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“MEDICAMENTEN-KASTENS” FROM 1850

Abstract: The paper presents the content of the basic medicine box "*Medicamenten-Kastens*" from 1850 for military units according to the original document of the Aulic Chancellery in Vienna, with a discussion. It contained 8 utensils for mensuration, dispensing and application of medicinal substances and 28 substances in the form of 22 "*simplicia*" and 4 "*composita*" and 2 bases for medicinal preparations. Topical disinfectants and hemostyptics, expectorants, analgo-spasmolytics, emetics, purgatives and digestives from the contents of this mobile military pharmacy were a component of the pharmacopoeias of the time, which were proclaimed for the areas of the Habsburg Monarchy, including the Croatian regions.

Keywords: drugs, history of medicine, history of pharmacy, Croatia

Non MeSH: 19th century, Habsburg Monarchy

Introduction

The development of medicine coexisted with the development of pharmacy, which was rooted in the humanistic – Enlightenment atmosphere of the progress of chemistry, mineralogy and physics in the 19th century, which in turn emerged from centuries-old alchemy, iatrochemistry and iatrophysics, and then followed by the accelerated academization of medicine and development of institutional higher education. Thus, in our regions, it was proclaimed by decrees from the Viennese court be-

tween the 17th and 19th centuries, both for the civilian part and for the military part of the empire in which Croatian military forces in particular participated on numerous European battlefields, and based on the development of the First and the Second Medical Schools in Vienna. In that era, treatment was carried out using internal and external methods (Lat. *cura interna*, *cura externa*). *Cura interna* consisted of therapeutic procedures with drugs and was exclusively reserved for doctors (Lat. *Medicus*, *Medicinae Doctor*, Ger. *Arzt*), and *cura externa* included surgical methods as well as methods of physical therapy carried out by surgeons (Lat. *Chirurgus*, Ger. *Unterarzt*, *Wundarzt*). In addition to constant military campaigns, devastating endemic and pandemic diseases, such as cholera, were treated in the mid-19th century by the above mentioned methods, especially dietary prophylactic measures and quinine, while natural factors such as air and light, and lifestyle such as healthy food and drink, work and rest, regular sleep and dreaming, were the basis of measures from the so-called natural medicine (Ger. *Naturheilkunde*). Herbal, animal or mineral preparations were the basis for the composition of medicines in various pharmacological forms and were described in the pharmacopoeias of the time as legitimate medicines. [1-9]

In places where there were no pharmacists, the physician was supposed to have a small, home pharmacy with basic medicines that he prepared and dispensed, while the pharmacists had a complete set of utensils and medicinal substances from which they produced and dispensed medicines. In military units, military doctors had, in addition to the proclaimed surgical equipment, a mobile pharmacy, with a larger content at a regimental level, and with smaller, basic supplies at a battalion or company level. [2,5-8, 10]

In this paper, we present, along with a discussion, a complete translation of the contents of a medicine box "*Medicamenten-Kastens*", *kleinerer art* from 1850, from the original document of the Viennese Court Chancellery "*k. k. Hof- und Staatsdruckerei: Beschreibung eines Medicamenten-Kastens – kleinerer Art, 1850*" (Figures 1 and 2) found in the documents of the 6th Border Guard Regiment Đurđevac with headquarters in Bjelovar. [11, 12]

"*Medicamenten-Kastens*" auf 1850.

DESCRIPTION OF A MEDICINE BOX

- Smaller type -

A box, covered with black calfskin, inlaid with iron, with two iron handles attached to the sides, provided with a lock and two iron clasps on the front; inside it contains a movable and a fixed chest, to the latter of which is attached a drawer three inches deep. On the inside of the lid is a flap for storing records, and the whole box is lined inside with green sedge.

Included in this box are:

A. In movable supports;

One mortar together with a serpentine stone pestle.

One measuring cup 6 ounces; of tinned iron sheet.
One powder scale with brass bowl.
One double brass powder spoon.
One double wooden powder spoon.
One wooden box with Austrian medical weights, from one ounce to one gram.
One large tin enema syringe together with two additional wooden tubes.
Iron spatula.

Four square standing white glass bottles, 16 ounces each, with wide mouth and rubberized glass stoppers, one of them unsigned, the other three with the inscription:

Ferrum oxydatum hydratum.
Unguentum mercuriale commune.
Unguentum simplex.

Five square standing white glass bottles, 1 ounce each, with wide mouths and rubberized glass stoppers, marked:

Argentum nitricum fusum.
Mercurius dulcis.
Mercurius sublimatus corrosivus.
Morphium aceticum.
Lapis divinus.

B. In the lower fixed supports;

Four square white glass bottles, 2 ounces each, with wide mouths and rubberized glass stoppers marked:

Balsamum
Copaivae.
Liquor Ammonii puri.
Liquor acidus Halleri.
Tinctura opii simplex.

Seven square white glass bottles, 2 ounces each, with wide mouths and rubberized glass stoppers labeled:

Alumen ustum.
Camphora.
Chinin sulfuricum.
Pulvis Doveri.
Saccharum Saturni depuratum.
Sal ammoniacus depuratus.
Tartatus emeticus.

One piece of a square white glass bottle, 8 ounces, with narrow openings and smooth glass stoppers, marked:

Liquor mineralis Hofmanni.

Five square white glass bottles, 8 ounces each, with wide mouths and rubberized glass stoppers labeled:

Arcanum duplicatum in pulvere.

Nitrum depuratum in pulvere.

Pulvis gummosus.

Radix Jalapae in pulvere subtili.

Radix Ipecacuanhae in pulvere subtili.

Four square white glass bottles, 16 ounces each, with narrow mouths and rubberized glass stoppers, one of them unlabeled, the other three with the following inscriptions:

Aqua vulneraria acida.

Spiritus camphoratus.

Tinctura amara.

Discussion

The medicine box with basic, minor contents, as stated, contained 8 utensils for measuring, preparing, dispensing and administering (e.g. enemas) medicines and 28 substances for oral or topical use in the form of 22 "*simplicia*", 4 "*composita*" in the form of potions, and 2 bases for medicinal preparations. It was of wooden construction with an interior lined with dry green sedge (Ger. *Rasch*), a type of grass that grows in Upper Austria, which was used to line the boxes to protect them from moisture and shocks. [11]

Simplicia were the following medicinal substances: *Ferrum oxydatum hydratum* was used topically for wounds with secretion and cancerous ulcers, *Unguentum mercuriale commune* (*cinereum*, *neopilitanum*) for infected and slow-healing wounds on the skin of the body, away from the mouth and eyes, *Argentum nitricum fusum*, spindles of silver nitrate were used for topical hemostasis and disinfection of open wounds and chemical fulguration of surface growths (warts, etc.) and are still used today, and *Mercurius sublimatus corrosivus* for irritations of mucous membranes and mucous membranes, including rectal tenesmus and fissures. *Lapis divinus*, silver nitrate in aqueous solution, was used for eye infections, *Mercurius dulcis* was used for quick relief of pain in the throat, eyes and otalgia, and *Morphium aceticum* as a well-known strong analgesic, *Balsamum Copaivae*, as an analgesic and expectorant and oral antiseptic in respiratory and urinary infections. *Liquor Ammonii puri* was used for stomach irritation (dyspepsia), *Tinctura opii simplex* was used for digestive

colic, *Alumen ustum* was prescribed as an antiseptic and astringent, *Camphora* as an "analeptic smelling salt", but also as an expectorant, *Quinine sulfuricum* as an analgesic, antipyretic, anticholeric and uterotonic, *Saccharum Saturni depuratum* was used for constipation, and as an anxiolytic and analgesic. *Sal ammoniacus depuratus* (*Salmiak*) was used as an expectorant, and *Tartarus emeticus* (*antibium kalii tartaras*) as a strong emetic, *Arcanum duplicatum* (*Potassium sulfate*), an antipyretic and antihypochondriac, and *Nitrum depuratum* as an antispasmodic, *Radix Jalapae in pulvere subtili* was prescribed as a laxative and active purgative, and *Radix Ipecacuanhae in pulvere subtili* as an emetic and antidysenteric. It is still used as an emetic today. *Spiritus camphoratus* was prescribed as an analgesic, antirheumatic, spasmolytic, and *Tinctura amara* as an aperitif and digestive. [12-17] Most of the preparations of that time, which are listed in "*Medicamenten-Kastens*" in the form of "*simplicia*", are used today in official homeopathic medicine in daily prescriptions as monotherapy or in combination.

Composita, or *mixtura*, were the following medicinal preparations: *Aqua vulneraria acida*, or *Mixtura vulneraria acida Thedenii* (wine vinegar, sulfuric acid, honey, water) was used for rinsing and disinfecting wounds in the pre-antiseptic era. *Liquor acidus Halleri* (*Aethereus sulphuricus*, *Spiritus aetheris sulphurici*), was prescribed as an aperitif but also as an astringent for superficial bleeding, often called and used as an elixir, *Pulvis Doveri* (mixture of *Ipecacuanhae* powder and *opium*) as an antipyretic, spasmolytic, for fever and colds, and *Liquor mineralis Hofmanni* (*Spiritus aetheris*) was prescribed as an oral analgesic and spasmolytic. [8,12-17] The neutral bases for the preparation of topical or oral medicines were: *Unguentum simplex*, a simple ointment made of vaseline for use on the skin and mucous membranes, and *Pulvis gummosus* (Ger. *Gummipulver*), which was used as an excipient for tablets. [12,14-17] Popular at the time were mixtures that were most often analgesic-spasmodic-sedative, such as the described *Pulvis Doveri*, then *Laudanum liquidum Sydenhami* (composed of opium, cloves, saffron, cinnamon, fennel and wine), then Hoffman's drops (75% alcohol and 25% ether) from the 17th century, almost 100 years before the discovery of ether as a general anesthetic. *Calomel* (mercuric chloride) was used for decades, from a panacea to real pharmacotherapy, as was bitter salt (Epsom salt, epsomite, magnesium sulfate heptahydrate) which is still used today as a laxative. [8, 14-17]

Therapeutic procedures (Ger. *Behandlung*; Lat. *curatio*) were still linked to the humoral philosophy of the inherited inviolable Hippocraticism and Galenism, and even panaceaism, right up until the mid-19th century and the development of cellular theory, and the further extensive progress of pharmacy. These procedures were most often dietary, as well as evacuation via enemas or vomiting, or sedation. Herbalists were often involved as consilarii of academic physicians, in order to prepare certain tinctures and teas. The post-Columbian period brought the use of various exotic preparations made from ipecacuanha, tobacco and quinine, so in 1666 Tackius mentioned various forms of tobacco preparations from drinking to inhalation for treatment, [18] while Valentini [19] also mentioned enemas made from tobacco smoke. Valentini thus mentions numerous herbal preparations for treating various diseases according to the organs affected by the disease or considered to be the cause, and thus,

among other things, recommends water lily extract (Ger. *Seerose*, Lat. *Nymphaea alba*) for treating postpartum hemorrhage. [20]

The pharmacopoeias of the Austrian Empire contained numerous medicinal preparations, and based on new knowledge, numerous amendments and additions were made, and examples from historical documents of hospitals from the 18th and 19th centuries confirm the scope of medicinal procedures and medicines, including the Osijek City Hospital from 1777. [21] Lime water (*Kalchwasser*, *Aqua calcis*) with or without camphor was most often used for drinking and for compresses, for the treatment of stone formation, for catarrh of the intestines and respiratory organs, "suppuration of internal organs", as an aid in tuberculosis, the treatment of gonorrhea, skin ulcers, dermatoses and burns. Furthermore, indispensable emetic and purgative agents were required, such as *abfuhrendes Trankel*, *Laxier-Pulver*, *Erbrech Getranck*, then *Camphor*, *Kalchwasser*, *Kalchwasser mit camphor*, *Bleyweis salben*, *Wund Salben*. [21]

Rezime

U radu je prikazan sadržaj manje kutije lijekova „*Medicamenten-Kastens*“ iz 1850. godine iz originalnog dokumenta bečke dvorske kancelarije koji je bio centralistički proklamiran za područja Habsburške monarhije, pa tako obvezatan i za hrvatske krajeve. Kutija za lijekove sa temeljnim sadržajem sadržavala je utenzilije za menzuraciju, pripremu, izdavanje i aplikaciju ljekovitih tvari, gotovih pripravaka ili sačinjenih iz farmaceutskih esencija koji se nalaze u popisu ljekovitih tvari u kutiji, a namjenjena je vojnim liječnicima u bataljunima ili satnijama. Značajan broj lijekova bio je magistralnog podrijetla i temeljen na dotadašnjim carskim bečkim farmakopejama s raspravom tipičnog dosega medicine i ljekarništva sredine 19. stoljeća. Ipak su emetici i purgativi prema ondašnjim terapijskim principima „*vomere*, *cacare*, *sudare*“, bili najčešće primjenjivani simptomatski lijekovi sredine 19. stoljeća, što potvrđuje i sadržaj kutije lijekova, odnosno mobilne male vojne ljekarne.

Ključne reči: lijekovi, povijest medicine, povijest ljekarništva, 19. stoljeće, Hrvatska, Habsburška monarhija

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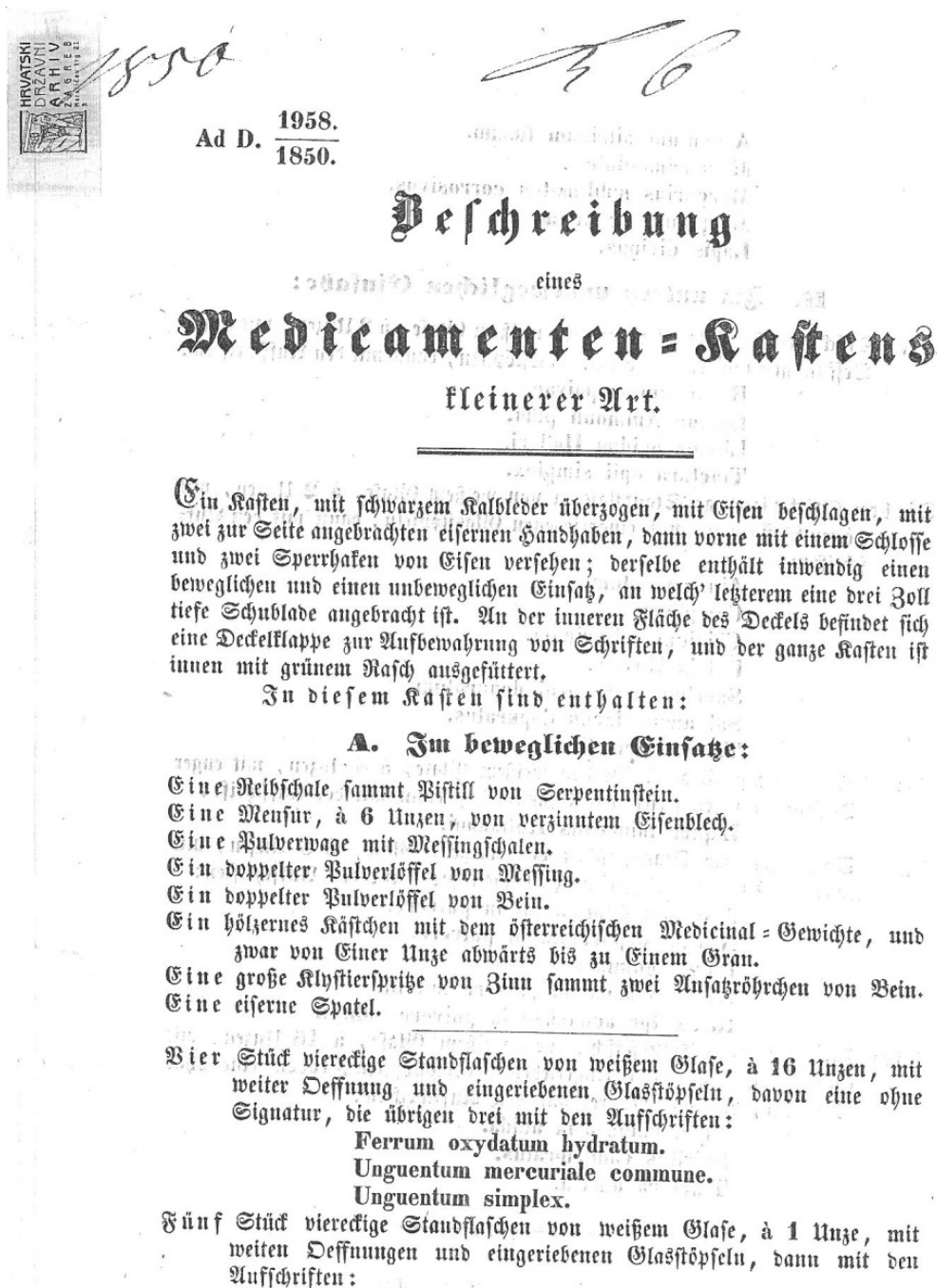


Image 1. „Medicamenten-Kastens“ auf 1850. HDA ZGK kut. 3., R-595, 1850.; k. k. Hof- und Staatsdruckerei: Beschreibung eines Medicamenten-Kastens (p. 1.)



Argentum nitricum fusum.
Mercurius dulcis.
Mercurius sublimatus corrosivus.
Morphium aceticum.
Lapis divinus.

B. Im untern unbeweglichen Einsatze:

Vier Stück viereckige Standflaschen von weißem Glase, à 2 Unzen, mit engen
Öffnungen und eingeriebenen Glasstöpseln, dann mit den Aufschriften:

Balsamum Copaivae.
Liquor Ammonii puri.
Liquor acidus Halleri.
Tinctura opii simplex.

Sieben Stück viereckige Standflaschen von weißem Glase, à 2 Unzen, mit
weiten Öffnungen und eingeriebenen Glasstöpseln, dann mit den Auf-
schriften:

Alumen ustum.
Camphora.
Chinium sulfuricum.
Pulvis Doveri.
Saccharum Saturni depuratum.
Sal ammoniacus depuratus.
Tartarus emeticus.

Ein Stück viereckige Standflasche von weißem Glase, à 8 Unzen, mit enger
Öffnung und eingeriebenem Glasstöpsel, dann mit der Aufschrift:

Liquor mineralis Hofmanni.

Fünf Stück viereckige Standflaschen von weißem Glase, à 8 Unzen, mit
weiten Öffnungen, eingeriebenen Glasstöpseln und den Aufschriften:

Arcanum duplicatum in pulvere.
Nitrum depuratum in pulvere.
Pulvis gummosus.

Radix Jalapae in pulvere subtili.

Radix Ipecacuanhae in pulvere subtili.

Vier Stück viereckige Standflaschen von weißem Glase, à 16 Unzen, mit
engen Öffnungen und eingeriebenen Glasstöpseln, davon eine ohne
Signatur, die übrigen drei mit den Aufschriften:

Aqua vulneraria acida.
Spiritus camphoratus.
Tinctura amara.

Aus der k. k. Hof- und Staatsdruckerei.

Image 2. „Medicamenten-Kastens“ auf 1850. HDA ZGK kut. 3., R-595, 1850.; k. k. Hof- und Staatsdruckerei: Beschreibung eines Medicamenten-Kastens (p. 2)