Medicamentorum Opus**" of the Greek physician of the fourteenth century Nicolaus Mirepsos.

Thereafter a physician of Basel Johann Jakob Wecker published an "Antidotarium generale et speciale," of

which exist several editions, a kind of pharmacopoeia, and a book on pharmaceutical practice with the description of various operations such as distillation and describing the various dosage forms in use. Wecker wanted also to fight the magical elements



and supernatural treatments with his writings, rejecting also the superstitious fanaticism propagated even by Paracelsus and his disciples.

During the Baroque period, throughout whole Europe appear city pharmacopoeias, as in France, England with London and Edinburgh, also in Italy. In Switzerland, the situation was quite different. The majority of the published works are private antidotaries written mainly by doctors and more rarely by pharmacists. With a few exceptions, almost all of these works were published in Geneva and Basel, the largest

cities in terms of economy and culture.

Baroque type pharmacopoeias are large format folio, with wonderful large prefaces and dedications.



The materia medica is plethoric and contains several drugs and many compounds at the image of polipragmasy then in vogue. The authors were the most famous



doctors of the time as **Moïse Charas**, Jean-Jacques Manget and **Joseph Du Chesne**. The obvious purpose of these publications were not this of the current pharmacopoeias, namely to promote the standardization

of medicines, but rather to ensure the reputation of their authors.

ESSAY
De la
PHARMA-
COPEE des SUISSES.

En laquelle l'on pretend faire voir que les Medicaments qui naissent en Suisse, ou d'eux memes, ou par artifice, sont suffisans pour composer une Pharmacopée entiere, & pour la guerison de toutes les maladies du Corps humain.

Traduite du Latin en François, corrigée & augmentée par l'Auteur.

JACOB CONSTANT
De R. Docteur Med.



Imprimé à BERNE.

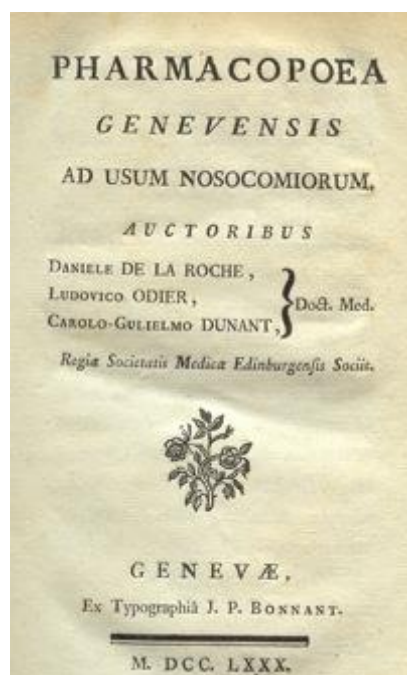
& se trouve chez François de la Jussieu
Libraire à Lausanne, 1709.



Therefore, Switzerland was a special case at this time, the pharmacopoeia of Jacques Constant de Rebecque with the title "**Essay de la Pharmacopée des Suisses.**" Constant, physician and pharmacist in Lausanne, attempt in this work of 1709 to replace the exotic medicines and therefore the high cost with local products.

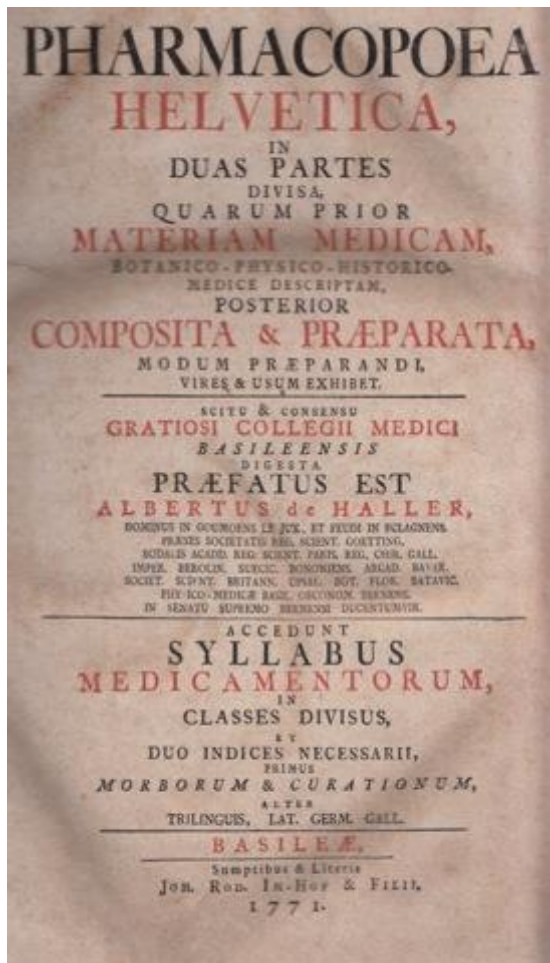
The pharmacopoeias of the seventeenth and the beginning of the eighteenth century were primarily written to defend a therapeutic point of view. The authors tried to prove their participation in the dispute on the theories, then being debated and often the defence of the therapeutic methods of Paracelsus. We have a

typical case in the "Pharmacopoeia spagyrica" of the pharmacist of Zurich Adrian Ziegler. This book is nothing but a propaganda for the chemical medicines manufactured by Ziegler in his pharmacy.



About the middle of the eighteenth century we do not find pharmacopoeias of an official nature for a city or canton in Switzerland. Only towards the end of the eighteenth century the situation changed with the publication of two pharmacopoeias: in Basel in 1771 the "Pharmacopoeia Helvetica" was published while in Geneva in 1780, three physicians, De La Roche, Odier and Dunant, edited the "**Pharmacopoeia Genevensis.**" English theories about treatment and medicine have influenced these physicians and the pharmacopoeia of Geneva stands out for its modernity, its format and its content. Clearly under the influence of

Enlightenment, the medical matter is reduced to 48 medical preparations, the plants

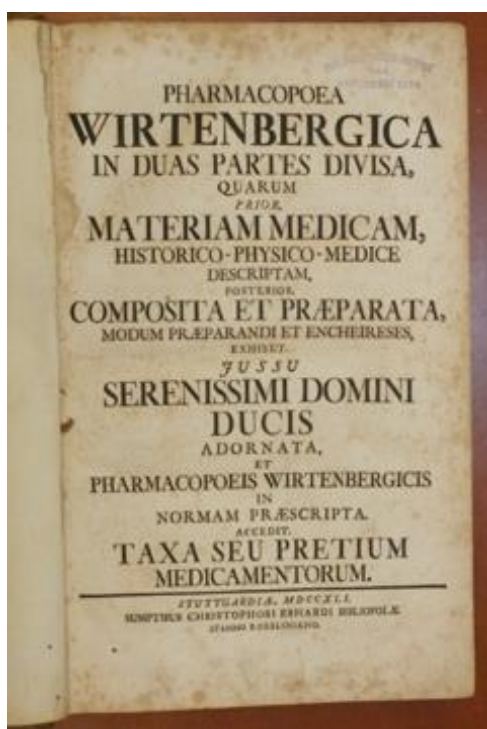


are described in the nomenclature of Linnaeus and the products of animal origin are gone. Still in use, the theriac, is composed of only four compounds, including opium. The Geneva pharmacopoeia was recognized as the official text not only in Geneva, but also in other regions of western Switzerland.

In Basel, the "**Pharmacopoeia Helvetica**" also takes an official character. The preface, written by the famous Albert von Haller, brings very modern concepts: the offered preparations are reduced in number but chosen with great care, new products come in the history of therapy and should be tested clinically, the compounds must be described scientifically.

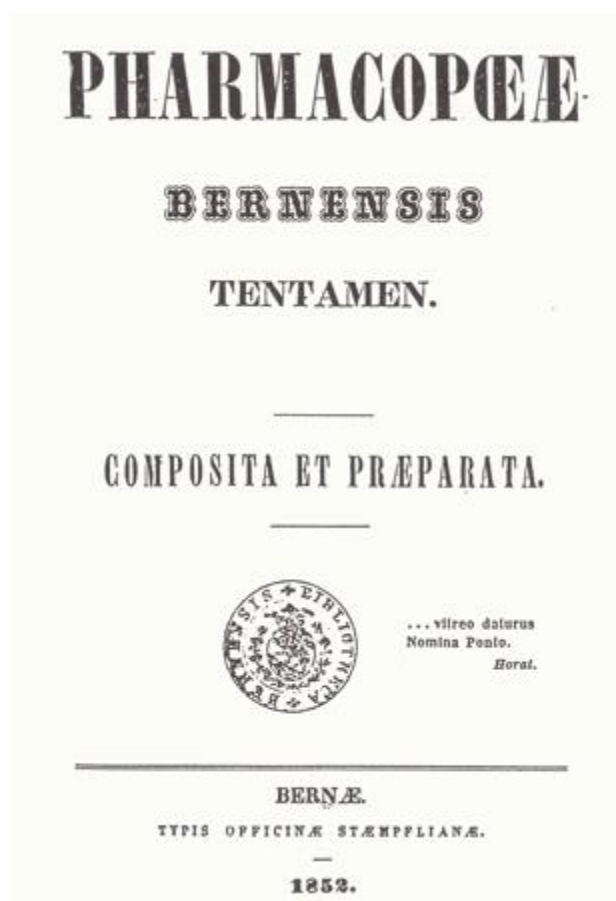
In the nineteenth century the pharmacopoeias must keep up with substantial changes. New medicines emerge, including alkaloids, morphine, codeine, quinine and many others. Even the analysis

procedures have improved, also the increasingly industrial manufacture of medicinal products and the technological development require essential changes of the pharmacopoeias. This brings to the standardization of the drugs, favoured also by the development of analytical methods of control. Also the function of the pharmacist evolves, passing from the production of medicinal products to the control of these products. This phenomenon is enhanced by the presence of new powerful medicinal substances, as the first synthetic products.



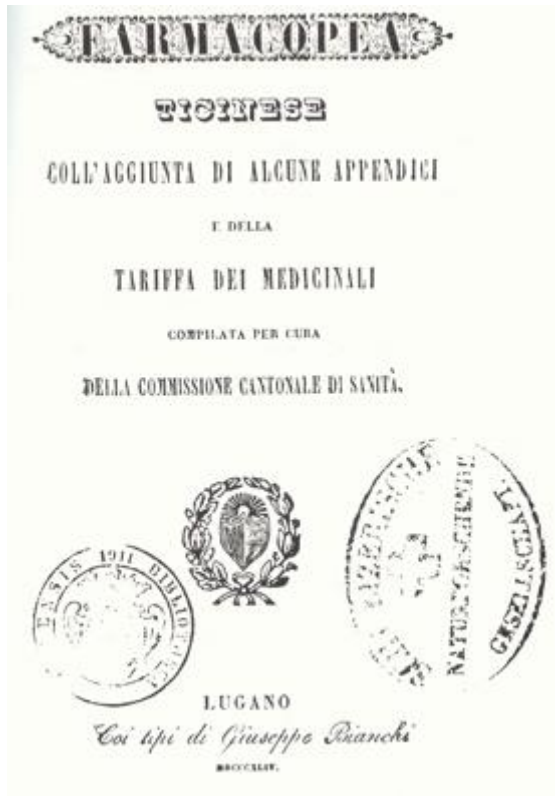
This evolution of therapy is reflected for example in the Prussian pharmacopoeias. In Switzerland, at that time, from the end of the seventeenth-century up to 1840, were not published pharmacopoeias. This is explained in part by the social and political instability of the period following the French Revolution and as a result of the Napoleonic Wars. Swiss Pharmacists refer to foreign pharmacopoeias. For example, Zurich and Schaffhausen rules apply the pharmacopoeia of Prussia, while the city of Bern used the **pharmacopoeia of Wurttemberg**.

On the political level and also on a strictly national professional strategy, just before the middle of the century, new ambitions and developments characterize the general trend. The period between 1840 and 1860 saw a revolution in political and social life. Nationalist sentiment dominates and the power of the cantons is reinforced. This is manifested by the publication of some cantons pharmacopoeias. In 1844 St. Gallen publishes the "Pharmacopoeia Sangallensis" that is not more as a commentary of the



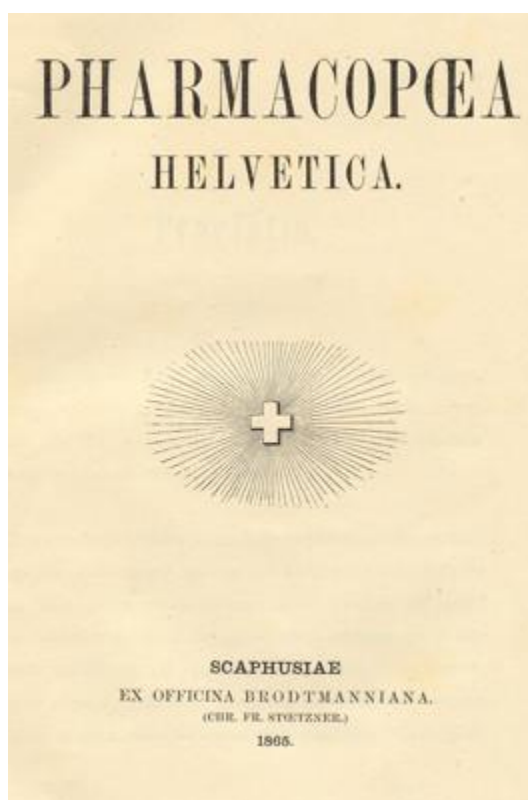
pharmacopoeia of Prussia. In 1852, under the control of the Consilium Medicum, Berne publishes a text entitled "**Pharmacopoeae Bernense Tentamen.**" edited by the Bernese pharmacist Karl Fueter. Unfortunately this book does not ever assume the role of official pharmacopoeia in Bern, perhaps because it considered only medicinal compounds and a second volume with simple medicines was never published. By writing this Pharmacopoeia, Fueter has leaned on German pharmacopoeias, but also on his own works, which he had performed in the laboratory of his pharmacy in Berne. This reveals again

the role of the pharmacist in the development of the sciences in the 19th century and the change of the profession from the artisans to the scientists.



At this time appears the third cantonal pharmacopoeia, the "**Farmacopea Ticinese**" written in Italian and published in Lugano in 1844 under the auspices of the Cantonal Health Commission.

The general trends observed in Europe to edit national pharmacopoeias also affect Switzerland, but has been slowed by the federal system. So the first "**Pharmacopoeia Helvetica**" was accomplished thanks to a private initiative of the young Swiss Pharmacists Association. In preparing this pharmacopoeia, we find the great Swiss pharmacist and pharmacognost of the 19th Century Friedrich August Flückiger, who lead the redaction work.



This first pharmacopoeia was only recognized as valid by a few cantons. Also a second edition of 1872, still published by the pharmacist association, was not accepted by all cantons, like a supplement 1876 that covered some gaps of the 2nd edition.

After 1880, the representatives of the physicians and the pharmacists give pressure on the federal government to induce the further processing of a national pharmacopoeia in Switzerland. A Federal

Pharmacopoeia Commission is created and the Swiss Confederation publishes a third edition. This "Pharmacopoeia Helvetica. Editio Tertia" is edited like the following pharmacopoeias in the three national languages German, French and Italian, and not in Latin. The fourth edition of 1907 was recognized as a major text in Europa. Alexander Tschirch, a Swiss-German professor and pharmacist, took an important part in this success.



The scientific changes that affect the drug production and the professional transformations influence the redaction of the Swiss pharmacopoeias until 2012 and the release of the 11th of the **Pharmacopoeia Helvetica**. Meanwhile, the European Pharmacopoeia has been recognized as official in Switzerland. The Pharmacopoeia in Switzerland is composed of the European and the Swiss Pharmacopoeia. Switzerland is contributing in the drafting of the "Pharmacopoea Europea".

Bibliography

Tschirch, Alexander, Die Pharmakopöe, ein Spiegel ihrer Zeit, Schweizerische Wochenschrift für Chemie und Pharmazie, 42, 1904, 602-695.

Büchi, Jakob, Das schweizerische Pharmakopöewesen, Schweizerische Apotheker-Zeitung, 94, 1956, 865-871, 885-893.

Büchi, Jakob, Die Entwicklung der Rezept- und Arzneibuchliteratur. 3 Teile. Zürich, Juris, 1982, 1984, 1986.

Ledermann, François, Bibliographie des ouvrages suisses de pharmacopée. Zürich, Juris, 1984.

Lutz, Alfons, Beziehungen zwischen England und der Schweiz im Pharmakopöewesen. In : Dann, Georg Edmund, Die Veröffentlichungen der IGPP, NF, Band 28, Stuttgart, 1966, 179-193.

Lutz, Alfons, Die Farmacopea Ticinese von 1844, die erste amtliche Pharmakopöe auf Schweizer Gebiet, Schweizerische Apotheker-Zeitung, 100, 1962, 342.

Lutz, Alfons, Beiträge schweizerischer Gelehrter zur Entwicklung des Arzneibuchwesens, Schweizerische Apotheker-Zeitung, 103, 1965, 141-148.

Dobler, Friedrich, Der Zürcher Apotheker Adrian Ziegler und seine Pharmacopoea Spagyrica, Schweizerische Apotheker-Zeitung, 95, 1957, 571.

Model, Corinne, Von der Farmacopea Ticinese (1844) bis zur Pharmacopoea Helvetica III (1893) : ein Beitrag zur Entwicklungsgeschichte der Schweizer Arzneibücher, Zürich, Juris, 1996.