A formulary or recipe book, such as that from the practice established by William Pilkington in St Helens, spanning as it does the period 1789 to the early 1900s, can be expected to reflect great changes in the practice of medicine, although the greatest changes will not be seen until the general availability of the sulphonamides and of penicillin and related antibiotics in the mid-twentieth century. Such a formulary should also permit some insight into the lives and attitudes of its authors.

In her detailed history of the practice in the then St Elyns, Jean Hugh-Jones, who had herself worked in the practice in more recent times, recounts how William Pilkington (1765-1831) served a seven year apprenticeship (from 1779 to 1786) under the tutelage of Dr William Fildes (d.1789). On completion of his apprenticeship, Pilkington moved to London and after six months' experience at St George's Hospital was granted a certificate indicating that he had attended the Practice of Surgery. The signatories to this certificate included the eminent surgeon John Hunter (1723-93). Having returned to St Elyns, in 1789 Pilkington joined Dr John Walker and the partners took over Dr Fildes's practice in Hardshaw, a part of today's town of St Helens. This practice also included an apothecary's shop.

The recipe book was started by William Pilkington in 1789 and, on its overwritten title page, is referred to as 'Recipes and Preparations Selected from Various Authors, March 27th, 1789'. The book was continued by his successors, Guy's trained Thomas Gaskell (1792-1868), his son Richard Allanson Gaskell (1828-1913), and Edinburgh graduate Robert Jackson (d.1952). It contains 200 entries in all. The final entries are not dated but the book seems to have been used well into the early 1900s; the last specific date is 1887 when reference is made to a formula for 'Liniment Commune' (Common Liniment) reported in the *Lancet* of 5 November of that year. A further eighty entries are recorded subsequent to this date.

By 1789 the old ideas of the Galenic theory had at last been laid to rest. Claudius Galenus Pergamenus (c. 130-200), usually known as 'Galen', had enunciated his ideas in about 150 AD and such Galenic style references to drugs such as, for example, mint being hot and dry in the third degree, had disappeared from the literature in the early 1700s. Nevertheless, many of the plant derived drugs used by Galen — henbane, colocynth, opium, turpentine, cinnamon and aloes — remained in common use into the present century and can be found in the Pilkington collection of recipes.

---

* Based on a paper delivered to the Summer Conference of the History of Medicine Society of Wales at Llangollen on 3 June 1995

2. Educated at Chetham's Hospital, Manchester and St Bartholomew's Hospital, London.
3. 'Recipes and Preparations Selected from Various Authors, March 27th, 1789', p. 80.
4. Very few of the recipes are accompanied by a specific date of entry. However, as a guide, it can be said that pp. 1-16 refer to the period 1789-95, pp. 16-18 to 1795-1825, pp. 18-28 to 1825-31, pp. 28-35 to 1831-33, pp. 35-47 to 1833-56, pp. 47-80 to 1856-87 and pp. 81-165 to entries after 1887. No further specific dates are cited after p. 165.
Basil Valentine (b.1394), in contrast, advocated chemical drugs, especially in his work *Currus triumphalis Antimonii*. Paracelsus (Philippus Aureolus Theophrastus Bombastus von Hohenheim, 1495-1541) was also an advocate of the use of chemicals such as antimony, mercury, sulphur, lead (all of which are included in the recipe book), arsenic, iron and copper sulphate; he is usually credited with burning the books of the ancients — Hippocrates, Galen and Avicenna. Paracelsus nevertheless understood folk medicine and applied empirical knowledge to produce and use ointments, extracts and tinctures manufactured from plant materials. This swing towards chemical medicine is also reflected in the prescription book, although the growth of understanding of chemistry, of plant active principles and of synthetic medicines was only slowly accelerating in the nineteenth century.

One other factor influencing practice in the eighteenth century was the wide range of plant drugs introduced to Britain by the explorers, men like Sir Francis Drake (c. 1543-1596), Sir Walter Raleigh (c.1552-1618) and Captain James Cook (1728-1779). Their experience yielded valuable information on the ethnobotanical value of tropical plants such as cascara, curare, ipecacuanha, coca, senega, cinchona, hamamelis, etc, data of importance to practitioners, researchers and traders alike.

The St Helens prescription book reveals interesting aspects of practice itself. The most obvious feature in this regard is probably the transition from the true Latin presentation of prescriptions in the early part of the book to 'dog Latin' (the mongrel language used in everyday prescription writing) and finally to English prescriptions and formulae at the end of the period.

In pharmaceutical practice it is usual to measure solids by weight. In the early part of the book, the Troy or Apothecaries pound (1 lb = 5760 grains) is employed, subdivided into 12 ounces, each of 480 grains and represented by the symbol \( \frac{3}{i} \). The Apothecaries ounce was further subdivided into 8 drachms (\( \frac{3}{i} = 60 \) grains) or 24 scruples (\( \frac{3}{i} = 20 \) grains). Later in the book, the Avoirdupois pound (1 lb = 7000 grains) appears and gradually supersedes the Troy measure. As the Avoirdupois pound is divided into 16 ounces (16 oz), each is equivalent to 437.5 grains. Liquid measure was based on the minim (m), 60 minims being equivalent to one fluid drachm (\( \frac{3}{i} \)), 8 fluid drachms to one fluid ounce (\( \frac{8}{3} \)), 20 fluid ounces to one pint (\( \frac{3}{xx} = \frac{3}{i} \)) and 8 pints to one gallon (\( \frac{Oviii = Ci} \)). The drop or gutta (gtt) was never really considered as a scientific measure but was frequently applied to oils used as perfume or flavouring. The metric system does not appear in the book, although it now completely dominates science and medicine and today's younger practitioners and students usually have little or no knowledge of the older systems.

In the practice of pharmacy and medicine in the eighteenth and nineteenth centuries, it was normal for all preparations to be manufactured in-house and this included the more domestic items needed in the general lives of the staff. Thus, amongst the 200 entries in Pilkington's book one discovers red and black inks, marking ink, varnish, battery acid, rat bait, water freezing mixtures, techniques for labelling bottles and jars and for cleaning sponges, Eau de Cologne and Lavender Water, items that could be used both in the practice and domestically. In addition, one finds reference to feeding troop horses, indicating the mode of transport of the day and an association with the military. Richard Gaskell did indeed undertake his medical rounds on horseback, as did his father before him; Richard was also a member of the 47th Lancashire Regiment of...
Volunteers, rising in rank from Captain to Surgeon-Lieutenant Colonel. Related entries include blacking for harness, boot polish and a formula for horse balls.\textsuperscript{5}

Manufacture of these household items often required considerable pharmaceutical skills. The recipe for blacking for harness reads:

\begin{itemize}
  \item White Wax 3\textsuperscript{iv} (4 ounces)
  \item Heal ball\textsuperscript{6} 3\textsuperscript{ij} (2 ounces)
  \item Turpentine 0 fs (½ pint)
  \item Drop Black\textsuperscript{7} 3\textsuperscript{i} (1 ounce)
  \item Indigo\textsuperscript{8} 3\textsuperscript{3/4} (¼ ounce)
  \item Oil of Rignonis\textsuperscript{9} 3\textsuperscript{i} (1 ounce)
\end{itemize}

Mix

The blacking was prepared by melting the wax and heelball, incorporating the remaining ingredients and stirring until cold.

The marking ink involved two sets of ingredients:\textsuperscript{10}

\begin{itemize}
  \item Argenti: Nitratis 3\textsuperscript{ij} (2 drachms)
  \item Aqua Distillata 3\textsuperscript{vj} (6 ounces)
  \item Mucilaginis 3\textsuperscript{fs} (1/2 drachm)
\end{itemize}

Preparing Liquid

\begin{itemize}
  \item Sodae Carbonatis 3\textsuperscript{fs} (½ ounce)
  \item Aquae 3\textsuperscript{iv} (4 ounces)
  \item Mucilaginis 3\textsuperscript{fs} (½ ounce)
\end{itemize}

Wet the linen where you intend to write with this last solution, dry it, and then write upon it with the first liquor using a clean pen.

JG

The reaction of alkaline soda with silver nitrate will produce the permanency of marking ink by deposition of silver oxide; the mucilage retards the formation of precipitates in the marking ink itself.

\textsuperscript{5} Ibid., pp. 48, 49, 77; 162; 85
\textsuperscript{6} Heel ball: a shoemaker’s accessory prepared from lampblack (soot) and beeswax
\textsuperscript{7} Made from ground burnt bones
\textsuperscript{8} A blue violet dye derived from plants of the genus \textit{Indigofera}
\textsuperscript{9} probably the fixed oil from the seeds of the Careb Tree \textit{Jacaranda procera} Spreng, also known as \textit{Bignonia caroba}
\textsuperscript{10} ‘Recopies and Preparations’, p. 29
A useful recipe for removing 'new' blood tells the reader precisely what to do with a contaminated sponge:\textsuperscript{11}

Soak for 48 hours in Sol Ac Hydrochlor (10 m fort ad 3 j aq) & soak for 24 hours in Strong Solution Sodae Carb. Wash well in aq.pur. and place in carbolic solution

\hspace{1cm}
or Soak in strong solution Sulphurous Acid

Dilute hydrochloric acid was the cleaner used, carefully neutralised with sodium carbonate; the sponge was then washed to remove the sodium chloride and excess alkali before storage in the antiseptic phenol solution. The sponges were probably used during minor operations and casualty treatment routinely performed in the St Helens surgery.

The medical preparations recorded in the recipe book indicate that a wide range of conditions was treated and considerable pharmaceutical skill employed in preparing the formulations. Therefore it can safely be assumed that a skilled dispenser (or dispensers) was present in the practice.\textsuperscript{12} The recipe book also reveals that the members of the practice were aware of the literature of their day, as the entries include some contemporary references from journals such as the Medical Gazette, Medical Review and Lancer.\textsuperscript{13}

The range of liquid mixtures in use (some fifty-five entries) include chalybeates,\textsuperscript{14} purgative medicines,\textsuperscript{15} astringent mixtures containing tannins in kino\textsuperscript{16} and logwood\textsuperscript{17} to counter diarrhoea, medicines for fever incorporating quinine,\textsuperscript{18} mixtures containing potassium salts for rheumatism, chlorodynes and other cough preparations, ergot mixtures for uterine haemorrhage, sedatives and hypnotics,\textsuperscript{19} diuretics, carminatives, and tonics. Such an armamentarium permitted reasonable treatment of a wide range of illnesses.

Some mixtures were apparently quite popular, as was the case with Brereton's Mixture:\textsuperscript{20}

\begin{tabular}{llll}
\textbf{R} & & & \\
\textbf{10 times} & & & \\
Ol Anisi & gtt iiij & m xxx & \\
Sacchar Alb & gr viij & gr Ixxx & \\
Intime Miscranitur et adde & & & \\
Aquam & 3iifs & 3xv & \\
Pulv Rhei & gr viij & gr Ixxx & \\
Magnes. Carb. & gr xv & gr 150 (3iifs) & \\
\end{tabular}

\textsuperscript{11} Ibid., p. 95.
\textsuperscript{12} Hugh-Jones, 53, confirms that assistants and dispensers did indeed work in the practice up to 1952.
\textsuperscript{13} 'Recipies and Preparations', pp. 27-8, 46, 65-7, 72.
\textsuperscript{14} Tonic and laxative iron preparations
\textsuperscript{15} Involving aloes, rhubarb, senna and magnesium sulphate (Epsom Salts), and including the Chelsea Pensioner
\textsuperscript{16} The dried juice obtained from incisions in the trunk of \textit{Pterocarpus marsupium} Roxburgh (family Leguminosae) and also the exuded gum of various \textit{Eucalyptus} species (family Myrtaceae).
\textsuperscript{17} The heartwood of the American tree \textit{Haematoxylon campechianum} L. (family Leguminosae).
\textsuperscript{18} The alkaloid obtained from South American \textit{Cinchona} barks (family Rubiaceae).
\textsuperscript{19} Containing chloral hydrate, cannabis or bromides.
\textsuperscript{20} 'Recipes and Preparations', p. 93.
The dispensing of this mixture required the intimate mixing of the White Sugar with Oil of Anise\(^{21}\) to facilitate solution of the oil in water. The insoluble solids (powdered rhubarb and magnesium carbonate) were added with careful shaking before the Tincture of Opium and Foetid Spirit of Ammonia were incorporated. The dosage instructions read, 'Take one drachm [that is, one teaspoonful] every three hours'. The ten-fold amount appended in the margin permitted the dispensing of approximately 120 doses. This recipe resembles other carminatives of the time, preparations used for their antacid and mildly laxative effects, such as the following electuary:\(^{22}\)

\[
\begin{array}{lll}
\text{Tinct Opii} & \text{gtt iiij} & \text{m xxx} \\
\text{Spt Ammon Foetid} & \text{gtt viij} & \text{m lxxx}
\end{array}
\]

Sumat \textit{3 ij tertia quaque hora} RAG

\textit{The Chelsea Pensioner}

\[
\begin{array}{ll}
\text{Gm. Guiaci} & 3 j \\
\text{Pulv. Rhai:} & 3 ij \\
\text{Pot: sub: tart:} & 3 j \\
\text{Flor: Sulph:} & 3 j \\
\text{Nuc. Muschat:} & 3 j \\
\text{Mel. Opt. q.s. ut ft Elect}
\end{array}
\]


The 'Chelsea Pensioner', considered by 1911 as a domestic remedy,\(^{23}\) included Guaiacum Resin (misnamed as Gum) used as a mild laxative and diuretic.\(^{24}\) Rhubarb\(^{25}\) and Flowers of Sulphur are also mild purgatives; rhubarb has the added advantage of an astringent after-effect, due to its tannoid content. Potassium subtartrate (potassium acid tartrate or Cream of Tartar) was valued as a saline purgative and diuretic. Nutmeg\(^{26}\) provided flavouring together with spasmyloytic and carminative action. Therefore, the 'Chelsea Pensioner' was much used in bowel-conscious Victorian times.

Before the advent of the ubiquitous compressed tablet, the alternative to liquid medicine was either the pill, a spherical individual dose form, or the powder which, although an individual dose form, was more difficult to handle. The earliest pills, used in Egyptian and Greek medicines, were massed with honey and were unstable in shape and

\(^{21}\) Obtained from the aniseed fruit, \textit{Pimpinella anisum} L., (family Umbelliferae) or from the star anise fruit from \textit{Illicium verum} Hook f. (family Magnoliaceae).

\(^{22}\) 'Recipies and Preparations', p. 41 An electuary consists of fine powder mixed with honey or syrup


\(^{24}\) Obtained from the trunk of the South American and Caribbean tree \textit{Guaiacum officinale} L. (family Zygophyllaceae).

\(^{25}\) Obtained from the rhizomes of Chinese and Tibetan species and especially from \textit{R. palmatum} L. and \textit{R. officinale} Baillon (family Polygonaceae).

\(^{26}\) The kernal of the fruit of the S.E. Asian \textit{Myristica fragrans} Houtt. (family Myristicaceae)
composition. Later pills, such as those which figure in the recipe book, were massed with soap as the binding agent; these disintegrated well on administration, although not always retaining their spherical shape. Subsequently, pills were massed using acacia and tragacanth gum. These rapidly disappeared from the pharmaceutical scene for, although such pills formed durable, spherical objects easily carried in a pill box they were also hard lumps that disintegrated too slowly and were therefore poorly absorbed from the gut. With the rise in popularity of the compressed tablet in the second half of the present century, the pill was consigned to the dustbin of history. Nevertheless, pill making, whatever the excipients used, was a skilled art and it is obvious that competent technicians were available in the St Helens practice.

The range of twenty-five pill formulations included in the Recipes included many mercury preparations for use as laxatives, squill and foxglove pills for heart conditions, sciatica pills, pectoral pills and opium analgesic pills. Also listed are Barclays's Antibilious Pills:27

\[
\begin{array}{c|c|c|c}
\text{ingredient} & \text{quantity} \\
\text{ExtJalapa} & 3 j & \text{Gm Guaiacum} & 3 iij \\
\text{Ext Coloc} & 3 ij & \text{Sapona Amyg} & 3 ifs \\
\text{Antim tartar} & gr viii & \text{Eps Ol. Rosis} & gtt iv \\
\text{Ol Carui} & gtt iv & \text{Ol Junip} & gti jy \\
\text{Syr Rhamni q.s. ft Massa et dividant Pil. Qy Ixiv} \\
\end{array}
\]

Such pills are powerful purgatives and were used for acute constipation. Jalap extract was prepared by extracting the tubercles of the Mexican Convolvulaceous plant *Ipomoea purga* Hayne with alcohol, then removing the alcohol to leave a soft extract suitable for massing. Colocynth soft extract was prepared from the pulp of ripe or nearly ripe fruits of the Mediterranean Bitter Apple.28 Jalap and Colocynth both yield drastic purgative glycosides. Guaicum (v.s.) added to the laxative effect. Tartrated Antimony29 was used in moderate doses as a diaphoretic. Oil of Caraway,30 Oil of Juniper31 and Essential Oil of Rose32 combined to provide flavour and an antispasmodic action preventing griping. Almond Soap and Syrup of Buckthom33 contribute to the effective massing of the pills which were apparently prepared in batches of 64.

In the period 1789-1900 powders were a common form of medication. Antacid powders containing bismuth, purgative cooling powders of calomel (mercurous chloride, HgCl) and aperient soda and Seidlitz powders appear in the book. The Duke of Portland's Gout Powder resembles today's herbal treatments:34

---

27 ‘Recipies and Preparations’, p. 37
28 *Citrullus colocynthis* Schrader (family Cucurbitaceae).
29 Or Antimony and Potassium Oxytartrate, known colloquially as Tarter Emetic
30 Prepared from Umbelliferous fruits of the European *Carum carvi* L.
31 Distilled from the unripe green fruits of the Cypress tree *Juniperis communis* L.
32 Probably obtained from fresh flowers of *Rosa damascena* Mill. (family Rosaceae).
33 Prepared from the fresh, ripe berries of *Rhamnus catharticus* L. (family Rhamnaceae).
The instructions state: 'Of this one and a half drachms of powder mixed in a suitable vehicle to be taken in the morning on an empty stomach'. The powder is a mixture of powdered Binhwort Root,\(^35\) Gentian Root,\(^36\) tops and leaves of Lesser Centaury\(^37\) and Germander\(^38\) and Ground Pine leaves.\(^39\) This powder would taste very bitter; it combined tonic, diuretic and stomachic properties and was therefore used to treat gout and related conditions.

The major drawback of powders was the need to administer such formulations temporarily suspended in a suitable liquid vehicle such as water or milk; inevitably powder was left adhering to the glass.

Medications for external application included sulphur ointment for the itch and ringworm, mercury ointment for venereal warts, lupus and other ulcerous conditions, detersive (cleansing) ointment, resinous ointments for indolent ulcers, ointments for headlice, boric acid ointment and potassium iodate ointment for the treatment of scrofulous glands. The ointment for piles was an effective preparation:\(^{40}\)

\[
\begin{align*}
\text{Ungt. for Hemorrhoids} & \quad \text{3 ij} \\
Pulv Opii & \quad \text{3 ij} \\
Gm. Camphor & \quad \text{ij} \\
Pulv Galla & \quad \text{xiv} \\
\text{Ungt: Cerufsi Acet} & \quad \text{3 xiv}
\end{align*}
\]

Opium,\(^{41}\) Camphor\(^{42}\) and Galls\(^{43}\) were incorporated in Lead Acetate Ointment, an ointment with a Soft Paraffin base. Tannins in the galls are astringent and opium and camphor provide analgesic and counter-irritant properties, yielding another preparation that would help the unfortunate patient.

---

\(^{35}\) From \textit{Aristolochia} spp. (family \textit{Aristolochiaceae}).
\(^{36}\) \textit{Gentiana lutea} L. (family \textit{Gentianaceae}).
\(^{37}\) \textit{Centaurium erythraea} Rafn. (family \textit{Gentianaceae}).
\(^{38}\) \textit{Teucrium chamaedrys} L. (family \textit{Labiatae}).
\(^{39}\) \textit{Ajuga chamaepitys} Schreb. (family \textit{Labiatae}).
\(^{40}\) 'Recipes and Preparations', p. 17.
\(^{41}\) Dried latex from the greyish-lilac poppy \textit{Papaver somniferum} L.
\(^{42}\) The white crystalline substance obtained from the wood of the Asian laurel tree \textit{Cinnamomum camphora} (L.) Nees & Eberm.
\(^{43}\) Subspherical excrescences resulting from puncture and deposition of gall-wasp eggs in the delicate epidermises of Dyer's Oak, \textit{Quercus infectoria} Olivier (family \textit{Fagaceae}).
The twenty-seven liniments, lotions and embrocations including soap, turpentine, belladonna and camphor were used to combat the pains of rheumatism, scurvy conditions, gout and chest complaints, including tuberculosis. Belladonna was also mentioned for the treatment of typhus. A typical example is an embrocation for rheumatic complaints:44

\[
\text{Bardsey's Embrocation for the Rhenumatism}
\]

Liniment: Sapon: 3 ij
Tinct: Cantharis: 
Sp: Ammon: Comp: 
Tinct: Thebaic: a 3 ij
Gm: Camphor: 3 j

M ft Ernbrocat

The dispensing instruction reads: 'Mix and make an embrocation'. Soap Liniment — a solution of Soft Soap, Camphor and Oil of Rosemary in Alcohol — formed a rubefacient base. The Camphor was probably dissolved in the mixed Tincture of Cantharides45, Tincture of Thebaica (also known as Opium Wine) and Compound Spirit of Ammonia.46

It is doubtful whether opium would be an effective analgesic under these conditions, although the old practitioners believed that soap liniments would enhance opium's analgesic properties. Camphor was widely used as an external analgesic and counter-irritant in rubbing liniments and Cantharides (or Blistering Beetle) was also a counter-irritant. This embrocation, too, would have helped the suffering patient.

Poultices to treat ulcerous states are also listed in the book.

An interesting group of preparations are the emulsions, mixtures of oils and water rendered stable by the use of a suitable emulsifying agent such as egg in the Linmentum Album (White Liniment) prescribed for rheumatism.47 Soap in turpentine emulsions were made for external use on recent burns and for flavoured with lemon and nutmeg. rheumatism,48 oleic acid and alkali (also a soap) for emulsions for inflammations and rheumatism49 and oil/water/gum emulsions, such as cod liver oil50 emulsion, as a tonic for the winter. These emulsions required considerable manufacturing skill if a good, stable preparation was to be the end product, confirming once more that competent dispensers were available in the practice.'

The occurrence of cleansing lotion, lead lotions, acne lotion and iodine paints, and reference to dilute sulphuric acid as an agent for the removal of ringworm scales after

44 'Recipes and Preparations', p. 3.
45 A weak alcoholic extract of the beetle Spanish Fly, Cantharis vesicatoria Latreille.
46 Better known as Sal Volatile, an aromatic solution of ammonium carbonate in 50% alcohol flavoured with lemon and nutmeg.
47 'Recipes and Preparations', pp. 24, 34.
48 'Ibid., pp. 25, 80, 85, 90, 99.
49 Ibid., p. 112.
50 Ibid., p. 94.
depilation, suggests that skin complaints were very frequent. Corn paints and corn collodion mentioned in the recipe book were also in common use.

There were many opium preparations in the book. In fact, opium and morphine, commonly used as analgesics and sedatives, occur in some 35 entries, including the following:\(^5\)

Hypodermic Solution of Morphia as used by Dr Ringer of London

\[
\begin{align*}
\text{R} & : \quad \text{Morph. Acetatis} \quad \text{Grs xx} \quad \text{(NOS)} \\
& : \quad \text{Acid Acetic} \quad \text{m iv} \\
& : \quad \text{Liq Atropiae Sulph} \quad \text{m 96} \\
& : \quad \text{Aq. distil ad} \quad \text{m 200} \\
\end{align*}
\]

ft injectio

- 10 m of solution contains 1 grain of morphia and 1/25 grain Atropia

Dissolve morphia in 100 drops of water with 4 drops of acid then add Sol of Atropia and more water if required to make up to 200 m of solution.

Inj. 1882

HWK

Acetic acid was added to ensure satisfactory solution of the morphine acetate; atropine sulphate was combined with the morphine acetate because it produced increased analgesic and hypnotic effects with reduced depressing and constipating effects.

The early entry outlining the 'Golden Rules for Vaccine Inoculation' as recommended by Dr Edward Jenner (1749-1823)\(^5\) and a later reference to the names of patients whose children are not to be employed for vaccination purposes, indicates that the practice was engaged in this new technique of preventive medicine against the scourge of smallpox. The entry already noted concerning hypodermic morphia, even if the solution was rather acid and probably painful in use, confirms that the practice was moving with the times.

Miscellaneous recipes including eyewash and eyedrops, styptic preparations, drops for earwax removal, lozenges of morphine and ipecacuanha smelling salts and camphor wax, complete a wide range of preparations, clearly showing that the practice tackled a multitude of medical conditions. Formulae for suppositories and enemas are notably absent from the list of recipes, which is surprising, as such formulations have been known since Egyptian times (c. 2500 BC). Apart from its medical work, the practice may well have incorporated dentistry, as amalgams and toothpowders are included in the recipe book.\(^5\)

The collection of recipes and prescriptions relating to an apparently progressive practice ended early in this century. Why was this? It is probable that in a working class industrial town such as St Helens the impact of the National Insurance Act of 1911 resulted in the virtual disappearance of private practice; prescriptions used for all patients

\(^5\) Ibid., p. 88.
\(^5\) Ibid., p. 13.
\(^5\) Ibid., pp. 16, 38 & 86.
would rely heavily on the successive National Health Insurance formularies and the rapidly increasing range of ethical proprietary medicines.

A recipe book offers the reader an insight into the medication of the time. Unfortunately, it does not relate to the effectiveness of the treatments used nor to the frequency of the use of the preparations. The dispensing instructions show that some nostrums were prepared in larger amounts and were therefore more frequently used. Such is the case with bismuth, carminative, fever, tonic, cough and cinchona mixtures, common soap liniment, lead and opium, boric acid, carbolic and iodine lotions and many pills.\(^{54}\) Although the application of modern phytochemical and pharmacological knowledge does suggest that most of these recipes would help the patients' conditions, a final and definitive judgement of the effectiveness of the medicines prescribed can only be pronounced if access can be obtained to any existing day books recording the patients' identities and their visits, prescribed medication and, hopefully, their return visits at a much, much later date. Nevertheless, this recipe book does provide a fascinating glimpse of a successful medical practice in an earlier time.

GENERAL BIBLIOGRAPHY


\(^{54}\) Ibid., p. 108.