

TWO CENTURIES OF MEDICAL PRESCRIBING IN MALTA 1683 - 1882

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Some time ago I published the results of a study of an 18th century manuscript, discovered at the Royal Malta Library, dealing with the importation of drugs and equipment for the pharmacy of the Holy Infirmary of Valletta. The manuscript contained information only for the last thirty years (1770-1798) of the rule over the Maltese Islands of the Order of St. John of Jerusalem (Cassar, 1967). Since then five old prescription registers kept by private pharmacists in Malta have come my way. They cover a wide span of years from the late 17th through the 18th to the second half of the 19th centuries. These registers, together with the contents of the manuscript referred to above, provide an extensive panorama of the pharmaceutical preparations which medical men prescribed and pharmacists dispensed over an almost uninterrupted period of two hundred years from 1683 to 1882.

The three registers from the 17th and 18th centuries list the medicaments supplied to the Jesuits of Valletta. Each entry bears the name of the patient for whom it was prescribed such as *Padre Vella*, *Farrugia*, *Brigundio*, *Biancardi*, etc. Sometimes the reference is simply *per il Padre Rettore* (for the Father Rector), *per il padre della filosofia* (for the Father who teaches philosophy) or *per li padri missionari* (for the missionary fathers). The names of the physicians or surgeons prescribing the medicaments are not recorded.

The earliest register begins on the 9th February 1683 and ends on the 2nd January 1713. It measures 27.5 cm by 10 cm and contains 75 written folios and 22 blank ones at the end. Only the first 35 folios are numbered. The front cover is missing; the back

cover is of cardboard. The register is worm-eaten in places. The entries, written in ink in Latin or Italian, are in varying hands showing that they were recorded by different pharmacists.

Some folios contain doodles of sailing ships, hulks of galleys, faces of men and dogs, architectural ornaments, arabesques, flowers and butterflies. At irregular intervals there are short notes in Italian recording payments to the pharmacists supplying the drugs.

Many of the entries are illegible. The following is a selection of names of preparations from among those that could be identified. They are reproduced in their original abbreviated wording with the year in which they were issued:—

- | | |
|------|---|
| 1683 | Ung rosati
Ol amygd dulcis
Ol de nocemuscata
Mannae elect
Cons ros rub
Ol de scorpionibus
Oximellis simplicis
Syr de sena
Syr de bettonica
Syr reobarb |
| 1684 | Radix china
Cornu cervis |
| 1686 | Diacodion
Cons ros damascena
Emp coronalis
Dia cydoniatum
Sanguisughe
Ol liliorum
Aloes socot
Terbentina veneti
Camomille
Cons boraginis |

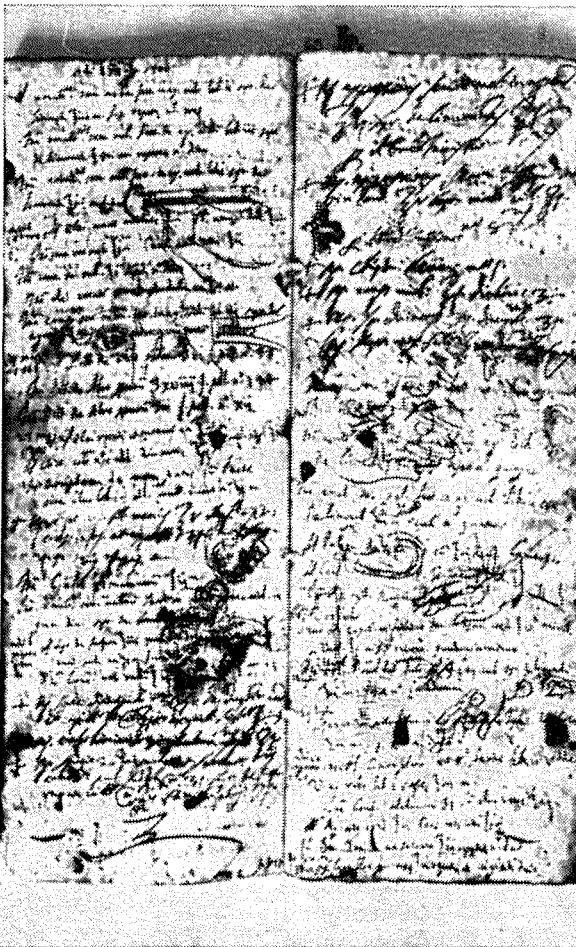
- 1689 Syr aurei
Syr capil veneris
Conf hiacinti
Syr magistralis
Theriaca
1698 Camomell lumbricat
Amarenj cond sine ossib
1701 Diachylon
Cons fumaris
1710 Aq stiptice
Sac ros sub
Ocul cancror

The second register bears at the top of the first page the IHS symbol (Jesus Hominum Salvator) and beneath it the title *Quinterno delli medicamenti fatto a primo giugno 1713*. Its initial date is the 1st June 1713 thus carrying on, practically, from

where the previous register left off. Its last date is the 28th September 1735. It measures 29 cm by 10 cm and has 85 written folios and 3 blank ones at the end. None of them is numbered. The covers are of parchment. This register, in contrast to the other one, records the names of the pharmacists who were paid for the drugs, i.e. Gregorio dell' Alberi (1714), Raimondo Poladi (1716) and Giacomo Zerafa (1732).

Among the preparations prescribed were:

- 1713 Aq flor aurantij
Clist com
Rad asparag
Aq angelica
1714 Ung plumb
1722 Lapid D Pauli



Two pages from the 1683-1713 register showing illegibility of entries and doodles of human faces, hands, etc.



The title-page of the 1713-1735 register with the IHS symbol and doodles.

- 1723 Salis ammoniaci
Syr de cornib cervi
Corallinae pulv
- 1727 Lapid Belzoar min
Salsaparilla
Camphor
Linguae D Pauli pulv
Polp innocens
- 1730 Cortex cinchon
Mercuriis crudi
Conf alcher
Cassia recens
Sang hirci pulv
- 1732 Helleb alb
Aluminis pulv
Spir sal arom
Pulv innocenti
- 1735 Ras cranji hom
Balsamo innocenziano.

These items include oils, ointments, syrups, conserves, powders and emplastra. They were compounded, in most instances, of vegetable parts but animal ingredients such as scorpions, crayfish, hart's horn and human skull also figure among the preparations. Mineral substances including lead, mercury and alum make their appearance in the 18th century register. A few of these medicaments still form part of current materia medica for example almonds, sena, aloes, rhubarb, cinchona, chamomile, camphor, mercury and lead; but pharmacy has long ago turned its back on St. Paul's Earth and Tongues, *terra sigillata* and theriaca. It is of interest to note, however that leeches disappeared from the British Pharmaceutical Codex as recently as 1959.

It is not proposed to describe all the remedies listed above but a few remarks will be given about some of the most notable or curious of them.

Ung rosati. It consisted of fresh roses pounded with pork fat in a pestle and then heated. It was used for piles and joint pains (Baume, 1780a).

Ol de scorpionibus. Scorpions were immersed in olive oil and exposed to sunlight for ten days. The oil was then expressed and preserved in a "well closed bottle". It was an anti-dote against the bites of scorpions and other poisonous animals (Baume, 1780b).

Radix china. The root of the Peruvian

cinchona tree of which several species are known. It was so called from the Countess of Chinchon who was cured of a fever by a preparation of its bark. It was known in Europe as early as 1640, the Jesuits being credited with its conveyance from Peru to Spain hence its other names of Peruvian and Jesuits bark. It was used as a febrifuge and aid to digestion. The Maltese 18th century surgeon M.A. Grima prescribed "this wonderful specific" in the form of a tincture in cases of suppurating firearm wounds (Grima, 1773; Baume, 1780c).

Cornu cervis. The tips of the antlers of the stag were boiled in water or calcined or formed into gelatine. They were originally used in ancient Egyptian medicine to drive out the demons of disease. They were adopted by Greek and Arab physicians and later by Western doctors. The "spirit of hartshorn" of modern pharmacy is a water solution of ammonia which in olden days was obtained by the distillation of horn shavings (Dawson 1929). In the form of a syrup it was recommended in epilepsy, apoplexy and paralysis (Baume, 1700d).

Diocodion. A decoration of the heads of the white poppy. It was administered to produce sleep, relieve throat pains and suppress cough (Baume, 1780e).

Dia (cridium) cydoniatum. A preparation of the gum resin scammony and the pear-shaped fruit of *Cydonia vulgaris*. It was taken internally as a purgative (Baume, 1700f).

Sanguisughe (Leeches). They were applied to inflamed parts to suck blood and thus relieve congestion. Their therapeutic use is first mentioned in the second century B.C.

Confectio hyacinti. It was composed of the "sealed earth" (*terra sigillata*) brought from the Island of Lemnos, "crabs' eyes", myrrh and other substances. It was employed as a sudorific, antiemetic and in smallpox (Baume, 1780g).

Syrupus magistralis. A syrup containing, among other ingredients, red roses, sandalwood, cinnamon and rhubarb. A purgative. (Baume, 1780h).

Theriaca. This electuary was compounded of many ingredients, sometimes as many as sixty-six, such as trochisci of vipers,

opium, agaric, valeriana, cassia, pepper, sealed earth of Lemnos and wine. It was used as an antidote against bites of poisonous animals and as a remedy for cough, smallpox and plague. (Baume, 1780i).

Diachylon. An emplastrum of lead and mucilage; it corresponds to the *emplastrum plumbi* of the modern pharmacopoeia. It was used to soften abscesses and promote the discharge of pus. *Oculi cancerorum* also known as *lapides cancri* were "stones" removed from the head of the cray-fish. It was claimed that they possessed astringent properties and were prescribed to arrest bleeding and vomiting. (Lemery, 1759a).

Aqua angelica was prepared from the seeds and flowers of the plant *Angelica officinalis*. It was recommended as a "cordial" and stomachic (Baume, 1780j).

Lapid. D. Pauli and Linguae D. Pauli pulv. A treatise on the "earth" and "tongues" of the apostle St. Paul and on the so-called Serpents' Eyes of Malta was written in the 17th century by the Maltese physician G.F. Bonamico (1639-1680). A handbill in Italian, extolling the efficacy of these Pauline remedies was also published in Rome in 1686. The "earth" was excavated from St. Paul's Cave at Rabat (Malta); the "tongues" and "serpents' eyes" are actually fossilised fish teeth obtained from the sedimentary rocks of Malta. In those days they enjoyed a wide reputation as antidotes against any kind of poison or bite of poisonous animals but were also used as astringents in "many other diseases". They were immersed in water or wine which was afterwards drunk. The "tongue" was also worn round the neck or arm. The "eyes" were encased in a ring in such a way as to be in contact with the skin when worn on the finger (De Boersgelin, 1805; Ms. CXLII, RML).

Corallinea pulv was a mixture of opium, myrrh, cascarilla, cinnamon and red coral reduced to powder. It was prescribed as an astringent in dysentery and to allay epigastric pains (Baume, 1780k).

Lapid, Belzoar. Two preparations were included under this label, the dried and powdered liver of vipers and the concretions found in the intestines of certain ruminants. They were employed as sudorifics and "to expel poison from the body" (Baume, 1780l).

Conf. alchermes. It was compounded of cochineal (the dried red insect *Coccus cacti*), cassia, pearls and red coral, the preparation being ornamented with silver leaves. It was prescribed in syncope and "to fortify the heart" (Baume, 1780m).

Sang, hirci pulv was the blood of the Billy goat dried in the sun and powdered. It was given internally to promote sweating and urination (Lemery, 1759d).

Ras, cranji hom. were shavings from the skull of a young man dying a violent death. They were reduced to powder without roasting or heating as such a process was believed to destroy the volatile substances on which their alleged healing virtues depended. Human skull was prescribed in epilepsy and other neurological conditions and as an antidote against various poisons (Cassar, 1967b).

The third eighteenth century register extends from 31st October 1766 to the 29th March 1768 (Arch. 1993, MRL). Its first 23 pages are missing. Its last page is numbered 42. It is of the same format as the previous registers but as it is bound with other documents it cannot be measured exactly. Its *materia medica* does not differ substantially from that of the other eighteenth century registers. The pharmacist (*aromatario*) from the 1st September 1767 to the 29th March 1768 was Gioacchino Delicata. The last entry in the register is a note to the effect that the pharmacist had not been paid for the medicaments supplied up to the 29th March 1768 as it was the custom of the Jesuits to pay him annually. He received payment, however, on the 19th May 1768.

The Jesuits were expelled from Malta in 1768 by Grand Master Emmanuel Pinto. There is a manuscript which lists the medicaments supplied to the departing Jesuits "for their needs during the voyage." It contains 25 pharmaceutical preparations among which *Diascord'io di Fracastoro* (an electuary of several roots and of laudanum administered in dysentery), *Laudano oppiato* (a liquid mixture of opium and spices for colic and vomiting), *Spermaceti* (a white concretion from the head of the whale for chronic diarrhoea) and *Elixir proprietatis Paracelsi* (compounded of myrrh, aloes and

crocus "to fortify the heart and purify the blood"). This list was signed on the 28th April 1768 by Dr. Gaetano Azzopardi, "Physician in ordinary" to the Jesuits. Dr. Azzopardi was employed in the medical services of the Order of St. John and eventually became Senior Physician at the Holy Infirmary.

The two 19th century registers were in use at the pharmacy of Messrs Collis and Williams of Valletta. The earlier one is marked in block letters with the words — "Prescriptions Dr. Edwards" and "1860-1862". Presumably the physician was Dr. St. J. Edwards who had a Maltese wife and who resided at 149, *Strada Vescovo*, (to-day Archbishop Street), Valletta. He was still in practice up to 1869. (*The Malta Almanac & Directory, 1809; The Malta Observer, 1861*).

The book measures 32.5 cm by 17.5 cm. It consists of 355 leaves. There is an index of the customers' names. The period covered by the register extends from the 1st January 1860 to the 30th April 1869. During January 1860 the pharmacist took the trouble of noting besides the date, also the weekday in Latin such as *Die Solis* (Sunday), *Die Lunae*, *Die Martis*, *Die Mercurii*, *Die Jovis*, *Die Veneris* and *Die Saturni*.

The other register has a label pasted on the inside of its front cover bearing the printed words:— "Entered at Stationers' Hall, H. Silverlock's Approved Prescription Book. H. Silverlock, 92, Blackfriars Road, London, S.E.". It is dated 1881-82 and measures 37.5 cm by 12.5 cm. It has 502 pages, each page being divided vertically into two columns of unequal width, the narrower one bearing the heading "Name and No." and the other column "Copy of Prescription and Price". An index is provided.

We can picture the apothecary — who remains anonymous — intently bent over his small desk by the side of the counter copying in these registers the prescriptions he has just prepared. His writing is in a neat and beautiful hand quite in contrast to the scrawling entries of the 17th and 18th centuries registers already considered.

In 1860 the clients of this pharmacy were almost all British residents and visitors.

They came from all walks of life and included naval captains, army officers, civil servants and their wives, clergymen, titled ladies and gentlemen, physicians and sea men from merchant vessels, private yachts and Her Majesty's Ships. There was even an admiral and a Protestant Bishop. Practically the only Maltese customers at this period were the domestic staff of British residents or the employees of the hotels of Valletta. By 1880 the bulk of the clientele was still made up of people from the United Kingdom. The Maltese domestics disappeared and were replaced by the names of members of the Maltese nobility, the "respectable classes" and the legal and medical professions. Most of the customers lived in Valletta but addresses in Floriana, Sliema and Pietà are also recorded; an occasional prescription came from Gozo.

While the names of adults were entered in full in the prescription registers, babies, children and domestic staff remain anonymous. In fact they were recorded simply as "Mrs. B . . . 's baby" or "Mrs. C . . . 's little girl" and "Mrs. D . . . 's French maid" or "Mrs. E . . . 's cook", etc. Occasionally domestics were registered by their Christian name only such as "Salvo the waiter" or "the servant Theresa" or "Angelo the servant". One solitary customer is entered simply as "Maltese woman".

The directions to the patient are almost always written in English. Some of them would not be seen on a modern prescription. A preparation of Alumen and Decoctum Quercus was to be administered as "one syringful three times daily" for its astringent effects in bleeding and discharges from the female genital organs; a mixture for a baby was prescribed as "one drachm as often as he will take it"; and Unguentum Gallae was applied to piles in the "size of a nut" or of a piece "as large as a marble to be well rubbed in night and morning". Of Aconite Tincture, "a little was to be applied to the gum with a camel-hair pencil or a feather" for the relief of toothache.

One very significant fact emerges from a consideration of the doctor's directions to his patient, i.e. his psychological insight into the difficulties experienced by the sick who, besides the sufferings occasioned by their

illnesses, had to tolerate the annoyance and inconvenience of ingesting medicines that were often of a repulsive taste. The physician, therefore, took great pains to devise ways and means of overcoming the resistance of his patients and securing their cooperation by rendering the mixture as attractive and as palatable as possible. In this he relied on the full knowledge and experience of the pharmacist who employed various methods to achieve his aim. For instance, powders were to be had in a "glassful of water and brandy"; drops of *Liquor Cinchonae* were put "on a lump of sugar"; *Syrupus Ferri Phosphatis* was swallowed "through a glass tube" to prevent blackening of the teeth and tongue by the mixture. Other preparations were given in milk, coffee, linden-tea or chamomile-tea. Pills containing quinine and gentian were enveloped in silver leaf to shield them from the palate and at the same time prevent them from becoming hard and dry. Some powders were administered in "a little honey or jam" or in orange-flower water or in the form of a snuff. Other substances were prescribed as a clyster or enema in "a tumblerful of milk with the yolk of an egg".

Liniments, were applied on pieces of "spongio-piline" which was a material made of wool and sponge with a layer of rubber to make it impermeable to moisture. The side with the liniment was placed on painful parts. Asthma was relieved by a powder of which a "thimbleful" was placed on a plate "and pinched into a conical shape and lighted at the top". *Pyrethrum roseum* or flower heads of pellitory were applied to the skin, after maceration in rectified spirit of wine, to ward off insects. Another remedy against mosquitoes was a "canadian recipe" containing Oil of Spearmint or Oil of Turpentine which was "dabbed on to the temples, neck etc. with a piece of cotton wool or sponge".

In 1860 the most common domestic medicinal measure for liquid mixtures was the wine glass; much less in common use was the claret glass. By 1880 they were largely replaced by the table, dessert and tea spoon.

A few directions written in Latin are scattered in the registers. They include *cras mane sumend.* (to be taken to-morrow

morning), *Cyathovinar'io ter in die* (a wine glass three times daily), *fiat injectio more dicto* (the injection to be made as directed) and, for an emplastrum, *super vellum extent ut magnit prescripta* (to be spread over a piece of wool of the prescribed size). Latin nomenclature was employed also in ordering brushes for local applications. Thus a *penicillum latum* was used for the spreading of Black Mustard Oil over stiff paper and a *penicillum rotundum* for touching sores and chancres with Nitric Acid Solution.

From these registers we can estimate the cost of a prescription in 1880. A four ounce bottle of medicine was sold for one shilling to one shilling-and-sixpence; powders cost two pence each. It was one of the principles of the trade to charge the same price for a repetition of the same mixture. In order to avoid mistakes the price was entered in the prescription register for easy reference. Sometimes, instead of numerals, code letters were written in accordance with a private mark known only to the dispenser. This code usually consisted of the name of a drug each letter of which corresponded to a number, care being taken that the word contained ten letters none of which was duplicated. An example would be:—

F	L	O	R	A	N	T	H	E	M
1	2	3	4	5	6	7	8	9	0

Thus the letters L/H would mean 2s 8d. This is the meaning of the letters that one sometimes comes across at the top right hand corner of the prescription entered in the registers.

The score or so of doctors whose prescriptions fill the pages of the registers include some of the prominent physicians and surgeons who dominated the medical scene of the last quarter of the past century in Malta. One comes across Professor G.B. Schembri (1841-1904) who occupied the Chair of Midwifery at our University and who performed the first laparotomies in Malta; Professor Lawrence Manchè (1846-1921) who held the Chair of Ophthalmology and who published a number of papers on several aspects of his specialty in foreign medical journals; Professor S.L. Pisani who studied at Edinburgh University, worked as surgeon during the Crimean War at Scutari

Hospital and subsequently became Professor of Surgery at the Malta University (1869-1885); and Professor G.O. Galea (1828-1903) who occupied the Chairs of Hygiene, Pathology, Physiology and Medicine for almost half a century (1856-1902) (*Malta, 1907*).

The conditions which these medical men tried to correct — and their favourite remedies — were the following:—

a) Constipation. As laxatives they employed *Confection sennae*, Seidletz Powder and *Decoctum Taraxaci* (a boiled solution of dried dandelion roots in water); among purgatives used were Magnesium Sulphate, Castor Oil, Rhubarb (in the form of Gregory's Powder) and Jalap Powder. Obstinate cases called for a dose of Croton Oil. Perhaps the earliest known American "eclectic" remedy to be used in Malta made its appearance in 1880. It was a purgative and diuretic called Iridin or Blue Flag, a resin obtained from the root of *Iris versicolor*.

b) Diarrhoea. Among the astringents prescribed were *Tinctura Catechu*, Magistery of Bismuth (Bismuth subnitrate), *Pulvis Ipecacuanhae compositus* (Dover's Powder) and *Tinctura Cascariillae*.

c) Dyspepsia was treated with Bicarbonate of Soda and Hydrocyanic Acid.

d) Pulmonary and cardiac affections. Prescriptions for these conditions were numerous and varied. Most of them were for expectorants as *Acetum Scillae*, *Pilula Galbani Composita* (a gum resin), Ammonium carbonate, *Tinctura Lobeliae* and Liquorice Powder. Such "tonics" as *Lichen Islandicus* (Iceland Moss), Citrate of iron and Quinine and Calcium were given in tuberculosis of the lungs. Digitalis was administered in the form of powder, for over-action of the heart and as a diuretic.

e) Gout and rheumatism loomed large in the medical practice of those days. The mainstays were Salicylic Acid and *Extractum Colchici*. Bottled mineral waters prepared abroad were coming into fashion while the chief external applications for the relief of pain and for reducing inflammation were *Emplastrum Belladonnae*, *Emplastrum Lithargyri* (lead plaster), *Cataplasma Lini* or Linseed Meal and *Charta Sinapis* or Mustard Paper (cartridge paper coated with a

mixture of powdered mustard seed).

f) Uterine pathology. Leucorrhoea was treated with Potassium Iodide; and bleeding with Tincture of Ergot. The latter was also prescribed to arrest haemorrhage from other organs such as the nose and lungs.

g) Mental and neurological diseases. Potassium Bromide was given in epilepsy; *Tinctura Valerianae* as a "stimulant" in hysteria and *Tinctura Strychninae* in paralysis, tetanus, hydrophobia and insomnia.

h) Fevers formed the bulk of medical practice in the last half of the nineteenth century. James' Powder (antimony) was in common use to lower the temperature in febrile states but the sheet anchor of treatment was the Tincture of Peruvian Bark (*Tinctura Cinchonae*) which had held sway as a febrifuge for at least two hundred years.

i) Pain was combated by various preparations of opium and morphine in the form of syrups, liquors, powders and suppositories.

The most common causes of morbidity in children seem to have been intestinal and respiratory diseases. Calomel was regarded as being a convenient purgative on account of its absence of taste; castor oil emulsion was also prescribed in constipation. *Pulvis cretae* (chalk mixed with nutmeg, cloves, and cinnamon) and *Pulvis Rhei Co.* (Gregory's Powder) were favourite remedies for dysentery and diarrhoea. Pepsine Wine was given "to aid digestion" and Fenne's Infusion was administered as an enema for flatus. Cough mixtures and expectorants for children included *Vinum Ipecacuanhae*, Sweet Almond Oil and *Oxymel Scillae* (vinegar of squill in honey).

A consideration of the prescriptions dispensed during the 19th century shows that many of the pharmaceutical preparations in use during the previous two centuries had been discarded and substituted by useful and rational ones; however up to ninety years ago drug therapy was still of a symptomatic and palliative kind. This reflects the general state of medicine all over the world as, though advances in the diagnosis of disease were being registered, little progress had been achieved in the therapeutic field.

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