BIOGRAPHY

ROBERT PEMELL, A PEDIATRIST OF THE PROTECTORATE

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In the middle of the seventeenth century there flourished a large number of medical worthies about most of whom we have a fairly accurate knowledge. This was the time of Glisson, whose work on rickets appeared in 1650; of Harvey; of Highmore of antrum fame; of Thomas Willis; of the great Sydenham; and of John Mayow. In this century Leeuwenhoek, Sylvius de le Boe, Malpighi, de Graaf, and other masters contributed their discoveries. There were countless others, most of whom left no trace behind, or, if any, it has been buried in the dust of the library. To fix the period better, perhaps, it may be mentioned that it was the age of Louis XIV in France and of the Protectorate in England, and that in 1653 Oliver Cromwell was made Lord Protector of the Commonwealth.

At this time Cranbrook or Cranebrooke was a flourishing manufacturing town chiefly concerned in making broadcloth. It takes its name from a stream that runs into the River Beult and is about forty-five miles southeast of London in the County of Kent. From the fourteenth to the seventeenth century Cranebrooke was a place of some importance; since then it has fallen from its high estate to be a market town of about four thousand. In this town, lived and practiced one Robert Pemell, who, in the year that saw Cromwell made Lord Protector, published, on May 29, a little book entitled "De Morbis Puerorum." This book was printed in London by F. Legatt, for Philemon Stephens, at the gilded Lion in Paul's Churchyard. Pemell had previously published four other books, two on simples, one on diseases of the head, and one on "Help for the Poor," but of these, more later.

Concerning Robert Pemell we know nothing whatever except what we glean from his books. His dates are not in the "Index Catalogue" and Leslie Stephen did not think him worthy of inclusion in the "Dictionary of National Biography," or perhaps the editors did not know of his existence. His book is not listed in Meisner's *Grundlage*. Pemell did nothing, as far as can be ascertained, but practice his profession and write five books. His only claim to fame is that he left an excellent account of certain phases of practice as carried on in his day. He deserves credit, too, for writing his works in English, being among the first to break the shackles of scholastic Latin. Not that he was lacking in erudition himself, but he realized that the best way to help the laity and the young physician was to write in the tongue they understood best of all.

We know nothing about Pemell, and yet in 1653 he was getting on in years, for he says: "And because I see my glasse run apace, and I know how short my time is, therefore, I have made the most haste and taken the present advantage."

We know nothing of Pemell, and yet it may be hazarded that he required not more than six or seven hours' sleep, used a large pillow to keep his head high, drank sack and hypocras and did not like such sweet wines as Muscadine or Malmsie.

His first work was entitled

DE MORBIS CAPITIS;

Or,

Of the Chief Internal Diseases of the Head,

with

Their Causes, Signs, Prognosticks, and Cures,
for the benefit of those that understand
not the Latine tongue.

By R. P.

This is a little volume of 141 pages, published by the same Philemon Stephens, this time "at the gilded Lyon," in 1650. Our author is, as he says himself, methodical. His pages bristle with references of the authors consulted, very much like some of us moderns. The margins bear little captions, sometimes in English, but often in Latin. He is a learned man and must needs let others know. His pre-

scriptions are also in Latin and often abbreviated according to the manner of the time. He borrowed freely from the aphorisms of Hippocrates, but he gave credit where credit was due, which is more than can be said of many authors both ancient and modern.

It was not an unpleasant custom of the day to have a poem, usually in Latin, at the beginning of the book. This was generally written by some one else in praise of the volume, or of its author. In "De Morbis Capitis" this was done, the Latin being rendered into English and printed on the following page. This poem is an interesting example of a phase of medical publishing that has fallen into complete disuse:

Concerning

A Book, intreating of the Diseases of the Head, and cure of them; written by Robert Pemell, of Cranebrook, Physitian.

The Head, the Heaven of man's Body is;
The Mind's high Palace, wherein it doth reign;
The Fountain, whence all motion takes its rise,
The Harbour, where the Senses do remain.
As many stars i'th the Sky conjoynd shine;
So rare endowments in the head abound;
Life, Health, Strength, Reason, Wit, do there combine,

And the best Organs of the Soul are found.
If mudless be the Spring, and silver-cleer;
As Silver-cleer, the Streams will also flow:
From muddy Fountains, muddy streams appear;
And like the Fountain, do the Waters go.
Man's health doth much depend upon his head;
If that be sound, th' whole body is at ease;

If that, with illness, be distempered,
On other parts some weakness soon doth seize.
Who then, to skilful Pemell can repay
His due reward? whose care has been so great,
For this chief part, its evils to display,
And of their signs, and Causes, to entreat?
Who likewise hath us of choice Medicines told,
For every Evil's cure, and due relief,
Whatever larger Physick Volumes hold

Good for thy head, is here compriz'd in brief.
Let this good friend be thy Physician.

Whose skilfull Counsell, and Direction,
Shall either keep thy head in healthfull case;
Or by his Art, away the Evil chase.

JOHN ELMESTON,
School-Master of Cranebrook.

The body of the book starts off with headache and differentiates those aches that are primarily from the brain from those emanating from the stomach, as follows:

"If the pain proceed from the head essentially, there will be no intermission, but a continual pain; or if the pain do remit, it is but little, and returneth again.

"If it proceed from the stomach, the pain will often cease, and return again; also, the appetite will decay; especially, if the stomach abound much with phlegme."

He considers

"Whether Pills do more properly purge the head than other Medicaments?"

"It is the opinion of many, that Pills do more properly purge the head, then potions, or electuaries, because they draw more strongly from the remote parts; and also, because they stay longer in the stomach, then the other; which is a truth, but not in regard of the form of Medicine, but because Pills have strong ingredients in them. For there is little reason, that in respect of their form, that therefore lying in the stomach some longer time than other Medicines, they should draw vitious humours, from remote parts; but rather, because the ingredients in those Pills, have a peculiar vertue, to draw the peccant humours from other parts; and so the expulsive faculty is stirred up, and causeth those humours, by the operation of purging Medicine, to be expelled by siege.

"At what time Pills (that purge the head) are to be taken?"

"Many are of opinion, that the best time for Pills to be taken, is at night. Now concerning Pills, we must distinguish them thus: some are strong in operation, and have strong purgative ingredients in them; others are gentle, as Pil. stomachic. Ruffi, de hiera, de Aloe, &c. For these, without controversie, the most apt time to administer them, is, one hour after supper; or (as some hold) before supper. But for strong Pills, the most proper time is in the morning fasting, when concoction is perfect; for otherwise, taking such Pills at night, distribution is made too soon, concoction is hindered, and the nourishment, or chylus, not concocted, is carryed into the veins, with the purging Medicine.

"However, I conceive, if the party forbear his supper, or eat a very small supper, he may take these Pills at night, though not a full doze at a time, and so for three or four nights together."

After headaches, he considers apoplexy and cites Galen and later writes in the same vein as to the causes, but he gives his own description, a terse little definition, hard to beat in a like number of words:

"Signes of the Apoplexie are these: A sudden crying out, as if they desired help; sense and motion is taken away; sometimes they snort, and lye as if they were in a sleep, and cast spume or froth from out of their mouth.

"Signes of the Apoplexie coming of blood, are these: A redness of the face and eyes; which redness, by reason of the extinction of head, doth turn to green, and at length to blackness; also, the veins of the tongue neer the throat, and the veins of the fore-head, and face, are much swollen.

"Sometimes the sphincter muscle of the Fundement, is so loosened in the Apoplexie, that a glyster can not be retained, as Sennertus observeth. Pract. med. 1. i. part. 2. c. 33. f. 568."

His treatment of apoplexy is as good as

we have today,—purging and blood letting, but he adds a number of prescriptions of simples to be taken internally and some for external use. These would delight some of our present-day therapeutists, for he was no nihilist. One can not agree with his sternutious powder in apoplexy, which was to be blown into the nose with a quill, nor with the “oyl of nutmeg chymicall,” to be put into the ears and nose. He wisely discourages emesis in the early stage of the disease.

Of the palsies, which he differentiates from apoplexies, he has many suggestions, e. g.:

“An inveterate Palsie is incurable,”

Or

“The Brain of a Hare is much commended in this Disease, as having a peculiar property for the paralyticall.”

His observations on convulsions are largely from Hippocrates, eked out with bits of Piso, Leoniceus, Massaria, and other authorities of the time who have passed into oblivion. He pays considerable attention to epilepsy, mentioning the old errors and some of the old truths. His therapeutics and prophylaxis are as extraordinary as those of the present day. The London Pharmacopeia of his day was not made up of unalloyed delights and he commends the following as preventive of the Falling Evil:

“If the child be very young, and you fear this disease, give it so soon as it is born (before it take any thing else) this following:

“R Sacchar. alb. ʒ ii. ʒi. Amygdal. dulc. recent. expres. q. s. f. mixtura instar pulvis, cujus usu materia vitiosa in utero collecta in primis viis ejicitur.”

The chapters on incubus or Hag or Night Mare, on lethargy, on phrenesie, and mania are strongly tinged with when not taken directly from Galen. For the last named, in addition to numerous prescriptions, he enjoins:

“If the party be bound, give him often cooling and laxative glisters.

“Let not the Patient be left alone, but still have company with him, and let such be his companions, as he loves and delights in, and not such as he hates. Musick is recommended for such. All sweet and delicious meats, and flesh of hot temper, are to be avoided; as also, all manner of Spice.”

Pemell wrote two books on simples, the first entitled:

TRACTATUS De Simplicium Medicamentum facultatibus A TREATISE

of the
Nature and Qualities of such Simples as
are most frequently used in
MEDICINES,

both purging and others.
Methodically handled, for the benefit of those
that understand not the Latine Tongue.

To which is added:

Many Compound Medicines for most Diseases
incident to Mankind: As also two Alpha-
betical Tables, very necessary for

the Reader.

Together with,
The Explanations of all hard words or Termes
of Art, whereby the vulgar may better
understand it.”

This was printed by M. Simmons, for
Philemon Stephens, at the “gilded Lyon”
in St. Paul’s Church-yard, 1652.

It is delightfully erudite with its long
list of authorities and their dates. He
starts out:

“Courteous Reader, as the knowledge of Diseases is most necessary and usefull for such as take upon them the Noble art of Physick, so no lesse profitable is the knowledge of simple medicines and their nature: For it is most true; Medicus tantum bene curat, quantum recte cognoscat, he only cures well that rightly knows diseases and their causes, as also the vertue of simple Medicines, he cures best.”

In his preface, entitled “To the kinde Reader,” he discusses the choice of medicines:

“Wee ought to give to Cholerick persons those things which purge Choller, to Flegmatick bodies those things which purge Flegme, to Hydriopical that which purgeth water, and to Melancholly persons that which purgeth black Choller or Melancholly.”

The purpose of the book is nicely
phrased as follows:

“What I have done herein and how methodically, I have been, I leave to others to judge, for now it is Coram Judice, and surely not without error, for humanus est errare, ‘tis incident to the best to erre; some have lapsed herein before me, and others will after me, however I let my good will be accepted, which if I finde, I shall be encouraged (God assisting me with life and strength) to publish some other Tracts usefull for the vulgar capacity, as also for young Practitioners.”

The first book on simples comprises 170 chapters and the pages are not numbered. Starting with absinthe, he gives a methodical account of various herbs and roots, together with their preparations and uses. While much, if not most of it, is regarded as absurd today, it is not more so than will

be our present-day works on therapeutics in four hundred years. Even less so, one imagines indeed, with our plenitude of vaccines, serums and chemicals. These old fellows sorted and tried out the simples, and while we have discarded most of what they prized, it must not be forgot that the foxglove, belladonna, hyoscyamus and numerous other potent drugs were the direct contribution of the age, just as diphtheria and tetanus antitoxin are among the things of value today and who knows but that even these may be forgot tomorrow in the face of some more efficacious method of treatment as yet undreamed of. So one should read with a sympathetic humor these old books and not deal too harshly with what seem vagaries.

One can not give here much of an account, but some idea may be gleaned from the following extracts. On the use of opium he says:

"Opium is given to provoke sleep, to ease the paine of the Iliack and Collick, as also to mitigate the paine of the stone in the bladder or kidneys, and to ease pain of the Gout; It cooleth inflammations, agues, or frensies, and stayeth defluxions which cause a cough, or consumption: It is given in great paines of the head, and to stop fluxes of the belly, and womens courses. It is put into Mithridate, Treacle, and other medicines that procure rest, and ease pain."

He also relates the following story:

"I shall relate what I have heard of an emperick practitioner, who (being ill and not taking rest) sent to one (either Physician or Apothecary) for some Opium, when the messenger had it, the party he had it of said, There is too much for once, but I hope your Master knows that the messenger brought it home, and this emperick (it seems) took it all, and wrote to this effect on a piece of paper, I shall sleep for many hours and then wake, but forgot to give any notice thereof, after he had took it, he fell into such a sleep, that he was given over for dead, laid forth and buried; so soon as he was buried, his wife (thinking to finde some money) looking in his chamber found this writing before mentioned, whereupon she sent and had the grave digg'd up, and the coffin opened, where they saw he had turned himself when he waked."

Of mercury, after relating a case of an apothecary who accidentally drank a glass of mercury and had the blood of his heart congealed, he says:

"Others say it is a safe Medicine, & may be taken inwardly without any danger. In a word, tis good, tis bad, it cures, it kills, according as tis used; therefore I advise the vulgar not to

meddle too much with it, for it hath mastered mighty Giants, and fool'd the best Artists."

Of milk, he writes:

"Milk doth nourish the body well, breeds good blood, and is very usefull in Consumptions and Ulcers of the Lungs, yea no remedy is found like it for the same: it is excellent in the bloody flux, or any other flux of the body, where there is no Feaver, nor choller abounding. It mundifieth and cleanseth, taketh away paines of the Breast, Lungs, Reines, Bladder and Entrailes, and very profitable in Ulcers of the bladder. It is good for temperate bodies, whose stomachs are free from chollerick and flegmatick humours, for in such it is well digested and engendereth good blood, and maketh the countenance faire: it asswageth heate and scalding of the urine, furthereth Venus, and is very good in times of infection."

The second part of the book on simples was printed by F. Legatt for Philemon Stephens, at the "guilded Lion in Paul's Church-yard." Mr. Stephens, it will be noted, was a careless speller. This half had the following title page:

TRACTATUS,

De facultatibus Simplicium,

The Second Part of the

TREATISE

Of the Nature and Qualitie of such Physical Simples as are most frequently used in

MEDICINES

Methodically handled for the benefit of those that understand not the Latine Tongue,

To which is added many Compound Medicines for many diseases incident to Mankind; as also an Alphabetical Table at the latter end very necessary for the

READER.

For scurvy Pemell recommends the scurvy-grasse, the name of cochlearia or spoon wort. He also says that

"Water cresses are good against the scurvie and to cleanse the blood and humours."

He gives eight other simples for the same disease and apparently did not know that any of the green things would have answered just as well.

The make-up of Pemell's book, with its table of remedies and its table of diseases with the remedies advised, is most modern. One is amused to know that he gives fourteen remedies for mad dog bites, fifty-two for dropsy, forty-five for epilepsy, and to provoke courses, sixty-four, this last doubtless as troublesome in those days as at present. A very popular present-day book on therapeutics does not mention rabies; gives twenty-two drugs for dropsy, thirty-three for epilepsy, and only eighteen for amenorrhoea. This drop

in figures for the last named doubtless shows the superiority of modern surgery rather than of morals, for remember Pemell's day anticipated those of good King Charlie.

Pemell has one advantage, perhaps, and that is that most of his simples were at least harmless. Taken all in all, his is one of the least objectionable of such books and is free from the therapeutic horrors of the time.

The chief interest in Pemell is in his contribution to pediatrics. It is valuable as are all the early books on this subject, inasmuch as we glean something of the manner of practice of the earlier days and also that they act as a sort of bridge or, perhaps better, stepping-stones on which we pass from decade to decade, or from century to century. Like the immortal bard, Pemell is careless in the spelling of his name as well as other words, one of the mannerisms of the time. His books were issued by Stephens at the gilded Lion, at the gilded Lyon, and at the gilded Lyon. The title page of his pediatric contribution is as follows:

DE MORBIS PUERORUM,
or, A
TREATISE

Of the Diseases of Children;
With Their Causes, Signs, Prognosticks, and Cures, for the benefit of such as do not understand the Latine Tongue, and very useful for all such as are House-keepers, and have Children. With the Contents of several Chapters, as also an Alphabetical Table of all the Diseases mentioned herein.

By Robert Pemell, Practitioner in Physick, at Cranebrooke in Kent. May the 29, 1653.
LONDON,

Printed by J. Legatt, for Philemon Stephens, at the gilded Lion in Paul's Church-yard. 1653.

It is a small book of 58 pages, divided into 28 chapters as follows:

THE CONTENTS OF THE SEVERAL CHAPTERS

Of Ulcers and sores in children's heads
Of Lice
Of the Scab and Itch
Of the falling Sickness and Convulsion
Of pain in the ears, with inflammation
Of breeding and coming of Teeth
Of inflammation of the mouth and throat, with ulcers and sore thereof
Of Feavers
Of the small Pox and Measles
Of watching out of measure and want of rest
Of fear, starting and terrible Dreams
Of Rheume, the cough, and shortnesse of breath
Of Vomiting, and weaknesse of the stomach
Of the Hicket

Of the Consumption, or leanness, and of the Rickets
Of Gripings and frettings in the belly
Of looseness and flux of the belly
Of costiveness and stopping of the belly
Of Worms
Of Ruptures and Burstings
Of swelling, or coming forth of the Navel
Of inflammation of the Navel
Of the swelling of the Cords
Of falling of the Fundament
Of the stone, and difficulty of making water
Of Pissing in bed
Of the diseases called Saint Anthonies fire, or wilde fire, as also of burning and scalding
Of fretting, chafing, or galling of the skin in the groines

For ulcers and sores in children's heads he recommends:

"First, let the child's head be bathed with a decoction of Mallows, and Barly, or with a decoction of Dock roots, mallows, Celendine the greater, Wormwood, Fenegreek, Cicers, Lupines, Beans, &c. If there be need of greater cleansing, you may boyl the foregoing herbs in wine; or make a Lotion with decoction of Marshmallow roots, made with Urine of the infant alone, or mixt with barley water. Then anoint the head with oyl of Roses and oyl of bitter Almonds mixed with a little litharge of gold or silver in fine powder; or take of the juyce of Beets and Celendine the greater of each one ounce, Hogsgrease two ounces; boyl them together a while, then being almost cold put in of Brimstone in powder a drachme, make an ointment, with which anoint the parts affected morning and evening. Or wash the head with sope-suds made strong. If these ulcers eat to the skul, then use hony of Roses mixed with a little spirit of Wine, and afterwards the powder Birthwort and natural Balsam."

With the exception of the use of urine, which crops up in the therapeutics of all ages, even to the present enlightened period (sic), the remedies are sound for the most part. In the first place, the bath was the thing; if that did not cleanse, he added wine, the antiseptic action of dilute alcohol, only he did not have to add phenol or bichlorid or other objectionable poison, as he lived in an era before the oligarchy of Westerville had become all-powerful. Silver in fine powder finds its counterpart in the silver foil of modern surgical dressings. The action of sulphur in suppurating skin diseases is well known and is part of the Hunterian dictum that there are some skin diseases that mercury will cure, some that sulphur will cure, and some the Devil himself can not cure.

He had curious ideas about the origin of lice, which he declares "is a foul and filthy disease." His therapeutic sugges-

tions are various, but he closes with the following paragraph of sound advice:

"A powder good and safe for lice in the head. Take of Coculus Indy a quarter of an ounce, white Pepper a drachme; beat them into a grosse powder, and strew it into the heads of children, for it will soon destroy the lice. Or you may dip a comb in strong Mercury water, or water made with Arsenick, and so comb the child's head therewith."

As might be imagined, he had some suggestions to make on the subject of epilepsy, and they are about as satisfactory as the latest work on the therapeutics of this disease.

For teething, he recommends the following:

"Let the gums be often rubbed with the finger wet with Honey, or with Honey and Butter mixed together, or with the brains of a Hare; or the brains of a Hare mixed with Capons grease and Honey. If you can not get Hare's brains, take Conies brains.

"Rub the gums often with red Coral. It is good also to wash the outside of the cheek with a decoction of Mallows and Camomil flowers; or to anoint the same with the juyce of Mallows and Butter mixed together.

"If there be an inflammation of the gums, and the pain be very extreme, use oyl of Roses with the juyce of Nightshade.

"If these medicines prevail not, as many times comes to passe, then the best way is to cut the gums; for this is very safe, and were it more used, fewer Children would die; for I am confident the want hereof doth occasion the death of many a child."

In his consideration of measles and smallpox, he employs the usual absurd remedies of his day, but his suggestions have the great merit that if they did not help they did not hurt. He gives this sound advice about the temperature:

"You must not keep the childe too hot nor too cold, for being kept too hot it may cause faintings and swoonings, and being kept too cold, it may drive them in again, and so check and hinder nature from expelling them out to the skin."

One chapter in toto will suffice to give one a good idea of the scope and style of the book. The one on hiccough is chosen partly on account of its brevity:

CHAPTER 15—OF THE HICKET

THE CAUSE

The Hicket in Children is caused from the corrupt nourishment in the stomach, or from abundance of milk in the stomach, or from the coldness of the stomach by the outward air.

THE PROGNOSTICKS

The Hicket in children most times is void of danger, and the same being taken away, it doth soon cease. But if it happen to continue long, or be complicated with some other disease, as the

Falling Sickness, or Convulsions, many times it proves deadly.

THE CURE

If the Hicket come from corrupt nourishment, or fulnesse of the stomach, 'tis good to make the child vomit either by putting your finger in the throat of it, or by putting down a feather anointed with oyl, or by some other light and easie means, that hereby the offensive matter may be taken away; then use means to heat and strengthen the stomach as in the 13. Chapter, and let the child be sparing in sucking and eating.

"If it proceed from corruption and fault of the milk, then means must be used to amend the same by good dyet of the Nurse as before, and the corrupt milk to be purged away by syrupe of Roses, or hony of Roses solutive, then to use Conserve of red Roses with red Coral in powder, or Bole-atmoniac.

"If it come from cold, then let the stomach be warmed both with inward and outward means. Give the child sirup of Mints, or sirup of Betony, and let the stomach be bathed with a decoction made of Mints, Organy Wormwood & Cyperus roots; afterward anoint the stomach with oyl of Dill, oyl of Mastick, or oyl of Mints; or apply a Pultis made with Mints and Dill seed bruised, and oyl of Mastick. Or,

Apply Mastic and Frankincense in powder (mixed with the white of an egg) to the hole of the stomach.

Or take of Mastick one ounce, Frankincense, Dill seed, ana 3 ii, make them into powder, and mix them with the juyce of Mints, then wet Hempen clouts therein, and apply it to the stomach warm."

He hit, perhaps unconsciously, upon the present-day idea of infantile diarrhœa when he stated that "The cause hereof (of looseness and flux of the belly) is bad concoction, or corruption of the milk or nourishment." He continues further on:

"Sometimes when children do not breed teeth, the cause may be from the outward air, whereby the stomach & belly of the child are too much cooled, and thereby concoction is hindered; or when the stomach is oppressed with too much food or nourishment whereby crudities and corruption of the food doth follow, so that if the same be not rejected or cast up by vomiting, it is carried down to the belly and causeth these fluxes: or it may arise from bad nourishment, or from the badness of the milk, from whence corrupt juyce is bred in the stomach which nature expels by stool. Sometimes it may proceed from the moistnes and looseness of the bowels, which moisture hath it original from some sharp humours in the stomach, and from thence falls down into the bowels."

The above is very sound and essentially the teaching of today, although phrased differently. Incidentally he knew, as did the ancients, that a diarrhœa should not be checked too suddenly.

"If the flux in children be not violent, the

danger is not great, neither must it be suddenly stopped, because the corrupt humours in the stomach hereby are evacuated or purged, which if they were stopt would prove dangerous."

He follows this with sound advice:

"If the Infant suck or not, and the flux be of some continuance, means must be used to stay it, and such means as first cleanse and then bind the body, as sirup of Roses solutive, or hony of Roses solutive. Clysters may be used."

The danger of milk in certain forms of diarrhea was noted, perhaps a little vaguely:

"Some commend the maw of a Kid, or Hare, if ten grains thereof be given, and the child to take no milk that day, least it curdle in the stomach; but give it bread boyled in water with Rosewater and Sugar."

The chapter on worms is most interesting, but is too long to reproduce here. The first part will suffice:

"Among all the diseases that are incident to children, this of Worms is not the least. There are three sorts of wormes, round, flat, and small wormes called Ascharides, and are bred in the fundament.

THE CAUSE

"Worms are caused of a crude and putrified flegme and other ill humours, but never of Cholera or Melancholy. For all bitter things kill wormes. All manner of fruits also breed wormes, especially in children and moist bodies.

SIGNS OF LONG AND ROUND WORMS

"The signs of long and round wormes are these: The mouth aboundeth with moisture, the breath stinketh: terrible and fearsome dreams follow, and they gnash and grind their teeth in their sleep, and start suddenly in their sleep, their tongues are hot and dry, and they often rub their noses; they have a dry cough, and sometimes vomiting and the Hicket followeth: they feed much sometimes, and sometimes little; great drought doth most times accompany wormes, the belly is hard and swollen, and sometimes bound, but most times loose. The urine is most times white and thick, and great gripings of the belly doth follow, especially when the belly is empty. The body waxeth lean for want of that nourishment which the wormes consume. Oftentimes they have cold sweats, the face is sometimes red, and sometimes pale, and many times they are taken with Convulsions, and fevers happen. The pulse is very uncertain. But the most certain sign of all is, when they void wormes in their excrements."

Pemell indulges in various vagaries regarding external applications, an error not entirely confined to those of earlier days and the vulgar. For example, he recommends:

OUTWARD MEANS TO KILL WORMS

"Outward means are to be used also; as you may buy Wormwood and Centory, Peach leaves and Lupins in water, and apply them warm to the belly, or apply Cumin feed with Ox gall, or

Bulls gall, or anoint the belly with the oyl of Savin, or oyl of Rue, morning and evening, warm."

Now and then Pemell forsakes his similes and wanders forth into the realms of the pharmacopeia so popular in his time. Fortunately, he does not do this often. A specimen of a prescription for incontinence of urine is as follows:

"Take a Hogs bladder, or Bores, or sheeps bladder dried, the stones of a Hare, and the Wesend of a Cock dried, of each half a drachme, Acorn cups two scruples, Nep and Mace, of each a scruple; make all into powder, and give hereof a scruple, or half a drachme in the distilled water of Oaken leaves; or give ten grains, or a scruple of Acorn cups in powder, morning and evening in Plantain, or Oaken leafe water."

Of course such suggestions provoke a smile, and yet in four hundred years from now there may be some who will laugh at some of our present-day therapeutics. These things are no worse than the desiccated glands as advertised and written about, witness the modern articles on endocrinology, the numerous serums and vaccines, but few of which will last an hundred, much less four hundred years.

Pemell also wrote a book called "Help for the Poor," a popular treatise on disease, its cure and prevention, but a copy of this book is not to be found in any of the larger libraries of this country. It places him forever among the front of the welfare workers as it dealt with affections most common among the indigent. It concerned the diseases of children in particular and this also places him among the pioneers of the prevention of disease and death among the young. Unheard of, almost entirely forgot, he was in his time a power for good and for progress. Just how much he influenced his contemporaries and successors it is difficult to judge, for if he had a following they did not herald his name as one who led them. In a fairly extensive reading of the earlier pediatric literature, his name has not been met with; yet he must have wielded a considerable influence.

Such is the history and work of Robert Pemell as far as one can give it today. An author of merit, a clinician of ability, a pediatric thinker in some ways ahead of his time, and one of the early workers in the field of infant welfare, his memory deserves to be kept green.