Last indignity to which Salernum was subjected was in 1811, when a decree allowed the school to remain as a preparatory medical institute.

Though its renown as a centre of medical education has long since gone, Salerno will remain famous for all time by reason of the poem in rhyming Latin verse entitled "Regimen Sanitatis Salernitanum". This was composed in honour of Duke Robert of Normandy and was presented to him by the School of Salernum in 1076. It was esteemed so highly that no fewer than 100 manuscripts exist, and over 240 printed editions appeared between 1480 and 1846, an edition appearing yearly until 1500.

It is really a treatise on all matters relating to the preservation of health (Conservandae Bonae Valetudinis Praecepta) and was composed not by one man but by the accumulated wisdom of the school. The main part of it however is thought to have been composed by John de Milano, who indeed in a M.S. of date 1418 is named as its author. This popular guide to health was no doubt presented to Count Robert during his long stay at Salernum as a recompense for his kindness to the inhabitants and to the school.

It is written in a popular style, and in its original form was comparatively short; thus the original edition of Arnauld contained but 326 verses. Later writers have added greatly to it, so that the edition of Dufour contains 452 verses, that of M. Baudry de Balzac 2,300 and that of Rienzi 3,520.

The poem is inscribed to Count Robert of Normandy, "England's King". This dedication is doubtless correct, though some foreign writers affirm that this inscription was merely a form of etiquette and that the work was also dedicated to the Kings of France, Ger-
fort." That Wolsey must have had a high opinion of his merits is shown by his appointment of Elyot as Clerk of the Council, "for some good oppynion that he conceyvyd of me withoute my merites, with oute my sute or desyre."

In November 1527 Elyot was appointed Sheriff of Oxfordshire and Berkshire.

Though the dreaded "Sweating Sickness" had been ravaging England for several years, it broke out in epidemic form in London in 1528. To show how friendly the relations were between Wolsey and Elyot, there is a letter from Elyot inviting Wolsey to come and stay at his house at Combe so as to avoid the disease.

So heavy did he find his work as Clerk to the Council that Elyot was compelled to resign his Clerkship of Assize this same year. He complains that he had received no salary for the former post, "so by the space of six yeres and a half I served the King not in the Starre Chamber onely, but in some other thynge pertayneyng to the Clerk of the Crowne, some to the Secretaries, and other travailes which I will not now reheare, and all this time withoute fee, without reward more than the ordinare, and that which grevith me withoute thank of the King, which I deseryued, as it wold appear if His Grace had ben truely inforumed of me, and my drawghtes seen which I devised and made to my sayde Lord. In this unthankfull travayle I nothing gate but the Colike and the Stone and all moste contynual destillations or rewnes ministres to abbreviate my lif." (This is from one of his letters and is quoted by Ellis in his "Original Letters." )

In 1530 his Clerkship to the Council was taken away from
title of "Pharmacopoeia Londinensis or The London Dispensatory" by Nicholas Culpepper, Gent; Student in Physick and Astrology, living in Spitalfields near London. Printed by a well-wisher to the Commonwealth of England, 1654. Many editions of these two works appeared during the succeeding years.

In 1651 he had published "Semeiotica Uranica or an Astronomical Judgment of Diseases based on Arabic and Greek Medicine". In the same year there had also appeared a "Directory for Midwives" and in 1652 "Galen's Art of Physic."

Culpepper was a most prolific writer and published several other works during his lifetime. He left to his wife after his death some 79 manuscripts of translations or original works and many of these were subsequently published.

In spite of his many enemies which his infringement of the close monopoly of the College as well as his attachment to the Puritans had brought him, he was held in great estimation by his fellow citizens. His constant and unremitting labours led to his contracting consumption which carried him off at the early age of 38 in the year 1654.
Death's but one night, my life hathb many seen
My life brought death - death brings me life againe
Seeds rise to trees - hearbes rise again from seed,
Shall bodies then of men obtain worse speed?
We dayly dye entomb'd in sleep and night;
But in the morning we renue our light;
Hence spring my joyes and comfortes evermore
I cannot feele but what Christ felt before.
Wee now believe, and heare, and talk by guess,
Then I shall see, and what I see possess;
And when I wake wrapt in Eternal light,
Of God and Christ, I know no more of night;
Crown'd with Eternal glories ever blest,
Oh happy rest that brings me all the rest.
Bodies calcin'd to iemmes like stars shalll sing,
Ravish'd with joyes and praises of my King,
Praised be God my Saviour, Praise his name
Angels and Saintes sing with me his fame.

"These verses were found, made, and ordered by Doctor Peter Chamber-
len, here interred, for his Epitaph."
The Deterioration of Medicine during the Middle Ages.

A Thesis presented for the Degree of D.Litt.

by

W.G. Aitchison Robertson, M.D., D.Sc. (Edin.)

Volume II.

Degree of D. Litt. conferred 16th December, 1932.
<table>
<thead>
<tr>
<th>Contents</th>
<th>Period</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Salernian Rules of Health.</td>
<td>1100</td>
<td>1</td>
</tr>
<tr>
<td>2. Nicolas Prepositus</td>
<td>1140</td>
<td>16</td>
</tr>
<tr>
<td>3. Aldebrandino</td>
<td>1256</td>
<td>24</td>
</tr>
<tr>
<td>4. Lanfranki</td>
<td>1300</td>
<td>30</td>
</tr>
<tr>
<td>5. Rhodion</td>
<td>1532</td>
<td>34</td>
</tr>
<tr>
<td>6. Sir Thomas Elyot</td>
<td>1534</td>
<td>44</td>
</tr>
<tr>
<td>7. Andrew Boexi</td>
<td>1542</td>
<td>70</td>
</tr>
<tr>
<td>8. Thomas Phaire</td>
<td>1544</td>
<td>83</td>
</tr>
<tr>
<td>9. William Bullein</td>
<td>1558</td>
<td>92</td>
</tr>
<tr>
<td>10. Alexis pedemontanus</td>
<td>1559</td>
<td>113</td>
</tr>
<tr>
<td>11. John Hall (primus)</td>
<td>1565</td>
<td>126</td>
</tr>
<tr>
<td>12. John Hall (secundus)</td>
<td>1600</td>
<td>148</td>
</tr>
<tr>
<td>13. Peter Droet</td>
<td>1572</td>
<td>168</td>
</tr>
<tr>
<td>14. William Gratarolus</td>
<td>1574</td>
<td>156</td>
</tr>
<tr>
<td>15. Leonardo Fioravanti</td>
<td>1582</td>
<td>173</td>
</tr>
<tr>
<td>16. Walter Cary</td>
<td>1583</td>
<td>185</td>
</tr>
<tr>
<td>17. William Clowes</td>
<td>1596</td>
<td>193</td>
</tr>
<tr>
<td>18. Peter Lowe</td>
<td>1597</td>
<td>207</td>
</tr>
<tr>
<td>18a. Christopher Wirtzung</td>
<td>1598</td>
<td>218 a</td>
</tr>
<tr>
<td>19. Thomas Moffett</td>
<td>1605</td>
<td>218</td>
</tr>
<tr>
<td>20. Ancient Mineral Wells in Scotland</td>
<td>1618</td>
<td>234</td>
</tr>
<tr>
<td>21. James Cooke</td>
<td>1647</td>
<td>271</td>
</tr>
<tr>
<td>22. The Powder of Sympathy</td>
<td>1651</td>
<td>285</td>
</tr>
<tr>
<td>23. Noah Biggs</td>
<td>1651</td>
<td>305</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Year</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------</td>
<td>------</td>
</tr>
<tr>
<td>24</td>
<td>Thomas Vicary</td>
<td>1651</td>
</tr>
<tr>
<td>25</td>
<td>Nicolas Culpepper</td>
<td>1651</td>
</tr>
<tr>
<td>26</td>
<td>James Primrose</td>
<td>1651</td>
</tr>
<tr>
<td>27</td>
<td>William Ramesay</td>
<td>1661</td>
</tr>
<tr>
<td>28</td>
<td>Peter Chamberlen</td>
<td>1665</td>
</tr>
<tr>
<td>29</td>
<td>Digby's Receipts</td>
<td>1668</td>
</tr>
<tr>
<td>30</td>
<td>M. Charas</td>
<td>1670</td>
</tr>
<tr>
<td>31</td>
<td>William Sermon</td>
<td>1673</td>
</tr>
<tr>
<td>32</td>
<td>John Archer</td>
<td>1673</td>
</tr>
<tr>
<td>33</td>
<td>Robert Godfrey</td>
<td>1674</td>
</tr>
<tr>
<td>34</td>
<td>Leonardo di Capoa</td>
<td>1684</td>
</tr>
<tr>
<td>35</td>
<td>Nicolas Andry</td>
<td>1701</td>
</tr>
<tr>
<td>36</td>
<td>Robert Pitt</td>
<td>1703</td>
</tr>
<tr>
<td>37</td>
<td>Alexander Russel</td>
<td>1712</td>
</tr>
<tr>
<td>38</td>
<td>Richard Browne</td>
<td>1729</td>
</tr>
<tr>
<td>39</td>
<td>Boyle Godfrey</td>
<td>1735</td>
</tr>
<tr>
<td>40</td>
<td>The Use of Coral in Medicine</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>The Unicorn's Horn in Medicine</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>The Use of Stones in Medicine</td>
<td></td>
</tr>
</tbody>
</table>
The Salernian Rules of Health.

c.1100.
It seems fitting that one should begin a consideration of the development of Therapeutics with a brief survey of one of the earliest Health resorts and seats of Medical learning.

To wander through what were formerly the abodes of splendour or renown is always a melancholy proceeding; but in no case is this more true than in the case of modern Salerno. Here we find a sleepy Italian town of some forty thousand inhabitants. Few people are in the streets, and they seem to be in no hurry about their business. Though the town is not attractive in itself, it is finely situated at the head of a beautiful bay, and has at its back a range of low mountains. The oldest part of the town stands high, and we can still find here houses which were built in the tenth century. The Cathedral dates from the year 1070, and contains sarcophagi which may even yet retain the mortal remains of the Northern adventurers who conquered Apulia early in the eleventh century. We search in vain for any vestiges of the once famous medical schools or hospitals, "while memory watches o'er the sad review".

Salernum (as it was then called) had been a Roman health resort as early as the second century B.C. It first however came into prominence by reason of the cures of disease brought about by the virtue of the bones of Saint Archelais, a Christian lady who was martyred during the reign of Diocletian, about the year 273 A.D., and whose remains were treasured there. St. Benedict founded a Monastery close by at Monte Casino early in the sixth century, and although it has been repeatedly destroyed and rebuilt, it still
exists at this present time. Other religious houses were founded there, and prelates and priests not only performed the duties which belonged to their office but applied themselves to the study and application of medicine to the pilgrims who resorted to the famous shrine. A School of Instruction was commenced, probably by the Benedictine friars who acted as teachers. The term "School" indicates the antiquity of the Salernian institution, for this was the term applied centuries before the word "university" had been given to such bodies of teachers and students. Indeed the latter term began to be applied only towards the end of the twelfth century.

Lay members seem to have been admitted from an early period, and thus gradually the famous Medical School of Salerno was instituted. Practical treatment of the sick had also to be undertaken in order to supplement the theoretical courses of instruction. This required the construction of infirmaries or hospitals, and it would seem that these were both large and efficient. In 984 the Bishop of Verdun travelled to Salernum in order to be cured of a disease; treated while in 1050 Pope Victor II was successfully there for a serious malady. In 1075 Archbishop Romualaus Guarna states that Salerno had enjoyed a great reputation for a long time. This Archbishop was himself a distinguished physician, having several crowned heads as his patients.

The names of famous medical practitioners appear in Salerno as early as the year 846, and texts of the Regimen Sanitatis of the eleventh and twelfth centuries show that the School of Salernum was already ancient even at that date. The teachers were called MASTERS, and this appellation again goes to prove the antiquity of
the school, as the term Professor does not appear in this connection until the thirteenth century.

In 1060 the famous writer on medical subjects, Constantine, arrived at Salernum from Carthage. It was he who introduced and influenced the line of thought towards Arabian medicine. Many Latins, Greeks and Arabs were in this way induced to resort there to study Philosophy and Medicine. Salernum attained its greatest fame and drew to its university the greatest number of students and to its hospitals the largest number of patients, during the lifetime of Constantine who lived until the year 1087.

Another feature which tended to make Salernum famous was its admission of women not only as students, but also as Teachers in the School as well as medical practitioners in the hospitals. Perhaps the most renowned of these was a lady named Trotula. She "flourished" about the year 1059, and wrote treatises on many medical, surgical and gynecological subjects. Many other illustrious female practitioners followed her during the succeeding two centuries.

During the twelfth century, Nicholaus of Salernum wrote a work, "Antidotarium" which still exists, while Maurus wrote on the Urine and Musandinus on Diet. Towards the end of this century, Archimathaeus wrote two works which had a great reputation for long; one dealt with the Ethics and History of Medicine, while the other treated of its practice.

It was in 1075 that Duke Robert of Normandy, while leading the French and Normans on a Crusade to the Holy Land, arrived at Salernum. The Normans had already made themselves Counts of Apulia when they conquered this territory earlier in the century, and thus Count Robert was more or less at home. It was late in the year
when he arrived, and as the weather continued stormy, he delayed setting out on his crusade until the spring. During the winter he must have cultivated the society of the inhabitants and endeared himself to the Masters of the School. Count Robert was the eldest son of our own William the Conqueror and by right should have been King of England. Doubtless this fact was known at Salernum.

The crusade proved successful, but the Duke having received a wound, returned to Salernum to be treated. Either the cure was tedious or dalliance in love willed away the time and caused him to spend a whole year in the town. This long stay abroad may have contributed to his loss of the English crown and to his twenty-eight years imprisonment.

In 1137 the King of Sicily ordered that all who intended to practise medicine must be first examined by Masters of the School of Salernum. Frederick II, King of Naples, founded the University of Salernum in 1224 and drew up very careful regulations as to the practice of medicine. Thus he prescribed a three years curriculum in Philosophy and literature before the student could begin the theoretical study of Medicine which lasted for five years.

At Naples there was unfortunately a richly endowed University and its proximity had an adverse effect on that of Salernum. The decadence once begun, went on apace during the succeeding years.

After 1435 however the advent of the Spanish princes seemed about to bring a revival of prosperity to Salernum. This hope was not realised however, as quarrels arose between rival factions, and gradually but relentlessly the reputation and fame of this most ancient of medical schools sank until it became a mere name, the
many, etc. Besides they affirm that Robert never was King of England, and therefore the poem could not have been addressed to him as such, and that an English transcriber has added this dedication. At the time however when the poem was composed, William the Conqueror was alive and there was every reason to believe that his eldest son was legally the future King of England.

The following extracts have been made from the text of Arnald de Villa Nova, who lived close to Salernum in the thirteenth century, and it is this text which Sir Alexander Croke published in 1830. It is much the same as the English edition which was published anonymously in 1607 under the title of "The Englishman's Doctor or the School of Salerne or Physicall Observations for the Perfect Preserving of the Body of Man in Continuall Health." The translator was Sir John Harington. It also closely resembles the Scottish edition entitled "Conservandae Bonae Valetudinis Praecepta longe Maluberrima Regi Angliae quondam a Doctoribus Scholae Salernitanae. The Salerne Schoole or the Regiment of Health. That is Physicall Observations for the perfect preserving of the Body of Man in Continuall Health." Edinburgh; printed by Andro Hart, and are to be sold at his shop, on the north side of the hie Street, a little beneath the Crosse. Anno domini 1613. (Black letter).

The Salerne Schoole doth by these lines impart
All health to England's King, and doth advise
From care his head to keepe, from wrath his heart,
Drinke not much wine, sup light and soone arise,
When meat is gone, long sitting breetheth smart;
And after noone still waking keep your eies.
When moov'd you finde your-selfe to Nature's needs,
Forbear them not, for that much danger breeds.

There are no drugs heere fetcht from Mexico,
Nor gold from India, nor that stinking smoake
Which English gallants buy, themselves to choake.

Use three Physitians still, first Doctor Quiet,
Next Doctor Merri-man and Doctor Dyet.

Long sleepe at after-noones by stirring fumes,
Breeds Slouth, and Agues, Aking heads and Rheumes.

Great harms have growne, and maladies exceeding
By keeping in a little blast of wind,
So cramps and dropsies, Collicks, have their breeding
And Mazed braines, for want of vent behind.

Besides we find in stories worth the reading
A certaine Romaine Emperour was so kind
Claudius by name, he made a proclamation,
A scape to be no losse of reputation.

Peares, Apples, Peaches, Milke and Cheese
Salt-meates, Red-Deere, Hart, Beefe and Goat, all these
Are meates that breed ill-blood and melancholy.

Wine, Women, Bathes, by Art or Nature warme,
Usde or abusde, do men much goode or harme.

Six things that here in order shall insue
Against all poison have a secrete powre,
Peares, Garlick, Raddish-roots, Nuts, Triacle, Rew.

But Garlick chuse, for they that it devour
May drinke, and care not who their drinke do brew,
May walk in aires infected every houre.

Sith Garlick then hath poer to save from death
Beare with it though it make unsavory breath;
And scorne not Garlick, like to some that thinke
It onely makes men winke, and drinke and stinke.

Though all ill savours do not breed infection
Yet sure Infection cometh most by smelling,
Who smelleth still perfumed, his complexion
Is not perfumed by Poet Martial's telling.

Yet for your lodging roomes give this direction
In houses where you minde to make your dwelling,
That nere the same there be no evill sents
Of puddle waters, or of excrements,
Let Ayre be cleare, and light and free from faults
That come of secret passages and vaults.

If wine have overnight a surfet brought
Then early in the morning drinke a draught
And that a kind of remedy shall yield.

(The poem then goes on to describe the kinds of wine
and when they ought to be drunk. Water and Small beer
were enemies to health and good digestion.)

If in your drinke you mingle Rew with Sage
All poyson is expel'd, by power of those,
And if you would withall lust's heat asswage
Adde to the same the gentle flowre of Rose.

Would not be sea-sicke when the seas do rage,
Sea water drinke with wine before he goes.

Of washing of your hands much good doth ryse,
'Tis wholesome, cleanly and relieves your eyes.

Some to drinke onely water are assign'd;
But such by our consent shall drinke alone,
For water and small beere we make no question
Are enemies to health and good digestion;
And Horace in a verse of his rehearses
That water-drinkers never make good verses.

(The original Latin of the above shows the liberties the
translator has taken: -

Potus atque sumptus fit edendi valde nocius,
Infrigidat stomachumque cibum nititur fore crudum.)

We see the better sort thereof (cheese ) doth eate
To make as't were a period of their Meate.
The poorer sort when other meate is scant
For hunger eat it to relieve their want.

To close your stomach well this order sutes
Cheese after Flesh, Nuts after Fish or Frutes,
Yet some have said, believe them as you will,
One nut doth good, two hurt, the third doth kill.

Raw peares are heavy to digest, we see
Drinke after Peares, takes after Apples order
To have a place to purge yourself of ordure.

Coole Damsens are, and good for health by reason
They make your entrails soluble and slacke.
By Figs are Lice engendered, Lust provoked.

New Rennish wine stire urine, doeth not binde
But rather loose the Belly breeding winds.

To tell of Cresses vertues long it were,
But divers patients unto that are debter;
It helps the teeth, it gives to bald men hair,
With hony mixt, it Ringworm kills and Tetter.

It (vinegar) makes one melancholy, hurts their eyes,
Not making fat, nor mending their complexions.
It lessens Sperme, makes appetite to rise;
Both taste and scent is good against infection.

Four speciall vertues hath a sop in wine,
It maketh the teeth white, it clears the eyne,
It addes unto an emptie stomach fulnesse
And from a stomach fill'd it takes the dulnesse.

Good Dyet is a perfect way of curing
And worthy much regard and health assuring.

The wormes that knawes the Wombe and never stint
Are kil'd and purg'd and driven away with Mint.
But who can write thy worth (O. sovereign Sage)
Some ask how men can die where thou dost grow.

Rew is a noble hearbe to give it right,
To chew it fasting, it will purge the sight,
It makes man chast, and women files with lust.
Fayre ladies, if these Physicke rules be true
That Rew hath such strange qualities as these
Eat little Rew, lest your good hisbands rew
And breede betwene you both a shrewd disease.
Rew whets the wit, and move to pleasure you.
In water boil'd it rides a roome of flmes.

For writers old and new, both ours and forren,
Affirme the seed (Green Willow ) make women chast and barren,

If in your teeth you hap to be tormented
By meane some little wormes therein do breed.
Which paine (if heed be tane ) may be prevented,
By keeping cleane your teeth when as you feed,
Burne Frank-incense ( A gum not evil sented )
Put Henbane unto this and Onyon-seed,
And with a Tunnell, to the Tooth that's hollow
Convey the smoake thereof, and ease shall follow.

Foure humours raigne within our bodies wholly
And these compared to foure elements.
The Sanguin, Choller, Flegme and Melancholy.
The latter two are heavy, dull of sense.
The other are more joviall, quick and joly
And may be likened thus (without offence)
Lyke ayre both warme and moyst is Sanguin deare,
Lyke fire doth Choller hot and dry appeare.
Lyke water cold and moyste is Flegmatique,
The Melancholy cold, dry earth is like.

The Sanguin gamesome is, and nothing nyce,
Loves wyne and women and all recreation,
Likes pleasant tales, and newes, placies cards and dice,
Fit for all company, and every fashion,
Though bold, not apt to take offence, nor ireful,
But bountiful and kind, and looking cheareful,
Inclining to be fat, and prone to lafter
Loves mirth and musick, cares not what comes after.

( The poet describes the characteristics of Choller as
being violent and fierce, ambitious, proud, bountiful,
often malicious, a right bold speaker and "as bold a
lyar", easily roused to anger, having a good appetite,
"yet ever looking pin'd.")

In younger yeares they use to grow apace,
In elder hairy on their brest and face.

The Flegmatique; Most of no great growth, inclining
rather to be fat and square, lazy, not well educated,
dreamy, "or els still spitting to avoyd the flegme."
The Melancholy; Very studious and solitary, pensive, apt
to be hateful to others, constant, sometimes extreme in
love, seldom lustful, mistrusting, "sparing, not daring."

Now though we give these humours severall names
Yet all men are of all participant,
But all have not in quantity the same
For some (in some) are more predominant.

If Sanguin honour do too much abound.
These figures will be thereof appearing chiefe;
The face will swell, the Cheeks grow red and round,
With staring eyes, the pulse beat soft and briefe,
The veines exceed, the belly will be bound,
The temples and the forehead full of grieues.
Unquyet sleepes, that so strange dreames will make
To cause one blush to tell when he doth wake.
Besides the moisture of the mouth and spittle
Will taste too sweete and saeme the throat to tickle.

If Choller do exceed, as may sometime,
Your eares will ring and make you to be wakeful
Your tongue will saeme all rough and oftentimes
Cause vomits, unaccustomed and hatefull.
Great Thirst, your excrements full of slime,
The stomach squeamish, sustenance ungratefull;
Your Appetite will saeme in nought delighting
Your heart still grieved with continuall byting,
The pulse beat hard and swift, all hot extreme,
Your spittle sowe, of fireworkes oft your dreames.

If Flegme abundance have due limits past,
These signes are here set downe will plainly show.
The mouth will saeme to you quite out of taste.
And apt with moysture still to overflow,
Your sides will same all sore down to the waste,
Your meate war loathsome,your digestion slow,
Your head and stomach both in so ill taking
One seeming ever gripping,t'other sking,
With empty veins,the pulse beat slow and soft
In sleepe,of Seas and Rivers dreaming oft.

But if that dangerous humor over-raigne
Of Melancholy, sometime making mad,
These tokens then will be appearing plaine,
The pulse beat hard, the colour darke and bad,
The water thin, a weake fantastick braine
False-grounded joy, or elis perpetuall sad.
Affrighted oftentimes with dreames like visions
Presenting to the thought ill apparitions,
Of bitter belches from the stomach comming,
His eare (the left especiall) ever burning.

To bleed doth cheere the pensive and remove
The raging furies bred by burning love.
Make your incision large, and not too depe
That blood have speedy issue with the fume,
So that from sinnewes you all hurt do keepe,
Nay may you (as I tought before) presume
In sixe ensuing houres at all to sleepe
Lest some slight bruise in sleepe cause an apostume.
First in the Spring for quantity you shall
Of blood take twice as much as in the Fall.

In Spring and Summer let the Right Arme blood,
The Fall and Winter for the left are good.
The Heart and Lever, Spring and Summer bleeding,
The Fall and Winter hand and foot doth mand.
One veine cut in the hand doth helpe exceeding
Unto the Spleene, voyce, brest and intrailles lend,
And swages griefes that in the heart are breeding.

The Translator to the Reader.
But here the Salerne schoole doth make an end.
And here I cease to wryte, but will not cease
To wish you live in health and die in peace
And ye our physick rules that friendly reade.
God grant that Physick you may never neede.
Nicolas Prepositus.

II40.
NICOLAS PREPOSITUS.

So capricious is fame that instead of coming down the ages to us as a learned physician, Nicolas Prepositus is mainly known as the author of the phrase "quid pro quo". It is said that he employed this trite form of words to show how certain drugs which were perhaps difficult to procure, could be replaced by certain others more easily procurable, and whose pharmacological properties were almost identical. This replacement, Prepositus described in his "Dispensarium" or catalogue of equivalent drugs arranged in alphabetical order. This was perhaps the best-known work on pharmacy during the middle ages and four editions appeared. It was also translated into Italian, French, Spanish, Hebrew and Arabic.

Little is known regarding the life of Prepositus. He is said to have been a native of Alexandria, but left there for Italy, where he became famous as a practitioner of Medicine and one of the renowned teachers in the School of Salerno where he occupied the position of President about the year 1140. Like many another famous man he had his detractors, who affirmed that though Nicolas had been most successful, he was a man of little education, and that he had collected his prescriptions from Alexandria and Italy.

Though his Antidotarium contains many prescriptions named after well-known practitioners, (it is said that it became famous mainly because of the inclusion of certain formulae handed down from the prophet Ezra and from Saint Paul) the work contains a mass of information gathered from Greek, Latin and Arabian sources.

The First Book treats of Simples which the apothecary ought to possess, of the appropriate times and seasons when they ought to be
collected, and how to preserve them. He describes the making of Compounds and of medicines from animal sources. He gives directions for the making of lion and wolf fat, of mummy, of marrow from the bones of stags, of the preparation of human bone and especially that of the skull, of human blood, scorpions, beetles, the excreta of serpents, infants and wolves. In the preparation of serpents, he says that they must first be beaten with small rods, then the heads and tails are to be cut off and the body allowed to twist about the ground, the more they bleed the better; they are then to be washed in water and then boiled in pure wine. The urine of infants is also to be made use of.

The second Book is devoted to Compounds, and the third to Antidotes. Prepositus seems to have had an inkling as to how to produce an anaesthesia, for he speaks of sleep being produced by inhaling from Spongia soporifica.

The first edition of the "Dispensarium ad Aromatarios" was probably printed in 1490; another was issued from Lugdunum Batavorum "cum additionibus" in 1517 and many others appeared subsequently. The earliest edition which I have seen is the 4th. edition published in 1505. It is the English translation which appeared in London in 1588 which I have employed in the following abridgement.

This was one of the books which a Candidate for Inception in Medicine at the University of Oxford was required to read—the only alternatives being the Regimen Auctorum of Hippocrates or the Liber Febrium of Isaac.
Prepositas, his Practice... A worke very necessary for the better preservation of the Health of Man, wherein are not onely most excellent and approved medicines, Receiptes, and Ointmentes of great Vertue, but also most precious Waters, against many infirmities of the Body with a Table for the ready finding out of every the Diseases and the Remedies for the same. Translated out of Latin into English by L.M. London 1588.

To the Reader. Here hast thou (gentle reader) a booke for thy profit, such as in English I know not the like, for herein maist thou finde readily medicines for sundry diseases and how thyself maist make the same.

Some peradventure will object that it is prejudiciall unto phisitians, Apothecaries, and such other, that such manner booke as this should be divulged in the English tongue, and that the secretes of physicke ought not to be participated unto the common sorte, but onely knowne of such as be professors of the arte. Hereto may be answered; that as to preferre the insatiable gaine of a few, before the commoditie of the whole publicke weale, were a thing against nature most injurious and odious; for so to pleasure a few men, to deprive all others of such a benefit as concerne their health, yea and their life also, for want of knowledge, were not onely great inhumanitie, but most opposite and contrarie to that which God in his law hath enjoyned as under paine of damnation ---- I not waighing the unsaverie speaches and contumelies of carping cavellers, will leave to commend these thinges which being tryed shall sufficiently praise them selves. Vale.
A very excellent Medicine, taken out of Actuarius, the Pisitian, Which the Apothecaries call Antidotium Sincritum. This is made up of opium, juice of black poppy, ammonium, cassia pepper, storax, mustard, honey, etc. Seethe all together with sweet wine and sodden to the third part, till it be as thicke as honey. This is good against a quartaine, long aches of the head, the turning sicknes, the falling evil, over much waking, francy, the paine of the eyes, the rumes, shortnes of winde, sighing, old coughes from the lunges. If a man do spit bloud then it must be taken with assetum multum, which is made of vinegar and honey. It is also a presente remedie for the stomake, it avoydeth winde from the stomake and from the lower partes, it helpeth the yelow jawndize and all diseases of melancholy; it doth distribute the meate digested into his partes; it causeth gravel in the reignes and bladder to avoide; taken with drinke it moveth a man to the stool it doeth mitigate the gnawing and the paine of the belly; it doeth helpe and take away the over much stretching forth of the matrice and when it cannot be easily taken by the mouth, them let it be ministered with the juyce of fenierike at the fundement; it asswayeth the paine of women which labor of child; it doeth also recover those which be in danger of life. This doeth not onely remedie all inward griefs, but also the palsie, etc., etc.

A pleasant Medicine of Cloves made by Dr. Mesues, called Aromaticum Caryophilatum. It cureth the stomake and the heart and dissolveth winde, etc.

A Confection of Perles of Dr. Nicholas called Diamargaritum calidum. This consists of 28 ingredients, including "little balles of roses, little balles of violets, i drachm of perles, the bone of the
heart of the red deer. It comforteth the lively partes of those whiche be pensiful and sad, sighing or be in a consumption.

To another confection of perles, he adds ivory, gold saphire, jacint emeralds, etc.

To know if one shall live or dye being wounded.

Give him the juice of Pimpernel mingled with Water, and if it goe out of the wound, he shall dye, or ells not.
A verie excellent Medicine, taken out of Actuarius, the Phisition, which the Apothecaries call Antidotum sincritum. This doeth not on onely remedie all inward griefs, but also the palsie; it doeth also recover those which be in danger of life.

The verie wholesome medicine of Alexander, the Phisition, called of the Pothecaries Aurea Alexandrina. This contains a very large number of drugs, including " ye stones of ye otter, fine golde and silver, little perles, little fishes called Unguis odoratus, the bone in the heart of the red deere, the shaving of ivery. It will cure colds, scoureth the reignes, breaketh the stone, cureth agues " etc.

Diamargaritum frigidum contains perles, ivery, saphire, jacinth, emerald, amber, gold, musk etc.

A Confection called Diacomeron "bringeth mirth, and causeth a man to be lustie and fat.

A Confection of the hearbe Saturion contains " the tailes of small crocodilles in the river of Nylus of the same kinde that the crocodilles of the earth be on ". This restores and fortifies the weakenes of the reines of the bladder, it provoketh urine and moveth a man to venere".

A singular Confection of Corrall called diacoralium magistralem contains both corruls, littel peeses of perls, beaten to a fine powder.

An Electuarie to comforte the Stomacke, called Electuarium comfortativum stomachi contains frankincense, pomegranate etc. "It moveth a man to meate ".
An Emplaister of slimy sappes called Emplastrum de mucilaginibus, contains hollyhock, linseed, inner rinde of an elme tree, oyle of camomil, lilies, dill, etc. It mollifieth all hardnesse.

An Emplaster which the Pothecaries call, Gratia Dei of Dr. Nicholas.

A composition which King Mithridates did use. This contains the bloud of a drake dried, the bloud of a ducke, goose, kidde, together with 28 vegetable ingredients.

Another confection which the same King did use and which was composed by Dr. Nicholas contains not less than 107 ingredients. Of necessity the number of diseases which it is said to cure is almost equal to the number of drugs composing it.

Oyle of Otter Stones is good for crampe. The Oyle of a Wolfe is made by taking a wolfe whole except the bowels and put him in a vessel, and pour unto him well water and salt water, eighteen of old oyle, three libr, ten ; seeth this with a soft fire, with three of salt untill the water be consumed, then put it into a vessell, and pour unto it of the sweet water wherein the hearbes have been sodden, one lib., and of tyme one M. Seeth them againe till the water be consumed. This is a chiefe remedie against the goute in the joyntes which is called, Arthritica passio.

Oyle of Scorpions is the most potent remedie to breake the stone in the raines or in the bladder, chiefly if the raines or the necke of the bladder or the places there about bee anointed therewith, or els if it bee ministered in by the yards. It is also a present remedie against the pestilence, and all other poysons.

Litle balles of myrrhe of Dr. Basis contain myrrhe, lupin, rue, mint pennyroyal, cumin, madder, pellitory, etc. This is so strong a
medicine to purge flowers in women, that it will cause the child to descend if they use it often; also the flowers be moved verie well in boring of the crooking of the hamme, or in cutting the vaine which hath course by the ankle, ye may also use, boring about ye thighs.

An Electuary of precious stones is good for diseases of the braine, heart, stomake, and the matrix. It is a medicine proved against the trembling of the heart and fainting and souning; the weaknesse of the stomake, pensiveness, solitarinesse. Kings and noble men have used this for their great comfort. It causeth them to be bolde spryted, the body to smell well and engendreth good colour.

A thicke sirrop of the lunges of a Foxe "Take of the lungs of a foxe dried, the juice of lickoras, maidenhaire, fennelseede, etc. This is a present remedie in all consumptions and diseases of the stomake; it doth both comfort and cleanse the lunges.

At the end of the volume, the translator adds certain approved medicines, most of them practised by himself. Thus, to draw teeth without any paine - take powdered cucumber, mix with vinegar, then put it on the tooth, but looke it touch noneother but that "

"To make thy face white"; "For milke that is cruddled in the Brestes"; "For the Aking of the Teeth and Gummes when they doe grieve thee. (The aking is cured by rubbing the temples when it is in the upper teeth, or by rubbing the under jawes, if in the lower teeth.)
Aldebrandino.

1256.
ALDEBRANDINO

AN EARLY HYGIENIST

In the Royal College of Physicians of Edinburgh there is a copy of a very rare book. The catalogue states that it is considered to have been the second book printed in the French language. Doubtless this statement is founded on the fact that this work is the second on the list of the principal books of French prose which M. François de Neufchateau compiled. M. Emile Littré however in his contribution to "L'Histoire Litteraire de la France" thinks that "Les Cents Histoire de Troyes" and the "Roman de Jason" were printed many years before that of Aldebrandino, and perhaps even before the "Jardin de Devotion" (which M. François regarded as the first book in French) was printed. Whatever be the merits of the case, Aldebrandino's work is undoubtedly one of the earliest books which was printed in France. Probably it was printed in Lyons. It is very difficult to read, being printed in early Gothic letter (black) and in the archaic form of Norman-French.

There are three manuscripts of Aldebrandino in Paris. The oldest belongs to the thirteenth century and consists of 71 sheets, small quarto size and printed in two columns. In this the author states that the work was made at the request of the Countess of Provence about the year 1256. A second manuscript (very incomplete) is probably of the fifteenth century, and states that Medicine is chiefly devised to preserve the body, to keep it in health, and lastly to cure disease. It goes on to say that the Emperor Feldris (Frederick II) of Germany, grandson of Frederick Barbarossa, who having more
desire to keep his body in health than to overcome the enemies of
his soul, first ordered this book to be translated from Greek into
Latin and then into French. He had already been crowned Emperor of
Rome in 1220 and therefore probably this translation was made by
Maître Hildebrandis of Sienna in 1234. M. Littré however strongly
suspects that this manuscript is comparatively modern. The third
manuscript seems to be a yet more recent transcription.

Each of these manuscripts begins with the ascription "Dieu,
qui par sa grant puissance tout le monde estably."

The copy in the library in Edinburgh is in folio, dated 1485,
Paris, and is beautifully printed in double columns with coloured
initials. It is entitled

Le livre pour la santé du corps garder et de chacun membre
pour soi garder et conserver en sante ; composé à la requête
du roi de France.

Maître Aldebrandin is supposed to have been born about the
middle of the thirteenth century in Florence and to have died there
in 1327. He studied medicine at Bologna and afterwards taught the
subject there. His colleagues however became jealous of his popu-
larit y and so he removed to Sienna. He wrote annotations on the
works of Avicenna and Galen and on the treatise "De la Nature du Fo
tetus " of Hippocrates.

Whether the present was an original work by Aldebrandin
or merely a compilation or translation made by him is not material.
The important fact is that it was the first treatise printed in
French which dealt with the conservation of the health of the human
body, or what is now known as personal hygiene and dietetics.
Doubtless earlier writers had discussed these questions incidentally, as for example the Arabian writer Isaac Ben Solomen, who had written on dietetics. Aldebrandino was the first writer however who emphasised the necessity of personal care; in fact he says that in order to keep the body healthy, thousands of cares are required. He goes on to say that it is not his intention to give methods for the cure of disease, but to show how diseases may be avoided. This is of course the essence of Preventive Medicine. Matters relating to hygiene had been treated of by Hippocrates in "De Aere, Aquis et Locis," but these were only accessible to scholars. Athenaeus of Attalia had, at the end of the first century, insisted on the benefit of a pure water supply and on the proper choice of sites for dwellings.

Aldebrandino's work is divided into four parts. The first deals with the preservation of health generally and of the means to be employed to attain this. The second part indicates what cares or attentions are required in order to maintain each organ in health e.g. stomach, liver, kidneys, heart, eyes, hair. The third part is devoted to dietetics, and deals with the properties of animal and vegetable foods. The concluding part is called Phisanomie and deals with the moral attributes of individuals as contrasted with their physical characters.

In the first chapter, Aldebrandino shows how one must know those things which are good as compared with those things which affect the body for evil. In the next chapter he gives advice as to the kinds of food and drink which should be taken by those who have a cold or moist constitution or by those in whom it is rheumatic or melancholic. As tending to show that the work had an east-
ern origin, we find the author describing such fruits as dates, figs, pomegranates and lemons, fruits which are not indigenous to northern Italy or France.

In speaking of beverages, he gives instructions as to how to tell good wine from bad wine and to know which is good water to drink. Another chapter treats of the amount of time which one ought to give to sleep and to waking, and with the character and quality of work and the requisite amount of rest. As regards bathing, he remarks that only some waters are good for baths, while others are harmful. He then goes on to discuss the relative advantages of hot and cold baths. Bathing, he says, must be regulated not only by the temperament of the body but also according to the season. He advocates the use of mineral water for baths, and says that some of these have the nature of soda and others of alum; some are salt, while others are bitter. Still others have the characters of saltpetre or of iron. He describes how one may make an artificial mineral water for baths by boiling soda in soft water. One chapter is devoted to the clothing of women, while the eighth tells how one is to guard himself against the emotions of anger, sadness or weariness, which are harmful to the body and to the health. Then follow directions as to the best time for bleeding and why one should bleed a patient; the object and uses of cupping and the method of employing leeches. Aldebrandino believed in the benefits of purging and vomiting, and indicates when these measures ought to be employed. He had noted the evil effects of bad or corrupt air, and gives advice as to its avoidance, and also how to shield oneself against the pestilence.

The dangers incident to each of the seasons are discussed and
Directions are given how best to combat these. This constitutes therefore an early treatise on Climatology. Aldebrandino follows this up by giving a warning against dwelling in certain localities, and indicates which are the healthiest cities and places in which to reside. Naturally this leads him to discuss which are the surest methods of preserving health while travelling either by land or sea.

He pays particular attention to the care of pregnant women and to the newly born child. Directions are given as to the selection of the nurse and to the proper nourishment and treatment of the nursling. One might almost say that "child welfare" finds itself adumbrated in this early work. At each period of life we find our author laying down rules for healthy living, and so from infancy to senescence he guides one's path, and so he brings to an end Part I.

Part II deals with the care appropriate to each organ of the body, eyes, ears, stomach, liver, kidneys, etc. He shows how one ought to take care of the teeth so as to keep them white and beautiful. He does not despise cosmetics, and describes how to preserve the complexion, and how to give it a beautiful colour.

The Third and largest part of the work is devoted to Dietetics. He goes into great detail as to the selection of food and to the best methods of cooking it. Several articles are mentioned which again are not indigenous to France or Italy, as for example, cane sugar. This he says, is hot and moist in the first degree. Its nature is to provoke urine, and to purge the kidneys and bladder. It mollifies the belly and clears up the chest and lungs; it also induces vomiting.

The Fourth Book deals with questions relating to morality and hardly lends itself to summarising.
Aldebrandino ends his work in the following words; -

Cy finist le liure que
Maitre Aldebrandin
fist a la requete du roy
de France pour la conser.
vation de la sante du
corps humain.

On the whole I agree with those who think that the treatise is in the main a compilation from Arabian writers. Even if it is, Aldebrandino has put his own impression upon it and made it stand out as one of the earliest treatises on Hygiene. He brought the medical knowledge of his day within the reach of all who could read, and so profit by its instruction.

A complete text of the Manuscript in the Bibliothèque National was published in Paris in 1911 by Drs. Landousy and Pepin.
Lanfranki.

1300.
Mediolanensis: A most excellent and larned Woork of Chirurgerie

Called Chirurgia parva Lanfranci, Lanfranke of Mylane his brief,
reduced from divers translations to our Vulgar or Usuall frase, and now first published in the Englyshe prynte by John Halle, Chirurgien. 4°. London. 1565.

This Lanfranche of Milan had been a pupil of William of Salicet and was well versed in the ancient authors. He was forced to fly to Lyons and later to Paris in 1295. Here he would have lectured on Surgery, but being a married man he was not allowed to do so. At that time all professors in Paris had to be clerics and celibate. After a time however permission was given him to give Clinical Lectures, and on account of his reputation, these were well attended. He died somewhere about the year 1315.

Owing to his dread of haemorrhage in operations he preferred to employ the actual cautery rather than the scalpel, and this fear even prevented him from extracting teeth. In treating fractures of the skull, he advocates that one should invoke the aid of the Holy Ghost. He recognised the difference between arterial and venous haemorrhage. That he was an experienced surgeon is shown by his suturing herniae, his setting of fractures, his cupping and cauterising poisoned wounds, etc.

In treating cut sinews, he advises that they should be stitched together and dressed with Oleum rosatum, "wherein hath been sodden vermes terrestres, and then the lippes of the wounde are to be stitched."

Here is his description of a rather curious method of determining whether the Skull has been fractured "unto the in-
ward partes, i.e., ad duram matrem. The patient is made to hold a thread between his teeth, while you hold the other end at the distance of a cubit's length. Then, holding it straight, you rasp the thread with your finger-nail. If the patient has no feeling of pain on this being done, the skull is not fractured to the dura mater. You may also smite his head with a small dry willow-stick while holding your ear to his head; "if the skull be whole, it will make an hole sounde, but if it be cut, or broken, it will make a dumme noyse after the comparyson of a broken Bell and a whole. If the bone be broken you must remove the broken shivers lest they hurt the dura, as also any pieces that underlye the skull."

"The second parte of thys work treateth of Apostemes (abscesses), Sanguin, Cholericke, Phlegmaticke, Melancholickse, watery, wyndye apostemes, also those called Botium Apostemes of compound humores, of unnatural humores."

"The fourth parte treateth of Algebra or Restoration; the intention of Algebra is the restorynge of Dislocation or breakyng of bones." This is followed by a Dictionary, "wherein is declared all strange wordes with their interpretation and significance."

Under the term "Lacertas", he says "it is a worme or little beast. That of Italy is venomous and yet moste friendly to man (whose face he deylghteth to behold), an enemy to serpentes and for man his cause he will fyght against serpentes. The dunge of the Lizarde is a medicine profittable for the eyes, as to sharpen the syght and to take away the itche and the webbe in the same. The head of the Lizarde bruised and layde to, draweth out all prickes and stynges fixed in the flesh. The lyver of the same put
into hollow teeth, taketh away their paynes. The Lizard broken and layde to the stroke of a Scorpion, easeth the same."

"Mumia. Divers greate learned men think it to be pissa Asphaltos cast up on ryver bankes, whiche doe smell lyke pytche. The Arabians however affirme it to resulte of the imbaumyng or spicery of dead bodyes at their burialles, beyng coagulated and growne together (with the fatte and moysture of the corps) into a bodie and therefore called Mumia sepulchorum. But as this composition is very costly and therefore used for the bodyes of the Nobles; soe are men of some lesse reputation imbaumed with aloe, myrrhe and saffron, neyther of the whiche bodyes are easily spoyled of their tombes and spicerie, namely, by strangers. Howe be it, the poorer sorte (whiche are the greatest number, the openinge also and removyng of whose bodies is the more tolerable) are enclosed with pissa asphaltum only, because it is of lesse price, for they use customably to embaume all bodys, But that which is nowe among our Apothecaries extant, varieth from all these substances, and is the very flesh of manes body, as it were burned to a cole, for both whole armes and whole legges have been here not rarely seen, being dryed as blacke as a cole. It is used in outward plasters and inwarde drinkes, to consounde broken bones and veynes, and to dissolve congeiled bloud, and stayeth the flux of the same. It helpeth Hemimicraniam and Paralism and the paynes of the heade that come of colde without humores."
anserino and poured in, they heale the paynes of the eares. If they are boyled in oyle and put into the contrarie eare, they helpe the payne of the teethe."

"Ova formicarum. So unspeakable is the carefull love of our merciful God towards his creatures, that he make the little ante and hir egges, medicines for their health. Thei are foode for Beares, and their egges (sayeth Fliny) are to them a hol-some medicine, when they are greved."
Rhodion. 1532.
DE PARTU HOMINIS

& quae circa ipsum accident.


Unfortunately little or nothing is known about the author. He is called Eucharius Roslim, Roesslin or Rhodion and is said to have died in 1526. He was a practitioner of Medicine at Worms and latterly at Frankfurt-on-Main.

In early times the leading authority on all matters dealing with Midwifery and Gynecology was Soranus of Ephesus, and his teaching and precepts continued to be the guiding principles for some thirteen years.

In 1500 a popular handbook for lying-in women was published by one Ortollf, and thirteen years later Rhodion issued his "Der Swangern Frawen und Hebammen Rosegarten." It appeared under Imperial privilege and was dedicated to Catherine Princess of Saxony and Duchess of Brunswick. Doubtless much was copied by Rhodion from the teaching of the Fathers of Medicine, but at all events he popularised many of the mechanical methods of delivery.

He gives a very good description of the method of external version which later, under the authoritative influence of Pare, became widely known and practised under the name of "podalic version."

In Rhodion's time, Surgery had hardly entered into the sphere of a practical art. It is therefore not surprising to find that he relied largely on the expectant treatment of parturition. To aid him however he called in an immense number of drugs and freely prescribed them in astonishing mixtures.
The Birth of Mankinde, otherwise named the Womans Booke. Set forth in English by Thomas Raynalde Phisition and by him corrected and augmented. Whose contents you may reade in the Table followyng; but more playnely in the prologue.

Imprinted at London by Richarde Wakkins, cum privilegio. 1598.

This edition Raynald says is now "much more enlarged and encreased and more diligently corrected than it was before eyther in the Latine or in the English."

In the prologue to the Women Readers he says:
"Here in the beginning of this present prologue, I will follow the example of them, which when they bid any ghestes to dinner or supper, are wont fyrst to declare what shalbe their cheere, what fare and how many dyshes they shall have, praying them to take it in good woorth."

He tells them that three or four years before he took the book in hand "a certaine studious and diligent clarke at the request and desyre of divers honest and sad matrones, being of his acquaintance, did translate out of the Latine into English a greate parte of this booke, entituling it, according to the Latine inscription 'De partu Hominis'. In which his translation hee varied or declined nothyng at all from the steppes of his Latine author, observing more fideletie in translating, then choyce or discretion in admitting and allowing many thinges in the same Booke greatly need- ing admonition and wary advice or counsell to the readers, which otherwise might sometimes use that for a helpe, the which should turne to a hinderaunce."

He goes on to say that he has added many new things and gives much counsel in the long and tedious prologue.
The Rosegarten must have been welcome, for editions appeared in 1522, 1529 and 1571. It was translated into Latin, and it is from the earliest edition of this work (1532) that the following summary has been made. Eight other editions followed in rapid succession.

It was translated into English by Richard Jonas and published in 1540. It is best known however in the translation made by Thomas Raynalde or Raynold and entitled "The Byrthe of Mankynde, otherwise named The Woman's Booke". This was not merely a translation made it almost a new work by adding much fresh matter. Rhodion's original work appeared as a small 12mo volume of about eighty pages whereas that of Raynalde was expanded into a volume - a quarto of 204 black-letter folios. This is certainly the first illustrated book on Midwifery in the English language. It ran through seven editions from the first in 1545 to 1676.

In the Prologue of the Latin edition the author gives praise to God for all his wonderful works and for the wonders of the human body. He refers to the various dangers which beset the pregnant woman, and ends by hoping that this work may help many to avoid such dangers to life.

The first chapter deals with the normal position of the foetus in utero. The illustrations of the different presentations are curious and fanciful. With regard to difficult labour, he notes that the first is where the womb is narrow and where the mother conceives before she is twelve years old. In other cases, ulcers, inflammations, piles, etc. cause the mouth of the womb to open with pain. Diseases of the bladder and bowels give rise to similar difficulty in labour. He refers to transverse presentations, and to presentation by the buttocks as being causes of great difficulty,
as do also twins when one presents by the feet and the other by the head at the same time, and again when parturition is delayed until the eleventh month. When the foetus is dead or even when it is very feeble and unable to further its own exit, the labour is very dangerous. He speaks also of delay as being due to early rupture of the membranes, or to their being too strong and not easily broken. If the pregnant woman partakes of food which is of a drying nature and astringent as chestnuts, acacia fruit, millet, etc., the birth will be troublesome. Cold baths after the fifth month of pregnancy, or the taking of such astringent drugs as alum, iron, oak-galls, etc., are dangerous; while strong smelling substances, if taken are drawn to the womb and cause difficult labour. These indeed are bad signs; a cold sweat, a violent pulsation of the vessels, dying away of the pains, these are indications of impending death.

In the fourth chapter he describes the treatment which should be given to the parturient woman. If the membranes are slow to rupture, they should be torn with the finger-nails or incised with a knife, and the labour will follow forthwith. If there is great dryness of the genitalia, they must be anointed with the oil of white lillies, or soft fat or an egg (both white and yolk) introduced within the genital tract, and something given to provoke sneezing. If the inlet of the womb is narrow, it ought to be gently relaxed also with the hand anointed with oil. He indicates how a foot case can be turned into a head one by external manipulation. He gives directions for the manual reposition of malpositions, the endeavour being to convert them into head presentations, and if this is not possible, to make the case a footling one.

In the case of twins, if one presents by the head and the
other by the feet, the one in front is to be extricated first: if however, it presents by the feet, an endeavour should be made to make it a vertex case. To make the birth more easy and less painful, warm oil should be applied to the parts.

In the fifth chapter Rhodion discusses many modes of facilitating delivery while the patient is in the reclining position or supine on the back. She must be kept cool in summer by allowing the wind to enter the chamber. Powder of hellebore or pepper ought to be given to induce sneezing. The woman's sides should be compressed and squeezed and the lower part of the abdomen pressed down. The fumes of pastilles made from myrrh, galbanum or castoreum burnt on charcoal and directed to the woman's private parts will afford relief, as does also the dung of the dove or hawk, with the addition of opoponax applied locally.

Wool moistened with tincture of rue or aristolochia or staphisagria introduced into the genital canal may provoke labour. Hellebore and opoponax used in this way will provoke labour and draw out either a living or a dead child. He gives a long list of drugs, as cassia fistula, azafoetida, cinnamon, etc., which, if drunk in wine, will facilitate the birth, as will also washing the body with water in which marsh-mallows have been boiled.

Several prescriptions for pills to promote labour are given, the chief drugs being cinnamon, sabin, cassiae lignum, myrrh, aristolochia, storax and opium. A plaster for rapidly promoting birth is composed of colocynth, myrrh, rue, and barley, and is to be applied to the womb.

The sixth chapter treats of the removal of the secundines. (Quomodo secundina e parientibus eximenda sit, si ea
sponte sua non discessura sit.) If they come not away spontaneously, there is much pain and labour in the uterus, the strength becomes exhausted, "suffocation of the womb follows," the membranes putrefy, and noxious vapours rise to the heart, to the brain, and to the diaphragm; the patient often becomes asthmatic, faint and dies.

If the membranes are retained through weakness and lassitude of the patient, then nourishing food and drink should be given, as yolk of egg, old wine, fatty flesh, chicken, partridge, grouse, pigeon, etc. If retention arises however, from harrowness and contraction of the womb or painful swelling, remedies to provoke their expulsion are required, as oils and fats, and especially the oil of white lilies, or oil of almonds or narcissus, while infusions of juniper, galbanum, southern wood, and pennyroyal, in warm wine, should be given to drink. To the genitals, the fat of hens, ducks, geese, and oil of lilies should be applied. Suffumigations with mallows, or laving the parts with hot or warm water, or the application of little bags filled with hot bran are useful (aut sacculos furfure oppletos genitalibus imponi). If the membranes however, remain fixed so as not to be easily loosened, then fumigations of sulphur, ivy leaves, nasturtium, or figs, and still later, odorous substances as musk, thyme, galls, should be vaporised and inhaled through the nose. Again, substances which have a bad smell ought to be inhaled, as asafoetida, castoreum, burnt hair, or peacocks' feathers, burnt hoofs of asses, etc. These are so powerful that they will even expel a dead birth. In addition, the patient should hold in her breath and strain as if to force something downwards. If hellebore or pepper do not provoke sneezing, the nostrils
and mouth should be compressed; though marshmallows given in rose water provokes the easy exit of the secundines. If some part of the membranes appear at the entrance, the female obstetrician ought gently to draw on it, but with care lest she tear it. If she should be frightened lest it tear, she ought to tie to the upper part of the patient's leg that part which she has got hold of, not too tightly lest it break, nor too loosely lest it slip back, and then provoke the patient to sneeze. If after all this the membranes refuse to come away then pulling and moving the part which protrudes will begin to separate them from the uterus. He recommends many drugs which ought to be given, as amber, musk, rice, artemisia, etc. and others which may be applied locally along with suffumigations and plasters. If obstinately and perversely they still remain, in a few days putrefaction will set in and they will dissolve into liquid, although with much pain and suffering to the patient.

The succeeding chapter is devoted to the Complications of Pregnancy or to the Puerperium. Incomplete expulsion of the menstrual fluid from the birth, too free a discharge, etc. are causes of these. The remedies are numerous and queer, e.g. scarification of the feet, blowing up the genital tract the smoke from burnt fishes' eyes or from horses' hoofs. If the membes remain strong and full after parturition, so that unbearable weakness follows, it is necessary to determine the cause, for then the cure follows easily. The author enumerates ten such causes, as fulness of blood, mixture of gall and blood through which the blood becomes heated and is determined to the vessels of the womb, the blood not being sufficiently diluted and thinned, the womb being weak and feeble, and its veins soft and large, etc.
A long list of remedies contains many of these already mentioned. For menorrhagia he advises cupping under the breasts together with an ointment of oil of roses, karaba, ivory, goats' horn, red coral, terra sigillata, etc. to be applied to the uterus and genitals. Baths medicated with absinth, plantago, acacia, carduam, tormentilla, oak-galls, etc. are to be employed in laving the abdomen.

When the perineum is slightly torn, liquid tar is a good application; but when torn into the bowel, so that the womb protrudes, it must be repaired surgically.

In discussing Abortion, he states that the mouth of the womb is often wide and spacious and not properly occluded, and thus abortion is favoured. The womb may be in bad position; it may be so full of humours that it refuses to retain the unformed embryo; aposthems, ulcers and such like weaken the womb. The cotyledons which nourish the embryo may be obstructed with thick and crude humours or may be inflamed. The embryo will therefore die, and this will happen chiefly during the second and third months. Ulceration of the bowels, haemorrhoids, vesical calculus, tumours, strangury, may also induce abortion by causing downward straining. Immoderate fits of coughing, too free purgation, excess in eating, all tend to provoke abortion, as do also excessive cold or heat. The pregnant woman ought therefore to avoid hot baths, excessive movement, hard work, leaping or jumping. Rhodion gives a very good description of the signs of the foetus having died in utero. For its removal he recommends pessaries of ammoniacum, hellebore and staphisagria. The patient should drink the milk of another woman and take theriaca, which is commonly called diatessaron, and this will expel the dead foetus. Should it still be retained, then instruments must be
employed to withdraw it, as the crotchet or forceps. The obstetrician having anointed his hand as well as the genitalia with the oil of white lillies, introduces the former and guides the crotchet to the foetus. The hook may be caught in either eye, in the palate or under the chin, or wherever it is most convenient, and so it is gradually drawn down. Another hook should be introduced to the left and then both are slowly drawn down together and at intervals — drawing now to one side, now to the other, and gently rotating. If the arms slip up, he directs how they are to be freed. If the head is very large, it should be incised, when it can be compressed.

If all these means should fail, then the patient being in the reclining position, an incision should be made on the left side of the abdomen (not on the right side because the liver does not allow such free access) and by the hand introduced through the wound, the foetus is to be extracted as it is said by Caesarean section.

The tenth chapter deals with the treatment of the newly-born child. He gives a prescription for a very complex powder to be applied to the cut end of the cord. An inspection of the child's umbilicus will show (as Avicenna says) whether sterility or other children will follow. When the cord drops off, the umbilicus is to be dusted with the ashes of shells which are found in marshy places or in lakes, or with the ashes of horses' hoofs. The infant's limbs are to be often gently drawn out and straightened so that they may grow properly. The feeding of the child is very adequately dealt with, and the final chapter deals with the diseases which are liable to attack the newly-born infant.

Looseness of the bowels is to be treated by abstinence from mikk, while one may allow bread boiled in water and galls, burnt ivory
acacia, opium, etc. are indicated. If the evacuation is white in
colour, then crocus, myrrh, etc. made into a plaster should be applied
to the child's belly. Constipation is to be combated with supposit-
aries of honey, and honey mixed with sheeps' gall is to be laid to
the umbilicus, or a suppository made from the excreta of mice mixed
with the kidney fat of a goat may be given. Rhodion seems to have
believed greatly in the efficacy of plasters applied to the belly,
for he gives many prescriptions for such. Any follower of our author
need have no fear of leaving his patient untreated, for if one com-
bination of drugs is not successful, there is another and yet another
prescription to make choice of, all being given for the reputed cure
of one disease, as for example dyspnoea, aposthema (swelling) of the
brain, swelling of the eyes, swelling of the body, papulae on the skin,
tumour of the umbilicus, insomnia terrifica, tenesmus, intertrigo,
epilepsy (for which he recommends a twig of mistletoe gathered in
the month of March and during the waning of the moon, hung about the
child's neck. It would be tedious to recount further examples.

These extracts show that many of the obstetrical procedures
employed today were in use four hundred years ago. The methods of
rectifying malpositions are almost the same as those used at pres-
ent. Although Rhodion relies too implicitly on combinations of
drugs, one must remember that an almost absolute faith in materia
medica persisted until very recent times, and that the risks of
meddlesome midwifery were even greater in Rhodion's time than they
are now. A perusal of this little work affords much food for thought.
Sir Thomas Elyot.

1534.
"The Castel of Helth"
and its author Sir Thomas Elyot.

Sir Thomas Elyot, one of the most out-standing in the galaxy of remarkable men of his time, was born about the year 1490, and probably in the county of Wiltshire though there is no real assurance on this point. His active life was passed during the reign of King Henry VIII, and he partook to the fullest extent in all the vicissitudes of that troublous period. Though sent as an ambassador on two occasions (and neglected by his royal master on both of them) he never was accorded that position to which his undoubted abilities entitled him. There can be little doubt but that his association with many eminent Roman Catholics engendered a prejudice against him, especially by the King and by Cromwell, who may have considered that it would not further their ends to place him in any position of power. Learned men are not always capable men, and there may have been wanting in Sir Thomas that something which is required in those who are appointed to posts of power and trust. It must be confessed that he both lived and died a disappointed man. He had read widely and into the numerous works which came from his pen, he incorporated much of his reading. His books were highly appreciated by his felowls, and numerous editions appeared both during his lifetime and after his death. He says himself that "he read every ancient work, Greek and Latin, that he could come by containing any part of philosophy necessary to the institution of man's life in virtue."

He was one of the first to employ the English language in his writings. In this way he incurred the anger of the physicians who told him that he should confine his attentions to histories.
To this Elyot answered, "if physicians be angry that I have written physicke in English, let them remember that the Greeks wrote in Greek, the Romans in Latin, Avicenna and the others in Arabic, which were their own proper and maternal tongues. And if they had been as much attacked with envy and covetise, as some now seem to be, they would have devised some particular language with a strange cipher or form of letter wherein they would have written their science, which language or letters no man should have known, that had not professed and practiced Physicke. But these, although they were Paynims and Jews, yet in this part of charity, they far surmounted us Christians, that they would not have so necessary a knowledge as Physicke is, to be hid from them which would be studious about it."

Elyot's aim was to make known to the people generally that knowledge which he had acquired through long and arduous study. To have written this in Latin, as was the usual method with the learned, would have limited his teaching to this class and would have defeated the very object which he had in view.

His father was Richard Elyot who held many lucrative appointments under King Henry VII and King Henry VIII, with both of whom he must have been esteemed. In 1503 he was Commissioner for the County of Wilts and collected the "aids" or money required by the King for knighting the Prince of Wales and for marrying the Princess Margaret to the King of Scotland. Richard also had held such appointments as Trustee for the Crown, Sergeant-at-law and Attorney-General to the Queen Consort, and he retained up to the time of his death the post of Justice of Assize on the Western Circuit.
It is not surprising that such a father should desire that his son should receive a thorough education. The Universities of Oxford and Cambridge held no great reputation at this time, so young Thomas was placed under such tutors as John Collet, who afterwards became Dean of St. Paul's, and who profoundly influenced the religious views of Erasmus; Linacre, who had a profound knowledge of Greek which he had acquired in Italy, and who was the founder of the Royal College of Physicians. Richard Croke was another of his teachers who was so well versed in Greek that he lectured on it both in Leipsig and in Cambridge. William Lilye, the classical grammarian, Hugh Latimer and others instilled into the receptive mind of the young Thomas Elyot the best learning of the day.

His legal education was supervised by such men as Sir Thomas More; and thus brought up in an atmosphere classical, theological and legal, there was everything to develop that philosophical attitude of mind which is so strongly shown in all Elyot's works. In his "Address to the Reader" which prefaces the first edition of his Dictionary, he tells that he received his education at home in all the liberal sciences, including philosophy and letters. It was however to his teacher, Linacre, that he was most indebted for his knowledge of the Greek and Latin languages. To him also Elyot owed that interest in medical subjects which he pursued all his life. Linacre had translated the works of Galen from Greek into Latin, and he and Elyot must have studied them together, and "afterwards of mine own studie. I redde over in order the moste parte of the workes of Hippocrates, Galenus, Oribasius and others which were their aggregators and followers." (Prohemeto the Castell of Helthe)
That he must have profited by his studies is shown by the fact that in 1511, when still a very young man, his father secured for him the appointment of Clerk of Assize for the Western Circuit, a post which Elyot in one of his own letters says was worth nearly a hundred marks or a sum about equal to £800 at present value.

About the year 1517 his father received the honour of Knighthood, and died early in 1522. He had possessed properties at Chalk and at Winterslow near Salisbury, and had resided there when not in his chambers in London. Sir Thomas must have spent part of his youth in those country districts, and in his "Dictionary" he relates that once when at Ivy church near Salisbury, he and his father watched some workmen unearthing the skeleton of a giant which measured 14 feet 10 inches in length. (This is quoted by the antiquary, John Leland.)

Sir Richard had given instructions that he was to be buried in Salisbury Cathedral, but as no tomb was to be placed on his grave it is not known where his resting place really is. By his will he set aside his lands at Chalk for providing masses for his own soul and "for his frendes soules and all Christian soules". His son now entered into possession of the estate of Combe near Woodstock in Oxfordshire.

In 1523 through the death of his cousin Thomas Fynderne, Elyot became entitled to certain estates in Cambridgeshire near Newmarket. The succession was however disputed, and the legal action caused Elyot much expense, "the saide suit by contynuyng one yere and a half, stoode me above one hundred pounds." The case ultimately came before Chancellor Wolsey, who "by his good justice, gave me good com-
him, "without any recompense, rewarded only with the Order of Knight-hode, honorable and onerous, having moche lesse to lyve on than before. This same year his name is found on the roll of Commissioners of Goal Delivery for both Castles of Oxford and Cambridge. He was also appointed one of the Commissioners to inquire into and take evidence on oath regarding Wolsey's possessions in Cambridgeshire.

About this time he married Margaret Atbarrow of North Charford near Salisbury. He had probably met her at the house of Sir Thomas More.

In 1531 Elypt published his most celebrated work, "The Boke named the Governour." It is probably the earliest treatise on Moral Philosophy in the English language. It is said to have been modelled on the work Francesco Patrizi entitled "De Regno et Regis Institu- tione" which was published in Paris in 1518 and went through many editions. Although Elyot seems to have borrowed largely from this book, he never even mentions the author.

In 1523 there had also appeared a work by the Spanish Humanist, Juan Luis Vives, entitled "De Tradendis Disciplinis", in which it is advocated that instruction should not be given in Latin but in the mother tongue. Vives was in England during the marriage of Catherine of Arragon to Henry VIII in 1509. In 1523 he became tutor to Princess Mary and also taught at Oxford, so that in all probability Elyot both knew the author as well as his books.

The "Governour" was dedicated to King Henry VIII, and soon brought its author fame and success. Within fifty years eight editions appeared. Elyot's object in writing the book was to obtain a better education for the sons of noblemen who later would be likely to occupy exalted positions, and to instill into their minds those
principles of morality which ought to regulate their conduct.

Mainly through the influence of Wolsey and Cromwell, Elyot was appointed Envoy to the King to Charles V, Emperor of Germany. Though his mission was mainly to secure the assent of the Emperor to Henry divorce from Catherine of Aragon, he was instructed to look for and apprehend Tyndale if possible. We find Elyot complaining of the treatment or rather neglect which his Royal master was giving him when abroad, e.g., that his letters remained unanswered, that he received no further instructions, but especially about the smallness of his salary which he says was quite inadequate to cover the great expenses which his position required him to keep up. Probably and as a consequence of this, he occupied the post for a short time only returning to England in the spring of 1532. Later in this same year another office was given to him, namely the Sheriffship of Cambridge-shire. This post would again have caused him greater financial liabilities than he felt himself able to meet, so he wrote twice to Cromwell begging him to cancel the appointment, but without success. He held this Sheriffsip for one year only. Elyot was in London in 1533 superintending the publication of his "Pasquil the Playne" (no copy of which now exists) and also "Of the Knowledge which maketh a Wise Man". The latter work is in the form of a dialogue between Plato and Aristippus, "touchyng the title of my boke, I considered that Wisdome is spoken of much more than used."

The following was a very productive year for Elyot, "The Castel of Helth", "The Bankette of Sapience", as well as a translation of a sermon by St. Cyprian and an Oration of Isocrates, all appearing from his pen. The Bankette consists of thoughts and sayings of
moral character collected for the Fathers of the Church, and was so much esteemed that four editions were soon called for.

For some time Wolsey with the consent of the King and Parliament had been alienating monastic property, but in 1534 more drastic steps began to be taken by Parliament to suppress the monasteries. Chapuys, the Imperial Ambassador, writing in February to Charles V, says "The king is very covetous of the goods of the Church, which he already considers as his patrimony." Towards the end of the year Cromwell began what was called the "visitatio" of the monasteries and religious houses, and Elyot was employed on this Commission.

In 1535 he was re-appointed Ambassador to King Charles V, and spent the winter in Naples. He was probably present at the capture of Tunis by Charles. He again complains that he had received no communications from his own sovereign.

Elyot was at home during the following year and seems to have been in dread that his library would be destroyed, it having been reported that it contained papist literature. Cromwell had been appointed Lord Privy Seal, and we find Elyot requesting him to grant him compensation from the King for the losses he had sustained in his service. "And that your lordship forgive not that neither of his grace, nor of any other person I have fee, office, pension, or ferme nor have any manner of lucre or advantage besides the revenues of my poor land which are but small and no more than I may therewith mayntayne my poor house. And if by your lordshippes meanes I may achieve good effect of my sute your lordship shall not finde me ingrate. And whatsoever portion of land that I shall attayne by the Kingses gift, I promise to give to your lordship the
first yeres fruithes with myn assured and faithful hart and servyce. This lettre I have written bycause that I herd that your lordship went to the court. Written at my house by Smythfeld this Monday."

For some considerable time Elyot had been engaged in writing his Latin-English Dictionary, receiving help from the King in the shape of the loan of books from the royal library. This work was published in 1537. He presented a copy to his old frienf Cromwell, and this is now in the British Museum. On the fly-leaf there is a complimentary letter written in Latin by Elyot himself.

About this tyme also he was translating from Plutarch what he entitled "The Education or Bringynge up of Children," and also "The Defence of Good Women".

His doubtful friend Cromwell was attainted and executed in 1540 and after this Elyot was able to secure some of his property in Cambridgeshire. In this year also he published "The Image of Governance compiled of the Actes and Sentences notable of the moste noble Emperor Alexander Severus, late translated out of Greeks into Englyshe. Sir Thomas Elyot, Knight, in the favour of nobylitie." Elyot declared that he had received the manuscript from a gentleman in Naples, but Sir Henry Wotton affirmed that it must have been the product of Elyot's own brain and was no translation.

In 1542 he was returned to Parliament as a member for the Borough of Cambridge. "A Preservative Agaynst Deth" written in 1544 was the last of his many literary efforts. It was published the following year, and consists of passages drawn from the Holy Scriptures and from the Fathers of the Church.

Elyot had for long suffered from ill-health and died on the
twenty-sixth of March 1546. He was buried in the Church of Carleton in Cambridgeshire. A monument was placed over his grave, and a large brass engraved with portraits of himself and his wife. A traveller gives a description of it in 1632, but it has long since disappeared. William Dowsing, the iconoclast, who "purged" more than 150 churches in Suffolk of stained glass, brasses, paintings and other relics of popery, says in his Journal, "Carleton cum Willingham. March 22 (1643)

A crosse on the steeple promised to be taken downe, and we brake diverse superstition pictures." It is by no means improbable but that the tomb of Sir Thomas Elyot was amongst those which were destroyed.

That Elyot was an original writer there is no doubt, but on the other hand several of his books are more or less compilations from earlier or contemporary writers who composed their works in Latin. To Elyot however there is the credit of making these as well as his own ideas accessible to English readers. By his translations of classical authors, theological works and medical subjects, he released them from being the privilege of the rich or scholars only and made the knowledge of such subjects common to the laity.

Of course it is not to be expected that Elyot ever dreamed that "The Governour" would ever become popular in the sense that we attach to it, but nevertheless it became widely read, because it explained in ordinary language how best to train and educate children in the best manner; thus for example "If ye bringe them up and instructe them in suche fourme as in this boke is declared, they shall than seme to all men worthye to be in authoritie, honour and noblesse, and all that is under their governance shall prospere and
and come to perfection. And as a precious stone in a riche ouche (jewel) they shall be beholden and wondred at, and after the death of their body their soules for their endeavouer shall be incomprehensibly rewarded of the gyver of wisedome, to whome onely be gyven eternall glorie. Amen."

"The Governour" is really a treatise on education, how best to train and instil knowledge into the young. This is not necessarily confined to those destined to fill positions of authority, but is applicable to every young person. This "boke" was valuable not only to those of his own time, but to all times and to every class of society.

In this book, Elyot lays much stress on the careful selection of a proper nurse, and recommends that the child should be brought up to speak pure English as well as Latin as colloquial languages. From the age of seven, instruction is to be given in the Greek language. Elyot anticipated the modern method of teaching foreign tongues, for he says "detain the child not too long in the tedious grammar. Let not the child's fervent desire of learning become extinct by the time he cometh to the most sweet and pleasant reading of old authors." At the age of seventeen, the youth should begin the study of moral philosophy, reading Plato, Aristotle's Ethics and Tully's Offices. Music, drawing, carving, geometry, astronomy and cosmography were all to be learned and attention was to be given to gymnastics and to archery.

As in our own time, and as I suppose in every epoch, Elyot laments the falling off of learning in his time. He suggests that it is due to the want of learning in the teachers themselves, and thinks that the poor salaries offered was the reason, "the avarice of par-
ents causes them chiefly to inquire with how small a salary a
teacher will be contented."

In the Proheme he says,"I have now enterprised to describe
in our vulgare tunge the fourme of a juste publicke weale,whiche
mater I have gathered as well of the sayenges of moste noble aut-
ours (grekes and latyns )as by myne owne experience,I beinge con-
tinually trayned in some dayly affaires of the publicke weale of
this tour moste noble realme all moste from my chyldhode. Whiche
attemptat is nat of presumption to teache any persone,1 my selve
havinge moste nede of teachinge, but onely to the intent that men
which wil be studious about the weale publicke may fynde the thinge
therto expedient compendiously writen......I do nowe dedicate it
unto your hyghnesse as the fyrste frutes of my studye."

Of all Llyot's works the one which is of chief interest to
medical men is his "Castel of Health".We have seen that he had stud-
ied under the famous Linacre not only classical but also medical
writers, and as with the preceding work, so with this. His desire
wasto make the knowledge which he had acquired with so much trouble
available to those who knew no Latin. Up to this time the practice
of Medicine had been mainly in the hands of the ecclesiastics who
had received little or no instruction in it.

The publication of what we may term a popular guide to
Medicine naturally aroused much adverse criticism from the members
of the medical profession of the period. This was due to the fact
that the profession was a "closed" one, and also to the fact that the
book was written by a layman for the use of the public.

A letter in the Harleian M.S. indicates that Elyot had
dedicated the book to his friend Cromwell. It is addressed to
"My speciall assurid frende Mr. Cromwell, Treasurer of the Kings Jeweller." Wherin if ye finding sufficient leisour (as it will be hard for you to doo) and will spend a fewe hours I doubt not but that your goode witt shal finde more frute than ye wolde looking for of any thinge that sholde have passid from my folissh need... and if it shal please you to recommend one of these bookes unto the Kings highnes when ye shal fynde therunto opportunitie, I conformme me to your plausursens this is the last ENglisse booke which I pourpose ever to make, onelass the desyre of some speciall frende do compell me." There is no special dedication in the book itself.

There is before me now not the first edition but a later one, The Castell of Helth corrected and in some places augmented by the first author therof Sir Thomas Elyot, Knight, the yere of our Lorde 1541 (in the marginal border the date given is 1534) Imprinted at London in Fletestrete in the house of Thomas Berthel

In the Proheme, Elyot writes that "Galen the moste excellent Phisicion feared that in writing a compendious doctrine for the curying of sicknesse, he should loose all his labour, for as much as no manne almost dydde endeavour hym selxe to the findyng of truth, but that all men dydde so muche esteme riches, possessions, authoritie and pleasures, that they supposed them which were studious in any part of Sapience, to be madde, or distract of their wyttes. Why shoul I be greved with reproches, wherewith some of my countrei do recopence me, for my labours taken without hope of temporale reward, only for the fervent affection whiche I have ever borne toward the publicke weal of my countrei. A worthy matter, saith one, for Thomas Elyot is become a Phisicion and writeth in Phisicke, whiche besemeth not a knight, he mought have been muche better occupied. And why, I
pray you, should men have in disdaince or small reputacion, the science of physike, whiche beyng well understand, truely experienced and discretely ordred, doth conserve helth, withoute the whiche all pleasures be paynefull, rychesse unprofitable, company annoyance, beauty turned to lothsonnes. Wyse men, not onely of the private estate, but also Emperors, Kinges, and other great princes, were therein right studious, in so muche as Juba the kinge of Mauritania and Lybia, found out the vertuous qualitees of the herbe Euphorbium. Gentius, kinge of Illiria, found the vertues of Gentian. Mithridates invented the famous medycyne againste poyson, called Mithridate. (Elyot then goes on to advocate the growing of herbs in this country for medicinal purposes so as to avoid their importation.)

This well considered, I take it for no shame to studie that science, or to set foorth any bokes of the same, beyng provokèd thereto by the moste noble maister kyng Henrie Vili, whose helth I hertily pray God as long to preserve, as God hath constitute mans life to continue. O roiall hert, full of very nobilitie. O noble breast, settyng foorth vertuous doctrine and laudable studie. But yet one thing muche greveth me, that though I have ever honoured the reverend college of approved phisicians yet some of them have saied in derision that although I was pretily seen in Hystories, yet beyng not lerned in physicke, I have put in my booke divers errors. But when I wraie first this boke, I was not all ignoraunt in physicke. For before that I was twentie yeres olde, a worshipfull phisicicion, and one of the moste renouned at that time in England, perceivynge me by nature enclyned to knowlidge, redde unto me the workes of Galene. And afterwards by mine own studie, I redde over in order the moste parte of
the works of Hippocrates, Galenus, Oribasius, Paulus Belius, Alexander Crallian, Plinius, with Dioscorides.... And although I have never been at Mountpeller, Padua or Salern, yet have I found some thing in Physicke, whereby I have taken no litle profite concerning myne owne helth. Moreover I wote not why Physicians should be angrie with me since I wrote and did set forth the Castel of Helth for their commoditie, that the uncertaine tokens of urines and other excrementes should not deceive them, but that by the true informacion of the sicke man, by me instructed, they might be the more sure to prepare medicines convenient for the diseases. Also to the intent that men observyng a goode order in diete, and prevertynge the great causes of sickenes, they should be of these maladies the sooner cured....

Finally God is my judge, I write neyther for glorie, rewarde nor promotion, onely I desyre men to deeme well mine intent, sens I dare assure them, that all that I have written in this boke, I have gathered of the moste principall writers in physicke, whiche shall be profitable unto the Reader, and nothing noyouse to honest physicians, that dooe measure their studie with moderate lyvyng and christen charitee."

The First Book deals with the "Conservacion of the Bodie of Mankynde, with the limitation of Helth."

"Thynges naturall be VII in numbre, Elementes, Complexions, Humours, Membres, Powers, Operacions and Spirites. These be necessarie to the beyng of helth." The different "Complexions of man" are given in tabular form. Ayre becomes corrupted through the influence of sundrie starres, great standing waters never refreshed, Caraine lyng long above ground, muche people in smal roume lyvyng uncleanly
and sluttishly". Long tables are given of "Meates and drinkes makyng good juyce", those which "ingendre fleume", those "whiche do hurt the teeth", and those "Whiche do hurt the eies."

The Second Booke of Quantitie. "The quantitie of meat must be porcioned after the substance and qualitie thereof, and accordyng to the complexion of him that eateth....... Some meates do nourish but lyttel, havyng lyttel conformitie with bloudde in their qualities. The grosse meate ingendreth grosse bloude, but when wel dygested, it maketh the official membres more stronke, than fyne meates. In a cholerike stomache bief is better dygested than a chickens leg. Meates that are clammie stoppeth the issue of vapours and urine, and ingendreth fleume and gravell....... Bief of Englande to Englishmen whiche are in healthe, bryngeth strange nourishynge, but it maketh grosse bloud, and ingendreth melancholy....... Above all kyndes of fleshe in nourishynge the body, Galene most commendeth porke, not beying of an old swine. Yong pigges are not commendede before that they be one moneth olde, for they do brede muche superfluous humours....... The fleshe of hare and coney maketh grosse blud and st stoppeth, but yet it provoketh a man to pyse."

Elyot then gives a summary of the good and of the evil effects of the various kinds of meat. Our forefathers seem to have been of an economical nature, as little of the carcasse of an animal seems to have been thrown away. Our author states that "the stones and udder beyng well digested, do nourishe muche, but the stones are hotter with their moystnesse, the udders colde and fleumatike, they both doe increase sede of generation. The stones of cockes maketh commendable nourishment."
"Custome in feedyng is not to be contempned or littell regarded,
unto a man is not so fed. Also the meates and drinkes, whiche so muche delite him that eateth, are to bee preferred before that whiche is better, but more unsavoury. But if the custome be so pernicious that it nedes must bee left, than wold it be withdrawn by littell and littell in time of helth, and not of sickenesse. For if it shuld be withdrawn in tym of sickenesse, Nature shuld sustayyne treble detriment, first by the griefe induced by sickenesse, second by receivyng of medicines, thirdly by forbearynge the thyng wherein she deylteth."

There must have been a far larger variety of vegetables eaten in Elyot's time than in ours, for he discusses the merits and demerits of many fruits and vegetables to us unknown, except by name.

In writing of "Byrdes", Elyot says, "The flesh of al birdes is much lighter than the flesh of beastes in comparison, most speci-alli of those foules whiche trust most to their winges, and do brede in high countreis. The capon is above al other foules praised as it is easili digested. Avicen saith that if a hen be rosted in the bealy of a kyd or lambe, it wil be the better.... The lunges or lyghtes of beastes are more easy to dygeste than the lyver and less nourysheth, but the nourishment that it maketh is fleumatyke. All be it the lunges of a foxe is medicinable fo them that have sykness of the lunges.

Bred havyng muche branne, fylleth the bealie with excrement
and nourisheth littell or nothyng, but shortly descendeth from the stomake.

Of Fish, he remarks that the best is that "Whiche swimmeth in a pure sea, and is tossed and lyft up with windes and sourges.... the more calme that the water is, the worse is the fysh. They whiche are in muddy waters, do make muche flewme and ordure, taken in fennes and dyches be worste."

Eggs wel poched ar better than rosted. If thei be fryed hard, they be of yl nouryshement and do make stinkying fumes in the stomach and doe corrupt other meates with whom thei be mingled."

Treating of Water as a "drynke, that whiche is lightest in poise or weight is best, also that wherof commeth least skym or froth when it doth boil. Also that whiche will sonest be hot. Morover despe linnen clothes into sundrie waters and after lay them to drie and that whiche is sonest drie, that water wherein it was deped is most subtill."

"After a great surfet, specially taken with superfluous eat- ing of banketyng meates, cold water drunken is a general remedy. To them that are feble, olde, fleumaticke or melancholy, it is not convenient.

God did ordein wine for mankind, as a remedy against the incommodities of age, that thereby they should seem to retorn to youth and forget heaviness. Undoubtedly wine heateth and moisteth the bodie, whiche qualitees chiefly conserveth nature. The wines whiche be pale or yelow and full of substance, they do increase bloud and
nourishe the bodie, but for the more part olde men have neede of suche wynes, whiche do provoke urines. Blakke or deepe red wynes do harme to olde men, for as muche as thei do stop the conduites of the splene the lyver and the raynes." Quoting from Galen, he says that young men should drink but little wine for it makes them "prone to fury and to lechery and that parte of the soule whiche is called rationabile, it shall make troublous and dull."

Elyot has no great opinion of Cider and says that anyone may note "in the countries where cyder is used for a common drinke, the manne and women have the colour of their vysage riveled, although t that they be young."

As regards the frequency of meals, he recommends that four hours should elapse between breakfast and dinner, and six between dinner and supper. "Muche aboundance of drinke at meals drowneth the meate eaten and not onely letteth (hindereth) convenient concoction in the stomake, but also causeth it to passe faster than Nature requireth and so ingendreth reumes and crudenes in the veyne debilitée and slippernesses of the stomake, and continuall fluxe."

Elyot thinks that breakfast is necessary in this realm because "choler beyng cruent in the stomake sendeth up fumosities unto the brayne and causeth ned ach, and sometime becommeth adust (burnt) and smouldreth in the stomake, wherby hapneth perillous sicknes and somtyme sodein deth. Therfore men and women not aged hayving their stomakes cleane, let them in Goodes mane breake their faste."

He is of opinion that there is great danger in drinking much water. If the air be very warm however," or bya pure choler, or eatyng of hotte spices, let hym drinke a littell julep or a littell
small hie or ale, so that he drinke not a great glutte, but in a littell quantitee, let it still doune softly into his stomake, as he sitteth, and than let hym not move sodeinly."

Elyot's ideas regarding the digestibility of certain foods are quaint; for example, he remarks, "Some drie meates eaten at one meal is the greatest enemie to helth that may be, and appeares helth, for some meates beyng grosse and hard to digest, some fine and easy to digest, do require divers operacions of nature and divers temperatures of the stomake, that is to say, muche heate and temperate heate whiche maie not be togither at one tyme. Therefore when the fine meate is sufficiently boyled in the stomake, the grosse meate is rawe, so both juices thone good and perfite, theother grosse and crudeat one tyme digested, and sent into the veynes and body, nedes must helth deceaie and sicknessse engendred. The nature of mankynde is beste content with thinges moate simple and unmixt, all thinges tendyng to unitée, wherin is the onely perfection .... It maie seeme to all men that have reason, what abuse is here in this realme in the continuall gourmandise and daily fedying of sondrie meates at one meale, the spirite of gluttony, triumphyng among us in his gloriusse chariot, called welfare, drivynge us afores hym as his prisoners into his dungeon of surfet, where we are tormented with catarrres, fevers, gouttes, frettyng of the guttes and finally cruelly put to deth by them, oftentlymes in youth or in the moate pleasant tyme of our lyfe, whan we wold moate gladly live. Alas howelong wyll men fantasie lawe and good ordinaunces and never determine them. Fantasie proceedeth of witte, determination of wisdome, witte is the devysyng and speakyng, but wisdome is the perfourmance which resteth onely in execution."
"Of Slepe and Watche", Elyot writes, "First to a hole man, having no debility of nature, and digesting perfectly the meate that he eateth, a littell sleepe is sufficient, but to them that have weake stomakes and doe digest slowely, sleepe mustw be muche longer, semblab temperance is required in youth and age.... Immoderate sleepe maketh the bodie apt unto palsies, apoplexis, falling sicknes, rewmes and impostumes. Immoderate watch maketh the bodie apt to consumpcion. Thei that are hole must sleepe first on the right side, because the meate may approache to the lyver, which is to the stomake, as fyre under the potte and by hym is digested. To them whiche have feeble digestion, it is goode to sleepe prostrate on thayr bealies, or have their bare hand on their stomakes. Liyng upright on the backe, is to be utterly abhorred."

Concerning Exercise and the most suitable time in which to take it, Elyot says, "The knowledge of this tyne is perceived by the colour of the Urine, for that whiche resembleth unto clere water betokeneth that the juice whiche commeth from the stomake is crude in the veynes, that whiche is well coloured, not to high or base betokeneth that the second digestion is now perfect, (i.e. that the food has been thoroughly digested and has passed into the circulation. W.G.A.R. ) Where the colour is very high or red, the concoc- tion is more than sufficient. When the colour of the urine is as it were gylte, than exercise shuld have his beginnyng."

Elyot has a Chapter beginning. "Of Fricasies or Rubbynges precedyng Exercise." He recommends the student however to "reade the boke of Galene of the preservacion of helth, called in Latine, De tuenda Samitate, translated moste truely and eloquently out of
greeke into latin by Doctour Lynacre, late physician of moste worthie memorie to our soveraigne lorde Kyng Henrie the eight."

The Third Book deals with "Replacion, whiche is a superfluuous abundaunce of humours in the body. This may exist in "quantitee or qualitee. The first is where the humours fylleth and extendeth the receptories of the body as the stomake, the veynes and bowels, and is moste properly called fulnesse, in greke, Plethora, in latine, Plenitudo. The other is where the bodie is infarced, either with choler, yellow or blacke, or with fleume or with matter humors, and is properly called in greke, Cacochymia, in latine Vitiosus success. Signes of replacion be these, losse of appetite, delite in nothyng, slouthfulness, dulnesse of the witte and sences, crampes in the body, stertyng of the membres."

"Urine is the water substaunce of the bloud, lyke as whaye is of mylke, whiche out of the meate that is altered and concocte or boyled in the stomake, is strayned in the veynes called Nisaraice, whiche procedeth from the holowe parte of the lyver and sent by the veyne into the bladder. Of humours, some are more grosse and colde, some are subtill and hotte, and are called vapours."

Our author recommends the induction of vomiting in various affections, e.g. "as for hym that hath muche spytte or his stomake wambleth and for hym that remeveth into sundrie places." From the colour, consistence and smell of vomits, he is enabled to draw certaine prognostications. But "to enforce one to vomite, whiche can not, is very odious and is to be abhorred."

"Of Scarifyng, called boxyng or cuppyng", Elyot says, "It is not convenient to be let bloud oftentimes in the yere, because
muche of the vital spirite passeth forth into the bloud. Therfore the base partes of the body, as the legges, should be scaryfied which is the moste sure remedie, as wel in conservyng helth, as in repairyngh of the same, beyng decayed." He was of the opinion that bleeding for piles was beneficial, for he says, "Somtyme superfluous bloud, by the puissance of nature, is by theim expelled, and than be thei very convenient, for by them a man shall escape many greate sicknesses whiche he engendered of corrupted bloud or of melancholy. Semblably if thei be hastyly stopped from the course thei have been used to, then dropsies, consumption, madnesse, francies, and divers diseases of the head develope."

In "Affectes of the Mynde", patients "not onely require the helpe of physicke corporale, but also the counsayle of a man wise and wel lerned in moral philosophy."

"At this present tyme in the realme of Englonde, there is not any one more annoynance to the helth of mans bodie than distillacion from the head called reumes. Distillacion is a droppynge downe of a liquide matter out of the head, and falling either in to the mouthe, or into the nosethrylles or into the eies, and somtyme into the chokes and eares. If it fall into the throte, it causeth hoarsenesse and later iy makith the voyce littell. Somtymes it doth exulcerate the lunges.... If it falls into the stomake, our author recommends wormwood, or hierapicra. Other troubles arise from distillacions, as "whirleynges, called in latin Vertigines, stinkynge of the nose called pollipos, etc...... This dare I affirm, that the reumes, whiche of late tymes have been more frequent than thei were wont to be XL yerem passed, have happened of none occasion more than of banket-
tyng after supper, and drinkyng mucho, especially wine, a littel afore slepe."

"By what tokens one may knowe whether the Stomake and head be hotte or colde...... In hotte distillacions the head is very hotte in feeling, the reume in the mouthe is thinne and warme, the tongue or cheekes within blistered, the face redder," etc. There are many articles of materia medica which Elyot prescribes for this condition, but the patient must chiefly avoid hot articles of food, exposure to heat. Those who suffer from the "colde reume", as evidenced by coldness of the head with paleness of the face, must avoid cold things, but especially must they avoid " Northern wyndes, the moonshyne by nighte, washyng in colde water and to be long bareheaded."

The writer says that he will not speak much of sicknesses common to particular times of the year or to different ages, because "it were very perillous to divulgate that noble science to common people not lerned in liberall sciences and philosophie, whiche be required to be sufficiently in a Physicion. And moreover many booke of Hippocrates and Galene ought to bee radde, before that one doe tak upon hym the generall cure of mannes bodies."

In tabulat form Elyot gives a list of ailments under different headings, e.g. - "The Braine sicke", "The Heart Sicke ", "The Lyver sicke ", etc. His notes are in many cases accurate and evidence good powers of observation, thus - "At the first pyssyng all urines well nigh do appere thimne (clear) as longe as thei abide warme, for naturall heate, duryn the tyme that it prevaieth, suffreth not that the liquor to congele or be thicke for any occasion, but after that heat is goone, some urynes shortly, some alonger tyme after, waxe thicke,
Likewise some tyme, some are pyssed thynker, and after waxe clere, some remaine still as thei were made, some bee metely thicke, as they were troubled, some very thicke and grosse. They that waxe clere, some doe gather that whiche is thicke into the bottome of the urin-all. Some remaine troubled, the grossenes notwithstanding gathered in the bottome."

"Thus make I an end of this Treatise, desiryng them that shall take profite therby, to defend it against enviouse dissayne, on whom I have set the Adventure, for the love that I beare to my countrie, requiring all honest physicions to remembre, that the intent of my labour was, that men and women readyng this worke and observyn the counsayles therin, should adapte therby their bodies, to receive more sure remedie by the medicines prepared by good physicions in dangerous sicknesses, that keepyn good diete, and informente diligently the same physicions of the maner of their affectes, passions and sensible tokens. And so shall the noble and moste necessarie science of physick, with the ministres thereof, escape the scandal, whiche thei have of long tyme sus teyned, and accordingly to the precept of the wyse man, be worthyly honoured, for as much as the highest God dide create the physicion for mans necessitee. And of the earth created medicine, and the wyse man shall not abhorratit. Thus fare ye well gentill readers, and forget me not with your good reporte, and praye to God that I be never worse occupied. Finis."

So Elyot finishes his book. Reading the extracts which I have given, many may think the work crude and ill-informed. One must remember however the time at which it was written, and compare it with other medical works which were written about the same time.
If we do so, it will be found that Elyot's Castel comes out well in the trial. In it none of the ridiculous and often repulsive prescriptions which were so often given by practitioners of that age, will be found. Elyot's counsels for the preservation of health will stand comparison with many of those of the present day.

A survey of Sir Thomas Elyot's life, his accomplishments, and chiefly the extent of his learning, place him in my opinion, in the fore-front of those who have endeavoured to help their fellow-men.
Andrew Boorde.

1542.
Andrew Boorde and his "Breviarie of Health."

It is not difficult to discover in reading this early medical work that the author was a priest-physician, a combination very usual in the early days of medical practice.

Andrew Boorde or Borde was born at Boords Hill, near Cuckfield in Sussex, about 1490, and thirty years later was appointed suffragan Bishop of Chichester. He belonged to the Carthusian order of monks and for many years lived an austere life of fasting, abstaining from all animal food. At length, however, in the year 1528, we find him writing to the prior of Hinton Charterhouse: "I am nott able to byd the rugorositie off your relygyon." This brought him a dispensation and subsequently he travelled abroad "for to have the notycyon and practes of Physyche in divers regyons and countres." He returned to England in 1530.

Having attended the Duke of Norfolk in a dangerous illness and having thus secured his favour, Boorde was "convocated to wayte on his prepotent mageste, Henry VIII." Not being satisfied with his medical education and desirous to "have a trewe cognyscyon of the practes of Physyche", he visited "unyversities and scoles approbated including Orleans, Poictiers, Toulouse and Montpellier in France and Wittenberg in Germany, and in company with nine Englishmen and Scotsmen, he went on a pilgrimage to Rome and Compostella. On returning to England in 1534 he again submitted to the discipline of Charterhouse where he was "keppt in thrawldome "until liberated by his friend Cromwell. The latter sent him abroad on a political mission. In a letter to Cromwell, dated 20 June 1535 from Bordeaux, he writes
"Few frendys Ynglond hath in theys partes of Europe (Normandy, France, Gascony, Bayonne, Castille, Spain, Portugal, etc.) as Jesus, your lourer knowth,"

To his patron, Cromwell, he sent from Spain "the seedes off reuberbe, the whiche come owtt off Barbary. In thes partes ytt ys had for a grett tresure." In April 1536, he wrote to Cromwell:

"I am now in Skotland, in a lytle unyversyte of study named Glasco, where I study and practyce physyk... for the sustentacyon off my lyuyng.....trust yow no Skott, for they wyll yowse flatteryng wordes; and all ys falsnode... it is naturelly geuen, or els it is of a develllyshe dysposicion of a Scottysh man, not to love or favour an Englishe man."

A year later he returned south but the inhabitants of London seem to have treated him as badly as the Scots, calling him an apostate and a good-for-nothing, and otherwise slandering him.

After the dissolution of the monasteries by Henry VIII in 1538, Boorde set out on a prolonged tour through Europe, travelling as far as Jerusalem. He remained at Montpellier for some time "the most nobilis universitie of the world for phisicions and surgions; the hed universitie in all Europe for the practes of Physych."

If he had not already written, it was at Montpellier that he completed his "Fyrst Boke of the Introduction of knowledge", his "Dyetary", his "Breuvary of Health", and his (now lost) "Boke of Berdes" (beards). The latter is known only through the publication, "Barnes in the defence of the Berde, or the Treatise answeringe the boke of Berdes, compiled by Colleyn Clowte, dedicated to Barnarde barber dwelling in Banbery, 1543." Boorde had evidently
written in condemnation of the wearing of beards, but here he is accused of having been drunk in a Dutchman's house, and of having vomited over his long beard, so that he had to shave it off the next morning because of its vile odour.

Boorde was again in London in 1542 and from there he removed to Winchester. A companion book to the Breviarie, his "Astronom ye", he "dyd wrett and make this boke in IIII dayes, and wretten with one old pen with out mending." His latter days were, however, passed under a cloud. Dr. John Poynet, bishop of Winchester, records in 1556 that "within this eight yere" it was proved before the justices that Boorde had kept three loose women in his chamber at Winchester, "and the harlots openly in the strestes and great churche of Winchester were punished." On April 9, 1549, Boorde made his will in the Fleet Prison in London to which he had been removed on its being discovered that he had kept a brothel for his brother-bachelors," and where he died (it is said from poison which he had taken) on the 25th of the same month.

Boorde is reputed to have been the author of several other books but as these are no longer in existence, it is impossible either to affirm or refute the statement. In the beginning of his "Fyrst Boke of the Introduction of Knowledge," the first printed specimen of the Gypsy language is found in his description of Egypt.

He alludes to the Englishman's whimsicality in dress in the following lines printed below a rude woodcut of an Englishman standing naked with a pair of scissors in one hand and a piece of cloth in the other:
"I am an Englishman, and naked I stand here,
Musyng in my mynd what rayment I shal were;
For now I wyll were this, and now I wyll were that;
Now I wyll were I cannot tel what."

Boorde's first work bears the full title: -

The fyrst Boke of the Introduction of knowledge. The whyche doth
teach a man to speake parte of all maner of languages, and to know
the usage and fashion of all maner of countreys. And for to know
the moste parte of all maner of coynes of money, the whyche is
current in every region. Made by Andrew Borde, of Physicke Doctor
Dedicated to the Right Honourable and gracious lady Mary, daughter
of our Soverayyne Lorde Kyng Henry the Ewyght. 1542.

This black-letter work has been reprinted in the Early
English Text Society's series, edited by F.J. Furnivall, M.A., 187

In this, Borde says that "The Kynges of England by the
power that God hath gyven to them, dothe make sicke men whole of
a sycknes called the Kynges Evyll."

The first chapter deals with the Englishman, the second
with Welshmen, the third with Irishmen and the fourth with the
Scottishman; - "I am a Scotyshe man, and have dissymbled muche,
and in my promyse I have not kept touche."

The south part of Scotland is better than the North parte,
but yet the South parte wyll gnaw a bone and cast it into the
dish againe. ..........

They whych doeth dwell by Nycoll forest
and so upward to Barwyke, by-ynde the Water of Twede - lyveth in
much povertie and penurye, havyng no howses but suche as a man
maye buylde wythin iii or iiii houres, he and his wyfe and his
horse standeth all in one rome. They are good musacyons but of all
musacyons they will face, crake and boost themselfe, theyr frendes and
theyr countrie, above reason; for many wyll make strong lyes.

Borde then goes on to speak of Friesland, Flaunders, Holand, Brabant
Denmark, Saxsony, Boeme, Poll, Hungary, Grece, Sicell, Calabre, Italy and
Rome, Venys, Lombardy, Fraunce, etc.

Thereafter foloweth A compendious Regiment or an dyetary of
Health, made in Mount Pyllicer, compiled by Andrew Boorde of Physicke
doctor, dedycated to the Army potent Prynce and valyant Lorde
Thomas, Duke of Northfolche. Imprinted by me Thomas Colwel, Dwellyng
in the house of Roberte Wyer, at the Signe of S. John Evangelyst, bes
besyde Charynge Crosse, 1562.

This contains much that is amusing and at the same time instructive. Borde relates many anecdotes concerning the customs and pri-
ivate life of his patients. He tells how to chose sites for houses,
how to arrange buildings, how to spend one's income, how to govern
one's body and what food to eat, etc.

The Breuyary of Health for all Maner of Sicknesses and
Diseases the which may be in Man or Woman.............
The Second Boke of the Breuyary of Health
named the Extra uagantes followeth.
The Brevierie of Health is a compendium of diseases arranged without method, though nominally the subjects are grouped under their Greek or Arabic names.

Each subject begins with a short description of the meaning and derivation of the title. This is followed by a brief account of the causes of the disease, succeeded by "a remedy", which consists mainly of an enumeration of the various drugs which may be administered. A better conception of the work may be arrived at by citing passages in it, than by endeavouring to summarize the treatise as a whole.

A part of the prologue is as follows:

"A Prologue of to Phisitions egregious doctours and maisters of the Eximious and Archane Science of physick, of your Urbanitie exasperate not your selves against mee, for making of this little volume of phisicke. Considering that my pretence is for an utilitie and a common wealth. You to be extolled and highlie to bee preferred that hath, and doth studie, practise and labour this sayde Archane Science, to the which none inaricious persons can nor shall attaine to the knowledge: yet fooles and incipient persons will enterprise to smatter and to meddle to minister medicines; a fie on such a one now a days will practise either by a bluide booke. O Lord what a great detriment is this to the noble science of physicke that ignorant persons will enterprise to meddle with the ministration of physicke........ A phisition must have surely his astronommy to know how, when and at what tyme everye medicine ought to bee ministered. I have nowe discharged my conscience in showing the truth as God knoweth, who send all manner of phisitions a true knowledge in
Phisicke, that they the which be sick and diseased may have a remedie.

A Propheme to Chirurgions (abbreviated). Masters of Chirurgerie ought to bee experts in their facultie, having good wittes and memorie, evermore to bee diligent and attendable about their cures and able to minister suche salves and medicines as is according to the infirmity. They ought also to bee wise, gentill, sober, circumspect and learned and not drunken and to promise no more than they are able to performe with God's helpe and not to be boisterous about his pacients but lovingly to comfort them. Also every chirurgion ought to know the complexion of his pacient and that they be circumspect in incisions and scarifications and Flebothomy and sure in Anathomy and in no wise to let blood in any particular place, there where the signs hath any dominion. Chirurgions must know the operation and the conjunction of the moone and in what signe the moone is in every day and to know what signes be attractive, what signes be recentive, or expulsive or digestive. They must also know the operation of all manner of breadyes, of drinkes and of meates, and to have ever in a readiness their instruments and their salves. In perillous causes one Chirurgion ought to consult with another and to have the counsel of a Doctour of Phisick, for there is no man can be to sure to help a man, as God knoweth, who keepe us all. Amen.

A preamble to sicke men and to those that bee wounded, in which he inculcates patience and peace of mind and the fixing of the heart and mind in Christ's death and passion and the sufferings he endured for our sakes, " And therefore let every sicke person stick as fast to Christ in his paynes and sicknes, as Christ did sticke fast to the Crosse for our sinnes and redemption. Then first let him
call to him his spirityall phisitian, which is his ghostlie father, and let him make his conscience cleane and that he bee in perfect love and charity and if he have done any wrong let him make restitution if he can and let him make a formall will or testament settling everything in a dew order for the wealthe of his soule. Then let the pacient provide for his body and take counsell of some expert phisitian. He must take care not to displease the phisitian or chirurgion, for if sother is neither Lord nor Ladye can have any service or pleasure of them.

The Preface to the Readers of this booke; Gentle Readers, I have taken some paine in making this booke to doe sicke men pleasure and whole men profit. But for as much as old auncient autentike autours or dottours of Physicke in their bookes doth write many obscure termes, giving also to many and divers infirmities, darke and hard names, difficult to understand. I have translated all such into English. There is no sicknes in man or woman from the crowne of the head to the soale of the foote but you shall find it in this booke. As everie man now a daies is desirous to reede breife matters, I name this booke "The Breviarie of Health". If I should write all my mýnde, everie bongler would practise physicke uppon my booke. In writing this and all the other bookes, I did never looke for no reward, neyther of Lord nor of Printer, nor of no man living, nor I had never no reward, nor I will never have none as long as I doe live, God helping me, whose perpetuall and fatherly blessing lyght on us all...... We doe kill our soules as much as doth lye in us when that wee doe breake any of his commandements or doe sin deadly, for that matter he hath provided a spirituall medicine, which is repen-
tance and amendment of lyfe. Also wee doe kill our bodies when a man doth abreviate his lyfe by sorfeting, by dronkennesse, by penefulnesse, by taking the pocks with women, or leprousnesse beside robbing, killing which is not God's will that such things should bee done. God therefore make pension that man might bee holpen by the vertue which he did give to herbes, weeds, trees, rootes, fruites and stones. The properties of which, few men or none doth know them except Docters of phisicke. Therefore let all men beeware of vacabounds and runnagates, that will smatter with phisicke, for by such person many sicke men have beene deceived, the more pitie, God knoweth who helpe us all now and ever. Amen.

The first chapter doth treate upon abstinence. The second doth shew of the labouering of a mans stomach against meat or drinke and is cured by taking all oderiferous and redolent savours.

In writing of Abortion, Boorde says:

It may come by a great frare or by extreame thought or by extreame sickness or death, it cometh also by a stripe or stroke or a fall. Also it may come by recepts of medicines, extreame purgacians, pocions and other laxative drinkes, of the which I dare not to speake of at this time, lest any light woman shuld have knowledge by the which wilfull absbortion may come of the multitudinesse of the flowers of a woman. The remedies to be taken extend from St. John's wart to amised.

Boorde treats a "wylde or running skabbe with mercury morified with fasting spettil". A "carbocle" most commonly comes "when the pestilence doth raine and is to be treated by applying doves dung and cantharides."

The 19 chapter doth shew of burning of an harlot or of an
hoare. This impediment doth come when an harlot doth hold in his
breth and clasp her handes hard together and toes in lyke manner.
And some harlot doth stand over a chafing dysh of coles into the
which shee doth put brimstone and there she doth perfume hirselfe.
If a man be burnt with a harlot and doe meddel with another woman
within a day, he shall burne the woman that hee doth meddel with all.
If one bee burnt, let them wash their secrets two or three times with
white wine or alse with sack and water. And if the matter have con-
tinued long go to some expert Chirurgion to have helpe or else the
guts will burne and fall out of the belley.

In speaking of the "Soule" of man, he urges: -
Every man in this life so provide by the merit of Christes passion
that soule and body being perfect may enter into everlasting joy
and glory, to be in heaven to God. The electuary of Gems and the con-
fection named Alchermes be good to comfort ye soule or the spirits
of man, soule and body beeing together heere in earth.

Chapter 35 doth show of a canine or a dogges appetite after
the stomake is evacuated or empty, then the pacient doth fall to
eating againe.

For the Melancholy temperament, he advises one to "eat fat
meates, as goose, pig and to drinke good drinkes."

For impotency, he recommends an aromatic electuary or a
confection made of the stones of a fox, and in Chapter 213 he advises
the use of "netles in the codpiece about the xmmx yeorde and stones."

For Sterility, he says; - Let barren women use to eate
in powder the martixe of an Hare or drincke the powder of the stones
of a Bore with wine and let her keepe an order in her meates and
drinkes and use no venerious actes after a full stomake.
There is nothing that doth comfort the heart so much beside God as honest myrth and good companye. And wine moderatelye taken, doeth comfort the hart. All sweet and dulcet thinges doeth comfort the hart as maces and ginger, rere egges, etc.

For Toothache, he recommends:

If it come by wormes; make a candell of waxe with Henbane seedes and light it, and let the perfume of the candell enter into the tooth and gape over a dish of colde water and then may you take the wormes out of the water, and kill them on your nayle, and beware of pulling out any tooth for pull out one and pull out more.

Chapter 109 treats of Knobbes and Burrs in the flesh—the one is hard and the other is soft. It comes of corrupt fleumatike humours the which be putrified. They must be abstracted out with the instruments of Surgery and after that incarnate the place.

Boorde discusses much more fully various favers, the names of which are now unknown to us. Thus he treats of -ephimer, cotidian interpolate, tertian, quartane, sinochos, sinocha homothena, augmastica, epamastica, causon, putrefied emphisode, hermitrick, epiall, lipery, tetrach, erraticke eticke, pestilence, lurden, and so on.

Ficus in ano, or a figge because it is a postumacion like a figge and comes of a melancholy humour the which doth descend to the longacion or fundement. It is to be cured by taking of the powder of a dog’s head burnt and mixe it with ye juice of Pumpernell and make tentes and put into the foundement.

Writing of Joy or Mirth, our author says:

It may be in musicall instrumentes and ghostly and godly singing but now a dayes he is mery that hath golde and silver and ritches
with lechery and all is not worth a blew poynt.

A "Gomery passion" is the name for gonorrhoea, and comes from Gomer and Sodome which cities did sink to hell sodenly for their sinnes."

Chapter 174 doth shew of an Infirmitie named Hereos, or love-sickenes. Young persons bee much troubled with this impediment. It doth come of amours which is a fervent love for to have carnal copulation with the party that is loved and it cannot be obtainéd; some bee so foolish that they bee vanished of their wits and women may have this sickenesse as well as men. I do advertise every person not to set to the hart that another doth set at the heele and muse not but use myrth and mery company and bee wise and not foolish.

For Shingles, Boorde recommends a plaster "made of the red wormes the which doe come out of the earth."

Chapter 183 doth shew of standing up of a mans hayre or horripilacio. It may come of foolish feare, when a man is by himselfe alone and is afraid of a spirit of the buttry which bee perillous beasts. Let every man trust in God and what can any evill spirit or divell doe any man harme without his will. And if it bee my Lord Gods will, I would all the divells of hell did teare my flesh all to peeces, for Gods will is my will in all things.

He notes that the "French pockes did come but lately into Spa and Fraunce and so to us about the yeere of our Lord 1470."

For Madness or Mania, he advises that ; -

The pacient be kept in a chamber void of all pictures but redolent of sweet savours and that hee bee kept from musing and studiing and use myrth and mery communication and use the patient so that he doe
not hurt himselfe nor no other man and he must bee kept in feare of
one man or an other and if neede require he must be punished and
beaten.

A person who is "gogill-eied" i.e. who squints, must beware
what is put into the eye except it bee cold onlesse it bee womans
milke and the blood of a Dove.

"Piping in the eare" comes of ventositie or winde which is
in the head and in the eares and cannot get out.

For Satyriasis he recommends leaping into a great vessell
full of colde water, and the application of nettles to the offending
part.

Here endeth the first book, examined in Oxforde in June the
yere of our Lord 1546 and in the raigne of our soveraigne Lord Henry
the Eyght, King of England, Fraunce and Ireland the xxxviii yeare.
Thomas Phaire.

1544.
The combination of religions and medicine was common in early days, but the subject of the present article, combined law with medicine. He was an able physician, he rose to high office as a lawyer, he was no mean poet, but to the general reader however he is best known as one of the best translators of Virgil.

It is supposed that his family was originally of Flemish origin, and he spells his name Phaire, Phaer and Phayer. He was educated at Oxford and was a student of Lincoln's Inn.

In 1535 he published his first law-book, "Natura Brevium, newly corrected in English with divers additions of statutes, book-cases, pleas. There followed in 1543 a "Newe Booke of Presidentes, ryght commodious and necessary for every man to knowe, wherein is comprehended the very trade of makynge all maner evyidence and instruments of Practyce." As a reward for these endeavours to popularise law, Phaire was appointed "Solicitor in the Court of the Welsh Marches."

This was a Council which was begun under Edward IV, and confirmed by Henry VIII in 1542 by a Statute. About this time he settled in Kilgerran, Pembrokeshire.

Phaire had begun to study medicine in 1539, and in 1544 he completed his "Regiment of Life." This was published by Whitchurch, the famous Protestant publisher, to whom we owe many editions of the Bible. The "Regiment is very largely based on that of Salernum, but to it he added "A Treatise on the Pestilence, a Description of the Veins, and a short Treatise on Childrens Diseases." Six editions followed until the last in 1596.

In 1558 Phaire graduated at Oxford, taking his degree of M.D.
In his application for the Bachelorship, he stated that he had been a practitioner of Medicine for twenty years and had made experiments on poisons and their antidotes.

Along with his legal and medical work, he also contrived to find time for purely literary pursuits. In 1544 we find a poem of his in Philip Betham's "Military Precepts", and to Sackville's famous "Mirror for Magistraytes" (1559), Phaire contributed a metrical version of the legend of "Owen Glendower". He wrote a ballad "On the Robbery at Gaddes Hill" (1558-9), and after his death "certen verses of Cupydo "ascribed to M. Fayre were published in 1566. His literary fame however rests on his great translation of the Aeneid of Virgil. He began this work in May 1555, and had completed the seventh book by the end of 1557. Each Book, he says, took him about twenty days to translate. It was published in the following year and dedicated to Queen Mary. The title runs "The Seven First bookes of the Eneidos of Virgill converted into Englishe Meter by Thomas Phaer, esquier, sollicitour to the King and Quenes Maesties (Philip and Mary) attending their honorable counsaile in the Marchies of Wales, Anno 1558. He had translated another two Books and was engaged on the tenth, when death interrupted his work in 1560.

He left £5 to his wife for "a purpose to which he and his wife were alone privy". It is supposed that this was left to furnish funds for the rites of the Roman Catholic faith to which it is believed he adhered. Phaire was the first Englishman who had attempted to translate the whole of the Aeneid, and his complete work appeared in 1562.
The Regiment of Life, whereunto is added a Treatise on the Pestilence with the Booke of Children, newly corrected and enlarged, by Thomas Phaire. Imprinted at London, I553. 12mo.

In his preface Phaire says that "it is impossible to avoid the teeth of malicious envy. He never intended to satisfy the mindes of any such pike fautes, whiche wyl doo nothyng but detract and judge other, snuffyng at all that offendeth the noses of their momishe affections." Finally, he "wishes to make thinges known to many whyche oughtenot to be secrete for lucre of a fewe and to comuicate the fruite of my labours to them that wyl gentilly and thankefullly receyve them". He thinks it is very wrong in medical practitioners to write their books in Latin and not in English, and so " me thynketh it is excedyng damnable dyvelyshe to debarre the fruition of so inestimable benefites whiche our heavenly Father hath prepared". He adds that he has translated the "Regiment" from the French tongue, but that he has added much to it.

" The body of Man is Compatte of foure humores, Blud, Fleume, Choler and Melanchyle.

The Complexion of the Fleumatiike - Fleume enclyneth a Man to be well fourmed; a sleaper, dull od understandynge, full of Spattle; full of colour.

The Complexions of the Sanguine.- Bloud causeth one to be full of fleshe, Liberall, Amable, Curteys, Mery, inventyne; Bold, lecherous, of redde colour.

The Complexions of the Cholerike.- Choler causeth a Man to be hasty, envyous, Covetous, Subtyll, Cruell, a watcher, Prodigall, leane and of yellow colour.

The Complexions of the Melancholike.- Melancholy maketh one
Solitary, Soft spirit, Fearing, heavy, Curious, Envious, Covetous, Blacke of colour.

Then follow "descriptions of diseases with the most holsome remedies". The remedies for "Hedde ache" are not unpleasant, consisting mainly of mixtures of roses, violets, lillies, camomile, etc. Sternutatories (as pellitory of Spayn) are recommended to make him to "nese".

The Second Chapter treats of how to cure diseases "chauncyng" in the face." For the cure of Gutta rosacea "or copper-face in English", one remedy consists of alum together with the whites of twenty eggs. One variety of copper-face is incurable, but sulphur helps it. Then follows "a generall dyete for all copperous faces". He affirms that Noli me tangere occurs often in the nose as a little rounde harde kernell or knobbe, full of payne and is very perilous. Wormes in the face are very difficult to remove, but he gives a recipe for an ointment for poor folkes to use. "A singular ointment for wormes that matter" is added.

Phaire rhapsodises about the eyes being the windows of the mind; both joy and anger, and the most of our affections being seen and known openly through them; they are ordained and made to lighten all the body. For dimness of the sight, he recommends the following: - Take a pie (Magpie) and burne and beate her to powder, and mingle it with fennel water and put it in your Eyes. Also water of young Pies stilled, is very good. Likewise water of rotten apples. For "bloudshotten eyes" he advises the bloud of a Stockedove to be dropped in each.

For pain in the Ears, "Yerth wormes with gose grece sodden is
good, or an Adders harne sodden in wine and the eare bathed in it helps those who have runyng with stinkyng matter and corripcion.

A Remedy for stynking of the Nose consists of cloves, ginger and calamie seethed in white wine.

For Bleeding at the Nose "the extreme partes are to be bound as hard as ye mai, a tent of Greke nettles is to be putte into the nose. Agrimony is to be held in the hand, the juyce of knob-grasse is to be drunk, and without the bloud shall staunche anone. Sette a burnyng glasse upon his liver if the bloud come from the right side, and on the splene if the bliede from the left side, and lay unto the stones a good quantitie of towe or linnen dipped in vinegre, and for a woman lay it upon her brestes."

"Another singular medicine for to staunche bloud, and it is a thyng experte of all the good practitioners: Take swines doung even as hotte as ye can have it from the swine, and when ye have cleaned the congested bloud out of the nose, wryng it through a cloite and let the juyce perce into the syde from whence the bloud cometh, and by the grace of God ye shall see it stanche anone. It is also good to bind the feete and the armes as harde as can be suffered with a corde or a lace, the stronger they be bounde the better."

For Pleurisy, he recommends, "An other expert remedy." Take ii good handfuls of horsdong, two races of ginger in powder. Put these in a clean linnen cloth and put them in a newe pot to boyle, with ii pintes of white wine; drinke a draughte of this every mornynge and cover ye aswel as is possible and sweate."

"The mawe of an olde cocke dried and powdered is good for trembling of the heart."

"The hecket or yeaskyng is an evil moving of the vertue ex-
pulsive of the stomak. It is very perilous and oftymes mortall. The treatment consists "in kepe longe and often his breath, to nese, to travayle much, to endure greeete thyrste, and also to sleepe longe; it is good to put hym in feare, to thretten hym and to angre hym." He gives numerous and long remedies for "the hotte lyver, and also if it be colde, or against stoppyng of the lyver, called oppilation."

One remedy for "jaundis" is to take "wormes of the yerth, called angle twitches, and wash them in white wine, then dry them and drink them, a sponeful at a tyme, with white wine."

A Glyster for all Colyke. Take the oldest cooke ye can gett, the whiche must be well beaten with smal roddes and then choppe of the head and put in a good sufficiency of water and scalde hym and trymme hym for to seethe and stuff the bealy with anise sedes, etc."

For Diseases of the Mother, whatsoever be the cause. Take the rasings of ivory and the rasings of an hartes horne with the hart of a hare, dried and made in powder, and as much of goaites clawes brent and poudred, if they may be gotten, or in stede of it, shepes clawes take all these and use to eate them in your porage, or other wise to stop the fluxes of the matruc.

Expert Medicine for them that have the Stone. There groweth in the galles of some oxen, a cert ina yellowe stone, some tymes in bignes of a walnut, somewhat long and bryttle, If ye take that stone and make of it a powder, and eate it in your pottage, it is a singular medicine to them yt cannot pisse for stoppyng of ye conduites.

An ointment for the Gout is made as follows; - Take a fatte goose and plucke her and trimme her, then stuffethe bealy within with twoo or thre yong cattes wel chopped in small gobbettes with
a handful of baye salte, roaste her and kepe the dryppinge for a precious oyntment.

To increase the flow of milk, Phair recommends the powder of earth worms drunk in naat's tongue broth.

To cool the burning of a sore head, "a singular remedy" is the urine of a bull.

For the fallyng evyll called in the Greke tonge Epilepsia; saphires, smaragdes, red coral, peony, mystletow of the oke taken in the moneth of Marche, and the moone deereasyng tyme, dylle, and the stone that is founde in the bellye of a yong swallow being the first brode of the dame. These hanged about the necke of ye chyld, saveth and preserveth it from the sayd sicknes. Another remedy is the mawe of a leveret dronke with water and hony.

For styffe and strind limmes, the urine of a goate with the donge stamped and layed in the place resolveth the stifnes.

For payn in the earnes, a singular remedy is to take the chest wormes that are found under barkes of trees or in other stumpes in the ground, seethe them in oyle and drop into the eare. The harne or skinne of an adder or snake boyled in oyle is good for the same.

Breedyng of teeth. Divers thynges are good to procure an easy breedyng of teeth, among whom the chiefest is to annoint the gummies with the braynes of an hare myxt with as much capons grease and hony.

Quimsay and Swenlyng of the Throte. Sometimes it lieth in the very throte upon the wesaunt pype and then it is exceeding peryllous for it stoppeth the breath and strangleth the pacient anone. The chiefest remedy in this outrageous sicknes is ye pouder
of a swallow brent with fethers and all and myxte with hony. They prayse also the pouder of the chyldes donge to the chylde, and of a man to a man, brent in a pot and anointed with a litle hony.

For Fluxe of the Bellye, the rindle mawe of a yong suckyng kydde with the yolke of an egge softe rosted. Yet must I not omyte a goodly practise in the sayde cure. The pesill of an hare or a stagg dried in pouder and drunken is of wonderful effect in stoppyng a fluxe, as is also the lyver of an otter. The stones of hym drunken in pouder xxx daies together hath heaaled men for ever of the fall- yng evyll.

For pissing in the bedde, the wesande of a cocke, or the stones of a hedgehogge powdered are of vertue. If the pacient or of age it is good to make fyne plates of leade with holes in them and let them lye often to the naked backe.

Of gogle eyes.—This impediment is never healed but in a very yong childe; there is no maner kind of medicine appointed, but only an order of kepyng, that is to say, to late the childe so in his craddle that he may beholde direct against the lyght and not to turne his eies on either of bothe sides. Phaire then gives directions as to now to make the squinting eye turn towards some light coloured object.

Dr. Phairey concludes this section of his work with a supplication entitled "A praiser to God for helpe against the perturbacions of the mynd," which is lengthy but excellent in thought and diction.

To this work is added, "A goodly bryefe Treatise of the Pestylence, by Thomas Phayer, studious in Philosophie and physick to
the ayde, comfort, and utilitie of the poore." In this case also the
preface is long and prayer-like in substance. The author explains
why diseases and other ills have been sent to man because of his
many sins. He describes four "rotes" or causes of the pestilence.
the First roote superior is the Wil of God ryghtfully punishyng
wyked menne, and this he expounds by many verses from Holy Writ.
The Second depends of the heavenly constellations, Saturn and Mars
being the planetes most blameworthy. "When the Sunne enters into
Aries, or when the sunne and moone are in conjunction, are likewise
evyl times." The Third Roote is the styneche and filthy savours
that corrupt the aire and engender venom in the body. The Fourth
Roote is the abuse of thinges not naturall, of meate and drinke, of
slepe and watching, of labour and ease, etc.

This 1ss followed by " A Declaration of the Veynes of Mannes
Bodye and to what Dyseases and Infirmitie the openyng of every
one of them doe serve ", and the work concludes with " The Boke of
Children."
William Bullein.

1558.
William Bullein was born early in the reign of King Henry VIII. It is not clear whether he was educated at Oxford or Cambridge, but he became rector of Blaxhall in Suffolk, resigning this charge however in 1554 when he went abroad to study medicine. After (it is supposed) obtaining a degree, he returned to England, and we next hear of him living in Tynemouth in the family of Sir Thomas Hilton, to whom he dedicated his book. Before he published his magnum opus, Bullein tells us that he had written another work entitled "Healthful Medicines," but the manuscript of this as well as many of his books were lost by shipwreck on his voyage from Tynemouth to London after the death of his patron. He escaped this death only to be threatened by another, for shortly after his arrival in London, he was accused by William Hilton of having caused his brother's death, and was arraigned before "that noble prince the duke's grace of Norfolk, for the same"; but his "wicked practise was wisely espied, his folie derided, his bloodie purpose letted, and finally I was with justice delivered.

At a later period however, this same Sir William Hilton, caused him to be imprisoned for debt, and it was while he was languishing in jail, that he composed his "Bulwarke". He had travelled much in Germany and in Scotland, but finally settled down to practise in Norwich and in London. He died in the metropolis in 1575, and was buried in St. Giles, Cripplegate.

His fame rests chiefly on his work entitled:

"A newe Boke of Physicke entituled the Gouernement of Heathne, wherein is uttered manye th notable Rules for Mannes preservacion
with sondry symple and other matters, no lesse fruiteful than profitable, collect of many approved authours. Reduced into the forme of a Dialogue for the better understanding of thunlearned. Whereunto is added a soverain Regiment against the Pestilence by William Bullein. London. 1558. (Blackletter)

Bullein begins his book with a diatribe against "surfeting," and this is followed by a poem in seven-line stanzas:

"For what avayleth ryches, honoures, costlye buyldinges, fayre apparell with all the pompee of this worlde and to be honoured of the people, and in the meane tyme to be eaten with wormes in the breaste or in the belly, consumed with agues, turmented with gowtes. ...There is nothinge under heaven that hath lyfe, but if it lacke good gouernment it will fall into utter decaie quickly. Seeing that to possesse health is better than to governe gold in so much that health maketh men more happier, stronger and quieter than all maner of riches, lacking health."

"Cursed by Bacchus, the father of dronkenes
Founder of lothsome lust and lecherie,
Thy servantes twain, be intemperance and idlenes
Which gentle diet and sobernes do defie.
But sobernes doth live, when glotony doth die
Though bankets do abound, eyes for to please
Overcharging the stomake, bringing small ease.

The abundance of wine, and lust of meate
Feasting in the day and riot in the night
Inflameth the body with unnaturall heate
Corrupteth the bloud, and abateth the sight
The sinews will relax, the arteries have no might, Apoplexia and vertige, will never from the start Until the vitall bloud be killed in the hart."

Other nine verses follow much in the same strain. There is a poetical foreword which ends with these lines: -

"In the means season, refuse not to take
The vertuous Physicians, for remedies sake
Which can supplant paine, and helth set in place,
So shalt thou live quietly, and finish thy race,
At last, when death comes, wherto thou must trust,
Call to God for grace, let death do his wourst."

The letterpress is in the form of questions by John and answers by Humfrey—a fashion very common at that period, E.G.

Q. I prey thee is it so great hurt to delight in plenty of bankettes?
A. It is ye very graine whereof cometh stinking vomets, saucye faces, dropsies, fluxes, apoplexis, rewmws, etc.

Q. Why is there so much division among Phisicians?
A. God hath not apointed the Phisicians to be railed upon or dis¬pised, but honoured and rewarded, yea, esteemed of princes.

Bullein then proceeds to give long disquisitions on Asclepiaides Hippocrates and Galen. He then bursts into song, and in poetic vein describes the characters of the Sanguine, fleumaticke, Colericke or melancholy.

Q. Have a man snye of the Elementes?
A. The thing which men do see, be none of ye foure Elementes, not earth, but earthie; not water, but waterie: not ayre, but ayrie
not fire, but fire. But the things whiche man do fele, be
the foure Elementes, as earth, arye, fire and water.

He goes on to describe the seasons, the zodiacal signs, the vari-
eties and qualities of meates and the godly upbringing of the young
He describes the four humours, and says, that the blood which is in
the pulse is "thinner, yellower and hotter than the bloude which is
in the vaines. Flewne is white, and is ingendied in the stomake and
at length by the vertue of naturall heate, fleame is turned into
blud. There be also watry, slimy, glassy grosse, salete, sower, thycke, hard,
binding and extreme cold fleames whiche in dede be unnaturall."

He asks Q. Whether men or women have the hotter complexion?

A. Lyke as men bechote and drie; so beewomen cold and moiste.

All things bringeth his own aparel with him saving

Man.

He discusses the best vaines to open for various diseases, e.g.
the frontal vein for megrim; for leprosy and deafness, bleed from
the two veins behind the ears; for squinancy, stopping of the
throat, bleed from the tongue, but

Vaines called Originals open not without greate Counsaile
of a learned Phisicion or cunning Chirurgion. They be in the
necke and have a great course of bloud, that governeth the head
and the whole body.

Dropsy. - Against dropsy open the vaine betwene the belly
and the branuch, the right side against the sayde dropsy, and the
left side against the passions of the milte, but bee not rash,
onlesse ye have the counsaile of one wellseen in the Annothermie.

After one be infected with the Pestilence xxxiii hours,
before he hath received medicine, a blud letting miracle helpeth
him, but truly no medicine have vertue to do it.

There follows a description of the bones, and then directions of various kinds are given. e.g. bleeding in the morning is good, but evil in the evenings; to bathe upon an empty stomach is perilous. Affection, lust, and fantasy have banished chastity, temperance and honesty.

To wash the hands in cold water is very wholesome for the stomach and liver, but to wash with hot water engendereth rheumes and corruption in the stomach, because it pulleth away the natural heat into the warmed place which is washed. Combing the head, cutting of the hair, paring of the nails, cleaning of the ears, are not only comely and honest, but also wholesome rules.

4. What is the proper diet for one who has lived like a riotour.

A. I know it well that thou art flegmaticke and therfore it is longe or thy meate is digested, when thou doste eat fysh and flesh together, it doth corrupte in thy stomach and stinke. When there are many dyshes on the table remember with thyselfe that the sighte of them all is better than the feding of them all. Grosse fishe, lambes, fleshe, the inmeates of beastes, raw herbes, pigges braines, and all slimie meates be evil for thee, but late suppers is worste of all. Good bread, fleshe of capons or hennes, fesantes and patriches, pignions and turtill doves, black birdes, and small fieldde birdes, rosted veale or boyled motton; these do engender good bloude. Mingle thy meate with mirth, which is ever the beste dishe, and be thankfull to God.

Such as be sicke, must have meate contrarye to their complexion.
For they that be cold, must have hote meate and medicines; and the
that bee drie, must have moiste thinges. But they thay be hotte, must
have colde thinges, for the ardent heate of the fier is quenched
with the moistnes of ye water. But in all thinges let him beware
of distemperaunce, surffites, or replexion, reare suppers and dronkenn-
esse.

To helpeto disgeste your ingorge ful stomache, then provoke
yourselfe to sleepe lying uppon your right side, leaning towards
your brest and belly, laying your warme hand upon your brest. The
power of digestion is made strong when a man sleepeth.

Q. Tell me the good and the abad ayre that I may learn to use the
good and refuse the bad.

A. There be certaine starres called Infortunates in their exult-
acion, whose influence bringeth corruption to creatures, rot and pes-
tilence to man and beasts, poisoning waters and killing fish, blas-
ting of frute in trees and corne in the fields, infecting men with
divers diseases, fevers, palsy, dropsyes, trancis, and leprosis.
Against ye saide influences al Christen men must pray to God to be
their defence, for they be Gods instruments to punish the earth.
Then make a fire in everye chymnaye within thy house and burne
sweete perfumes to purge this foule ayre.

A. Among all mortall diseas is stone is the greatest, a pre-
venter of time, a deformer of man and the chief wakener of the
bodye, and a grevous enemy to the commonwealth. How many noble men
and worshipful personages nathe it alaine in thys realme, manye one
which cometh of not wines, spices, longe banquetttes, replotions,
fulnes, costivnes, warme keping og the back, salt meates, etc. The re-
medy whereof points contrary to those causes and not to kepe the
There follows on this a poetical lesson for "thine urine." Here is Bullein's description of the "Signes of the Excremente of the Belly."

Of filthy dung and fex most vile
The dregges of natures fode,
Whan thei be divers coullerid made
The signes be never good.

If the siege be like unto the meat
New drawnen into the mawe,
Or fleting with flem or burbles great
The body is wyndy and rawe.

The yellow doth from choller cum
The grene is burnt adust,
The black and leady, be deadly signes
That flesh wil turne to dust.

The excrement that is in the jakes cast
If it have oile or fat,
Consumption of body than begin
The chiefest signe is that

The privey soft wel compact
Made in the accustomed time,
Is ever good and the hard is ill
And thus I ende my rime.

The author then goes on to discuss the value of many simples, as anise, absinthe, chicken weed (good to draw flem out of
thy head), sorrel, sage, verbena, mint, lettuce, hissope, groundswelle, violets for sleep, Sweet Basil for dropsy, windes and rheumes, Saxifrage which breaketh the stone, etc.

Q. Would to God thou wouldst tell me the vertue of Dates and Figgges:

A. The crude rawe date doth calify the body, it is not good for the heads of the hote people, and maketh the teeth rotten. Figgges be the best and amongst all fruts doth moste norishe, it doth engender lice.

The tripes and guttes of swyne be holesemer and doth nourish better than any other beastes guttes. The braines of a Bore and his stones or any part of them stamped together and alid warm upon a pestilence sore in the manner of a plaister, it wil breake it incontinent.

Cravises and crabbes be very good fisshes, the meate of them doth helpe the linges, but they be hurtful forr the bladder, yet they will engender seade. Limpetes, cockles, scallopes be hard of digestion, muskels and oisters gold be wel boilled, rosted or baken with onions, wine, butter, sugar, ginger and pepper, or els they be very windi and flegmatike.

Speaking of Waters, Bullein says: -Waters running toward the East be pure, comming out of hard stony rockes, and a pinte of ye water is lighter than a pinte of ye standing water of wels. The lighter the water the better it is.

Honey.-Mervelous is the work of God in hony being a heavenlie dew that falleth upon flours and leaves, and is neither the juice of leaves or frute but only ye heavenli dew. Whereunto the Bees come in due time and gather the said hony, and lay it up in store in their
curious builded houses whereas they dwell together in most goody order. O, bees, bees, how happier are you then many wretched men, which dwell never together in unity and peace but in continuall discord and disquietnes.

Of Rosewater, oearles, and sugar is made a goody comforter for the hart, called Manus Christi.

Milk.-- Ye best milk ye helpeth against consumptions is woman's milk.

Wine.--Those people ye use to drink wine seldom times be dis-temper atell. Black or depe red wine which is thicke, a stopper of the belly, a corrupter of the bloude, a breeder of the stone, hurtful to olde men and profitable to fewe men excepte they have the flix. To conclude of wine, Almighty God did ordeine it for the greate comforte of mankinde, to bee taken moderately, but to be dronken with excess, it is a poysen moste venemous, it relaxeth the sinewes, bryngth palsey, fransies, fighting, lechery, and a consuming of the liver. And generally there is no credence to be given to dronkards although they be mighty men. It maketh men like unto monsters with countenaunc like unto burnynge coles. It deshonereoth noble men and beggereth pore men, and generally killeth as mani as be slain in cruell batailles, the more it is to be lamented.

Beer.-- Cleane brued beare if it be not very strong, brued with good hops is veri holsom for the liver. It is an usual and common drinke in moste places of England, which in dede is hirte and made worse with many rotten hoppes dried like dust which commeth from beyond the sea, yet the goodye stilles, and fruteful grounds of England do bring forth to mans use as good hops as groweth in any place of the world. Ale and beare have no such vertue nor good-
Almonds.— To eat almondes before meate preserveth against druncknes.

Pepper,— Although pepper be good to them that use it wel,yet unto artificiall women that have more beastlines than beuty and cannot be content with their naturall complexiones,but would fayne be fayre; they aete pepper,dried corne,and drinke vinegar,with suche like bagage,to drye up their bloude,and this is the very cause that a great number,though not all,fal into weakenes,greene sicknes,stinkyn brethes,and oftentimes sodaine death.

Methridatum.— for those that be in the country; This excellent Triacle is next in quality and vertue of Theriac and do doffer but little,but onlye Theriaca is a little hotter and stronger against venim of snakes,edders and serpents. It helpeth all paines of the hed,squinace, apoplexias,bite of mad dog,etc.

Bullein ends his work by committing the reader "unto the Eternal Father,that is hable when all Phiseck fayleth,to help the by his wonderful miracle. To whom with the Sonne and the Holy Ghoste be praysefor ever and ever,Amen.— Farwell, the 20 of April 1558.

William Bullein.
Bullein's Bulwarke of Defece againste all Sicknes, Sornes, and Woundes that dooe daily assault Mankinde, which Bulwarke is Kepte with Hillarius the Gardiner, Health the Phisician, with their Dhyrurgian to helpe the wounded soldiers. Gathered and practised fro the moste worthie learned, both old and newe, to the Greatte Comforte of Mankinde. Doen by Willyam Bulleyne and ended this March, Anno Salutis 1560. London. folio. Blackletter.

This treatise was dedicated to Lord Henry Carey, first Lord Hunsdon, who was Governor of Berwick and was closely related to Queen Elizabeth who knighted him soon after her accession. He distingishe himself as a man-at-arms and held the lists against all opponents in 1559. He took a most active part in all the troubulous times in the North of England and in Scotland, and it is reported that he enjoyed the hanging of Scottish rievers as much as hunting or hawking. He became a High Court Official, being appointed Lord Chamberlain. He died in 1596.

The "Bulwarke" is divided into four parts. (1) A Booke of Simples; (2) Dialogue betweene Sorenes and Chyrurgi; (3) a Booke of Compounds; (4) A Booke of the Use of Sicke Men and Medicines. The first is one of the earliest herbals known in English. Bullein relates many cases of his own cures and launches many diatribes against the quacksalvers.

In his dedication to the "R?Hon.Lorde Henry Cary, Baron of Hunsdon, Knight of the moste noble Order of the Garter, Willyam Bulleyne wisheth all healthe and perfect felicitie in Christe." He affirms that nothing but is "Knowen unto the wittie hedde of man-
Kinde to this ende to helpe mankinde in the tyme of his bodily infirmitye. I am bounde to helpe the ignoraunt, that thei maye resort to this little Bulwarke (a folio of about 100 pp.) so that they shall have at hande all maner of Cordialls and wholesome Salves, for whose sakes I have builded this little Fort, calling it my Bulwarke, and although there will be many parauenture bothe malicious, spiteful and cankered of mynde, that bothe with slander and disdaine will laie their Batrie against this Forte, I shall be able ever to repulse them, through your good Lordshippes good aide."

In his address to the Good Reader, Bullein says that he had promised in his boke "The Gouernment of Health" to publish another book of "Healthfull Medicines." He finished his copy but it perished in a shipwracke and so his labour was lost. He describes how the brother of his patron attempted to take his life and later had him imprisoned. It was during the time of his imprisonment that he wrote this Bulwarke; "First, I have made you a booke of simples for I had no small pleasure in the Nature of them." This treatise, like the former is written in the interrogative form, e.g.-

Q. "Because I have no small grief in my breast, I desire you to show me the nature of an herbe called Asaron which I trust will help me by the waie of vomitte."

A. "Pliny says that among al other flowers or herbes, it is utterly refused and not worthy to be preferred among pleasant garlandes or swete nosegaies, because of the basenesse and bitternesse of his nature," and so on. "In Sommer vomentes ought to be taken to clense the upper partes as the lower members be purged by electuary in winter."

Carlyke when dried and mixed with Beares Grease is good to anoynt
a baulde head to recover heere, but it is a groase kinde of medi-
cene, verie unpleasaunt for fayre ladies and tender Lyly Rose
coloured damsels which profereth sweet breathes before gentle
wordes.

Honey distilled with the urine of a boy and sponged on the
face is good for cleansing "The skinne of them whose faces be
uncleane." He goes on to describe the many virtues which this
substance possesses, and ends with a long poem in praise of it.

If Sage be taken both my husband and wife "without a doubt
conseption followeth." There was so great a pestilence in a city
of Egypt that few were left alive; but when the plague ceased,
"the yonge women were compelled to drink the juice of sage through
whose vertue they were conceaved with children, having the helpe
of man, that in the ende, the citie was replenished againe."

Of Hysop, he says; " God graunte us all to have soche blesse
plantes of that hysop inn our gardens, whiche have vertue to heale
sicknesses of the soule, defiled with sinne."

In speaking of the virtues of Water, he repeats the old be-
lief; "In the northe partes of Scotland nere and upon the said
ocean sea, stickes, braunches and bordes of broken shippes, falling
into the same sea, upon these things be engendered foules or
birdes, which were commonly cal Brantes or Barnakles, a kinde of
small Geese, whiche wee do se commonly in this Realme all of one
coulere and bignes; their eggges were never seen amongst us, thei
have none other generation than I have said, although to the in-
credible and ignorant, it seemeth untrue, whose fantasies I force
not of, but of the truth."

Nothing is better to restrain
"the immoderate flix menstruell, than to make a fomentum of Shephardes Purse, and moiste bathe of this herbe and to sit over it close; Many greate learned men do affirme, that the onely holding of this herbe in a mans hande, doth stoppe the bloud flowing at the noze, or any other parte of the body. Many marvels might be declared of the vertue of this herbe, but unto the ignoraunt and incredible, to them it is but vaie to write any farther."

Of Mandragora, he writes that it is a " verie invention of Witches and hypocrites through the sugestion and motion of the devill, for thei doe affirme that this herbe cometh of the seede of some convicted dedde menne, and also without the death of some lyvyng thing, it can not be drawn out of the yearth to mannes use. Therefore, thei did teye some dogge or other lyvyng beaste unto the roote thereof with a corde, and digged the yearth in compasse round about and stopped their own eares, for fear of the tirrable shrieke and crie of the Mandrake. In which crie, it dieth not onely die itself but the feare thereof killeth the Dogge or beaste whiche pulled it out of the yearth. In the olde tyme thei wrought wounders by this herbe to provoke, bewitche, or cast men into madde blind fastasies or trances, called Love, which rather mai be termed, noisome beastlie luste, and whem it is wrought by herbes, foolishnes."

Bulleyn grows eloquent over Hartsease; " God send thee hartsease, for it is moche better, with povertie to have the same than to be a kyng with a miserable mynde, for from thens springeth either felicitie or adversitie, an Image of Heaven
with joie or els hel with inward horroour of minde and vex-
acion. Thou art not without worldie Hartesease, whiche I graun;
doe please sometyme thy vaine delight, yet I praise God give
you, but one handful of heavenly hartesease."

Treating of Mistletoe, he likens it to strangers and for-
eigners who become high, wealthy and lusty, and this at the ex-
 pense of the natives who suffer from want, poverty, and hunger.

Of Musk, he asks "What is pleasaunter in swete water to
washe handes, hedde and beard, and good in apparell, it is go
Goddes gifte to adorne and garnishe mankinde with, although
light, wanton and lecherous people doe make it an instrument
of provocacion to naughtines withall."

When speaking of Guaiacum, Bulleyn makes a long exordium
to Christian living, and alludes to the efficacy of this drug
in smallpox,—"When your friend was smitten with the pox, his
heere fel away, he could not sleepe for boneache, his breath
did stinke, Lorde how pale he looked, his muskles consumed,
the skabbes appered, under whom were deepe hooles graven with
putrified matter but now he is in health."

"Of the goodnes of Porke", he remarks that "Bores
fleshe is proved in the tyme of Pestilence, to breake a plague
sore. Bores grease and his stones or anie parte of them,
stamped together, and warme applied to the same sore, woorke
thist effecte. And thus I doe ende of swine, which in their
hives be most vile, noisome and never good in till the die."

As to the vertue of Goats, he says that "The urine of
goats distilled in May with sorell if drunk morning and
evening will preserve from the pestilence. While the lunges
of a deere sodden in berly water and stamped with pededice and hony and eaten amorninges, doeth greatly helpe the olde coughes.

He notes in tabular form the diseases which may be helped or cured by partaking of the marrow, gall, braines, liver horns, hoofs, urine, blood, dung of various animals, including man "The dung of manne is the beste in medicein although most abominable to the sense of smellyng; a water made of it is goode to be drunke against the falling sicknesse, stone and the water betwene the fleshe and skin (anasaren)."

Materia Medica Animalium.- The frogge sodden with salte and cleane oyle and so eaten helpeth against all venime of serpentes.

The mouse being rosted is goode to be given to children that pisse their bedde.

The head of the Lizard broken and applyed to anie place on the body where a prickle or nail is embedded will soon draw it forth. This worme is much used of Chyrurgens.

Earthworms here recommends for toothache. Earthworms are "the bowels of the grounde. He adds another long oration on our coming out of and returning again to Mother Earth, and so Bulleyn ends his "Boke of Simples." To this however he adds; "Hereafter insueth a little Dialogue betwene two men, the one called Soranes and the other Chyrurgi concerning Apostumacion and Woundes, their causes and also their cures." 1562.

This is a long rambling story and hardly bears condensation. There are many pithy and true statements in it but these are for the most part concealed in a mass of verbiage. Here is on
of his statements.—"Soft chyrurgians make foulre sores, swete words are pleasautnt to women and young children; but plain true tales, ought to be emong men of knowledge without curious circumstaunce. Therefore, go to your matter, the daie is colde and snorte, the tyme passeth spedely awaie and can never come again."

"The Booke of Compounds." 1562.

This again is in dialogue form between Sickness and Health. In a lengthy discussion on perturbations of the mind, Bulleyn cites examples from ancient and modern history, and shows how only dependence on God will help towards serenity of mind. He ends his book with this stanza;—

"Though our giftes be never so small
Yet let us give thankes to God for all;
And who of talentes, have greate store,
Their accomptes to God shal be the more."

W.B.

Although Bulleyn published several other works, it is only necessary to direct attention to one which was published in 1564. It is in black-letter and small 8vo. I am indebted to the volume published by the Early English Text Society, and edited by Mark W. and A.H. Bullen, for the following extracts. The work is entitled.

"A Dialogue bothe pleasaunte and pietifull, wherein is a Godly regimente against the fever pestilence with a consolacion and comforte against death "Newly corrected by Willyam Bulleyn, the Author thereof. Imprinted at London by John Kingston. Marcii Anno Salutis 1564.

The volume is dedicated to the "right worshipfull
and his singuler frende Maister Edward Barrette of Bellions, of
Essex esquire, Willyam Bulleyn sendeth salutations.''

In his address to the Reader he says that many when they are
touched "by the fearfull stroke of the Pestilence of their neate
neighbour fall into sodaine devotion, in giving alms to the poore
and needie, whiche before have doen nothing els but oppresed them
and have doen them wrong; others doe Locke from their hartes Gods
lively worde, and refuse Grace offered by Christes spirite, thinkyng
there is no God.

Mors gloriosior est quam mala vita.

(here is a figure of a skeleton.)

There are twelve questioners. The wife asks the beggar if he is
Scottish. He replies :-

"Trowe me never ware then, gud deam. I had better bee hanged in
a withie or in a cowtail, than be a rawfooted Scot, for thei are
ever fare and fase. I have been a fellen sharpe manne in my yonge
daies and brought many of the Scottes to grounde and gave them
greisly woundes. Then the limmer Scottes hared me, burnt my guddes
and made deadlie feede on me and my barnes, and now I have nethyng
but this sarie bagge and this staffe and the charitie of sike
gud people as you are.... If the plague doe ensue it is no greate
losse for it shall cutte of many coveteous usurers whiche bee
like fat uncleane swine, whiche doe never good untill thei come to
the dishe. And in sike plagues we pure people have muche gud.
Their losse is our lucke."

The Doctor giving advice says :-

"I have appoincted at what tyme that you should receive your
Clester, and how your Ptisante should bee made, and in what order
that your frontary should bee applied to your forned to cause you
to sleep quietly. You are not and drie, also the tyme is verie hotte,
feare nothing."

Antonius answers :-
"You are a merrie gentlemanne; doe your pleasure with me, I will put
myselfe into your handes, I tell you." The doctor then tells the
surgian, "to prepare lace, staffe, and launce with your unce vessels
that I may consider his bloud in order and due quantitie, further
he had bo fitte this ten houres. Let him bloud by little and little
and although he doe fall into lipothimion it is no matter. Oh lorde
how might you live if this bloud should have remained any longer.
The worste is paste; this would have been a greate sore or Apostum-
ation ; Stop up the vein in Gods name.

I have cured many amongst them a noble man, he is a good friend
of myne, I have twentye pounds yerely of hym. He sente mee a fatte
Buke upon Mondaie last, and gave me my Mule also, with a velvet foote
clothe. He is well learned ; he hath red the Apocalips."

The Apothecary is directed thus :-
"I praie you make some thinne Brothe of a Chicken in some stone or
silver vessell ; Copper or Brasse are not good for Maister Antonius
suche vessels are leprous."

The sick man then discusses with the doctor the quality of
earth and the number and characters of the four simple bodies;
questions of religion, of the soul, and finally and at great length,
of the Pestilence.

The Doctor explains that Pestilence comes " Most chiefly to
theim under the place infected, then to slutabishe, beastly people,
that keepe their houses
and lodynges uncleane, their meate, drinke and clothyng most noysome.

Eclipses of the Sunne and Moone are manifest signes of the pestilenc
among men, or muche Southe or Easte Winde in the Canicular daies or
when birds forsake their egges or anie dearth goyng before."

He then describes the symptoms saying that he will hide nothynge.
The patient is to be kept from the passion called feare, for that
doeth drawe the spirites and bloud inwards to the hart; neither use
actes venerous, nor bathyng, neither quaffyng or muche drinkyng.
Music is good in this case, pleasaunt tales and to have the meates
well sauced with cleane sharpe vineagar. No Privies ought to be at
hand but a softe fire with perfumes in the mornyng. Use to smel upon
some pleasaunt perfume and to bee letten bloud a little at once
and to take Pilles contra pestem. Then follows a long of drugs
which should be given.

The patient pays him at once ; - " Have, take you that to buye
you a newe mule, a footeclothe, and a goune."

The Doctor departing says to the Apothecary "that they had
harried here verie long, but not without gaine." He then dictates to
him various prescriptions in Latin.

Later on we find the Citizen saying to his wife ; -
" The daiely janglyng and rynging of the belles, the commyng in
of the minister to every house in ministrying the Communion, in
readyng the Homelie of Death, the diggyng up of graves, the sparryng
in of windowes, and the blasyng forth of the blewe crosse, doe make
my harte tremble and quake. Alas, what shal I doe to save my life ?"

She advises that they and their children should go for three
weeks into " a goode aire and a swete countrie "; to which he
replies, quoting in full measure scriptural passages.
Others come and relate tales or give accounts of their adventures. A minister appears and discusses theological questions and so on. The citizen dies and the minister ends the dialogue with a prayer concluding with the following words:

"His soule commeth nowe unto thee, goode Lorde, receive it to thy mercie, into thyne everlasting glorie, where as Abraham, Isaac and Jacob are; continually to thee, oh heavenlie father be incessaunt honour and glorie. Amen."

The end of the Dialogue.

Several other works are attributed to Bulleyn, but most of these bear no evidence of his authorship. He died in 1575 and was buried at St. Giles, Cripplegate.
Alexis Pedemontanus.

1559.
ALEXIS PEDEMONTANUS.

De Secretis libri sex mira quadam rerum referti ex italicis in latinum sermone nunc primum translati per Joannem Jacobum Weckerum. 12 mo. Basil. 1559.

Alexis of Piedmont. (Black Letter).

The secretes of the reverend Maister Alexis, of Piedmont, containing excellent remedies against divers diseases, wounds and other accidentes, with the maner to make distillations, perfumes, confitures, dyings, colours, fusions, and meltings, a work well approved, very profitable and necessarie for everie man, newly corrected and amended, and also somewhat enlarged in certaine places, translated out of Frenche into Englyshe, by William Warde, in three parts. Prynted in London by Rouland Hall, for nycolas England, dwellyngs in Pater noster rowe, 1562 -63

The secretes of Maister Alexis of Piemont, by him collected out of divers excellent authors, and newly translated out of French into English by William Ward. 3 parts. 8vo. London 1595.

The fourth parte ...... Containing sise hundred foure score and od experimented medicines, pertaining to physick and chirurgery ... translated out of Italian into English by Richard Androse. London, 1595.
The work commences with an Epistle by the translator in which he dedicates the book to the Right Honourable Francis, Lord Russell, Earl of Bedford.

He recounts that God has made everything subject to man and for his use—nearbes, trees, fruites, stones, the dew of the ayre, etc. so that nothing is unprofitable, no not the very dung of beasts and birds, but that it hath some wholesome operation for mans health. In all these things are certaine secret vertues, which be manifest signs of Gods love and favour towards man, for hee created them to the intent that man should use them, glorifie him and give him thankes for them.

God of his meere goodnesse hath not onely given unto the diligent searchers thereof, the gift of perfect usage and understanding of their operation, in this time of christianitie; but also unto infidels before Christ, being ignorant from whence they gift came; they thought that each of these things had in itselfe a certaine divine power, or els that there was of everything a severall God or Creator........... What would they have done if they had known, and confessed God to have been the onely maker of the world. They would not have done as some curious Christians among us nowe a daies doe, most impidentlie despise all manner of medicineis and ignorantly dispute about the vertues and operations of nearbes and trees, saying, that if the sicke manbe appointed to die, all the medicine in the world cannot save his life.

To this it may be answered that every man that is vexed with a disease is not appointed to die of the same; but that the infirmitie is sent as a punishment for his offences, and yet hath God created things to give him ease and remedie for his disease........he that despiseth the work, seemeth to contemne the workman......and as no man knoweth when God hath prefixed the terms of our life, we use those
remedies at the handes of those to whom he hath given ye knowledge how to minister them unto us. As these things are abundantly known to your Honour........I do but bring Owles unto Athens, in declaring this unto you........These unprofitable members who neglecte physicke, are often caste awaie and perishe, which otherwise might have been saved, for they that despise Physicke, despise a heavenly science. For what be they that contemne it; forsooth ignorant and unlearned men, that barke at and backebite them that take paines for the commoditie of all men. This is true of Englishmen more than any other nation. I would God it were not. And yet I thinke there is no man so bestiall, so rude and so blunte of witte, but that he is desirous to knowe thinges not before known.

I coulde not better declare my bounden Duetie to you than in translating this noble and excellente worke called "The Secrets of the reverend father Maister Alexis of Piemont, first written in the Italian tongue, and after turned into French, and of late into Dutch, and now last of all into English.

The translator goes on to say that he is not able to extoll sufficiently the learning and enormous trouble the author had in collecting these secrets from all parts of the world, but that he hopes that th

the noble Sarle will put some of them to his own commoditie.
Don Alexis to the Reader.

Alexis tells the reader that God by His great goodness hath made me to be borne of a noble house and that besides I have always had my pleasures, a great plenty of riches, yea, far passing the smallness of my deserts. I will saie yet more (not to boast, so to advance myself, but to the end to reforme the gentle Reader, and to give thanks to God) that there be many which know, how I being given from my first youth unto studie, have gotten not onely the knowledge of the Latine, Greek, Hebrew, Caldei, and Arabick tongues, and also of divers other nations and countries; but above all things, having by a naturall inclination, taken a singular pleasure in philosophie, and in the secrets of Nature, have wandered and travelled abroad in the world, the space of seven and twentie yeares, to the intent to acquaint myself with all sortes of learned and discreet men. By the which diligence and curiousitie, I have learned many secretes, not onlie of men of great knowledge and profound learning, and noble men, but also of poore women, artificers, Peasants, and all sortes of men. Moreover I have been three times at Levant, and sundrie times have travelled almost all other parts of the world, without resting or sojourning at anie time in the place above five moneths. Yet have I alwaies been mused up by a certaine ambition and vainglorie, to know that which another should be ignorant of; which thing was grafted in me a continuall nigardnesse or sparing to distribute or communicate any of my secretes; yea, unto my most singular friends that I had, saying: that if the secretes were knowne to evrie man, they should no more be called secretes, but publike and common.
Now it chanced these fewe daies past, being in Milan, in the fower score and two yeare, and seven moneths of mine age, that a poore artificer was marvellous tormented with the stone, and had bin two daies without making his urine. The Chirurgian that dressed him, knowing wel that I had many secrets, and singularlie for the stone, came unto me and requested me that I would teach him the receipt or at the least to give him the medicine composed and readie made, for the health of the patient. But I perceiving that he would use other mens things for his own benefit and honour, refused to give it him, but willed him to bring me to the sickeman, and that I myself would minister to him the medicine gratis. Two daies later he brought me, whom at my coming I found so nigh his end, that after he had a little lifted up his eies, casting them pitiouslie towards me, passed from this into a better life.

With this case I was moved to such a compassion and sorrow, that not onelie I wished my life selffe evil, but also I desired to die, Wherefore so great was the remorse of conscience in me, that desiring to seuartrate my self from the world, & not finding my selfe of such a disposition of minde, that I could live in a monasterie, among religeous men, better edified than I, I was at the last fullie resolved with my selfe, to chuse a place separate from any toune, where I shewe a little land, some Booke3, and a studie, for to avoyd idlenesse.

But yet not having the power to put out of my fantasie but that I was a verie homicide and murderer, for refusing to give to the physician the receipt and remedie, for the healing of this poore man, I have determined to communicate and publish to the world all that I have, being assured that few other men have so many as I.

There is nothing in this Booke, but it is true and experimented, and giving alwaies glorie and praise unto God, onelie for all, have a
good hope that by means of his divine grace, I will consequentlie make
you a present of the rest of all that I have gotten in so many trav-
ailes, voyages, costs and diligent studie ".

Here is the first of his "Secrets";

"The manner and secret to conserve a mans youth and to hold backe old
age, and to maintaine a man alwaies in health and strength, as in the
fairest flower of his age." ....... Being a thing most certaine, that an
old man of three score and ten yeares, all withered with age, of a verie
will complexion, and subject to divers kinde of diseases, was altered
and changed, as into the age of six, or eight and twentie yeares.

To begin with, one must make a verie precious ointment of inestim-
able vertue to be taken by the mouth, and begin to take this in the mon-
month of May. It is to consist of the dewe for rosemarie, Burrage, and
other good herbes, except sage for under it certaine venemous beastes
assemble and infect and poison it with theyr breath. " Alexis then enum-
brates an endless variety of herbes which are to be infused in the dewe.
After this wonderful concoction has been made, it is to be taken in
spoonfuls put into " halfe a glasse full of the milke of a woman, now
brought to bed of a man child, or of a nurse that giveth a man child
sucke, or else in Gotes milke."

Another method of conserving the youth and health of a man is to
give him Aurum potabile.

"To healte the Emorphodes or piles ina night, a rare secret and very «
excellent". The cure consists in boiling the leaves of the green Elder
until they are dissolved (°). The leaves are then to be placed (as hot
as they came put of the caudron) on the emorrhods, and covered with a
piece of red cloth a little bigger than the palme of your hande. This
is to be continually changed for fresh boiled leaves, allowing the
patient to sleep as much as he will. In the morning he shall finde himselfe as if hee had never had the disease.

"An excellent remedie for a woman who for 2½ years never purged naturally downwards and vomited up everything she ate, so that she became yellow and as drie as a sticke."

"To heale children of the Lunatike disease which happeneth unto them by reason of a worme with two heads that breedeth in their bodies, the which worme coming unto the heart, causeth them to have such a passion, that oftentimes it killeth them." A liquor is to be made of gentian, Peonie and Wilding tree. With this the lips and mouth of the child are to be wet. After doing this three or four times, you shall see the worme come out dead with the siege. This have I often seen by experience, and for want of it, manye children have died, which for lack of good help, the which afterward being opened, men have found the worme sticking upon their harts.

"To make an oyle of a Red Dog whereof I have healed A Frier who had had a Lame and drie withered arme like a sticke."

Take a young dog of red haise and keepe him three daies without meat, and then strangle him with a corde. Boile a kettle of oyle uppon the fire and put the dog in whole or in pceces and seethe him until he bee almost sodden to pceces. In the meantime take Scorpions to the number of fours score or a hundred and put them in a bason on the fire until they be thoroughlie burned. Then put them in the oyle with the dog, putting in a good dishfull of great ground wormes, well washed and certain herbes.
"A notable secret to heale a madde man, be it that the madness came unto him by a whirling or giddinessse of the hedde or braine, or otherwise."

First of all, make him four clisters, in four mornings one after another. Let the first clister be simple, that is to saie, made with water wherein ye have boiled or sodden wheate, bran, common oyle, and salt. Let the second be of water sodden with Mallowes, Mercure, Pellitome of the wall and violet leaves, with oyle and salt. The third is to contain honey and wine. The fourth like the third with numerous additions. Then an elaborate medicine is to be given. If he will not take it, binde him and hold him perforce, make him open his mouth, put some sticke between his teeth and then pour the medicine into his throte, as men doe unto horses. Then anointment is to be rubbed into the skin of the whole body, and this is to be continued for a moneth. After you have begun to anoint him, "burne him with an hot iron upon the seame, or joining together of the hedde, and at the first laie uppon the marke a linnen cloth with Barrowes grease, leaving it so for the space of 8 or 10 daies. Let him also carrie ever about him some good odours, and heare melodie or musicke; speake oftentimes soberly and wiselie unto him, admonishing him to be wise and sage, rebuke him of his follie when he dooeth or speaketh of anie fond or foolish things; And in such case the authoritie of some fair woman availeth much, to tell him of these things, good admonitions are of great vertue and strength; for to establish and settle a braine, troubled or disquieted with anie sicknesse or passion.

"A verie good parfume against the Plague," consists of mace, wormwood, aloes, musk, ambergris, nutmeg, bay, rosemary, sage, cloves, etc. You shall set this upon the coals, and so parfume the chamber.
As showing how common the dread disease, "The Plague" was, we find Alexis giving numerous Cures "against the plague... One of the least pleasant to take must have been the following: - "Take the dung or excrement of a young boie, between ten and twelve years of age and dry it, and after beat it into powder. This done, put of it at the most two spoonfulles in a glass of white wine, and give it to the patient to drink at the least six hours after the greefe taketh him, and the sooner the better. This hath been found true in many men."

"A verie perfect oyle against the plague and all pain" was made by boiling at least 50 scorpions in each pound of oil.

"A verie goodlie and present remedie for to heale the pestilence in drawing out the venim from the botch or sore, or other like accident. Take a quicke Hen, and plucke the feathers from her arse, and from the place where she laieth her eggs, and set hir so, that the said bare place may be upon the greefe, and that she may as it were sit on the botch or sore, or the place of the plague, and hold hir so for a good while. Then you shall see that the said Hen will have drawn all the poison and infection, that shortly after she will die. It shall be good to doe this with two or three or more Hennes, immediately one after another. This done, anoint the place with good Triacle, and give Ivy or Bay berries by the mouth."

These are followed by a curious collection of recipes dealing with cosmetics, dentifrices etc. Thus for example: -

How to make perfumed oils wherewith to perfume gloves and clothes.

Very excellent Muscardines which eaten cause a sweet breath.

Dentifrices or Rubbers for the teeth, of great perfection, for to
make them cleane. The ingredients seem to be rather harsh for present day teeth, thus red coral, shardes of galey pots, cuttlefish bone, pumice stone; all are to be ground up with cloves, cinnamon, pearles etc.

Various waters to make the face red, pale, fresh, fine, etc.

To make the hair like gold - the chief ingredient being the pils of oranges and lemons.

To make the hair blacke. As at the present time, chesnute are used.

Recipes are given for making Sopes, dyes, how to gilt the edges of Bookes and how to cast or found metals.

The Second Part of the Secrets of Maister Alexis of Piemont. This begins as the first part ended. He gives directions

To make the face fair.

To take away spots from the face.

For oxen that pisse bloud.

To make one that is poisoned to vomit the poison.

To kill and destroy fleas. If one burns pennyroyal while it is inblosom where fleas are, they will all be destroyed.

To make the hair growe one must take three quicke frogges and burne them alive in a pot, and mingle the ashes with honey or with tarre, whiche is farre better, and rub the place where no hair groweth, and in a short space it will grow abundantly.

To make that dogges shall never be mad. If you cut off the dogges taile within 30 or fourtie daies after he is whelpt, he shall never be mad, unless he be bitten of some mad dog or wolfe; for if he be bitten, you must give him to eat the space of thirtie daies continually. Hennes dung with bread or other meate laying upon the place so bitten, a plaister of roots of wild
Roses, and put a collar of it round about his necke, and to the wound
some garlicke or onions stampt, and if you be nigh unto the sea, cast him
into it everie daie twice or thrice, so that he may thoroughly wash, and
continue so the space of twentie daies, because the sea water hath a vertue against the madness of dogges.

To be assured, and safe from all Sorcerie ans Inchantement.

Take Squilla and tie it upon the principall gate or dore of your
house, and you shall assure all the inhabitants in it from all sor-
cerie; and this Squilla assureth and keepeth all plants and trees
that are about the house where it is planted or set, from all noisom-
nesse and infection of the ayre.

Against Lightning and Tempest.

In the place where there is tied the skin of a beast called in
Latin, Hyena, or of a crocodyille or hippopotame, or of a sea calfe
or seale, the lightening tempest and thunder will never fall there,
or likewise upon a bay or fig tree.

For him that cannot pisse.

The stones and kernels of peaches and medlars are to be powdered
and mixed with the same weight of sugar. This is then to be taken
in good white wine, and incontinent he shall make water.

The Third part of the Secrets contains ; -

Against the Phrensie.

The bodie being purged, it is good to shave the head, and to laie
upon the seame of the crowne of the head, quick pigeons (having first
cleft them in the backe, and drawen outt the entrails ) leaving them
so upon his head untill they ware colde; or else little whelps of a
moneth olde, their garbish pluckt out.

Verie good receipt, which Pope Clement the seaventh, tooke in his last sickness.

To the distilled juice of many plants, a pound of mans bloud of the bodie of a verie healthfull and fleshy man, and all is to be redistilled. So do in distilling it alwaies, until nine times. Then gold and silver leaves, jacinths, emeralds, rubies, granadas pearles, corall, etc. are to be added. This medicine brings sudden strength to the weak. It prevents plague and sudden death if taken every morning.

The Fourth Parte, containing sixe hundred foure score and od experiment medicines. Translated out of Italian into English by Richard Androse printed at London by Peter Short for Thomas Wright. 1595.

To heale those that pisse in bed.
Take the bladder of a goate or of a sheepe, burn it upon a tile on the fire, and give the patient to drink with water and vinegar, or Boyle the testicles of a hare in good wine and give him to drink. It helpeth to anoint him under his yarde with the earth of a smithes mill.

For to heale the Stone in the bladder.
Take the urine of a goate and give it the patient to drinke, the space of nine daies, and he shall be whole, or else give him to drinke the bloud of a fox.

Against the Debilitie of Sinewes.
Take a goose and pull it, and having taken out the guts, wash it within then take halfe a fox, and halfe a catte, that are fat, and break the bones of them both, and braie them wel, and put thereto of turpentine
of Serapine, of Edelium, of Earth worms dried, and fill the body of the goose with them. Then rost it with fire made of the wood of baies or genuper, or of vines. Keep that which droppeth to anoint the sinewes and also the uppermost part of the head
John Hall (primus)
1565.
The Two John Halls.

If one were to peruse any catalogue of early writers on medical subjects, one would almost certainly come across the name of "John Hall" twice. Both men were celebrated in their day. The first lived about the middle of the sixteenth century, while the other attained fame towards the end of it. Though we know but little about the lives of either, they have fortunately left works by which we may estimate their learning. Though bearing the same name, there is no indication that they were related to one another.

John Hall (primus)

The few facts which have come down to us show that this first John Hall was probably born in 1529 and died in 1568. He was buried in All Saints Church, Maidstone. He was a Member of the Worshipful Company of Chirurgeons of London, and practised as a Surgeon at Maidstone in Kent. Being a staunch Protestant, it is no wonder that he took up arms against the Roman Catholics. Taken prisoner along with other of the rebels under the leadership of the unfortunate Sir Thomas Wyatt in 1554, Hall was imprisoned, but later was liberated and pardoned. He then settled down and practised his art.

Hall has left a reputation as a poet, translator and writer on medical subjects which has survived the passing of time. Two of Hall's works narrate mainly the "Devilishe Practices of Sorcerers and medical quacks." One must remember that in his time, the number of educated men who practised medicine and surgery was small, hence a wide field was open to charlatans and others who preyed
on the public. As has always been the case, their boundless promises of cure attracted such large numbers that undoubtedly there must have been great financial losses amongst the ordinary physicians and surgeons of the period.

One cannot wonder that to a man of Hall's character, such practice must have been in the highest degree irritating, and at last they drove him to a severe castigation of those quacks. In an age when language really expressed thought, (and was not used to cloak it as it so often does now ) and was not measured by convention, Hall's epithetical objurgations are of the strongest character.

It is not fair however to think of Dr. Hall as a mere writer of tirades. He is in my opinion, one of the first, if indeed he is not the very first, (if we except the scanty writings of Hippocrates and Galen on the subject) who drew attention to the fact that there was an ethical code for medical and surgical practitioners, and who gave instructions as to medical conduct and practice. In his "Goodlye Doctrine and Instruction, necessary to be marked and followed, by all true Chyrurgiens ", Dr. Hall lays great stress on the danger to a medical practitioner of taking on the entire responsibility of a case. He advocates the importance to the doctor in attendance of getting the advice of at least one, but preferably two experts. Perhaps we might almost call Dr. Hall the earliest protagonist of "team work" in medicine. In the sixteenth century we must remember medical education was of the scantiest nature, and what knowledge a man had was almost entirely derived from books, and not from hospital experience. Hence the opinion of those who had had experience in the actual practice of medicine or surgery must have proved of the ut-
most value to the youthful practitioner.

Then again, Dr Hall emphasises the immense advantage of "Experience" and affirms that a man is not really learned who has derived his knowledge merely from the published works of others. He says that experience is the best instructor, and advises that this must be gained before a man can be considered a good physician.

Dr. Hall was an excursive writer, and his works appeared in the following order:

(1) "Certayne Chapters taken oute of the Proverbes of Solomon, with other Chapters of the Holy Scripture, and certayne Psalmes of David, translated into English metre." London, Thomas Raynalde. 8vo. 1549.

(2) "A Poesie in Forme of a Vision, briefly inveying againste the moste hatefull and prodigious Artes of Necromancie Witchcraft, Sorcerie, Incantations, and divers others detestable and devilishe practices dayly used under colour of Judicia Astrologie." London. 1563.

(3) "The Courte of Vertu, contaynyng many Holy and Spretuall Songes, Sonettes, Psalmes, Ballettes and Shorte Sentences, as well of Holy Scripture, as others; with musical Notes." London, Thomas Marshe. 16mo. 1565.

As an example of Hall's poetry, I append a few selections from a long poem entitled, "A Sonnet inveyinge agaynst the abuses and pryde that reygneth among vayne women." He describes their vaynness in dress, "theyr gyrdles of golde, theyr gay stomachers, theyr hookes and hedbandes wherein they delight, theyr spangs and theyr chaines, theyr smockes and theyr kerchers."
"When I was a boy, I nowe wel remember,
(Though at that tyme of age were but tender),
That women theyr breastes dyd show and lay out,
And wel ye mayd whose dunges then were atoute.

Which usance at fyrst came up in the stues,
Which mens wyves and daughters after dyd use.
The preachers at that, then gan out to crye,
And honest men dyd it lothe and defy.

Wherfore they left of that foule synful gayse,
But streight thei laid down their hear to theyr eies.

Eche lasse lyke a lady is clothed in sylke,
That dayly doth go to market with mylke.

My prayer therfore shalbe day and nyght,
That eche parte may mende and walke here aright,
That I may report the maydes of my countre,
Thankes be to God have lerned honestye,
Whyche God graunt me grace, to see in my tyme,
Thus make I an ende, of thys symple ryme."

Hall made many translations, not all of which were published. Mr. D'Arcy Power (Proceedings of the Royal Society of Medicine 1918 has given us the substance in abstracts which he has made from Benedictus Victorius (1481-1561), professor of Medicine at Padua, and then at Bologna, as well as of abstracts from Nicholas Massa, who as Professor of Anatomia at Padua and Venice and who died in 1569.
The best known of Hall's translations is—

(4) "Mediolanensis. A moste excellent and learned woorke of Chirurgie called Chirurgia Parva Lanfranci, Lanfranke of Mylane his breife, reduced from divers translations to oure vulgar or usual frase, and nowe fyrstvpublyshed in the Englyshe prynte by John Halle, Chirurgien. 1564.

(5) In the succeeding year he added to this work. "A very fruteful and necessary breife Worke of Anatomy."

(6) To the historian of Medicine however, the best remembered of his works is

"A Historiall Expostulation; against the beastlye Abusers, both of Chirurgerie, and Physyke in our e tyme, with a good-lye Doctryne and Instruction, necessarye to be marked and followed, by all true Chyrurgiens, gathered by John Halle, Chyrurgyen." London. 1565.

As frontispiece there is a portrait of the author at the age of 35. If this were his real age, he must have been prematurely aged for the picture shows him as an old bearded man closely resembling the well-known portrait of John Knox. His poetic temperament bursts forth at once in the following verses:

"Let Idiotes and bettes blynde

Therfore lay me aparte;

Lest contrarie myne authors mynde,

They rudly me pervert.

For as the bee doth honie take,

From every goodly flowre,

And spyders of the same doe make

Venim that wyll devoure."
Wherefore all those that use me right
I shall increase their fame,
And vyle abusers all my mighte
Shall be to doe them shame."

"For as much as in the Epistle and Prefaces, I have declared the
dishonour that the noble arte of medicyne susteyneth, by deceavyng Fugitives, and ither false abusers; I thinke it good here to blasen
the dedes of some in this cure tyme, that it maye apere, that not
withoute a sufficiente cause, I have so there of them complayned.

First there came into the towns of Maydstone, in the yere of ou
Lorde, 1555, a woman whiche named hirselfe Jone, havyng with hir a wal
kyn mate, whome shee called her husbande. This wicked beast toke hir
Inne at the sygne of the Bell, in the towns aforesayde. Where shee
causeth within short space to be publyshed, that shee coulde heale all
maner, bothe inward and outward diseases. One pouder shee caried in a
blader, made of the herbe Daphnoydes, and Anise sede together, whiche
shee (as an onely sufficient remedie for all grefes) administered
unto all hir folishe patientes, in lyke quantitie to all people,
neyther regardyng tyme, strengthe, nor age. All the tyme of hir being
there (whiche was about iii wekes) there resorted to hir company
divers Ruffians, and vacaboundes, under pretence of being diseased &
seyng to her for remedye; so that her false profession, was unto
their wicked behavioure, for the tyme in that towns was a safe sup-
portation.

This beastlie deceaver, amonge manie others tooke in had an
honest mas child, who had a suppurat tumor in his navell, percyng
dangerouslye the panicles of the belye; to wholme she administered
the sayde pouder in great quantitye, in so muche, that the childe dyd
vomyte continually for the space of halfe a daye and more, withoute
ceassynge; whereby the sayde aposteme brake.

The parentes of the chylde then feared muche, by the grevousnesse of the syghte, that his stomache woulde brake; whiche may be thought that in very dede it so dyd. For in processe of tyme, ther issued out by the orifice of ye same, vii wormes at vii severall tymes (suche as children are wont to avoyde; ether upwarde or downwarde, from the stomache or guttes called Teretes i. Rotundi) with also a certayne yelowe substance not stynkyng, suche as we sometyme fynde, in the stomaches of dead men, when we open them.

This fearfull syght I saye, caused the onildes parentes to sende for me, to knowe therein myne opinion and counsell; unto whom I prognosticated (as I saw good cause) that the mater was very dangerous and not lyke to be cured. But this beastly forme of a woman, hearynge me to saye; answered that she douted therein no danger, and farthermore offered hirselfe to be locked up in a chamber with the chylde, and that yf she healed hym not, shee myghte be punished, with a great deal more circumstance of prating and deeytfull braggynge wordes. Unto whose moste wicked and divyse boldnes, I thus answered. Wher as you saye that ye doubtte not any daunger in this chylde, I verye well beleue you, for ignorante fooles can doubte no perils, and who is bolder than blynde bayerd; howe shoulde they doubte that knowe not what a doubtte meaneth. Notwithstandinge this preheminence you you deceavynge rennegates have, ye maye bragge, lye, and face, tyll ye have murdered or destroyed suche as credyte you, and then are ye gone, ye shewe your heles, and that is onely your defence. But honest menne of arte muste have truthe for theyr defence, and experience of theyr true works, and maye promise no more than they maye performe.
What should I amke manye wordes, the parentes of the childe all to late discharged this deceaver. And the child notwithstanding the counsell had of divers learned men, dyed afterwarde of the sayde grefe. But the sayde deceaver accordyng to my Prophecie, after iii dayes ran away, she and her walkyng mate, robbynge their hoste where they laye, of the shetes, pillow beres and blankets that they laye in And by their entysement of one of the mayd servauntes of their sayd hoste; They hadde muscadell served them in steade of bere, whyle they laye there for the moste parte; whiche entyced servaunt ranne awaye also with them, and could not synce be herde of.

Secondly in the yere of our Lorde, 1556, there resorted unto Maydestone one Robert Paris professyng and pretendyng an hygne knowledge in Physike; under cloke wher of he deceaved merveylousli with vyle Sorcerie. This deceaver could tel (as the folish people reported of him) by onely lokyng in ones face, alll secrete markes and scarres of the bodie and what they had done, and what had dechauced unto them all their lyfe tyme before. Wherwith he had so incens ed theee fonde and waveryng myndes of some, that pitye was to here. Amonge whome one woman (who for hir yeres and professio, ought to have bene more discrete). When I reasoned with hir agaynste his doynges; she ernestlie affirmed, that she knewe wel that he was then distant from hir, at the leaste vii myles, and yet she verelye beleve that he knew what she then sayde. O great beastlynes and infydelitie specially in suche as have borne a face to favour the wordes of God.

Well for tellyng a lyttell agaynste the madnes of thys deceaver I hadde a dagger drawne at me not longe after the wordes that I spake were to his hostes, when I saw hym goe by, to this wyse. Is this
(quod I- the cunning soothsayer, that is sayde to lye at your house?  
Soothsayer quod she; I knowe ni suche thyng by him, therfore ye are to blame so to name him. Why quod I, suche men and suche enformed me that he can tell of thynges loste, and help children and cattell bewitched and forspoken, and can tell by lokynge in ones face, what markes he hath on his bodie, and where, and tell them what they have done and their fortune to come. Yea and all thyg in dede he can doe quod she. Why then he is a Soothsayer, and a Sorcerer quod I. Well quod she yf he have so mushe cunning in his bellye, he is the happyer, and it is the more joye of hym. Nay, quod I, were mere folyshnes for hym toarrye his cunninge in his bellye; and why quod she, why quod I, thynke you that men of lerning and knowledge cary their cunninge in their bellies: Wher els, quod she, and why not; Nayy quod I, yf he should beare his cunning there, he should alwayes waste it when he went to the private, and so in tyme he should lose all his cunning. 
Thys beyng merlye spoken turned me afterwards not to a litle displeasure, even at their handes, where I had deserved and loked for frendship as of dutie; but I must cease to marveyle any longer at this when almoaste everie suche abominable vylaine is defended upholden, and mayntayned, by suche as of righte, and accordyng to the holesome lawes of this realme, shoulde punishe them for these abusions. Yet surelie the grieffe were the lesse, yf onely the blynde, and superstitious antiquitie, had a regarde and love to suche deceavers. But nowe a greate number that have borne an outwarde shewe of great holynes, and love to Gods holie worde: We see them seke dayly, to suche divelishe Wych es and Sorcerers, yf their fynger doe but ake, as though they were Goddes, and coulde presentlye helpe them with worde although thet knowe that God in his Israel, hath called them an
abominacion, and hath farther commanded, that none suche should be suffered among them to lyve.

Thyrdlie in the year of our Lorde a thousand fuye hundred lyftic and eyght, there came to Maydstone one Thomas Lufkyn, by occupation a Fuller and bucler of vlothe and had been brought up (by reporte of divers honest men) at the fullyng nylles there besyde the towne, nevertheles he had been longe absent from thate countrie, in whiche become tyme he had by rovin abroade a Physicien, a Chirurgien, an Astronomie a Palmister, a phistognomier, a sothsayer, a fortune devyner, and I can not tell what. This deceaver was the beastliest beguiler by his sorcerys that ever I herd of, making Physike the onely colour, to cover all his crafty thefte and mischieves, for he sette uppe a byll at his fyrste commyng, to publysh his beyng there, the tenour wherof was in effect as f overturneth: Inviting any man, woman or childe who had any manner of illnes whatever let them resorte them to the Signe of the Saracens Head in the Easte Lane and brynge theire waters with them to be sene and they shal have remedie." Unto this Devil incarnate resorted all sorte of wayne and undiscree persons as it were to a God, and women to knowe how manie husbandes and children they would have. Unto some he prophesied deth within a moneth, who thankes be to God are yet lyvyng. All this he boasted he could do by Astronomie. But when he was talked to by one who had but a yonge and Smal skylle in that Arte, he coulde make no directe answere no no more than puppe my dogge.

In 1560 one Valentine came professing to tell the present, past and future to all people by merely looking at their faces, but even as the Ape tourneth his fylthy parts to every mannes syght.
He pretended to aske answeres from the Devil by mumbling in a corner. Yea suche a wonderfull sayme and brute wente abroade of his doyinge that some of the verie worshipfulles of these partes were stricken with admiracion and desyre to seke to hym to knowe manie good morowes. Wherof also he woulde not aski; a lyttle bragge and boaste. But as tyme revealeth a;; thynges so this devylsh beaste was knowne in his righte kynde and name and that he had iii wyves lyving at that present. The second left hym and maried after with a preste. The thirde whiche he at that present had was a riche widowe. He had spent all her substance by riotous fare. For he was reported to fare at his mable lyke a Lorde and was served as fynelye as a Prynce. He spent in his house weekly five pound in meate and drynke with such resorte and banketynges as it was a wonder to see.

But especially was he cunnyng to inchaunte women to love. He guiled a yong woman and got her to lyve with hym and then speakyng so fairly he came with her and resided at her Mother's house. A warrant for his arrest was issued but he fled and coulde not be taken. He was so ignorant that he knew not a letter but yet got the people to beleve that he knew latin, greke and Hebrew.

In 1562 came William a shoemaker pretending to be able to cure eye diseases, but I put questiones to hym and found that he knew nothyng about the Anatomie of the eye. He sayed that he could cure all diseases of the eye all the same. At length he became verie angrie and flinge out of the doores in a greate fume and could not be caused to tary and drynke by any intrety.

If I were to reherse all the other men and women who came to the sayde place, it weare to tedious, yea it would abhorre any honest
In the same yeare came a woman, a ministers wife (but I thynke she falsely lyed) but being called before the officers for her credentials she sayed she had none, but had never bene so treated before. She was expelled the towne.

Not long after came thither a makeshifte with 2 men wayghtyng on hym, as verie rakebelles as hymselfe bragging that he was a profound Phisicien. Being examined he sayed they were all of one krewe and had done thys to get monie, and so were they expelled the towns, or rather they shifted sodainly away, for feare of punyshement whiche if they had tarried, they cou;ld not have escaped so good then was the mynde of the officers for that yeare. And nowe one historie of the tyme present, to knitte up this my tale of vagabondes and renegates moste hurtfull.

One Robert Nicols of the profession of vagabondes killed a poor widow on 26 Sept. 1564 of the village of Linton 3 myles from Maydstone by pouring into her a purgation; whiche within three or foure hours purged the lyfe out of hir bodie; so violent was this mortal potion. The woma being before in perfecte health, to all mens judgementes; being onely by simplicitie persuaded to take the same, by the deceivable perswasions of this Nicols, who had by compositio xx shillinges for the said drynke.

For this murderous facte he was apprehended and imprisoned in the Castle of Maydstone. On being questioned why he gave her the purgation. He answered that he knewe by hir complexion that hir lyver and hyr lunges weare rotten, and therfore he tould hir so. One asked hym, I praye thee what complexion am I of; He answered
you are sanguin. Then was it asked hym, whether it weare proper to a
sanguyne man, to have blake heare, as that partye hadde on his beard
To this he answered, O ye wyll saye ye are more a the Choler. Then t
the partye gave hym hyshande to feelle, whiche was commonly colde,
Saiynge; is a Cholericke man wonete to be so colde: Whiche when he h
has felte, he sayed; O then ye woulde be at the fleme..... Beyng
questioned about medicines; he sayde as stoutely, as obstinatly, that
he knewea as many as y partie that reproved hym....... Then was he
againe reproved, for his beastlie braggyng.

He was asked the nature of Peper. He saide it was hotte in the
fyreste degree and colde in the seconde. Why then, sayde the demaundy-
ant, what saye you of the Nature of an oyster. And he (answerynge as
before of the temperamente) sayde colde in the fyreste degree and
botte in the thyrde. Then was it saydeto the standers by, here you
maye see his beastlie ignorance, did ye ever heare that two contraries
coulde dwelle together and agree in one sibiecte. He was asked what
the spleen was, and he sayde it was a disease in the syde baked hard
lyke a biskete. Muche more coulde I write of his beastlie answeres
if I thought thys not enough, yea to muche.

A certaine patient of myne (havyng lately been cured at my hand
metynge with this Nicols reasoned with hym of a payne that he had in
his hyppe, " I trow", quod he, "ye cal it a Sciatica, doe ye not ?
"Yea ", sayde Nicols, "there is a Siactica and a Sciitica." Then began
Nicls to praise a naybor of myne, saiying that he was Cunynger
than I. But my patient praised me, "Yes", sayde Nicols, "in talke." 
He also went on to saythat he had seen his masterclose a mans head
that had bene cleft down to the necke and said that he was after-
wards healed and did lyve."
Hall goes on to speak of others who worked "by dyvelyshe spirites and of a Joyner in London, a Frenchman borne who is of late become a Phisitien, who is esteemed to be verie lerned and cunning, but an honest woman who had knowne hym previously met hym, He wronge hyr harde by the hande and rounded hyr in the eare, saying, "I thou be an honest woman, kepe thy tongue in thy hedde and saye nothyng of me."

Well sure if there were good orders in all places, and the holesome lawes of this realme well executed, there coulde nonsuche deceive with theyr runnyng about and krepyng into corners unsuspected and examined. I trust one day yet to see it better looked on and in the meane season let a greate many abusers repent and leave theyr wickednes. Otherwyse I wil no more stay to publysh them with theyr wicked doinges and knavery knackes than I have done to set forth these.

It shall behove everie good Chirurgien thersore to place hym selfe in some good towne, or famous citie, and surelye the people wyl resorte unto hym and send for hym at theyr nede, to hys sufficient profit and lyvyng; neither wyl anye good man despayre of thys.

Not withsatndyng, I am not ignorant, that constant dwellers may be also deceavyng abusers; so long as ther is no punyshment, nor execution of lawes to the contrarie, as for example.

One named Kiterell, dwelleth in Kente at a parysh called Bedesden; that hath bene all hys lyfe a sawyer of tymbre and borde, a man verie symple, and altogether unlearned; Who at thys present is become a Phisitien, or rather a detestable deceavyng sorcerer. He wyll geve judgement on urines, and whyles that he loketh on the water he wyll grope and fele him selfe all about; and otherwyse, where as
he feleth, he wyll thynke, as though he were pricked, or felte some great Payne. Then he tourneth to the Messenger, and telleth hym where & in what sorte the partie is greved, whiche maketh the people thynk him terie sunnyng. They seke to hym farre and neere for remedy, for suche as are bewyched or inchanted; and as they comonly treme it, forspoken. What stuffe this is, let the wyse and learned judge. And he hath so prospered with these doynges, that in shorte space he has bene able, bothe to purchase and buylde. For there are manie t that reporte (and they no smal fooles) that he hath cured suche as al the learned Phisitiens in England could doe no good unto. beleve it who wyll.

Dr. Hall seems to have believed in the power of Incantation and Witchcraft, and as Physic and Surgery know not the cause of diseases produced by "divilyshe and wicked sciences; they are not able to effect any cures." But only by helpe of some of these sciences moiste detestable must the same be taken away againe." He then goes on to recite the history of a case narrated by the learned Cardanus of "a great Philosopher of our tyme, of Mylayne." It was that of a lady who evidently suffered from some form of cystitis. The medical men and surgeons not only of Milan but of other cities also were apparently unable to arrive at a diagnosis, "some esteemed it a stone, one called it Erysipelas, another an Ulcer, another named it an harde tumor, called Scirrhus, other sayde it was a Cancer, some affirmed that it was an Aposteme & some that it was certayne vessikes or blisters but remedie there coulde none be founde. . . . Thus beyng tormented by this maladie, seven whole monethes without remedie, she was of the Physitiens forsaken, and in utter despeyr of helth. And certainly
shedid not feigne hir grefe consyderying that she had drunke so many bitter medicines, suffered so many fomentations, permyttying also that secrete place to be scene of so greata nubre of Physiciens, beholding it by a glasse and using burnyng medicines as well as iron instrumentes and fyre. But mowe there stepped forth to nyr helpe, one Josephus Niger, who was suspected to be an inchanter or worker in the wicked sciences. This man broughte with hym a glasse of Cristall in forme of a triangle, wherin he caused the womans child to looke who said that therin he sawe three foule & ougly spirites, standing on their feete before nys mother. Then he saw a horseman came who bounde these spirites and carried them of under nys saddel. (From that moment the woman began to amend and made a perfect recovery)

And nowe it must folbwe that thys woman was healed by a spirite, or by imaginacion or by hope, but Cardanus sayes, that it is lyke to be true that she was healed of a spirite.

In order to get rid of all such vile Abusers and Inchanters, Dr. Hall then proceeds to set down certain rules of conduct for both physicians and surgeons, not only towards their patients, but also towards one another. In this way they will attract patients to themselves, and in this way people will not have recourse to these charlatans.

"I have thought good to gather the counsels, and good documents of divers good and veteinate authores and have formed the same into English verses, or metre and here to place the same, for the better instruction of all yonge chirurgiens; that it may as well be easy to learne, as apte to be kepte in memorie, of all wyllynge learners."
Marke and drawe nere ye younge studentes,
Your eares loke ye unclose:
The worthye arte of Chirurgery,
To practise that purpose.

And marke what the greate masters saye,
That here before have wroughte:
And did to theyr disciples leave,
In wrytinge what they taughte.

And to their scolers did describe,
A briefe methode or waye:
Commaunginge them the same to marke,
On thy wyse gan they saye.

When thou arte callde at anye tyme,
A patient to see:
And doste perceave the cure to greate,
And ponderous for thee.

See that thou laye disdesyne aside,
And pride of thine owne skyll:
And thinke no shame counsell to take,
But rather with goode wyll.

Gette one or two of experte men,
To helpe thee in that neede:
And make them partakers wyth thee,
In that worke to procede.

For in so doinge thine honestye,
Thou shalte well kape and save:
Also thy patiengt therby,
Righte greate conforte shall have.
By thys meanes thou mayste haplye learne,
ryghte seldome sene before,
Of thee, or hym whyche fyrste thee taughte:
Thoughe thou have cunnynge store.

And also if oughte goe awrye,
Or hinder in thy cure:
The one maye mende the others faulte,
while frendship dothe endure.

The wounded or sore man also,
Shall have no cause to grudge;
In you suche uniformitye,
while he maye see and judge.

And farthermore thou haste thy parte,
Bothe of profyt and fame:
when that your worke bothe good successe,
And luckilye dothe frame.

And if it happe to frame amisse,
Suspicion can be none;
Sythe thou haste saughte all meanes of healthe,
And wouldst not be alone.

So eche man shall with other beare,
The juste cause to defende;
All wyse and learned men also,
Shall thee prayse and commende.

For all that be discrete doubtlesse,
wyll judge thee to be wyse;
In that thou doest desyre to learne,
And augmente thy practise.

And wylte not that through negligence,
And pride of thine owne waye;
Thy pacient in paine shoulde spill,
To perashe and dekaye.

Thybpurpose thus thou shalt atteigne,
with ease and honesty;
where otherwyse it myte thee brynge,
Shame and ignominye.

And farther if thou waye it righte,
It is easie to gessse;
That better two, than one alone,
All errours maye redress.

For as all men that here doe live,
Borne in thys wretched vale,
Are fraughted full of errores greate,
Oure boote mixed wyth bale.

From whyche the prudent Salomen,
was never voide and free;
As of hymselfe he wryteth playne,
who so will reade maye see.

So if thou in Chirurgerye
Alone wylte and wade;
Thyne errores wyll thy worke confounde,
And all thine honours quade.

Sithe Bernarde knewe not all hymselfe,
Thinke never in thy minde;
But that at laste by painfull profe,
Thou shalt thine errores fynde.

For errores not staide at the fyrste,
But suffred to procede;
To mischiefes greate as Plato sayth,
will growe in every dede.

But the beginninge if thou stoppe,
By good counsell and pure;
All doubtfull thynges thou shalt prevent,
And harde diseases cure.

For all to late comes remedye,
when throughghe thy negligence;
The griefe is growne paste aide and cure,
And all experience.

But one thynge note, when two or moe
Together joyned be;
Aboute the paynfull patient,
See that ye doe agree.

See that no discorde doe arise,
Nor be at no debate;
For that shall sore discomforte hym,
That is in sycke estate.

And when alone wyth your foreman,
One of ypu is present;
Defame nor dispraise in no wyse,
The same that is absente.

For noughte can more discomforte hym,
That lyes in griefe and payne;
Then heare that one of you dothe beare,
To other suche disdeine.

wherefore what so ye have to saye,
in thinges aboute your arte l
Let it be done among your selves,
In secrete and aparne.

wyth one consent uniformlye,
Comorte the wounded man;
But unto s-me good frende of hys,
Express all that ye can;
And let them knowe the daunger greate, 
That ky kyke is to succede ;
Prognosticatinge wittilye,
And in convenient speede.

wherfore eche one of you shall take,
at other his counsell ;
Hove that in moste convenient wyse,
Ye maye the griefe expell.

And so that one in anye wyse,
From other nothyng hide ;
But by all meanes consulte, and for
The sicke mannes healthe provide.

For in that nede if any doe,
His counsell kepe a loofe ;
And so the wounded man decaye,
It shall be hys reproofe.

See that for goulde or covetise,
Ye take no thynge in hande ;
whiche incurable for to be,
Ye doe well understand.

Or oughte unlesse to cure the same,
Thou hast some perfectegrounde ;
For if thou doe, it wyll thy fame
In utter shame confounde.

Looke of thyselfe in anye wyse,
Thou make no prayse nor boste ;
For that shall turne to thy dispayse,
when thou doest use it moste.

See thou dispayse none other man,
His erreoure thoughe thou knowe ;
For sure an other for thy plage,
Shall thee lyke curtsye shewe.

Commende the dedes of eche good man,
The best loke that thou saye ;
So shall good fame redounde to thee,
From all men day by daye.

Not onely in Chirurgery,
Thou oughtest to be experthe ;
But also in Astronomye,
Bothe prevye and aperte.

In natur all Philosophys,
Thy studye shoule be bente ;
To knowe eche herbe, shrubbe, roote and tree,
Muste be thy good intente;
Eche beaste and foule, wyth worme and fyssh, 
And all that beareth lyfe ;
Their vertues and their natures bothe, with thee oughte to be rife.

But chieflye the Anatomye,
Ye oughte to understande;
If ye will cure well anye thinge,
That ye doe take in hande.

For by the same above the rest,
Ye shall greate fame deserve;
The lyfe of man from manye streightes,
To save and well preserve.

withoute the knowledge of whyche arte,
Thou canst not chuse but erre;
As if ye cutte or cauterize,
Or use Phlebotomye;
Ye can not but erre in the same,
withoute Anatomye.

He is no true Chirurgien,
That can not showe by arte;
The nature of everye member,
Eche from other aprte.

For in that noble hantye worke,
There dothe nothinge excell;
The knowledge of Anatomye,
If it be learned well.

Endevoure therfore by all meanes,
The same to knowe and cunne,
For when thou haste it perfectlye,
Thine arte is hallye wonne.

For therby shalt thou understande,
Of eche member in dede,
Their nature and their offices,
And howe they doe procede.

And unto what good use they serve,
As well the leaste as moste,
And by their hurte Prognosticate,
what action will be loste.

wherby of knowledge and greate skill,
Thou shalt obteine the brute,
And men to thee in generall,
For helpe shall make their sute.

wherfore all honour, laude and praise,
To God ascribed be,
The Father, Sonne, and holye Ghoste,
One God and personnes three.
Reverting to prose, Dr. Hall remarks that one might be far removed from expert advice and that one's neighbour might be a newly fledged and bragging 'boye' who had but lately come out of his prentishode'. In such a case Dr. Hall advises that one should pray to God for help, and for that purpose he gives his readers two or three specimen prayers. "For if God be on thy syde, fear not who so ever be agaynst thee... and so shalte thou bee the better able diselye to walke alone, where the nedeful society of counsell doth ynte."

Hall would have no man think that he is learned unless he has had experience also, for though book-learning is good it is useless without experience. He counsels the practitioner to avoid envy and wicked wrath against a brother practitioner who has had better success than oneself, and that one should rather place himself in the fear and service of God in order to learn to do better and to exceed others. "Let no slouthe cause thee to neglecte thy sentences wherof thou hast take charge, lest through thy negligence they perish, and their bloud call for vengeance on thee at the handes of God."

"Lastlye and above all these, beware of drunkennesse, a vice that was never more used, then it is of manye at thyse tyme...... set vertue therefore I saye be thy guide: let her be bothe thy rule and compass, wherby to frame all thy doinges. Moreover be not ingrate and unthankeful unto God when he sendeth good successse to thy business, good lucke to thy handes, and graunteth thee thy heartes desyre. For unthankefulnesse many times is the cause that our prayers are not heared."
John Hall (secundus)

1600.
A little more is known about the second John Hall, and a kind of glory is reflected on him because of his relationship to Shakespeare. He was born in 1575 and lived for practically the whole of his life in Stratford-on-Avon. He was a well educated and travelled man, but it is not known at what university he received either his Arts or Medical training. In 1607 he married Susanna, the eldest daughter of Shakespeare, and began to practise in Stratford-on-Avon. Either from this connection or from his own ability, he soon became a popular practitioner, and had many titled people as his patients. In 1597 the poet had bought a large house called New Place in which to dwell, and at his death in 1616 this passed to his daughter, Susanna, who with her husband took up residence there the following year. Both of them were executors as well as residuary legatees of Shakespeare whose books and MSS passed into their keeping. It is a fact ever to be deplored that Dr. Hall did not make a better use of them for at his death in 1635 he left his 'study of books' together with the poet's MSS to his son-in-law, Thomas Nash, with the instruction that he was to do with them what he wished, burn or destroy them. As we know nothing of these now, it is most probable that they were actually destroyed—priceless material perhaps. In 1617 Hall was elected a Burgess of the town, and again in 1623. On account of his occupation requiring his personal attention, he was so often absent from meetings of the Council that on one occasion he was fined for non-attendance. Evidently he must have been very difficult to get on with, and there are records of frequent disputes with his fellow-councillors. Finally he was expelled from the Council because of hi
The committal of "breaches of orders, sundry misdemeanors and continual disturbances." This was after the Vicar of the parish and Hall had brought an action against the Council. As is not infrequent in similar cases, Hall was a deeply religious man, and seems to have been devoted to his church, for we find him occupying the successive appointments of borough churchwarden, sidesman, and Vicar's churchwarden, and presenting to the church a handsome pulpit. It was in the chancel of this parish church that he was buried on 25th, November 1635. The inscription on his tomb is as follows:—

Heere lyeth Ye body of John Hall
gent: he marr: Susanna, Ye dagh
	ter & co-heirecof will; Shakespeare, gent. Hee
deceased Nover. 25, A.D. 1635, Aged 60.

Hallius hic situs est medica celeberrimus arte:
Expectans regni gaudia laeta Dei:
Dignus erat meritis, qui nestora vinceret annis:
In terris omnès, sed rapit aequa dies.
Ne tumulo, quid desit adest fidesima conjux,
Et vitae comitem nunc quoq. mortis habet.

The inscription on his wife's tomb is:—

Heere lyeth Ye body of Susanna, wife to John Hall, gent. Ye
daughter of William Shakespeare, gent. Shee deceased Ye 11th
day of July A.D. 1649, aged 66.
Witty above her sexe, but that's not all,
Wise to Salvation was good Mistress Hall,
Something of Shakespeare was in that, but this
Wholly of him, with whom she's now in blisse.

Then Passenger, ha'st ne're a teare
To weep with her that wept with all.

That wept, yet set herself to cheer
Them up with comforts cordiall.

Her love shall live, her mercy spread,
When thou ha'st ne're a teare to shed.

Dr. Hall does not seem to have published anything during his life but he left several manuscripts. It was only in 1643 that these were gone over by Dr. James Cooke, who was serving with the Parliamentary Army in the neighbourhood. Things went slowly in these troublous times, and it was not until fourteen years had elapsed that Dr. Cooke had finished his translation and had published Dr. Hall's work under the title of: -
Select Observations on English Bodies and Cures both Empiricall and Historicall performed upon very eminent persons in desperate Diseases, first written in Latin by Mr. John Hall, Physician, living in Stratford-on-Avon in Warwickshire, where he was very famous, as also in the Counties adjacent, as appears by these Observations drawn out of several hundred of his as choysest, and now put into English for common benefit by James Cooke, practitioner in Physick and Chirurger London. 12mo. 1657.

In 1679 a second edition appeared, but to which "is now added an hundred like counsels and advices for several honourable persons. In 1683 this was re-issued with a new title-page.

In the Preface the author hopes that what is now made publick can be no wrong to any of those Physicians, having for their pains, Prescriptions and Directions, received generous pay and noble entertainment." In the Second Edition, the Dedication made by James Cooke, senior, at Warwick on 25th March 1679, is addressed to the Rt. Honourable Fulk, Lord Brook, Baron Brook of Beauchamp Court, in the following words; "The Right Honourable, your Father, was pleased to show me greater Favour than I do pretend to Deserve. Your Right Honourable Mother was seldom ill at home or abroad without commanding my attendance. The same have the Right Honourable your Brother and your Lordship done. By whom scarce anything was taken without my thoughts, from the most eminent Physicians, till they became acquainted with their bodies."

The work is interesting to us as showing that the elementary rule of medical secrecy was non-existent in Hall's time. He describes minutely the diseases from which his patients suffered along
with records of the medicines given and the results attained.

For example: - The Countess of Northampton, aged 44, on 6th March 1622, fell into a swoon, and remained so for half an hour. This occurred in Ludlow Castle. I cured her perfectly by God's assistance, by giving her medicines which purged her 5 or 6 times each day. He then goes on to give details of the drugs which he employed.

William, Earl of Northampton, labouring of the heat of his urine 4th April 1622, was cured by taking cassia, turpentine, rhubarb, etc.

Mr. Wilson, Minister of Stratford-on-Avon, aged 40, being grievously vexed with Rheum in his eyes, was cured by the application of plasters to forehead, temples, and behind the ears, while upon the eyes were applied whites of eggs well beaten with rose water and Woman's milk. By these remedies he was cured, blessed be God.

John Emes of Alcester, aged 15, was cured of pissing in bed by taking the windpipe of a Cock dried and made into powder with Crocus Mastis given in a rear egg every morning.

Mary Wilson, aged 20, afflicted with a Hectic Fever, Cough, Obstructions of her Courses and Weakness, was cured by feeding her with well-fed Poultry, frogs, Snails and River crabs, by using Clysters made of Chicken broth, poppy seed, violets, mallows, etc. She sucked Woman's milk also. A year after this, she died.

Captain Basset, aged 50, was afflicted with Hypochondriak Melancholy. Dr. Hall then gives an enormous list of drugs which he had administered to the unfortunate man, and remarks that, at the end of the cure," he thanked me."

Elizabeth Hall, my daughter, (only) was vexed with Tortura or Convulsion of the Mouth. Purges and rye waters were given ad lib
Thus was she delivered from Death and deadly diseases and was well for many years. To God be praise.

Talbot, the First born of the Countess of Salisbury, aged about one year, being miserably afflicted with a Fever and Worms, so that Death was only expected, was cured by giving him a Clyster of Milk and Sugar. Burnt Harts Horn was given by the mouth and to the Pulse was applied Ung. Populeon mix't with Spiders Webs and Powder of Nutshells. To the Navel was applied the Emplaster against Worms, and thus he became well in three days, for which the Countess returned me many thanks and gave me a great reward.

Mrs. Harvey, now Lady, very religious, five weeks after childbirth, suffered from Flux of Whites was cured only by eating dates. This stayed the Whites and made her fat.

One Hudson, a poor man, suffered from Vertigo. He was bled and purged. Lastly he took 3i Peacock’s dung dried from New Moon to Full Moon every night and was cured.

Dixwel Brunt of Fillerton aged 3 years had a Tumor of the Navel out of which broke five long worms out of a little hole like a Fistula; the Nurse pulled out four dead, but the fifth was somewhat alive.

Esq. Packington as he was riding to London, in his Inne was suddenly and miserably afflicted with the Gout in hands and feet so that he could neither stand nor handle anything. I cured him by applying Mallow Roots and Rye bran. This eased him in one day and he was delivered from the Inflammation by fomenting the parts with water of the Spawn of Frogs. He was restored the third day and rid towards London.

The Countess of Northampton
Dropsy, called Anasarca, and was cured by taking a decoction of many herbs, e.g., fennel, hysop, pennyroyal, rhubarb, etc. The first day it gave her 8 stools, the 2nd. day 18 stools, the third, 15 stools without any loss of strength. Later she took an Electuary. It gave first two stools, after that two vomits; after that 3 stools and one vomit. At last 12 stools, after which the Tumor was altogether removed. She was brought to a good colour in twenty days space.

The Lady Jenkinson, fair, pious and chaste, was cured of pains in head and scurvy.

Mrs. Richardson (a Roman Catholic) was troubled with Wind in the Womb, so that when she went to make water, the Wombe sent for the Wind as if she had broke wind backward. She had also scurvy.

On reading these records one is struck by the constant repetition of "scurvy" and "Worms". Dr. Hall made constant use of Scurvy-grass and anti-scorbutic beer. Our predecessors while they undoubtedly ate very large quantities of food, did not seem to appreciate the necessity for a properly balanced diet.

Observation LX is of a personal character, and is as follows.

"Thou, O Lord, which hast the power of Life and Death, and drawest from the Gates of Death, I confess without any Act or Counsel of Man but only from Thy Goodness and Clemency, Thou hast saved me from the bitter and deadly symptoms of a deadly Fever, beyond the Expectation of all about me, restoring me, as it were from the very Jaws of Death to former health, for which I praise The Name. O most merciful God praying Thee to give me a most thankful heart for this great favour I was in the 57th year of my age, August 27, 1632, suffering from haemorrhoids. I fell into a deadly fever which then raged very much killing almost all that it did infect. I also had convulsion of the
Mouth and eyes. Then was a Pigeon cut open alive and applied to my feet, to draw down the Vapours for I was often afflicted with a high delirium. Later I was afflicted with an Itch in the Scrotum, which was cured with our Decoction of Sarsa, so I became perfectly well, praised be God.

The translator, James Cooke, in the Second Edition, 1679, added An hundred like counsels and advices for several Honourable by the same Author. These contain prescriptions for the King's Evil, Palsey, Ulcer of the Bladder, Immoderate Courses, Smallpox, Stone, Miscarriage, etc. Thus let us take as an example, the case of a woman who had "a grievous pain in the whole right arm". She was cured by taking a mixture of Oil of Earthworms, Fat of a Man, Dog and Badger, aa 3 ii and used hot.

I confess that I am disappointed that James Cooke, who seems to have been a man of some learning, should have thought so little of his profession as to have included in his translation:

"Ars Cosmetica" or Collections from persons of great quality, being Choice Receipts for the Beautifying of the Face and Body," by Dr. Stubbs. Here we find "Receipts of a Maid of the Dutchess of Orleans, and after a Gentleman to an Honourable Lady in this Nation; she was eminent for Cosmetics and these were particularly commended to my Esteem by the said Lady." Directions are given under such heads as, "To make Gloves to whiten the Hands;" "Pomatum to make the Hair Grow;" "Water for the Complexion against Sunburn;" "To Dye the Hair Black;" "To make the Teeth White;" etc.

The work ends with "Directions for Drinking the Bath Waters."
William Gratarolus.

1574.
We have to go back to very early days to find who this learned Italian gentleman was, and even when we do, we discover that little more than what he himself tells us in his writings about himself is known. He was born at Bergamo in 1510, and died at Basel (Bale) either in 1562 or 1568. He was a voluminous writer, and in the British Museum Catalogue there are some twenty-four notices of his works. These deal with a great variety of subjects, e.g., Alchemy, the Quintessence of all things, Lignum Vitae, Philosophy, Concerning Memory; The Castel of Memorie, wherein is contained the restoryng, augmentying, and conservying of the Memorye and Remembrance; Englished by W. Fulwood, London 1563.

In 1553 he contributed a long article to the huge octavo volume, "De Balneis." It is addressed to Dr. Conrad Gesner, and is entitled, "De Thermis Rhaeticis et Vallis Trascheirii agri Bergomatis." Gratarolus also wrote works on Defence of the Art of Chemistry; on Meteorology, on Wines, on the Philosopher's Stone, on Plague, on Memory, etc. He was considered an authority not only during his lifetime but for long afterwards.

The treatise by which he is chiefly remembered however passed through many editions in a few years and is entitled:

Ichelum & Petrum Fischerum consortes. 1592.

Then we find Henricus Ranzovius publishing an edition greatly enlarged and altogether much more elaborate than the preceding. It has for title, "Henrici Ranzovii De Conservanda Valetudine Liber, in privatum liberorum suorum usum ab ipso conscriptus, ac editus a Dethlevo Silvio Habsato. In quo de dieta, itinere annis climactericis et antidotis praestantissimis, brevia & utilia præcepta continentur. Tertio editio, auctior & emendator seorsum accessit Guilielmi Crataroli Bergamatis, Medicis praestantissimi. Da litteratorum et eorum qui Magistratum gerunt, conservanda valetudine liber. Frankofurdi Acud Joannem Wechelum & Petrum Fischerum consortes. 1591.

A certain Rector of Little Ilford in Essex made a very literal translation of the original Latin work into English. Towards the end of the book however the translator becomes much more prolix than Gratarolus, and his commendation to the Reader to the Almighty is (as might be expected from a clergyman) much more verbose and comprehensive. The full title of the translation is:

"Direction for the Health of Magistrates and Students. Namely such a case as bee in their consistent age, or near thereunto; Drawn as well out of sundry good and commendable Authors, as also upon reason and faithful experience otherwise certaynely grounded. Written in Latin by Guilielmus Gratarolus and Englished by T.N. (Thomas Newton) Imprinted at London in Fleet -streets by William How for Abraham Nealse. 1574."

It is dedicated to the Right Honorable Maister Francis Walsyngham Esquier, one of the Principal Secretaries to the Queens moste excellent Majestrie and of hir Majesties moste honorable privie Counsell.
In the curinge of the Sick three things onely are to be considered the disease, The Patient, and the Physicion. The Physicion and the disease do mutually oppugne one an other and strive for maistrie. For the Physicions charge and onely care is, and ought to be, to recure his Patient wit Sickness attaynted. The Sickness contrary wise employeth his whole devoir and bendeth all his force to the destruc-
tion, spoyle and ruyne of the bodye whereinto he hath made breache and entraince. Now is the Patient, the Subject and Partie in whom this conflict and combate is darreigned who if for his part, he do wiselye and politike resist the somonce of his enemie Sicknessd, directing the order of his diet and daylie usage by the Dyal of the Physicions learned prescription and counsell, and absteine from thinges hurtfull and inconvenient by practizinge that which is holesome and expedient, he is joyned in commissioun and made (as it were) fellowe in office with thePhysicion agaynst all raging assaultes of Sickness. Whereby they twain being thus firmly confederate and linked together, the disease and Sickness shall be easely driven to a narowe exigent and glad to disclaime his interest, and great hope is to be conceived by the victorie and upperhand:..........

Diet is the safest, the surest and the pleasantest way that can be used and farre to be preferred before all other kindes of remedies. And for that I saw the same in this little pamphlet, so clerkely and compendiously decyphered, I have adventured to devest him of his Latine weede, and after a homely sorte forced into barbarous Englishe, whereby ... to thinke in mee some spice of presumption and foly, for thus inter-
medlyng in an Art nothinge appendant to my profession.
Of Exercise and Labour. Exercise by expelyng superfluous humors excuseth a man from the usual Receipt of Purgations and Medicines. We must be care ful, he says, that we move not the body with medicines because they are very paynefull to be taken inwardly because their Office is contrary to Nature. They draw out not only good and evil humours but also the vitall spirites whiche maintayne and comforte life. Galen playnly writeth that all such of his freendes as take diligent and speciall regarde to exercise were never sicke. He then goes on to show when the best time to take exercise should be chosen, and what is the best kind. Exercise is not to be atken when there is in the Stomake or Bowelles any great quantitie of meate undigested. The meate ought to have been thoroughly byoled and concocted in the stomake first. Furthermore to go to the Stole and exonerate nature before the time of exercise is very holesome. He counsels one to be very careful not to take exercise in the cold, and says that Avicenna recommends us tó take exercise in the house when the weather is cold or in some close covert place about noone, having the ayre a little warmed for feare least coldes els should take away or hinder the commoditie that exercise bryngeth; For nothyng is more hurtful to the vertue Regitive than cold.

Walkynge If it be not fast is a weake exercise and is best used in Autunme. Often and longue walkynge used without intermission is a strongue exercise and meeter too be used in the Springs season. Andtherefore somewhat long deambulacion being pleasant and not wearesome is very meete and apt for this season. A strong and vehement walkynge, especiallie up and downe highe and unequall places, as many tines to goe up and downe a ladder, or a steepe hill, till a man pant and fetche his breath thicke and often with difficultie, is a very good and commendible exercise in cold and moyste seasons.
As for Wrestling and dauncing, which be accompted amonge vehement exercises (because they be nothyng agreeable and fitting for a sage magistrate nor for a serious student) I have nothyng to say. When you begin to sweate and the exercise seemeth not to be so pleasant, cease and leave off, wypying away the sweate from your bodie.

Fricasie and rub binge concocteth crude humours, and also nourisheth the whole bodie. Amonge all the partes of the bodie, the braine is the coldest, and therefore his naturall heate must with all diligent heede be conserved and kept. Therefore everie daye when thou arisest after that thou hast beene at the stoole, rubbe thy heade with a cleane drie linnen cloath somewhat warme. Such persons ought to washe their heds which have a moyst brayne, or suche as love to have their heare grow longe; Avicen affirmeth that it is not good to suffre the heare of the head and beard to grow longe, because they gather and retayne muche grosse filthe and baggage, stoppyng the pores about the rootes, if they be not washed away.

As regards Bathing, he says, "They must use the ayrie Bayne fastyng that are corpulent and grosse or have abundance of concocted superfluous humoures and excrements; but ye watrie better accordeth with them that are slendre.... They that have fat and corpulent bodies or els bees replete with abundance of humours may sone take harme by using disorderlie and unduelie this bayning.... Now as concernynge washing in colde water, I do say that it is utterly to be forborone of all such as are not thereto accustomed. Yea and sometimes it bringeth a man into distemperaunces and passion if it be not verie advisedly used.

Speaking of Meats, he indicates the proper sorts for those that are melancholy, choleric, etc. " We ought to prefer that which
is slippery and moist before that which is stipticke and harde.....

And all men (without exception) do confess and know that the lower part of the stomach or Maw in the act of concoction is stronger than the upper or middle part is. So meates which are easily digested ought to be taken before those which are more difficult, as the power of the lowest part of the ventricle differeth from the first and middle.

As to Bread, Avenzoar saith that it ought to be eaten the same day it is made because when it is old it is harsh and difficult to digest, whereas Avicenna says that it should not be eaten until it has stood a night, and hoate bread he utterlie discommends it.

He advocates the use of Wine freels as an invigorator both of the bodie and the spirit, and remarks "that it is often (because in many things there is much legierdemayne and deceit used) adulterated with honey or water."

As to Flesh, of four-footed Beastes, the youngest are the most wholesome, but of those that be moist, the youngest is the most harmful. Seldom therefore and warelie must hambe be eaten but rather in the Summer and Autumn than at anieother time of the yeare, because drinesse then beareth sway....... Younge Beef bred in by wholesome pasture and well exercised and chased, is in the winter and sprung not to be misliked....... The flesh of the Hare is to be eaten seldom because it makes the blood gross and gives rise to melancholy.

Sparrows are to be avoided chiefly because they "stir up Venus merverlouslie, they are fittest to be left to olde men that have younge wives."

"Whereas there be many sortes of Milke, of all others Womans Milke is the excellentest, because it is very good and
beneficial to mans brayne, for it is thought to increase it merveylouslie, and preserveth agaynst consumption."

The milk of the Goat, Camel and Ass he recommends as being excellent purges. The milk of Kyne should be drunk hot from the Udder.

"The Creame or thicke summitie of Milke, whiche is gathered after the milke hath been sodden and suffred to stande a night, is unwholesome and hurtfull.

Fyshes for the moste parte are not holesome, or they are of smale and ill nourishment and leave manye sufluities in the body and also are easilie corrupted...... All fatte is ill, but of fishes the fettefattenesse is worse than anye other........... Those fishes also are greatly commended; that come swymminge out of the Sea into Rivers, sith they come agaynst the streames, and the further of that they be from the Sea, the holesomer and better they are.

Athenaeus writeth that if a lyvinge Mullet be put into wine and choked or strangled therein, whatsoever man drinketh of the same wyne, shall not be able to do the Acte of generation.

I once read this of an eele, in a worke of a certaine Naturall Philosopher, and have taught the same to manye, albeit I knowe no man that as yet hath put it to proofe, neyther yet my self. If you woulde make some notorious drunkard and common swil bowle to loth and abhorre his beastlie vice, and for ever after to hate the drinking of wine; put an eele alyve into some wyde mouthed potte with enough wine as may suffice to suffocate the eele to death. Let the partie whom you would have reclaymed from his bibacitie, not knowing hereof drinke of that wine onely as muche as he listeth.

Lintles are misliked and discommedded because they annoy the stomach and cause melancholy. The best and surest way is to ab-
staine from them altogether; they are fitter rather for Laborers and Rural people than Magistrates and Students.

Beanes are verye windie, and tarie longe ere they be digested, yea, although they be decocted the full space of three dayes, yet do they still retaine their windiness and ventositie.

The juice of Colewartes is cleane contrarie to Wyne. For this cause the Germaines use often to eate cabages and Colewortes at their meales, thereby to avoyde the harme that commeth by excessive bibbynge of Wyne.

Speaking of Repletion, he quotes Hippocrates who wrote that excess of drink did less harm than inglorious repletion of meat, and Avicenna said that to be drunk once a month was wholesome and healthful to the body. Our author was of a contrary opinion however.

He gives directions as to the amount of sleep and the time in which it ought to be taken, and also for keeping the mind in a cheerful and happy state.

Venery. Treating of this, he quotes Avicenna who thought that if ever so little Sperma or Seede over and above the measure and Stinte of Nature, do passe from a man in doing the Acte of Generation, it harmeth him more than if he should bleede fortie tymes to muche. For the Sperme is more spiritual than bloude is. "

He counsels the Reader to apply himself earnestly to the Study of Moral Philosophy and the Sacred Scriptures, banishing Idleness and forbearing the company of beautiful damsels and amorous women, but if a man use the seed of Agnos Castus he will experience a marvellous effect in repressing his fleshly concupiscence.

He warns one not to live in a close bad air, nor to expose oneself unduly to the sun's rays especially when asleep. The night
Air is also unwholesome because the sun, the Giver of Life, has gone out of our hemisphere.

He sums up the whole of his advice briefly in the adage: "Temperance in all things." An invocation to God and His Son, Jesus Christ concludes the work.
Thomas Newton.

The translator of Gratiorolus was an indefatigable writer. Born at Preetbury in Cheshire about 1542, he was educated at both the Universities of Oxford and Cambridge, and became a poet, physician and divine. It is not improbable that he practised as a physician at Butley in Cheshire previous to 1583 as many of his works are dated from this village. In this year Queen Elizabeth presented him to the Rectory of Little Ilford in Essex. He was an easy and fluent writer both in Latin and English verse, and was a man of wide and deep learning.

In 1569 he published "The Worthy Booke of Old Age", containing translations, mainly from Cicero. In 1576 there appeared "The Touchstone of Complexions " containing again Latin translations. This must have been appreciated as three editions were published.

"Approved Medicines & Cordiall Receiptes" appeared in 1580, as did also "A Pleasaunt Dialogue concerning Phisicke & Phisitions" translated out of the Castlin tongue by T.M.

"The Olde Mans Dietarie" 1586.

"Thomas Newton's Staff to lean upon." 1590

He also wrote on historical and theological subjects as well as contributing to various works commendatory Latin poems. He died in 1607.

"Approved Medicines and Cordiall Receiptes, with the Natures Qualities and Operations of Sundry Simples, very commodious and expeditent for all that are studious of such Knowledge." Imprinted at London in Fleete-streete by Thomas Marshe. 1580.

This work of Newton's is addressed and dedicated to "The Worshipful, the Maister, Wardens and Generall Assistantes of the
Fraternitye of Chirurgions in London. The work was, the author states, penned and gathered by one whose name is to mee unknownen, who nevertheless seemeth hereby to bee a hearty embracer and well witter of your excellent Arte and function, and therefore you are the meetest, and in my opinion the fittest to defend his labours & also become Guardians to this his poore mangled and forsaken Orpiane. The Holy Ghost blesse you and your Labours in that your so noble an Office & profession, having so excellent a subject to worke upon, as Man is, the perfectest excellentest of all Creatures, and for whom all others were made and created.

From Butley in Cheşhyre the 19 of October 1580,
Your unfaygned wellwisser,
Thomas Newton.

The work is arranged alphabetically, beginning with a list of drugs with their uses e.g. "Amber is thought to distill from the popular Tree into the Floud of Euridanus and there to waxe harde. It stayeth the Fluxe of the Stomache and Belly and stoppeth Bloud."

"The Oyle of a Foxe is good agaynst all colde diseases and aches; as colde gouts."

The Oyle of Scorpions breaketh the Stone in the Kydnies."
This is followed by a list of "Medicines hote and drie in the first degree" as wormwoode, the spounge, sugar, etc. Then medicines "hote and drie in the second degree, i.e. the Nettell, Sage, the Nutmegge, Missetoe, Honny, etc.

Mumy (Mumia) is not much different from Bitumen Indaicium, for in Syria they embaule the corses of dead persons in Bitumen Indaici, which embauling with portions of the deade Bodies is brought from thence and is called Mumia. It is used againstbruses,

"Medicines hote & drie in the third degree" as Anise, Gentian,
Carret, tyme, mynt.

"Medicines hoat and Moiste in the first degree" as Borage, Dog-stone, etc. "In the second degree "as the Nut of India"

"Medicines colde and drie" as the Myrtle, Oak, Leech, etc.

Earthwormes kep the sinewes; The Cobwebbe stayeth blood, and so the book is continued in much the same fashion as its contemporaries.
Peter Droet.

1572.
A new Counsell against the Pestilence. London. 1580:

This is a translation of a work by Pierre Droet entitled "Concilium Novum de Pestilentia" published in Paris in 1572.

The Pestilence is a contagious ayre, not being the disease itself but the mearest and most principall cause thereof either raised within the bodies or caught abroad, suddeinly weakening the spirites and the powers which governe the body.

Some learned writers are of opinion that the poysoning infection is sent down from the starres and planets, others say that the ayre itself is putrefied, and is caused by the conjunctions and oppositions of the planets, the eclipse of the sunne and moone and the conjunction of Saturnus with with other evell planets whereby the ayre is changed into the nature of a poyson. Whereby it cometh to pass that according to proportion, this plague ragoth sometime among beasts and sometime among grasse, fruite, and corne. Many do perceive that the feeding on naughtie meates engenders the Pestilence. Then immediately shall he infect others and when it hath gained strength, it is called the Pestilence.

Again they suppose that sometimes the Ayre is infected by lower causes of thinges rotten and putrefied, as of carcasses unburiied, wythred and putrefied herbes and weedes, privies, dunghills and such lyke. Surely that this is the verye just judgement and revenge of God. If the botch aoppeare in the grine, it is a signe that the disease is in thr Liver or in the partes beneath the midriffe; but if the dore breake forth in the arme pits, they say that the
heart and the parts above the midriffe are infected, as they likewise gather that the infection is in the braine if the poysoned swelling gather behinde the eares.

Many times the skull being eaten with rottenness and the rime of the braine perished with a stripe or putrefied and when stoare of mater is gathered within the skull, a man shall perceive the urine to be little or nothing at all chaunged.

Our author tells of Ambrose Paré who caught the infection of Pestilence from a patients bed which so stroke his Braine that presentlie he fell in a Sowne to the ground without feeling any paine at the heart or other accident that might declare that the heart or stomache or any other part were affected. At length recovering strength he arose and his Braine began to expulse that contagious ayre with so forcible sneezing that the blood therewith gushed out of his nose and unless, said hee, the expulsive facultie of my braine had bene strong, doubtlesse I had died.

For loving Reader, there is a perpetuall drawing of ayre into the braine in everye breathing creature in at ye nostrals through the bones called Ismoidea into ye foremoaste ventricle or sell of the braine, whereby it commeth that it imparteth most readelye into the braine that infection which it receiveth before that it convey it unto the heart.

But a man shall not easily perswade the common people or the newe wayters in this point as that the filthy and stynking kennels and durtie places of the citye doo onely hurt the braine.

As to the Cure and Prevention, avoid dwelling in places where the wind is East, North east or West for these winds bring
infection. Also go from high to lower levels and burn certain things which are contrary to the infection as Styrax, Benzoin, red roses, lavender, cypress, also sweet smelling herbs, sage, rosemary and use the sprinkling of sweete waters about the chamber.

I like especially two things which withstand the pestilent ayre (1). Make a hole in a basyll nut and pull forth the kernel with a pin and fill up the place againe with common quicksilver and hang about the neck; it preserveth a man wonderfully from the Pestilence. This medicine I learned above 12 yeares agoe of the Phisitian to the Right Honourable The Lord Vidam that nowe dead is.

(2). There is also another such medicine and it is christialline and red arsnick, the effect whereof I learned at Argentine and Basel in the yeere of our Lord 1564 at what tyme the Plague raigned almost over all Germanie. The arsnick is to be beat into an egg and apply it to the region of the hart but beware that the moyst arnicke exulcerate not the skin. Surely in this one point God wonderfully declarcth his providence when he teacheth us to applye strong and deadly poysons unto our commoditie. And our men of late tyme have applyed the oyle of Scorpions in the cure of the Plague with a good successe, that onelye with the anointing of this oyle they drywe awaye the cvyll qualitye of the pestilent ayre. Moreover an oyntment made of Lasespetium , the fat of venuous Serpentes and vitrioll is much commended, or if of these be made a broade cake and folded in stike and layd upon the heart and arteries. Some stiepe cloves in vineagar al night and eate them in the morning and washe their face, arme holes and privie partes with vineagar.

We must take heede lest by sharp and strong purgatives we cause a laske which were very dangerous in this disease, for in a pestilent constitution the humors behooved by the smallest occasion
that may be and forcibly do run down into the belly.

The moste wicked and desperate varlets, whom the Magistrates of Lions put to death for carrying about and increasing the Plague, when they were led to execution, confessed that they preserved themselves from the Pestilence with none other thing than a walnut which they toasted or scorched a little against the fire before they ate it.

Dr.et advocates emptying the stomach by an emetic at the first sign of the disease as well as the employment of antimony or by eating this wonderful Indian nut. Sweating is also to be provoked by medicines which help to the driving forth of botches and also expel the very seeds and ground of the pestilence putrefaction with the thinnest part of the blood through the small passages of the skin. Now the most fit and sovereign medicine to provoke sweat are the salt made of wormwood and of scabious. By burning them to ashes and pouring common fires water unto them and boiling half an hour, then strain and evaporate, whereof ye shall give X grains in white wine dilated with the water of Buglosse. With this medicine onely many were saved of the plague in the year of our Lord 1567 at what time it rained all over England and Germanie.

At the first sign of the disease give the patient a drachm of an electuary made of angelica, zedo ry, tormentil, gentil, etc. and either blonde from the ankles if the disease be fixed upon the groin or liver, and apply cupping glasses to the groin after scarifying, or if in the arm open the Basilic vein. His former Majestie used to apply live oysters to draw out the botch.
Another book is included in the volume entitled. "Here beginneth the seing of Urynes and of all the Colours with the Medicines annexed to every one." He divides urines into 20 colours, each he says has its appropriate significance and each has its own cure. Taking one as an example—"The thirde is a whytysche yellow. If little in quantity and often made, it betokneth the sycke man may not kepe his urine." The 19th. colour is black and shining as a Ravens fether. This if copious and thin, indicates a Quartaine. The urine of a woman coloured as bright gold betokneth that she is desirous of the company of men. The urine of a woman coloured as is white lead, if shee bee with childe, it betokneth that the childe is dead within her, and she bee not with childe and the water styneck, it betokeneth that the mother is rotten.
Leonardo Fioravanti.

1582.
Leonardo Fioravanti.

A Compendium of the Rationall Secretes of the Worthie Knight and most excellent Doctoure of Physicke and Chirurgerie, Leonardo Phiorauante, Bolognese, divided into three booke. In the first is showed many secretes apperteinyng unto Physicke. In the second is showed many secretes apperteinyng unto Chirurgerie with their uses. In the third is shewed divers compositions apperteinyng both to Physicke and Chirurgerie with the hidden Vertues of sundrie vegetables, animals and minerals and proved wel by this Author, nitherto never set out before. London 1582.

The translator dedicates the work to "the Worshipfull and vertuous lover of learnyng Maister Richard Garth, Esquire, one of the Clarkes of the Pettie Bagges in the Chauncelerie, I.H. wisheth long life and healthe and felicitie.......and with the continuance of your wonted curtesie to accept the good meanyng of your old and poore J.H.

It is only at the end of the book that we find that I.H. was J.Hester, an apothecary. The last medicine which he describes is a wonderful Balme which is "to bee solde at Poule's Wharfe at the Signe of the Furnace by Ihon Hester". He addresses the Reader as follows, "for the receiptes in this Booke specified as also for many other rare thynges mentioned els where, if any be disposed to use them, let them repaire to my house at poule's Wharfe, where they shall either finde them readie made or me at reason- able warnyng readie to make them simply and plainly without sophistication, and so gentle Reader, I leave thee, till thou hast found occasion to use me. I.H."
This John Hester seems to have been a man of many parts. His business was that of an apothecary and distiller which he carried on at St. Paul's Wharf from 1579 to 1593, in which year he died. He must have attained a good age, for "olde John Hester" is mentioned as a distinguished chemist in Gabriel Harvey's "Pierces Supererogation" of 1593. Hester styled himself a "Practitioner in the spagericall arte" (i.e. according to the chemistry of Paracelsus and his followers). He issued curious advertisements of his preparations, and was the author of the following works:

1. The Pearle of Practise for Physicke and Chirurgerie. Found out by I. H. Since his death garnished and brought into some Methode by a welwiller of his J. Fourestier. 1594.

2. The First part of the Key of Philosophie. Wherein is contd. most excellent Secretes of Physicke and Philosophie. 1596.

Hester was also the translator of:

3. A Short Discourse of L. Phioravanti uppon Chirurgerie. Translated out of the Italian by J. Hester. 1580.


5. An excellent Treatise teaching how to Cure the French Pockes, with all other Diseases Arising and Growing thereof and in a manner all other Sicknesses. Drawne out of the Bookes of T. Paracelsus. Compiled by P. Hermanus and now put into English by J. Hester. 1590.

6. The Scolpotarie of Josephus Quercetanus or His Booke containing the Cure of Woundes received by shot of Gunne or such like Engines of Warre. Published into English by I. Hester. 1590.

(8) A Hundred and Foureteen Experiments and Cures of Paracelsus. Translated out of the Germane tongue into the Latin 1596.

(9). A Discourse upon Chyrurgery. Translated out of Italian by I. Hester and now newly published and augmented by R. Booth 1626.

Hester also edited :-


Little or almost nothing is known about the life of Fioravanti, except that he lived in Bologna and was a follower of Paracelsus. He lived during the middle part of the sixteenth century. It is his descriptions of plastic surgery which attract most attention to his work.
Let us glance over the book of "The Rational Secrets" itself. Speaking of Infirmities or Disorders, the Author says that many disorder themselves in their eating and so corrupt themselves and engender ill disposition of the stomacke and thence cometh the Itche and diseases of the Legges and other like matters.

To helpe the Falling Sickness in young Children which is caused by too great humiditie in the heade and the cure is with drying thinges which dissolveth the humiditie and the remedie is this. Take our Corotte Magistrale and spread it on a cloth and strawe theroon the poudre of Cantharides the whiche of his own qualitie and nature is attractive and bryngeth forth great quantitie of water. Then laie this Cocotte in the nuke of the necke and there let it lye at the least 8 or 10 daies. Likewise you shall anoint the head with Oleum Petroleum the which is very dryying and penetrative because it commeth forthe of a myne under the earth the whiche continually doth boyle. This oyle hath a marvellous vertue in himselfe that it defendeth the fire: for if a man anoynt his handes therewith, he may washe his handes with molten lead presently and never hurt hym.

Of the Small Pox that come to children. They are caused of superfluous choller and feum which increase so much that Nature can not beare it and so driveth it forth with a great fever and eruption. Therefore so many from four to ten years of age die because the eruption does not come forth but chokes them and so they dye. If they dye not, the fever doeth commonly continue foure or five daies together and then cometh forth the certaine wheals or bladders full of corruption, the whiche within three daies will breake and runne forth and drie. When the disease appears, give the child one drage of our Aromatico which
draweth the humors into the stomacke and from there it is got rid of by vomiting or seege.

Of Waxynge Kernels which are called of some scorophule. These commonly come in the throte of young children and are caused by superfluous melancholy humours corrupted. To the sore you shall use our Costicke which being laid on the sore doeth mortyfie in 24 hours and taketh away the corruption. You must not take away the Askar untill such tyme as it falleth out of himself.

Scabbes are all caused of putrefie bloud."

"Thou shalt understandethat I have a greate secreete againste the wormes more safe than any. You shall anoint all the bodie with our Balm artificiall and give the patient thereof to drinke one dragne. Though the childe have no wormes, yet this medicine will doe him greate goode.

Runnyng of the Raines moste commonly commeth of the much use of women or because those women are corrupted with a certayn distemperature of heathe that is able to corrupt a man using with her. You shall take three tymes our Pilles called Pillole aquilone every third day and make use of our Electuary. When you use this medicine you shall sate no porke nor Fische nor slimie thynges."

Pellarella that causeth the haire to fall off. I will showe a secreete with the worlde. Thou shalt understandethat the beginnyng of Pellarella is one Caruoli or more that commeth upon the Yeare, the whiche seemeth to be of little because they are holpen with ease, but when X or XV daies after they are whole, there will come a cer-taine alteration in the throte which will not suffer him to swallow his meate which doeth indure commonly 3 or 10 daies and in that tyme the haire is mortyfied and then within two or three moneths the haire will fall. You shall purge him nine daies every morning with sure
Sirupo Magistrale. Then you shall give him Electuario Angelica according to our receipt and anoint his face and head with our Magno licore. This secreto was never yet been written of."

"The Cough which cometh to olde folke is caused by a catarrhous humor. This must be holpen by eating little meate and to use thynges that warme the stomacke and helpe digestion.....

The fowerth kind of cough is devilians and evill to helpe because it is caused by the pox. You shall give him certayne drugs, then perfume him with cinaher five or sixe morninges or so long untill that he feels paine in his gumes and then he shall be whole. This is a greate secret, and I have proved a thousande tymes with good successse."

Of the Squinancie. This is caused of a flatuous or windie humor and cometh with suche a vehemencie that if he be not quickly holpen, it will choke hym." Out of many remedies we chose this one,"take the tooth of a Bore made in powder and drinke the quantity of two drages in linswede cyle. This helpeth as I have proved divers tymes.

"A Goodly and easie waie to helpe all sortes of Fevers. Seeing the fever is caused by corruption and putrefaction there are fouer thynges necessary to be done in the cause thereof. The first is to evacuate the stomacke; the seconde is to purge by urine; the thirde is to evacuate the bodie and the fowerth is to purge by sweat. These may be done the one after the other with great ease, and will restore the patient to his health. But you shall understand that all cannot be holpe, for that God Almighty hath made us to dye, and when that tymes commeth medicines will doe no good, but if that tymes be not yet come, by the helpe of God, with these medicines, he shall be restored to his former health."

Of the Fever Hectic. This is a viscous and putrefied humor in the stomacke and lungen. There are divers sortes of the Fever. Thei are all
evill to be holpe and are counted incurable. Nevertheless I will show thee some excellente remedies very holsome that may pleasure them although they are nye their death. The Electuaria Angelica draweth to itself all the offensive humors and carrieth them forthe by vomit and sege and so leaveth the stomacke eased and cleane that the patient thinketh himselfe whole. There is one kinde of Hectic Fever that commeth through the weaknesse of Nature itself and that beginneth to destroy the Lunges, and that kinde, I finde to be incurable because it is caused by the evill nature of the man and not through any accident.

Of the Fever Quartaine. It is thought to be incurable but I that have sought alwaies to help those diseases which were compted incurable have found the true and perfect cure which is done with those medicines that are rare and marvellous to dissolve any Quartaine. The first is Mercury precipitate without corrosive, therof 10 grains with halfe an ounce of Sugar Rosate etc. I have holpe more Quartaines more than any physician of our tyme.

Of the Goute. This both of the old and new doctors hath been compted incurable. But yet I which have doen nothyng els but sought out the nature and qualitie of thynges have found divers marvells in sundrie artes as thou maiest read in my Coaprici Medicinali and so amongst the rest I have found (through the helpe of God) the true and perfecte secrete to helpe the goute so that it shall never come again. (The author then proceeds to describe his treatment). Many have thought the Gowte to have beene of divers kindes, whereas indeede it is onely one and is cured with one onelyorder and dissolved altogether for ever. for that infirmitie is caused by no other than of rotten humors caused by indigestion and this occurs in those persons that feed well on meates of great nourishment and then Nature that
alwaies seeketh to ease herselue driveth that humor into the extreme partes as the handes and feete and this is the gowte.

There be three operations in the cure. (1) The first is Flebothomie, which must be doen under the tongue cutting overthwart one of the two veins for that evacuath the stomacke of all humors that cause that corruption. (2) The second is to assubtiliate the grosse and rotten humors. (3) The third is to preserve Nature in good temperature and to helpe the digestion. After that a man through the divine Goodnesse of God shalbe helped of the Gowte, he mai if he will preserve hym selfe with three noble remedies? (and these the author goes on to describe)

For Sciatica let him bloud under the tongue, the whiche is suche a singular remedie, that it causeth the worlde to wonder thereat.

Of Pain in the Mother. Take Cantharides in pouder I, Gallingill and the rootes of Mercury, aa vi; mix and put into a little piece of Sarcenet and binde it like a button and put it into the Matrix asx hye as you can and there let it remain fower and twentie houres without movyng of it for it purgeth divinely. And this is a graate secrete whiche was founde out by me. You shall understand that who-soever would knowe the truth of this disease, it were necessaire for hym to be expert in Philosophie, because it is an operation of naturall thynges, the which can not be well understoode without great knowledge in Natural Philosophie.

For Deafnes in the Eares, our author recommends the fumes got by burning "Synaber and herbs" and to "put the fatt of a silver eele into the eare which hath a principall vertue to comfort the hearyng."

Cure for Carnositie in the Yeard. He recommends the employment of small long candles made with "waxe and frankinsense, red lead, white honey, fresh butter, and prepare pigeons quills with it. One is to be
introduced until it touch the Carnositie and this is to be done from tyme to tyme until the candle passes without paine.

"To Breake the Stone in the Bladder. You must give the powdered stone which is founde int the bellies of ryng doves. These birdes are so subject to this stone, that if kept in cages they soon dye, because their meate can not passe through them and that is because the poore birde can not goe and helpe hym selfe with that Medicine which Nature hath taught hym. For these al likeilie flie unto the sea side and then finde a certaine kinde of small stone very harde, the whiche stone has vertue to dissolve the stone in the belie of the birde.

Truely the vertue of stones are very greate unto those that knowe them. I saw once in Rome two stones of inestimable vertue. One beyng laied upon the flesh of a man or woman, it causeth them to pisse with greate aboundance so that it were to bee wondered at. The other was of suche vertue that beyng laied upon a wounde, presently the bloud stench ed so that there fele not doune one droppe.

The Second Booke of Chirurgerie.

There is no Arte in the Worlde that hath more neede of the knowledge of divers thynges than this Art. It is necessarie to have skill in Housbondrie, also to understande the Arte of Paintyng, whereby you may set broken bones in their places and to joyne or close woundes well. It were needeful to have skill in the art of Joynyng, whereby he may make Instrumentes for broken bones in the Armes or Legges or Hands, also the Arte of a Smith, whereby he may make his instrumentes, also that of Apothecary and Alchemist.

One kinde of Impostume in the Groyne is called "Glandulae" and is evill to heale because it requireth greate care and terrible medicines for it were necessarie to cure the principall cause and that is the Poxe.
Impostumes in the throte must not be cut because of the danger.

Of Inward Impostumes. These are evil to know and uncertain to cure, and therefore all that we reason of in that matter maiebee to the contrarie. For where a man can not see with the eye nor touche with the hande, the matter is doubtfull whether it bee or no and therefore it is beste to saie little.

Amongst Ulcers there is one kinde that will receive no curation and thei are called Cancari that are cruded of evil digestion and go creeping along the flesh and have a roote as it were a plante. There is no better remedie to mitigate them than is our Quinta Essentia Vegetabile. It taketh away the stinkyng and comforteth the place very much.

Woundes. The cure is in three manneres. The first is merely to keep the wounde cleane and keepe a diett. The second is called Canonica in which there are fewe operations, (1) Digestion, (2) Mundification, (3) Incarnation, (4) Siccatrization. The third is our own invention and is doen in this order. The first thyng to be done with a wounde is to joyne the partes together and stitche them and dresse them with divers sortes of dryying medicines. In compound woundes stitche it close as thei use to sowe bagges and not to leave greate wide stitches as thei most commonly doe, that byng doen dresse it upon the wounde with our Magna licore laying it on as hote as you may suffer it, then strewe thereupon our second powder, so that subtillateth the matter that runneth to the wounde and taketh it forth.

When there is offence of sinewes onely, you shall stitche them presently and dresse them with Oleum benedictum and oyle of Frankinsence because these doe comforte marvelouslie those sinewes that are cut.

Woundes in the Head. When there is an offence of the Braine, the wounde is mortall, But I by the Grace of God and gift of Nature have
found the order to cure and heale them in shorte tyme. (The author then goes on to recount wonderful cures which he has performed in Naples, Venice and Rome.)

To staie the Fluxe of Bloude in Woundes. Stitche it up verie close and harde and upon the wounde apply the bloude of a man dried made in pouder.

The Thirde Booke consists of instructions as to how to make the medicines used by Leonardo Phiorauanti.

"There has alwaies been a greate questioning among the Philosopher whether that one medicine might helpe against all diseases or no. The whiche I affirme and will approve with suffict reason that the Petra Philosophaale made of our invention mai helpe against all the infirmitie that commeth into man8s bodie, and for two reasons. The first is that all sortes of infirmity have theit originall and beginnyng of the stomacke and to knowe the treuble, ye mai see manifestly that if the bodie bee never so little infirmed the stomacke is also greeved. For ye mai see how the animalles terrestiall never helpe them selves of othery infirmity than of the stomacke, and when thei will helpe them selves thei eate nearbes, the which causeth them to vomitte and this doeth signifie that thei have no other infirmity than the aforesaid. So by the experience of the animalles, I approve that the infirmity is caused of the stomacke.

The second reason is that all the medicinex wherein our Petra Philosophaale is put as soon as thei are come into the stomacke, it draweth unto it all the evill humors of the stomacke and also of the whole bodie and mixeth with them and so Nature sendeth them forthe by vomite or by sege or bothe and so the stomacke shalbe evacuate
of that matter and the bodie remain free from all infirmitie, so I affirme that our Petra Philosophalle may helpe againste all sortes of infirmity".

This Petra Philosophalle he tells us consists of Salt Niter, Rock Alum, Roman Vitriol, Mercury, Quicklime Soap and common ashes, all distilled very carefully.

All his prescriptions are given in great detail together with the occasions when they are to be employed in different diseases.
Walter Cary.

1583.
Walter Cary.

A Briefe Treatise called Caries Farewell to Physicke wherein thou shalt find rare and speciall helpe for manie common diseases. Hereunto also is to be referred a gentle remedie against the Collicke; named the Hammer for the Stone, by the Same. W. Cary 1583.

Imprinted at London by Henrie Denham dwelling in Pater Noster rowe at the Signe of the Starre.

In his Preface Cary tells us that having retired from practice, he is desirous of putting down on paper those remedies which he has found most useful in his own work.

In the First Chapter he says that whereas Nature has brought forth purgers of divers kindes according to the diversitie of corruption in mans bodie, some purging one humor, some another.

Cary then goes on to describe a potion which he had devised some eight years previously, "I thynke I shold doo my countrie-men much wrong if I shold anie longer keepe from them so great a treasure." He then enumerates all the ills that it does good to, sore eyes, black and yellow jaundice, biles, scabs, itches, rheumes, obstructions of the lungs, but instead of telling his 'countrie-men' what this wonderful prescription is, he says, "I have deliv- ered my bill for the making of the same, unto Maister Graie, Apothecarie in Fanchurch streete, for that I have made long triall of his honest and faithful dealing, also of his excellent skill in his profession. You shall have it for six shillings the wine pint .......I. may be kept good and in perfect vertue for three weeks or a moneth contrarie to the nature of other purgers,"
In the Third chapter Cary gives directions as to how his medicine should be taken. "You may take the potion at anie tyme, but I advise thee to forbear everie change and full of the moone in whiche are contained the eclipses.

They whose bodies are full and as it were laden with corruption shall finde wonderful ease if they take it IO days in the fall and IO days in the spring , and also now and then one good spoonful before supper which will gather together the relikes of digestion with other corruption and cause the patient to have the next morning one great stoole ".

4th Chapter. For the Headach and for such as are much bound and have their excrement alwaies hard and drie. One kind of Humor is of fulnesse, when the partie living in great securitie, and feedeth his bidie excessively even untill his eies swell with fathesse and his whole bodie be puffed up like a bladder. Another kinde is due to corrupt humors, while another kinde is due to the fume of corrupt humors, the disease being in the stomach, casteth up to the braine evill fumes. This also happens in the case of persons who retain their excrement long in the bodie.

5th Chapter. For those that have red faces, pimples or other corruptions rising in their faces and for the morphew.

In manie it riseth from inflammation of the liver. But some have it from their parents, and others from over much drinking, and others which are verie shamefast and their bloud somewhat corrupt withall in this sorte. The bloud in them hath often recourse to their faces and cometh alwaies as a wittnesse to testifie of matter in question. And passing awaie againe suddenly, leaveth ever some grosse cor-
ruption behinde which nature after dooth expell in the place where it was left. This yeere I made an ointment which without questionis of wonderfull force against the same. You shall have it made by Maister Graie for foure shillings the ounce. It is verie requisite for thee to take of my potion also 3 - 4 daies.

Seventh Chapter. For those that are full of fleame.those that are inclined to corruption,etc. He recommends that one must take his potion and also make a decoction of Tussilago, Lickerish,anisceed,Isop,Rosa Salis made with malmesie.

The Eight chapter concerns itself with the cure of a surfet by over) eating.

The Tenth chapter is entitled,"For those that have no apetote to meate." Cary says that the two most common causes are,(i).When the first veines from the stomach do not sucke which is their naturall action,whereby they receive food for the whole bodie.

(ii).The other is proper unto fat and grosse bodies which are alwaies stuffed and so full that nature seemeth content with that she hath.

Chapter Thirteen deals with "The Yellow AmundimexJandice and stopping of the Liver ". There are diverse causes for the these,as for example,(i).The biting of some venemous beast whose poison joineth with the blood and maketh the same cholereike. (ii) is chieflyie in the declination or going awaie of a hot fever. (iii).Inflammation of the Liver. (iv) Through the weaknesse of the gall which is not able to sucke or draw from
the liver the cholerike humors. (v). Obstruction of the passage from the gall into the bowelles. The excrement in the last two cases is white. The treatment mainly consists in taking Bryony or parsley infused in white or Rhenish wine along with copious sweating.

14th. Chapter treatsof Blacke Jandice or Melancholiah. It is known chiefly by this that they have alwaies drie, withered and blacke bodies. It is verie harde to be cured for Melancholia is a verie stubborne humor. One ought to give as treatment Ceteracke, the inner rind of ash, the roots of the white vine, parsley boiled in wine clarified wheie. Note also it is good for thee to anoint also thy left side about the girdle where the spleen lieth with oile of wormeooode warmed or oile of brionie which is far better.

17th. Chapter. The Quartan Ague is a disease so hard to cure that it hath alwaies accounted the reproch and shame of the Physician and doth in despite triumph over their patient. Wherefore I shall now take a hand in hand for the working of so rare an effect. This he proceedsto do at tedious length.

19th. Chapter deals with the Plague. There be three speciall causes of this Disease. The first is the just judgement of God for the sinnes of the people, and herein I consent with the Divines, that in this case the Plague someth as it were by the commandement of God, and them in vaine worketh the policie of man unto health where the power of the Almighty worketh to destroie, Wherefore repentance and amendment of life is the onely salve for this sorr. Yet withall for that we are ignorant of the determination of God, I wish no man to omit such naturall meanes as he hath provided for preseruation of our naturall bodies, least thereby he tempt God.

The second kind proceedeth of the corruption of the aire. The
weather is long, dark, cloudy, foggy, verie hot and moist; little
frogs & toads, also flies, lobochesters and wormes of sundrie sortes
(such as commonly proceed of putrefaction) do greatly abound. The
aire is particularie infected by the savour of dead carcasses. The(3-)
evill effects are often due to many living in small rooms.

To prevent the onset of Plague — They should burn greate fires
in all greate cities. Those who live in close places ought to now
and then assemble themselves togethier in the fields in some sweete
and open place, there also to use moderate exercise which will great-
lie purifie their bodies, and in the meantime to leave a good hus-
wife at home to see the house made cleane and sweete by sweeping
by strowing good herbes by airing the bedding by opening windowes
to let fresh aire into everie roome.

There ought to be some one appointed to see that there be no
house or roome over- pestered with lodgings or people and to drive a
out of the citie such as upon examination they shall finde to be
vagabonde or unnecessary members. To cure the plague Cary ad-
vises the use of endive, centaury, ivy berries etc.

Chapter 21 deals with Burning and Scalding. As to the treatment
he says "Take of your ordinie graie sope and anoint the place
burnt or scalded presentlie as soon as it is done. Assuredlie it
far excelleth all other medicines.

25th. Chapter deals with the: "Diseases wherewith our Wantons
in England are troubled." There is yet one other disease where-
of it is verie requisite to speake; wherewith our Wantons in England
are much troubled. If they feele never so smalle or light a grieue.
they must presentlie to Physicke; until they have so filled their
bodies with drugs that they are sicker of their physicke than of any disease. In this griefe a little more wit will be a present helpe, for so shall have heavier purses and lighter partes.

This is all that Cary says on this subject.

"The Hammer for the Stone" so named for that it sheweth the most excellent remedie that ever was knowne for the same, Latelle devised by Walter Cary, Maister of Art & Student in Physicke. 1581.

There are two causes of Stone:—

(1). Materiall cause is an earthelie, grosse, thicke and slimie humor.

(2). The formall cause is the heate of mans bodie digesting or baking the said humor untill it be hard.

Unto stone in the bladder children are most inclined. He describes the various colours, the hardness and appearances of stone. Certain meates are apt to produce stones, and these are—Veal, pig, lamb, greenfish, eels, cheese, milk, and generellie all verie grosse slimie, sweete and fat meates, or else they cause an unnaturall heate in the bodie and inflame the kidnies and other partes also as heating the back at the fire, lieng much upon the backe, also great use of pepper, ginger and other spieces.

The stone is to be cured chiefly by things which cause the stone to breake and voide, as saxifrage, parsley, pellitory of the wall, gromwell, also by letting bloud, purging oysters etc.

The 4th. Chapter describes "The preventing and Curing of the Stone by a new meane latelle devised." This consists in taking the quintessence of Goats Bloud, It is Cary's intention to deliver in writing to the Right Worshipfull and most learned Company of Physicians in London as to the manner of making the choice.
of the goat, the time of the year, the diversitie of the blood of the arteries and of the veins, etc. But in the meantime you shall have as much as I can conveniently make at Maste Graines house and also at my house in Great Wickham in the County of Buckingham for five shillings the wine pint for those that are from their father or mother or either of them naturalie inclined therunto or otherwise feare the disease & would prevent the same is to take 20 or 30 daies in the Spring and at the Fall Spoonfulls in a good draught of their accustomed drinke fasting.

But unto those who are troubled with the stone and feele now and then a passion thereof, I have thought good to prescribe this order. Cause 4 or 5 galones of drinke to be brewed and turned up in a little vessel fit for the same, and when it is new turned, add thereto a lightlie bound together, one good handful of Parcellie and one handful of Pellitorie of the wall, but for want of the Pellitorie, take the more Parcellie although the other were better. And when your drinke is stale enough drinke thereof everie morning fasting, a goode and heartie draught adding thereto 2 spoonefuls or more of the quintessence, but while you take it use no violent motion of your bodie least the stone beginnring to breake into pieces thereof fall into the narowe vessels between the kudnies and the bladder or from the bladder into the yard to your great torment. And this order I wish you to use as long as you finde anie gravell to avoid.

For manifest people that the Quintessence dissolves the stone, Cary advises to evaporate a quantity of urine and you shall finde a grettie substance if you were troubled with the stone, and this is a verie perfect triall.

If the stones be great in quantitie you must use the quintessenc
the longer, and not looke to be cured miraculously with the use thereof a wake or two.

If you be troubled with the exulceration of the bladder, you must awoide all spirituous drinke, and you ought not to torment your bodies with muche physicke, for though eased yet cured they cannot be. Onlie I allledge one sentence of Fuchsius, an excellent, wise and learned Physician, where he saith in his booke "De Medendis Morbis,"

"Sanguis denique, hircinus ad calculos cum renum tum vesicae presens remedium est. Nam praexistantes solvint et per urinum excernit."

But least this most excellent medicine should be slandered, I have thought good to signifie that if anie person having used the quintessence in such sort as is requisite both for time and order, find not such remedie as I have promised & he looked for, let him (if it seeme good) repairie to my house in Wickham aforesaid where he shall finde me readie without either penie or penie worth to do what possible I may for his further cure, and if by taking ought therein, I breake my promise, let me rather be thought a deceiver than one seeking to benefite my countrie.
William Clowes.

1596.
Of his early life we know almost nothing: It is probable that he was born about 1540 in Warwickshire of good family. He served his apprenticeship as a surgeon in London and wrote of his Master, George Keble in these high terms "Sure Alexander the Great, was never more bound to Aristotle his Master for his lessons in Philosophie than I was bound to him for giving me the first light and entrance into the knowledge of this noble Art of Chirurgerie."

In 1563 he was appointed Surgeon to the Army commanded by the Earl of Warwick in France and it was there that he came in contact with the famous Surgeon and prolific writer John Banester, who later became his intimate friend. Clowes then transferred his services to the Navy for a few years.

In 1569 he began practice in London as a Surgeon and in the same year he was admitted to the Company of the Barber Surgeons. As well as being a successful surgeon he was also a studious man. He himself tells us that his chief text-books were Tagalthius, Guido, Vigo and Quercetanus while he had made Calmathius "as it were a day-starre."

In 1575 he received the appointment of Surgeon to St. Bartholomew Hospital and later to Christ's Hospital. In 1579 he published his first book, "De Morbo Gallico."

In 1585 he was sent as Surgeon to the forces fighting in the Low Countries. He remarks that bad surgery killed more of our men than did the enemy; neither he nor Mr. Goodruse lost any case from gunshot wounds except those mortally wounded. He was in the action when Sir Philip Sidney was wounded.

In 1688 Clowes was admitted to the Court of the Barber Surgeons, he was with the fleet which defeated the Spanish Armada in
the same year. On resuming his practice in London, he soon acquired a large and distinguished clientele, and was appointed Surgeon to the queen. He died in 1604 at Plaistow in Essex where he had resided after he retired from work.

Clowes was a copious and somewhat garrulous writer; yet his surgery was good for the age in which he lived. In his books we get many interesting side-lights of life during the reign of 'good Queen Bess'. He terms his critics 'scornfull scanners, their commendations I disdayne'. He tells us that he was a good embalmer and knew well how to roll cerescloths. He has no hesitation in speaking of his secret preparations, "my unguent", "my Balm" etc.

All his books were printed in black-letter in London. They are as follows:

(i) Prooved Practise for all Young Chirurgeons. 1591
(ii) Treatise on the Struma. 1602
(iii) Treatise of the French or Spanish Pocks
(iv) A Profitable and Necessary Book of Observations. 1596.
(v) A right frutefull and approved Treatise for the artificiall Cure of the Struma or Evill cured by the Kinges and Queenes of England. 1602.
"A profitable and Necessarie Booke of Observations, for all those that are burned with the flame of Gun-powder etc. and also for curing of Wounds made with Musket & Caliver shot, and other Weapons of Warre commonly used at this day, both by Sea and Land, as hereafter shall be declared with an addition of most approved Remedies, last of all is adjoined a Short Treatise for the Cure of Lues Venereae by Unctions and other approved ways of Curing and now againe newly corrected and augmented in the Yeare of our Lord 1596 by William Clovves, one of Her Maiesties Chirurgeions.

The first part of the work is taken up with the narration of the case of two gentlemen who were stirring gun-powder with their hands in a pan over a fire when it exploded and they were grievously burned. They received first attention from a gentlewoman who eased them greatly with a whey of Verjuyce and milke, but she was afraid to go further, neither could her stomach well digest the sight and filthy savours thereof, whereupon I was sent for and applied ointments composed of oil of olives, roses, violets, prunella, etc. In the end I finished these cures, without blemish or manifest signes of any burnings with the often using of Oleum Uvorum, and Oleum Amygdalorum dulcium, etc. You must not attempt to cut or open any of the blisters of them that are burned with the flame of gun-powder, but if the inflammation do so increase that the humors under the blistered skin do corrode and ulcerate the flesh, then you must in any wise cut the blisters to give passage to those painful humors."

The author then describes a second case of burning by Gun-powder-
Of a man's hand and arm which had been treated by a surgeon with Malt Saponis, which he confessed was a cure he had little experience in. "I went with him and perceived the patient's paine and grief to be most lamentable, as appeared by his heavie countenance so that I feared his grave would have swallowed him up. I told the surgeon he had not done well, but I presently let the patient blood and washed the part with Aqua Ranarum and other remedies. Nevertheless there was left behinde an unseemly cicatrize by reason of the ill handling at the first, which after by no means possible could be prevented or amended: Then I told the young man that he had served an ill saint, which did not learn him to know any better the nature and properties of his medicines; he answered me againe, his knowledge was just of his master's pitch: then I spoke little to him, but willed him to be more diligent in reading of good authors, and hereafter to be more careful how he applied his medicines. "Clowes had great faith in Succus cepearum and Olive Oil, or litharge with oil of Roses and poppies, or this (here follows another prescription), or this (prescription) or this (still another and so on.)

Clowes cites many cases which came into his hands after having been mishandled by other surgeons and which he cured by applications of many different ointments. Thus :)" The cure of a certain Souldier that was wounded with Gun-shot in the Low Countries: he was shot in the bottome of his belly on the left side, and the bullet passed through and rested in the right buttock neere the Anus, where it lay secretly hid, and could not bee found for the space of three yeares, in which time it became a Fistula of a hard Citration. He came to me three yeares after the accident and I after due consideration and
search made with probes of Lead and Waxe candles and long and flexible tents which were apt to yield to every crooked turning, yet by no means I could come to where the bullet had conveyed and had itself. I enlarged the mouth of the Fistula with tents and applied Emplastrum Diachaleitheos; not succeeding I applied a strong powder of White Vitriol, alum, perchloride of Mercury and so destroyed the callous matter, but could not yet attain to the bullet. I then used a spring with a long pipe and large barrel and at length a swelling appeared at the Anus which I incised and did take out the shot.

The Cure of one of the waiters at the Custome House, he being upon the River of Thames a skirmishing with his piece, and by reason the piece had certaine flaws in it, did break into many pieces, and made a greate wound upon his chin and carried away a good part of the Manduble and the teeth withall; moreover it did rend his hand greatly; all which I cured without maine or deformitie." (mainly with ypbd of egg, alum, oil of worms etc.)

In another case by the overdischarging of his Dag, a man was wounded in the corner of his eye. "He did grow weaker and weaker, insomuch the Bell toyled for him; then I was sent for; I enlarged the wound by incision and I tooke out the Screw of the Dag out of his head and he liveth unto this day."

"The Cure of one who received a puncture or prick into the sinew or nerve of his right Arme, by a most impudent and ignorant bloodletter, which did prick the sinew in stead of the liver veine. The author gives a verbatim account of the discussion between the doctor who was called in and this "impudent blood letter" who said that "he cared neither for Galen nor Tagaltius for I have done as good cures as the best of them." Then said the doctor, "I am ashamed of the
impudency and beastly boldnes. "Then with unseemly behaviour and rude speeches which are unworthy the rehearsal, he departed. "Then follow several pages of prescriptions on account of which (or in spite of which?) the patient was cured by Dr. Clowes.

In the case of a poisoned bullet-wound, he applied an ointment composed of human fat, gosse and cock (medulla cervinae), turpentine and wax, and so cured the patient. "And thus, friendly reader, ye shall understand, I write not this observation in mine own praise, but chiefly, for the good of my countrymen and country wherein I was borne and bred, so that those who endeavour to be conversant with learned Physicians and well-experienced Surgeons may in the ende enjoy the fruits of their labour and diligence, for idleness yeildeth as great profit as a barren and drie tree good fruites."

"The Cure of a Pioner which was shot into the left shoulder so that the bullet lay secretly hid towards the chine or hollownesse of the patient's body and also was shot thorow the secret parts and so into his thigh where I tooke out the shot." The bone in the shoulder was broken into "shivers", and these the patient being "a hot, cholericke and raging fellow, would not suffer me to cut them out and great putrification did follow and the clotted bloud at the bottome of the wound could not be turned into matter notwithstanding the best digestions which I daily used and which was due to the over-long lying of the pieces of broken bones which could not be apprehended or taken out with tentacles, crowes bils or ravens bils. Another reason for the wound being troublesome was that this rusticall boarish fellow was of a marvellous dogged and churlish nature and disposition and usually given and delighted to drinke all sortes of strong drinkes, in like sort he would covet to
ate bacon, salt beefe, hard cheese and dried fish and look whayt was hurtfull unto him, therein he took his greatest pleasure and delight. and thus he laid gorge upon gorge. I was in despaire of his recovery and many times repented me that ever I enterprised this beastly cure. The naughtines of his disordered body was such that his very sweates were noisome unto us, for he did smell extreme reminish like unto a rank bore or goate; but in the end his grady stomacke was almost cleane taken away." The treatment consisted of injections into the wound of barley water, absinth, centaureum, etc. with cataplasms of fennel greek, linseed and so on. Progress was not continuous for there ensued "an inflation or puffing up of cold, windy and waterish humors in his neck and shoulders and so downe all his arme and hand." To alleviate these, baths were given of infusions of camomile, wormwood, sage, fennel, etc in which a good, fats, sheeps head, broken in pieces, was boiled, together with ointments and plasters, ans so"by these goodes means and helps he was cured."

"The Cure of a Smith belonging to the Tower of London, who was given an old Caliver which a long time had been charged, to cleane." The workman being unable to remove the bullet from the old rustie Caliver, hee was forced to put the breech of the pcece into the fire, and (not freseeing the danger) did place or rest the mouth directly against the middle of his thigh, nothing suspecting that the pcece would so suddenly have blowne out the bullet. For the space of three or foure yeares he was constrained to goe and stay himselfew with a staffe by reason of the debilitie of the part greaved. I cured him by means of injections of wine and Aqua vitae and ointments."

"The Cure of a Serving-man who was shot into the leg with a.
sheafe arrow, and the head sticking in the bone". This patient was at first attended by a surgeon who did him little good, then I was sent for as "his friends would be rid of this fellow and said they were greatly aggrieved with him and told him in my presence that he had stained his practice in preserving and dressing the patient so ill and that his abuse was great and deserved punishment. Then he went about to bleere their eyes with a little beggerly eloquence, the which he had learned amongst a sorte of treacherous runnagates, counter fei land-lopers, Sophisticall mounty-banks, cosening Quacksalvers and such like jugling deceivers, with their paradoxical innovations, whose native soil is to them a wild-cat and who abuse all good arts. But he vanished away in darkness as may appear in my former booke, whose bloody hands without knowledge doe hazard the lives of many.

Such emptie barrels found farre,
Which doe little good in peace or warre,
It is a world to understand,
How such doe flourish in this land.

Long have I mused at the same,
Till I perused stories old,
Where I did finde men of such fame,
Greatly dislike such persons bold.

Wherefore I leave them to their wills,
That list to like these kind of men,
And when they have approved their skills,
They may the better judge of them.

Now in the end I thus conclude,
They were none of the Sons of Art, 
But men unskilfull, grosse and rude, 
Even as the blinde man casts his dart."

To end a long story, the head of the dart could not be grasped so a dilatorium was introduced to open the wound and then a Rostrum gruinum seized the arrow - head and removed it. After this ointments and plasters were applied and so a cure was effected.

"The Cure of a man which received a notable wound in the head with great fracture of the skull by a fall out of a gallery in the Beare Garden, at that time when all the gallery there did fall downe and killed and hurt many."

This patient was a man of some account and so I considered that I was to speake with men of worship and good calling unto whom I delivered mine opinion, first calling to remembrance the wise sayings of Guido, Tagaltius and others, that he was not without great danger. I then applied the Trepan in two places and raised the depressed bone and immediately his speech amended and there was found on the Dura Mater a good quantity of congealed blood which was removed and because there was a certaine blacknesse on the Dura a pece of Lawne dipped in Mel Rosarum and Aqua vitae was introduced and replaced daily until the blacknesse disappeared. A cure is to be feared and small hope of health to be looked for if the blacknesse doe not disappear under hony of roses.

"The Cure of a Master of a Hoye, that had both his legs fractured and broken into many pieces, with an iron Bullet, shot out of a great Barre or marquebusse of croke at the sea, by a Pyrat or Sea rover". With the help of other two surgeons, Clowes at length cured this man
so well that he "goeth strongly upon both his legges without staffe or stay to support himselfe by."

"The Cure of a certaine man that was thrust thorow his bady with a swprd, and the point of the sword passed thorow his body and so out at his backe in such manner that he which wounded the man did run his way, and did leave the sword sticking in his body; so thwe wounded man did with his own hands pull out the sword, whom after I cured as shall bee here declared."

By the wonderful worke of God, the sword escaped the liver, the stomache and the intestines or guts. I enterprised this cure as followeth. I did first take two short tents artificially made, the one for the fore part of his breast, and the other for behinde his backe; Upon the which tents I applied Galen his powder mixed with Here's haires and the whites of Eggges and so put them into the wound and outwardly to the wounds the foresaid restrictive. So he rested untill the third for feare of the bleeding. Then he was given a drinke of singular vertues called Potus Antioehiae. The strangee cures which the said drinke hath done are wonderfull to heare, and the wounded man was cured chiefly with this drinke of Antioeh." (this prescription contains twenty ingredients—cloves, cinnamon, geranium, violets etc.).

"The manner and ordering of the taking or cutting off a mortified and corrupt leg or arm, which commeth oftentimes by reason of woundes made by the Gun-shot." This operation is to be done either three inches below or above the knee, "then through the Assistance of Almightye God you shall luckily accomplish this worke by your good industrie and diligence. After that his body is well prepared
and purged then let him have some two houres before you cut off the limb, some good comfortable caudell or other broths only to corroborate and strengthen his stomacke and in any wise omit not but that hee or shee have ministered unto them some good exhortation concerning patience in adversitie, to be made by the minister or preacher. And you shall likewise advertise the friends of the patient that the worke which you goe about is great and not without danger of death; Then ordaine the night before some good defensative and let it be applied two or three times about the member. All which being considered you shall have in a readiness, a good strong and steady fourme and set the patient at the very end of it; then shalt there bestride the fourme behind him, a man that is able to hold him or her fast by both the armes; which done if the leg must be taken off beneath the knee, let there be also appointed another strong man to bestride the leg that is to be cut off and he must hold the member very fast above the place where the incision is to be made and very steadily without shaking, drawing up the skin and muscles and he that doth so hold should have a large strong band and a good fast gripe whereby he may the better stay the bleeding in the place or stead of a straight band or ligature, which band is also very necessarie for by reason of the hard and close binding it doth so benum that part that the paine of the binding doth greatly obscure the sense and feeling of the incision. I have often seen by the skilfulness of the holder there has not been lost foure ounces of blood. Another skilful man must hold the limb below and must neither hold it too high for feare of staying or choking of the sawe or too low for feare of breaking the bones in the time it
is a sawing. The surgeon must have a sharpe sawe, also a very good catlin and an incision knife, and then boldly with a stedy and quick hand, cut the flesh round about to the bones without staying being sure the Periosteum be also incised and likewise a muscle or sinew that runneth betweene the bones of the leg; then set your saw as near unto the sound flesh as well you may and so cut asunder the bones; then Ambrose Pare willeth that you draw the sides of the wound together with foure stitches made crosswise like the letter X. I must confess I have cured many and yet never so stitched them. I then apply my restrictive powder of Riol Armoracia, dragon's blood, aloes, Olibanum, terra sigillata, mastich, egg shell, mummy and gypsum. This is to be mixed with the hair of a hare, the finest and whitest from the belly and cut up finely, and white of egg. Certaine French chyrurgions say that the veines and arteries are to be drawn out and tied and so stop the bleeding, but I never practiseth this order and will proceed with mine own approved practise. You are to make three or foure small boulsters or buttons of very fine towne wrought up in wine and vinegar with the restrictive added and these are to be placed on the mouthes of the veines that are incised and cut and upon them lay a round thick bed of towne as neare as you can gesse it of the same compasse as the stumpe all spred with the restrictive. Then much towne is to be fastened on; which order and way did never faile me. We doe sometimes use to draw over the great bed of towne a wet, ox eye bladder and so doe pull it close up. Some have rewardec most unkindly. I have been back-bitten and thus I reape for my labour chaffe for corne, ill-will and private grudge for curtesies and friendship offered. Therefore beware to whom you impart secretes lest you also enter with me into the gap of ingratitude or the unsavorie dunghill of despightfull tongues.
A Gunner of a Ship cured of a wounde in his belly through the omentum and some guts did come. Cowes tied the omentum close up to the wound, returned it with the guts into the abdomen and left the ligature thread hanging out. The latter came away in four or five days and he then closed the wound with stitches.

The author gives directions for the dieting and purging of those wounded with receipts "for certaine medicines and instruments good for young practisers of Chirurgerie to be furnishe with". These comprise suppurativs, desiccatives, unguents, electuaries, pills, etc.

He ends his Necessarie Booke with certain precepts meet for young students in the surgical art framed in metrical measure and takes farewell of them:

"What valient Mars, with brave and warlike band,
In foughter field, with sword and shield doth stand,
May there bee mist a Surgeon that is good,
To salwe your woundes, and eke to stay your bloud.

To cure you sure he will have watchfull eie,
And with such wights hee meanes to live and die,
So that againe, you must augment his store,
And having this, he will request no more.

There are four pages of illustrations of surgical instruments, which are not unlike those in use at the present time. In conclusion he remarks that it will not be new to him to have his work despised and ill - spoken of, but since it argues the rashness of their base and inconstant heads, he cares the less for it and he doubts not but that in time for shame they will be silent.

In speaking of the cure of Lues Venerea he praises highly.
quicksilver when used as an ointment.

For lameness and aches he recommends an ointment composed of foxes, sage, rosemary, marjoram etc. as most precious.

The surgeon's art seems to have included many practises which I am glad are not now included in his work. Thus we find Clowes stating that he was a good embalmer and was an expert in the rolling of cerecloths. He describes the "manner and order of Searing and preserving dead bodies for a long time." This consisted chiefly in packing the cavities with a powder devised by himself and wrapping the body in a specially prepared cerecloth.

William Godorus (Goodruse), Sergeant Surgeon to Her Majesty commends the work in four verses, the last two being as follows:

"So he that hath painfully hath pend,
This skilfull booke of Surgerie,
I needs must praise and eke defend,
Both worke and workman worthily.
For men of learning, skill and fame,
Far passing me, commends the same.

Or men unlearned that envie makes
Against this booke to beare ill will,
I Godorus doe the same command,
And wish him well, and so I end."
Peter Lowe.

1597.
This notable Scot was born about the year 1550 probably in the village of Errol in Perthshire as he styles himself "Arellian". At the age of 15 he left for Paris where he studied Medicine and in due course became a Master in the Faculty of Surgery of that city. For the next twenty-two years he practised in various places in France and Flanders. From 1589 to 1590 Lowe was Surgeon Major to the Spanish regiments in Paris. During the following six years he followed the French King, his Master in the warres'. He was in London in 1596-7 and took up a permanent residence in Glasgow in 1598, where he soon brought himself into notice, and in the following year he was appointed to attend the poor of the town at a salary of 86 marks per annum. His continental upbringing must have made him antagonistic to some of the rigid rules of the Church, and for some ecclesiastical offence he was sentenced by the Presbytery to stand "on the pillar". Having treated this as a joke, he was further fined and made to stand two Sundays on the pillar.

Lowe had made representations to the Scottish King, James VI (who later became James I of England) as to the propriety of instituting some form of Examination for those who intended to practise medicine or surgery. As a result Peter Lowe and Robert Hamilton received letters under the Privy Seal empowering them to grant licenses to those whom they thought fit to practise and to exclude from practise those they deemed unfit and to fine those who proved contumacious. This was the beginning of the Faculty of Physicians and Surgeons of Glasgow.
And its inception dates from the granting of these letters on 39th November 1599. In 1601 Lowe was sent again to France with the embassy of the Duke of Lennox, and thus it was not until his return in 1602 that the Faculty really began its work. He died in 1612 and is buried in the Cathedral Churchyard, his tombstone bearing a eulogistic epitaph.

Lowe's published works are:

"An easie, certaine and Perfect Method to cure and Prevent the Spanish Sicknes", London 1595.

"The Whole Course of Chirurgerie" London 1597 with many subsequent editions.

"Presages of Hippocrates".

"The Poore Mans Guide"

"Treatise on Parturition".
The Whole Course of Chirurgerie wherein is briefly set downe the Cause, Signes, Prognostication, and Curations of all sorts of Tumours, Woundes, Fractures, Dislocations and all other Diseases as practised by Chirurgions according to the opinion of all our auncient Doctours in Chirurgerie. Compiled by Peter Lowe, Scotch - man, Arellian Doctour in the Facultie of Chirurgerie in Paris and Chirurgion ordinaire to the Most Victorious and Christian King of Fraunce and Navarre. Whereunto is annexed the Presages of Divine Hippocrates. London: printed by Thomas Purfoot. 1597.

The work is dedicated to the Most Puissant and Mightie Prince James the Sixte, by the Grace of God, King of Scotland.

For being Chirurgion Major to the Spanish Regiments, two years at Paris, and since that time following the King of Fraunce my Maister in the Warrs where I and commoditie to practise all points and operations of Chirurgerie. Upon the which occasions I collected my practice with the opinion of both auncient and late writers at vacant howers into a booke which is that I offer to thy view. Herein thou maiest reap the fruit of my travells and studies and by the friendly acceptance hereof gaine to thyselfe fruition and commodity of my other like labours like as my Treatise of the help of Woundes in the time of their infantmet, with the Curation of such diseases as happen commonly to maides and maried women, and the treatment which is called the poor mans guide, which are works esteemed by such learned men as have scene them most necessary for the Commonwealth.
A long letter to the Reader then follows and several poems in Latin and in English in praise of Peter Lowe. One runs as follows:

Lenvoy - "Low is thy name, high growes thy fame,
Amongst all English men.
Thy booke shall save, my yearse from blame;
When world well waies thy pen.

Give Zoyilus or Momus brood
Doe carpe at thee what then,
Doe feeds thy hope with heavenly foode;
Amongst wise learned men."  {John Norden Esqre.)

First Chapter of the originall beginning, and of the Antiquitie and excellence of Chirurgerie.

The following are some examples of the work.
Question. What conditions ought the sickes to have?
Answer. Divers also, and first hee must have a good opinion of the Chirurgon, that he have a good hope to be cured of him and be obedient to his counsells, that he endure patently that which is done for the recoverie of his health.

Question. Which be the instruments ferramentals?
Answer. Some are to cut as Rasures, Some to burne, as cauters actual. Some to draw away, as tenells, incisives, pincetts, tirballes. Some are to sound, as to sound, a winde, the soundi in the bladder and such like.
Some are to sow woundes and knit veins, arters as needles. Various speculi for eye, mouth, uterus, anus. Some for broken bones and such as be out of their place, as machnies, iacs, glossocomes.
Various drugs and ointments must be always at hand

There are long accounts of the Elements, taken chiefly from Hippocrates and from the Aphorisms of Galen.

The 8th Chapter of Vertues.

Q. How many vertues or Faculties are there?
A. Three to witte, animal, vital, and natural. Animal vertue commeth from the Braine and sendeth the senses and moving through all the body by the nerves.

The 10th Chapter of Spirites. They abound most in the Heart and Arters, in the Braine and nerves.

Second Treatise of Unnatural things.

Chapter I. Of the Ayre.

Q. What is evil ayre?
A. It is that which is contrarious to the other, thick, rotten, near hills, masses, stankes, dunes, the sea, and towns that be lowe and close, or situated betwixt two hills or places, where passeth the filth of towns, also that which is nebulous and commeth from stinking brethkes, also the ayre which is inclosed in close houses for certaine time, which becommeth mouldie and putrefied. Titus Livius sayeth that the places change the nature of our bodies, and those which dwell in mountains differ from those which dwell in low places in Countries which are fertile, the men are ordinarilie Cowards, given to Lust, the Countrie & place barren, the people are more hardie & ingenuous, quicke spirited.
Chapter V. Of Evacuations

The body is evacuated by the immoderate Act of Venus but this is hurtful to the eyes, the nerves, the neirs and partes neare to the neirs and maketh men forgetful and bringeth soone old age. The Bishoppe of Illerden tells of a woman who complained to the King of Arragone that her husband did know her 30 times a day and he was commaunded upon paine of death not to have companie with her above sixe times a day least the woman shoulde thereby be in danger of her life. Wherein saith he, we are not so much to marvaile at the abilitie of the husband, as at the complaint of his wife seeing the verse saith et lassah viris nondum satiata recessit and also in the XXX Chapter of Solomons proverbs, Three things are insatiable and the fourth is never satisfied. But because such as delight in this past-time will formalise, as also obsee the usage hereof is sometime profitable to the country, I will not altogether condemne it.

The braine are discharged by the roufe of the mouth, and evidently by the nose, by the eyes & eares obscurely, the lightes by the trachearter, the stomach by vomiting, the intestines by the fundament.

Chapter VI. Of Perturbations & Passions of the Minde.

Mirthis an affection of the mind conceived of a good thing by which the braine and spirits are sweetely spread by the dilatation of the Heart, and if it be great and last any space there often commeth Death because the heart is destitute altogether of blood. Aristotle reporteth of a woman Policrita that shee dyed for joy, also Phillippides, a writer of comedies dyed for the joy of overcoming anther in a disquitation.
Valerius Maximus writeth of two women who dyed for joy that their sons had returned after overcoming their enemies in the wars.

Gellius telleth of one Diagoras who when he saw his three sons crowned at Olympus embraced them in the presence of the whole people & dyed for joy. Sadnesse may induce the same effect as Pliny and others relate.

Fourth Treatise. I Chapter of Aposthumes in General.

An aposthume is a disease composed of three divers maladies, to wit, evill complexion in the similar parts, evill composition or constitution in the instrumental parts and dissolution of continuity in both similar and instrumental parts offending the actions of the member where it is.

Congestion is a mass of matter contrarie to the nature engendered of the superfluities of the third concoction of the aliment and foode which are distributed for the nouriture of the parts of the bodie, which chaunceth when the aliment is not so digested, as it may well be appropriated to the parte which should be nourished.

Tumours. There are those that proceede of Bloode; Phlegmep Carbunculus, Phimus, Phigetlon, Tirminton, Fermiculus, Gangrena, Anthrax, Tuberculus, Ophthalmia, Schinancia, Bubo

There are those that proceede of Choller. (Choller is a humor hot & drie, of thin & subtill consistence, black coller, bitter tasted and is compared to the fire). Erysipelas, Herpes, Formica & Empetigo.

There are those that proceeds of Melancholye. Scirrhus, Cancer, Leprosie, Dracunculus, Wartes, Clavus, Morphea.

The treatment is largely based on that laid down by Galen
Chapter XI treats of Tumors Phlegmaticks. They are called;
Attheorema containing a matter like gruell;
Steotema containing a humor like Greace.
Mellericeris containing a humor like honey. It is the hardest of the three to heale. Great dextilie is required in removing them as oftentimes there commeth great flux of blood.

Chapter mxxIII of Cancer which the Greckes call Carsimonia.
Cancer in Latin isthe sore of a beast, Guido saith it is called cancer either by reason it sticketh to the partie, like the fish cancer or because it is round and hath veines about it like the feet of a crabbe & is also like unto it, being livide of colour as also because it gnaweth, eateth and goeth like this fish.

Some counsell to cutit in such sort that there remaine no roote but my opinion is not to doe such thinges, but rather follow the counsell of Paul which is to take the juice of Morrell, plantaine, lettuce and sorrell, centorie, shepheard's purse; wet a cloth in these juices and lay it on. Also I have often used the urine of a young maid in the same fashion.

Chapter VIII of the Fifth Treatise treats of Tumoursof the Tonsils.
The Amigdalles are placed at the roots of the tongue for divers reasons, but chiefly for receyving the humiditie of the braines, which if it fell onely on the toungue, would trouble the speech, and also that the tongue should be moystened, otherwise it should bee drie in speaking.

Chapter XXV. Of Hernia. The patients hands and legs having been bound, make an incision and draw out the testicle and kintle with a waxed threed & cutt the production with the stone, a little from the threed
threed. Take care not to include intestine in the knitting, which if it happen, the sickle voydeth the excrementes by the mouth and so dyeth. I am of opinion with the learned not to attempt this operation, but rather to use a trusse.

VI Treatise of Woundes.

Chapter X Of Wounds in the Head. Fracture of the Skull. Sometimes the cranium is pressed in by the stroke, chiefly in children, that have the bone yet soft, which sometimes rise of themselves, if not we employ ventouses and cause the sickle to hold in his breath to make it rise, Amplasters which have the force to draw. If for all this, it doth not rise, incise the flesh and apply a tirrefond, if that be not sufficient apply a trepan, then an elevator.

The 5th kind of fracture is called Counterclist, which is a fracture on the opposite side.

Another is Commotion or Astonishment of the braines caused by falls, bullets, launces, sound of a cannon shot.

Wee must not trepanne on the boane petrosa nor on the boane of the eiesb because there is a great cavitie full of aire and humidity ordained by Nature to prepare the aire that goeth to the braine. There are few that know how to use the trepanne well, but Gilbert Primrose and John Nessmith, Chirurgions to the King of Scotland, are verye expert in this operation. God increase the number of such learned men in this Land.

Seventh Treatise. Of Ulcers by Peter Lowe Arellian.

He gives a very detailed classification with the names of all their humors, e.g. Sanie, Commendable or Evill Sanie, Virus, Sordities, Durities, Putrefaction, Estachiles or Estilaches (putrefaction of the part) Histioomen (whole corruption of the member.
Full directions are given unto the "Embalmimg of dead folke".

In the Chapter on "Bleeding", it is said that "the number of veines which wee open ordinarily for maladies is 41; to wit, 17 in the heade; 6 in the armes; 6 in the handes; 4 in the fundament; 8 in the legges. They must be opened in three ways. He agrees with the most learned that when the body is most grievously oppressed with maladie, we must not stay for the course of the celestial signes (for astrologers say that we must onely bleed when the body is governed by certain signes of the Zodiac. Olde women must be bledded in the olde of the moon, and young women in the newe. The sicke must have his minde free from passion, chiefly fears, which retireth the blood to the center of the bodie; if he feare fainting, he must eat an egge before or a toaste in wine and lie in his bedde.

Horselaches or Bloudsuckers. These little beastes are little worms. There are two sortes, the one maligne as those which are bread (bread) in rotten standing water, where carrion has been cast, of the which come great accidentes, as tumor, inflammation, ulcers, aposthumes, venenous, as we read of one Messalinus who dyed by putting one on his knee. Therefore we must abstayne from those that have the heead greater than the rest of the bodie, and are greene colour, glittering with blew rayes on the backe. We must chuse such as are found in cleane water, that have their heade little and bodie small, round red-bellied, the backes rayed like threeds of golde. To make them bite, put a drop of pigeons or chickins blood on the part, then if you would have them drawe much, cut the endes of with the sheerers to let the blood runne.
He gives a list of medicaments which are

<table>
<thead>
<tr>
<th>HOT in 1st. degree</th>
<th>2nd. degree</th>
<th>3rd. degree</th>
<th>4th. degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aristolochia</td>
<td>Guaiacum</td>
<td>Gentian</td>
<td>Allium</td>
</tr>
<tr>
<td>Mercury</td>
<td>Peonia</td>
<td>Pyrethrum</td>
<td>Sinapis</td>
</tr>
<tr>
<td>Salvia</td>
<td>Scabiosa</td>
<td>Juniper</td>
<td>Piper</td>
</tr>
<tr>
<td>Saccharum</td>
<td>Fenicula</td>
<td>Anise</td>
<td>etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLD</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Castanea</td>
<td>Cucurbita</td>
<td>Virgo past.</td>
<td>Papaver</td>
</tr>
<tr>
<td>Hordeum</td>
<td>Psillium</td>
<td>Endivia</td>
<td>Opium</td>
</tr>
<tr>
<td>Pira</td>
<td>Plantago</td>
<td>Tormentilla</td>
<td>Mandragora.</td>
</tr>
<tr>
<td>Poma</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lists of drugs are labelled as:

Repercussives, Attractives, Resolvatives, Emollients, Suppuratives
Detergents, Incarnatives, Cicatrisants, Cathetersticks,
Septicks, Causticks.
Christopher Wirtzung.

1598.
Dr. Christopher Wirtzung.

The General Practise of Physicke containing all Inward and Outward Parts of the Body, with all the Accidents and Infirmities that are incident to them, even from the Crowne of the Head to the Sole of the Foote. Also by what Mwanes (with the Helpe of God) they may be remedied; very meete and profitable not only for all Physitians, Chirurgians, Apothecaries and Midwives, but for all other Estates whatsoever, the like whereof as yet in English hath not been published. Compiled and written by the moste famous and learned Doctor Christopher Wirtzung, in the Germane tongue and now translated into English, in divers places corrected and with many Additions, illustrated and augmented by Jacob Mosan, Germane, Doctor in the same Facultie. London. Printed for Thomas Adams, 1598

However learned Dr. Wirtzung may have been, he was a confirmed misanthrope. In the introduction to his book, he bewails the miserable lot of human beings, the whole of life is a sea of misery. There were apparently some compensations however and he tells us that the "Practice of physick is a most sure pawn, for what expert physician has ever lacked wealth. A good physician may also save the soul of an ungodly and vicious man."

That Wirtzung was an indefatigable collector of recipes there is no doubt, his large volume crammed with prescriptions proves this, but that he was a clever practitioner or one that added anything to the sum of human knowledge, one may take leave to doubt.
Address to the Reader. In this it is stated that "for lacke of good and wholesome writings in English for the instruction and safe direction of all those that have not alwayes a good and learned Physician at hand, it has been translated. Further, it is said that the original work was written in high Dutch or Germane, and that it has been more often printed than any other work of a like nature.

Introduction. A very meet and necessary Introduction; for the better understanding of all such things as are handled in the present Practice of Physicke. The author points out that man's life has been made miserable by Sinne. Every maladie hath her due remedie. Then is showed the due and true use of the Ayre, of Moving and Quietnesse, of Waking and Sleeping, of Meate and Drinke."

Man hath examined the whole Earth to find meanes to ease the disease and wretchednesse of Mankind. Yet it is the Nature of Man by Sinne so overtaken, by the first Fall so over-reached, so wrapped and rooted in Iniquities, that at no time in him any goodness either is or may be found. And indeed if we behold our own Wretchednesse, we shall perceive that we are as it were swimming in a boysterous and bottomless sea, tossed to and fro, not finding any place to rest our foote or free our head from water, and albeit at length (with much ado) we doe arrive on shore. Yet there we find as many thistles and thornes, which doe pricke and plague us on every side, untill our miserable flesh at the last returne to the dust and wormes meate.

And in very truth, if we rightly weigh our estate, what is
our life more than a continuall anguish and paine, labour, feare, so sorrow, and alasia, altogether troublesome; Behold our wretchedness even from the hours of our Birth; yet are we not able in any wise to aide ourselves but as it were thrust headlong into an everlasting and terrible prison; there lye we wrapped in our own filth, then doe we abide paine in the belly, gnawing of the Wormes, ach of the gums and teeth, and can onely shew our paine and grief, but lye weeping and wailing evermore. Later follow stripes and blowes, braulings and chidings of the parents and school masters.

In Youth we are in ten thousands of Perilles both of body and Soule, for now we grow wanton, and lascivious, stubborne and obstinate towards our parentes, vicious and ungoodly in the Sight of God.

What sorrowes and cares after all these bring man's yeares with them, the labour and paines to maintaine himselfe, his wife, his children and family. Peradventure if he come to any preferment, he is hated and envied of others, now with one thing, now with another troubled and vexed in mind. When at last he reapeth his paines for his labour he is rewarded with ingratitude, yet oftentimes he is endangered of Goods, of honour, of life and all. Thus with much travell, with many perilles, and with great paines gained he nothing but gray haires and old age. And to conclude, what is old age else then a very sickness it selfe, feeble, weake, full of sorrowes, and an heape of cares, not regarded and esteemed of those that should moste account of it.

Out of all this we may see that our short life is nothing else but a long dying day, in the whiche all miseries meet."
The Causes of Man's Miseries ans Wretchednesse.

"Man's reason as it were chides with God and accuses him of tyranny for creating men so wretched. But not so the godly man who knows that Sinne is the first and onely cause of all our distress, and that at the last we must taste and take death as a merit and payment for our sinnes."

In the next Chapter, Wirtzunge discusses the "necesstitie, profit and Practice of Physicke. God in his pity for our Misery and in His infinite Mercy, has revealed the meane to alleviate them so bountifully and by the Art of Physicke imparted and communicated them to man. The Ancients thought so highly of Physicke that they not onely ascribed the Art itself to the Gods but also reverenced all those who were skillful in it. Physicke is a most sure pawne, for what expert Physician has ever lacked wealth. A good Physician may also save the soule of an ungodly and vicious man."

The work is divided into four chief parts dealing with I. The Head; II. The Breast; III. The Belly; IV. The Extremities.

He begins however by describing when and how to gather roots, etc. and then how to make preparations.

Phlebotomy. In treating of this, he says that April or May are the best months in which to perform this operation, for then man doth most abound in blood. It should be performed on the right side.

At Harvest time the blood groweth melancholy and so must the veine of the Spleene be opened. It is altogether forbidden to open a veine in March, and in January or February only if necessitie constraine.
sitie constraine. In April it is always convenient, but not the median vein, and so it is in May, but not in the legs or feet. In July and August it is hurtful by reason of the heat. It is good in September, October and November, but in December it is forbidden because of the cold, and because there is small store of blood in the Body of Man."

Dr. Wirtzeng however is of opinion that the condition of the patient is of far more importance than any dependance on the condition of the Moon or Constellations. After bleeding a patient, he advises that we follow the directions of that most learned man Joachimus Camerarius; -

The first day not much meat be spent,
The second day to Mirth be bent,
The third day use thy rest and ease,
The fourth and fift eate what thou please,
The Sixt day bathe in any case,
The seventh walke from place to place,
The Eight mayest thou lie with thy wife,
And after live thy wonted life.

The Spleene Veine or Saluatella lies between the little and four fingers on the outside of both hands. It is oftentimes opened because it cleanseth the Spleene, Liver and Brest, cleareth the voice easeth the paine of the heart.

Horseleaches. To make them fasten better, the part must be well chafed, moistened with water and well scratched with the Nailes. If they drawe or sucke not strong enough, clip off a little peace of their tailes, that the bloud may passe through them. They will not leave off until they be stricken on the head with a
little wand or rod or burnt with a wax candle.

The First Part of this Book containeth the HEAD, with all the parts thereof, to the verie Necke, as Face, Haire, Beard, etc.

Cephalalgia is a disease which may affect the whole head and may be very violent. It may last a long or a short time.

Cephalaea is an intolerable headach which doth marvellouslie weaken all the powers of the head. Sometimes it is as if a Hammer were being beaten inside the head.

Hemicrania and Congelatio—the latter is like lethargie and a stupor.

Of Frantiknesse, Madnessse or Doting.

Diseases of the Braines are divided into three kinds, to wit, First, if their accustomed operation be hindered; Secondly, if they be perished and enfeebled; Thirdly, if they be altered from their good disposition and nature into another; like as when a man falleth into foolishnesse and forgetfulness; the which in truth proceedeth out of a coldnesse of the braine, like to the palsey. But if this disease be small then it is a signe that the coldnesse is not great.

He must eat onley bread which is well-raised in such cases and above three days old, otherwise he is to eschue all things that are made of dow. The flesh of all young animals is allow-ed. Herbs and fruits and well-watered sweete wine or small beer may be taken.

Of the Dwelling of a Frantick man. This must be temperate more colde than warme; Bestrew his Chamber and bed with colde
healbe, as Lettice, Purslaine, Willow leaves, Water Lillies and Night Shade. Cold wet cloathes are to be wrapped about him. Let him smell of Roses, Violets, Flowers and Camfere.

For the Falling Sickness in Children.
Amongst a host of remedies our author includes "the water of cow-dung, and if this cannot we had, then is the cow-dung to be broken into faire water and strained through a cloath, and to give him halfe an ounce at least."

The fish that is called Mustella Fluviatilis hath two small bones lying upon the braines, which are to be dried and powdered and given to the child. These are marvellous good, but they must be taken out of an unsodden fish, when they be sodden they have lost their vertue."

"Cures" for the Falling Sickness are so many and varied as to make one gravely doubt whether there was a single one of any value. Here are a few of the more remarkable 'cures':

"Take the juice of Swine's bread, the Seede of Rue, the Rennet of Hares' maws (i.e. the milk found in the stomachs of sucking leverets). Stirre them together in a mortar; blow this into the patient's nostrils through a Vulture's quill. There have beene before times marveles wrought thereby."

"There is also to be a great noysse to be made about the patient, to open his eyes, and hold great light before them; When he is come to rest againe then is he to purge often. Large blisters are to be raised on the part where the disease is caused, and are not to be broken, but left to themselves to burst. They are then to be
kept open for ten days, to the end the moysture have his full course, for this is one of the moste principall remedies that is meete for this maladie."

Perhaps these may not seem so ridiculous when we consider that Dr. Wirtzung states that the causes of this affection are:–
1. Phlegma. 2. Melancholia. 3. Foods and Drinks which fume up into the head, as onions, garlick, raw fruities, wormes of the belly.
4. Putrefaction of the detained naturall seede, of obstructed termes in women, etc.

One may be glad that they did not live in these days should they chance to have swallowed something which had stuck in the throat. The remedy for this was, after having tried various other means, to take a piece of sodden flesh and bind it on a strong thread, and slide it down the throat and afterwards pluck it out again. "If the bone still sticketh, then with a myllet draw it out. If all these do not helpe, then you may use a leaden pipe full of holes, smooth and bent, which you may thrust into his throat to the neather part by force."

The Sixt Chapter deals with

"The Heart, the moste precious Parte of Mans Body."

It is itself hotter than any other member, and is in all beasts in the midst of their bodies, that it might warme the blood and spreade the same abroade over the whole body..........

It is also the dwelling-place of the vitall spirits, which with a continuall stirring and moving preserve it..........

The Heart is also the dwelling-place of all inclinations of the
mind, as mirth, vexation, sorrow, fear, care, hope, love, hate, anger, malice, mercie, etc.

The heart of them that died of Cardiaca or Swouning, or their harts that dyed through poysen, cannot be burnt."

"Panting of the Heart" seems to have attracted much attention for many pages are devoted to descriptions of the affection and to the manifold forms of treatment which it required.

**Barrenness in Man or Woman.**

The tests for this condition are, to say the least, curious. For example, one is: "Sprinkle both their urines upon a Lettice leaf, and whosoever doth dye awaye first, the same is unfruitfull. Or take five corne of wheatemsevne Barley graines, and seven Beanes. Put them all into an earthen Pot, and pissee thereon. Let it stand for seven dayes long, and if they begin to sprout, then is the person fruitfull. or if they rot, then is he or she barren be it man or woman. Or let him pissee in a pot, and let the urine stand a while, if wormes grow therein, then is that urine barren. These three last proofes doe the antient Physicians themselves say to be uncertain, therefore we will let them rest."

**Item.** Make underneath an odoriferous Fume, as of Myrrh, red Storax and such like odoriferous warme things to passe into the necke of the Wombe, through a tunnell, which being close covered round about; if the woman finde that this smoke go through the body, and feeleth it in her nose, then is she fruitfull.

**Another.** Take grosse beaten Garlike, and lay the woman with her backe thereupon, if so be that she feeleth the small in her nose then it is a token of fruitfulnesse.
From an almost endless list of 'cures', the following may be taken as examples:

Item. "Take the Stone of a Bore Hog being two years old, and the pessell of a Stag shaven small, half an ounce, four pair of Foxe Stones, and fiftie or three score Sparrowes Braines, wild Yellow Rapes, Satyrion, etc. confected altogether in Sugar, Shaven Ivory, three ounces and a halfe, Cinnamon, the Pisse; of a Bull, Pingles, Dates and Indy Nut kernels, of each two ounces, (then there follows twenty other ingredients). This confection may be by both men and women used, whereof have beene greate wonders seene."

Of those things which expell Gravel and do breake the Stone.
Take oil of Lillies, of Scorpions and of Earthwormes of each a like much, anoint the reines with it by the fire, or a warme oven. Eat every morning 6 or 7 bitter almonds, or Peach Kernels.
To breake the Stone is this following very forcible.
Take prepared Buckes blood, one dragee and a halfe, an ass of Scorpion, one scruple, ten grains of good Treacle, burnt and prepared glass one Dragme,

Of the Termes or Flowers of Women in Generall.
Common experience showeth and all learned men do testify the same, that women's termes do bring innumerable sicknesses with them, and have many infectious properties; namely, when the same happeneth to fall, there groweth no fruite, spoileth the vines, the Must will be Vinegar, the Hearbes wither, the trees dry away, iron rusteth, and all mettals do darken and waxe dim; the same being taken, make a man madde, and chiefly the dogges. The Bees leave their hives if they be anoynted therewith. Women when they
have the same, then do they darken through their breath all bright looking glasses, the aire will be poisoned with them and children (as it is said) bewitched."

It must be a common occurrence with the present-day practitioner, when at his wit's end to know what to do for some patient, he refers to well-known text-books, only to find that the whole of the therapeutic measures are summed up in a few lines.

There could be no such complaint in the days of Dr. Wirtzung, for octavo page after page is devoted to descriptions of mixtures, salves unguents, plaisters, etc. for each disease. Thus in the Chapter headed, "How to preferre and Mowe the Termes or Flowers in Women", some fifty detailed prescriptions covering seven large pages are are set out for the benefit of the doctor who desires to bring on the flow in any particular case.

One of the cures for the "Falling downe of the Mother or Wombe" was, I hope more effectual than it must have been pleasant. Item. Take a stinking egge from a brood Hen, and dip cotton in it, and then lay it upon the dependent necke of the Matrix, then will it forthwith be drawne up againe.

"Meddlesome Midwifery" finds no place in this volume. Dr. Wirtzung rather inculcates a masterly inactivity. If, for example, there is a malpresentation and a hand or foot appear," then there must be swelling of the necke of the Matrix and of the partes adjacent. Then take Penniroyall, Bugwoort, and browne Betonie; hack it altogether and let it seethe in milkw, lay it then under her, before the birth, as warme as she may abide it, about the member
of the childe, the same driveth away the swelling, or let seething water under it, when the childe feeleth the warmthe, then doth it draw the member back againe." Other recipes of a somewhat like character are given, but manual interference is never mentioned. "If the Afterbirth will not come away, then let the woman be given of the powder of the Aggat, and that thereupon the secundine must follow."

Ague in its manifold forms must have been a very common disease at that time, for our author devotes about 24 folio pages to a discussion on it and to the treatment to be adopted.

Of the Plague. Amongst many causes of this disease, Wirtzunge gives the following, - "Venimous vapors of the earth that are infected by some earthquakes. Or if a country be hot, moyst, full of standing waters, and cloyed with stench of dead bodies," and so on. "But however, this is the moste certaine cause, that God, the Lord, for our manifold sinnes and wickednesse, to wit, idolatry, incrudelitie, and ingratitute, hath used this plague and many afflications more, as hunger, warre, and shedding of blood, to punish the foersaid sinnes and transgressions. These are his rods and scourges (even the ministers of his wrath) to chastise the wicked world."

Signes of the Plague to come. First. It is a certaine signe that the Aire is infected and that a plague is to be expected, if in the end of Summer there appeares Comets, or any other impressions, which men call flakes of fire, starres that fall or shoote.

Secondly. When any unaccustomed heape of Beastes are seene, as of
Frogs, Toades, Grasshoppers, Mice and Wormes.

Thirdly. When in the Winter the South or East Windes abound, mistie or foggy weather full of vapors continue, "etc.

Of the Detestable Sickness, Drunkenesse.

Wirtzung treats this as if it were a real disease, and discussing it after Ague and Plague, says that it is worse than either.

Of the Venomes that come of Beastes.

Amongst numerous preventives and cures, he gives the following; The Smoke or Fume of Asses lights will drive away venomous beast. They cannot abide the smoke of Ferne.

Hair of Womens' heads burnt, hath a marvellous power to drive awaye Snakes and Spiders.

The Braines of a Cocke or Capon are good for venom, being used in meate.

A live Mouse applyed to the place hath a speciall vertue for to drawe out the venom, howbeit, Hens, Pullets, and Frogges are also very commodious for it.

Woodlice (albeit they are lothsome wormes) nevertheless, they are above all things commended by the renowned Phisitians against the poyson of Snakes.

Spiders are well known beastes and are very venomous.

A wonderful Remedie that might be tried for the Pleurisie;—

Take the tooth of a Wild Boar. File from it two scruples and drinke this powder with scabious or Well water."
Thomas Moffett.

1605.
THOMAS MOFFETT.

We are indebted to Mr. Oldys for most of the facts which relate to the life and writings of Thomas Moffett. This information was contained in an introduction to an edition of "Health's Improvement" which was published in London in 1746. According to this, Moffett was born in London close to the end of the reign of King Henry VIII or about 1540. In the Dictionary of National Biography the date of 1553 is given. Moffett came of an ancient Scottish family which gave its name to the watering place in Dumfriesshire. A John Muffet died in the parish of St. Leonard, Shoreditch in 1596, and it is presumed that he was the father of the subject of this paper. As the parish of St. Leonard was inhabited by well-to-do people, it is likely that the Muffet family was in comfortable circumstances. Thomas was the eldest of three sons, and was educated at Aldham Hall in Essex. On the occasion of the marriage of one of his brothers, he relates that an enormous oyster was presented at the feast. It had shells a foot long, and the oyster itself was so large that it was divided into eight pieces. He also informs us that his mother died after a surfeit of pig's flesh.

Thomas took his degree in Arts at Caius College, Cambridge. He was nearly poisoned there by eating a few 'muscles'. He tells us as a remarkable fact that he saw the stone (Urinary calculus) which Dr. Thomas Larkin, who was Professor of Physick at King's College, passed in a very unusual manner. He studied under this Dr. Larkin and under Dr. Caius, the Founder, "Whose Frowardness in his last sickness
was owing to his having been suckled but by one woman." His other teachers at Cambridge were Dr. William Turner, the Divine, learned physician and botanist, Dr. Timothy Bright and Dr. John Penney. Moffett informs us that the last "having abstained from taking salt for a certain number of years, fell into divers stoppings, cruel vomitings, intolerable Head Ach whereby his memory and inward and outward senses were much weakened." He also tells us that he once cured this same gentleman of asthma, after he had taken Hog-lice in Wine to no effect, with smoking of Brimstone through a pipe."

He travelled widely through the continent of Europe, visiting Holland, Germany, Denmark, France and Italy, and he speaks of having studied in the Academy of Basil in 1579 under the famous Felix Platerus, President of the Physicians there, and under Zuingerus. In 1578 he obtained the degree of MeD at Basil (Basle) and published two collections of his theses. He visited Spain and Italy during the two subsequent years and spent much time studying the habits of insects. Moffett studied earnestly the works of Paracelsus, and after his return to England he did much to propagate the principles of this system.

In 1582 he accompanied Lord Willoughby of Ebesby, who had been sent by Queen Elizabeth to convey the order of the Garter to the King of Denmark. He met there Tycho Brahe and Peter Severinus who was the King's physician. The latter was engaged in a controversy with the Anti-Paracelsians and other enemies to the New Improvements in Physick by Chymical Preparations. After his return to London, Moffett wrote in Latin an Apologetical Dialogue in which he maintained the use and excellency of Chymical Medicines. In five other epistles he upheld the doctrines enunciated by Paracelsus.
Another letter showed why the modern physician was to be preferred to the ancient, while his last one was written to demonstrate the advantages of travel in enlarging the learning and practice of the physician. These epistles were written between 1582 – 4, and are to be found in Vol. I of the Theatrum Chemicum of Lazarus Zetznerus of 1659.

It would appear that Moffett had been the medical attendant of the noble house of Somerset, and in his 'Book of Bees', he speaks of having made his observations on these insects at Her Grace's seat Hanworth. In 1586 he, along with Dr. Penny attended the Dutchess of Somerset when she was dangerously ill at Hanworth.

In 1588 he was admitted Fellow of the College of Physicians of London, and published in the same year his "Nosomantica Hippocratica sive Hippocratis Prognostica cuncta, ex omnibus ipsius scripta methodice digesta." Frankfurt.

In 1591 he served with the forces in Normandy and gave medical attention to the Earl of Essex there. It would appear that after his return to England he became attached to the Court and so formed a friendship with Sir Francis Drake. Moffett tells us that he lived with his family at Ipswich for some time, and while there he came across two cases where a living toad was found embedded in the rock. In one of these instances 500 persons saw the occurrence. Another of his stories is that artichokes were so rare and so much appreciated that they were sold at a crown apiece in his youth. When he was about the Court he had seen "Wolmer that foul Feeder, who would swallow glass, oyster shells or anything; yet at last was overpower'd with eating of a raw eel."

Later, he lived mostly in Wiltshire as a pensioner of the Earl of Pembroke. In 1597 he was elected a Member of Parliament for Wilton.
where he died and was buried in 1604. A contemporary eulogy says of Moffett that "he gain'd, as Men of great Genius, refin'd Morals, the Character his high Merits deserve'd, and the Happiness of being esteem'd a famous Ornament of the Body of Physicians, and the true Pattern of all polite and solid Literature."

That he was a well-learned and indefatigable writer is evident from a list of his published works:

(1). "Dialogus Apologeticus De Jure et Praestantia Chemicorum Medicamentorum", auctore Tho. Moffatto, Londinare Anglo, Accesserunt etiam epistolae quaedam medicinales ad medicos aliquot conscriptae. Francofurti 1584. (This is explanatory of his medical principles).

(2). "Nosomantica Hippocratea sive Hippocratis Prognostica cuncta, ex omnibus ipsius scriptis methodice digista". T. Meufeti. Opera, 1588.

(3). "The Silkwormes and their Flies; lively described in verse by T. M. (Moffett), a countrie Farmer. 1599.

(4). His History of Insects he found to be too expensive to be printed during his life-time. It lay in M.S. for many years until it was sold by Darnell (Moffett's apothecary) to Sir Theodore de Mayerne, the King's Physician. It was not until 1634 that the latter published it and dedicated it to his friend Dr. William Paddy. Mayerne speaks of Dr. Moffett as "An eminent ornament of the Society of Physicians; a man of the most polite and solid Learning, and renown'd in most branches of Science."

The full title of the work is:

"Insectorum, sive minimorum Animalium Theatrum, olim ab Edoardo Wottono, Conrado Gasanero, Thomaque Pennio inchoatum, Tandem Tho.
Moufeti, Londinatis, Opera sumptibusque maximis Conconnatum, auctum, perfectum; Et ad vivum expressis Iconibus supra quintentis illustratum. Londini, ex Officina Typographica. Thom. Cotes. Folia 1634

This work was published in English in 1658 by Dr. John Rowlan and is included in Edward Topsell's "History of Four-footed Beasts and Serpents".

According to Anthony Wood an imperfect edition was printed abroad, but whether with Moffett's permission or not, is not known. Wood says that it was published in 1598 by Laur. Scholzius.

Moffett's M.S. was in the form of a folio volume and was dedicated to Her Majesty, Queen Elizabeth. A frontispiece had been engraved by William Rogers of London and contained in four small oval frames portraits of Gesner, Wotton, Penny and Moffett himself (styled Scoto- Anglus).

In his Introduction, Moffett states that he had rescued Dr. Penny's work (which had been written fifteen years previously) from the risk of being thrown away. It had been evidently carelessly put together as it resembled waste-paper, but Moffett had seen its worth and had purchased it. He says that he had incorporated in it the labours of Gesner, Wotton and his own in a methodical manner and had enlivened the same with such a spirit and elevation of style, as may exalt our Considerations upon this exiguous part of the Creation, to magnify and adore the Wisdom and Power of the Creator himself, no less for his miracles in miniature, or in these compendious, than in his more Capacious Operations.........and may lead us to know how much greater our Obligations are, who have received his Gifts in greater Perfection.
"A treatise of Drinks". This has been lost.

"Health's Improvement or Rules comprising And Discovering the Nature, Method and Manner of preparing all sorts of Foods used in this Nation; written by that ever-famous Thomas Moffett, Doctor in Physick. Corrected and enlarged by Christopher Bennet, Doctor in Physick and Fellow of the Colledg of Physicians in London, 1655.

This was the first appearance of the author's work—fifty years after his death and it is probably the one which is of most interest to the medical man. As it gives a good idea of the state of medicine at the time, I think it would be of interest to quote freely from it.

In his address "To the Reader," the editor, Dr. Bennet, says, "Tis not an itch to be in print, but my Profession to keep men alive, and when gone to recover and revive them, that hath induc'd me to this undertaking. Blame me not therefore, for using means to raise our Author out of the dust and long oblivion wherein he was buried. His own Relations and their Interests much solicited my Help, but the Merits of the Man were the greatest Motives Seriously, upon perusal, I found so much Life and Pulse in his dead dead Works, that it had not been Charity in one to let him dye outright. Farewell."

Moffett says that there are but few and particular persons (yea, perhaps the sons of Devils) which cannot overthrow the general rule and course of Nature. It is possible to God (as the Devil truly objected) to make stones as nourishing as bread; to feed men with locusts, (a most fretting, burning and scalding vermin)
as He did John the Baptist."

In discoursing on "Aire", he says, "How staggers the head and how presently sinks the heart, at the smell of a damp, or the insensible sense of deadly and subtile spirits carried from the Ugh trees of Thasus or the hole of a cokatrice, or the breathing of Aspes, or the Dens of Dragons, or the Carcases of Dead Serpents wherewith the aire is not so sooninfected as the hearts and brains of men wherunto it is carried. The aire may be also infected by the smoak of charcole newly -kindled whereof Quintus Catulus died, or with the smell of new morter which killed Jovinian the Emperor in his bed, or with the snuf of a candle wherewith many have been strangled, or with the aire of a pan of coles throughly kindled by which Aemilius Victor suddenly fell down dead. By the smell of the snuf of a candle many become leprous, and women miscarry of children. The smell of a wantlowse may kill a child in the Mother's womb........Nevertheless as Thilly saith of women. They smel best which smel of nothing.

They which live in a stinking house are seldom healthy. Isabella Cortesa the dainty lady of Italy, comb'd her hair and sprinkled her gown every morning with this sweet water following, whereby the aire circumfluent was so perfumed that wheresoeuer she stood, no stinch could be discerned. (Orange-flower water, violets, musk, roses etc. entered into the composition of this water.) These waters are costly nevertheless sith men of mean fortune are likewise to be preserved, I appoint for them these perfumed cakes, and for the poorest sort, a less costly perfume (benzoin, storax, musk etc. to be burnt on coles).

Moffett then goes on to show how sudden change of air is dangerous and gives examples, e.g., the brother of Lord Rich who had almost recovered from the smallpox. He looked out of a casement and presently was stricken with death; or the case of a rich clothier
coming suddenly in an extreme frost from a very hot fire into the cold aire his bloud was presently so corrupted, that he became a lepet, which is an ordinary cause of the same disease in high Germany.

Some go out early before the dew is off and the sun up, which is very unwholsom; others also walk at night after the dew falling, which is as perilous, for the dew to man's body is as rust to iron in so much that it blasteth the face and maketh it scabby if a man do wash himself with it.

Treating of Meals, Moffett remarks that "feeding on chicken peparers, rabbit suckers, young pheasants, all young small birds, all small fishes of the river, eggs warm out of the belly of the hen, etc. engender fine complexions.... As there is a certain temperature and distemperature of our bodies, so likewise is there in meats, that temperate bodies should feed of their likes. as, for example: -

(1) First degree, as lamb, pork cockles, skirrit roots, hop buds, etc.
(2) Second degree, hare, turkey, peacock, honny, ducks, carrots, potatoes, nutmegs, etc.
(3) Third degree, scallops, mints, tarragon, leeks, ginger, pepper, etc.
(4) Fourth degree, skallions, garlick, ramsies, etc.

In Scotland and Wales many men's bodies and stomachs are so full of cold and raw fleagme, that leeks, onions, watercresses, and garlick is made a nourishment to them which would gripe, fret and blister temperate stomachs.

What is more unpleasant to most men's natures, than the taste of humane flesh? Yet not onely some women with child have longed for it, but also the whole nation of Canibals account it the sweetest meat of all others.

He condemns the flesh of artificially fed animals as being unwholsome food. In describing how best to make meat tender and appet-
Patoncles affirmed that if a lion were showed to a skug strong bull 3 or 4 hours before he was killed, his flesh would be as tender as that of a steer, fear dissolving his hardest parts and making his very heart to become pulpy. Perhaps for the like reason we used to bait our Bulls before we kill them, also for same cause old Cocks are courses with little wands from one another or else forced to fight with their betters before they are killed.

Till 2240 years after the flood, we read of no flesh eaten of any man.......but now our complexions being weak through abundance of sin and riot and our climate being unapt for wholesome fruits, let us give God thanks for storing us with flesh above all other Nations making our Shambles the wonder of Europe, yea verily rather of the whole world.

Some ascetics have never eaten flesh because they say that it is ready to inflame lust, but the Greenlanders feed upon nothing but fish (for no beast nor fruit can live there for cold) are nevertheless exceedingly lecherous, and also their women very fruitful. Nothing is more available to engender lust than the eating of certain fishes and sea plants which I had rather in this lascivious age to conceal from posterity than to specify them unto my Countrymen.

Moffett then goes on to describe the characters and uses of particular foods. From an enormous mass of details I shall select a few passages which are of interest from a medical or historical aspect.

"Ox Beef, the older it is, the worse it is, engendering quartane agues, leprosies, scabs, cankers, dropsies, etc. The flesh of an old He - Goat is tough, hard and unpleasant. His flesh is not to be eaten till he hath been baited like a Bull, to death, and when he is dead
you must beat the flesh in the skin, after the French fashion of beating a Cow. An old SHE-Goat rather provokes venery and sharpness of seed than nourishing the body. The Chief Priest of Rome did never so much as touch them, saith Plutarch, because they are subject to the falling sickness, lecherous in life and odious in smell."

After having given directions as to how to brawn (i.e. Fatten) a pig, he goes on "After he is brawned for your turn, thrust a knife into one of his flanks and let him run with it till he dye; others gently bait him with muzzled dogs. The Roman cooks thrust a hot iron into his side, and then run him to death, thinking thereby that his flesh waxed tenderer and his brawn firmer. I esteem it to be a very queasy meat, however it be prepared. Finally, no Brawn, pork or bacon should be eaten without wine.

Hare. Certain it is that much eating of hare's flesh procureth leanness, because it is very diuretical, and commonsense teacheth, that a man missing much, cannot be fat; because the wheyish part of blood is sooner expelled.

Hedgehogs. When I consider how cleanly the Hedgehogg feedeth, namely upon Cow's milk (if he can come by it) or upon fruit or mast, I saw no reason to discontinue it. Some affirm it nourisheth plenteously, strengtheneth Travellers, preserveth women with child from miscarrying, helps the Lepry, Consumption, Dropsy, Stone; only it is forbidden unto Melancholick and Flegmatick persons and such as are vexed with Piles.

Squirrels are much troubled with Choler and the Falling Sickness yet their hinder parts are indifferent good.

Wild Fowl especially such as flye far for a little: their meat is more light in digestion because they are of a more spirituous and
aiery substance, and are not of so abundant nourishment as tame household birds which converse with us and offer themselves (as it were) to be killed at our pleasure. Young Cockrels are counted the best in this kind, nourishing strongly, augmenting seed and stirring up lust. Of a Black Hen the broth is whitest, and of a Black Goat the milk is purest. The most part of hens and hares are scurvy and leprous. Moffett thinks that the best of all flesh is that of Capons. Referring to Geese, Jason Pratensis says that the Jews have so hard a flesh, so foul a skin, so loathsome a savour and so crooked conditions, because they eat so many geese. Indeed their exceeding watchfulness, meek disposition and blackness of flesh argue a melancholick constitution. Young pigeons must be let blood to death under the wing as this maketh the flesh cold and whiter.

Snipes (snipes) Rusticulae. When they perceive a worm's hole, they thrust in their Bill as far as they can, and if the worm lie deep, they blow in such a breath or blast of wind, that the worms come out for fear, as in an earthquake. Snipes are of laudable nourishment.

A large variety of birds seem to have afforded nourishment to our ancestors. For Moffett mentions the virtues or evils of cuckoes, Godwits (Wedoes), Snipes, Redshanks, Smirings, Pees or Haggisses (magpies, Jays, Woodpeckers, Stone-chatterers, Kingfishers, Thrushes, Fieldfares, Blackbirds, Owls, Rocks andd many other small birds.)

He devotes one chapter to the relative advantages of the "inward and outward parts" of beasts and birds. As regards the Fat of beasts "as it was forbidden the Israelites by God himself, for some cause unto himself best known, so there be many reasons to persuade us not to eat of the same. For it takes away the appetite gluts the stomach and decayeth the retentive powers." Let some commend
lard and fat bruises never so much, and slap it up as greedily as they list yet they will reward us in the end with many diseases.

The Brains of animals he does not approve of, but the Tongues are good, excepting those of birds which are usually exceedingly hard, dry and gritty.

Tripes and Chitterlings of Oxen, Swine and Deer are foul and unwholesome meat, engendering scabs, itchings and leprosies and other filthy diseases like themselves. The guts of Larks, Woodcocks and Snipes give no bad nourishment, being presently roasted as soon as the birds be taken." Moffett makes the curious statement that birds do not possess kidneys.

"The Stones of a Bore work marvails (Saith Pissanellus) in decayed bodies, stirring up lust through abundance of seed. Indeed when Bucks and Stags are ready for the rut, their stones and pisels are taken for the like purpose; as for the stones of young Cocks, Pheasants, Drakes, Sparrows, it would be a world to write how highly they are esteemed." Are we three hundred years late in the discovery of the therapeutic value of orchitic substance?

Milk is in his opinion of universal value. It seemeth to be nothing but white blood, whited in the breasts of such creatures as give suck. Nature converteth the superfluity of blood in a woman bearing her child within her to the breasts for no other purpose than that she should nourish her own babe. For truly nothing is so unperfect, defectuous, naked, deformed and filthy as a man when he is newly born into the world through a straitened and outstretched passage, defiled with blood, replenished with corruption, more like to a stain than to a living creature."

Moffett affirms that the milk of the Goat is apt to produce a
a goatish and lecherous quality. - "I pray you what else is the cause that many children put out to nurse in the country are so subject to frets, sharpness of urine and the stone, but that their nurses for the most part eat rye bread strong of the leaven and hard cheese and drink nothing but muddy and new ale. An unclean and pocky nurse (which woful experience dayly proveth) infecteth most sound and lively children. A child's mind is answerable to his nurse's milk and manner for what made Jupiter so lecherous but that he was fed chiefly on goat's milk? What made Romulus so cruel? but that he was nursed by a she-wolf. What made Dr. Cajus so peevish and so full of frets at Cambridge, when he suckt a woman (whom I spare to name); and contrariwise so quiet and well when he suckt another of contrary disposition.

Moffett gives the following directions as to how Milk should be taken:

1. The milk of every horned beast should be sodden, for so will it not easily curdle or engender wind.

2. Season it with salt, sugar or honey; eat it on an empty stomach, and fast for an hour afterwards.

3. Exercise not presently upon it, neither sleep upon it; then wash your teeth clean, for there is no greater enemy unto them than milk itself, for therefore hath Nature chiefly ordained for them, who never had or have lost their teeth.

Out author declares the milk is not a suitable food for healthy adults, and cites the case of "My Lady of Penruddock of whose cruel and terrible end caused by the left worms of all other, perpetually engendered betwixt the skin and the flesh, through superfluity of nourishment arising from the long continuance of goat's milk."
The best sure for Marasmus is to suck the milk from a woman's breast. The nurse must be young, clear of skin, of a kindly smell, no wine bibber, no ordinary wanton.

Butter is best at breakfast; Tollerable in the beginning of dinner, but at supper no way good, because it hindreth sleep. "Butter is good in the morning, silver at noon, and lead at night."

The sixteenth Chapter treats of "Eggs and Bloud." "They which eat only the yolk fall into many hot and dangerous diseases unless they have a very cold liver and watrish bloud. Contrariwise the whites of eggs are so cold that spongy wood being overlaid with them will hardly or not at all be burnt in a glowing fire. Both being taken together do so qualify one another that generally they agree with all stomachs. Neither can we imagine how any egg should be wholsom proceeding from an unwholsom or distempered creature. Wherefore we condemn all Eggs of Turkies, Peacocks, Geese, Ducks. Eggs are best eaten alone because being mingled with other meat, they corrupt in the stomach, filling mens faces full of pimples, morphies and freckles."

Blood. In Rome, Physicians did prescribe their Patients the blood of Wrestlers, causing them to suck it in warm breathing and spinning out of their veins, drawing into their corrupt bodies a sound mans life and sucking that in with both lips; yea they were not ashamed to prescribe them a meal made of mans marrow and infants brains.

Fish. Sea fish which live in a stormy ocean afford the best diet, while those in still waters are often harmful. Herring well watred or qualified in warm milk, they taste not ill after they are broiled but yet they give none or a bad nourishment, saving to ploughmen, sailors, soldiers, mariners or labouring persons to whom gross and heavy meats are most familiar and convenient. Mackerel cause
drowsiness in the best stomachs, and apoplexies and palsyes or dulness( at the least) of sense and sinews to them that be weak. Of scallopes he says, the most and best be in Spaine, by Campostella, whether many lecherous men and women resort to eat scallops for the kindling of lust and encrease of Nature, under the name of a Pilgri- mage to St. James, his Shrine."

"A good way to dress most scaled fishes is to stop the mouth of the fish with a nutmeg and cast him in skipping into a boiling liquer of strong vinegar and stale ale and keep him down until he be thorowly dead and perfectly sodden. Snails are unfit for weak, cold and moist complexions, because they themselves are cold in the first degree and moist in the second. They are best for hot stomachs, choleric constitutions, thirsty distemperatures, watchfull brains and men troubled with ulcers of the lungs."

Treating of Fruits, Moffett says that Abricocks are good onely for their taste and fragrant smell as they engender pestilent agues. Old Apples are best because of long lying they lose two ill qualities Watrishness and Windiness. It is questiones by some whether raw Chesnuts may not engender lice. Figs are the sweetest fruit of the bitterest tree in the world. Plato so affected them that he was called the 'Fig lover', nay, he loved them so much that he died of lice, engendered of corrupt blood which the figs made. Chesnuts engender much blood and seed whereby mankind is much encreased which opinion I like best, hearing and seeing so much fruitfullness in Wales, that few or none be found barren, and many fruitful before their time; while long use of Lattice causeth barrenness.

Strawberries, let every man take heed of Melchior, Duke of Brunswick, how he eateth too much of them, who is recorded to have burst asunder
at Rostock with surfeiting upon them".

Dr. Moffett quotes largely from the classical writers on Medicine either to support his opinions or to controvert their statements. "Breakfasts are fit for all men in stinking houses or close cities, but also in time of pestilence and before you visit the sick; Contrariwise where the air is pure, clean and wholesome, it is best to fast till dinner.... True labourers and workmen may feed four or five times a day because of their hard work. How long should one sit at dinner or supper? The Duke of Lithuania (Switrigalus) never sat fewer than six hours at dinner and the same at supper. I think this custom was carried to Denmark, for I remember I sat with Frederick, King of Denmark, seven or eight hours together at one meal.

To conclude, mince or chaw your meal finely, eat leisurely, swallow advisedly and sit upright with your body for an hour's space or less."
Ancient Mineral Wells in Scotland.

1618.
That Mineral Waters were well known to the ancients is evident from the fact that Pliny gives a long list of mineral springs which were employed therapeutically all over Europe. Nearly all the temples of ancient Greece devoted to Aesculapius were situated closely to mineral springs. When these waters were warm, the temples became in large measure bathing establishments. Hippocrates enumerates the diseases which were benefitted by the topical application of warm salt water. He also alludes to the internal use of mineral waters; thus, he says that hard salt waters were good for those who suffered from loose bowels. The employment of cold water in the treatment of fevers was extolled by Hippocrates, and Galen, Celsus, Asclepiades and others followed his advice. Amongst the Romans however the use of baths and bathing became almost an obsession. Indeed the "thermae" were really pleasure resorts in the decadent days of Rome, and it was said "Balnea, vina, Venus corrumpunt corpora nostra".

Nor did the use of mineral waters cease during the middle ages and we find Actius, Alexander of Tralles, Paulus Aeginata, Avicenna and many others recommending their use.

In comparatively modern times, Cardanus, Hoffman and notably Sir John Floyer were advocates of the use of mineral waters and baths.

It is little more than a hundred years however since the widespread use of mineral waters and baths came into vogue. Dr. James Currie of Liverpool popularised this method of treatment by his "Medical Reports on the Effects of Water, Cold and Warm, as a Remedy in Fevers and other Diseases" published in 1797. A Silesian farmer
Priessnitz, by name, with true Teutonic thoroughness, commenced the practice of hydrotherapy in Germany.

It is not however with the development of this art that I wish to deal, but with a very limited application of it in Scotland in bygone days. There are many mineral wells in Scotland whose reputation goes back for centuries. Several owed their reputation as curative agents merely to the fact that they were reputed to be "Holy Wells"—made so either by the blessing of a Saint or by some miracle having been performed through the agency of the water. In time medical men began to direct their attention as to why certain of these wells did really exert influences which were beneficial to health. The following is a brief survey of the work of these early investigators.

I. Kinghorn Well.

During the early years of the seventeenth century, a well situated near Kinghorn, in Fifeshire, seems to have attracted much attention. Two medical men, well-known at that time, wrote descriptive accounts of it within a few months of one another; one was Dr. Patrick Anderson, and the other, Dr. William Barclay.

The Colde Spring of Kinghorne Craig. His admirable and New Tried Properties so far foorth as yet are found true by experience written by Patrik Anderson D. of Physick. Dedicated to the Right Noble and Illustrious Lord John, Erle of Mar, Lord Erskine and Garioch, etc. Lord High Treasurer of Scotland.

My singulare good Lord and Patrone,

Right Noble Lord, Thought water bee but a wairsh and tastis subject, wherof manie lyke litle to heare, far less to taiste
yet it is a great worth. And I hope your L.as willinglies will accept from your owne servand not a drink, but a discourse of that rare water, which long hâde, hath been of lait discovered for the good of manie........

Take it then, my Noble Lord, in good pairt, it being from one who honoureth your worth, and oweth you his love. From my hart wishing your L. and your most noble Ladie, a great portion of Methusalem's Yeeres for this lyfe, and after it, eternall lyfe. I humblie rest,

Your L. most willing Physition and obedient servitour.

From my house at Edinb.

the 8 of Oct. 1618.

Not very much is known about Patrick Anderson. He made himself much more famous by his "Grana Angelica, the prescription for which he says he brought from Venice, and the merits of which he extolled in a volume published in Edinburgh in 1635. They must have appealed to the public, for they were on sale as late as 1843 in the capital. That he interested himself in general literature is shown by the fact that in 1625 he took the trouble of seeing through the press the Rev. James Caldwoodle's ( Minister of Falkirk ) work entitled The Countesse of Murr's Arcadia, and to it he prefixed a long dedicatory Epistle to the Countess, who was one of his patients. He also wrote a History of Scotland in three volumes; but this has never been printed, and remains in manuscript in the National Library of Scotland.

A satirical dramatic poem written by Dr. Anderson was published after his death in 1635, and was reprinted in 1821. It is
entitled "The Copie of a Baron's Court, newly translated by what—
you-call-him, clerk to the same. Printed at Helicon, beside Parnassus,
and are to be sold in Caledonia."

It would appear that Anderson was physician to King Charle
I., and it is not improbable that he knew King James VI and I. He
dedicated "The Colde Spri ng" to John, Erle of Mar, who had been
educated at Stirling along with King James, under the tutorship of
James Buchanan. The two boys were close friends, and King James nick-
named his companion "Jocky o' Sc latti s" (slates). John Erskine
was the only son of the Regent of Scotland, and rose to high eminence,
becoming Lord High Treasurer of Scotland.

The cold Spring which attracted so much attention during
the seventeenth century was situated a little to the east of King
Alexander's Cliff, and issued from under a huge rock of which Dr.
Anderson gives a rude drawing. The construction of the railway line
has however almost obliterated this ancient spring.

"The Ca uld Spring."

"Hard by the shor e syde of Kinghorn e, within a bow-draught or
Botes
more to the heaven of Prettie-cur where the heave
west the sands, is a great round steep Rock, whose fore-front lying so
oppen to the sea, and opposite to the weather, is so beaten therewith
are that his superficial parts are become so friable, and as it were
rotten to everie light twitching of one's hand........

Upon the east syde is perceved a certaine white cleir congeal-
ed water anotring through the moyst cliffts, much resembling the geil
of faze or representing the strynge of ane eevile rosted egge. Out of
the broade face of this foresaid Rock, springs most plesandly a verie
cleir and delicate cauld water, which being drunk in great measure is
is never for all that, felt in the belly."

Dr Anderson goes on to state that it is one of the best remedies for stomach troubles, and is the only remedy for "chronick and lingring diseases", especially for those who have spoiled their stomach by the "superfluous drying of cuppes." It is a most comforting and refreshing drink in fevers and agues and distempers of the liver. "It dryeth up the Youk, and universal Skab and tempereth the heat of the Reines; it is a soveraine remedie for paines in the Back proceeding of Gravell or Sand, causing the patient to pitle out many small stones, and making them to descend without paine."

It is employed for eye troubles, singing in the ears, for itching and heat of the face with "plouks." It is powerful for those who are short of Brath. "The geallie water that sweateth out of the craig when rubbed on hands and face, "procures a verie faire and beautiful skinne."

He states that he was the first member of his profession who crossed the Forth to investigate the spring. "I, at the first, as also many others, thought it but ane idle toy ans a conceit of the people, ans as some think it yet. Others thought it a trick devised by The Ferriers onlie for gaine..... At length, I begoud to think that albeit it was no uncouth thing in others countreyes to have such minerall waters yet rare and but of lait knowne amongst us."

Anderson was of opinion that the agent which was of value in the water was "rather a kynd of doulce Nitruse and semi-minerall mixture, wherewith these Crystalline and glauncing stones are obscurelie possessed." This nitwe differs little from saltpeter, he says. The Craig was also endued with a soft Crystall " which is made of water materailie, and that water of itself is fleeting; but by
vehement cold is made stedfast Crystall." (I presume he refers to
the formation of stalactites.)

"These waters are not like the superstititious or mud-earth
wells of Menteith or the Ladiswell of Ruthven with a number of
others in this country, all tapestried about with old rags, as cer-
taine signes and sacraments wherewith they arle the divell with
ane arls-pennie of their health; so subtile is that false knave,
making them believe, that it is only the virtue of the water, and
nothing els. Such people can not say with David, 'The Lord is my
helper, but the D."

The above refers to the common practice at that time and for
long afterwards of hanging on bushes or trees near the well threads
or patches of cloth as offerings to the Spirit of the Well. The Holy
Well at Craigie in the Black Isle, was in the first Sunday of May
of each year almost hidden by the quantity of rags dedicated to it
by the pilgrims.

Our author ascribes the beneficial effects of this cold
spring to the Nitrositie, Crystall and Gypsum which it contains. He
also hears that the spring has "helped paralytick members, the
stupiditie, and inability of the sinewes."

"Water was the first drinck that men universalie used of
old, but afterwards when voluptousnes seased upon mens appetites,
they invented and set before them diverse sorts of drincks, becausethey thought water but a taistles and unsavorie thing...... But
now a dayes our queasie stomaches are become so tender, and so kitle
that if wee but ones in a yeere taiste water, wee are in danger to
catch the colick; no, we must have a litle seck and sugger or else
vehement cold is made stedfast Crystall." (I presume he refers to the formation of stalactites.)

"These waters are not like the superstitious or mud-earth wells of Menteith or the Ladiwell of Ruthven with a number of others in this country, all tapestried about with old rags, as certaine signes and sacraments wherewith they are the devil with ane arls-pennie of their health; so subtile is that false knave, making them believe, that it is only the virtue of the water, and nothing els. Such people can not say with David, The Lord is my helper, but the D."

The above refers to the common practice at that time and for long afterwards of hanging on bushes or trees near the well threads or patches of cloth as offerings to the Spirit of the Well. The Holy Well at Craigie in the Black Isle, was in the first Sunday of May of each year almost hidden by the quantity of rags dedicated to it by the pilgrims.

Our author ascribes the beneficial effects of this cold spring to the Nitrositie, Crystall and Gypsum which it contains. He also hears that the spring has "helped paralytick members, the stupiditie, and inabilitie of the sinewes."

"Water was the first drink that men universalie used of old, but afterwards when voluptuousnes seased upon mens appetites, they invented and set before them diverse sorts of drincks, because they thoght water but a taistles and unsavorie thing...... But now a dayes our queasie stomaches are become so tender, and so kitle that if wee but ones in a yeere taiste water, wee are in danger to catch the colick; no, wee must have a litle seck and sugger or else..."
our stomach is gone.

I perceive my verie lerned frend and old Parisen acquantance, Mr. William Barclay, would have all the effects of this water to proceed from Tinne. I cannot think this has proceeded of ignorance, because I know him to be more lerned than my selfe. I suspect it may bee imputed to his haist in making for the tyde."

Dr. Andersom ends with this exordium:

"Goe then with boldnesse, and drinck of this wholsome and Physicall water, and say not to your selfs, the Physitions envyeth it, speaketh against it, they approve it not, and it hindereth their gaine. Onlie but carie with you these few directions following, and so faire yee well." Then follow certain directions as to those who ought to drink the spring water and those who ought not.

"none should drinck of this with a 'bund bellie'. Th help those, he advises that they should carry with them a box of Grana Angelica (his own preparation) and to swallow 8 or 9 in a vere or potched egg.


To mine approved Friende Andro Hart,

Master Hart being at Kinghorne bearing company to my deare and sickly nephew, who is come thither to crave helpe from
this recently laureated Master Doctor, the new-found, much celebrated well, I have penned a little Discourse, containing in a letter to my Lord Chancellor, the Nature and Effectes of this water. But I am wonderfully importuned either writing or diting copies of the same. For the which cause I send to you, as to a Common Father of Letters the principall piece, that you maye give it the Cognissance of your Characters and a patent Pasport under the Seale of your Presse. So constrain-ed to cut short, by the slamoour of Mariners calling to the Tide, I take my leave at Leith the 8 of August anno 1618.-

Your most affectional friende,

Barclay,
Doct. Med.

An interesting personality William Barclay must have been. He came of a good family, his elder brother being Sir Patrick Barclay, Baronet of Towie, and was born about 1570. He studied Arts and Medicine at the University of Louvain, where he took the degrees of M.A. and M.D. Justus Lipsius, the great classical scholar, was one of his teachers, and so it is not surprising to find that Barclay soon became Professor of Humanity at the University of Paris. Lipsius had the highest opinion of his former pupil's talents, and said that if he were dying he knew no person on earth to whom he would leave his pen but to the Doctor Barclay.

Barclay returned to Scotland and practised medicine for a short time, but la belle France lured him to resume the teaching of the Classics at Nantes, where he died in 1630.

In 1614 he published at Edinburgh the pamphlet (now very rare) on which his afme chiefly lies, "Nepenthes, or the
Virtues of Tobacco." It is a warm panegyric on the herb, which he asserts is adapted to cure all diseases when used with discretion and "not, as the English abusers do, to make a smoke-box of their skull, more fit to be carried under his arm that selleth at Paris du noir a noircir to blacke mens' shoes than to carry the braine of him that cannot walk, cannot ryde, except the tabacco pype be in his mouth." He calls it " A heavenlie plant", "the hope of healthe;" the jewell of our life," etc.

Two years later King James published his Counterblast to Tobacco, in which he says that smoking is a "custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs." In 1598 Barclay had published an " Oratio pro Eloquentia "; in 1615 " Callir noea, commonly called the Well of Spa or the Nympe of aberdene resuscitat," and also " Apobaterium or Last Farewell to Aberdeen," of which no copy exists; in 1618 "The Nature and Effects of the new-found Well at Kinghorne. He also wrote several poems and paraphrases of the psalms, which were published in 1619 and 1628.

To illustrate the spelling, diction and quasi-scientific explanation of the author, I give the following summary of his work:

"To my Verie Hon. Lord, My Lord the Earle of Dumfermeling and Chancelar of Scotland.

My Lord, I know how little pleasure the affaires of this Kingdome doe afford to your Lordship and I know how large a discourse the Argument of this Letter dorth minister; therefore I shall not distract your Lordships busy attention, neither shall I extende this purpose, but according to your Lordship's intelligent judgement, I shall contrive an obscure and intricate subject to a compendious narration."
This latelie found, and newlie-known, too-long unknowne Well si fama dedicit jam non mentiri. This well is so blazed abroad, and our Physicians, not without cause, are so loath to open their mindes concerning the same, that I imboldened both by your Lordships countenance and understanding have taken the hardinesse to breake the yce, and show to your Lordship so much as I can perceive, touching the Causes and Nature of the Water and of the Effects and Vertues thereof, that the rest of my more learned collegues may be encouraged to dye their exercised Quilles in this wholesome Liquour.

It is a mixed water by the Continuall flowing thorow a Mettall from whence it hath contracted a Spirituall Energie and a certaine Mercuriale subtile substance. To be short, the Mettall which hath communicated force and efficacie to this water is Tinne.

From the Water itselfe are many pregnant reasons; as that the water being a compound, and mixed bodie, it carrieth no savour or taste of anie thing, but of pure water; which argueth none other Mettall but Tinne; For anie other Minerall or Semi-Minerall, except Golde and Silver would bewray itselfe by taste or colour. But Golde it is not, neither is it Silver, which I affirme by the Effectes; For all Physicians, both Dogmaticke and Spagyrickes, receive Golde and Silver amongst their cordiall Medicamentes, and not amongst the Nephrickes; But this is by experience Diureticke and asswadgeth evidentlie Nephricke dolours, wassheth the ureters and the Bladder, which effectes the Paracelsians attribute to Saturne. I need not to draw the consequent which wittingly followes the premisses. More, this water being distilled, or exhaled, leaveth in the Bottome of the Alèmbecke a Salt unsalt, that is, a matter white like Chymik
salt, which is unsavorie, and somewhat inclining to sweet, much like to
the matter which the Alchemistes drawe from Tinne and call it Sac-
charum Saturni.

Nowe, secondlie, from the Effectes I prove it to be Tinne, Because
the whole Furnace of Paracelse keepe as a great secret in their
Phylosophicall extractions, That Sacch Saturni: that is to saye, the
salt of Timne is the onelie speciall thing to cure an Ulcre in the
Kidneyes, because it is diureticke, and so carrieth to the afflicted
part, and then it is detersive and drying, which qualities do cure an
Ulcre, and which qualities we find in this water.

Lastlie, from the adjacent circumstances, wee reason this way.
It is not improbable, that there should bee Tinne in that part because
it is a Mettall familiare and domesticke to this yland, the best of
Europe being found in England.

As Towardes the effectes of this water. There are two thinges
to be said. (I) What it might doe, being Physicallie used (2) and
what it hath done, being Vulgarlie abused. For the first, I will
supercede, because I am loath, at this time, to trouble your Lordship
for the other.

This water is experimented to bee verie aperitive and serveth
verie much for the washing away of Sande, being taken in such quan-
titie as maketh a speate; and it bringeth doun little stones from
the kidneys, and expelleth them also from the bladder. Yet it is
not tried to have force to diminish or demolish a conformed and con-
solidated stone in the bladder, albeit it hindereth the intollerable
dolours of the pitiable gravels, and quencheth the burning heat of their water, and causeth them make water without painful dropping. It is verie detercive for the which qualitie it louseth the belly of some. It is also very drying, and in this respect it bindeth the belly of most part off Drinkers. As we remarke the same accidents fall out in the use of Milke. For the croudy part bindeth some, and the serous or wheyish part louseth others. Nowe joyning these two properties together, to deterge and to drye, it maketha soveraigne remedie for all internal Ulcers, also for this detercive qualitie, it is good for the sight, because it taketh away all clouds or blots which effuscate or dimme the Cornacea tunica and causeth the Species intentionales to passe more purelie and cleanelie to the humor chryssallin.

I adde thus much more. That there is not a more daintie Fairde for Ladies; no not Oleum Falci which is so Curiosalie ever sought, and never found. It plaineth and poliseth their faces and taketh away all blots and furrowes, and leaveth no frumples in their skinnes, with greater securitie and honour, that the venemous Sublimatum or Gerussa which they so frequentlie abuse. Because this water hath the more spirituall operation of Mercurie quintessenced from the Tinne, which I confirme by two reasons. The one is, because it is sudorifick and procureth sweate in abundance, being drunken some number of dayes consequently. The other is, because the temperament of it is hotte, albeit it bee actualie cold. The heate appeareth, in that it procureth of the eyes, first a smart, and next a great itch.

Lastlie, this is a soveraigne and unioke remedie for that disease in Women, which they never acknowledge to be a disease,
while it be almost past remedie, and more than a disease, when Phys-
sicians have none helpe, but one lie sowwvow to heare their complaints
and the regrate of their lamentable negligence, so ceasing to pro-
secute this warsh matter of water, I will never cease to continue,
Your Lordships most humble and obedient Servitour,

Barclay, Doct. Med.

II. MOFFAT WELL.

The author of the following account of the Medicinal Well
at Moffat was Matthew Mackail or Mackail. His father was minister
of Trinity College Church in Edinburgh, where Matthew was born about
1630. He became an apothecary and burgess of his native city. In
1657 Archbishop Sharp of St. Andrews employed him to write papers on
various Church matters connected with Scotland. His cousin Hugh was
a Covenanting minister, who was apprehended, tortured with the "boot;
and hanged at the Market Cross in Edinburgh on 22nd December 1666,
amidst such " a lamentation as was never known in Scotland before,
not one dry cheek upon all the street, or in all the numberless
windows."

Matthew practised medicine in Aberdeen, where he took his
M.D. degree in 1696. He was the author of several works; the descrip-
tion of Moffat Well was first issued in Latin in 1659, and its trans-
lation followed in 1664. In 1675 there appeared at Rotterdam his
"Noli me tangere tactum, seu Tractatulus de Cancri curatione"; a
short treatise " On the Use of Mace " in 1677, and several others
at later dates.

Moffat- Well, or a Topographico-Spagricall description of
the Mineral Wells at Moffet in Annandale of Scotland. Translated and much enlarged by the Author, Matthew Mackaile, Chyrurgo-Medicine, Edinburgh, Printed for Robert Brown, and are to be sold at his shop, At the Sign of the Sun on the north side of the street, over against the Cross 1664.

Dedicated to the Rt. Hon and truly noble William, Earl of Morton Lord Dalkeeth in servile phrases.

There is a long preface in which he describes the Elements of Chymie. He states that there are six simple bodies whereof every Animal, Vegetable and Mineral body is composed and into which they are resolved by distillation and calcination; and they are these:—

1. Earth, 2. Phlegme or the insipide Liquor, 3. Mercury or the Acide Spirit, 4. Sulphur or the combustible Liquor, 5. Volatile Salt which cannot endure the fire, but flyeth from it, 6. Fixed Salt which resisteth the strongest of Vulcan's fury without any damage.

Then as regards Moffet Wells, "he declares the manner of their becoming notour unto men." Six years ago, a valetudinary Rustick who, travelling through Annandale, felt a smell like to that of Brampton Wells, which made him walk contrary to the wind, following the smell brought thereby; and then upon the top of a little Rock (and at the distance of one mile from Moffet), which was covered with mire and clay, he discovered two little Spring - Wells. He recommended them and his friends, so that within twelve months after, all sort of sick persons did begin to resort unto them and that from all places of the Country. The manifold commendations which I did everywhere heard uttered, concerning their virtues and effects, did beget in
me a longing desire after a sight and tryall of them; especially seeing I could never hear from any, of a reason for the vulgar opinion concerning them.

Two years are not yet expired since the Earl of Hartfield and Annandale was pleased to command the dressing of the Wells; so that the entry to them is much bettered and their diversity is made more conspicuous, by the removal of the Clay and the surroundings of them with a Wall. This is the Topography. Let us proceed with the Spagyrical description. The limpide Waters are impregnat with the putide Sulphur of Antimony, Nitre and natural Salt—Amoniack. The last cometh of the Urines of the (almost) innumerable Beasts which live in the circum-jacent Moors.

As the Water of the Heather Well descendeth into the preter-labent rivolet, a matter whitish and salinous (and without doubt Nitrous, wherein the diuretick virtue of the Water resideth) doth attach itself unto the rocks. The whitish stones of the Upper Well are Nitrous and Antimonial. From whence proceedeth the vomitive and purgative virtue of the water if not from Antimony? We therefore reject the common opinion That this Water runneth through mineral sulphur or Brimstone and that it barroweth its putide smell from it.

There then follows a long disquisition as to the cause of the smell of the water—quotations being taken from Dr. Andrew Bacchius and arguments made as to his statements. MacKail then goes on to discuss the cause of the heat of the waters, and wanders from it in order to investigate the cause of the heat in fevers, in heart-burn (which he calls the Heart) scade) and concludes from his premises, (i) that it is necessary to distinguish betwixt hot and cor-
rosive as betwixt hot and cold, (2) that the intense heat of waters that boil in fountains ought not always to be attributed unto fire (as Dr. Bacchius said) but rather to the action of a corrosive body as of Nitre, Vitriol, etc., being not far distant from the fountain.

Concerning the Use of the Water; Many have gotten much good by the Use of this water, and others have reaped more harm and finished their miserable lives soon after their making use of it. Certain rules must be followed:— (1) The Water of the Wells of Moffet should be most warily used seeing it doth sometimes produce as bad symptomes as Antimony itself doth. (2). No man should use this water internally who doth not (by vomiting, urine or stool) evacuat as much as he doth drink, especially if he be hydropick. (3). It conduceth to the cure of almost all Ulcers; and external diseases and pains of the joynts, etc. when it is only externally applied. (4). It is very diuretick. (5). In the autumnal months, it is enriched with the most and best of its strength and virtues, the Earth being at that time most dry. (6): The robust should take an antimonial vomiting for lousing of their humours, before they make use of the waters. (7). It is by many confidently reported, that this water hath often made the barren womb fruitful; which we cannot contradict, having been greatly convinced of its certainty in some afflicted with this lamentable infirmity. (8). It is also good for Scurvy, and paralytick have been much bettered by its use.

An Appendix Concerning the Saltiness of the Sea, etc., contains some stupid wrangling concerning an assertion of Dr. John French that the heat of springs is due to the burning of bitumen or sulphur in the earth. MacKail then goes on to deny that the sea has gradually become salt.
Seeing that the Sea is a great body, it is more probable that all the salt was concreted with it, in the very instant of its creation; than that its saltiness was, by little and little, communicated into it by the salt of the Bitumen which was burned in the caverns of the earth. For seeing that salt is such a useful and necessary thing for man, it is incredible, that God (Who created so great a variety of Creatures for the use of man) Did not, at the beginning, cre.ate it with the rest than many of which it is more useful. Seeing that every pound of Sea-water contains about a drachm of Salt, and the Asphaltick Bitumen scarcely containeth any saltiness that's perceptible by the taste; It is probable that a mass of Bitumen (though calcined and equiponderating the terrestrial Globe,could not communicate so great and perceptible saltiness to so great a body as the Sea is." Mackail then explains why the Dead Sea (lake Asphaltitis) is so salt because the Cities of the Valley, Sodom, Gomorrah —were calcined or incinerat by Fire and Brimstone which came down from Heaven and that the ashes of all calcined bodies contain salt which has been washed into this lake.

He gives a curious explanation why sea-sickness attacks people not accustomed to navigation. It is due, he says, to the circulation of salino-sulphurous spirits from the water to the air and this being inhaled causes them to nauseat or vomit. Mackail has some curious ideas about the saltiness of the sea causing the moon to attract it and so causing flux and reflux of the sea, and that sea water is not so saltish when the Tide is at its height as when it is at Low water, because then its salt is dissolved in a greater quantity of water.
III. St. Catherine's Well at Liberton.

The Clyly-Well, or a Topographico-Spagyrical description of the Clyly-Well at St. Catherine's Chappel, in the Paroch of Libberton, by Matthew MacKaill, Chyrurgo-Medicin 1664.

The preface to the Reader consists mainly of a diatribe against quacks or Cheaters as he calls them. He thinks the people have been very ingrate to their MAKER who hath furnished their native Country with such an abundance of most able and skillful Physicians, and remedies of all sorts as might serve in the greatest necessities.

This Well is distant from the Church about a quarter of a mile; its profundity equalleth the length of a Pike, and is alwayes replet with water; and at the bottom of it there remaineth a great quantity of black Cyl, in some veins of the earth.

His Majesty King James the Sixth, the first Monarch of Great Britain, of blessed memory, had such a great estimation of this rare Well, that when he returned from England, to visit this his ancient Kingdom of Scotland in anno 1617, he went in person to see it, and ordered, that it should be built with stones from the bottom to the top; and that a door and a pair of Stairs should be made for it, that men might have the more easie access into its bottom, for getting off the Cyl. This royal command being obeyed, the Well was adorned and preserved, until the year 1650 when that execrable Regicide and Usurper, Oliver Cromwell, with his rebellious and sacriligious complices, did invade this kingdom; and not only deface such rare and ancient monuments of Nature's handwork, but also the Synagogues of the God of Nature.
The author then goes on to explain the origin of springs, quoting learnedly from Aristotle, Solomon and Dr. John French. He quotes from Monypeny's Memorial of the rare and wonderful things of Scotland at the end of his Abridgement of the Scottish Chronicles:

"In Louthian, two miles from Edinburgh, is a well-spring, called St. Catherine's Well, flowing perpetually with a kind of black fatness or oil above the water, proceeding (as is thought) of the Parret-coal, being frequent in these parts. This fatness is of a marvellous nature; for as the coal whereby it proceeds, is sudden to conceive fire or flame, so is this oil of a sudden operation, to heal all Salt-scabs and humors, that trouble the outward skin of man, commonly the head and hands, are quickly healed by the virtue of this oil. It renders a marvellous sweet smell. Dr. Jo. Hart also maketh mention of it, in his Dyet of the Diseases.

Our author says that Monypeny is mistaken in saying it hath a sweet smell, because the smell is most like unto that of the smoke of coals, and their oil which are no ways grateful or sweet, and again the oil remaineth at the bottom of the well and doth never ascend unto the superfice of the water but by drops only and that when the water is commoved.

The manner of collecting the oil is this; the water of the Well being exhausted by buckets, until the superfice of that which remaineth be as low as the orifices of those veins, in which the oil is absconded and then it is removed as cream from milk.

He notes the iridescent character of the scum on the surface variegated with these colours, blue, red, green, purple, etc., and explains it as the reflection of rays of light. The water of the well is
scarcely affected with the taste of the Oyl. It is most probable that the foresaid Oyl is the Oyl of Coals because it is most like in colour, smell and taste, to the Oyl which is extracted out of coal save only that it is not so strong. The adjacent ground southwards is full of Coal-pits and Lime-Stones. We cannot but also confess that it is the very Oyl of the Parret-coal because this is the most sulphureous coal.

The virtues of the Oyl. It cures the Scab and heals all aching of the Bones. It is also probable that it is an Excellent Anti-podagrick (gout) and anti-paralytick Oyle, as well as anti-hysterick.

V. St. Bernard's Well.

A Medical Treatise on the Virtues of St. Bernard's Well, illustrated with Select Cases, addressed to Francis Garden, Esq., one of the Senators of the College of Justice, Proprietor of St. Bernard's Well, by J. Taylor, M.D. 1790.

Francis Garden, afterwards Lord Gardenstone, to whom Dr. Taylor addresses this work, was born in Edinburgh in 1721 and was the second son of Alexander Garden of Tromp, Banffshire. He was admitted to the Bar in 1744, and the following year while serving as a volunteer under Sir John Cope he narrowly escaped hanging as a spy at Musselburgh. He displayed great energy in the famous Douglas Cause and distinguished himself in the trial by his wide knowledge of law and by the fluency of his French. He died in 1793, and is buried in Greyfriars Churchyard, although no stone marks his resting-place. Many stories are told of his eccentricity. He was so fond of pigs that he even allowed them into his bedroom. One day a visitor
stumbled over one which gave a loud grunt: "It is just a bit sow, poor beast, and I laid my breeches on it to keep it warm at night."

Like many other lawyers in the metropolis of Scotland at that time he was a most distinguished advocate and judge, and at the same time was renowned as a wit and humourist. He founded the village of Laurencekirk, and in 1789, having derived much benefit from drinking the water of St. Bernard's Well, he erected a building in the form of a Doric temple over it.

The origin of the well is related to be as follows. St. Bernard had been sent from Rome on a mission to the Court of this country. Not having been successful in this, he retired to the country, took up his abode near this well and soon proclaimed its virtues to all and sundry. He made it clear however that without gifts and free-will offerings, folks could expect but little benefit from drinking of the water. In this way St. Bernard became rich, but at the same time avaricious. He made proposals to the owners of the adjoining lands, that if they desired to devote these to charitable purposes, he would make it sure to them that for every acre which they so gave, they would receive three acres in paradise. Wonderful to relate, by these means he obtained possession of the neighbouring lands. Though he enriched himself, he lost his reputation and popularity, and soon after he died his lands were claimed by the Church, and they continued in their hands until the Reformation about the commencement of the 16th century. After this catastrophe this excellent fountain fell into disrepute, or rather total oblivion.

In the Valley of the Water of Leith from under a green bank and through a flinty rock, a small fountain of clear water takes its rise. It runs in six small veins which are collected into two, and
run into a tub perforated a little above the chyme in two places.

Just facing St. Bernard's Well, upon the opposite bank of the river in the middle of a grove, stands a lofty Gothic tower which serves as a mausoleum to its founder. Near to this spot stands a sepulchral monument in form of an urn, erected to the memory of two lovers, who lost their lives by the falling of a bank, and their remains being lately dug up, were deposited in that sequestered corner.

The fountain is now enclosed and the water raised by means of a pump in its greatest purity and perfection. Here are no mercenary ends, nor exactions, no allurements to expense, vice or dissipation, and no more than just accommodations for the patients and invalids who came for the benefit of the waters.

Dr. Taylor then describes the composition of the water in archaic terms, as consisting of a sulphureous volatile acid and a phlogiston or inflammable principle.

By a copious and continuous use of these waters, the skin from being dry and scurfy, becomes moist and smooth. It smells of a sulphurous odour and the linen becomes dingy and yellow; the silver in one's pocket tarnishes, turns yellow and afterwards blackish.

The water of St. Bernard's Well seems to possess all the good qualities of the other foreign or domestic wells, with the singular advantage of being of our own growth and free from trouble or expense.

The superior excellence of this water is shown in these maladies which are incurable by human art, as for example, Elizabeth Laing after being tapped six times in the Infirmary, and discharged as incurable, recovered perfectly by applying to St. Bernard's Well afterwards bore children and is now alive in St. Cuthbert's Workhouse.
The water when used to make coffee and taken after dinner imparts as surprising vigour to the mental powers; from being morose and sulkys, we are all at once metamorphosed into a gay and cheerful mood.

The restorative qualities of these waters is undeniable and obvious where universal debility, weakness of sight and defect of hearing are impaired through a valetudinary state of health or the infirmities of age. Dr. Taylor gives an instance in the case of a woman who recovered her eyesight after being almost blind, and the case of a man who had lost his sense of hearing on the right side being restored after using this water.

Scorbutic, scrofulous, nephritic cases are all improved or cured. Directions are given as to the selection of cases where the water may be beneficial and where it would be injurious. Cold, moist and phlegmatic constitutions will always find relief from the water of St. Bernard's Well; but in the hot and dry constitution where the solids are over-braced and strung up too high, they must be used with a sparing hand. Therefore asthmatic, hectic, bilious complaints, dry coughs, contraindicate their use. Neither is it to be used in acute or inflammatory complaints, as pleurisies, peripneumonias, etc.

The water may be used at all seasons. A tumbler-glass or two, taken morning, noon and night, is preferable to large draughts. The mind must be kept free from care and anxiety and an uninterrupted state of peace and serenity of mind must be enjoyed. The passions of the mind and the bodily appetites must be kept under government, the result of which is tranquility of mind and health of body.

Numerous cases are cited where cures have resulted from the use of this famous water.
IV. The Well of Spa, or the Nymph of Aberdene.


What diseases may be cured by drinking of the Well of Spa at Aberdene, and what is the true use thereof. As it was printed by Andro Mart, Anno dom 1615 and now reprinted at Aberdene by John Forbes Younger, Printer to the Town and Universitie, Anno domini 1670.

Aberdeen, printed by Burnett and Rettie, and sold at their office, Nether Kirkgate; also by the Booksellers 1799. (Price Threepence).

In an address to the Lord Provost and Magistrates a writer, who calls himself "Philopolis", states that the building over the well had been twice been thrown down, and that he had at his own expense rebuilt it.

Dr. Barclay prefaces his work with an address to the Right Worshipful Sir Robert Keith of Benholme, Knight. He goes on:

"Hippocrates sayeth in his book De Aere, Locis et Aquis, that a physician should consider diligently the nature, and situation of the soyle, wind and water of the land where he mindeth to exercise his Art. Which lesson moved me at my returning to Scotland from thirty years of peregrination to examine these points. I confined my inquisition to the land lying between the water of Tay and the dangerous gulfe of Pightland Firth. I found the High-land to nourish stronge, rude, cruell, long-living, laborious and leacherous men. The only sicesases in this holy Iland known to our Fathers..."
were the Gravel and the Cold or Catarrhus. In the low or civil parts where the inhabitants are more delicately brought up and the land being cold and moyst they suffer from Catarrhes, Gravels, Diarrhoeas, Guts?Colickes, Apoplexies, Paralyses and such like; and because the winds are boysterous and cold, the maladies of their minds are much worse than the Diseases of their Bodies, Pride, Anger, Hatred, Envie, Cruelty, Inhumanitie, Inconstancy. In Aberdene however the inhabitants beyond the nature of their soyle and in spight of Aeolus and all his winds, do so civilise their Burgh as to make it a little Paris.

The medicinal water which not only orneth the Towne of Aberdene, but blesseth the territorie about it with a treasure of Health, more worth than the wealth of Croesus. Before I enter to dye my lippes in that sacred Liqueur, I would say that this Well of Aberdene has received qualities and vertues from such minerals as it floweth thorow, which are Iron and Vitriol; for the effects do argue the mixture of these two. In so much that I dare affirm this Aberdonian Nymph to be sister Germane to the Well of Torges in Normandie, and may well worke as many cures as it, if it were as wisely used. There is no dogmaticke Physician in Europe, which does not allow the use of Iron and Vitriol in the cures of many diseases; so that Nature having mingled these in this water, shall worke powerfully the medicinal effects of both. Now this conceit of Nature is admirable, in joyning the Iron and Vitriol to bring forth one effect; seeing there is such matrimony and copulation between the Iron and Vitriol that there is no part of the world, where Vitriol grow but Iron is adherent. This water has all the spiritual virtue of Vitriol, but all the medicinal qualities of
of Iron, and all the insensible energie that procedeth from the mixion of both. This is the reason why this water hath no such force when it is carried, as it hath at the spring itself; because the vertue of it consisteth in a spiritual and occulte qualitie, which exenleth and vanisheth by the carriage.

Now I proceed to show by what Arte we shall know that this water hath these qualities. For trial take a little of a nutgal and bruise it in pieces and throw it in a drinking glass full of this water and it will become red like clared wine; notwithstanding nutgal maketh all other liquour black; there is no moisture in the world except it be endued with this Vitriolicall vertue that can draw a scarlet colour out of a nutgal. If the water be distilled, a matter unsavourie, sometimes red or blacke remanes in the Alembicke.

The third essay is the quick passage of this water through the body when drunk.

As to how to use this water; it were a temerare and dangerous thing to any man to use this water in aboundance, not having his body prepared and disposed for the same. It can hardly do any harm except in diseases of the lights; because it moveth the cough and increaseth the dolour to the pulmonickes. This water is a present and sure remedy against all obstructions, which are the mothers and authors of most part of our diseases. Now I call an obstruction a sitting or stopping of any passage of the body; this water taketh away the slimie, thick, gleue, teugh matter, that sticketh to the bankes of the channels. If the matter be in the neires, the ureters or bladder, it expelleth the humours by urines; if the cause be in the melt, in the mesentere or the liver, this water worketh by the passage of the stoole; if the matter be in the matrix, the water worketh by the
ordinarie purgation of that part. I have seen sundry men and women
cured of great and tedious diseases by vomiting after drinking of
this water.

This Nymph, beyond the custome of all her sexe, refresheth and
augmenteth the wearie and dull spirits; she giveth health principally
to the general partes of the one and the other sexe; she is the
Panacea for the stone in the neires or bladder and taketh awayv the
hereditarie disposition to this disease; it healeth the carnositie
which is engendered in meatu urinario. And there is no better remedie
for the filthy and stinking Gonorrhoea; if the abundance of slip-
perie and tough phlegme impede a woman to conceive, the discreet use
of this water will assure her of better success.

This water hath a special vertue to help those which have a
natural propension to the leprie or Elephantiasis because it temper-
eth the roasting heat of the liver, which burneth the blood. It does
much good to all cancreous and maligne ulcers.

Can this water hepp those opprest with a confirmed and consol-
divate stone in the bladder? If the stone be of middle bigness, and
consolidated as such are wont to be, then neither this water nor any
other remedie can be able to dissolve it. (The author rates soundly
a Highland imposter who professed to cure the stone). Though this
water cannot dissolve a stone, it doth much good to those vexed there
with as it washeth away the slime.

This water is the surest to prevent dropsie which is due to
exorbitant heat of the liver, and in the case of one perfectly hyd-
roped, this water will cure him because it voideth water out of the
belly.

As regards gout (for so it is called because the waterie
humors guttatim cadunt in articulos), though the water has no leas-
ure in the body to go to the joynts, yet it doeth good by drawing
water out of them.

The meetest time drinke the water is when the weather is hottest
and driest because then the water is lightest and easiest of diges-
tion, the superfluous vapours being drawn out of the earth by the
heat of the Sun. Before we enter to drink of this water, it is meet-
est that our bodies be prepared and purged by the advise of some
learned Physician (I seclude barbarous apothecaries, high-land
leeches, impostors and montebankes). In the mean space that they are
drinking this water, it were meet to keep a good dyet and eat such
meat as leave no cruditie, and doth resist melancholy. This water
must not be drunk with meat, because it helpeth to carry the meat to
the neirs and bladder before it is perfectly digested. The water
should be taken in the morning - two to three houres after the
rusing of the Sun. I ask the Lector to render thanks to God which
has revealed this secrecy not in the Highlands and wilderness, not
in some countrie beggerly village as Spa and Forges are, but amongst
the most civil and courteous and charitable people of this Realme.

Several reputed cures are added along with the names of the
individuals. From a poem added to the 1799 edition, it would seem
that the virtues of the well had fallen from their high position
and that the well at Fir-hill had replaced it in reputation.
Holy or Curative Wells in Scotland.

In all times and amongst all races of mankind rivers, streams, lakes, springs and wells have been worshipped as the abodes of spirits of one kind or another. Most of these supernatural beings were beneficent and did good to those who sought their aid. The Nature-worshipper was not so sure of others however; and so to avert their wrath or to propitiate their protection offerings were made to them.

The river Ganges is without doubt the most sacred water-course in the world. To bathe in her waters, washes away all sin; to die and to be buried on her banks, secures a free entry to eternal happiness but to die and have one's body committed to the bosom of the mighty mother, is the supremest satisfaction.

On the other hand in our own Scottish Highlands, it was the malevolent Water-kelpie which inhabited our lochs. The dwellers around often lived in fear and dread of these evil spirits. It is not so very many years since in a certain loch the drag net and the grapnel were made use of to endeavour to capture the kelpie.

Kindly spirits however haunted the wells and springs of this and of other lands. They either granted the wishes of their worshippers, prevented them from taking illnesses or cured those who were afflicted.

In our country, the pilgrimages to these holy wells became so numerous and so large, that King Edgar in 963 and King Canute in 1030 had to issue edicts to prohibit them. The canons of Anselm
laid it down as a rule, that no one was to attribute reverence or sanctity to a fountain without the authority of the bishop.

Long after paganism had been replaced by organised religion, the popular belief in these wells continued, and only after the Reformation was the custom forbidden as being idolatrous and superstitious. Not to be done out of their supposed rights, the people dedicated the wells now to Saints and not to nature-spirits, and so they have continued to attract pilgrims to the present time.

As to the Greeks and Romans every river had its tutelary god or goddess, so had the hot springs. The curative powers of the latter were so well known that many of the Temples of Ascularpius were built in their vicinity so that patients might obtain nature-cures as well as medical treatment.

Many of the wells must only be visited at certain times of the year and a few are only efficacious before sunrise. Almost all require votive offerings; but these are generally trivial, e.g. pins (sometimes only crooked ones), pebbles or rags which are hung on neighbouring bushes. As showing the great reputation of some of these wells, Mr. Haslam states that he could have picked up handfuls of pins from certain wells in Cornwall.

Perhaps the most famous of British wells is that of Saint Winifred at Holywell in Flintshire. Its renown has endured through many centuries. In the twelfth century, the historian and ecclesiastic, Giraldus Cambrensis offered his devotions to it. King James II visited it in 1688, and the traveller and writer, Pennant still found hundreds of crutches hanging from the roof in 1778. It was considered to be one of the "seven wonders of Wales", and even at the present
ent time large numbers of Roman Catholics make pilgrimages to it. It is related that the spring burst out of the ground at the spot where St. Winifred's head came to rest after it had been cut off by the pagan prince whose attentions she had disdained. If one is in doubt as to the truth of this story, let him look at the stones at the bottom of the well still stained by her blood, and let him not think that this is due to any vegetable growth.

So highly were many of these wells esteemed that on certain days when their curative powers were greatest they were decorated or "dressed" with flowers. Perhaps the devotees were going part of the way to fulfill the advice of Seneca when he says that where a spring rises or a river flows, there should we build altars and offer sacrifices.

St. Elian's Well in Denbighshire is perhaps the best-known of the "cursing Wells". If any one desired evil to his or her enemy they had only to write his name on a pebble and cast it into the well along with a pin when the accursed one would begin to pine away.

I wish however to speak more particularly about the Holy Wells of Scotland. There are many of them all over the land, but as one might expect, they are more numerous in the Highlands. Living more in intimate relation with Nature in all her varying moods, it is not surprising to find that the Highlanders are much more superstitious than the Southerns.

On the first Sunday in May of each year and before the sun rose all the roads leading to Craigie Well in the Black Isle of Ross were thronged with all manner of folks. The congregation
was so great around the well as to make it resemble a fair. Everyone in this assembly had come to dip their hands or faces in the water in the belief that it would act as a charm in warding off from them diseases or witchcraft.

The bushes around the well were almost obscured by the multitude of threads and rags which had been hung upon them as offerings to the spirit of the well. It was of no avail to dip into the water or to drink it after the sun had arisen. Within the memory of some still alive such gatherings took place.

In many cases huge crowds frequented these Holy Wells in spite of remonstrances from both Church and State. The Scottish Privy Council issued an Order in 1579 and another in 1629 prohibiting pilgrimages to wells which "were now so frequent to the great offence of God, scandal of the Kirk and disgrace of His Majesty's Government."

There was another Holy Well at Struthill in Stirlingshire reputed to cure insanity. In 1668 the case of a woman who had been tied to a stone at the well for two nights was inquired into by the Presbytery of Stirling. It was stated that her friends stayed at a house nearby, and during the first night the woman came to them having loosened herself without any help. The second night they bound her again to the same stone, and she again returned loose. They declared that she was very mad before they took her to the well, but since that time she was working and sober in her wits.
On the island (St. Maelrubha) in Loch Maree in Ross and Cromarty there is a deep well which again was supposed to cure cases of mental disease. Those who suffered from such affections were taken to the well and made to drink of the water. After this each was tied to a boat, thrown into the water of the loch and towed round the island. It is said that such a case occurred in 1836.

Pennant in his "Voyage to the Hebrides" describes this well and states that it was supposed to cure those suffering from melancholy, mental trouble and insanity. The poet Whittier, who visited the well in 1850, found out the real reason of its curative power, and tells us so in the following lines:

A fountain, gushing through the turf,
Flows o'er its grassy borders.

And whoso bathes therein his brow,
With care or madness burning,
Feels once again his healthful thought
And sense of peace returning.

O restless heart and fevered brain,
Unquiet and unstable,
That holy well of Loch Maree
Is more than idle fable.

Life's changes vex, its discords stun,
Its glaring sunshine blindeth,
And blest is he who on his way
That fount of healing findeth.
The shadows of a humbled will  
And contrite heart are o'er it;  
Go read its legend, "Trust in God",  
On Faith's white stones before it.

One of the most celebrated wells was that of St. Fillans in Perthshire. Bishop Forbes in his "Kalendar of Scottish Saints" (1872) drew attention to the cruel practices which were at one time carried on here for the alleged cure of insanity.

This is an account of what took place on the 9th. August 1798. A visitor rode from Tyndrum to the holy pool of Strathfillan, which was resorted to by crowds of the neighbouring peasants to be cured of their diseases. Its virtues were so great (he was told) that had he come a day or two later, he would have seen hundreds of both sexes bathing in its water. As it was, he met five or six returning, and amongst them an unfortunate girl out of her mind. She had been brought a distance of thirty miles for several moons, (the well being most potent towards the end of the first quarter of each moon but had not received the least benefit. A rocky point projected into the pool, on the one side of which the men bathed, and on the other side the women. Each person gathered up nine stones from the bottom of the pool, and after bathing, walked to a hill nearby, where there were three cairns, round each one of which he performed three turns at each depositing a stone. If they are bathing on account of any bodily pain or sore, they throw upon one of those cairns that part of their clothing that covered the part affected; and if they have at home any beast that is diseased, they bring some of the meat
it feeds upon, and making it into a paste with the water of the pool, they afterwards give it to the beast to eat, which is an infallible cure, but they must likewise throw upon the cairn the rope or halter with which the beast was tied. Consequently the cairns are covered with old halters, gloves, shoes, bonnets, nightcaps, rags of all sorts, kilts, petticoats, garters and smokes.

When mad people are bathed, they throw them in with a rope tied about their middle, after which they are taken to St. Fillan's church where there is a large stone with a niche in it just large enough to receive them. In this stone trough, which lies in the open churchyard, they are fastened down to a wooden framework, and left there for a whole night with a covering of hay over them, and St. Fillan's bell is put upon their heads. If in the morning the unhappy patient is found loose, the Saint is supposed to be propitious; but if, on the contrary, he continues in bonds, the case is supposed to be doubtful." ( "Scotland in Early Christian Times" by Dr. Joseph Anderson.)

The Well of St. Wallach in the parish of Glass, Aberdeenshire was until a comparatively recent period in repute for the cure of diseases of the eyes. In a hole close by, every devotee was required to deposit a pin, and so it soon became full. When Dr. Duguid first came to the parish, hundreds of puny children were dipped every year. A rag, old shirt or bib was hung on a tree beside the well by each or for each one who was bathed.

In 1796 the Reverend Colin Macbean states that in the parish of Kenmore in Argyllshire there were several tiobaits (tiobairts ?) or holy wells which were resorted to at that time, the number of
those who sought help from the wells was however not great. Some of these wells were reputed to be good for sore eyes, others for the cure of pining infants, some for toothache, others for consumption, some for whooping cough, while others were mere wishing wells.

The island of St. Kilda had several miraculous wells. Thus the Well of the Church (Tobar na Cille) was resorted to when the islanders wanted to visit the island of Harris. If the wind was not in that direction, each of the boatmen stood astride the well in turn, when the last one had done so, the wind changed into the desired direction.

Another was the Well of Virtue (Tobar nam Duaidh). It was held in great repute for the cure of nervous diseases and deafness.

Though hardly in the nature of a well, the Whooping Cough Stone on the farm of Easter Kindrochit in Athole, Perthshire, was famous over a wide area for the cure of this disease. Rain water gathered in the hollow of a large block of stone and children were made to drink this from a spoon made from the horn taken from a living cow. Until about forty years ago this custom was quite common.

On an adjoining farm, Pitaltdonich or Balandonich (either of which means "the hamlet of the Sunday burn") there is another well. Crowds used to resort to this on the first Sunday of each May. Those who were the earliest arrivals were considered most lucky as they obtained "the cream of the water". Buttons, coins and pins were thrown into the well as offerings, and on the trees around rags, pins, ribbons and other offerings were hung.

Not far off there is another farm called Balan Stewart on which is the "fever well" (Fuaran an Chesach). It was supposed to cure
any case of fever.

Near Dumfries there is a famous well known as St. Qurian's well at Cargen. In it hundreds of coins have been found, dating as early as the reign of Queen Elizabeth down to very recent times. Even yet people visit it on Sundays, but this is perhaps due to curiosity more than to any help of cure.

These are only a few out of the many wells in Scotland which have attracted the superstitious in the hope of cure or in even a larger number in the hope of obtaining a fulfilment of their wishes. Of course in Roman Catholic countries, these reputedly Holy Wells still attract large numbers of folks, and in Ireland a few years ago, I have seen many devoutly worshipping at them.
James Cooke.

1647.
Vera Effigies Jacobi Coose Medici, ae Chirurgi peritusseri. Qui, quae indefesso studio et multorum annorum Experience comperit, usu foro ad presentem sanitatem tuendam amissamque recuperandam, non invidet humano generi. Etatis sua ob.
The "Mellificium Chirurgiae" of James Cooke.

It is a pity that one is unable to find out anything of the life of James Cooke apart from what he himself tells us in his works. I feel sure that his life must have been adventurous and full of interest. His own records show him to have been a hard worker at the very least. He lived in the troublous times of the Civil War in England and accompanied the army under Cromwell, and as Army Surgeon he may have visited Scotland and even Ireland. He tells us in the Preface to the Mellificium that his surgery had been "much advantaged by continual practice through the bloody work which had taken place in the Kingdom". It is even possible that he may have acted as Naval Surgeon in some of the numerous engagements between our navy and that of the Dutch, and he may have served under Blake, the great Sea-king himself.

That Cooke was a religious man is evident from the many Christian admonitions which he gives to his reader in the course of this treatise. At the end of the work he says, "to conclude, it is my earnest desire to enjoy the prayers of those who are interested in Christ, which shall (God enabling) be answered with earnest breathings for thy eternal happiness by him, who desires to be accounted a Brother, though unworthy."

Cooke lived for some time at Warwick, from which place he issued the first edition of the "Mellificium" in 1647 in 8vo. A second edition appeared in the following year, and yet another in 1655, but this latest had as an addition a "Supplementum Chirurgiae, or the Supplement to the Marrow of Chirur-
gery, wherein is contained fevers, simple and compound........ as also the Military Chest, containing all necessary Medicaments." 12mo.

In 1657 under the title of "Select Observations on English Bodies and Cures in Desperate Diseases, etc." Cooke published a translation from the Latin MS of Dr. John Hall (Shakespeare's son-in-law) of Stratford-on-Avon who died in 1635.

In 1662 an enlarged edition appeared under the title of "Mellificium Chirurgiae or the Marrow of many good Authors enlarged, wherein is handled the Art of Chirurgery, as also an Appendix wherein is handled the Cure of those Affects usually happening at Sea and in Camp. To which is added new Institutions, physical and chirurgical, Hippocrates' Aphorisms with a brief Commentary." London. 12 mo.

In 1676 it was republished but still further enlarged and with the addition to the above title "to which is now added Anatomy, illustrated with twelve brass cuts and also the Marrow of Physick; both in the newest way" by James Cooke, practitioner in Physick and Chirurgery. London. Printed by J. D. for Benj. Shirley, and to be sold at his Shop under the Dial of St. Dunstan's Church in Fleet Street.

The "Mellificium" has the Imprimatur of Sir George Ent, President of the Royal College of Physicians. He was a man of Dutch extraction and lived from 1604 to 1689. He wrote an essay in support of Harvey's discovery, entitled "Apologia pro Circulatione Sanguinis."

The four Censors of the College who upheld Cooke's
work were—Thomas Cox (born in 1615, died in 1685) a physician in the Parliamentary army; Daniel Whistler; P. Barwick and Thomas Allan.

Sir John Micklethwait, one of the eight Electors of the College, states that he has perused the book and judged it to be very useful and fit to be printed. He was also President of the College from 1676 to 1681 and Censor seven times, being at the same time medical attendant to King Charles II.

William Willis, the famous physician, whose body lies in Westminster Abbey, writes a commendation of the work.

Cooke dedicates his book to the Right Honourable Robert Lord Brook, Baron Brook of Beauchamp Court, to whose family he had been Servant and Chirurgion for nearly forty years, "and I can say I have oft sat down and bewailed your condition and oftner beg'd of God that he would not only effectually heal you but sanctify them (his troubles) to you, for the purging away of sin, and making you more holy; without which there's no seeing God's face with Comfort."

To the young Chirurgion he says that he has composed this work so that it will suit him both for sea and land so that the young beginner need not be troubled with Chest or Portmantue........... as for Juniors in the Profession they need not think themselves so perfect that they require no help, or having been taught of others, instead of thankfulness, throw dirt in their faces, let them lay this down as not being intended for them, till they learn more humility, and better manners."
The following illustrations will show the style of the work.

Examination of the Urine. Dealing with this, Cooke says, "You may know a breeding woman from one not. For those with child, the sediment is like carded wool and there are little particles much less than a pea and more white than ordinary sediment, but then the woman must be well."

"Brain and Breast purgers. Those which empty the diseased matter nestled in the Brain do it by the Nostrils and the Pallet. By the Nose are Errhines. 'Tis a liquid remedy which drawn into the Nostrils, calls the humor from the Brain, especially Flegm; and are used for several Affects of the Brain, Meninges and Nostrils; White Pepper, Pyrethrum, Tobacco, Hyssop, Marjoram, Mustard, etc. are to be employed. The next are Sternularie which are more strong, thin and sharp, stirring the expulsive faculty of the Brain more strongly. They may be blown into the Nose with a quill. To the Mouth are used Masticatories; these draw Flegm plentifully from the Brain through the Mouth by their heat and acrimony, by which they thin the Humor and stir up the expulsive faculty: hyssop, nasturtium, origanum, anise, angelica, gentian, pepper, cloves, etc. are used.

The author then gives long lists of drugs to be used as Cephalicks, Ophthalmics, Thoracicks, Cardiacks, Spleneticks, Utericks, etc.

After narrating "Hippocrates his Aphorisms" with Commentaries, Cooke proceeds to "set down some very good Receipts approved of several Persons of great note;" and cases are quoted from Riverius, Thonerus, and others.
Quoting almost at random from the Alphabeticall List of diseases, we find it stated; — "Phythysis is a wasting of the nutritive juice, but almost all authors define it to be an Ulcer of the Lungs, join'd with an Hectick. 'Tis true the Pus infecting the Blood, makes it unfit to nourish, and thence the Body wastes, as appears in an Empyema. . . . . . . . There are various other ways, by which Ulcers of the Lungs may happen, as from Gonorrhea, too much of Venery. . . . . . . . The Medicaments to be used, are the Decoction of Lign. Guaiac corrected with Red Sanders and Curran's is good, also Water of Swine's Blood distilled. . . . . . In all Spittings of Blood, the chewing the Roots of Nettles, and swallowing the Juice down; yea, the Juice of Nettles as also the Decoction is excellent, as I have tryed."

"The Cause of Delirium or Raging Fever. . . . . is Bile pectant both in a more salt Acrimony and a more acid Oiliness which diminisheth the viscousness of the Pancreat Juice, and so causing a vitious effervescency, which being made sharper frames a Humor not much unlike black Bile."

Plague. "For Preservatives in short use frequent Prayer to God. Fly (if your quality and condition of Life admit) early, far off, and be slow in return. But depend not too much upon it, for 'tis impossible to fly beyond the reach of God."

In speaking of Natural Hunger, Cooke says, "it is an Appetite of Meats and is chiefly caused by the remainders of Food fermented in the Stomach, raising a sour and grateful vapor from it, and the Spittle which pleasingly affects the upper Orifice thereof, and so produces hunger."

Incontinence of Urine. "Children have been oft cured
with fryed Mice, stones of a Hare burned, Snails, Shells and all burnt; powder of Egg shells, powder of Agrimony is excellent; so the inner skins of hens gissards dried, either of which may be given either alone or mixed together. Cocks wesan dryed and powdered is good; the powder of a live- Toad burnt in a new pot hung about the neck in a Bag, and the powder may be given in Red Wine, or steel'd Water or Aq. Calc. Viv. There's also good Sow's Bladder, burnt ashes of a Hedg-hog, but above all is Pudenta suilla which is said also to be admirable in Convulsions.

The Second part of Cooke's work deals with Anatomy. This he says, is handled in two ways. Philosophically, which searches into the structure of the parts, their Actions and Uses, for Man to know himself, and admire his Maker. Physically, which also enquires into the natural disposition of every part, bringing all into practice; both are necessary. The Subject is every live-Wight, especially Man."

On the whole the descriptions though meagre are adequate, and are helped out by some excellent plates. The following few sentences will give an idea of his style.

"The Gall-bladder is Pear-like; in its neck is three valves to hinder the Biles regress."

"The Spleen joynes to the bottom of the Stomach by short vessels by which, some say, is cast a special kind of fermentative Juice; others think not."

"The Clitoris is sometimes soft, sometimes hard, resembling that which sometimes 'tis too apt to receive and is too apt to intrude."
"That all the Nerves especially the Sixth pair of the Head, do convey the Nutritive Juice (or rather the Nervous Juice some say from the Mesentery Glandules of the Loynes and Thymus to the Brain and Spinal-Marrow, whence 'tis imparted by the Nerves to the parts of the Body for Nutriment. The Motion of the Juice is by intervals slow and gentle to the Brain in Sleep and to the Members after Sleep (it seems taking a Nap first). The cause of the Motion is the Midriff, Brain and Nerves themselves."

The MARROW OF CHIRURGERY forms the Third Section of the book. "Chirurgery teacheth, how divers diseases of Mans Body are cured by Manual Operation. 'Tis most ancient, very certain; exercised especially on external parts; yea internal, so far as Hand or Instruments may reach.

The Chirurgeon ought to be young, or middle-aged. Of Hands, strong and steddy; and useful with both. Sight sharp, quick and clear. So Pittiless, as not by clamor, either to overhasten or forbear his work more than necessity requires in the Cure under hand.

The Assistants are not to be displeasing or troublesome to the Patient, but attentive and ready to perform the Chirurgion's commands and withal silent.

As regards Fractures, if any Slivers of the Bone, either here, or in Fractures of the Ribs, cause pain and difficulty in breathing, the part must be opened and they removed else Death follows....... Yea, they are to be removed in all other parts where pain is much."
Dislocation of the Shoulder inward. I have oft reduced this by first fixing a Clew of Yarn in the Arm-pit, after laid the Arm over a high Door, one holding it and the Arm close to the Door on the one side; the Party standing on a Stool on the other side, which being suddenly and unawares cast away, the Bone doth slip in.

Prolapse of the Womb. Zacutus cured it by tying a Mouse to the Thigh unknown, and so by the fright the Womb went up. Roder by making as if he would have applied a hot iron to it, which prevail'd. If there be a Gangreen, it must be cut off, first binding it, and after cut off. Barret tells us that five or six smart blows on the bare Buttocks with a strong hand, may reduce it; it being first anointed cum 01. Ros. Yet I fear not so sure, as it may cause smart sorrow or laughter in by-standers.

One having a malign and cruel Carbuncle in the foot, after several Medicines tryed in vain, was cured with this:—

Erysipelas and Herpes owe their Product to Bile. In the first 'tis mostly cast into the Skin; yet sometimes to the adjacent Muscles; appearing in dispersed, red, broad spots.

For the Cure of Cancer, if external and not ulcerated, I have found plates of Lead very good. Unguent de Ran. Virid. is excellent. Take Green Frogs, that live among Trees or in pure Water, put them into an earthen Pot full of small holes in the bottom, fill their Mouths with Butter, cover and lute up the Pot
close, place this in the mouth of another pot without holes set in the Earth up to the Brim, lute them well together; after for the space of three hours, set a gentle fire of Charcoal about the upper Pot, to distill them; when the pots are cold, take out the Frogs in the upper Pot, and beat them in to fine Powder; with which mixing the moisture in the lower Pot, make an Ointment.

Fractures of the Skul. If the Head was bare, the blow hard, the Skul thin and tender; if after the Blow there be Vertigo, dimness of the Eyes, Bleeding at Mouth, Nose or Ears, the party grown dumb and swoon suddenly; thereupon follow Delirium, Fever, Convulsion, Palsie, faultering of Speech, Deafness; and if the Hair cut stand up in the Wound, there's a Fracture. In a word, the more Symptoms there are, the less Hope; and the more grievous they be, the more deadly. If the Bone grow black in the beginning, Death is at hand.

Wounds of the Brest. If they penetrate, holding a lighted Candle thereto, the Party stopping his Mouth and Nose, the Breath will either blow out or move the Candle.

If the Heart be hurt 'tis mortal, yea speedy Death, if it pierce the right Ventricle, such not living twenty-four hours at most. If in the Left, they may live longer. The knowledge of these, led me to predict rightly, that one Moses Lander, Servant to Capt. Matthew Bridges was wounded in the Heart. One of the Scots soldiers under Lesly in their march through Warwick quarreled with one of the Guards and ran him in the left side, which passed between the Ribs into Mucronata; the Man finding himself wounded, set Spurs to his Horse, and rid from St. Johns-Brook to the Castle, the best part of half a quarter of
as he came riding up, I with others, standing at the outermost gate of the Castle seeing him make such haste, with a wan countenance (that always had been ruddy) and the horse side bloody. Scarce my thoughts of his wounding being perfected, before he came near me by twenty yards, he fell from his horse. I with another ran and carried him within the gate, laying him on a form without, at the Porters lodg upon his back, by which time an universal coldness had seized him; his pulse was gone, and so to all appearance past recovery. I used frictions, till a handful of salt came which sent for; with which rubbing his lips for a quarter of an hour, his colour came, and he began to look up ....... About two hours after, coming to him with my wife, speaking something to him to prepare for Heaven, he understanding, cryed out for all or most part of that night, Heaven, Heaven. The next morning, finding him in a fever, after I had dressed his wound, which was very small, I opened a vein, towards the afternoon he spoke pretty plain, and knew me .... I conceived that he would not long continue. The next morning finding his fever again increased, I repeated V.S. as also the next morning after that, yet in the afternoon he dyed. The next day I opened him. There being present his captain, Mr. Trap minister, and several officers and soldiers. I found the tuck had passed through the diaphragma into the point of the heart, almost to the right ventricle, and the stomach drawn up above the midriff. He was a congregational member, meeting them in Warwick Castle. He made a very sweet and comfortable end.
The Gums in infants may continue long unnaturally joyned, so thereby many of them dye. Here speedy help is to be administer before Mortal Accident seize them, as Convulsions, Consumptions etc. Many are the Medicines used in this case, as the Fat of Ha Hens, Geese, Ducks, Fresh Butter, Ol Amygdal. For those soften and rarify. Cock's blood from the Comb, anointed with the Finge once at most. Hare's Brains are good. If there be danger, the Gums must be divided, where the Teeth bunch out with little swelling, either with an Incision Knife, or piece of Gold or Silver, by which means some have been preserved, that had otherwise perished.

Whilst I sojourn'd in Daintry in Northamptonshire a Servant to Mr. Rawlins (then Apothecary) was dressing her Head with her Mouth full of Pins; her Sweetheart coming unawares behind her, gave her a gentle Blow on the Back, being frighten she swallowed all her Pins. Her Master presently gave her a Vomit, which brought them up, and so she was delivered from danger of Choaking.

Prosthesis. The Nose may be restored from the Body, it may either be from their own Body, or the Body of Others. If the last, let them be sure if they can that such be longer-lived than themselves, lest they lose what they have got before they dye. To perform this work, remove the callous edges of what's remaining of the Nose; after make Incision into the Biceps Muscle of the Arm, as large as there is need, into which put the Parties Nose, binding the Head to the Arm for Fourty days, or till they be agglutinated; after cut out as much as will make
the Nose, which is after to be duly fashioned in all things. The Lips and Ears may be taken from the same part, the last are more dangerous, there usually following a Haemorrhage, the quantity of the Flesh to be cut out being greater. He that undergoes this work, may be truly called a Patient.

The Nose is oft lost by the Fox. An artificial Nose may be of Gold, Silver, Paper or Linnen-cloth glued, after Artificially coloured, it may be stay'd on with little threads ty'd in the hinder part of the Head, or to the Hat, or rather fixed with some sticking Plaister annexed to the part remaining.

If there be any of the Upper Lip wanting, it may be added in the making of the Nose, which may also be made of it self if wanting.

I have known wrong Teeth pulled out, and being immediately put into their place again, have fixed and become as useful as others.

Cooke has a Chapter entitled "Of Encearing and Embalming. He remarks that a living Body hath been hitherto the Subject of our Discourses. Now they are to deal with it, having paid it last Debt by Death the King of Terrors being not only a sure Prognostick of our following after, but also a Monitor to prepare for the like condition, for after Death there's no place for Repentance.

He then gives Instructions as to how to prepare the Body, e.g. " Embowel the Corps, removing all the contained parts in the three Venters, save the Heart which may be embalmed with the Body. The rest are speedily buried, unless the Body be far from the Place where 'tis to be interr'd, and friends
desire that they may be laid together. Then follow the next Course, which I took with the Bowels of the Right Honourable Robert Lord Brooke. I caus'd a Cooper to make a strong tite Barrel fit to contain them, and to pitch it with in very well, into which I put all the Bowels, with good store of Bran & some Salt. After the Head being put in it, was pitched very well, after which I besmear'd it with the Oyles after prescribed, and so it kept for a month or six weeks, till the Body was interr'd without any offence.

The Last general Part of Chirurgery, i.e. of Medicines, their forms and Applications. This does not differ from the usual lists of Medicaments found in almost all the medical works of that time, and so calls for no remark.
The Powder of Sympathy.

1651.
had reached 48 kg. (7 st. 7½ lb.). She felt well and capable of intensive work. The menses have so far not reappeared, the total increase in weight, however, in this case is 12·3 kg. (27 lb.), of which amount an increase of 9·3 kg. (20¾ lb.) occurred during the first six months of treatment.

Case 3.—Unmarried girl, aged 15. Nothing of note in family history. As a child she had measles, whooping-cough, and chicken-pox. Appendectomy at 11 years. Her weight up to July, 1929, was about 54 kg. (8 st. 7 lb.). June, 1929, she had paratyphoid of five weeks’ duration, with pyrexia and severe headaches. Weight at the end of July, 43 kg. (6 st. 10½ lb.). In the following months general condition was relatively good. At the end of October, 1929, there was a further diminution in weight of 13 kg. (28½ lb.). Severe constipation set in, accompanied by a feeling of weakness and coldness, and lack of appetite. Her first menses occurred at the age of 14; since July, 1929, the menses ceased. A course of treatment with insulin begun before admission to hospital gave no result.

Condition on Examination.—Poor state of nutrition. Height 1·55 m. (5 ft. 1 in.), weight 30·3 kg. (6 st. 10½ lb.), musculature and fatty deposits very poorly developed. Skin pale, dry, and no oedema. Pupils reacted to light and convergence. Thyroid not enlarged. Heart and lungs showed clinically and on X ray examination nothing of note. Pulse, 60 per minute; blood pressure, 70/50 mm. Hg. Liver could just be palpated, but spleen could not be felt. Nothing of note in the reflexes or in the urine. Blood picture: haemoglobin, 90 per cent.; erythrocytes, 4,180,000; leucocytes, 4,500. Blood Wassermann negative. Blood-sugar, 0·108 g. per cent. Vollhard’s renal efficiency test of 1 litre of water ingested, 370 c.c. was excreted within four hours. Basal metabolism, —43·7 per cent. Specific dynamic effect of nourishment showed a rise of 20·7 per cent. in the oxygen consumption. Nothing else of note.

Treatment.—Treatment with prolan was commenced at the end of December, 1929, 1 ampoule of 60 rat units being given daily, and 2 tablets of 50 rat units three times daily by mouth. In the first week there was a further loss of weight of 1·9 kg. (about 4½ lb.), and in the following weeks an increase of 10 kg. (22 lb.). In the course of the next 11 months the prolan was continued at intervals of two to three weeks every two months, with the result that there was a further increase in weight of 12 kg. (26 lb.), bringing the total weight up to 50 kg. (7 st. 12 lb.). The total increase in weight in the 13 months of continual prolan treatment was therefore 22 kg. (ca. 48½ lb.). Plate 3 shows the patient before treatment with prolan, and Plate 4 shows the same patient after eight weeks of prolan administration.

Case 4 resembles in essential particulars the preceding three cases, where the patient, an unmarried woman aged 33, increased in weight by 4·5 kg. (ca. 10 lb.) under 200 rat units of prolan intraglutecally every second day, being given at the same time 1 tablet of 150 rat units prolan daily.

Summary.

In summarising these results, the authors found in a series of patients of hypophyseal-cerebral malnutrition and with hypophyseal cachexia, where every other type of therapy, including insulin, had been of no avail, the parenteral administration of the anterior pituitary hormone prolan together with oral doses produced an increase in weight of from 5 to 20 kg. (11 to 44 lb.). Treatment with prolan must, according to the circumstances, be carried out for a period of several months.

In general, the authors found that one ampoule of 100 rat units should be given intraglutecally every day or every second day, and that 150 to 200 rat units should be given by mouth every day.

The authors are of opinion that this treatment by prolan has a better effect in the milder and medium cases of hypophyseal cachexia rather than in the very severe cases, where the prognosis is bad.
THE POWDER OF SYMPATHY

ONE is accustomed nowadays to hear of the healing of wounds, aided by the application of some local medicament. Many doubtless will testify to the adjuvant action of dermatol powder or pellidol ointment in such cases. But in the seventeenth century they had a much more striking technique, and the man who introduced it into England was Sir Kenelm Digby, a courtier of the Stuart Kings, an ambassador and a commissioner of the navy.

The first patient to be treated was Mr. James Howel, who was wounded on the back of his hand when trying to intervene between two friends who were fighting a duel. They bound up his hand with one of his garters to close the veins which were cut, and bled abundantly; he was brought home and the king sent one of his own surgeons.

"It was my chance to be lodged hard by him," wrote Sir Kenelm, "and four or five days after, as I was making myself ready, he came to my house, and prayed me to view his wounds, for I understand, said he, that you have extraordinary remedies upon such occasions, and my surgeons apprehend some fear, that it may grow to a gangrene, and so the hand must be cut off . . . I told him that I would willingly serve him, but if haply he knew the manner how I would cure him, without touching or seeing him, it may be he would not expose himself to my manner of curing . . . He replied, that the wonderful things which many have related unto me, of your way of curing, makes me nothing doubt at all of its efficacy . . . I asked him then for anything that had the blood upon it, so he presently sent for his garter, wherewith his hand was first bound; and having called for a basin of water, as if I would wash my hands, I took a handful of powder of vitriol, which I had in my study and presently dissolved it. As soon as the bloody garter was brought me I put it within the basin, observing in the interim what Mr. Howel did, who stood talking with a gentleman in a corner of my chamber, not regarding at all what I was doing: but he started suddenly, as if he had found some strange alteration in himself; I asked him what he ailed? I know not what ails me, but I find that I feel no more pain, methinks that a pleasing kind of freshness, as it were a wet cold napkin did spread over my hand, which hath taken away the inflammation that tormented me before."

Thereupon Sir Kenelm told him to remove his plasters, but to keep the wound clean. After dinner he took the garter and started to dry it before the fire. In a short while Mr. Howel's servant came running in to tell Sir Kenelm that his master felt as much burning as ever in his wound, whereupon he again put the garter in the vitriol solution and the servant, on his return, found his master free of pain. In five or six days the wound was cicatrised, and King James was
anxious to know all about the remedy, and was provided with some for his private use, “whence he received singular satisfaction.”

In his Discourse touching the cure of wounds by the powder of sympathy, Digby is at great pains to prove the existence of invisible atomic emanations from matter in the atmosphere, which atoms have the power of influencing other bodies. Thus the atoms of blood in the garter “being joined inseparably with the spirits of the vitriol, both the one and the other do jointly imbibe together within all the corners, fibres and orifices of the veins which lie open about the wound of the party hurt.” The cure is in this way effected.

Vitriol was supposed to consist of two parts, fixed and volatile. The volatile part was smooth, soft, and balsamical, of great value as a haemostatic, and being transported by the sun was drawn and incorporated by the wound into the blood, together with its humours and spirits.

At first only common vitriol (ferrous sulphate) was used, but later the method was elaborated. Vitriol of Rome or of Cyprus was calcined white in the sun and tragacanth gum was added. This of course was more expensive, but Sir Kenelm adhered to plain vitriol at eighteenpence the pound, although he admitted that the purest and best sort of powder gave the best results. Moreover the “æthereal fire of the solar rays” incorporated in the calcined product rendered it more fitly disposed to be transported through the air by the sun, and the glutinous faculty of the tragacanth, “being for the rest very innocent,” might contribute towards the healing process.

The author found that if he interrupted any of those causes which were theoretically necessary for the action of his powder, he could retard the cure of the wound. For instance, if the basin or powder were put in a corner and covered with a spongy cloth which would imbibe the atoms, or if the bloodstained cloth were washed in vinegar or lye before being dipped in the vitriol, no result would be seen. The remedy could be applied to the blade of the sword causing the wound, provided the spirits of the blood were not evaporated, but had penetrated into the hard steel.

He concludes by denying that there was anything of charm or magic in his remedy, but all could be explained on a rational basis:

“ It is a poor kind of pusillanimity or faintness of heart ... to confine all the actions of nature to the grossness of our senses, when we have not sufficiently considered nor examined the true causes and principles whereon ’tis fitting we should ground our judgment.”

One feels Sir Kenelm’s reasoning was sounder than his remedy.
ENURESIS AMONG SCHOOL-CHILDREN

Some months ago we gave at length an abstract from the Canadian Medical Association Journal on the Treatment of Enuresis as described by Dr. S. J. Usher, of Montreal. In this abstract special stress was laid on the psychological treatment of the condition, and reference was made to the value of luminal in raising the threshold of nervous response, being particularly valuable in the highly strung, nervous child, where psychic treatment alone was inadequate.

An article on the subject of bed-wetting among school-children, by Dr. R. J. Batty, of the Lancashire County Health Department, draws attention to some features other than the psychological in the causation or maintenance of this complaint. While he agrees that the most important factors are lack of training in infancy, combined with bad home conditions, he also found in a large series of cases examined by him in his capacity as school medical officer, that in 90 per cent. of the patients some associated physical defect was present, but the only effects of importance in this connection were, in their order of frequency:—

- Tonsils and adenoids.
- Threadworms.
- Mental deficiency.
- Epilepsy.
- Malnutrition.

No fewer than 73 per cent. of all cases had either tonsils and adenoids or threadworms. Malnutrition had the same predisposing causes as enuresis (viz., chronic fatigue, ill-balanced diet, and overcrowding at night), but it could itself be regarded as a causal factor. Unsuitable articles of diet and excessive drinking in the evening were important predisposing causes of bed-wetting.

Only one-half of the cases could be regarded as of normal intelligence, 39 per cent. were dull and backward, another 7 per cent. were mentally defective, and only 4 per cent. were described by their teacher as very intelligent. With regard to general behaviour, the restless, fidgety type of patient predominated.

Treatment.

As Dr. Usher emphasised in the article previously referred to, education is of the utmost importance, everything else being only auxiliary treatment.

The usual methods of education—to teach the child to empty its bladder at meal-times, at playtime, before going to bed, and also immediately it awakens—are too well known to need further elaboration.

1 Clinical Excerpts, January, 1932, p. 8.  
2 Medical Times, November, 1932, p. 182.
The Powder of Sympathy.

In days now happily long gone by, many highly educated men believed that if a certain special powder were sprinkled on the garments stained by the blood from his wound, the injured person would shortly be cured. Indeed the cure might result even though he and his garments were sundered afar both in time and space.

Not only so, but if the powder were made into a salve and applied to the weapon which had caused the wound, a cure would follow. Sir Walter Scott refers to this in "The Lay of the Last Minstrel."

But the broken lance in his bosom stood,
And it was earthly steel and wood.

She drew the splinter from the wound,
And with a charm she stanched the blood;
She had the gash be cleansed and bound:
No longer by his couch she stood:
But she has ta'en the broken lance
And washed it from the clotted gore,
And salved the splinter o'er and o'er.

William of Deloraine, in trance,
Whene'er she turned it round and round,
Twisted as if she galled his wound.
Then to her maiden she did say,
That he should be whole man and sound,
Within the course of a night and a day.
Full long she toiled for she did rue
Mishap to friend so stout and true. (Canto iii, 23.)
Butler in his "Hudibras" makes fun of this and says that he could cure warts and corns or fire a mine in China with sympathetic gunpowder.

It is stated that this powder had its origin in the East, and that a monk who had sojourned there for many years brought to Europe the secret of its manufacture. The prescription however has not much of an Eastern flavour about it, and one is inclined to believe rather that it had been evolved from the inner consciousness of some one who possessed all the attributes of a witch or sorcerer. It partakes of the characters of the "hell-broth" which these unfortunate individuals were said to concoct. Macbeth's witches sang as they worked:

Round about the caldron go;
In the poisoned entrails throw,
Toad, that under the cold stone,
Days and nights hast thirty-one
Swelter'd venom sleeping got,
Build these first in the charmed pot.

To these were added snake, eye of newt, toe of frog, wool of bat, tongue, of dog, adder's fork and blind-worm's sting, lizard's leg, howlet's wing, scale of dragon, tooth of wolf, witches' mummy, shark, hemlock, Jew's liver, goat's gall, nose of Turk, Tartar's lips, finger of a child strangled at the birth, all cooled with a baboon's blood. Though the powder of sympathy had perhaps fewer ingredients, it was not a whit less repulsive.

Towards the end of the fifteenth century there lived in Germany, it is said, a famous alchemist named Basil Valentine, who made many discoveries. Perhaps however he was a myth, and the
discoveries were really made by Johann Tholde. It does not really matter much to us but he affirmed that magnetism traversed many thousand miles to the pole star, and that this was the reason why we had the curative influence of sympathetic ointments applied to the blood which had flowed from, or to the weapon which had inflicted, a wound. The influence is carried to it through the air and will undoubtedly cure the wound.

Paracelsus in his "Archidoxes Magica" repeats this and adds a discovery of his own. He affirms that magnets will check all abnormal discharges, such as bleeding. They will also cure epilepsy and tetanus. He gives his prescription for the sympathetic ointment (1526). One had to take of moss which had grown on the human skull which had lain exposed to the weather for some time, and of human fat of each, two ounces; of mummy and of human blood, of each half an ounce of oil of roses and of bole armeniac, of each one ounce, of linseed oil, two drams; all to be made into an ointment. When a wound had to be treated, a splinter of wood had to be dipped into the blood of the wounded person; when the blood had dried on the wood it was placed in the ointment. The wound was to be bandaged every morning after a new cloth dipped in the patient's urine had been applied. In this way the wound would heal without any other application, and one could cure an individual ten or twenty miles away if only one had some of his blood. By similar means toothache could be cured. These were all wonders and gifts of God. In the same way, if the weapon which had caused the wound, were anointed with the ointment, a cure would result but as one was not able always to obtain the weapon, the splinter of wood method was to be preferred.

Jerome Cardan (1568) states that the ointment must contain
Another prescription known as the "Weapon Salve of Paracelsus" consisted in the following ingredients:

Take the fat of a very old wild hog and the fat of an old bear and heat these for half an hour in red wine; then drop all into cold water. Skim off the fat and mix it with roasted angle worms and with the moss from the skull of a man who had been hung and which had been scraped off during the increase of the moon. To these were added powdered bloodstone, the dried brain of the wild hog, red sandal wood and genuine mummy.

( It has to be remembered that genuine mummy flesh was sold by the apothecaries as late as the beginning of the nineteenth century in our own country.)

In 1608 Rudolph Goclenius described in his "De Magnetico Curatione Vulneris" the Unguement Armarium. This was composed of the patient's blood and human fat. This was applied to the weapon, while the wound itself was wrapped up in wet lint.

In England, the mystic and physician, Dr. Robert Fludd upheld the efficacy of this powder or salve.

Many of the clergy however were entirely opposed to it. Some even went the length of stating that if any cures resulted, they were due to magic or to the work of the devil. This opposition found a voice in a work published in 1631 by William Foster entitled "Hoplocriisma Sponagus, or a Sponge to wipe away the Weapon Salve".

Jerome Cardan (1568) states that the ointment must contain
twenty-six ingredients, though he says that many practitioners used much fewer. It was reported, he says, that if a weapon with which a man had been wounded was exposed to the air, the patient suffered severe pain. On the other hand however, there was an ointment which when applied to the weapon, would relieve the patient as much as if an effectual remedy had been placed on the wound.

During the latter half of the sixteenth century the use of this sympathetic ointment was very general on the continent. Several learned men however ridiculed the idea, thus we find the great physician and chemist, Andrew Libavius, publishing a work in 1592, "Against the Paracelsic Imposture of the Weapon Salve" in which he shows the absurdity of the idea.

Fabricius Hildanus (1641) the famous German surgeon was one of those who rather believed in it. He remarks that it was the common belief that it was the devil himself who revealed the cure to Paracelsus.

Van Helmont in his "Disputatio de Magnetica Vulnerum Natural et Legitima Curatione" upheld the value of the Sympathetic Powder. He offended the Roman Catholics by stating that the cures brought about by the relics of Saints and certain images were really not supernatural at all, but were due partly to the patient's faith and partly to a magnetic influence very similar to that of the ointment.

The fame of the powder or ointment spread to England, and while several writers testified to their curative power, others took up the pen to demonstrate and show how nonsensical was the very idea.

Lord Bacon in Chapter X of his "Historia Naturalis" (1620)
writes: -

It is constantly received and avouched, that the anointing of the weapon that maketh the wound, will heal the wound itself. In this experiment upon the relation of men of credit, though myself as yet am not fully inclined to believe it, you shall note the points following first, the ointment wherewith this is done is made of divers ingredients; whereof the strangest and the hardest to come by, are the moss upon the skull of a dead man unburied, and the fats of a boar and a bear killed in the act of generation. These two last I could easily suspect to be prescribed as a starting-hole; that if the experiment proved not, it might be pretended that the beasts were not killed in the due time; for as for the moss, it is certain there is great quantity of it in Ireland upon slain bodies laid in heaps unburied. .......The description of the whole ointment is to be found in the chemical dispensatory of Crollius. Secondly, the same kind of ointment applied to the hurt itself worketh not the effect, but only applied to the weapon. Thirdly, which I like well, they do not observe the confecting of the ointment under any certain constellation, which commonly is the excuse of magical medicines when they fail, that they were not made under a fit figure of heaven.

Forthly, it may be applied to the weapon, though the party hurt be at a great distance. Fifthly, it seemeth the imagination of the party to be cured is not needful to concur, for it may be done without the knowledge of the party wounded; and thus much has been tried, that the ointment for experiment's sake, hath been wiped off the weapon without the knowledge of the party hurt, and presently the party hurt has been in great rage of pain, till the weapon...
was re-anointed. Sixthly, it is affirmed, that if you cannot get the weapon, yet if you put an instrument of iron or wood resembling the weapon, into the wound whereby it bleedeth, the anointing of that instrument will serve and work the effect. This I doubt should be a device to keep this strange form of cure in request and use, because many times you can't come by the weapon itself. Seventhly, the wound must be at first washed clean with white wine or the party's own water, and then bound up close in fine linen, and no more dressing renewed until it be whole. Eighthly, the sword itself must be wrapped up close, so far as the ointment goeth, that it taketh no wind. Ninthly, the ointment if you wipe it off the sword and keep it, will serve again and rather increase in virtue than diminish. Tenthly, it will cure in far shorter time than ointments of wounds commonly do. Lastly, it will cure a beast as well as a man, which I like best of all the rest, because it subjecteth the matter to an easy trial.

Another who firmly believed in the power of the powder of sympathy was Dr. Nathaniel Highmore, whose name is familiar to students of anatomy because of the cavity in the upper maxilla which bears his name. He was born in 1613, studied medicine and took his degree at Oxford in 1642. It was here that he met Harvey, and to him Highmore dedicated his first work entitled, "Corporis humani disquisitio anatomica in qua sanguinis circulationem prosequitus est." He wrote several other works, but it is his "History of Generation, etc.", to which is joyned a Discourse of the Cure of Wounds by Sympathy, or without any real appliccation of medicines to the part affected, but
especially by that Powder, known chiefly by the name of Sir Gilbert Talbot's Powder, "published in 1651, to which I desire to draw attention. It is an interesting work as showing the laborious and involved line of reasoning common at this period. The book was dedicated to the famous philosopher, Robert Boyle.

Highmore remarks that "the sympathetic cure of wounds will soon appear as an unquestionable truth and not as a magical delusion as hath been supposed, because, -

1. All actions and motions are performed by Atomes moving after a different manner;
2. There is a constant Effluvium or expiration of such Atomes from all bodies...causing them to wander about in the air till they meet some other body of the same nature, or return to the original body where they may obtain their desired rest for a time;
3. This expiration some by the help of glasses have seen in the form of a mist to flow from a Loadstone and other bodies whose Apocheas are more plentiful. In bodies that are actually hot this effluvium is sensibly apparent to the smell, and are as sure a guide to the persecuting Dog.
4. These Atomes are not of one magnitude or grosseness, some being so subtile and slender, that they admit of no opposition, but continue their course through all mediums. Such are the Contagious Atomes of bodies infected with the Plague or other pestilential diseases which are conveyed to remote places and persons on whom they exercise their tyranny. Others again are grosser and cannot so easily passe by and are therefore driven and inforc'd from their intended voyage;
5. It is a general law of Nature that all bodies desire rest; 
6. There are some places more fit for receiving and holding of Atomes than others. Some Atomes are angular, some Cylindrical, branch'd smooth, sharp, rough. There are in bodies pores agreeable to these figures, so that some Atomes shall bee received into pores proportional to them. The infectious Atomes of that pestilential disease among beasts, called the Murren, insinuate themselves into Cows and Swine, not into Horses or Men, as the infection of the Pox or Measils in Men is not communicated to Beasts. This agreement betwixt the pores and the Atomes, makes that we call Cognition. 
7. No Atomes rest anywhere but in those cognate or proportionate pores. If not cognate they are shouldered on by Atomes which suit more conformably to the pores and so are inforc'd to move where there is least crowding, and where the violence least urgeth. This motion they say is caused by Sympathy; 
8. No distance hinders the motion of these Atomes towards their natural places. This sympathetic motion of these Curative Atomes cannot be accounted Magical, if they cure the part they seem not to touch; 
9. The nearer these Atomes approach to their desired home, the resistance is still lesser on that side, and the pressure greater on the contrary. 
10. There may be and oftentimes is a Conjunction of Atomes, which is their Pilgrimage, flie on the back of one of another, and may and do operate together. 

These things premised will demonstratively illustrate the cure of wounds without any topical application. We will explain the matter
the medicine, and why it works.

The Medicine is made of a Zaphyrian Salt, calcined by a celestial fire, operating in Leo and Cancer, into a Lunar complexion. It must be kept constantly dry. If the heat be excessive, all the volatile parts and finest Atomes, which only work this cure, will be evaporated, and only the grosser saline part remain, which by their sharper angles, grate the orifices of the capillary veins and so produce an efflux of blood, and not a consolidation of the wound.

The substance of this being joyned with other unctuous bodies is applied to the wounds themselves in most cicatrizing and drying emplasters as is that called Diapalma, &c; Much more effectual must the finer active volatile particles be when conveyed into the remotest pores of the wounded part by the help of the bloody atomes returning home; upon whose score they finde a far greater and more welcome entertainment than if they came alone, or joyned with any other Forainers.

The Manner of Applying it. The blood or bloody matter taken from the wound or a cloath, must be lightly covered with this powder, kept very dry, and afterwards wrapt up close from the air, and so kept at a temperate heat; the wound in the meantime must be kept clean, and clothed up with dry clean clothes. If the wound be fresh, the applied medicine presently stoppeth the blood and hinders an efflux of humors to the part.

The way which these balsamical atomes of the medicine, applied to the blood, take to come to the wounded part is next to be showed. It must need make this cure suspected, because the medicine being applied onely to the blood, there appears to be no kinde of contact and therefore no operation or action upon the wound. But the Sun
darts his beams into any inferior body though thousands of miles remote from it. The Medicine therefore being a body constituted of several particles, there will necessarily be an Effluvium or constant expiration of atomes from it, and by the ninth rule these may be conjoin'd with the atomes of blood extravasated, and accompany them in their flight. Nay, they must join with them, and the particles of the salt will be carried by the particles of the blood. Who by the sixth and seventh rules must by necessity be driven to the wounded part, though remote from it a very great distance.

When these companions, the atomes of the extravasated blood and the Medicine, are come to the wounded part, the atomes of the blood are received, finding an ease entrance at those cognate parts, those proportionate pores, with which covertly slips in the other of the medicine, who meeting there with more moisture, presently delivers up its saline parts to be conjoin'd with those new moist parts which are looser and fitter to be driven out, which is suddenly done. The medicine hath such parts also as contracts the solider parts nearer together and so shuts the orifices of the veins, that the efflux of blood and humors thence is presently stayed, so that the wound is more easily soadred up.

This double work of the Medicine, the loosening and diluting the fluid parts that distend the pores of the wound (which causes the pain) as likewise the constriction of the pores, is demonstrable in alls salts.

The cloth in which the blood and Medicine are kept, must be wapt up close and kept warm in a temperate heat, not declining to either excess. First because the cloth doth prohibit the expur-
ation and breathing forth of those atomes which should drein forth the superfluous humidity. And this is that which causeth the pain, occasioned by exposing the clothes to the cold air. Besides this hindring the efflux of those aporrneas from the cruentated cloth by cold, there may bee some extraneous atomes ( as those of cold or icy parts ), which being conveyed along with those atomes from the cloth, may disaffect the wound, as may appear by that story of Sir Kenelm Digbye's usage of Master Howels cruentated garter, heating it over coals in a dish of Vinegar, which put the lame gentleman into extream pain and torture, but upon the removal of those and the fresh dressing of the garter, hee presently received ease and in a short time a perfect cure. The other extreum, viz. of heat, doth as much exasperate the wounded part, as is shown by a similar case to the above in which the cloth was accidentally kept at a great heat. This raised a far greater number of saline parts than usually and which did when introduced into the wound by the sanguinous atomes by their sharp angular parts shave and corrode the orifices of the veins.

This cure by this Atomicall Energy wrought at a distance is more sudden than any the most excellent Balsame could perform or than the substance of the Medicine it self applyed to the part could do.

Thus have I cleared what to Philosophers seemed one of Nature Cabinet - secrets, but to others it hath been accused to have been done by some diabolical compact.

The famous philosopher and writer on the most varied subjects Sir Keelm Digby, is the man whose name is most usually associated with the Powder of Sympathy. Though we cannot believe that he was
its originator, he did more than any other, not only by his own observations but perhaps more from his social standing, to make the preparation widely known. He gave grounds for his belief in "A late Discourse made in a solemne Assembly of Nobles and Learned Men at Montpelier in France by Sir Kenelm Digby, Knight, etc. Touching the Cure of Wounds by the Powder of Sympathy, with instructions how to make the said powders, whereby many other secrets of Nature are unfolded. Rendered faithfully out of French into English by R. White, Gent. 1658.

Digby narrates the case of W. Howell; a case which was investigated by King James I of England and also by his son, the late King Charles, and the Duke of Buckingham, then Prime Minister. Mr. Howell in an endeavour to separate two duellists, got his right hand cut to the bone and also received a severe wound on his head.

"He came to my house four or five days afterwards saying that his surgeons were afraid he would lose his hand from gangrene. I asked him to give me anything which had the blood upon it, so he gave me his garter with which it had been bound. I took a handful of Powder of Vitriol and dissolved it. I put the bloody garter in it and observed Mr. Howell, who was talking with a gentleman in a corner of my chamber not regarding what I was doing; but he started suddenly, as if he had found some strange alteration in himself. I asked him what he ailed? I know not what ails me, but I find that I feel no more pain, methinks that a pleasing kind of freshnesse, as it were a wet cold napkin, did spread over my hand, which hath taken away the inflammation that tormented me before. I replied that I advise you to cast away all your playsters, only keep the wound clean, and in a moderate temper. This was shortly reported to the King and to the Duke of
Buckingham, who were curious to know the circumstance. After dinner I took the garter out of the water and put it to dry before a great fire. It was scarce dry, but Mr. Howell's servant came running, that his master felt as much burning as ever, if not more, for the heat was such as if his hand were twixt coals of fire. I answered that he would find ease in a short time, for I knew the reason. At the instant he went, I put again the Garter into the water, whereupon he found his master without any pain at all. Within 5 or 6 days the wounds were healed. King James required a punctual information of what had passed touching the cure. His Majesty would needs know of me how it was done, having drolled with me first about a magitian and a sorcerer. He then would do it with his own hands, therefore he would have some of the powder, which I delivered, instructing him in all the circumstances. Whereupon His Majesty made sundry proofs, whence he received singular satisfaction. The secret has now fallen into my hands, and now there is scarce any country barber but knows it.

It must be avowed that it is a marvelous thing, that the hurt of a wounded person, should be cured by the application of a remedy put to a rag or cloth, or a weapon at a great distance. The true causes have hitherto been wrapped up in darkness. I wish now to make convincing proofs, that this sympathetic cure may be done naturally and to show you how it may be done.

Sir Kenelm then enters into a long involved philosophical discussion as to the reflection of "rays" of light, and shows how these reflections carry part of the substance on which they have impinged. A narrative of his shipwreck is interpolated in this argument.
He shows how one can wash his hands in a "dry silver basin by the reflection of the moon beams";

One would think it were a folly that one should offer to wash his hands in a well-polished silver basin, wherein there is not a drop of water; yet this may be done by the reflection of the moon-beams only, which will afford it competent humidity to do it, but they who have tried it, have found their hands, after they are wiped, to be much moister than usually; but this is an infallible way to take away warts from the hands, if it be often used.

They who have been pricked by a Viper or Scorpion hold over the place, the head of a Viper or Scorpion bruised and by this means the poison returns back from its way to the heart of the person bitten and so leaves the party well recovered. In time of common contagion, they use to carry about the powder of a toad or a living toad or spider shut up in a box or arsenick which draws into it the contagious air. Harcy is a venomous humour in a horse, if a toad be hanged about its neck in a little bag, the horse will be cured infallibly; the toad which is the stronger poison drawing to it the venom which was within the horse.... Touching the sight, 'tis evident that the light reflecting upon the body it sees enters into the eyes bringing with it some emanations of the body whereon it reflects and so explains the formation of mothers marks.

Digby then goes on to explain and to illustrate by cases the nature of maternal impressions. He describes (somewhat incoherently) the manufacture of the Sympathetic Powder and states that it is a kind of vitriol. It was highly efficacious in "stanching of desperate bleeding of the nose, in stanching the blood of a wound (where
there is no fracture of bones) without any plaister or ointment in a few days". In the case of an incised wound, the powder was infused in water, and "into this water they did put a clout or rag of cloth embued with the blood of the party hurt (the rag being first dry, but if it was fresh and moist with the reeking blood, there was no need but to powder it with the small powder of the said vitriol". Further on he explains that "the same cure is performed by applying the remedy to the blade of a sword which 

in another work by the same learned writer, "Choice and Experimented Receipts in Physick and Chirurgery", published in 1668, Sir Kenelm gives the following Sympathetic Cure for Toothache:

With an iron nail raise and cut the gum from about the teeth till it bleed and that some of the blood stick upon the nail; then drive it into a wooden beam up to the head; after this is done you never shall have the tooth-ach in all your life.

In spite however of the high authority of Sir Kenelm, a strong body of opposition sprang up against the belief in this powder. As early as 1651, we find the celebrated Dr. James Primrose ridiculing the employment of this agent. In his work "Popular Errors", he writes of the weapon salve:

Because the Weapon Salve, otherwise called the Sympatheticall, magneticall and starry ointment, is held in so great esteeme by some, that they think it cures woundes, being applyed not to the affected part, but to the weapon that makes the wound, we will not pass it over
for now adayes it begins to be much in use. This was the invention of some Germanes, especially of Theophrastus Paracelsus and others. Now some will have this to bee a wonderfull gift of God, that woundes should be cured with so much facility, so that for the future surgery need not be regarded seeing wounds and ulcers may be cured with one only remedy. Yet Nature seems blameworthu in that shee so long kept close such an excellent remedy and revealed it not to Adam, the Patriarches, holy men; Jewes, the primitive Christians and the most learned men, but hathb revealed it to drunkards, whoremongers, diers, such as the report goes Paracelsus was. Goelenius says that he could name Emperours, Kings and Princes who give testimony to the vertue of this oyntment, but I verily believe that Goelenius was never known to King and Emperours.

This oyntment is compounded of mosses that grows upon a man's skull, because this is, as it were, the pure quintessence of the skull and a spirituous substance.

Crollius makes choice of a man that hath dyed a violent death, and Hartmann preferres one that hath been hanged, "Because when they are strangled, the naturall and vital spirits are carried upwards and as they cannot get out of the hard skull they are coarcted together with the animal spirits and in processe of time grow into one and breake gorth into the circumference of the skull". Hartmann however is a grosse and palpable error, for how knows hee that those spirits are carried up to the braine in them that are hanged. How then can these spirits be present when the corpse is rotten and the skull bare and fit to contract mossiness. Besides the substance of spirit is very thin and apt to evaporate; how is it then that they grow into a grosse and filthy mosses.
Of this mosse Crollius mixes in his oynment but the weight of two hazell nuts or one dramme, but Paracelsus deemed two ounces little enough, but added the blood and fat of a man. Both add thereunto mummy (Hartmann thinks Egyptian mummy). Which nevertheless is the most unprofitable remedy, being made in Egypt by cousing fellowes of the flesh of Elephantick and leprous persons and of such as dyed of the French Pox or some such filthy diseases and of the flesh of slaves which they buy and which they Enbalme with Pitch and Bitumen. But Paracelsus doth highly extoll Mummie of the Gallows or the flesh of a man that was hanged together with oyle of Roses, and linseed. Crollius added earth-wormes washes, the braine of a borer, redde sanders and the blood-stone. Some in the making up the oynment observe the aspect and course of the stars. Others doe annoint the weapon and binde it up carefully and keep it warm and free from dust and winde, otherwise the party wounded will be in grievous torture, if the weapon should lye cold and unbound. If the weapon that made the wound cannot be had, they take a piece of wood, especially willow, and besmeare it over with bloud that flowes from the wounds and so apply the remedy unto it. They also bid that the wound be washed every day with urine. Some give this reason of the effect, to wit, that there are spirits in the bloud, and in regard to the familiaritie and sympathy of mans spirits among themselves, the oynment is made of mans bloud, fat and flesh and the mosse of the skull in which spirits are contained. Thus when the bloud of the party wounded is joyned unto the oynment, the spirits that are in the bloud, are by reason of sympathy joyned with the spirits of the oynment and so doth take the vertues of the oynment and carry it unto the partie wounded. Crollius thinks them all fooles who think that
this cure is Magicall and he will have it to be done by a Magneticall and attractive vertue caused by the starres. And Hartmann explains it, when the weapon is anointed, the salt of the blood which is upon the weapon doth by a magneticall vertue draw the animal spirits out of the oynment, which two spirits by the concurrence of the spirit of the world are friendly united into one. Thence it is that the partie is in paine if the weapon bee held to the fire or exposed to the colde aire, and contrariwise if the patient eat onions, mustard or garlick, it may presently bee perceived in the weapon, because those spirits doe communicate their passions one to another.

Our author discourses learnedly (?) to show the falsity of the reasoning of those who believe in the ointment and says that only such wounds have been healed as might have been healed by the endeavour of Nature herself. He asserts that it is a false statement to say that this ointment is a more special gift of God than are other ointments and remedies, and that it is an unprofitable method of making a cure.

They say that from the too loose or too strait binding of the weapon the same symptoms doe happen in the sick. Now these symptoms doe proceed either from the oynment or from the binding. As if the weapon should bee anointed in a Northern country, and the patient bee in Afrik in a hot country; Suppose the weapon to bee colde, the patient likewise will be cold in Afrik. Yea perhaps being near the fire. Now seeing that cannot be done but by the aire, the aire of the Northerne Country shall have power to refrigerate the aire in Afrik which is a grosse absurditie.
It is impossible to follow Dr. Primrose through the long course of his destructive criticism, but suffice it to say that he is no believer in the efficacy of the power of the "sympathetic powder".

What seems most remarkable is that men, and learned men for their time, could have brought themselves to believe in such an absurdity and no elaborate arguments to prove in their estimation the truth of their assertions. The more grotesque the remedy was, the greater seemed to be the assurance of the prescribers. They lived however in an age of credility and took their full share in it. One must not think that credence in superstition has gone. Cases are still reported where a roasted live mouse is given for the reputed cure of whooping cough, and the by no means remote Abram's Box demonstrates that the medical profession is as gullible as any other portion of the community.

Thus passed in to the limbo of forgotten things, the belief in the power of the "Sympathetic Powder."
Noah Biggs.

1651.
The Vanity of the Craft of Physick

or A New Dispensatory wherein is dissected the Errors Ignorance, Impostures and Supinities of the Schools in their main Pillars of Purges, Bloodletting, Fontanels or Issues & Diet etc., and the particular Medicines of the Shops.


Preface. To the Parliament as a Signal and acknowledgment of thankfulness to God for the late victory over the Scot, that ye would reform the abuses of all Professions; Then three laudatory poetical effusions follow.

The Vanity of the Craft of Physick. Her chief Courtiers and Contenders are the old stercorearian and snailcreeper, the Galenist and the uspstart single fangl'd Paracelsian. These two between them would drive away the rationality in Physick into the low marrish puddle inclosures of their own particular modes and thereby have made it like a percipice to walk on.

To what end tends the Anatomy of these ywo thousand years, with those tedious lectures, if the Sanation of diseases be not more happier at this day than of old. What means that tearing and Cadaverous dissection of bodies if we may not learn by the Errors of the Ancients. The whole mode, method and Body of Physick, as it is now prescribed and practised, with the desires of good men, groans for a reformation.

There are those who confess truly that they are not Physiti-
ans but have great skill in Physick, and have their secrets and receits from King, Emperours, Queens and Great Ladies. For these are wont to suborn the middle sort of people, which do extoll the price of the Medicine. Others there are who turn themselves into Physitians, who have been old Souldiers, and now left the Warres, brag of and show their wounds, and thereby think and persuade themselves they have got great experience. Some of the Clergy also, Priests and poor Scholars that have nothing to do turn Physitians. Some silenc'd Ministers, and outed of their Benefices, lay hold upon Physick, and commit force and violence to her body, that if one fails, 't'other may hold, and think their Latin, and their Coat, the Grand Charter to entitle them to the practise in Physick.

Others scribble upon paper Characters, Charms as they call them whereby Diseases as well as Devils are chased away, and crosse themselves before and behind, lest the Devil should take him away, writing powerfull words. These are they again who pretend to be baptis'd Jewes ( more wicked than the not baptis'd ) who have learned from the Kabala to mortifie Mercury divers wayses, and also to prepare poysons variously which are good against all diseases and many more. But the Schools do with greater security, and above all, with a most liberall authority, impose their things upon mortalls. They promote their Schollars; This man because he hath Latin and Greek, a Doctor or Chirurgion to his Father; another because he is made a Master of Arts, hath heard and read lectures; another because he holdst to Euclid's Elements, or that he hath learn'd to dispute or rather scold from Aristotle. Wherefore they read the voluminous Books of Galen, Avicen and the interpreter. Galen, their prince, hath not shown one medicine, that is not borrow'd from Empiricks.
Before the threshold of the Shop we cannot chuse but have a fling at the Describers of Simples. Galen like a Plagiary, and sneaking Filcher, suppressed the name of Dioscorides and made use of his words. To this very day, even the more learned and leading Physitians do anxiously dispute only about the shapes and names of herbs. There hath also arisen other sects afterwards who observed the Signatures, as it were a kind of Palmistry in Herbs, and so have introduced new fangled names and swelling titles, to close their fopperies. There have not like wise been wanting, who have compris'd the immense Catalogue of Diseases, in the signs of the Zodiac, whose number being too narrow, they enlarged every one of the signs into a triple section.

(Then follows a long disquisition on Laxatives.)

The powder of Pearles profit no more than flint-stones or glass-powder taken inwardly.

It will be expedient to speak of that piece of Tripery of washing the Guts with a Clyster, though I shall be cried out on by the common Physitians and their besotted Admirers, and he is accounted no better than an Ass that speaks against it. It is to be abhorred as a cruel and beastly remedy, taught us (as they say) from a Bird. Every Clyster is naturally an Enemy to the intestines.

Our author disagrees with the authorities as to the time in which simples should be gathered.

Phlebotomy is not necessary in Feavers. Blood is not drawn out without losse of strength.

Fontanelles or issues do not purge bad humours.

Kitchen Physick or Rules of Diet which they prescribe with so much seeming seriousnesse as they would be looked upon as nursing, or feeding fathers. When Blood-lattat, purging, cupping, rubbing and
other grievous remedies have done no good they commence the sober rules of Diet and think to turn out the Diseases at the back door.

The author then proceeds to pour ridicule on the Directions which are given as to Diet.
The date of his birth is unknown; he died in the year 1561. He was a man held in high estimation by his colleagues as is evidenced by the fact that he was appointed to the office of Master or President of the Barbers Company of London five times in succession, often more than any other holder of that office.

In 1528 he was appointed Surgeon to King Henry VIII at a salary of £20 a year. In 1541-2 the Masters or Governours of the Mystery and Commonalte of Barbours ans Surgeons of London commissioned Holbein to paint a picture depicting the King presenting the Act of Incorporation of the Society to Vicary its Master, who with fourteen others are shown kneeling.

He received a grant of lands from the King for a lease of 21 years. In 1542 he was appointed Sheriff of Boxley Manor in Kent where he had bought an estate. In 1548 he was made Governor of St. Bartholomew's Hospital, having three surgeons under him, each receiving £18 a year. In 1551 a grant of the old Convent Garden was made to him, and from 1554 he resided in the hospital.

He was Sergeant Surgeon to King Edward VI, Mary, Elizabeth and Philip. He made his will on 27th January 1561 and died at the end of the same year. It is not known where he was buried. In his will he left one shilling each to forty poor householders living within the hospital walls and tens shillings each to the Chaplain, Matron, Steward, Cook and porter.

Vicary published in 1548 "The Anatomie of the Bodie of Man". This was the first printed book on the subject issued in England. It was reprinted by the Surgeons of St. Bartholomew's Hospital in 1577 and in numerous later editions it held the field for more than a hundred and
fifty years. It was dedicated to The Right Worshipful Sir Rowland Haiaarde, President of St. Bartholomew's Hospital, Sir Ambrose Nicholas, Kt and to Alderman Ramsay.

"Nowe he that is the perfect guyde,
Doth knowe our helpes were here alone,
By homely style it may be spyde,
For rules in Rhetorike have we none;
Our heads doe lacke that fyled phrase
Whereon fine wittes delight to gase,
If any say we deserve heere blame,
We pray you then amende the same."
The Surgions directorie for Young Practitioners in Anatomie, Wounds and Cures &c., shewing The Excellencie of Divers Secrets belonging to that Noble Art and Mysterie. Very usefull in these Times upon any sodaine Accident. And may well serve As a Noble Exercise for Gentlemen and Others; who desire Science in Medicine and Surgery for a generall Good. Divided into X Parts.

Written by T. Vicary Esquire, Chyrurgion to Hen. & Edw. 6 & Mary & Eliz. London, Printed by T. Fawcet dwelling in Shoe Lane at the Signe of the Dolphin 1651 and are to be sold by F. Nuthall at his Shop in Fleetstreet at the Signe of the Herculius Pillers.


To All the vertuous Ladies and Gentlewomen Of this Commonwealth of England, whose Goodnesse surpassing Greatnesse, and desi desiers to exercise themselves' as nursing Mothers) in the Art of Medicine and Surgery (especially in the remote parts of this Kingdom) where is nether Physiology nor Surgeon to bee had when sodaine accidents happen; whereby the poorer sort of People many times perish for want of advice.

Courteous Ladies and Gentlewomen, As this little Treatise is a Messelin of divers hidden Secrets; So likewise you must observe the USE of them in Practice.

Vicary begins his treatise by noting the derivation of the word Chirurgerie as interpreted by Hippocrates, Avicenna and Galen. Galen says that Chiruregerie is the last Instrument of Medicine - Dyet, Potion and Chirurgerie, of the which three, saith
Dyet is the noblest and most vertuous. The second Instrument is Potion, and if a man be not cured by these two, then let Chirurgerie be tried.

All authors do agree, that a Chirurgion should be chosen by his Complexion, and that this be very temperate, and all his members well proportioned. For Rasis saith: Whose face is not seemly, it is impossible for him to have good manners. He must also be a good liver, and a keeper of the holy Commandements of God, of whom commeth all cunning and grace, and that his body be not quaking, and his hands steadfast, his fingers long and small, and not trembling; and that his left hand be as ready as his right, with all his limbs, able to fulfill the good workes of the soule.

Now then to know what Properties and Conditions this man must have before he be a perfect Chirurgion, I doe note foure things most specially. The first that he be Learned. The second that he be Expert. The third that he be Ingenious. The fourth that he be well-mannered.

Vicary then goes on to enumerate in what particulars the surgeon's learning should consist, viz. Chirurgery, Physicke, Naturall Philosophy, Grammar, that he speake congruity in Logicke, Rhetoricke, Theoricke that teacheth him to know things naturall and not naturall, and things against Nature. Also he must know the Anatomie. To be well-mannered, he must be no Spouse-breaker, nor no Drunkard, because they live a life bestiall. Likewise, a Chirurgion, must deceive no man with his vaine promises, for to make of a small matter, a great because he would be accounted the more famous. They may neither be Flatterers nor Mockers, nor privie Back-biters of other men. Likewise they must not be proud nor presumptious, no detractors of other
men, nor Covetous nor no niggard and namely amongst their friends, or men of worship, but let them be honest, courteous and free both in word and deed. Likewise they shall give no counsel except they be asked, and then give their advice by good deliberation, and that they be well-advised before they speake. Likewise they must be as privie and as secret as any Confessor of all things that they shall either heare or see in the house of their patient . . . . Also that they doe their diligence as well to the poore as to the rich. They shall never discomfort their patient but to his friends speake much as the case standeth. They must also be bold in those things whereof they be certaine, and as dreadfull in all perils. They may not chide with the sicke, but be always pleasant and merry. They must not cover any woman by way of villany and specially in the house of their Patient. They shall not for covetousnesse of money, taken in hand those cures that be uncurable, nor ever set any certaine day of the sicke mans health for it lyeth not in their power. They must also be gracious and good to the Poore, and of the Rich take liberally for both. And see they never praise themselves for that redoundeth more to their shame and discredit than to their fame and worship. For a cunning and skilfull Chirurgion need not vaunt of his doings, for his works will ever get credit enough. Likewise that they despise no other Chirurgion without a great cause, for it is meete that none Chirurgion should love another, as Christ loverth us all.

And inn thus doing, they shall increase both in vertue and cunning to the Honor of God, and worldly fame.


of Physick. Collected and published for the Benefet and Cure of the Boorer sort of People, who are not able to goe to the Physitians, by William Bremer, Practitioner in Physick and Chirurgerie.

He believes that the chief virtue of the Waters lies in the Brimstone which they contain and if there is anything else lightly mingled it must be copper. "Though these Bathes have of long time beene knowne, either unlearnednesse or the enviousnesse of the Physitians is greatly to be rebuked, because either for lack of Learning they know not the vertue of these Bathes or else would not send the sicke folkes whom they could not otherwise heale, but now that so many learned Physitians have so greatly commended these Bathes, I doubt whether the niggardly liberality or the unnaturall unkindnesse of the sicke men of England is more to be dispraised, they will not bestowe one halfe-penny for Gods sake upon the bettering and amending of them.

If God have smitten you with any Disease, before you goe to any Bath for the healing of it, call to your remembrance how often and wherein you have displeased God and if any of your sinnes come to your remembrance, exercise the same no more, but be heartily sore for it and desire of God forgiveness for it.

Howbeit, wee may judge no man to bee a greater sinner than another, because hee is oftener sicke than the common sort be, for God sendeth unto Good men oftentimes sicknesse to keep them in good order that the flesh rebel not against the spirit. Yee must make your prayers to Almighty God, and if it be meet for you to be healed, you shall be healed."
"If thou be rid of thy disease by thy bathing, offer unto Christ in thy pure members, such offering of Thanksgiving as thou mayest spare. But if thou be not healed the first time, be patient and live virtuously till the next bathing time, and then if it be to the Glory of God, and for the most profitable, thou shalt be healed by the Grace of God."
The ideas of the functions of the different parts of the body seem curious to us at the present day. Here is one instance to illustrate this.) "The Arteir which arises from the heart bringeth with him to the lungs blood with the spirit of Life to nourish the lungs withall. And also that Arteir bringeth with him from the lungs ayre to temper the fumous heats that is in the heart."

"Fatnesse is of three kinds: the first is PINGUEDO which is made of a subtill portion of Blood congealed by cold: The second is ADEPPS which is departed from the flesh besides the skin, and it is as an Oyle heating and moystning the Skin. The third is AUXINGIA and lyeth about the kidneys and in the Intrailles and keepeth them from drying by his unctiosity."

"The haires of every part of a mans body, are but superfluity of members; made of the grosse fume or smoake passing out of the viscous matter, thickened to the forme of haires. The Nayles likewise, are a superfluity of members, engendered by great earthly smoake or fume, resolved through the naturall heats of humours, and is softer than the Bone, and harder than the Flesh. The utility of them are, that by them a man shall take the better hold; also they helpe to claw the body when it needeth. Lastly, they helpe to divide things for lacke of other tooles."

"Galen and Avicenna both agree in stating that the head of man was made neither for wits, nor yet for the Braines, but merely for the Eyes. For beasts that have no heads, have the organs or instruments of wits in their breasts. Therefore God and Nature have reared up the Head of Man onely for the Eyes for it is the highest member of Man, and as a Beholder or Watchman standing in a high Tower.
to give warning of the Enemies, so doth the Eye of Man give warning unto the common Wittes, for the defence of all other members of the Body.

In describing the uses of the hair of the head, Vicary states that one of them is "that the fumosities of the Braine might ascend and passe lightlyer out of them. For if there were a sad thing, as the Skinne, the fumosities might not pass through so lightly, as it doth by the Haire.

The Skin of the Head is more Lazartus, thicker and more Porrus, than any other Skinne of any other member of the Body: And two causes. I note why one is, that it keepeth or defendeth the Braine from too much heat and cold as doth the Haire. The other that it discusseth to the common wits of all things that annoyeth outwardly, for the haire is insensible. The third cause is this; that it keepeth the Braine the more warme and is the better fence for the Braine and it bindeth and keepeth the Bones of the head the faster together.

The PIA MATER is so-called because it is soft and tender to the Braine and feedeth it, as doth a loving Mother unto her tender child or Babe.

As to the BRAINE, in every part God hath ordained and set singular and severall vertues: First in the foremost Ventricle, God hath founded and set the common Wittes, otherwise called the five Wits, as Hearing, Seeing, Feeling, Smelling and Tasting. And also there is one part of this Ventricle, the vertue that is called Fantasie, and he taketh all the forms and ordinances that be disposed of the five Wittes, after the meaning of sensible things.

In the Middle Sell or Ventricle there is founded and ordained...
the Cogitative or Estimative Vertus and in the Third and last Ventricle is founded the Vertue Memorative.

Also the Braine hath this property, that it moveth and followeth the moving of the Moone. For in the waxing of the Moone, the Braine followeth upwards, and in the Wane of the Moone, the Braine descendeth downward and vanisheth in substance of vertue; for then the Braine shrinketh together in it selfe, and is not so fully obedient to the Spirit of Feeling; And this is proved in Men that be Lunaticke and Mad, and also in Men that be Epulenticke or having the Falling Sickness, that be most grieved in the beginning of the New Moone.

Wherefore when it happeneth that the Braine is either too dry or too moist, then can it not work his kind, and then followeth feeblenesse of the wittws and of all other members of the Body, and last Death.

Two Sinewes spring from the foremost Ventricle of the Braine and go one to each eye. These sinewes be hollow as a Reede for two causes. The first is that the visible Spirit might passfressely to the Eyes. The seconde is, that the forme of visible things might freely be presented to the common Wittes.

The PAPPES in Woman serve for the generation of Milke; for in Woman there cometh from the Matrix into their breasts many veynes which bring into them Menstruell blood, the which is turned through the digestive vertue, from red colour into white, like the colour of the Paps.

ARTIERS have two coats because one coat is not sufficient nor able to withstand the violent moving and stirring of the Spirit of Life, that is carried in them.

Also the Heart hath two little Eares, by which commeth in and passeth out the Ayre that is prepared for the lunges.
The LUNGS are ordained that (i) they should draw cold winde and Refresh the Heart. (ii) that they should change and alter and purifie the ayre before it come to the heart, lest the heart should be hurt and annoyed with the quantity of the ayre; that they should receive from the Heart the famous superfluities that hee pulleth forth with his breathing.

As to the EMBRYO, Vicary says that there must elapse sixe and forty dayes from the day of Conception until the day of full perfection and receiving of the Soule, as God best knoweth.

LEITCHCRAFT. Vicary then goes on to describe the various medicaments necessary to the Arte of Leitchcraft: At what season of the Moone to let blood; the twelve different kinds of Poulses; the different kinds of Urine and of the manner of detecting a man's urine from a woman's or Man's from a Beast urine: Urines that betoken death. WOUNDS; their Recognition and Cure. "A rare Secret of the author which heppeth all wounds either by Cut, Thrust, Galling with Arrowes or Hargubush, Shot, etc. is to first to wash the woundes very cleane with Urine and then dry it very well. Then put therein Quint- essence of Wine and joyne the parts close together, and stitch or sow them well. Then put thereon 5 to 6 drops of our Balsam and lay a cloth wet with our Magno Licor as hot as they can suffer it."

He then gives recipes for making secret powders to treat poisoned Wounds, to stanch blood. He describes the making of Plaisters, Cynaments, divers precious Waters (one of which contains young pigeons dried and powdered. Many remedies and Cures for specific diseases are given, e.g. "to make an aching tooth fall out of himselfe."

"To kill lice or nits in the head by drinking the powder or scrapings of Harts Horne." A remedy for a red face and a red nose consists of
Nicolas Culpepper.

1651.
Nicholas Culpepper was born in London on 13th. October 1616. He made his reputation as an Astrologer and physician, and wrote many books on these subjects. At Cambridge he studied Latin and Greek, and later Medicine. At the age of 24 he commenced practice as an astrologer and physician in Red Lion Street, Spitalfields. During the Civil War he threw in his lot with the Parliamentarians and his sympathies with the religious sectarians. In one of the conflicts he received a wound in the chest which undermined his health and doubtless was the indirect cause of his early death.

His fame as a medical practitioner was soon established, and in 1649 he published an English translation of the Pharmacopoeia of the College of Physicians of London under the name of "A Physical Directory". This publication was most strongly resented by the College as well as by its mouthpiece, the Royalist periodical, "Mercurius Pragmaticus" which stated that the book is "done (very filthy) into English by one Nicholas Culpepper, an absolute atheist and by two yeere drunken labour who hath Gallimawfread the Apothecaries book into nonsence mixing every receipt with some scruples of rebellion and atheisme besides the danger of poysoning men's bodies. And to supply his drunkenness and leachery with a thirty shilling reward, he has endeavoured to bring into obloquy the famous societies of Apothecaries and Chyrurgeons". Nevertheless the publication was received with much enthusiasm and second and third editions were called for in the two succeeding years.

In 1653 he along with Peter Cole published "The English Physician, enlarged with 369 Medicines made of English Herbs".

In 1654 he enlarged his first work and published it under the
Mr. Culpepper published in print such things as were most reprehensible by any sober man. I will first mention such of his expressions as are most derogatory to the Glory of God and prejudicial to his servants.

In his Dierctory to Midwives, he writes, "Pray do so much as read the four or five first Chapters of the First Book of Chronicles and see what instruction you can find there. When you want knowledge you know whether to go for it; not to an idle Priest, but to one who will not upbraid you for your trouble". Besides this, whole sentences in Scripture are so translated that t'would make a man sick to see them. By these expressions you may know, how the pulse of his soul did beat at the writing of them. Surely then when the tongue raileth against God himself and his servants, it argueth the soul to be in a lamentable estate by reason of most depraved principles. Without transgressing the rules of Charity, Mr. Culpepper may be called the most audacious Menus of this our age in daring to vilifie that most exact translation of the Holy Scriptures and also to speak the worst of Evils concerning Dignities. The author then goes on to say that Mr. Culpepper taxes Almighty God, His Wisdom and Will, in not authorising the Holy Pen-men of the Scriptures to explicate all the proper names and that he would have had the Interpreter to have added the explications of these proper names, by the doing of which they would have made themselves the object of that dreadful threatening. Revel. 22.18.
Mackaile asserts that Culpepper never wrote a certain book which he names, and as regards the statement on the title-page "that every man may be his own Apothecary", he affirms that Culpepper was as ignorant of that ingenious Art as a Mole is of Sight. He gives as an instance Culpepper's prescription to Cause a Beard to grow, for which three ounces of most costly Musk are required, or the Blood of a Batt for making an Oyntment to Hinder the Growth of Hair containing such things as are not easy to be gotten, as the turd of a Mole.

Take now his statement on the second page of his Epistle to the Midwives, where he calleth the Physiceans a Company of lazy Doctors, most of whose covetousness outweighs their wits, as much as a Millstone outweighs a Feather. Why are they that cry out against Empyrieks? Who, the Colledge of Physicians. And why do they so? They kill men for want of judgment. And who is the cause of this? Themselves forsooth. By these words, he resembleth one, who with inky hands would do away a black spot from off his own face and so rendereth himself an object of censure of all ingeniously-minded persons.

"Your best way to learn to still Chymical Cyls, is to learn at an Alchemist; for I rest confident, the greatest part of the Colledge had no more skill in Chymistrie, than I have building houses.... I dawsay I have been a greater teacher of Physick and have had incomparably more disciples in that Art, than all the fellows of Amen Colledge since old King Hary gave them their Charter.".

His "Compleat Method of Physick" is only a confused description of English Herbs and their Virtues. As regards his translation of the London Dispensatory, an Apprentice of one year's standing, would have written as well, if not better than he did.
When he describeth the virtues of the Vinegar of Squills, prefixing his own name to it, he doth it according to Galen his words, which he had stollen; yet he had so much impudent confidence as to challenge the learned physicians of London for stealing the prescript of the Lockoch of Purslain from Ausberg and then addeth these ridiculous and scurrilous words, "you shall shortly hear the Augustian Physicians come with new and cry after the Collège and cry, Stop theves."

Mr. Culpepper's writings are only either men's writings which he hath translated into English or collections out of other men's works, which he hath deformed with malicious, scurrilous, detracting and railing expressions and studied to beautifie with some ridiculous and impertinent jests.
There is a long detailed account of the anatomy of both the male and the female organs of generation. (Though why he should give such a detailed description of the male organs to midwives, is not evident.) Culpepper states that the woman does not emit seed in the act of copulation and that the ovary contains only eggs.

He lays great stress on the mutual pleasure and delight which the act of copulation affords; that women are never better pleased than when they are satisfied in this way, which delight they say is double in women to what it is in men. For as the Delight in men in copulation consists chiefly in the emission of the seed, so women are delighted both in the emission of their own and in the reception of the man's.

Besides the natural desires of begetting their like, which stirs up men and women to it, the parts appointed for generation are endowed by Nature with a delightful and mutual Itch, which begets in them a desire to the action, without which it would not be very easy for a man born for the Contemplation of Divine Mysteries, to join himself by way of Coition to a woman, in regard to the Uncleanness of the parts and of the action.

The chief and the most certain Signs of Conception according to Culpepper are:

[i] If the woman has been more than ordinary desirous of copulation and has taken more Pleasure than usual therein, it is a sure sign of Conception.
(ii) If she retain the seed in her womb after copulation; which she may know if she perceives it not to flow down from the womb as it used to do before, for that is a sure sign the womb has received it into the inward orifice.

(iii) If she finds a coldness and chilliness after copulation.

(iv) If after this she begins to have loathings of those things which she loved before; loss of appetite; strange desires for things.

(v) If under the lower eyelid the veins be swelled and appear clearly and the eye be something discoloured.

(vi) Some also stop the woman's urine in a glass vial for three days and then strain it through a fine linen cloth, and if they find small living creatures in it they conclude she had certainly conceived.

(vii) Take a green nettle and put it into her urine, cover it close and let it remain a whole night. If the woman be with child it will be full of red spots on the morrow. If she be not, it will be blackish.

Whether the conception be a male or a female. The prognostics though not all to be trusted, yet there is some trust amongst them.

It is a Male Child if the woman on rising is more apt to stay herself on her right hand than her left; the belly lies rounder and higher; she first feels stirring on the right side; carries her burden more lightly and with less pain; the right nipple is redder; the right breast is harder and more plump; her colour is more clear nor is she so swarthy; the circle under her eye is pale and of a bluish colour and if this is more apparent under the right eye she is bearing a son.
If she let fall a drop of her milk into a basin of fair water, and if it spreads and swims on the top, she carries a boy. If it sinks to the bottom as a round drop, she carries a girl. This last is an infallible rule.

How the woman ought to order herself during pregnancy.

She ought to avoid all nauseous and ill smells. Some times the stink of a candle not well put out may cause her to come before her time. The same may happen from the smell of charcoal, rue, mint, pennyroyal, castor or brimstone.

During her first two months let none present her any strange or unwholesome thing, nor so much as name it, lest she should desire it and not be able to get it, and so either cause her to miscarry or the child to have some deformity on that account. She ought also to take—R. Pearles prepared 
Red Coral 3 i
Ivory
Precious Stones 3s

and also Citron peels, mace, cinnamon, cloves, saffron, wood aloes, ambergris, etc.

She ought at the same time to apply strengtheners to the navel made of nutmegs, mace, mastiche, made up in bags or a toast dipped in Malmsey sprinkled with powder of mints.

During the third and fourth months she is not to be bled. If she requires purging she must be careful not to use any vehement medicine, nor very bitter as aloes which is an enemy to the child and opens the mouths of the vessels.

In the fifth, sixth and seventh months she is often troubled with a cough which is from a sharp vapour that comes to the Jaws and rough Artery from the Terms, or from a thin part of the
blood gotten into the veins of the breast; this endangers abortion, and strength fails from watching. Therefore purge the humours that fall from the breast with rhubarb and agarick.

Palpitation and fainting arise from vapours that go to it by the arteries or from the blood that aboundeth and cannot get out at the womb, but ascends and oppresseth the heart, and in this case cordials should be used both inwardly and outwardly. You may also strengthen the child at the navel; and if there be a cacochimy, alter the humours; you may likewise use amulets in her hands and about her neck.

If her thighs and feet swell, let them be anointed with Oxphrodinum which is a liquid medium made with vinegar and rose water mingled with a little salt.

Ninth month. She must take heed of stooping or bending herself lest the child be unfolded in the Umbilical ligaments by which means it often perisheth. Let her exercise be rather to go upwards than downwards. Baths of sweet water with emollient herbs, and after the bath let her belly be anointed with oil of Roses and Violets. But for her privy parts it is better to anoint them with the fat of Hens, Geese or Ducksor with the Oil of Lilies and the Decoction of Linseed and Fennigreek, boiled with oil of Linseed and Marshmallows.

If for fourteen days before the Birth she do every morning and evening bathe and moisten her belly with Muscadine and Lavander Water, the child will be much strengthened thereby. And if every day she eat toasted bread, it will hinder anything from growing to the child. Her privy parts may be also gently stroaked and anointed with a Linseed and Marshmallow fomentation. She may use this as a vapour in a hollow stool, taking great heed that no wind or air come to her in any part. And then let her wipe the part so anointed with a linnen cloth, that she
may anoint the belly and groins. Let her not sit on it longer than half an hour lest her strength languish and decay.

Certainly the chief use of the Placenta is for the containing the Child in the Womb. The use of the Amnion is not only to enwrap the Child round but also to retain the sweat of the child.

**Formation of the Child in the Womb.**

The first thing which is operative in the conception is the spirit, whereof the seed is full, which Nature quickening by the heat of the womb, stirs it up to action. This seed consists of very different parts, of which some are more and some are less pure. The internal spirits therefore separateth those parts which are less pure, which are thick, cold and clammy, from those that are more pure and nobler. The less pure are cast to the outsides and with them the seed is circled round and of them the membranes are made in which that seed which is most pure is wrapped round and kept close together that it may be defended from cold and other accidents.

The first thing that is found is the Amnois next the Chorion, and they enwrap the seed round as it were a curtain. Soon after this the navel-vein is bred which pierceth those skins being yet very tender and carries a drop of blood from the veins of the other's womb to the seed; from this drop is formed the Liver; from which liver there is quickly bred the Vena Cava or chief vein, and now the seed has something to nourish it whilst it performs the rest of Nature's work. The navel arteries are soon after formed, then the great artery of which the others are but branches, and then the heart; for the Liver furniseth the arteries with blood to form the heart, the arteries being made of seed, but the heart and the flesh of blood. After this the Brain is formed and then the nerves to give sense and motion to the infant. Afterwards the Bones
and Flesh are formed, and of the Bones, first the Vertebrae or Chine Bones and then the Skull.

Of the Manner of the Child's lying in the Womb.
The posture of the Child resembles one sitting to ease. Nature and stooping down with the head to see what comes from him. At the beginning of true labour, slimy humours flow from the glandules called Prostate. When the waters have been discharged, the child is not able to subsist long in the womb.

How the Woman may be helped at Delivery.
If the womb abounds with blood to bleed her a little may not be improper; for thereby, shw will both breathe the better and have her breasts more at liberty, and likewise more strength to bear down her pains. Besides this evacuation does many times prevent her having a Fever after delivery.

Let the Midwife also anoint the woman's privities with emollient oyls, Hog's grease and fresh butter if she finds they are hard to be dilated. If the waters break too early and labour is delayed, she ought to be given such things as hasten delivery, e.g. penny royal, dittany, Juniper berries, red Coral. Featherfew boiled in white wine, Mugwort. Cinnamon is also good, as is also Tansy bruised and applied to the privities.

The Stone, Aëtites held to the privities, is of extraordinary virtues and does instantly draw away both child and after birth, but great care must be taken to remove it presently or it will draw forth the womb and all. For such is the magnetick virtue of this stone, that both child and womb follow it as readily as iron doth the Loadstone or as the Loadstone doth the North star.
Many other things Physicians affirm are good in this case; among which are an Ass's or Horse's hoof hung near the patient, or a piece of Red Coral. A Loadstone helps much held in the woman's left hand. The skin which a Snake has cast off gilt about the middle next the skin is of virtue.

The following are good to give speedy deliverance.—

(i) The decoction of White Wine made in a Savoury. (ii) Wild Tansy or Silver Weed. Bruise it and apply it to the woman's nostrils.

(iii) Date stones beaten to a powder and let her take half a drachm of 'em in white wine at a time. (iv) Take parsley, bruise it and press out the juice. Dip a linnen cloth in it and put it up so dipped into the mouth of the womb. It will presently cause the Child to come away even if it be dead, and it will bring away the after-birth also.

The juice of Parsley is a thing of great virtue, being drunk by a woman with Child, it cleanseth not only the womb, but also the child in the womb of all gross humours. (v) Give a woman in such a case another milk to drink. It will cause speedy delivery and that without pain. (vi) Give her the juice of Leeks.

(vii) Piony seeds beaten to powder and mix't with oil, with which anoint the loins and privy parts and it gives speedy delivery and with less pain than can be imagined. (viii) Take a Swallow’s Nest, dissolve it in water, strain and drink it warm. xx (ix) a Mixture containing dried navel strings (x) An ointment for the navel.

The midwife is to anoint her hand with oil and with it to stretch and dilate the opening of the womb. The woman is to be placed on her back with her legs flexed and with a small pillow below her buttocks to the end Her RUMP should have more liberty to retire back.
Cutting off the Child's Navel String.

Great care must be taken about this. The presence of the Caul generally betokens weakness and a short life. Many children that are born apparently dead may be soon brought to life again, if you squeeze out six or seven drops of blood out of that part of the navel string which is cut off, and give it to the child inwardly.

It is a received opinion that the parts adapted for generation are either contracted or dilated according to the cutting of the navel string, and that's the reason that midwives are generally so kind to their own sex that they leave a longer part of the navel string of a male than of a female, because they would have the males well provided for the encounters of Venus. And the reason they give why they cut that of females shorter is because they believe it makes them modest, and their privities narrower, which makes them more acceptable to their husbands.

There are two things which experience has made good:

(i) That if the navel string of a child after it is cut be suffered to touch the ground, the child will never hold its water neither sleeping nor waking. Take care therefore that the piece cut off touch not the ground.

(ii) That a piece of the child's navel string carried about one, so that it touch his skin, defends him that wears it both from the Falling Sickness and Convulsions.

It is the usual custom of Midwives to put a piece of a burnt rag to the cut end of the navel string, or which we commonly call Tinder, but I would rather advise Bole Armoric, because of its drying quality.

The Afterbirth.
The After birth.

To extract it, directions are given for twisting the cord round the fingers and pulling it down but not too forcibly. A little white hellebore in powder sniffed up the nose to make her sneeze is very proper. So is Tansy and Vervain and the stone Aetitis. The smock of Marigolds received up a woman's privates by a funnel has been known to bring it away. Boil Mugwort in water until very soft. Then apply it in manner of a Pultis to the Navel of a labouring woman and it instantly brings away both birth and after birth.

Labour and Difficult Labour.

The reason why some women suffer more pain than others proceeds from their having the mouth of the Matrix more full of nerves than others, as skilful anatomists do easily discover.

If her pains be slow and small or none at all, they must be provoked by frequent and pretty strong Glysters that's so they may be excited thereby.

Some women there are who protract their Delivery by reason of their Shamefacedness or Modesty; as not being willing their private parts should be exposed to the view of some persons that may be at that time there; and in such a case, the persons who are the cause thereof must be desir'd to quit the room. She must be encouraged by saying that others have gone through greater pains than she has. Such comfortable words being often times a great support to the labouring woman.

Signs of Labouring of a Dead Child.

Her Breasts are slacker; there is coldness of the Belly. The urine is filthy, stinking and thick. There is no motion of the child. She is subject to dreams of dead men; her breath stinks; when she
turns, the child sways that way like a lump of lead.

After the Birth has taken place.

Apply all over the bottom of the belly and privities the following Anodyne or Cataplasm made of Oyl of Sweet Almonds, 2 or 3 new laid eggs, stirring together over hot embers until the consistence of pultis. Spread on a cloth and applied indifferently warm; to be renewed in 5 or 6 hours. Take great care that no cold air come near her, for cold is an enemy of the spermatick parts, and if it gets into the womb, it encreases the after pains, causes swelling of the womb and hurts the nerves.

Treatment of Wind in the Bowels after Birth.

Many remedies are given, as for example, Bayberries beaten to powder and placed on a chafing dish of Coals, and let her receive the smoak of them up her privities. Or take Tar and Barrows Grease and boil with Pigeons dung and apply to the Reins of the back and it will cure after pains.

Haemorrhoids.

To cure these use an onion roasted with oyl and applied to the fundament, or 12 snails without their shells bruised with oyl may be employed, or as many Wood-lice as you can get, bruise them with oyl and apply.

The Child.

He must be swathed in Mantles and Blankets to give its little body a straight figure, which is most decent and proper for a man, and to accustom him to keep upon his feet; which otherwise would go upon All-four as most other animals do.

Food. For the first three or four days to empty the Flegm out
of its stomach, wine and sugar ought to be given to cut and loosen it and to prevent the milk it shall take from corrupting. It will be very proper to stay at least 5 or 6 days before it sucks.

Let sleep come naturally without rocking.

Gripes in children are sometimes caused by Worms which have bred in children, even in their mother's belly.

Epilepsy. To prevent the child having this disease give these medicines as soon as born. Take Male Piony roots gathered in the decrease of the Moon or the Magistry of Coral and leaf Gold. You may also give Miasleto of the Oak, Man's Skull, Amber or Musk.

Barrenness.

If the man and woman be of the same complexion, they seldom have children. The only way to help it is for people before they marry to observe each other's constitution and complexion. Another cause is want of Love. If their hearts are not united in Love how should their seed unite to cause conception, and this is sufficiently evidenced in that there never follows a conception on a Rape. Love is that vital principle which ought to animate each organ in the Act of Generation or else it will be but spiritless and dull. A third cause is the letting of Virgin's blood in the arm repeatedly. This prevents blood getting to the womb which dries up and the woman is forever barren.

Barrenness in Men.

This is due to many causes, but one important one is the cutting of their veins behind their ears, which is often done in various distempers. The seed flows from the brain by these veins behind the ears more than from any other part of the body, so if these veins be cut, the seed cannot descend to the testicles or gets there very
crude and raw.

**Barrenness in Women.**

The chief cause of this resides in the womb. Women whose wombs are too thick and cold cannot conceive, because coldness extinguisheth the Heat of the Human Seed. Immoderate moisture of the womb also destroys the Seed of Man and makes it ineffective, as Corn sown in Ponds and Marshes and so does overmuch Dryness of the womb for that the seed perisheth for want of nutriment.

Immoderate Heat of the Womb is also a cause of barrenness for it scorcheth up the Seed as corn sown in a drought of summer.

If you would know whether the Fault is in the Man or in the Woman sprinkle the Man's urine upon one lettuce leaf, and the woman's upon another, and that which dies away first is unfruitful. Also take five Wheat corns and seven beans, put them into an earthen pot and let the party make water therein. Let this stand seven days, and if in that time they begin to sprout, then the party is fruitful, but if they sprout not, then the party is barren, whether it is a man or a woman. This is a certain sign.

Another test is to take Myrrh, Storax, etc. and make a perfume of it. Which let the woman receive into the neck of the womb through a Funnel. If the woman feel the smoke ascend through her body to her nose, then she is fruitful; otherwise barren.

If Barrenness be due to falling out of the womb, let her lay stinking things to the womb, such as Assa foetida, smoke of her own Hair being burnt; for this is a certain truth that the womb flies from all stinking and to all sweet things. But the most infallible Cure in this cases. Take a common Burdock leaf, green or dry. Apply this to her head and it will draw the womb upward.
The following things increase natural Seed and stir up Venery, eggs, milk, Sparrows brains, flesh bones and all, the Stones and piddles of bulls bucks rams and boars, also cock-stones, lamb-stones, Partridge quails and Pheasants eggs, and this is an undeniable Aphorism. That whatever any creature is addicted to, they move and incite the Man or Woman that eats them, to the like; and therefore partridges, quails, sparrows etc., being extremely addicted to Venery, they work the same effects in those men and women that eat them.

Take notice” That in what part of the body the faculty which you would strengthen lies, take the same part of the body of another creature in whom the faculty is strong, as a Medicine, as testicles etc., also Creatures that are fruitful, being eaten, makes them fruitful that eat them, as crabs, lobsters, prawns, pigeons etc., The dried stones of the fox or boar are good. The heart of a male quail carried about the Man, and the heart of a female quail carried about the woman causeth mutual Love and Fruitfulness.
Nicholas Culpepper.

Medicaments For the Poor; or Physick for the Common People, containing Excellent Remedies for most Common Diseases, incident to Mans Body: made of such things as are common to be had in almost every Country in the World; and are made with little Art, and small Charge. Hereunto is added an Excellent Book, called Health for Rich and Poor, by Diet without Physick. The Second Edition. By Nich. Culpepper, Student in Physick and Astrology. Edinburgh, Printe by a Society of Stationers 1664.

In an address to the Reader it is stated the if the Medicines do not perform the Cures promised it is due to the unskilfulness of those that make up the Medicines. He therefore advises those who are about to use them to go or send to Mr. Ralph Clarke, Apothecary, at the Signe of the Three Crowns on Ludgate-Hill in London; where they will be sure to have such as are skilfull and honestly made.

Purgers that evacuate are divers, for some do sensibly evacuate the Matter by the Belly, by Vomit, by Urine, by Sweat, by Spittle i.e. Sputum; by the Pallate, by the Nostrills: -

Physicks that purge the Belly as Cathartics.

Strong Purgers in a Cholerick Cause as Whey clarified and so dranke from three to eight pound.

Un - huld Barly Water from two to six pound

Purgers in a Flegmatick Cause as Sweet Wine and Honey

Purgers in a Melancholy Cause as Tartar and Senna etc

Medicaments that Evacuate by Sweat, as the Decoction of Garlic of Box-wood (with which the French Pox is easily cured as with Guaiacum
Medicaments that Evacuate by Spittle. (Sputum)

Those things that unloose the stuffing from the ways of breathing are called Expectorating Medicaments. A list of drugs is given containing many of those in use today.

Medicines which evacuate by the Pallat.

The Head is purged three ways, by the mouth, by the means of the Channel the Pallat, namely by Masticatories, Gargarisms, and anointings of the Pallat.

For a Masticatory in a hot cause, a Paper is good, especially a brown paper, Figs, bitter Almonds, or Peach Kernels etc.

In a cold Cause are good the roots of Cyprus, Acorns etc.

These are more violent, and are fit for extreme coldness; the leaf of Sciatica Cresses, water Pepper of Hors-radhish, garden Cresses, root of Pellitory, Mustard seed, Staves-acer, which that they may the more easily be chewed by the teeth, they must be mingled with a little yellow Wax, and so made into little Bals or Morsels.

Medicaments that evacuate by the Nostrils.

Some of them by their acrimony cause one to sneeze, and these are very fit for a very thick humor that is pressed close in, and where the Expulsive Faculty is dull. Some again provoke the humor, without sneezing, amongst which, some may be safely used, even when the Head enclineth to heat; others belong only to a cold humor and head.

The pouders of all the propounded remedies for strong Masticatories, if they be blown in or snuffed up into the Nostrils, may cause one to sneeze. Also without sneezing, the Head that is over hot, may be evacuated with the Decoction, or juyce of Mallowes, or Blites.
Medicaments that Evacuate Insensibly.

The matter these are made of is of a large extent. For all hot things by rarefying and turning the Humors into air, do evacuate insensibly, so do all dry things by restraining moisture, and all astringent things by pressing them forth, may be reckoned in the number of these; but things that digest are properly so called, which do by degrees turn the Humors into vapours; and those that discuss and do it by heaps, and dissipate also gross Humors, and Blistering Medicaments that do both vehemently by violent Heat remove the Matter that lieth deep, that is not sufficiently attenuated, and draw it to the Skin.

Sometimes Winds are drawn out of the Body by some Instruments that Chirurgions use that work suddenly. So the winds are drawn forth that extend the great Intestines, thrusting in (After a Clyster to void the Excrements) a dry Syring, and drawing it downwards. Hippocrates used Smith’s Bellows.

By the same way the winds that fill the Matrix, by help of a Syring, with a long thin Neck, may be drawn out.

Things that increase Sperm, or Seed.

Those Nutriments chiefly serve to augment Sperm, which by a Physical force, move hot and thin Vapors, fit to cause erection of the Yard. The cheap things are these; Flesh of Ducks and Geese, cooked especially with Garlick; the Brains of Calves and Pigs seasoned with Pepper and Salt; the Juyce pressed out of the Lungs of a Ram roasted, Swans Eggs fried with butter, all kinds of Shell-fish seasoned with pepper, the Polypus, the Cuttle seasoned.

Those are thought to be more efficacious; The thickest root of all the Satyriums. The Pizzle of a Bull, or Hart, Boars Stones,
and of Foxes, and a Boar Pig that hath engendered, washed in White Wine, and dried in an Oven. The powder of these may be drank mixed together, or else a part in White Wine to one dram.

Remedies to force out the Dead Child.
Especially, vertue is ascribed to Dittania, both in drink and Perfume. Also the milk of the first litter of a Bitch being drank is very good in particular.... The fume of Pigeons dung, of Brimstone, of the cast sk skin of a Serpent. Also we must not neglect in this case such things as tied to the Thigh do ease Child-birth.

Remedies to break the Stone.
Some Medicaments break Stones in the Kidneys, by which the Stones in the Bladder are not touched. Those remedies have a three fold order: (I) Those that dissolve a hard stone. (II) Those that dissolve a soft stone, and not yet fast compacted out. (III) Those that drive out small Stones and Gravel.

The Medicaments that drive out the last, the Shells of Wood-nuts, the Calx of the Shells of Eggs, the Stone of Spunges, the winter shells of Snails, the bones of the Head of a Pike in Powder, the Stone found in the Head of a Snail, Crabs Eyes etc.

For a Stone that is hardened and grown great. The Powder of a Bears Tooth, the Ashes of a Calcined Grasshopper, the kernels of Cherries... The Ashes, and the Flesh and the Dried Blood of an old Cock, the Ashes of Young Swallowes, the Ashes of a Hare burnt skin and all, the Ashes of Earth worms, Sow lice washed in White Wine, burnt and dried. Also hares blood and Foxes blood dried, the Ashes of Scorpions and various vegetable medicaments.

The Goats blood must be taken from animals that have been kept in Gardens of Saxifrage for a month. The Blood of the Fox must be taken.
Remedies contrary to Poysons.

But this must be generally taken notice of, that the flesh of any venenous Creature laid to the biting or wound, that that creature made doth draw out the venome; whence it comes to passe that the powder of water Serpents, but especially of Vipers is so famous against the Poison of all Serpents, but of we may believe report, it is good to cure and preserve against all venoms and poisons for many dayes. (Three different methods are given as to the preparation of the powder of Vipers.

For the pain of the Chollick, a sure remedy is, one dram of a man's Skull prepared, and taken with one scruple of Annis seeds in a cold cause; but with Coriander seed if the Cause be hot. Also the powder of the Testicles of a gelded Horse, taken to one dram, after the same fashion.

Hernia. Culpepper is very sure that ruptures of the intestine can be cured in the case of young or old men or adults by the use of medicaments taken inwardly and also applied externally and this within a period of threescore days at the longest. He enumerates several drugs that are to be used, one of the chief being Rupture wort... "Let the place be anointed twice every day with common Oyl or Oyl of St. Johnswort, wherein live Lizards by long standing of it in the Sun, are consumed.

Treatment of Wounds.

A deep wound must first be filled with flesh, with Remedies called Sarcoticks, which do scour away the thick excrements of the part, and consume the thin, then we must bring it to cicatrize with
Spuloticks, which by their great drying, do not only consume the excrements, but the Blood also, and do harden the upper Superficies of the Ulcer, and do as it were turn it into Skin.

The book is filled with long prescriptions in which an endless list of vegetable drugs appear.
Health for the Rich and Poor, by Dyet without Physick, by
Edinburgh, Printed by a Society of Stationers, 1665.

In the preface Culpepper shows how excess in either meat or drink causeth Crudities, Crudities sickness, and sickness Death .... but this is not all, for intemperancy not only causeth both a short and sickly Life here, but also by Crudities choakes the intellectual and Angelicall part of man, whereby his Brains are made so muddy, that he is incapable of the understanding of what great things God has left for him to know.

Then a poem follows which ends thus: -

"How they (the Angels) rejoice and Sing, to see Thee tending temperate to be, Yea. God himself from Heaven above Will Showr down blessings, grace and love Upon thy Head and thou shalt be Upon the Earth the only He, And at last when this Life ends Thy Corps and Spirit part like friends. This same Book makes an Essay To lead thee in this lovely way Ita dixit Nich. Culpepper.

My intent in publishing Books of Physick in English is not to make Pools Physicians; But to help those that are Ingenious, Rational and Industrious....... I shall say no more but this; I am resolved not to give over, until I have Published in English whatsoever shall be ne-
necessary to make an industrious, Diligent, Rational; Man a knowing
Physician. This is the aim and indevor of

One quantity of food is not convenient for Bodies of con-
trary Complexions: for that which is too much for a Flegmatick ma
is not sufficient for one that is Cholerick; and the reason is,
because the temper of the stomach is different in all these cases.

...... He that desires a long life, a healthful body and a vigorous
Mind, let him labour to bring his Appetite into subjection to Reason,

...... If thou find a dulnesse or weariness after meat, it is a
sign thou hast exceeded. For meat and drink ought to refresh the
Body.

Beware of variety of Meats, and such as are curiously and
daintily dressed, because they prolong the Appetite....... Such
as fare hard, and work hard, have sweeter and pleasant bodies than
such as live idly, and fare deliciously....... That which we call
Crudity is the imperfect concoction of food....... If the stomach
makes a corruption instead of a concoction, the Liver cannot turn
that bad Chyle into good blood. .... Then from corrupted blood,
must needs proceed corrupted flesh, but by little and little it
putrefies and breeds, first Diseases, secondly Death.

All Epidemicall Diseases, proceed from the Air corrupted
by planetary influence....... If then your Bodies be kept clear
from corruption, by a temperate Diet, there is nothing for the
Disease to work upon....... A sober Diet makes men die without
pain and mitigates the Violence of Passions and Affections...
It also preserveth the Memory and helps the Understanding.
Mrs. Culpepper published at the beginning of this book an long Vindication and Testimony concerning the books written by her husband. She is indignant that a book should have been published under the title of "Culpepper's Last Legacy" by a man who called himself Nathaniel Brook. It is a Hodgepodge of undigested collections and Observations of my dear Husband deceased. He also forged two Epistles, one in mine, and the other in my Husband's name, of the penning of which, he nor I, never so much as dream'd...... All that he saith are as false as the Father of Lyes....It never entered into the Head of my Husband to publish such an undigested Gallimofery.......I shall say no more touching the abuse of the Book-seller, but my Husband left seventy-nine books of his own making or Translations, in my hand........Mr. Peter Cole, bookseller has these for the good of my Childe. Also my Husband left seventeen books completely perfected in the hands of Mr. Cole, for which he paid my Husband in his lifetime.

From my House next door to Your servant (in, and for the Red Lion in Spittlefields.

October 18. 1655.

Alice Culpepper.

Culpepper ponders ridiculous so many of these as medicines and his virtues are so pointed that it is no wonder that the College rose up arms against him.
In the Pharmacopoeia Londinensis Culpepper gives a List of what part of Living Creatures and Excrements the Apothecaries must keep in their Shops according to the Colledg of Physicians. Here is a selection from this list:

The Fat of Goose, Eel, Bone, Dog, Capon, Bever, wild Cat, Stork, Horse, Hedge-Hog, Hen, Man, Lyon, Hare, Wolf, Serpent, Badger, Hog, etc.

A Dog's Turd, the Backbone of a Hare and a Hog, East and West Bezoar; The Stone taken out of a Man's Bladder; Vipers Flesh; The Brains of Sparrows and Hares, Crabs Claws; The Rennet of a Lamb, hare, horse; The Heart of various animals; The Horn of an Elk, Hart, Rhinocerot, Unicorn; The Skull of a Man killed by a violent death; Cock's Comb; Teeth of various animals, Ivory; the Skin a Snake hath cast off; the Gall of various animals; the cases of Silk-worms; the Liver of a Wolf, a Notter, a Frog; the Guts of a Wolf and a Fox; the Milk of various animals including Woman; the Stone in the Head of a Carp; the Marrow of the leg of a Sheep and other animals; a Swallow's nest; Crabs Eyes, the Bone of a Stag's Heart; the inner skin of a Hen's Gizzard; the Pizzle of a Stag, of a Bull; Fox's Lungues; The Blood of various animals; A Bullock's Spleen; The Turds of various animals including that of a man or woman; the piss of various animals including that of a man or Woman that is a Maid, and that is not a Maid; the Moss on a Man's Skull etc.

Culpepper pours ridicule on many of these as medicines and his remarks are so pointed that it is no wonder that the College rose in arms against him.
James Primrose.

1651.
JAMES PRIMROSE.

Though born at St. Jean d'Angely, Charente Inferieure, France, his name shows that at least he was of Scottish extraction. He studied at the University of Bordeaux, where he took the degrees of M.A. and M.D. at the University of Montpellier in 1617. He came to England some time after this and was esteemed a skilful physician in Hull where he practised. In 1628 he took the degree of M.D. at Oxford, and at the end of the following year Primrose was admitted to the College of Physicians of London, his examiner being William Harvey.

As showing the influence which Harvey had exercised over him, we find him publishing a work entitled "Exercitationes et Animadversiones in Librum Gulielmi Hervaei de Motu Cordis et Circulatione Sanguinis" in 1630, in which he tries to upset Harvey's conclusions. The following year he issued "Academia Monspeliensis descripta".

The most important of his works was not published until 1638. It was printed in London, and had for title "De Vulgi in Medicina Erroribus". Though translated by Dr. Robert Wittie in 1640, it was not published until 1651 owing to the Civil War. Another Latin edition was published in 1639 at Amsterdam, and still other two appeared at Rotterdam in 1658 and 1668.

In 1640 there was printed at London a translation from the Latin by Wittie of another work by Primrose entitled "The Antimonial Cup twice cast". In 1647 Primrose published at Leyden "Aphorismi necessarii ad Doctrinam Medicinae acquerendam perutilis". A resume of Galen's medicine appeared at Amsterdam in 1650 under the name of "Enchiridion Medicum". In 1651
"Ars Pharmaceutica"; in 1655 "De Mulierum Morbis et Symptomatis". In 1657 "Destructio fundamentorum Vopisci Fortunati Plempii" in 1658 "De Febribus". In 1659 "Partes duae de Morbis Fuerorum". These were all almost all published at Rotterdam.

Robert Wittie, the Translator.

Apparently he was a practitioner at Scarborough and died in 1684. Besides the translations of Primrose's works, Wittie wrote:

(i) "Hydrologia Chymica". 1669.
(ii) "Fons Scarburgenses sive tractatus de omnis Aquarum Generis origine ac usu. London 1678.
(iii) "Gout Raptures or an Historical Fiction of a War among the Stars." Cambridge 1677.
(iv) "A survey of the Heavens" in English, Greek and Latin verse 1681.
James Primrose.

Popular Errours, or the Errours of the People in Physick, first written
In Latine by the learned Physitian, James Primrose, Doctor in Physick,
divided into Four Books; to which is added by the same author his
Verdict concerning the Antimonial Cuppe, translated into English, by
Nicholas Bourne, at the South Entrance of the Royal Exchange. 1651.

The frontispiece depicts a sick man in bed; a most lugubrious
angel who, while introducing the Physician, pushes back a female who
has come to give her aid to the invalid.

The work had been translated some eleven years previously, but
the political distractions of the times had prevented its publication
until the year 1651. It is dedicated to The RightHonourable, the
Lady Frances Strickland. It is prefaced by Latin poems in praise
either of Primrose or of his translator. There are two by the well-
known poet, Andrew Marvell, the friend of Milton.

The First Book treats of Physicians. The author says that most
of the vulgar Errours are upheld by the ignorant runnagate Quack-
salvers and Empyricks with which the nation abounds. The knowledge
of the Tongues is not sufficient to make a Physician. It was Celsus
who said that Diseases are not cured with eloquence, nor do degrees
given by Universities make a man a good physician, and many univers-
sities (especially foreign) give their degrees almost to every one who
asks. "I have observed in some this evil custom, that whatsoever
a Physician shall speak well, they contradict, that they may get to
themselves some fame, out of the ruin of another man's name.

He goes on to state that many ministers of Religion "do seriously
and greedily and with much gain to themselves undertake the cure, not of souls only, but of bodies likewise." He goes on to show that it is impossible for an ecclesiastic to give that amount of time to the study of medicine which it demands. The older Church laws forbade the union of ministry and medicine, but if some will still continue both "I leave to the judgement of God, to whom they must be accountable one day for all their words and works."

Of Women that meddle in Physick and Surgery he remarks that they are borne for the care and service of man and are not to be thought worse of if they doe their whole endeavour for the good of mankind. But they especially are busied about surgery and that part which chiefly concerns the cure of Tumours and Ulcers. But Galen in his Books of Method, teaches that remedies are to bee altered according to the person, place and part affected.

There is another sort of man sprung up for a Mocking-stock of Art, which call themselves Empyricks, the English and Italians call them Mountibanks; the French Chartalans. They are men of no esteem in other countries, but if they travail the country here, they are accounted in great honour and are sometimes equalized with Physicians. Mountibanks are far from the learning of the ancient Empyricks and sell the common Remedies at a dear rate. Their principall remedy is against poysons, but as they are so rarely used, there is no great need of their remedy. I dare be bold to say, that a draught of Cowes milk can do more against Arsenick and Sublimate than all their Antidotes.

Surgery being a part of Physick, a Physician ought to be knowing in Surgery. Hence it is that whosoever have written anything of Surgery, worthy of praise, from Hippocrates his time unto this our age, have been always Physicians, except a few late writers, who have presented nothing
to us, but what we had before.

A Physician ought especially skilful in Pharmacie. For now-adayes many of our Apothecaries are to seeke in this point. Some think that it is a thing unbeseeeming the dignitie of a Physician, to prepare his Medicines, but there is nothing disgraceful in it, but he must having nothing for sale. It is an ordinary thing to see men that have practised physic a good space of time, to have notwithstanding no certaine experience of any thing. Many men that practise physick observe the beating of arterie peepe into Urines and prescribe purges. Yet silly women doe it. And who is able to restraine from laughter, when he sees women feel the pulse. Yet there remain above one hundred differences in the pulse to be considered by a physician. The same may be said of Urines. It is a very easie thing to loose the belly, but he alone is able to doe it according to the rules of Arty, that is a good Artist. Not the plenty of remedies, but the manner of using them, makes the Physician.

Regarding the French Pox, Primrose gives the advice, that first men should beware of Whores, and then that they beware of such coseners as pretend to cure the pox in a few days. Let him that is troubled with this disease not trush himself but to a Physician that is a skilful Artist unless he desire to lose both his labour and his money too.

The Second Book deals with "Errors about some Diseases and the Knowledge of them". Speaking of the "Deceitful Judgement of Urines" he says that Physicians in France and Italy have quite abandoned the foolish custome of divining the disease by looking at the urine.

"If a very cholericke urine be brought, can the pisse prophet tell which disease doth trouble the patient?". He states that it is not true that the sex can be determined by examining the urine, nor whether a woman be gravid nor whether one has consumption.
Writing of the PLAGUE, Primrose says that some men are so froward, stoicall and obstinate, as that they go about to take away from the plague all contagion and infection. Others think it an impious thing for a Christian to fear the evil, or to fly from it. Yet the plague is contagious and can be conveyed from one city to another, which often happens without any precedent fault of the aire. He gives the opinions of many ancient writers in regard to the contagiousness or non-contagiousness of the plague, and quotes Pliny who says that old men are not so soon infected as young men because of the coldnesse of their bodies. He then discusses whether it be lawful to fly in the time of plague or not. As no one would expose himself to a roaring lion, so if a man's calling hinder him not, he will not be perswaded to stay among those that are sick of the plague, and Hippocrates saith that it is the safest way to fly soon and farre and to returne late.

Among many errours, this seems most worthy to bee laughed at, that the husband is thought to bee sick and troubled with the same symptoms, wherewith a woman with child is wont. I had a patient sick of a Fever, who would not be perswaded of any other cause of his sicknesse, than his wife's being with child. Our author goes on to show the absurdity of this belief.

He asks whether foraine Physicians and aliens can know the temper of the sick of another countrey. Here in England all that are skilfull Artists doe practise Physick according to the precepts of Galen and Hippocrates and can therefore discerne the diversitie of men according to their ages, countries and the different temper of the aire; it were no art however, if it should accomodate its precepts to some particular place only.

Some physicians referre almost all diseases to a Cold. Cold
are being inspired, makes the gristles of the lungs become stiffe, so that the lungs can scarce bee dilated. Hence oftentimes the vessels of the lungs are broken, and the blood runs into some capacity and putrifies, corrupts and stirs up naughty symptoms. Primrose demonstrates that many diseases are due to other causes, but that the letting of blood is the principal remedy.

The Third Book treats of The Errors about Diet. The author thinks that our native waters are equal to those of any of the hot countries. He says that the linen of the sick ought to be changed often, and not kept about the patient as is the present custom. The long keeping of them hinders transpiration of the body; sweat and filth are kept in their shirts, which do putrefy and contract an evil savour. Sweat and filth do obstruct the body and so doubles the heat. The fuliginous vapours are obstructed, and the fever is increased. It is very good often to change the linen about the sick, and when they sweat diligently to wipe or cleanse their body.

He affirms that the decoction and broth of an old cock is not well prescribed for nourishing the sick. All old flesh is of hard digestion and makes thick chyle and yields but little good. They shall do better that shall administer young cock - broth to the sick. It is in vain to boyle gold in broth for them that are in a consumption. It doth no good at all, for nothing is dissolved from it. It cannot be converted into our nature.

Strong beere or ale should not be drunk in the morning fasting. These drinkes insinuate themselves into the nervous parts and cause gout. Midwives do ill, who give to women in Childbed nothing but hot drinks. I have oftentimes permitted drink not so strong and somewhat cool to women in Childbed, burning and
thirsting after small beere, by which they have felt themselves much refreshed.

The Physician does not command drunkennesse, although sometimes he persuade to a liberall drinking of wine. He that doth use such a remedie, not with a lust to sin or for pleasure, but for his health's sake only, doth scarce seem to have committed a sin.

Red Cloths are not to be preferred before others for the voyding of the measles. That colour of the clotthe seems to me to be superstitious. I think it a vaine thing to regard the difference of colours. Yea rather I would commend the whitest because that colour doth draw forth the spirits to the externall parts and thus the humours into the skin.

The Fourth Book deals with The Errors of the People about the Use of Remedies, Profitable and Necessarie to be Read of all. Primrose enters into a long discussion regarding the use of Chymical and Minerall remedies, and shows that the remedies are not to be changed although the cure does not presently follow, because there are many stubborn diseases very hard to be cured. If however the symptomes be exasperated, it is a signe that the remedy was contrary to the disease and is therefore to be changed. Thus Antonius Musa when he perceived the paine of Caesar's stomach to become worse by the use of hot things, he applyed cold remedies and so cured him. This is the excellency of the Art of Physick, that though it doeth not performe a cure, yet it preserves the inward parts and thus the noble parts are not harmed by the disease.

In reference to the letting of Blood and of purging—"no regard is to be had of the stars".

Many people taking physick think it to be a dangerous thing
to use these remedies when the Moone is in conjunction with the Sunne.

Some doe advertise that Cupping-glasses be not applied in the beginning of the moneth, because the humours are not yet swelled up to the height, but rather that they should be applied at the middle of the moneth. Though it is wise to adhere to these for the prevention of disease, yet in the sick such precautions cannot be observed without danger, seeing that diseases do not permit such great delays.

Primrose speaks of the ridiculous physicall observations of Almanack-makers, who every year warn the People about the taking of Physick. The talk of the Astrologers of Blood-letting is but vain and frivolous; for whatsoever the influence of the Moone be, bloodletting is never good for a Phlegmatick man. It is good only for Cholerick and Sanguine Complexions, let the Moone be in what signe it will.

It is not hurtfull to purge in the Dog-days, but that purging-pills should not be taken after supper, but rather in the morning after the meat has been concocted. That physicall potions may not onely be taken hot, but also cold; that it is not hurtfull to take cold drinks on the day of purgation; that May is the best moneth for taking physick, and it is best to purge phlegmaticicks in the beginning of the Spring, and the Cholericks at the end; that a purge is not much to bee disliked because sometimes it is cast back by vomit; that purging ought not to be feared, though there be a flux of the belly, but nothing doth stay the belly like to a purge.

Clysters are the most gentle and innocent physick of all, for they never touch any noble part. Much lesse can mollifying and cooling clysters hurt the body. A clyster lies like a fomentation upon the kidneys and the bowels and it often brings that out of the body which a reiterated purgation can never doe.
Old men may be blooded without danger, except in decrepit old age. It is a vain thing to be so curious in the choice of the veins in the arm and that sleep and drink ought not to be wholly forbidden after blood-letting. In inflammations of the internal parts, in the beginnings of fits and in pestilential diseases sleep is not good, but in other diseases there is no reason why the patient should not sleep.

Bleeding and purging are not hurtful for women with child. Some think that such remedies draw all the nourishment from the childe and that there is danger of abortion.

It is not hurtful to take quicksilver by the mouth. Some modern physicians even will have it to be a poison. Primrose then narrates several cases where people have drunk several pounds of quicksilver with no harmful results.

Tobacco is not narcotick but it is good for old men or for those whose stomachs are by nature cold. Tobacco doth not go up into the braine and hath not any antidotary quality against the Plague.

Of the Errors about the Bezoar Stone.

Primrose describes the various kinds—One being a precious stone which drops from the eye of a Hart. Those generally used are found in the stomachs of certain beasts. But as neither the Emperour nor the King of Spain had any true Bezaar, its very probable ours are all sophisticated. Bezaar is only for the rich and must be given in a large quantity as a Dramme.

The Unicorn's Horn is not so common as the Bezaar Stone, but it is doubtful if there is such a creature. Probably it is the Rhinoceros. Those that are digged out of the earth are the best against poison. Though it be knowne from what creatures they are taken, yet their vertue is not to be denied.
Of the Applying of Young Whelps and Pigeons to the Soles of the Feet. They are cloven through the middle of the back. Of which custom I do not in this place speak against for I know it has been of exceeding great commodity of the sick. The Antients were wont to apply them to the head (but seldom or never to the feet) for frenzie or madnesse. Young pigeons doe resolve without much heat. They may therefore doe a little good and cannot doe hurt.

Of the Weapon Salve, or the Sympatheticall, Magneticall and Starry oynment.

Many affirm it cures wounds being applied to the weapon that makes the wound. Now adayes it begins to bee much in use. A principall ingredient is the moss that grows upon a man's skull that has been murdered or preferably hanged. Some add Mummie of Egypt. Which is a most unprofitable remedy being made in Egypt by cousening fellows of the flesh of Elephantick and leprous persons and of such as dyed of the French Pox or some such filthy diseases. Some affirm that the weapon is to bee anointed from below upwards and kept warm and wrapped up. The Sympatheticall oynment is thus made from man's blood, fat and flesh and the moss of the skull in which Spirits are contained. (He proceeds to give a long account of the method of cure, and shows the vanity of curing by the ointment).

Of the Curing Of the King's Evill by the Touch of the Seventh Sonne.

Some diseases are sometimes cured only with the touch of some remedies. Thus Galen commends the root of the Peionie hung about the neck for the Epilepsie, others the Stone called
Aetites bound to a woman's thigh to facilitate the birth though I have tried these without success. (Aetites is a stone which is found in an Eagle's nest, without which (as it is thought,) she cannot lay her eggs.) That this curing by the seventh sonnes touch is naturall, scarce any will believe. This son is said to have some peculiar power which is denied to the other six brethren. Seeing that all diseases are cured by the taking away of their cause, these Wondwemongers cannot take away the King's Evill, unless they first take away the cause.

Now seeing that the cause of the King's Evill is pleasing, settled in the kernels, he might be able by the same touch and the same vertue to cure other diseases that come from the same cause which he cannot doe, it must follow that the cure is miraculous or that it depends on the imagination of the sick. The cure must of necessity be either miraculous or false or diabolicall. I doe not believe it is miraculous, God will not have miracles to be wrought at every man's private pleasure. The seven sonnes of Sceva a Jew, were punished by being beaten by the Devill.

The power of curing the King's Evill is by the blessing of God granted to the Kings of Great Britaine, and France, which is denied to other Christian kings; and so Edward the Confessor, for his singular piety, cured not only the King's Evill but also other ulcers by touch alone, which his successors could not doe. In Spaine, where this disease of the King's Evill is epidemicall and popular, Francis the first King of France, being taken prisoner by the Spaniards, cured it by his touch alone. This power is given only to the lawfull heires of these kings and abide in the Christian Faith. For if an Usurper should depose a lawfull Prince, he should not with the Kingdome obtain this prerogative to himself. Seeing then it is thus, who will believe that such power is given to men of no account, to bee perpetuall to them,
simply and absolutely from their birth which Kings alone doe obtaine by unction. For that which God hath bestowed on Kings, ought to be such a thing that it must manifest more the glory of God, nor is there any promise to be found made from God to the seventh Sonne. Therefore it is manifest that this kind of curing, if there be any such is diabolicall. For wee know that the Devill is God's Ape, that he may detract from God's glory and so likewise that this admirable prerogative which God hath granted unto Kings may be had in contempt. Therefore questionlesse these fellowes doe either not cure at all this diseas or else the Devill doth incontinently cure it with naturall meanes, whose vertues he is not ignorant of.
ENCHRIRIDION MEDICUM, containing An Epitome of the whole course of Physicke, with the Examination of a Chyrurgian by way of Dialogue betweene the Doctor and the Student. Herophilus. London; Sold at the Shop at the Great North-doore of Pauls, at the signe of the Bible. 1612.

The first question which the Doctor asks is, 'What manner of man must a Physician be?' Then the usual series follows, e.g.
What is Physicke? What is an Element? How many elements are there?
The answer to the last is given as: 'The Fire, which is extreme hot, and moderately dry; The Air, extreme moist and moderately hot; The Water, extreme cold and moderately moist; The Earth, extreme dry and moderately cold.

Then follow questions as to Temperaments: 'Sometimes it doth happen that the hot complexion proveth unfit for Venus, because the members of generation are cold. The cold complexion is not so hairy as the hot, as may be perceived by Eunuchs, and women which are of a glaber and smooth skinne.' What are humors? What are Spirits?

The Second Part treats of 'Things not naturall, called Hugiene, and doth respect the conservation of man's health.' This section deals with air, food, sleep, exercise, emptiness and repletion, the affects of the Mind, etc.

The author is of opinion that Clysters may be administered for nourishment. He states that Galen was of the contrary opinion when he denied that the substance of the clyster was not carried beyond the Intestinum jejunum, but he says that it has been proved that the substance may ascend even to the stomach; from whence the Mezeraicall veins doe draw nourishment.
As to the cure of a Quartan Ague, Trallianus affirms that a live Bittle hung about the necke in a piece of linneh tinted with saffron, should be a sure experiment; others recommend the worms to bee found in the thistle called Labrum Veneris hanged about the necke.

The Pestilence hath its beginning from a pernicious and unusuall putrifaction such as from the waters in Moorefields at London, where no man was wont to walke in the evenings for stench, stinking channels, venomous dens and mettalin spirits arising out of the earth. Often it hapneth from the variable commision of the Planets; and then it is the hidden and admirable scourge of the most just God for our sinnes.

The duties of a surgeon comprised largely those of a physician for he had to regulate carefully the diet and medicine of the patient as well as giving attention to the affected part.

This for a specimen of pathology;—"Dolor dentium or tooth-ach; it is caused sometimes through hot or cold distemper, sometimes through flowing of humors out of the head unto the rootes of the teeth, which through their sharpenesse either doe gnaw about them, or else with their abundance they ingender greise in the teeth, as if inflammation be about the fleshy parts.

Amongst many remedies for Epilepsy, he recommends opening of the scull with the trepan, to the extent that the vapours and the matters from whence they doe ascend may be avoided and consumed.

Apoplexy. "It is altogether impossible to cure a strong Apoplexy therefore I wish alwayes that the gouvevment and cure thereof might be committed to Priests and Divines.

Melancholy. "The use of noughty meates and evill nourishment and chiefly when they are not well digested, is oft times the cause of this evill. Widdowes, and such as burne with immoderate love, are often
affected with this evill.

For Phrensie, lethargie, etc. he recommends frictions and paineful ligatures, cupping glasses with scarifications etc.

For the cure of Angina or the Squinancie, he advocates that a little piece of flesh may be tyed with a thread and given to be swallowed downe and presently drawne backe againe, and so may a piece of Sponge be used.

In the treatment of Stone in the Kidney, he advocates the ashes of Scorpions, Grasshoppers, Earth-wormes, Millepedum, the ashes of an Hare burned in an oven with his skin and all; also there is found a stone in the gaule of an Ox, the powder whereof doth also breake the stone in the bladder.

For Pissing in the Bed he says that Galen recommends the poudre of the Sheapes bladder along with Posca. Aetius says that the lungs of a Goose roasted and eaten for three dayes together fasting without bread, to be very profitable. Also the braine and testicles of a Hare is very good. If you please the testicles may be boyled in Wine, and they may be drunke, and the stones eaten. The tongue also of a goose, and the throat of a Cocke or an Henne, burned and the pouder thereof given in something luke-warm is a thing confirmed by Galen.

Though much that our author has written in the book is fanciful, he ends it with a wise aphorism -

"A doubtful hope is better than utter dispayre".
William Ramesay.

1661.
The author of this work was a rather famous physician and astrologer. No doubt he had inherited his predilection to the latter from his father, David Ramsay, the well-known clockmaker who lived in Scotland but followed his master, King James I to London. That he had been a favourite with Royalty is shown by the fact that he was appointed Page of the Bedchamber and Groom of the Privy Chamber as well as being Keeper of all His Majesty's clocks and watches. The latter duty was continued under Charles I.

William Ramesay was born at Westminster on 13th. March 1626. He tells us in his "Astrologia Restaurata" published in the year of his father's death 1653, that his mother was English and that he had changed the spelling of his name because he was of the opinion that his ancestors had come from Egypt where this name, Ramesay, meant joy and delight.

On account of the Civil War William was sent to the University of St. Andrews to study Medicine and later, he went to Edinburgh. The prevalence of the Plague there however drove him away and he returned to London in the spring of 1645. It is to be presumed that he practised medicine in London, for we find him living with his father in Holborn in 1652, in which year also he took his degree of M.D. at Montpellier. Soon afterwards he was admitted Licentiate of the Royal College of Physicians, and appointed Physician in Ordinary to Charles II.
In June 1668 he was admitted by Royal Mandate M.D. of Cambridge and he was then living at Plymouth. We do not find any further mention of Ramesay after the publication of "The Gentleman's Companion" in 1676.

That he was more of an Astrologer and Astronomer than a Physician is evident for a consideration of the books he published.

I. Lux Veritatis or Christian Judicial Astrology vindicated. In reply to Nathaniel Holmes or Homes D.D. answered by W. Rowland, M.D. 1651.

II. A Short Discourse of the Eclipse of the Sunne. 1651.

III. Vox Stellarum. 1652.

IV. Astrologia Restaurata; An Introduction to the Knowledge of the Stars. 1653. This contains a portrait of Ramesay by Thomas Cross.

V. ο' ανθρώπος και εξοικλα or Man's Dignity and Perfection. 1661

VI. Tractatus de Venenis. 1663.

Another edition of this appeared in 1665 with the title of "Life's Security."

VII. Φυσικολογια or Some Physical Consideration of Wormes. 1668. This also contains a portrait of the Author.

VIII. The Gentleman's Companion, by a Person of Quality. 1676.
Treatise of Poisons. Their Sundry Sorts, Names, Natures and Virtues, with their Severall Symptomes, Signes, Diagnosticks, Prognosticks, and Antidotes. Wherein are Divers Necessary Questions Discussed; The Truth by the Most Learned, Confirmed; By many Instances Examples and Stories Illustrated; and, Both Philosophically and Medicinally Handled by William Ramesay Latros. Medicus Certus, in Re Incerta Cernitur. Fabram sanitatem fecisse accidens est, quoniam non estaptus ad faciendum sanitatem faber, sed Medicus.

Arist. Metaph. 5.

Medicus Vir multis aliis aequandus. Homer. Iliad. Lib. II.

London, Printed by S. G., for D. Pakeman, at the Rainbow in Fleetstreet. 1661.

To the Most High and Mighty Monarch the King's most Excellent Majesty CHARLES the Second. By the especiall Grace, and most singularly miraculous Providence of GOD, King of England, Scotland, France and Ireland, Defender of the Faith, etc.

Ramesay presumes to present this book to the King to testify his joy and to congratulate His Majesty's most miraculous Restauration, to manifest that loyalty "which hath for many years kept me under a cloud. If your Majesty shall descend to take the smallest cognisance thereof; I must ever brag and boast of Superlative favour and greatest honour that so mean a shrub and unworthy a subject can be capable of."

After referring to the disorders, confusions and troubles which they had passed through." witness my last Dedication
to my Quadripartite, Intituled 'Astrologie Restored' published 1653." Ramesay goes on quoting freely from the Bible and beseeches the King to rectify abuses; one of which only will he trouble the King with, but one which makes "divers of your Majesty's suffering Subjects and Servants sick at the very Heart. That is the more than ordinary Abuse of that most noble Art of Physick by Illiterates, Quackes, Mountebancks and Empericks, that have been, are and will be, if not prevented, the Ruine of more of your Majesty's Loyall and Faithfull Subjects, than either the Sword or Plague. Yet if your Majesty would be pleased to take notice of such as have been wholly ruined by the Fall of your Majesty's Father of Glorious Memory (as I have been for one) to whom my father was not only a Servant, both in the Bed-Chamber and Privy Chamber, but also to your Majesty's Royale Grandfather all his Reign in England, and likewise to your Majesty whilst Prince, that we will be kept from Ruine, it will be the highest peice of Kingly bounty imaginable.

It is most requisite that a Physician be well learned in those seven particulars;

I. Language or Knowledge of the Tongues, especially Latine and Greek, and if they had Hebrew and Arabick, it were not amiss for Translations many times vastly vary from the original Copies, whereby many mistakes and much mischief is occasioned. (Ramesay then gives a list of about fifty whom he calls the best writers.)
2. Philosophy, that so he may know the Subject on which he is to work — man's body, the Elements, Humors, Spirits, and Signs, both Diagnosticks and Prognosticks and the Right Method of Cure. Without Philosophy a man can never be a good Physician.

3. Logicke, which is indeed the first in order of all Arts, without which Discipline he can never be able to give a perfect Definition of any Disease.

4. Astronomy, for the knowledge of Ascension, Culminations, etc. but especiallt (as Sennertus thinks, who is the Prince of our Neotericke Physicians,) as an help, furtherance and introduction to Astrology.

5. Astrology, which is the most necessary Discipline of all the rest. Not as it is commonly practised (and indeed abused) by broken Mechanicks and illiterate Novices (and hath been of late yeares, when every one did what seemed best in his own eyes,) bringing shame and contempt upon the noble Art, they under that Colour, Deceive men of their money, and fool them out of their lives. There being more Empericall Imposters, pretending to Astrology, that are very Idiots, Cheats, Illiterate, and of the Vulgar Sort, then of any other kind whatsoever (Which Abuse it could be wished your Majesty would likewise amend, and restrain this their Licentiousness, which on every Post and Pillar through all the Streets of this City of London wherein notwithstanding there is a Colledge of Able and Learned Physicians — they publish not only to the seducing, but ruinating of many of your Majesty's poore subjects.
It is the pure Astrology I speak for without which Hippocrates and Galen accompted a Physician a fool, and without which Avicenna accompted them Butchers rather than Physicians, "Homicidas Medicos Astrologiae Ignaros". And Thurnesferus, Paracelsus with others, will admit of no Physician without it, "Medicus sine Coeli peritia nihil est". Many Physicians are of the contrary opinion, but whoever is ignorant of the Causes of the Alterations of the temperatures of mens' bodies, by which diseases are occasioned, must needs be ignorant in the Cure. But mens bodies alter in their temperatures with the Seasons, which change according to the Motions and Places of the several Constellations and Celestiall bodies whence follow many Infirmities and Diseases. Ergo, whosoever is ignorant of Astrology, that is, do not know the Influences of the Stars, which cause Diseases, and alter our Temperatures, are ignorant of the Cure. Then Astrology, and it only, by the knowledge of the Motions, Nature, Positions, and influence of the Moon, discovers unto us the true Crisis, in all sharp and violent Diseases. .... And as Acute Diseases follow the Moon: so do Chronick, the Course of the Sun. (Ramesay quotes from many distinguished authors who are of the same opinion.)

6. Chemistry with the Knowledge of Mettals, Stones, etc. and to know true stones and mettals from false and adulterate. Paracelsus ostentatiously boasts himself a Monarch in Physick, affirming he did more famous cures than all the Galenists in Europe besides. Yet Erastus accompts him but an Imposter, and Emperick, an Heretick, affirming him to do the same in Physick, which Luther did in Divinity; That he was a drunken rogue, a
base fellow, a Magician, having the Devil for his Master, Devils for his familiar Companions, And what he did was by the help of the Devil.

Lastly, a Physician should know the Vegetables and Plants that are to be used. If those who practise on the lives of your Majesty's poore Subjects are not so trained, they are to be accompted Cheats and Murtherers, and ought to be proceeded against according to Law. Will your Majesty be graciously pleased to cause such wholesome Statutes as are provided in that case already, to be put in execution.

From my aboad in London       Yours Majesty's most Loyall.

Die 16 octobris 1660.             and obedient Subject,

William Ramesay.

"To the Judicious and Ingenious Readers" our author addresses ten pages. He tells us that his friends have prevail ed upon him to publish this work. Especially had he been pressed "by my most constant, Faithfull, Antient and Beloved Friend Ferdinando Gorges, Esquire.

Writing of IDIOSYNCRASIES, he says, "How could it be possible for those cases recorded by Agricola and Sanborolitanus to drink whole pounds of Argent Vive without any hurt? or those people in Thrace to eat whole handfuls of White Helle bore as Theophrastus notes. Poyson may become food, and I myself knew a gentleman about the late King's Court, who would familiarly eat Toades raw as he found them without the least inconvenienty to himself, being rather nutriment to him. admitting of perf ect Concoction, as appeared by the death of such women whom he
knew. And Cardan confidently averss, he knew one that did usually feed upon Spiders.

Ramesay says that he had written this work for the better avoiding those Horrid Mischief which he had known occasioned by the unadvised, and ignorant rash Actions of Empericks and Intruding Practitioners in the Art of Physick.

"To the More Imprudent and Rural Readers ", Ramesay addresses 27 pages. " It is to the major part of our little world that I address my words. They must not think to cure themselves for the Cures and Antidotes are beyond the Sphear of their Capacities."

Ramesay enters into a long discussion as to why one should not employ Quacks. " Why should we then seek to Angels, Saints, Devils, Magitians, Conjurers, Witches, Imposters, Empericks, Cheats, Ignoramusses, when we may walk in God's way, by using the lawful measures he hath appointed by the Hand of the Physician.

To use Prayer only, that God would help them without the means by the Hand of a lawfull Physician, is a tempting of God and his Goodness. Again to use the means appointed by God for Restauration of the Health, and not to crave a Blessing from him is prophane, presumption and a sin in a high Nature. Both together is therefore best.

For Impudent, Rural, Rash, Conceited and Ignorant People, therefore I have not compiled this Treatise, nor for Confident Youngsters, and Women, who think their own witte best, and yet want so much witte as to advise with others better than their own. To all these I desire it may be a SCARR CROW, And so ter-
rible, that they may avoid meddling with it.

"Of POYSONS, with their severall Antidotes, illustrated with divers Histories. The Testimony of the Most Approved, Authentick, and Learned Authors Extant."

Ramesay thinks that it is mere fancy to imagine that anyone could so arrange a poyson that it would act only after a certain given time, and this he affirms in spite of the contrary opinion of many illustrious Authors. The idea of conveying Poyson, in clothing, by shaking Hands, by infecting Spurs, Saddle, Stirrups, Boots, etc., is to Ramesay quite as ridiculous.

"Some Creatures are so poysonous as that they infect not only by their Touch corporally, but also by their Breath, and virtually kill by a kind of spiritual Influx. Thus Avicenna notes several Cases where some have been killed in flaying a Serpent with a Spear coming not nearer than the length thereof. Or as the Breath of Cats, as Avenzoar, Praemite, Mathiolus and Dioscorides, attest, is known commonly to be poysonous. The Basilisk even with its Touch kills. For no Creature can to touch him and escape, as Galen averts.

In one Case Sags poysoned several people because of a Toad which had lain at its root. By the very look & smell noyse of poysonous Creatures we may be not only infected, and sustain much Misery, but also sometimes be deprived of life also. The Basiliske can kill with the Sound of its hiss and the rayes of his sights. Pliny mentions a wild Beast near Nilus, called Catableyes, that kill any man it beholds instantly. Cardan says that many of these are fabulous, but sounder judgements are not of this Opinion. The poysonous vapours are
received by the Pores, Eyes, Nose and Ears. If a man by a malicious and envious look may hurt, disturb and discompose the spirits of another, how much more is it possible for a poisonous creature by his Venemous Aspect to hurt or kill. Lord Verulam in his Natural History IO gives the reason why men in their triumphs are oftentimes sick or indisposed, because they have received the venemous rayses and malignant beames of some malicious and envious Eye. Many have perished by sleeping under the venemous shade of the Yew-tree, as Pliny observes in Lib.16 Nat.Hist Cap.IO.

The antidotes which Ramesay advises are so many and so curious and often so difficult to obtain, and as they have to be taken mixed together, it must have been necessary to keep stock-bottles of them so as to be ready in case of emergency. If not, I fear greatly that the patient would have succumbed before the antidote was ready.

For poisoning by AQUA FORTIS, Ramesay recommends an Eclegma of mucilage of the seeds of Cyndonorum, Althaea and Tragacanth gum, along with extract of Rose water, Money of Roses and Violets. A gargle is also to be made of the same seeds along with Cucumeris.

ARSENIC is of two kinds:

I. Natural.

1. Auripigmentum is yellow in colour like gold.
2. Sandarache is bright red in colour.

II. Atrificial.

1. White and transparent like crystal. This is got by subliming both the above, and is commonly
2. Realgar, which is composed of sulphur and auripigment. They all kill very quickly. Some survive for many years, but in grievous misery. The specificall Antidotes are:

I. Crystallus Fossilis pulverizatus, one drachm with fresh sweet Almond Oil.

2. Oleum a nucleis pini, three drachms.

3. Lapis Bezoar.

ARGENT VIVE. (Mercury). The metal itself kills either soon or, if he live, he becomes paralysed. Others again say it is harmless. Joannes Schenckins records the case of a man, who by the frequent use of mercury, his veins were at length perceived to be full of Mercury, (being penetrated therewith) so that it was discerned to run up and down as his arms were elevated or depressed. Hydromelites in the shape of enemata are to be used as antidotes.

Ramessay says that Precipitate Mercury is a much stronger poison and he gives a very good description of the symptoms. He describes the corroding effects of Corrosive Sublimate, "it extremly burns the Stomache and bowells, exulcerating them, and the Intralls also. Some authors think so highly of certain preparations as to call them Mercurius Vitae, Angelicall Poudre etc. Fabricius says that what they call Mercury of Life may oftentimes be well nominated Mercurius Mortis & M. Vitae Aeter- nae, because it often sends a man either to Heaven or Hell. In plain English, they are most excellent medicines, if by an able and knowing physician administered to strong bodies, otherwise they are no better than poisons.
VITRIOL in spite of its transcendent use in Physick, when taken in too large amounts causes grievous torments, as that fellow in \textit{Joannes Crato, lib. 5. Consil IO}, who being affected with the gout, drank Oyle of Vitriol, in all his external Parts and Pores felt before he dyed, as it were points of Needles all about him. Nay the same Crato affirms he hath seen the Lungs corroded in one who used much this mineral; and another whose Liver as it were came away in Bits, intolerable pain in the Bowells, vehemently exclaiming their Intralls were burnt up and torne in peices. The Antidotes are Decoct. Anethi or Warm Water with Amised oyl.

\textbf{LEAD CERUSE \& LITHARGE.} Lead itself taken in small bits or powder causes grievous and intolerable Symptomes. A man suffering from Gout ate about a pound of Lead in 15 dayes, he experienced such sharp Knowings of the Belly that he could not endure that it should be touched, in the gentlest Manner, and so propense was he to belching, that he would have it that he was even made up of wind. These grievous paines continued twenty dayes and nights, during which he never slept a wink, and never went to Stool without the help of some Clyster. His very Blood was of a yellow Colour, Cholericke and strange to be hold. At length he became Ictericall and of a nasty hew."

Ramesay has much to say regarding other mineral poisons. One is surprised to find it stated that "Diamond is rank Poison if taken into the Body in Powder, causing Death itself", while many other writers of his time advocate the use of this precious stone along with Red Coral, Ruby and many other precious stones in the treatment of disease.
In his article on HENBANE, Ramesay cites the case of a noble man who was persuaded by his lady to take 25 whole seeds in order to ease a pain. "But let this be a warning to all rational men, how they take Physick of that wonderful Creature in Nature, a Woman-Doctor. He grew so wild and fell into a Phrensis and Alienation of Mind, so that he did not know of his relations.

It is news to us to be told that the common vegetables of our diet are fraught with great danger to us. "The excessive use of Garlick, Onyons, and Leeskes engenders many gross, corrupt and malignant Humours, and incline to Sleeping and Madnesse. Nay, Cardan affirms that 'even the children that are begotten by such as use to feed frequently on onions are much inclined, and prone to madness'."

He says that the Walnut and the Yew Tree are so deadly that it is very dangerous even to sleep under them or let the shadow of one of them fall on any individual.

TOXICUM is a most violent and wicked poison, so destructive and pernicious, that all poisons have generally been denominated, toxica. But what this Toxicum is or formerly was, is not plainly discovered by any authour, that I have yet rancounted. Dioscorides says it was a Medicine in which Savages dipped the Heads of their Arrows to make the wound incurable and mortall. It seems to have been the Juice of some Herbar or Herbes, as Napellus, Aconite, White Hellebore, etc. It is so deadly and Peercing a Poyson, that it is unmedicable, killing even with the very touch.

MUSHROMES that meanest and most unworthy of all vegetables, which although some are adventured on as food for
Fanatrick Braines, yet acherers are poysonous and all pernicious. May and none of them fit for food. The reason why they are so poysonous is because: -

1. They are naturally nothing else but a bundle of cold, moist and viscous vapours and matter of the Earth or Trees on which they grow.

2. That they are very apt to attract and suck in all manner of poysons from Toades, Spiders and other noxious Creatures that do, or may converse about them. Whence those that eat them are as it were, suffocated, strangled, or choakt, filling their Bellies with Wind, causing the Hiccop, and sometimes Madnesse and Death.

The Antidotes are Calaminthia, Origanum, Hyssop, Rus, Nasturtium, and twelve other drugs.

The MADNESSE IN DOGS is due some say to: -

1. Because they are of a Melancholy temper.
2. Because they feed on Stinking, corrupt Matter and Water.
3. Through vexation at losing their Master, and smelling at every filthy and foetid thing.

Dogs are more propence unto this Delirium than other Creatures out of an innate property in themselves, which, in plain English, is as much as to say, I am ignorant of the cause. Were touching of the Foam is sufficient or the Smell of a Mad Dog or by sucking or biting that which they have bitten. Thus, a Man from which a Mad Dog had bitten off a piece of his Cloak. He sowed it on, but perhaps bit off loose threads. He was infected and at the next full Moon Dyed. Indeed Araetaeus
relates of one who was affected by the ardent, venomous and fierce aspect of a Mad Dog earnestly looking him in the Face, neither biting nor touching him in any manner of way."

The only sensible remedy contained in a list of drugs which extends to ten pages, is that a ligature should be tied on the limb above the part which had been bitten.

Of CATS POISON AND ITS ANTIDOTES. By some it is thought to be of that Poisonous Quality, at the very sight or presence of it is sufficient to make a Man swoon, tremble, sweat and become speechless. Sennertus and others think there is a venomous quality in these Creatures which infects the Aer. I however rather believe it proceeds from some secret Antipathy. If the Braine of these Creatures be eaten it proves assuredly destructive as Schenklus, Lib. de Venenis, Fol. 953, and others affirm that it makes such to grow mad and rage. It being very dry potentially, (especially the male) comparing it with mans.

It obstructs the Passages of the Braine, so that the Animall Spirits cannot pass to the hinder part, whence the Memory becomes depraved and lost. They become Dolts, grow moped and vertiginous. It is the same in eating the Braines of other Animalls, as Sennertus instances those who have been changed into the very habit and disposition of a Bear, by eating the Braines of that Creature. He then discusses the Treatment by Vomits and Clysters and by giving drugs as Musk, Hellebore, etc. as if it were a constant Habit of people to eat the Braines of Cats or other animalls. The Blood of Cats is also extremely pernicious. In the case of a Maid who developed Epilepsy
through seeing a Thief's head cut off, and who was advised to take Cat's Blood as a remedy. She soon degenerated into the Nature of this Creature and by fits would New, Leap, Scratch and play as Cats do, as also in private Catch Mice and contract herself so as to pass through Holes, that nobody else could of her business. The very Breathing of Cats is by many of the Learned said to be extremely dangerous, consuming the radical Moisture of the Body, Lungs and the whole Man, and so Fevers, Marasmus and Consumption of the Lungs have resulted from people taking them into Bed with them. This however is certain that by all Authors they are condemned as very noxious to Mankind. In spite of which, the late William Laud, Archbishop of Canterbury was wont to have Cats walk on his table and about his person.

WOLF’S POISON. Ramesay discusses the changing of Men into Wolves after having been bitten by them and of their frequenting sepulchres, Graves, etc., and behaving as the Wild Creatures themselves.

THE DRAGON is a Creature not much known in our parts or Regions, nor indeed in any other part of the World, It is therefore not worth while to spend much time over it, especially since most of the Learned will not admit it to be ranked among the number of Poisons. Yet some think otherwise, in regard it is a Serpent and as poionous as the rest. Such as are bitten are usually cured in the same manner as those who are bitten by other venomous Creatures as Mad Dogges.

The CROCODILE is an outlandish Creature also and ven-

emous.
The SCORPION. Ramesay cites cases where the frequent smelling of the Heart Basiliske has caused intolerable headache and then death. When the Head was opened, certain Scorpions were found in the Braine.

The BASILISK. Some deny its existence, while others affirm it. One is gendered from the egg of an old House-Cocke and is therefore termed a Cockatrice. The other is a kind of Serpent, The latter is mentioned by Galen who affirms that the noysse of his Hissing or raies of his Sight are sufficient to kill a Man outright and no creature can touch him and live. Pliny says he is so pernicious that he destroys and kills even Vegetables, trees and Shrubs by his very Breath, or Steame of his Body. In Syrene, by the Berreness of the soyle and deadness of the trees etc., men know that they are near their Dens. Avicenna addst that if Birds but fly over him within the Verge of his Steame, they immediately fall down dead. Aetius saysthat all other venomous Animalls shun him, so that he is termed the "King of Serpents" because he overcomes them all and slays them with his very touch although he is dead. Whence the people of Pergamos in Greece (as Salinus records) give a large sum of moneys for the dead Carkass of one, to hang up in the Temple of Apollo, to drive away Spiders, Birds and other Creatures from polluting that sacred place.

Paraeus describes the Basilisk as "of the length of twelve fingers, with a white spot in his Head resembling a Crown". Cardan however refuses to believe in its existence.

Erasistratus and Dioscorides give Antidotes as Castor Oyle
or Poppy; but if I agree with Aetius, it is vain to give any remedy, for it kills so suddenly and effectually with its Breath and noyse that there is no time in which to do anything.

The SALAMANDER is so deadly that whole families have been poisoned through drinking the Water of a Well into which a Salamander had fallen. Ramesay has long paragraphs describing Serpents, Vipers, Asps, etc., as well as many poisonous Marine Monsters.

It seems curious that though Ramesay addresses his work to the "Rural reader," all his prescriptions of antidotes to be used are given in Latin and these are just the most important parts in his work.
Peter Chamberlen.

1665.
Peter Chamberlen.

There were three Peter Chamberlens. This one was the son of Peter the Younger and grandson of the inventor of midwifery forceps, William Chamberlen. He was born in Blackfriars on 8th. May 1601. At the age of 14 he was admitted to Emmanuel College, Cambridge. Later he studied at Heidelberg and at Padua he took his M.D. degree in 1619. On returning home, this degree was incorporated by the University of Oxford in 1620 and Cambridge the following year. In 1626 he was elected as a member of the College of Physicians, and on March 29th, 1627 he was elected a Fellow. At the same time however he received a grave admonition from the President and was requested to change his mode of dress and not to follow the frivolous fashion of the youth at Court. It was agreed that he be not admitted until he had confirmed to the custom of the College and adopted the decent and sober dress of the members.

That Chamberlen submitted is evident from the fact that on the 7th April he was admitted to the College.

He must have been well qualified both as Physician and Surgeon, for on the 5th May 1642 he was selected by the Company of the Barber Surgeons to give the yearly demonstration in Anatomy. For this he received a silver tankard. The Czar of Russia wrote to King Charles I begging him to allow Dr. Chamberlen to come to Russia and enter his service. The King would not grant this request as he had already appointed Chamberlen as his Physician Extraordinary.

In 1634 the Midwives inhabiting the city of London brought a petition to the College for their incorporation. It would appear from this that Dr. Chamberlen had endeavoured to control their work and to instruct them personally. It would seem that he possessed a knowledge
of Midwifery greater than any other practitioner, " threatening that
he will not apply his helpe to such women as are distressed in their
trauale whose Midwifes refuse to appear uppon such his Summons at
his house and conforme themselves to him or his directions.....they
humbly desired His Majesty to referre their Petition to the Right
Reverend Bishopps under whose Jurisdictions they are and by whose
 Authority they are licensed".

To this the College presented to the Lords a statement in which
they say "He (Chamberlen) is not otherwise able to instruct them than
any other the meanest Fellow of our College unless he understand it by
the use of iron instruments which Physicians and Chirurgions may prac-
tise if they please and some do and have done with as good success and
dexterity as himself and therefore there is no necessity of a sole
dependence upon him."

In the Objections against the project of Dr. Chamberlen which
they conceive would give the sole and absolute power either to license
or approve of all the Midwifes practising in or about London, it is
stated that "He delivers none without the use of instruments by extra-
ordinary violence in desperate occasions, which women never practised
nor desyred for they have neither parts nor hands for that art"......
And therefore they humbly desire that Dr. Chamberlane may be compelled
to desist from troubling himselfe and the Midwifes by such unwarrant-
able meetings and unnecessary and frivolous discourses."

The strong opposition to his scheme for incorporating mid-
wives led to his publishing in 1647 a " A Voice in Rhamada, The Crie
of Women and Children. Echoed forth in the Compassions of Peter Chambe
len". It is a rambling statement in which he gives certain information
about his own life and controverts the statements that he did not attend.
the poor and charged exorbitant fees from the rich. " That Operation merits 100 as well as other Cures or Operations, according to the value of Lives and Estates. Yet for one that hath paid me 10 £ I have delivered 100 for nothing, as many for little or nothing, and as many for less than nothing; such as thought it a point of wisdom to save their Purse and pay me with Lies and Scandals, insufferable Scandals, and so frequent till they caused me abhor the work itself. . . . . Because I considered the Case of the Poor, therefore I ought not to be considered of the Rich. . . . . . I resolve to afford my Labours to none but such as trust me with their money before I trust them with my Art, which I shall afford at 10£ to any that are reputed worth 1000 £ and in lesser proportion to such as shall bring with them the Testimonie of their Minister, and Neighbours of their meaner condition; and if the Certificate rank them amongst the poor I shall as freely as ever give them assistance."

Disappointed in his attempt to benefit the condition of Midwives, Chamberlen turned his attention to the construction of Bathes and Bathe Stoves. In 1649 he obtained an Ordinance from the Lords granting him the sole manufacture of these for 14 years. He advocated these as a means of Cleanliness, of preserving health, preventing Plague, reviving the Spirits, curing diseases as Dropsies, Consumptions, Feavers.

Chamberlen had already erected these baths in the Low Countries and had made a special study of them. The ordinance goes on to state that Chamberlen was willing out of his Zeale to the good of his native Country to undertake at his own costs and charges the making of artificial Bathes and Bathe stoves in this Kingdome wch as it will be a work of great benefit to all sorts of people as well poore as rich so it must necessarily be a work of vast and transcendant charge to t the undertaker.
The College having been asked their opinion replied that as public baths had in the Greek and Roman States "effeminated bodyes and procured infirmities, and moral in debauching the manners of the people, yet in either of them upon the coming of the Christians into power they were demolished or converted into other uses....and that there were in divers private houses Cradles, tubsboxes chaires bathes and Bathstoves in which by the help of fumes vapours water oyle etc. sweat may be procured payne asswaged and all necessary ends of bathing attained.....if Dr Chamberlen be empowered to erect such, the Committee must make provision and take such caution from him so that none of the aforementioned inconveniences shall follow."

In 1649 Chamberlen was dismissed from his Fellowship by reason of his contumacy. He next launched into a hare-brained scheme set out in his "The Poore Man's Advocate or England's Samaritan. Powring Cyle and Wyne into the Wounds of the Nation. By making present provision for the Souldier and the Poor, by reconciling all Parties By paying all Arrears to the Parliament Army...and all publique De Debts" London. Printed for Giles Calvert, at the Black-spred Eagle, at the West End of Pauls April 1649.

Next he became a religious enthusiast and published innumerable pamphlets on various religious subjects. These all evidence want of mental balance, though at the same time he was appointed Physician in Ordinary to Charles II. As his age advanced his mental instability increased to such an extent that it was commonly stated that he was mad. This caused him to publish in 1662 "The Sober Man's Vindication " discovering the True Cause how Dr. Chamberlen came to be Reported Mad.

He died in 1683 at Woodham Mortimer Hall near Malden in Essex.
The following is the inscription on his tomb:

"Here lies ye body of Doctor Peter Chamberlen, who was born on the 8th of May 1601, and dyed on the 22nd of December 1683, being aged 82 years 7 months and 14 days. He had two wives, and by ye first Jane Middleton, had 11 sons and 2 daughters, and amongst them 45 grand-children and 8 great-grandchildren (whereof were living at his death 3 sons viz. Hugh, Paul, and John, and his 2 daughters and 20 grand-children and 6 great-grandchildren) By ye second, Ann Harrison, had 3 sons and 2 daughters, whereof only Hope was living at his death, who hath erected this monument in memory of his father.

The said Peter Chamberlen took ye degree of Doctor of Physick in several Universities, both at home and abroad and lived such above three score years, being physician in ordinary to three Kings and Queens of England, viz. King James and Queen Anne, King Charles ye Second and Queen Katherine, and also to some foreign princes, having travelled to most parts of Europe, and speaking most of the languages. As for his religion was a Christian, keeping ye Commandments of God and faith of Jesus, being baptised about ye year 1648, and keeping ye 7th day for ye Sabbath about 32 years."

To tell his learning and his life to men
Enough is said, by Here lies Chamberlen;
Death my last sleep, to ease my careful head,
The grave my hardest, but my easiest bed;
The end of sorrow - labour and of care,
The end of trouble, sickness and of fear;
Here shall I sin no more - no more shall weep,
Here’s surely to be found a quiet sleep;
Anatomy of the parts. The testicles are placed at the root of the yard; whereby they keep men the more chaste, being kept cool; for those creatures which carry their stones within their bodies are more salacious and bring forth in greater number than others. There have been some men and also beasts whose stones I have known never appeared outwardly but lay hid in their backs, having no appearance of any cold at all.....yet have been most excessive prone to lechery.

In men the left stone is generally bigger than the right, and some are of opinion that this is the reason there are more women gotten than men, for boys come from the right stone. The stones are drawn up or shrink in the time of carnall copulation or from cold, but descend in hot weather, in Feavers, [weakness]es of the stones and old age. And for this cause there was an English lady, who when any of her men servants complained of any distemper, she would judge of his disease by feeling how his stones hung; for if they did ascend at her gentle touch, she concluded no danger of the disease, but would administer a present cure.

The temperature of the stones is not alike in all persons, for in some they are far colder than in others according to the constitution of the whole body. Those who have hottest stones are most salacious and prone to lechery and venerial actions. Their stones are bigger and much harder than others and they are more hairy about those parts and also about their faces.

The distension of the yard is caused by repletion, which is caused first by the plenty of seed; secondly by superfluity of wind, and therefore peas, beans and such windy meats provoke to lechery, by making the
yard to stand by their windinesse; and oftentimes in flatulent bodies, the violence of wind causes a priapism. (There follows much unnecessary description of the male parts of generation).

The Stones of Women. They are less in substance than in men and in temperament they are colder, whence women’s seed is more moist, thin and watery (and that’s the reason women have no beards on their faces).

It is approved by daily experience that the womb is much affected with savours and smells, so that some have been known to miscarry upon the stench of a candle put out. It were absurd to think that the womb did smell savours, it not being the proper instrument of smelling; but it is affected by savours by reason of the subtile and thin vapour or spirit which arises from any strong scented thing, even as our spirits are refreshed and exhilarated by sweet savours by receiving a thin airy vapour from them, so is the womb affected with the vapours of things which yield a strong smell and that very suddenly because it is a part of exquisite sense.

Hence may arise a question, how the womb is pleased with sweet smells and displeased with those that are unpleasant. The reason is, all things which yield a noysome smell are uncooked concocted, and of a bad and imperfect mixture, and therefore they affect the sense with a kind of inequality, or else the spirits or vapours that arise from these rank bodies are impure (whence come faintings and swoonings sometimes) and so defile the spirits contained in the generative parts.

If the womb delight in sweet savours, why then does the smell of ambergris, musk and such like bring suffocation to the mother. To this it might be answered that all women fall not into suffocation upon the smelling of sweet perfumes, but only those whose wombs are especially evilly affected, for sweet smells having a quick spirit arising from them, do instantly affect the brain and the membrane
of the same; the membranous womb is presently drawn into consent with the brain and moved, so as those bad vapours, which before lay as it were asleep in the ill-affected womb, are now stirred and raised up by the arteries or other blind passages into the midriff, the heart and the brain itself, and so becomes the suffocation or fits of the mother. But on the contrary, those things which yield a noysome smell, because they are crude and ill mixt, doe stop the pores and passages of the brain, and doe not reach into the inner membranes to affect them.

There is a sympathy and consent likewise made between the heart and the womb by the mediation of many arteries called Spermaticall and Hypogastrical, that is the arteries of seed and the inferior part of the lower belly. From hence happen light faintings, desperate swoonings, stopping of breath and intermission of pulse. The use of them both being obstructed by a venemous breath, which dissolveth the natural heat of the heart.

Such women who are afflicted with these terrible passions, doe only live by transpiration, that is by such aire as is drawn through the pores of the skin into the arteries and so reacheth unto the heart, so that it is almost impossible to perceive whether such women do yet live or not, and doubtlesse many are buried in such fits (for they last sometimes 24 hours or more, and the bodies grow cold and rigid like dead carasses) who would return if time were waited on and means used.

But the sure and safest way is, not to make over haste to bury women (except you have a mind to be rid of a trouble) especially such as die suddenly, and not upon evident cause, till 2 or three days be over for some have been known to revive and come to themselves so long after they have been supposed to be dead and some that have been taken again out of their coffins have been found to have beaten themselves
upon their reviving before their stifling in the grave.

**Generation.**

There are divers ways and kinds of generation. Some creatures engender only by Affirication without coition, others contrary to the ordinary course of Nature by a reception of the instrument of the female. Some females also engender within themselves without the help of the male; some creatures are bred of putrefaction without either male or female, as eels, snakes, etc.; while others are bred sometimes out of putrefaction otherwise out of seed, but these are imperfect generations and the creatures thus procreated are called unbloody and insectile creatures.

**Menstruation.**

Usually maids begin to bloom at the second seven years, the heat then beginning to gather strength, and to burst forth as the Sun in his brightnesse, and to rule in the body, sometimes, nay often, making the body become very unruly. About this time maidens' paps begin to swell and they to think upon....... for want wherof some pine away and dwinder into consumptions, others more vigorously rage, affected with the Furor Uteri, using allways to be satisfied. etc.

**Fleshy Mole.**

This may be caused by the seed of the man being imperfect, barren or weak or in too small a quantity so that it is choked by the menstrual blood and being not sufficient to form the infant instead thereof produces this mass of flesh which increases by degrees. Further it is likewise caused by women carnally accompanying with their husbands in the time of their monethly purgations or while her body is not fully purged and void of them and this also causes leprous, monstrous, crooked and imperfect children—imperfect in body and perverse in manners. Therefore let not men defile them—
Chamberlain then goes on to describe the different kinds of mole and gives a good description of the extruded fibroid.

**Generation of Parts.**

Within 7 days many fibres have been formed in which not long after the liver with its chief organs is first formed. Soon after this, the brain and the heart appear. During the last month, the child sends forth its urine through the privy members. Children born at the 8th month cannot live (though they can at the 7th.), because in the 7th. month the infant stirs itself to come forth, and if it have so much strength it performs its desire, but if not, it changes its position to another part of the womb, by which it is so weakened that if it should be born at the 8th. month, it cannot live.

**Monsters.**

He discusses the causes of their formation, e.g. the will of the Almighty; the agency of the Starres; Deficiency of Spermatical Matter; Overplus of it, this may lead to monsters with double heads or four arms etc; Sodomy; Bestiality; Strong Imagination, as in the case of the woman who brought forth a child full of hair like the hair of the camel, because she was wont to kneel before the picture of John Baptist who was clothed in Camel's hair.

**Preparing the woman for Delivery.**

One must be careful as regards the diet of the woman. A gentle Glistre may be given. Bell Mercury in pottage to mollify and soften her belly may be used, and also a suppository of Sope, lards or yolks of eggs. An easy delivery may be obtained by baths of...
Camomile, etc. enough to come up to the Navell, and after this to anoint the Navell, belly, back and privacies with a salve of Oyl of Sweet Almonds, Lillyes, Linseed, Hollyhock, etc. This should be used every day for 5 to 6 weeks before delivery.

Directions for the Woman in Labour.

The woman may take up various positions, but if she be anything grosse or fleshy, it will be best for her to lie along groveling, for by that means the matrix is thrust and depressed downwards. Let the private parts be anointed with Oyl of Lillyes, and let the midwife anoint her hands with oyl and handle the places and loose and relax the parts and straits. If the membranes be ruptured too soon, an egg both white and yolk beaten and poured into the place will make it slippery and sliding and supply the room of the natural humidities. If the Head be large, the midwife must help all she can by opening and enlarging the way with her hand. If the legs come down, the midwife ought to try and turn these upward so that the head may come down and so make a natural birth.

Tedious Labours.

Many prescriptions are given for this condition containing Pennyroyal, Parsley, Fetherfeu, etc, but a Snakes Skin tied about the thigh or girt about the middle, I think it no matter where, is good. An Ass's or Horse's Hoof hung about the patient or Bayberries applied to the Navell, as also Myrrh, Castor or Storax are all good. Sliced pippins fried in Oyl of Sweet Almonds eaten in the morning and at 4 in the afternoon constantly for 5 or 6 weeks at the same time anointing the belly with the same oyl is effectual. The powder of Piony seeds mixed with oyl applied to the loyins and privities gives speedy delivery. If the labour be still delayed, use Suffumigation of myrrh galbanum, castoreum beaten with bull's gall and put on hot coal, and
let the woman receive the fume thereof underneath.

After Delivery.

If the woman hath had hard labour, presently after she is delivered, they ought to cast her into the skin of a sheep flead alive and put it about her reins hot; and take the skin of a Hare flead alive and then put the hares throat and rub the skin with the blood and apply it as hot as may be to her belly. These if they can be gotten and thus used, close up the dilatations made by the birth, and expells the ills and melancholy blood from those parts by. Let those that use them keep them on 2 hours in winter and 1 hour in summer. After this the woman's belly is to be anointed with Cyl of St. John's Wort then swathned tightly above the haunch.

Let the child-bed woman abstain from flesh at least 2 days after her delivery, because after so great an evacuation she must in no wise suddenly fasten to receive a full dyet.

To expell the Secundine.

If they remain it produces grievous symptoms and intolerable pains, and sometimes especially if it begin to putrefie, death itself, if not expelled. One must take means to drive them away as Marjoram, Pennyroyal, Mugwart, Betony, Savin, etc. (There are 14 ingredients in the prescription) or a powder of Myrrh, Madder, Saffron and Castoreum may be given in broth made of an old cock. Some commend that if a woman drink the milk of another woman, it's a speedy remedy; and I remember Quacking Culpepper amongst the rest of his railings, commends the same. There is little reason for it and I am sure it is loathsome to most women.

Let the privy members be well anointed with warm oyles, and if they can be at the cost, there may be added amber, musk or civet. Suffumgations may be exhibited underneath as Cassia, Spikenard, Cloves etc. the smoak whereof the woman may receive underneath, her clothes covering it close about.
To the nostrils you may also apply Suffumgations of Partridge feathers or pigeons feathers, Garlick, Castoreum, Scaumony, or the like, and in case of great extremity you may proceed to use Pessaryes of the Decoction of Wild cucumbers, juice of Rue, Hellebore, etc., and by adding some Ox Gall you may make a Plaister and apply it to the lower belly. Or take a little Hellebore and Opoponax, mix and roll in fine wool, then bind them in a linen cloth and with a string tied thereto; put them up into the neck of the matrix and they will draw down the Secundines in a very short time; This is of such efficiency that it will bring away the dead birth with the secundine.

But if the secundine cannot be drawn away, neither with the operation of the hands and nails, nor with any of these above named medicines, Suppuratives must then be injected into the womb, that so the putrefied secundines may be expelled. And to this purpose the ointment called Basilicon profiteth being dissolved in Oyle of Bitter Almonds and Oyle of Water Lillies or a Pessary containing Hiera Picra, etc.

Maturatives which are such things as ripen it are also to be lastly used, and the most useful is Unguentum Basilicon dissolved and infused in milk. Or the Cyntmant called Aegiptiacum dissolved in strong lye injected. A bath also to the lower belly made with convenient herbas.

Afterpains.

If great dolour and pain doe follow the birth, Boyle Rosemary, Camomile flowers and Southerwood, and apply them hot to the belly, or bind upon the belly the skin of a Lamb or a Ram taken fresh and hot off the Lamb or Ram. A Plaister of Onions may be applied to the belly along with aniseed and camomile taken inwardly to dispel the wind.

To expell Wind in Child-bed Women.

Oyle of Bitter Almonds is recommended to be drunk and so is the
Juice of Horse Dung strained and drunk in a little Maligo Wine or Mugwort Water. Rondeletius teacheth that the secundine being dryed to powder and drunk will presently cease the after-pains, and the reason of this he grounds upon this foundation; Because all bruit animals do eat the afterbirth, for that purpose, to free themselves from these afterpains.

A very large number of other prescriptions are given, but these only evidence the inadequacy of the treatment.

Dead child in the Womb.

Carping Culpepper brags much of a stone called Aetitis which he saith is found in an Eagle's Nest, and that the Eagle cannot hatch her young ones without it and he ascribes such virtue to it that he saith if it be held to a woman's privities it draws away the child, but this is an idle tale like the rest of his quackeries, and pickt out of Mizaldus a thousand notable things and such lying fables, yet though he has been very large in his abuses to the Learned, railing on them for prescribing such Remedies as grows in foreign Countreys (though they be common in our shops), yet he tells not how to come by this stone Aetitis, that being as far beyond his knowledge, as he was besides his wits.

An emollient Clister may be prepared with much oyle and injected into the womb. Also use Suffugation of the hoof or Dung of an Asse or hoofs of a Horse, put it on coals and let the woman be conveniently placed to receive the fume underneath. Pigeons ao Hawks dung is also good.

Directions are given as to how to dilate the passages, applying hooks, of amputating arms or legs, cutting the body up piece meal, and of puncturing the hydrocephalic head.

Cesarean Birth.

He recommends that this be not done during the life of the mother, but if she be dead, then it ought to be done. In doing
In doing it, it will be necessary to keep open the mother's mouth and nether places, that the child by this means may receive and expel breath and air, which otherwise, for want thereof, it would be soon suffocated and destroyed.

Abortion.

There are many causes of abortion. The womb being corrupted or infected with viscous, slimy, phlegmatic and other waterish humours insomuch that the cavity is thereby made so slippery that the seed cannot remain therein but slippeth and slideth out again. The Cotilidons or veins whereby the conception is tyed to the womb, and through which nourishment is conveyed into it, may be stopped with viscous and evil humours or else are swollen with wind or inflammation so that they break and the fruit perisheth.

Abortion may be caused by the Alteration of the Aire, Intemperancy, Mutation and Change of the Weather, and although this may seem strange yet it is most true. Hippocrates said that when the Winter is hot and moist, and the Spring cold and dry, such women pregnant in that Spring shall be apt to miscarry or if not, their labour will be difficult and painful. He explains this by the opening, unloosing and resolving of the woman's body through the hot, moist winter and the cold of Spring finding an easy entrance and so pierceth the body the more vehemently and the birth feeling the sudden cold and change of weather, pineth away and perisheth in the Mother's belly.

Injuries as well as sudden anger, fear, dread, sorrow, or on the contrary by sudden and unlookt for joy. If a woman carry twin, you
shall know of the death of one by the breasts falling and flagging on that side on which it had dyed, thus if the right side flags, it is a male infant.

It is a sign of miscarriage to follow if the woman feels great aching in the inner part of her eyes towards the brains, and as it were a weariness over all the other parts of her body and no outward sign thereof appearing, and if at the same time the flowers flow also, it portends Abortion at hand. A comforting powder to prevent abortion contains shells of Crevis dried, amber, burnt ivory, prepared pearles, mace, shavings of a Stag's pizzle. Numerous prescriptions for plaisters to be applied to the pubic region are given.

A pultis which doth marvellously comfort the young in the womb when it first begins to stirre, consists of crumb of bread, camomile flowers, Mastick, Nutmegs, cloves with Malaga Wine and Vinegar of Roses.

Some incredible authors attribute much virtue to Amulets and the stone Aetitis which they say if it be held to the mouth of the Vulva or tied to the foot forthwith draws out the Birth, or if tied under the Arme or under the Breast then it holds it up and retains it. Such things as Lapis Lazuli, Jasper, the Skin of a Snake, Leadstone are employed. I confess that there may be more virtue in the latter than in Amulets. They may however doe much good to the woman by strengthening her mind and abolishing her fears.

The rich ought to provide good food and medicine for the poor and in so doing they will find a better return of their charges, if they would bestow that expense upon the poor who want it, which they do, upon spots and paint for their Faces.

Immoderate Flux of Blood after Delivery.
This proceeds from great plentitude or fulness of blood or that the woman in her travail hath taken too many over-hot and corroding medicines or the blood may be overheated by straining themselves too hard in their labour. For cure thereof, although this evacuation or flux be immoderate. You must not forthwith go about to stop it, but only by Dyet and gentle medicines, which may fix and unite the laxated parts of the womb.

But if the flux be too violent, begin to stop it with gentle Suppressions as by Sirrop of Myrtles, flowers of the Wild Poppies, etc. and anoint the lower part of the belly with Oyle of Mastick, etc. Lay also upon each groyn a skain of Rawe Silk moistened in cold water: also take powder of Crab Shells and give it in wine or you may take dry Asses Dung, Boyle it in Ale into the substance of a Pultis and apply it to the belly warm untill the Flux be stayed.

If these things profit not, let her drink a little wine wherein Sea Crabs or Crevises have been drowned. Cupping glasses applied under the breasts doe help much.

The Ordering of Women during their Lying-in.

There is a great deal of difference in the governance of such as have different constitutions, but delicacy in their breeding, for if you should order an ordinary labouring industrious or painfull countrey woman, as you must, such as have been bred up in delicacy and idleness, it would kill her. She as much abominating and abhorring the vanity and idleness of those who think they came into the world for nothing but to sit like Peacocks and trim their tails, as those Papingayes do scorn the virtue of pains-taking or industry so that there is a vast disparity and absolute antipathy between them. For the stomach and naturall constitution of the one is tender and weak and the constitution and stomach of the other strong and lusty.

Relaxation of the Womb.
Use fomentations of Nut Galls or a Pessary made of a cork with a hole through the middle and waxed or dipped in Sallet Oyle and the woman must hold it in when she goes to do her necessary occasions. Such women ought not to lace themselves over hard, for that thrusts down the Matrix and makes the woman pouch bellied and hinders the infant from being well situated in her body, causing her to carry the child all upon her nipples, and makes her belly as deformed as her waist is handsome.

**Hot Distempers in the Womb.**

It is necessary for the work of conception that there be a moderate temperature of heat in the womb; but if preternatural heat doe abound, it is so farre from causing conception that it hinders it, not nourishing the mans seed but dispersing it; so that the seed is like corn sowed upon scorching sand, which dieth and withereth away.

The signs demonstrating the hot distemper of the womb are, such women are prone to lust, thirsty and desirous after copulation, they have few courses and these are yellow black, burnt or sharp; if they have the heat from their birth, they have hairs grow betimes about their privities. When this distemper is very strong they are troubled with hypochondial maladies, and are subject to Furor Uteri, a disease called the Frenzy or madness of the womb.

**Coldness in the Womb.**

Their wombs being too cold to nourish the mans seed and cause it to fructifie. It may proceed from birth, and in others is caused by coldness of aire, rest and idleness. The signs are quite contrary to the other, for whereas the others are very lecherous and desirous of copulation with men, these have no desire to lechery, neither doe they
take pleasure in the act of copulation as others do, nor receive such delight when they spend their seed. They have few hairs about the privities and are elder before they bud than the other.

**Moisture in the Womb.**

This is commonly joined with the former cold distemper. It likewise causeth barrenness, drowning as it were the seed, like corn sowed in a quagmire.

**Dryness of the Womb.**

The womb is dried by diseases and medicines and feavers. They void little seed and are unapt for venereal actions. They are of a slender and dry constitution; their lower lip is of a blackish red colour.

**Suffocation or Strangulation of the Womb or Fits of the Mother.**

Sometimes it is caused by the retention of the natural seed, as in widows and old maids; for this retention causeth wind to ascend and ill vapours from the matrix to the diaphragma or midriffe and there stoppeth the passage of the breath, and therefore it often troubles such as have been used to have carnal copulation and afterwards are constrained to be without it; therefore widows are most often troubled. Likewise the over much retention of the seed doth cause it to putrefy and send up ill vapours to the head causing drowsiness, dullness, giddiness, sometimes madness itself. Sometimes they gnash their teeth or yе as if they were dead.
Digby's Receipts.

1668.
Digby's Receipts.

Into the comparatively short lifetime of sixty-two years, Sir John Digby managed to compress the energy and accomplishments which ordinarily are distributed through several lives. By turns he was diplomatist, courtier, theologian, cook, naval commander, leader of successful expeditions, original investigator, writer on theology, biology and medicine.

His father, Sir Everard, succeeded to large estates in 1592, became a Roman Catholic in 1599 and suffered death for his complicity in the Gunpowder Plot in 1605. His eldest son, Sir Kenelm, was born in 1603 and at his father's death he came into a fortune of £3000 per annum. He was brought up under the care of the future Archbishop Laud as a protestant, and at an early age showed that intellectual ability which later was to stand him in good stead. He entered as a student at Oxford in 1618, but two years later he left without a degree. He then spent some years abroad, chiefly at Florence, and on his return to England from Madrid along with Prince Charles, he was knighted by King James I in 1623.

In 1625 he secretly married a lady who in childhood had been his playmate. She was the beautiful but morally frail Venetia, daughter of Sir Edward Stanley, and former mistress of the Earl of Dorset. Sir Kenelm and his wife were devoted to one another, and on her death he retired to Gresham College, where he remained in solitude for two years. He was well-known at Court as the friend of Charles I, who appointed him a Gentleman of the Bedchamber, a Commissioner of the Navy and a Governor of Trinity.

In 1628 he was appointed Admiral of a small fleet which was
sent to punish the Venetians in the Mediterranean. He rescued a large number of English slaves from Algiers, and attacking the navy of the Venetians in the Gulf of Scanderoon, he obtained a brilliant victory over them and over the French. He also engaged in fight several Flemish and Spanish vessels and captured them. He wrote an account of his exploits in the Mediterranean, and named it his "Scanderoon Voyage". It is however partly biographical and partly romantic, and so it is difficult to determine which is true and which is imaginary.

Digby had been brought up as a Protestant, but the allurements of his early religion exerted so strong an influence upon him that he recanted and went back to the Church of Rome in 1636.

He does not seem to have played a very straightforward course during the Civil War, and indeed was a prisoner of war in Winchester Castle for some time. The reason for this is alleged to have been that he had endeavoured to raise a Roman Catholic army in support of the King. On his release, Digby was expelled from Great Britain, and resided in Paris and in Rome. It was during this period that he published two philosophical works, viz. "The Nature of Bodies" and "Of the Immortality of Man's Soul".

In 1642 Sir Thomas Browne published his "Religio Medici", and his friend Sir Kenelm wrote a long and tedious criticism of it which was published the following year.

Digby was the foremost exponent in England of the wonderful powers of the "Sympathetic Powder" which was composed of many ingredients, including moss from a dead man's skull and mummy flesh. He explained and expounded its virtues at Montpellier before an assem-
ably of French savants in 1658. He said that he had obtained the prescriptions from a Carmelite friar who had travelled in the East in 1622. He had made the first trial of it on a friend of his own, Mr. James Howell, for a wound on the hand. The King, James I and Dr. Mayerne, to whom he had shown the case, were much interested, and Francis Bacon included the observation in his scientific observations.

On the institution of the Commonwealth, Digby returned to England in 1649 in order to look after his estates. As he had not asked permission of the authorities to do this, he was again ordered to leave the country. He consequently returned to France, where he was soon appointed Chancellor to the Queen Henrietta.

In 1653 he was allowed to return to his native land, and remarkable to relate he became a friend of Oliver Cromwell. He took a leading part in all the activities of the literary and scientific world of the day. He was one of the originators of the Royal Society and was one of the first members of its Council in 1663. He lived in Covent Garden where his house was the rendez-vous of the brilliant and the learned. It was here he died on the 11th June 1665, and was buried in his wife’s tomb in Christ Church—within—Newgate. His monument along with a bronze bust of Lady Digby was destroyed in the Great Fire of 1666. The inscription over his tomb, composed by R. Farrar, was as follows:—

"Under this tomb the matchless DIGBY lies,

DIGBY the great, the valiant, and the wise,

This age’s wonder for his noble parts,

Skilled in six tongues and learned in all the arts,

Born on the day he died, the 11th of June.

And that day bravely fought at Scanderroon:..."
It's rare that one and the same day should be
His day of birth, of death, of victory."

His was a curious and eventful life, well suited to the times in
which he lived. He was a keen observer of Nature, as is shown in his
"Discourse concerning the Vegetation of Plants" (1660), and in anatomy
he describes very accurately the various muscular fibres of the heart
and states that the diastole of this organ was really due to muscular
action similar to that of the systole. In discussions on theology he
was able to take a leading part. He is described as possessing a
"winning voice, a flowing courtesy and civility, and such a volubility
of language as surprised and delighted." Yet some of his contemporaries called him "AN arrant mountebank", and one even went the length
of styling him "the very Pliny of our age for lying." Nevertheless
he had many good friends, among them being Sir Thomas Browne, Bacon,
Descartes, and Ben Jonson. In the National Gallery, London, may be seen
the portrait of himself, his wife and his two children by Vandyke.

It is however to only one of his works that I desire to draw
attention. It is entitled "Choice and Experimented Receipts in
Physick and Chirurgery, collected by the Honourable and truly lear-
ned Sir Kenelm Digby, Kt., chancellor to her majesty the Queen Mother
Translated out of several languages by G.H. London, printed for H.
Brome at the Star an Little Britain . 1668." The translator, George
Hartman was probably the author "The Preserver and Restorer of

The translator, dedicating the work to the Right Hon. George,
Duke of Buckingham, says that he had "formerly thr Happiness of bear-
ing an humble Relation to Sir Kenelm Digby, and to his Business; by
means of which iInterest, and Favour, there came to my hand diverse of
his Excellent Curiosities and Receipts: In truth, it is so choyce a Collection, that in the first place, I make it a matter of Conscience to recommend it to the Publique; and (having permission from his ingenious Son, Mr. John Digby thereunto) my next care was, so to do it, as to render all possible Honour and Right to the Memory of that Eminent Person.

The Receipts deal with all manner of diseases and their cure. Most of them are excellent examples of polypharmacy. At the end of some of these it is stated "this will infallibly cure"; but in many cases this one is followed by another prescription also stated to work a cure, and this often is followed by a third equally infallible.

Glancing through the volume, the following seem worthy of note as showing the style of pharmacy at this period.

To Bring away the After-burthen, or any Foulness or a Dead Child and to Cure the After-throes and Griping, after a Woman is delivered. Take the inner skins (that are wrinkled) of Gizzards of Hens that are laying of Eggs; wipe them clean and lay them to dry. When you have need to use them, heat them to subtle powder, of which give one dram for a dose in a little White Wine.

For Torn Bladders. Place a little bag containing some powder of Toads calcined so that the bag lay always upon the pit of the Stomach near the Skin.

To Prevent a child ever taking Smallpox. Before tying the ligature tightly round the umbilical cord of a newly-born Child, drive up with the finger and thumb the blood that is at the Root of the Navel, that so you may drive away out of the child's body the loose Blood that is newly come in by the Spring. Then draw the thread close
his will cause, that this child will never at no age, have the Small-ox though he or she should converse daily with those that are infected. This has often been tried.

To prevent marking in the Smallpox. As soon as over the pocks appear, oyle of Sweet Almonds is to be painted all over the face. Then beaten gold leaf is to be carefully placed all over the face leaving no intervals and this will prevent any marking.

Another infallible remedy for the same is to dissolve in a wineglassful of sack as much fresh sheep’s dung as possible and to cause the patient to drink it.

A Sudden and Infallible Cure of Bleeding, either at the Nose or by a Bloody-Flux. Take two parts of the Moss growing on the Skull of Dead Man (pulled as small as you can with the fingers) and with a stick and Gum- Dragagante make a soft Plaister and lay upon the veins of the Forehead at the joining of the Nose and along the eye-brows for Bleeding of the Nose. But for Bloody-Flux, it must be as large as the palm of the hand and round, to lay upon the Navill and all round about it.

To cure the Tooth-Ach, With an iron nail raise and cut the gum from about the teeth, till it bleed and that some of the blood stick upon the nail. Then drive it into a wooden beam up to the head. After this you shall never have Tooth-Ach in all your life. But whether the person used any Spell or said any Words while he drove the Nail, I know not; only that I saw done all that is said above, this is used by several certain persons.

Another cure for Tooth-Ach was to fill the ear on the affected side with crushed parsley.

An Oyntment for Burning. Take Cow dung and put to it sufficient
quantity of Sein doux (Hog's grease); fry or boil them together. Strain the liquor through a napkin, and when it is cold, you will have a green ointment which is excellent for burnings.

For the Falling of the Uvula. Gag yourself with the thumb, forcing your jaws as widely apart as possible all the time sucking in your breath. When you are weary, take out your thumb and rest. Repeat it till you are weary. You shall not have done so thrice, but your uvula will be restored to its due place.

An Excellent Remedy to procure Conception. This consists of the syrops of Mother-Wort and Mug-Wort, Spirit of Clary, root of English Snake-weed, Purslain, nettle and Rocket seed, Candite Nutmegs, Eringo roots, Satyrion roots preserved, Dates, Pistaches, Conserve of Succory, Cinnamom, Saffran, Conserve of Vervine, Pine-Apple Kernels picked and pill'd. Stamp all these into an Electuary. Put it in GallyPots and keep it for use.

To Digest a Large Meal. When one hath eaten a great meal and that it lyeth heavy and dead on the Stomach, and digesteth not but would hinder one from sleeping at night, drink a great draught of Claret Wine made as hot as you can well drink it.

To Stanch Bleeding. A very desperate and continual Bleeding at the Nose has often been stanch'd by making the Party hold in the hand or anywhere about their Body, a little of the Herb Bursa pastoris wear it continually and it will prevent bleeding. It will suffice though one wear it but in their Pocket, or in their Hat-Band.

For Wormes in the Belly or Stomach. Take an Apple of Colo-quintida and split it into two halves; fry one of them very well in good store of the Gall of an Oxe, till it be very tender and pappy;
Then apply it warm to the Navell of the child or man at the hour of their going to bed. Do thus three nights in all; This will kill any worms in the guts or maw, be they never so many or dangerous.

If any person hath worms in the belly, you may put up into the Fundament as far as you can, a long piece of fresh Beef in the form of a Suppositor, and let it remain there a good while. Worms will fasten to it, so that you will pull them out sticking to the Beef.

An Experimented Remedy for the Stone. A certain person in Rome was sick of a great Stone in his Bladder, who after many Remedies (taken in vain) was resolved to be cut, but was cured by taking Millepedes dried and powdered along with Aqua Vitae. The third day after taking this, he avoided a great deal of Sand; but the seventh day he avoided so much that his Urine was full of it. And the ninth day the patient was perfectly cured from his Stone.

Another Cure for this Disease, was to distil the dung of a Bull three years old and the water being taken will dissolve the Stone both in the Bladder and Kidneys.

To Cure the Hot and Cold Gout. Take a good quantity of the Insect called Cockchaffert in the month of May and digest them in Spirits of Salt. The tincture is then to be mixed with Salt of Tartar and to begin with two or three drops in small beer is to be taken as a dose and increased by one drop until the fifth day, when a diaphoretic and purge are to be taken.

An Experimented Remedy for the Falling-Sickness. - Take Cranii Humani and Parings of Nails of Man, of each two ounces; reduce to a fine powder and grind it on a Marble Stone. Various vegetable ingredients are added, and when boiled and mixed with sugar, it is
made into tablets. One is to be taken three times a day.

**A Receipt of the Labour-Powder.** Take date-stones, Amber, Saffron and Cummin-seeds and serve them all severally into very fine powder. Take of each as much as will lie upon a great; but double so much of the Cummin-seed, mingle them all together; and when the woman is in her greatest extremity, give her a spoonful of it in mace-ale. This is also very good to bring away the After-Burthen.

**To Dry up Sharp Humours with one's own Water.** A certain Lady had an Humour broke out at the lower part of her heel which neither Physicians with Purgings and Diet drinks, nor Chyrurgeons with ointments could heal and dry up; it was healed in three or four Fomentations with her own Urine newly made and some white Salt dissolved in it. It is exceeding to wash and bath ones feet and back-sinews with one's own water, warmed. It strengtheneth and suppleth them.

**Powder of Sympathy.** A Maid had been much troubled with a Tetter on her Arm above four years, much matter running out of it. Some of the Matter being taken upon a Rag, was dressed with some Sympathetick Powder, and some of the Balsam applied to the Tetter, and so dressed twice a day for three days; and the Maid's arm was perfectly cured, and continued well and firm.

**To prevent Catching the Plague.** Take mineral Cinnabar and reduce it to the more subtile Powder. Mix it with Turpentine and roll into flat thin cakes. Upon one side of them ingrave the character of Mercury, which must be done Die Mercurii and Homo Mercurii, which is twice every Wednesday. Put this into a double piece of Saracen or into a Silver Box, and hang it about the Neck of any person (or any living creature); it will infallibly preserve them from the Plague, though they converse with, or are about infected persons every
day; the Pastels must be made very smooth, and the character well ingraved. If on the other side of them you engrave the character of Jupiter, it will preserve from witchcraft, which must likewise be done Die Jovis and Hora Jovis. It will likewise preserve from Convulsion fits and Falling-sickness, being worn in a Sarsenet upon the region of the head.

Bezoardicum Theriacale. Take a Viper, which hath been newly caught; and hold her fast by the neck with your thumb and the next finger, so that she cannot stir or wag at all, and with a pen-knife cut her throat open, so that you may be able to tear out her tongue, which you lay by. Loosen also the skin round about the neck, joyning the head, and skin it all; afterwards cut the body an inch above the Navel, and throw away the tail. Then take out all the entrails, put the grease by itself, and the heart and liver likewise; and cut the body or bulk upwards joyning the head, and cast away the rest. Prepare a great many Vipers after this fashion. Dry all these several parts apart in a slow oven. Then powder them dropping upon them now and then a drop of Opobalsamum or white oriental balsam, but gently so that it may be sucked by the Powder, that is, a pounding, without discerning of any liquor.

The Heads, Skins and Grease of the Vipers, which you have separated are kept, because they are endowed with sundry virtues. Dry gently the Heads and Skins and keep them by themselves. The Head being worn next to one's throat, is excellent against the Squinsie and other diseases of the Throat. The Skin laid upon the Kidneys of a Woman being in Travel, will promote her deliverance. And if the After-birth doth not come away after the Child, put the Skin upon the thigh of the Woman, and it will come away within a short time.
after. The Fat is most excellent for the anointing of a red face. The Skin being dried and cut small and mixed with oats, and given to a Horse that hath the Farcy, cureth the Horse, if it be continued for a while.

A certain and often approved Remedy for the Dead Palsy.

Take white Onions, shred them small and bake them in an earthen pot until they become pappy. Make a thick Cataplasm of this and lay it upon the bemummed part. Change it every twenty-four hours, and continue it till you are well. If it be an Universal Paralysis, you must use your Cataplasm all over.

Numerous receipts are given for the making of Aurum potabile and for the relief of Surfeits. The results of over-eating seem to have been common complaints, but the contemporary history of the time gives on a good idea of the gluttonous habits of our ancestors.
M. Charas.

1670.
New Experiments upon Vipers together with the Exquisite Remedies that may be drawn from Vipers. Originally written in French by M. Charas of Paris. 1670.

He narrates numerous experiments in causing vipers to bite various animals which all died in spite of the application of the snake stone, which he concludes has no virtue.

The bite of the viper is not dangerous unless it be accompanied by vexed and enraged spirits in the animal. The injury to the skin opens a door through which the enraged spirits enter into the body of the victim. When one receives a bite, the vexed spirits of the viper push and press the blood and spirits contained in the vessels and embarassing the particles that compose the blood cause there a coagulation or confusion which disturbs the ordinary circulation, and by this means hinders the communication of the spirits to the principal parts from which depends the subsistence and life. The imagination of the viper being irritated by the idea of revenge pushes the exasperated spirits violently through the nerves and their fibres towards the cavity of the teeth as into a funnel. It was thus that Cleopatra knowing that the natural fierceness of the viper was not sufficient to execute well what she desired, she pricked it with a golden needle.

The bruised raw head of the viper applied to the part bitten in a pigeon had no effect in retarding death. This is different with the Scorpion, which if bruised and laid on the part stung, cures it.

The best treatment is to use the Volatile Salt of Vipers; the cause being subtile and spirituous, a remedy of like nature is required that might be able to make haste to find it out, to
Joyn with it and to draw it to the extremities of the body.

Anointing with the oyle of Scorpions of Matthiolus and with the Water of the Queen of Hungary the swelled parts served much, but really only the Volatile Salts made these angry spirits surrender.

Uses of Vipers.
As a food, the flesh of Vipers is very good and nourishing and so are the bones, but it is better to crush the latter before eating.

As a Medicine, all parts are to be used but see that all excrement and worms are removed from the intestines. Spring and autumn are the best times in which to catch them.

There is no animal which affords so many virtues in eating its flesh. It preserves the natural heat of the body and repaireth it and restoreth it when altered. It helps digestion, retards old age and prolongeth life. Many believe that both Staggs and Eagles eat all the vipers they meet, and that 'tis upon that score that their lives are so extremely long. Vipers have a renewing virtue capable of making people young again. They clear and strengthen the Eyes and this is probably due to their lively and dazzling aspect.

Vipers cleanse the whole body and particularly the blood. They are therefore good to cure the Itch, Tetter, Erysipelas, Measles, Smallpox, Leprosy. Cleansing all impurities and obstructions, vipers beautify the body. Thus many ladies in Italy use them in their ordinary food.

In Consumption and Wasting fevers they afford great relief, and many affirm that they cure Venereal diseases.

It is very certain that the Head of a Viper boiled and swallowed healeth the bite of the same animal. If the head cannot be obtained,
the heart, liver, blood or entrails may be used.

Divers authors assure us that the head of a viper hung about the neck, hath a very particular quality to cure the Squinancy, and all other distempers of the Throat, and that the Brain of a Viper hung about the neck makes the teeth of children come forth.

The Liver swallowed, greatly facilitates the Delivery of Women.

The Skin if made into Garters hath a singular virtue in curing all Skin diseases.

The Gall is very good for weakness of the Eyes, and so is the Fat in Epidemic diseases.

One may make powder or Trochisques of Vipers, but do not whip the Viper to make it angry as some do.

Theriacal is the name given to the Salt of Vipers. The Volatile Salt is made as follows:—Cut the vipers up and place the pieces in a retort and distil. The volatile salt spirit and Oyle are so penetrating that you are not able to hold your nose over it. Distill again and catch the crystallised snow which cometh up into the head of the apparatus.

This produces admirable effects in Apoplexies, Lethargies, Convulsions, Palsies, Swoundings, pleurisy, etc. Affections of the Matrix also; it counteracts all stings and venomous bites.

The Oyle is not often used on account of the Smell. It is however good to keep in a small box and to smell often for it keeps away the plague. For Epilepsy it may be put into the nostrils. It resolves tumours and hardnesses, ulcers, etc.

Men will doubtless aver that the Ill that Vipers are able to cause is nothing in comparison of such a remedy, as the same vipers can furnish, not only to heal their bitings, but also to overcome
many obstinate diseases, against which the ordinary remedies perform nothing. It is also good against the suffocations of the Matrix, and against all sorts of Worms, in which case a few drops of the Volatile Oyle may be given by the mouth and the hollow of the stomach anointed therewith.
William Sermon.

1673.
William Sermon.

Sermon gained his medical experience in the armies. In the year 1666 on going to Bristol on a visit, he was asked by the Mayor to remain as all the other medical practitioners had left the town by reason of an outbreak of the Plague. Sermon confined his activities to the Mermaid Tavern and later to another house," in which infected houses I stayed the space of three months and cured all of the Pest that took my Directions." He practised in Bristol until the 8th, June 1669 when he was summoned to attend Lord George Monck, Duke of Albermarle at Newhall in Essex. Sermon states that he cured him through giving him his famous pills. At any rate Lord General Monck gave him a Certificate of having been cured, Sermon denies that Lord Monck did eventually die from Dropsy " as many enviously report".

On 6th. August 1669 King Charles II requested the University to bestow on Sermon a medical degree with the result that Sermon graduated M.D. in 1670. He had left Bristol for London the previous year, taking up his residence in West Warding Street, near The Three -legged Alley between Fetter Lane and Shoe Lane and becoming Physician in Ordinary to the King. He soon acquired a large practice, though he complains of "the great rage of black-mouth'd envy", excited by his success.

In 1672 there appeared an eighth edition of his "Advertisement concerning those most famous and safe Cathartiques and Diuretique Pills". His "Ladies Companion, or The English Midwife" had been published the year previously and in 1673 "A Friend to the Sick, or The Honest Englishman's Preservative......with a particular discourse of the Dropsie, scurvie and Yellow Janndice" appeared.

Sermon died in the year 1679.
A Friend to the Sick or the Honest English Man's Preservative

with a particular Discourse of the Dropsie, Scurvie and Yellow Jaundice and the most absolute way of Cure; Whereunto is added

A True Relation of some of the most remarkable cures effected by the Author's most famous Cathartique and Diuretique Pills wherewith was cured his late Grace George, Duke of Albemarle, etc.

by William Sermon, Doctor in Physick, one of His Majesties Physicians in Ordinary. London. 1673.

In the Epistle to the Reader, the author says that it may be thought a high Presumption for me that may be accounted the least of all men to put myself to such a publick censure of those most learned and great Proficients in this Honourable and Most Noble Art. However because I would not hide my Talent that the Lord has given to me and so to be termed an unprofitable Servant, having through the wonderful Goodness of God found out those and such like Remedies, and that by a diligent care and long study, have had thereof large experience, I publish these for the benefit of the Diseased as well as for the Student and that the Honest English Man may reap thereby the greater benefit, I have purposely omitted all Philosophical, Eloquent and hard crabbed words (though not ignorant thereof) which more affright the honest and harmless patient, than cure his languishing Disease.

Black mouthed Envy, that severely Barkes though cannot bite, will still Snarl, and look upon me with a Squint Eye, as if I had done some Injustice to the very Laws of Friendship and common Society. And the Grand Reasons are, that my Pills in the Dropsie, have wrought more wonderful Effects than any other Medicines yet have done. Since which time to defraud the Ignorant, every fracturated fellow in their pamphlets
pretend to cure the Dropsie, though it be but with Aloes and Sena etc., infused in Brandy, and the Lungs of an Oxe applied to the Belly, which preposterous Courses have of late kill'd many, some of good worth.

But perhaps some of the forementioned will be apt to judge that I have published this Treatise purposely to promote my own Interest, because I have in some Chapters made mention of my Cathartique and Diuretique Pills in answer to which, I will assure the Reader, I have not made mention thereof but where they are absolutely necessary. So not valuing the Threats of some of the same faculty, knowing the snares they have laid for others, themselves will be taken in. When I shall be from their rigid Malice shelter'd under the Wings of the Almighty and there live above the Praise or Dispraise of Men.

This address is succeeded by nine poems in praise of Sermon's book.

Falling Sickness.

Amongst other remedies he recommends Red Coral, Pearls, Unicorn's Horn, the Skull of a Man hanged or killed by Chance, peony, musk, etc. or "Take young Swallows, burn them with their feathers altogether in a new earthen pot covered closely; then add as much castor and beat all well together, then add sour vinegar; let it stand three days, then distill in a glass according to Art." He recommends his own pills in the treatment of this disease.

For this disease in Children, he advocates the use of the fresh roots of Peony, cut in small pieces and hung about the child's neck and bound upon the Hand-rist.

One may also give the Afterbirth of a sound Woman, dried and made into fine powder; one scruple given at a time in Black Cherry
Water. This is a perfect remedy.

Or give the Child in the very Fit, all the Gall of a Black sucking Puppy (being choaked) in the distilled Water of Tile - flowers; but for a Girl, take the Gall of a Bitch Whelp

Apoplexie.

The cause is (too frequently in these dayes) drunkenness, falls, blows, very cold air which congeals or thickens the moist excrements of the Brain is also oftentimes the cause. The disease usually happens to old men and to the great drinkers of Brandy and decayed Wine, too much made use of in these dayes, were the Truth known.

As treatment Sermon recommends bleeding, clysters, sternutatories, ointments to the back, etc.

Palsey.

The cause of this disease is through abundance of gross, tough and clammy humours which obstruct or stop the sinews, hindering the Animal faculty, that it cannot come from the Fountain to the Members. Many times it is caused by a Fever, and that principally engendred by Melancholy. This is no acute disease but Chronical, and for the most part, curable, especially in young people or when the Paralytick member does not become less or change his colour; for if so, it is hardly curable.

Sermon describes many remedies, e.g. "Take oyl of Earthworms, Foxes and Castor, with Spirit of Sack. Chymical Oyl of Rosemary and anoint the back.

To Cure Palsey of the Tongue, the patient should chew Mustard made with Elder Vinegar or Pellitory of Spain.

For Palsey in the Hands, rub with Camomil and wear Hare skins upon the parts affected.
For Palsey in the Yard which doth stop the Urine, the Sperme and doth hinder Copulation, you may anoint the Hips and Loins and give Medicines that have power to erect the Yard, as Diasatyrian and Castor and Bath the Yard with Wine wherein has been boiled Sage and Elder with Pellitory of Spain.

Convulsion or Cramp.
These are to be treated with Oyl made from Earthworms, Oyl of Foxes, and the parts affected are to be covered with a hot Sheeps Skin, Lamb or Goat

To cure The Cataract.
Some have found good by wearing the roots of Water Pepper, seven or eight in number, hanged about the neck, which roots must be gathered upon St. Bartholomew's Day before the sun rise; the juice of baked red ants eggs is good for most infirmities of the eyes, also one may take good store of Crickets, which commonly are in Bake-houses; bruise them well and strain forth the juice, and drop one drop into the eye thrice a day and though the patient be as it were blind, he shall be restored. The Gall of a Cock mixed with the like quantity of honey and the eyes anointed therewith, clears the sight. The Gall on an Hare and the Galls of Eles are also very good.

For Sound and Noise in the Ears and Deafness.
There are many remedies including syringing the ears with stale urin or with the urine of a Whelp that can hardly go. Or take some Mutton fat and tye it up in a very thin Rag and infuse it three days in your own water and put it in the ears.
Bleeding at the Nose.

This may be cured by applying bruised herbs of lettuce, sorrel, plantain, shepherds purse or their distilled waters on linnen cloaths or vinegar and cold water to the privy parts and into the nostrils a small quantity of the powder of a Toad should be blown, or this may be given in 2 - 3 spoonfuls in Plantain Water or in the distilled water of Hog's dung, for this hath been found effectual where no other medicine would prevail. Or you may burn the blood that comes from the the Patient's nose, and blow thereof up into the Nostrils, for it is also of excellent use, or the egg - shells wherein Chickens have been hatched powdered and blown into the nostrils; or the Hair cut off the Belly of a Dog, made into a Tent and put up the Nostrils.

For the King's Evil.

There are innumerable remedies amongst them being an ointment made from the following, the Fat of a Man, the Fat of a Bear, The Fat of a Goose and of a Cock, etc.

Pleurisy requires Horse dung infused in the distilled water of Carduus, strained and given to the Patient, powerfully dispenses and abates the pain. Hen's dung made use of in the same way, has a similar virtue. Prepared Goat's blood is also very effectual.

Pnysick or Consumption.

This is commonly caused through sharp fretting and graving Humours which fall from the Head upon the Lungs. Sermon's own pills are very useful in this disease. He advises also White Rose Water, white Sugar Candy, the yolk of one new laid egg and new milk warm from the Cow, b beaten together and drunk all at once morning and evening." You may believe me, this very Medicine is worth an hundred times the price of the Book, which I freely communicate."
Women's or Goats Milk is also of wonderful value and be assured that Milk is one of the best medicines against the Pitisick.

The Dry Distemper of the Liver may be cured by taking the powder of a Wolf's liver well prepared. The Livers of young Rooks, washed in White Wine, and then dried and powdered is very profitable in such cases.

Most Dropsies are caused through great coldness of the liver, or through other parts over much cooled. But thousands in these days through the excessive drinking of Brandy burns and dries up the Radical Moisture from which follows sudden death. In such cases the use of Sermon's Cathartique and Diuretique pills forms the onely safe and Famous Medicine (ever yet known in the world to combat the Dropsie) whose composition is without Mercury or any other poysinous Ingrediants as many other medicines are (to the great damage of the Patient too frequently given in this deplorable Distemper.

Assure yourselves that where my Pills are made use of in time, there will be little or no need of outward applications.

For the Scurvy the most infallible cure is to use my Pills for the do so highly Purify and Sweeten the Blood that no other medicine can be compared to them in the cure of Dropsie and Scurvy.

Jaundice may be cured by giving the dried livers of Rooks, or dried and powdered dung of the Goose, Hen or Sheep.

Another prescription contains Hog's lice bruised; 40 or 50 are to be infused all night in White Wine, strained and taken in the morning fasting. A live Trout or Tench cut open and applied to the pit of the Stomach for some time is an infallible Remedy against the Jaundice.
Ulcers of the Reins are best cured by my pills.

French Pox. My pills are well known to expel this contagious disease. Plague may be prevented by taking my pills. They were wonderfully effectual in the last great contagion; for some hundreds that took thereof, through God's goodness were not infected, though most of their families that would not be persuaded to make use of them died. Amulets hung about the neck are, believe me, of excellent use. Thus:

Take a hazel nut, remove the kernel and fill with quicksilver and close the hole. Hang it about the neck that it may touch the pit of the stomach. Or take the Head of a Toad well dried and wear it as above.

To break and heal the Carbuncle or Plague Botch.

Take pigeons dung, mustard seed, Venice Turpentine and the Urine of a young Child, spread on a cloth and apply it to the part. Or take a live Cock and pull off the feathers off his Breast and apply him to the Botch, keeping him there till he die; afterwards bury him, for he will have drawn the poysnon to himself. Or take a large Toad, thrust him through with some sharp stick, dry and powder him and apply to the sore. Or take a green Frog and tie him alive upon the Botch, till such time he dieth, by which means all the poysnon will be drawn forth.

Sermon then gives a description of cases which he has cured by the use of his pills; thus two 8 shilling boxes or one 12 shilling box effected cures.

On 8th June 1669 I took my journey forth of Bristol towards New Hall in Essex to cure His Grace George Monck, late Duke of
Albemarle, who through the wonderful Goodness and Mercy of God by taking nineteen or twenty doses of my pills, in 28 days evacuated by stool 12 gallons of water, upon which his swellings all abated and he became perfectly cured of his Dropsy.

This is followed by a certificate granted by the Duke testifying that Mr. William Sermon, Professor of Physick, cured him.
John Archer.

1673.
John Archer.

Not much is known of the early life of this man. Probably he was an Irishman for he was practising in Dublin in 1660. He removed to London and seems soon to have acquired fame for in 1671 we find him acting as Court Physician to King Charles II under the style of "Chymical Physician in Ordinary to the King".

Archer certainly did not hide his light under a bushel and whether he was a good physician or surgeon we do not know, but we find him stating that on the favourable report of his patients, His Majesty was pleased to command him "to help some noble persons afflicted with a fistule." It would seem that he had specialised in Venereal Diseases for he advocates the use of his own specific remedies. These were to be obtained at his own house and the prices are specified.

He has been styled a Quack because he promises marvellous cures through the use of his preparations, but at this time such pretensions were common to the medical profession, and his advice seems to me little different from that of his contemporaries.

On the fly-leaf of the copy of his work "Every Man his own Doctor" in the British Museum there is a written notice "The Author is to be spoke with at his chamber in a sadler's house over against the nes gate next the Black Horse nigh Charing Cross; his houers there are from eleven to five in the evening, at other times at his house in Knightsbridge." Archer died in 1684.

Besides the above named book, Archer also wrote:-- "Secrets disclosed of Consumption showing how to distinguish Scurvy and Venereal Disease, etc." London, 1684.
Every Man his own Doctor compleated with an Herbal shewing
First. How every one may know his own Constitution and Complection
by certain Signes. Treating also of Air, Passions of Mind, A new Hot
Bath, Venery with an Infallible Secret to prevent the Pox; Of the
Senses proving Six in Number. 8vo. London. 2nd Edition. By
John Archer, One of His Majesties Physicians in Ordinary. 1673:

Of Signs to know your Constitution and Complection.
Bodies which are too hot, yet moderate in dryness and humiditie; such
discover themselves to the Touch. Hair abounds in the whole Body
and is inclining to yellow & thick, they are thinne, as to matter of
Fat, they are swift and strong for Motion; prone to Anger; the color
of the Face is redder than of a Temperate Body, they are easily
hurt by hot things.

Signs of a Hot and Dry Constitution or Chollerick.
If dryness be joyned to Heat, which they call Choll, the Body shall
be hot hard thin lean and hairy, and the hairs are black curled.
The Pulse of the Arteries are great, and their Veins great; they are
Angry Persons which are endued with such a Temperature.
Obstinate, Lovers of Brawlings, they desire few things, they are fit
for the Generation of Males.

Signs of a Hot and Moist Sanguine Constitution.
If Moisture be joyned to Heat, which Temperament they call Sanguine
the Bodies shall be hot and soft abounding with much blood, flesh
indued with large Veins; and those that are so in their Youth,
have often the Haemorrhage or Bleeding at the Nose, and if the
Humidity abound they are apt from their Youth to Diseases of
Putrifaction.
Signs of a Cold Constitution.

If the Body be too cold, such a body is perceived by the Touch, and is white, fat, slow, soft, and bald. 'Tis easily hurt by cold things, it hath a narrow Breast without Hair and narrow veins, scarcely appearing, the hairs thin and of small increase for the most part, they are fearful that are of that Temperament.

Signs of a Cold and Moist Phlegmatick Constitution.

If moist be joyned to the cold not much, nor that coldness great, the Body shall be white in colour, fat, thick, soft, reddish Hair inclining to paleness, but if the Frigidity with the Humidity be more intense, the Body shall be thick coloured yellow, exceeding bald, the Hair smooth, the Veins lying hid. Such Temperaments are dull and slow of apprehension and for the most part altogether idle, no ways ready, simple not prone to anger.

Signs of a Cold and Dry Melancholy Complection.

If Frigidity be joyned to Dryness, such a Body is discerned by the Touch those shall be lean, bald, pale which are of such a constitution, slow in motion, dejected in countenance with their eyes fixed. Those Melancholians are ingenious who by Nature abound with good and plenty of Blood wherewith some part thicker and dryer is mingled, which add as it were strength to the Body, and when attenuated, and as it were poured it is Spiritual.

It is of great benefit to know what one's complection is. It will bridle Nature, for it is truly said "Mores sequuntur Humores," According to the Humour of the Body so are the conditions of the Mind, and also for Food, knowing my Temperament to be Hot and Choleric, I must avoid those things in Meat and Drink that increase it
Dr. Archer then proceeds to discuss the influence of Air and climate on the Body. He then goes on to treat of Food. He says that the HEART of Animals used as food is of a hard and dry nature and fibrous, neither is it easily concocted, but if it be well concocted, it yields neither ill juice nor a little and that very stable and firm, chiefly corroborating the Heart by sympathy.

BOWELS. The Intestines afford not very good but thick aliment and the Bowels of younger Quadrupeds as Calves, are of better juice and easier concocted than of old. Venison and Hare's flesh is accounted by Physicians as Melancholy meat and are not so good for those that have dry Bodies.

Lobsters, Crabs, Oysters and Scallops have a soft juice and therefore irritate the Belly to dijection and cleanse the Ureters, stimulate Venus, and easily generate obstructions and nourish but little.

Butter agreeeth not with those that have a moist and slippery stomach, nor is it agreeable to hot natures.

Cabbage affords little nourishment; being boiled in the Broth with fat meat, it is somewhat corrected, yet the stinking coction or Broth shows its generic danger and that it is only fit for laborious people.

Artichokes hot and dry to the second degree, they afford no good aliment, they stimulate Venus, windy yet they do wonderfully cleanse the Reins, sending forth stinking Urine, and cures the Running of the Reins if it be decocted in White Wine.

Wine. A fragrant smell is a token of the best wine,
because it can encrease spirits, restore decayed strength, and recreate and refresh those that are suddenly languishing only by the smell.

Tobacco. He shows that it is hurtful to those who are hot and dry, to the Chollerick and Sanguine, and concludes by saying that one ought to confine oneself to one pipe a day for "then you may boldly and safely leave it off quite, and you will find your breath sweeter, your stomach better, your eyes stronger, your teeth whiter and sounder and yourself wiser.

Venery. Consider there is many a woman, very desirable to look upon yet if you enjoy them you will less prize them, and you can find no more pleasure in them, but the evacuation of your own heat and vigor. Therefore it is downright folly and madness, to run such great hazard of Soul, Body, Estate and Good Name for a Toy of no value.

I have however found an Infallible Way of preventing Infection from Venery though daily enjoyed which is the greatest Secret which has been discovered to this sinful generation. And that I know that none hath this Secret but myself which I have many times experienced and it never yet failed in any. It is so sure an Antidote against Infection. If I do but consult the person before Copulation or the same day after it, I do promise a certain prevention of any fear of Infection which I do publish not to encourage Sin but to hinder Sin and guine of Families. Yet I will not instruct any, on purpose to go on in Sin without Fear. I dare not divulge what I intend only for the Married or to such offenders that have fallen by the strength of some Hurrican Temptation being overcome by wine or other wise, which is common in this age. And I do here declare my belief that should a thousand men fall into the laps (or Hell) of a thousand women corrupt women, yet by the use of my discovery or Antiven-
rian next night after, I should not doubt the soundness of every man from this Pollution.

Of the Senses. There are six of these he says. The Sixth which might for its dignity be placed first is The Sense of Venery, otherwise called the Generat Faculty. He goes on to prove this by

(i) The Members are adequate instruments for that sense. Their Faculty or Sense is highly useful and very perceptible giving more sensible Delights than Tasting etc., and as the other senses do give perception by Touch, as proved, how much more this. For the other senses are inferior in perception to this because not only the adequate instrument is in Venery sensible, but also all the instruments of the body do contribute to this Sensibility and most of all assisted by the Reins and Brain which is the Primum mobile of all Sense and Perception. Every one of the Senses is bound by its Power and are commanded, constrained and subservient unto it, ministering fuel unto the fire of Lust and Venery where Reason does not command Sense. Therefore be it acknowledged by all Philosophers for the time to come, That Venery is Chief of the Senses, and all that are captiv’d by it are ipso facto, sensual and subject to the sixth sense.

The Second Part treats of "Diseases and How to Cure them."

Pox. It is the corruption of the Radical Moisture of the Body chiefly taken by contract in those tender parts in the Act of Copulation. (He describes other ways in which the infection may be got as for example—) By sitting on a close stool, whilst the fume evaporates, or by lying in a hot Bed with the infected, whereby emission of putrid Sweat throu' the pores penetrates the adjoining Body, etc.
How to cure the Pox or French Disease. The best meat for you is Rabbet, birds, Poultrrey, Mutton all thow. Roasted; Stale Bread Crusts of Bread Bisket. You may sometimes eat a few Baysins of the Sun therewith; Avoid Venery & Leachery and also all Salt Meats, fish, sharp things like Vinegar, Lemmons, All Milk Meal also Wine.

First begin to purge with our Morbus Pills so called. Take 30 pills the first night, next night 4 pills and ifthy strength be sufficient 5 pills the next night always taking some Posset made with Small Ale in the morning. Now after your Body is sufficiently cleansed for preparation, if you are young, strong and Phlethorick take from the Liver Vein of the Right Arm 8 to 10 ounces of Blood, then begin to take of the Dyet Drink which doth wonderfully purifie the Blood and makes the Liver firm and sound and is very Cordial, you ought to drink of this 3 half pints every day not at different hours and endeavour to sweat after it. The time of taking this drink must be according to the Patient's Disease. It cures some in 14 days, others one month, but if it be inveterate and old, it requires six weeks but it is a sure Medicine.

Sometimes when Men have a great and sore Disease and may keep out of sight for a month, I cause a Flux or Salivation and I have so great a Secret in that way that never fails, being easie to take with out any danger to the Patient. (Not like the Vulgar poysous Pill which some use). I perfectly cure many to their great comfort, however there is a necessity of Dyet Drink also.

He recommends almost the same treatment for Running of the Reins (Gonorrhea). He also advises the use of his Cordial Dyet Drink and Corroborating Pills in Gout, Consumptions, Catarrhs and Rheums. The prices of the Medicines are as follows.
Cordial dye drink 2/6 per quart
Morbus pill box of 50 at 5/
Corroborating pill box of 40 at 5/
Vomiting pill box of 20 at 3/6

The herbal follows next.

Each plant is under the dominion of certain planets as Mars, Saturn, Jupiter, Venus, and the plants are only to be gathered when the particular planet is at its full strength. If you gather the plants in their planetary hour you may expect to do wonders, otherwise not. Gather the most juicy leaves, dry them in the Sun, for the Sun doth not draw away the virtues of herbs but adds to them. And keep them in paper bags, and I wish you good success in using them.

Astrologers do assign the seven days of the week to the seven planets, thus the Sun rules Sunday, the Moon Monday, Mars Tuesday, Mercury Wednesday, Jupiter Thursday, Venus Friday, Saturn Saturday. Every planet governs the first hour after sunrise upon their appointed days and the next planet to him takes the next hour and so on.

At the end of the book Dr. Archer draws attention to his Inventions

(i) Hot steam bath.
(ii) An oven which with a small faggot doth bake a good quantity of things & distill or boil a pot or stew all at the same time
(iii) A charriot that with an ordinary horse will run swift with 4 or 5 people within and there is place with out for more, All which one horse can draw as easily as two horses in the ordinary way.
Robert Godfrey.

1674.
Robert Godfrey.

Various Injuries and Abuses in Chymical and Galenical Physick: committed both by Physicians and Apothecaries, Detected. For the benefit of such who by being conscientious and studious in Physick, aim chiefly at the Welfare of the Sick, and of those Patients, whether rich or poor who are willing to preserve their Lives and Health.


The author was a young man aged 27, who declared that he had written this book to show up the selfishness of physicians and the carelessness of apothecaries." My most dear Father (I being young) was kill'd secundum artem through the deceit of the Physician and Apothecary, by taking a preventive Purge; and seeing that I myself also in my younger years had my Vitals also much weakened by their poisonous and debilitating Methods, that I believe, as long as I live I shall fair the worse for it. But I am resolved to find fault with them, whilst mens' lives and healths are so little set by, and that Money is the only thing sought after, whilst 'tis little minded what Medicines are given for Relief to the Sick."

Dr Godfrey was no believer in bleeding, and early in his book he asks, How can we ever hope to cure diseases by weakening it through Phlebotomy, "Whenever you breath a vein, through the Bloods circulation, all parts are co-sharers in the loss.... and the whole Fabric of the body is impaired."
Phlebotomy is as ridiculous as if one pretending to defend a Country already invaded, should take away from them part of their Ammunition and Weapons." Instead of this he advocates the use of Spirituous, Valiant and Innocent Healers (i.e. medicines) seconded by a regular Diet. Some Physicians give Poysons and Venoms to the Sick to cure diseases, and thereby hurt and leave them worse than they found them and exasperate the Disease if not kill them. Especially are these Poison-mongers such as depreciate Chymistry and its innocent Remedies.

Dr. Godfrey then goes on to unmask Mercurial and Antimonial Remedies and he shows the danger of such medicines. He dismisses Gold as a remedy in a few sentences. "Yet seeing all the harm Gold in a Medicine can do in regard 'tis not corrosive, in the encreasing an Apothecaries or Doctor's till, and making the Patients purse lighter, I shall let it here alone."

"Against Mercury, I can't say enough" and makes long quotations from Helmont. "The Doctor must have his Fee; which he well deserves were the Medicine good. And if the Patient happens to be kill'd by means of it, 'tis but the Doctors laying the fault upon the Malignity of the Disease and telling you the Patients time had come. So the Earth must hide this fault.

Vomits are commonly given under pretence of Cleansing the Stomach but it oftener defiles it. I speak experimentally, for in my youthful days, took several of them, to my great hurt. Away with them. And not go to prescribe Crocus metallorum for a Vomit. A Lady in the West of England, a few years since took such a Vomit, and the poyson being great, she never left vomiting till she died. Helmont gives an account of three persons which were destroyed by Vomits; one of whom was his Life's brother, and the other two were young noble Ladies and Sisters.
ill three, after Death, being dissected, Blackish and Stinking Liquor (see the excellency of poisons) floated on the Pylorus or lower mouth of the Stomach, which was contracted through indignations against the admitted Venom." Dr. Godfrey then describes the violent deaths of several who had swallowed Mercury or Antimony.

There is a long diatribe against Glauber whom he accuses of deceit and roguery. "What can one think," he asks, "of his Recipe for making Aurum potabile." He narrates the cases of two patients who suffered from Fever and who desired greatly, the one strong beer, and the other sack. The medical attendants told each that his condition would be infinitely worse, and indeed he might die if he took either of these liquors. Both patients however drank largely of these, and in spite of the prognostications benefited so much that in a short time they entirely recovered. The author advocates the use of such wholesome liquors in fevers and not the universal custom of bleeding, and cites cases of pleurisy cured by medicines alone. How can this hostile sharpness of the blood engendered by contagion in the inbreath'd air be overcome by bleeding? How could it counteract the acidity of the blood? 'Tis a miserable thing that so many should yearly perish of this disease, whilst the Venal Blood is emitted, by lavishing the strength through taking away its Magazine and neglecting the Cause in the Blood and Pleurae, seeing that the bountiful Father of Lights hath afforded Medicines for its Safe and Perfect Cure without exhausting the Vitals in the least. Whereas if the Blood be let out, though the patient escape choking, and is perhaps delivered from the Jaws of Death, yet is he so shattered and shaken in his Vitals by the loss of the Vital Juice, that if he recover, 'tis very long. Whereas if one or two excellent Medicines be given, inwardly the patient may be well and vigorous in a week.
Yet believe that what with the hurts of the Small-pox when I was a Youth, seconded with the Damage received from Purges, Vomits &c. I have been so weakened; that I shall scarce ever regain my former Complexion and cheerful countenance.

The author relates a case of what he calls pleurisy— "I asked her what she had lately been eating of ... She replied that last night, she had too freely eaten of a thing she lov'd, but it did not agree with her. This confirm'd 'twas a Pleurisy, and that her Stomach not well digesting the last night's Supper, had sent a Pleuritical sharpness into the Blood.... As I had learnt from expert Helmont, I gave her a Medicine to stop the foreign Ferments in her Stomach and so expel the Acidity in the Pleura, and put the Blood in good order again without borrowing the least aid from the Lancet. When I visited her again in six hours, I found my patient had gone into the city and was quite recovered.

In the following article Godfrey proves to his own satisfaction that the Stomach is the seat of the Soul as the Acute Philosopher, van Helmont, hath affirmed. ... To prove it, I shall refer you to those who have undergone a New - Birth or Regeneration, and in whom Christ's Spirit inhabiteth; who can tell you experimentally by pointing to the Pit of their Stomachs, or a finger's breadth lower, That the Spirit of Christ (which is not an imaginary thing but real substance, obtained through Tribulation by the Goodness of God) appearing to refresh and consol...
that Load and Burthen, causeth his most Holy Spirit, the Gentle Dove, (in his own time) to appear and abound like over-flowing streams, to the unutterable consolation of the Soul.

Neither does the ignobleness of its Office, in that it concocts for, and is a Servant to the whole Body, at all gain, say or hinder it, no more than that the High-Priest of the Jews, was a Butcher in sacrificing. No animal can live without a Stomach and its sensibility is so great that it will not endure the pressure of a hand on its upper Orifice without grief; nor a wound without sudden Death." The fact that the Ancients said that the seat of the Soul was the Heart was merely a statement common amongst the people.

Many cases are cited where the patients were restored to health by the aid of medicines prescribed by the Chymical Doctor and without recourse to bleeding.

Dr. Godfrey concludes his book with a long panegyric on von Helmont, who, he affirms, was an honest man and merciful to the Poor and Distressed.
Leonardo di Capoa.

1684.
The Uncertainty of the Art of Physick together with an Account of the innumerable Abuses practised by the Professors of that Art, clearly manifested by a Particular Relation of the Original and Progress thereof also divers Contests between the Greeks and Arabs concerning its Authors.

Written in Italian by the famous Lionardo di Capos, and made English by J.L. Gent. London. Printed by Fr. Clark, for for Thomas Malthus at the Sun in the Poultry, 1684...

The translator, John Lancaster, dedicates the work to the Honourable Robert Boyle, whom he lauds in high-sounding phrases.

Don Carlo Buragna tells the Reader that the work was the result of a consultation between several Physicians who had been ordered by the Vice-Roy to try to put a stop to the Abuses and Errors daily committed in the Practice of Physick. Signor Lionardo was requested to put his opinion in writing. His colleagues thought that it was so valuable that it ought to be printed.

Lionardo states that unhappy accidents had befallen some sick persons, and for which Chemical Medicines were blamed. When such were made known to His Excellency, he ordered that we should immediately search out a Remedy for such Misfortunes and prescribe certain secure and Solid Rules to be observed.

He traces the early History of Medicine and states that amongst the Egyptians the number of Physicians had increased to such an extent that certain were appointed to look after each distemper and were not permitted to cure any other. Herodotus tells us that some cured the Eyes, others the Head, others the Teeth, and so on. Diodorus relates that if these practitioners followed the acknowledged Rules of the Sacred Book and failed to cure the Patient
no charge could be laid against them. If however they acted contrary to the written Rules, they underwent the Judgment of Death. It was well for Galen that he was not born in such a country and in such times, for he himself tells us that he was not easily drawn to believe what was written in Hippocrates nor in all the Books of the Ancients.

Amongst the Greeks however, no penalty was put upon the Practisers of Physick but that of Infamy, which to those who have their Reputation at Heart, is more grievous and tedious than any other Torment. Amongst the Romans, Pliny remarks that the only man who may kill another and yet be unpunished is the Physician.

By the Cornelian Law, if a man died by reason of taking medicine which had been given him for his Health or the recovery from his Distemper, he that gave it, if he be of Quality, shall be banished; if of meaner condition, let him be put to death.

Although the same lawyers registered both in the Institutes of Justinian and in the Digests the statement of Jacobus Cujacius, the Head of the Aquilian Law, that the Physician "sanandi non nocendi animo dedit ", but also the following words of Ulpian:- "Though the event of Mortality ought not to be imputed to the Physician yet what he commits out of ignorance, is to be laid to his charge, neither is the deceiver to go unpunished under pretence of human frailty."

Not only Pliny brought accusations against Physicians, but also the learned Angelus Politianus wrote, "I have again bewailed the folly of Mankind, that has so long suffered besotted Ignorance to reign, and all the while buys the hope of Life from them who are the real causes of certain death."
Ludovicus Vives also cries out in these words, "Their miscarriage and errors (speaking of physicians) not only go unpunished, but are also recompensed with fees.", and an Academic in a choice Dialogue says: "Hangman and Doctor herein alike fare, Both kill unpunished, both rewarded are." and another writes:—

"If to each Crime its punishment be due, What pain, Physicians, is enough for you? Who with your Drugs Diseases frequently Do cause, and the Sick before their time do dy."

Maximinus condemned to death all his Physicians because they had neither wholly healed him, nor eased him of his pain. Alexander unjustly caused Glaucias the Physician to be slain through a suspicion that he had not been diligent enough in curing his dearest friend, Nephsestian.

Hippocrates himself says That he gained more reproach than Commendations by his profession. Therefore it is extremely difficult or rather impossible always to judge, whether the unhappy success of the distempers proceeds from the sottishness of the Physicians, or from the Nature of the Disease or from some other internal cause, into which no humane Wisdom or Knowledge can penetrate.

Lionardo goes on to say that often poisons are engendered in the body, and medicines themselves may bring about the death of the Patient. The Physician therefore fearing the hazards of the Law may stand idly by while the patient dies, or else is constrained to act in concert with the vulgar crowd.

He is of opinion that the ancient Roman laws were directed not against skilled Physicians, but against Quacks and Astrologers.
The author then discusses the rival Schools of Medicine—Methodists, Galenists, Rationalists, and Arabians. There are long extracts from a work which repudiates Galen and reference is made to Vesalius who showed in how many ways Galen and his followers had been wrong not in Anatomy alone. Then we have Silvius calling the work of Vesalius a most unworthy, villanous and perplex'd Miscellany of Errors, and an abominable Dream of filthy and wicked Instructions. Then turning to his Readers, with Prayers and Protestations Silvius exhorts and conjures them furiously to tear it into pieces and burn it. He beseeches also the Emperor severely to punish the Author, whom he terms a Monster of Folly and Ingratitude and saying it would be a deed of Charity, if he totally made him away and strangled him that he might not infect Europe with his poisonous and pestilential Breath. The whole of this diatribe was due to the fact that Vesalius was opposed to the Galenists. The attack bore fruit however for in time the Emperor banished Vesalius from his Court. This same spite passed into Andreas Laurentius who also wrote in virulent terms against Vesalius.

But of the Questions, Quarrels, Contentions, Debates, Disputes and Skirmishes that did thereupon arise amongst Physicians, he will make no mention, for were they not present before the eyes of all at that time?
Nicolas Andry.

1701.

The author first lays down certain postulates: (i). The animals we call worms are little insects; (ii). The other insects are called Great insects; (iii). The worm breathes and hath lungs. All worms however little soever they be, have blood. Most have several hearts and lungs, and this is why though divided, they show signs of life so long after. The eggs of worms enter our bodies with the air or food or into our flesh from the outside. Most of the worms that breed in the rotten carcasses of dead animals, were there in the egg when the animal was alive. The eggs which have been swallowed bring forth their worms in the same manner after the death of the animal. The air is full of the seed of worms, as are also rain, water, vinegar, sour wine, stale beer, cider and sour milk. All parts of the body are subject to worms, none excepted. The blood and urine are sometimes full of them. The urine and blood of those who have Smallpox have worms in them, as have also the pustules. The more worms there are in the pustules, the more do they mark the skin. One good way to hinder the marking, is to wash the face with some water that kills the worms. If in the beginning of the Smallpox, the patient's feet be bathed in warm milk, all the Smallpox falls into the feet, and the face is free of 'em, which without doubt is occasioned by this, that the worms which make the scabs or pustules of the Smallpox run to the milk.

In the Venereal Distemper there's no part almost of the body which is not knawed with little imperceptible Worms; and it is those worms that occasion most of the ravages that happen in
those sorts of Distemper. In the Fistula Lachrymalis the water which comes from the Eyes, is full of little Worms that are discerned by a Microscope.

A Physician ought to examine with a Microscope the blood which he has taken from his Patient, to see if there be any worms in it, because there are abundance of Prognosticks to be drawn from them.

Worms are distinguished into Intestinal and Un-intestinal Worms. The first are those that feed in the Guts; the others are those that breed in any other part.

Strongli worms occasion most Distempers. They occur ordinarily in Malignant Fevers; sometimes they occasion Dumbness and dry up Nurses' Milk.

Ascarides frequently occasion the Tenesmus and Swoonyngs. They are tortured with the Headache and afterwards become deaf and drowsy & are in danger of an Impostume in one of their Ears.

The Worm call'd Solium breeds in Man in his Mother's Womb; it often causes Epilepsies, Fluriesies & ordinary pains in the Liver. Those who accuse Pliny of speaking largely, when he says he has seen Taenias above thirty foot long, are people of very little knowledge or experience. The Solium is always alone, nor does it re-ingender when once it comes out. It never comes away almost without taking Medicines; it grows old as the Patient does. The ordinary medicines against Worms are of no use against this; it's only one Worm & not several joined together.

External Worms breed in the Head, Ears, Nose, Liver, Heart, etc. and occasion Distempers. The great pains in the Teeth are not occasioned by Worms. Heart Worms frequently occasion sudden death.
The Worms that breed in the Blood don't hinder it being of a lively red Colour.

The Skin Worms sometimes dig under the Skin as Moles do under ground, and as the Mole is discovered by the Ground it digs up, those Worms are sometimes known by a sort of Cordes which they raise above the Skin which resembles the embroidery we see on Melons. These cords can be taken up with the point of a Needle. Some have their Feet so spoiled with these Cords that they cannot walk.

Cancers are all full of imperceptible Worms; they know the fibres of the part & all the sieves of the glands; afterwards the worms increasing and eating whatever they find, they many times ulcerate the part and consume it. The Dropsy may sometimes be occasioned by Worms.

Worms may occasion Tumours & Excrecences in the Body as they do in the leaves of Oak (Gall-nuts). The deformities we are many times born with, may happen by Worms that having knawed the tender parts of the Foetus by this means occasion Tumours or Crookedness.

Most of the Distempers ascribed to Witchcraft proceed from Worms. In the Jaundice the Intestines are for the most part attack'd by Worms. The Navel-worms are nothing according to all appearances but the Worms of the Intestines.

The Crinones pass for worms but it's probable they are not. The Crinones and little Dragons are different. The latter is a true Worm and neither a swollen Vein nor an Imposthume.

Always suspect Worms in children, or else they have a Vermi- nous matter concealed in them which may produce Worms. Infants
are more subject to Worms than others, and amongst these, the Phlegmatic more than the Choleric. When Children put their hands often to their belly, it's a sign of Worms.

Children, men of full age, old men, maids, women, people of all ages and sexes are subject to Worms.

When people fall into Apoplectic fits, if then their hands and feet be cold & their pulse very slow, there's no doubt but that they have Worms. To lose one's voice, and to be of a sudden seized with madness, is another sign of Worms. To awake with surprise & alarm, especially in Children, is a certain sign of Worms or the Smallpox. A certain sharpness or sourness of breath is a certain sign as is also to be always hungry, though one eats a great deal.

Round and long Worms bite often and occasion great pain, but Broad Worms don't bite at all. Those parts which resemble the seeds of a Gourd in the excrements are the eggs of the Solium. The Solium consumes the purest Chyle. It sometimes gives a false appearance of Women being with Child.

Three things make our bodies subject to Worms, bad air, bad diet and excess of good food. Vinegar which kills Earth-worms, does not always kill those of the body; there be some of the latter sort which live very long in it sometimes.

The kernels of pine Apples are very pernicious when one has Worms. Melons cause Indigestions that oft times serve to make Worms breed in the intestines. Mushrooms are capable of breeding abundance of Worms in the body. Children are often subject to Worms, because pap has been given too soon or because that pap is made of raw meal which hath not been set upon the fire or in the
Nurse's milk is sometimes full of Worms. If so she must be changed, otherwise the infant is expos'd to mortal Diseases. Most Country Nurses are subject to Worms because they eat abundance of milk and fruit.

The Worms that issue from the Nose come sometimes from the Intestines. When Worms issue upon the declension of the Distemper it's a good sign, but if they come away at the beginning of it, it's a bad one. If they issue upwards, it's ordinarily because of some obstruction in the Intestines, or in the Gall-passage, or because the person has been too long fasting. After voiding Worms upwards if the Patient vomit a black matter like ink, it is a sign of Death especially at the beginning of a Distemper. If the excrements with Worms are white, the Patient is in danger.

When part of a flat Worm is voided, there's no danger provided the Head be come away. When Worms come away folded up in Wrappers or Coverings, it's many times a prognostic of a speedy cure. Those wrappers are woven by the Worm as the Spider's web is woven by the Spider. The Worms sometimes dissolve all into water after being voided, and many times they dissolve in the same manner in the body. When Worms come away red, it's a bad sign; the white presage neither good nor bad by their colour; those that are yellow or livid, presage nothing that's good. If the Worms that are voided have others in their Belly, it's usually a sign of death. When a great quantity of Worms is voided, there's cause to fear that some of those Worms have gnaw'd the Guts.

Treatment. Many medicines are used against Worms which are more proper to multiply than kill them. Vinegar is a very bad medicine against Worms. The powder of dried Worms makes
abundance of Worms to come away, but for the most part they are such as are bred of itself. Mercury is good against Worms, but it hath dangerous Consequences, nor ought it to be made use of except the Patient be attack'd by Venereal Worms. Avoid using Wormseed against Worms. If you put into Spirits of Wine live Worms that are come from Humane bodys, they will live in it for some time.

Malmsey Wine is a sovereign remedy against the Encephali or Head Worms. The Juice of an Onion, stale Urin mixed with a little Honey, the Juice of Calamint, A Woman's Milk milked into the Ear, are all good remedies against Ear Worms.

It's a Fable what they talk of Worms that fly away with the Smoak of Henbane Seed. The Juice of Horehound mixed with Honey is good against Worms in the Lungs. The Pouder of Hoglice is good against Worms in the Liver. Garlick, Cresses, Peony roots, etc. for Heart Worms; the Juice of Chervil for Worms in the Blood. Vegetable salts destroy Worms in the Bladder. The Juice of Calamint kills the Ellophagi or Ulcer Worms. When a child is subject to the Crinones, bathe it in warm water, then rub it with Honey by the fire. For Acari or Ox-worms wash the body with Decoction of Gentian root. Fasting is bad for those with Worms in their Intestines.

The Fern and Bark of the Root of Mulberry trees are specifics against the Solitary Worm. Why certain Worms that come out of the Body live in Vinegar is that most of them feed upon a sharp matter that is in the Body. The Body-worm has no more (Centipeda) feet than the Hog-louse (Millepeded) or 14, i.e. 7 on each side.

Those who are subject to the Distemper called Vapours, have during their youth been more subject to Worms than others.

The Spermatic Worms are those that produce all animals.

...
Alexander Russell.

1712.
An Essay of Medicine, Detecting the unaccountable Arrogance of Quacks, and the deadly Credulity of their Patients.


This work was published by Authority of the College of Physicians of Edinburgh, Matthew St. Clair, President, and William Stewart and Thomas Young being Censors.

The Author offers this work to the President, Censors and Fellows of the College. He dedicates it to Prince Wriothesley, Duke of Bedford.

To the Reader he explains that he had three motives in mind when writing the work: -

(i). To baffle the cruel and blind Arrogancy of those who practise Medicine without application to the Rational Theory and Institutions thereof, by representing their Insufficiency and Mistakes.

(ii). To demonstrate openly, that knowledge of the Institutions of Medicine is indispensably necessary for safe Practice; and thereby to convict those of Suicide, who intrust Life and Health Blessings preferable to all Sublunary, to such as are void of this knowledge.

(iii). To pave a way to the Learned to depress this mortal Precipitancy of Quacks, and to advertise Patients of their Hazard that they may be disabused, and above the precarious Affectation Crafts and Doubles of Buffoons, sneaking Pretenders, vain-glorious Scolds and the peevish Man of Design, with which this miserable World is perplex'd. . . . . They undertake the Cure of Diseases which they neither understand, nor endeavour to understand.
The Quack not knowing the Situation of a Tendon, lancets it in stead of a vein; whence proceed a great many Troubles, Fever, Convulsion, Roving inflammations, and at length Gangrene. An Artery being opened in stead of a Vein, there is too great effusion of Blood, and the Event made more dangerous.

The Situation of the Stomach not being known, the Remedies fit for it are applied to the forepart of the Region, and not to the Back; whereas these Remedies should rather be applied to the Back. He that opens the Wind-pipe unhappily, renders his Patient dumb, unless he carefully avoid the recurrent Nerves, which are hard by the proper place of Apertion.

I acknowledge that there have been many Things performed which seem impossible, as for example, that English Man, by Sirname Heggins (commonly called the Supple-man) who to the Amazement of Physicians, Anatomists, and a great many others performed at Edinburgh not long ago, many Things difficult to account for. Those Entrails, viz. The Liver, the Spleen, the Gutts, which the most wise Creator of all Things had placed in the Belly, this Man would have drawn up to the Region of the Breast, so that there remained in the Belly nothing but Skin and Backbone. He also lifted up his Buttocks to his Shoulders, and his Feet to the Crown of his Head, yea and much higher, and that with no Difficulty.

He that, having no knowledge of the Animal Oeconomy, practices Medicine, knows not who or to whom, nor why, nor how, nor to what End, nor what he acts; wretched, he inquires into nothing, and has no distinct Perception of the matter about which he is employed. If he succeed, it is mere Chance indeed, as the Fool speaks a wise word.

Ye shall frequently hear a Quack acknowledge, he cannot name
the Disease, and yet he'll be advising his remedies with Abundance of Confidence and Ostentation.... They will call Melancholy, which is attended with Roving, the Hypochondriack Passion, or vice versa. Thus frequently a Rheum they name a Consumption, and the Cholerick Passion they call a Wind.

A Churchman (unmarried) ask'd a Quack concerning his Headach, and the latter replied that his Continence was to blame for it.

Those also are faulty, who think or pretend they may discern Diseases by the Urine. This is indeed a mischievous, corrupt and ridiculous Practice and Opinion. How foolishly these presume, who pretend to tell by the Inspection of Urine alone, whether it is of a Man or of a Woman, or of an old Person, or of a young Person, or of a Virgin, or of one with Child, or of one in Health, or one diseased.

There is one Squinnance called Cynanche, that is an Inflammation of the Wind-pipe. There's another called Synanche, that is an Inflammation of the Gullet. Incision is advised for the former, but for the latter a nourishing Clyster. But Quacks advise these Remedies promiscuously.

Internal Pectorals are prescribed against a Cough, and that very fitly, if it be of the Wet Kind; but if of the Dry Kind, these are to no purpose. In which case the Remedy is to be applied to those Muscles, whereof the Motion is lesed, which is the Cause of this Cough: But this is incredible to Quacks. There be many different Causes of a Tremor, commonly called a Palsy, viz. — Penury of Spirits, an Incrassation of Spirits, A Narrowness of the Vessels, or a Perverted Tone of the Nerves, each of which calls for a peculiar Remedy. The Discrimination of these requires Learning.
Quacks undertake to Cure Diseases without a Discovery of the Cause. They know not a Hawk from a Hand -Saw.

Quacks do ignorantly imagine, that Blood - letting occasions Abortion, and therefore do prætermitt it. When Abortion is threatened, yea tho' plenty of Blood coindicate it; and yet in this Case Bleeding is the all in all.

Our Author is persuaded that when medical works are published in our Mother - tongue and not in Latin they should be confined to the Libraries of Physicians. This Baglius says that such works teach old Wives impudently to prattle and dispute with the Learned Physicians. Learning is a foolish Thing, if not accompanied with Reason: " Though, says Erasmus, thou hadst mad'st Thyself Master of a Thousand Experiments, thou shalt be but a Quack, not a Physician; and thy experience without rational Learning, is no better than Foolishness, or a Guide to Folly.

Quacks presume to advise and prescribe compound Medicaments, when they know not so much as the Names of their Ingredients...... Quacks also frequently steal in upon other Men's Labours, and often they do more Hinderance in one Day than was gain'd in a whole Moneth. They very frequently stop critical and healthful Evacuations, to the destruction of their Patients, as bleeding by the Nose in a Headach, Looseness of Belly in a Fever, etc. By which Mistake, their Cure becomes worse than the Disease. When an Itch is stopp'd or unskilfully cured thereafter very dangerous Diseases have ensued, such as Spitting of Blood, Dropsy, Apoplexy, long Fevers etc.

They confine Bleeding to Spring and Harvest, under pretext of Good Skill, but Necessity has no Law. They think that Pills are always purgative, and yet there are Thousands of these astringent and increa
tive remedies used daily.

Then we have Silvius calling the work of Vesalius a most unworthy, villainous and perplex'd Miscellany of Errors, and an abominable Dream of filthy and wicked Instructions. Then turning to the Readers, he with Prayers and Protestations exhorts and conjures them furiously to tear it in pieces and burn it. He beseeches also the Emperor severely to punish the Author, whom he terms a Monster of Folly and Ingratitude, saying it would be a deed of Charity, if he totally made him away and strangled him that he might not infect Europe with his poisonous and pestilential Breath. All these diatribes are uttered because Vesalius was opposed to the Galenists.

This attack bore fruit, for in time the Emperor banished Vesalius from his Court. This same spite passed into Andreas Laurentius who also wrote virulently against Vesalius. But of the Questions, Quarrels, Contentions, Debates, Disputes and Skirmishes that did thereupon arise amongst Physicians, he will make no mention, for they were present still before the Eyes of all.

The main part of the volume however was written to show the falsity of an unwavering belief in everything that Galen taught.
Richard Browne.

1729.

The work is addressed to The Right Honourable Baptist, Earl of Gainsborough who had just then attained his majority. The dedication concludes with the pious hope that the perusal of the work may contribute to the preservation of his Lordship's life. "On which your country has so great an interest."

In his preface the Author states that he builds his greatest hopes on the favour of the Fair Sex, seeing that the Treatise is chiefly intended for their good, whose tender and delicate constitutions render them most liable to the Disease he has inquired into.

He proceeds to show how Singing gives pleasure to the Soul. That Singing is an enemy to Melancholy and a Promotor of Mirth, and Joy arises in proportion to the Fineness and Sprightliness of the Composition, the Tunableness of the Voice and Modulation of the Ear for Harmony. When all these perfections concur, 'tis impossible in Nature, but that by Singing the Soul should be delightfully ravish'd, and filled with gay and enlivening Ideas. If then at any time, he permits his thoughts to dwell only upon this delightful System of Sounds and at the same time determines the Motion of the Organs that are appropriated for this Modification, the Pleasure arises only from Reflection upon the pleasing Ideas of the Tune.

Thus by Singing we may cheer and elevate the Soul, though the Voice be harsh and inharmonious, whereas if our Ears are not
not rightly modulated for the perception of Harmony, be the Voice never so Tunable, no pleasure can possibly from thence arise; since by this Defect we can form no Idea of Musick, but are as utter Strangers to it as the deaf Man into the Notion of Sounds.

Inquiring into the Operation of Singing on the Body, our Author states that there is a Sympathy betwixt the Soul and Animal Spirits as is proved by the daily Observation of how the Passions of the Mind affect the Body, as Anger, fear, etc. As the Mind affects the Body, so does the Body affect the Mind. A Defect of Spirits is attended with Pusillanimity; too great a quantity is the Cause of Impatience, Rage, Frenzy and Madness. The Motion of the Heart and Circulation depend on an Influx of Spirits, and as Digestion is perform'd chiefly by the Friction of the Stomach as that is by the Influx of the Spirits into its Muscular Fibres; By Inspiration the Blood passing through the Lungs is comminuted.

Singing, Mirth and Joy are Concomitants; thus when our Minds are fill'd with cheerfull and enlivening Ideas, we naturally discover our Gayety of Temper by Singing with the Voice of Gladness. When we are Sad, Singing is particularly adapted, for by it we may possibly strike the Ear so agreeably as to give a Pleasure to the Soul, and at the same time we assemble the Ideas of the Tune, and reflect upon its Beauty and Harmony. By this means, those dark, gloomy Ideas, will be chas'd away, and a joyful Serenity of Mind ensue. The Body that before was like a lifeless Log, or a Piece of inanimated Clay, will now be render'd brisk and active.

Singing having such a vast Influence over the Mind of Man, we are amaz'd that it should be a Diversion or Exercise so little practis'd, since the Advantages are so numerous.
Some not having a musical Voice, wholly forbear such an useful Diversion, because that they know that their Singing will be unacceptable to others; as if their own Health was not to be preferred to the Pleasure of another.

If therefore there is a plentiful Secretion of Spirits, and if the Motion of the Heart and of the Circulation depends on the Influx of Spirits, then the Blood will be thrown out with a force sufficient to conquer all Resistances and be so comminuted and divided as not easily to run into Cohesions and therefore Singing can't but wonderfully conduce to the Preservation of our Health.

It must also help Digestion by the Influx of Spirits improving the Friction of the Stomach; the Diaphragm also and Abdominal Muscles, by this Exercise compressing the Stomach will give more Assistance to it in Digestion.

Singing, when not rightly used, is often prejudicial to the Lungs, and brings on fatal Diseases. It would be very improper for any Person whose Lungs are weak, to sing loudly or acutely, for by that he would run the Hazard of a Disruption of the Bronchiae, the Consequence of which might be fatal.

In all Disorders in general where the Motion of the Solids and Fluids are raised above their Natural Standard, Singing is not indicated, because it promotes the Secretion of Spirits, which are already too exuberant; braces the Fibres, which are already too tense; and increases the Velocity of the Blood's Motion, which already circulates with too rapid a Stream. But more particularly will it be injurious in Pleurisy, Peripneumony, and other inflammatory Diseases of the Lungs, but it will probably do good to a Periodical Asthma. In Pthisis Singing is improper, because it may
induce the sad Catastrophe of Blood-spitting. In Chronical Diseases, such as a Cachexy, Jaundice, etc. Singing may in some measure contribute to a Cure, as it promotes Digestion, etc.

Of Musick.

If the Strings of a Fiddle be struck swiftly and boldly, the Vibrations of the Air must of necessity be swift, short and bold, whereby the Nerves will be briskly agitated and give a brisk and lively Pleasure to the Mind, which by sympathy will invigorate the Motion of the Spirits and communicate a correspondent Sensation through the whole Machine. By the soft, slow, languishing strokes of a Fiddle the Nerves will be so finely and delicately touched and the Sensation be so exquisitely pleasing and ravishing, as to cause the Spirits to flow back in gentle Undulations. For, as in a Tarantism, where the Patients lie as in an Apoplexy, a brisk, lively Airs strongly incite them to dance. An Allegro by short, quick and brisk Impressions upon the Auditory Nerves, communicates to the Mind a lively, pleasing Sensation, while the soft, languishing Trills and strains of an Adagio, touch the Nerves so finely and inspire such ravishing Sensations that the Soul is ready to dissolve in Pleasures. For the treatment of Excess of the Passions, a soft Adagio will be most convenient as softening the Temper, while whenthe the Soul is dejected a brisk Allegro is the best;

In the Spleen and Vapours, the Soul is clouded and overcast with gloomy and dejecting Ideas; in this Disorder, a soft Adagio would be very improper as it causes languishing of the Spirits. An Allegro however excites a lively Turn of Mirth and
Joy and diffuses Vivacity through the whole Nervous System.
In Madness, a soft languishing Adagio is onely to be admitted. A brisk Allegro may be of prodigious Service in the Cure of Apoplexies, Lethargies, etc., as it is so rousing and invigorating.

Dancing.

Medicina gymnastica had in all ages been of great esteem in the Cure of Chronical Diseases. The differences between Riding and Dancing consist onely in the different Degrees of Motion and Heat. In Riding there is not so great an Expence of Spirits in the Motion of the Muscles, as in Dancing. The Preference must be given to Riding in Consumptions and Hectick Fevers, since it gently suscates the Bowels and exercises the Muscles of the Abdomen, as we well as Dancing, if not more, and by that means helps Digestion and Chylification; whereby a fresh Supply of Crudities and Indigestion in the Blood may be prevented, which otherwise would be oppressive to the Lungs and create a Disturbance in the Animal Economy. Dancing however excels in the Cure of the Spleen and Vapours, and Melancholick Affections; in Agues and in a Suppression of the Catamenia. In the two first, the Spirits are very much deficient, and the Blood of a viscid Texture; Dancing attenuates the Blood, because of the frequent Attrition of the Muscles, and also by the prevailing Charms of Musick that attend it, the Mind is filled with gay, enlivening Ideas, the Spirits flow with Vigour and Activity through the whole Machine, and the depres'd Motions of the Solids and Fluids are thereby raised to a degree of Perfection.

In the Cure of Agues, I wou'd advise to begin Dancing about two Hours before the Paroxysm is expected, which perhaps may prevent it.
or at least the Cold Fit will be sooner over and the Lentor be more freely dissipated through the Pores of the Skin.

As regards the Cure of Suppression of the Catamenia, the Advocacy of Dancing is grounded only on Speculation and not upon Experience, but no body will be so hardy as to deny the Truth of 'em.

When persons are bitten by a Tarantula, if they be incited to dance by the sprightly, ravishing sound of Musick, they produce such a Heat and Rarefaction of the Blood by which the Cohesions are dissolv'd, the Heart stimulated, and the Lentor produc'd by the Malignity of the Poison carried off by the Cutaneous Pores.

The most convenient time for Dancing is as such a Distance from Dinner, as that thereby we mayn't precipitate Digestion, and that it ought to be intended or remitted according to the different Nature of the Disease, Strength and Constitution of the Patient. I believe indeed, that to dance an hour or more at a convenient time after every meal, would be the most beneficial Method in most Cases.

In such Disorders, wherein it is judged necessary to encrease the Blood's Velocity, and promote Sweating, this Exercise is to be continued for a considerate Space of time without any intermission and immediately after that it will be requisite to go to Bed. In others again, as in the Spleen and Melancholy, a long Continuance of this Exercise would be highly improper, for Reasons aforementioned; in such cases the Action ought to be so short, and the Intermissions so long, as that the Patient be neither tir'd nor much inclin'd to Sweat, and that thereby the profuse Dissipation of the Sinking Fund of Spirits be prevented.

In order to enjoy the profitable, as well as pleasing Effect
of Dancing, we neither ought to begin this Exercise too soon after Dinner, nor to extend it so far as in any measure to deprive us of our wonted Rest.

The concluding Chapter on the Spleen and Vapours, or Hypocondriack, and Hysterick affections is not of much interest. He advocates the use of Peruvian Bark and a Course of Chalybeat Waters in order to cure these conditions.
Boyle Godfrey.

1735.
"Upon Aliments in Order to Health and Longer Life." He is confirmed in the opinion that our bodies are designed for 100 years, and if we fall short it is due to our own faults, we erring either in the quantity or quality of the Aliments we make use of.

"Vegetable Eatables that I have found by experience and observation not to be wrought on by the Stomach and which are ejected in a crude undigested state, being useless to our bodies: —

Most raw herbs, as Sallets, etc. are of a texture or make that renders them scarce digestible. Some however say that they are of a cooling nature. But they are just of the reverse kind, for parsley, sage, mint, cresses, onions etc. are of a very hot nature, the first three abounding with an Aethereal Chymical Oil, the others with a volatile active salt which in Plethoric habits are very pernicious.

Mushrooms are wholly undigestible and a person may as well eat Buff or Cork, besides some are poisonous. Truffles are not digested.

Potatoes if well boil’d may serve for food to people who use exercise.

Pickled Cucumbers, French Beans and other pickles are very little worked on by the Stomach, and four hours after eating them, I have caused a man to vomit and found them as the teeth had left them.

Unripe fruits are likewise extremely crude and indigestible.
I knew a youth who dy'd by eating what they call gooseberry fool.

Pipe fruit may be eaten very safely & most innocuous of all are straw-
berries. People think to take off the Soursness of fruit by sugar,
which is a grand error; for sugar is an acid itself being made up
chiefly of such parts and committed to distill gives a spirit not
unlike vinegar; it only hides the Soursness from the Taste, and deceives
the palate.

Cherries are a good food, and their juice is very good against
a Scirrus of the Liver, but it is a great error to swallow the
stones & set so fine a part as the Stomach to grind on such hard
and often pointed things, A gentleman told me he knew a man who did
eat five pounds, by which he was made very ill, whom he relieved by
large doses of Harts-horn, and the Surgeon of Chelsea Hospital told
me that part of the Skin of a cherry stuck so close to the coats of
the stomach of a person who ate them, that the man almost strained $\frac{1}{2}$
to death in vomiting, before it was cleared from the part it adhered
to.

Eggs boiled hard: the whites are wholly indigestible and they
are one of the worst things we suffer to enter our stomachs. They
occasion cholics. Let a man eat the white of one hard egg every
day, its more than probable he shall not live a year. The assertion
of some that Black Raddishes resolve hard eggs is a Falsity.

Eggs when soft boiled are one of the strongest foods we use. The
worst way we use them is mixing them with Ale or other strong
Liquors. I have known that done, when the egg that was put into the
Ale ran together again, which making the stomach uneasy, an emetic
was exhibited, and the Person near Death's Door in getting rid of it.

Cheese toasted becomes like leather and is undigested. Cheshire
is corrosive for it will excoriate the mouth.

Oysters done on the fire in the shell are rendered indigestible, and a man may as well eat Buflf; otherwise dressed they are good.

The Udder of the Cow is hard of digestion; which part is very often unsound, it being subject to ailments like the Breasts of Woman. Gizzards are untouched by the stomach.

Kidneys and the Heart are very hard of digestion, so are the Lungs and the lesser end of a dry'd Tongue is hardly worked on, and so it is likewise with tough meats.

The stomachs of none of the voracious animals, as dogs, wolves, tigers, bears, Monkeys, Baboons & Lyons do not alter hard bone which are found in the same state in the Stercus or dung as the Teeth left therein. How fabulous therefore must be the assertion of the Ostrich's digesting Iron, notwithstanding the power of his gizzard to grind.

Digestion is little more than Trituration, Maceration and expansion of the Aliments by warm, aqueous or watery Liquors, for to imagine a Fermentation is a Dream.

We ought to be cautious in the use of Salt. It is a pity we are, as it were, necessitated to use Salt, for this ingredient is but a bad guest in the Animal Oeconomy, and those at sea woefully experience it; for they are full of the Gravel. We never take any into our Bodies without its leaving a part behind for it is partly indissoluble to our Fluids; and this remains chiefly in the Kidney. There are indeed some Gentlemen who think Salt necessary to stimulate the Intestines for the Protrusion or Expulsion of the Excrements, but I believe that Nature has provided for that work without it.
Vinegar. This is the Hand of a Physician may be of service, but Acids and Sours disagree with most people. They introduce a Lentor & Coagulum into the blood; they occasion Cholics.

Mustard. It is very improper to be made free with in Victuals, for it contains a volatile, pungent salt which is Fire to our Nature, heats the Blood and increases its motion to a great degree. Spices act much the same. They contain a fiery active Aetherial Oyl which is much the same within us as Sherry strong intoxicating Liquors.

Gravy as 'tis call'd. A little just to touch the meat is good; but it is very improper to be sopped freely or to be used in Broth, for it will subject the Users to Fevers, and is bad for those of a Scorbutick Habit; it is concentrated Broth, the more watery or serous part being Exhal'd by the Fire, the Remainder is driven into a less compass, which is too much for Nature.

Fish. If Oysters ever purge (as they will some) it is not from themselves but the sea salt in the Liquor that is with them; they are admirable food. I speak of purging, because it is a harder Tryal upon the Animal Economy than persons imagine, and a work not to be done but by the Physician's order.

Tobacco. I wonder more at the use of this than all other things; for Nature at first startles at it; it contains a foetid Oyl that is next to poisonous. Ramazzini says it occasions the Piles, renders the Lungs dry, and by robbing us of too much saliva, brings on Consumptions.

Tea. We know people who were great drinkers of strong tea who died thereby, and who, being opened, their stomachs were found ulcerated. The too free use of strong tea is very pernicious; it spoils the
texture of the nervous fluid, called the Animal Spirits. It is an error to think it raises our spirits; it is only the effects of the hot water. Hot water and straw will do the same. Our own country produces about 1800 Simples, out of which we may pick very pretty teas, without sailing to Turkey, the East and the West Indies for a breakfast for which we send coin. They will do much better to use instead thereof an infusion of Ground - Ivy, Baum, Sage, or Coltsfoot. I am of opinion that most of the modern new illnesses and Lowness of Spirits arise from the abuse of tea.

Strong Liquors. These are our Bane and Destruction and introduce everything into the Animal Economy destructive of its functions. They introduce a Lentor and Coagulum into the Blood and impede or spoil its due circulation. They subject the drinkers to Cholics and beget Polypusses. These liquors held in highest esteem are the French Wines, which in Truth is the curse of that fine country. All of them abound with a cruel Tartar indissoluble to our Fluids from their Acid being closely combined with their own Terra or Earth; which Tartar subjects the People of the Country to the Gout, Vertigos, all the kinds of Haemorrhages or Effusions of Blood, the Gravel and Stone.

If a man is firmly resolved to go on in the use of Wine, let him use Red Port, of many evils he then chooses the least. The most innocent of all strong liquors is the Common Ale of the Alehouses. Punch is the worst composition of Liquors which we make. We dig our graves with our teeth; that which should preserve Life to us, bereaves us of it. It is a strange error.

Speaking of Health, I would add one more caution; not to suffer
Robert Pitt.

1703.
Robert Pitt was born in Dorsetshire in 1653. At Oxford he first studied Arts and later took his M.D. degree there in 1582. During the succeeding two years he taught Anatomy in his Alma Mater, and was elected a Fellow of the Royal Society. He took up his abode in London in 1584 and became a Fellow of the College of Physicians 1687. Pitt was a physician to St. Bartholomew's Hospital and died in Hatton Garden in 1713.

The College of Physicians had established a Dispensary in 1696, and this was the cause of a violent controversy which resulted in the publication of Dr. Pitt's "Craft and Frauds of Physic expos'd" in 1702.

In 1704 he published "The Antidote; or the Preservation of Health and Life and the Restorative of Physick to its Sincerity and Perfection."

In 1705, "The Frauds and Villanies of the Common Practice of Physick demonstrated to be curable by the College Dispensary."

Other writings connected with Dr. Pitt are:

1671 "The Case of R. Pelham Esq. and others upon the Appeal brought against them by R. Pitt and others."

1704 "The Censor censur'd; or the Antidote examin'd; wherein the Designs of Dr. Pitt and the Dispensary Physicians are detected."

1703 "The Modern Practice of Physick vindicated and the Apothecaries clear'd from groundless Imputations of Dr. Pitt."

In the same year the second and third editions of "The Craft and Frauds" appeared.
In a long preface, he says that the Faculty of Physic has declin'd in the Public Esteem. The Empirics, their Rivals, have the Title conferr'd on them, have usually the First Address in most cases, and have had the Privileges communicated to them.

The Profession of Physic has been openly assaulted or Secretly Undermin'd by all the Quacks and ignorant Unlicensed Practisers.

But it has suffered much more from the Impudence, or Ignorance or Impudence of many of the Physicians.

The Truth is, Three or Four of our Worthies, in imitation of the Gentlemen of the Stages on Tower Hill have avow'd themselves to be the only Physicians; that all the Rest know nothing if compared to them. The Sick are in all cases oppress'd with too many Medicines, and made to Loath and Complain of the very Cordials;

That the Expense is made greater and more extravagant by the suspected Confederacy, and that the death of the Patient is frequently supposed not the Effect of the Disease, but of the numerous doses obtruded in the same Proportions in every Sickness and Age, visibly pushing a declining and Even Departing Life.

The Major part of the College has many years past detested and abhorr'd this inhumane Treatment of the Sick which they foresaw must at last prove destructive to the Faculty. The People have lost their Common Sense and cannot see the obvious causes of their Complaint
that tho' they can buy all the Medicines at low Rates at the Shop, yet they pay for the Mixtures very dearly in the Bill, and that more is bought than the Patient can bear, or the Stomach receive.

When the Apothecary neglects the business of his Trade, neither prepares himself the Compositions, nor forms the Doses from them, but undertakes to advise in all Distempers, he becomes an Empiric, and invades a Profession, which he cannot be suppos'd to understand. A Physician is presumed to have collect'd from the Greek and Latin Authors whatever has been observ'd relating to the natural state in Health, and how when altered it may be restor'd. Whereas our Modern Quack having made only one general Observation, i.e. that many shall recover after the use of any Cordials and Two or Three other Medicines put into the Mouth every Hour for his own Advantage. He amuses the People into an Opinion of the Excellence of his Remedies by the Greatness of the Price and of his Learning and Abilities, by thr great Words he distinguishes them by, which insinuate to the Vulgar, his most perfect knowledge of the Languages those Names are deriv'd from.

With this Knowledge he sets up and advises every one that sends for him, with a large proportion of Medicaments given frequently to them; but they are for the most part burning Cordials, which are applauded by the Attendants, who judge of their goodness by the Warmth they give to their own Palates. When he apprehends Danger, he calls in the Physician; but the Physician cannot discern the Distemper because the Symptoms are not from the natural Motion of the Humours, but the Heat and Violence of the Cordials. The Empiric then shall kill great numbers of Children and the more feeble Patients, before he happens to think of changing the Method.
These matters are kept from the knowledge of the People by the Physicians, who must support their Credit and Reputation, because our pretended Apothecary hath the power of the Keys committed to him, of keeping and shutting out, what Physicians he pleases, and recommends those only who will give the highest Encomium of his Skill and Judgment and justify the use of many Doses by appointing more, and raising his Profit very much beyond their own Fees.

From this Cause only, the present Disgrace of the Profession, the Complaints of the vast Expense of the Bill, and the frequent Deaths from too much Physic, may very clearly be deriv'd. The College has prepared both Chymical and Galenical Medicines with the greatest Care from the highest priz'd Drugs and Simples. This is the only Remedy to cure the Corruption of the Faculty and all the Complaints of the Public. The Dispensary is at the College where all the Preparations are made and these are distributed to its two branches in St. Martin's Lane, Westminster and at St. Peter's Alley in Cornhill. The Doses of these Electuaries, Juleps, Pills etc., may be about a penny apiece, tho' every the most useful Drug, tho' of the highest prices, is in every Composition. There never was nor ever will be the least Profit, beyond the necessary expense of the Servants etc. We, having no advantage from the Medicines, have no Bias to divert us from Curing our Patients.

To end this Odious Debate, receive the sovereign Remedies, which Providence has bestow'd, within the Reach of the Poor as well as your own. Pay your Apothecary cheerfully the best Prices for the best Medicines, to reward his Industry and his Care. You may for all his extraordinary Services be as generous as you please. We would not be suspected to design to Stint your Gratitude to the Council or Hand which preserves you. We would only divert you from the present Practice of
magnifying the Prices of the cheapest Medicines.

The unhappy People suffer themselves to be Delud'd and cheaped of their Lives and their Mony. The Rich think themselves very Fortunate that they can purchase the Alexipharmic, which has the Power by itself to control the Disease and make their Lives if they use it often, almost immortal. The pity the Vulgar, who have dy'd before them, not being able to pay the Ransom.

Bezoar has held its Name and Reputation almost sacred with us, tho' exploded long since in almost all the Parts of Europe. The learned Deimerbrook said he had no regard for it, tho' his richer patients would not be content without it. Bontius tells us that, if we must give Stones, we ought to put a greater value on the Stones cut out of the Bladders of Men, a more noble Creature, fed with Meat and his Spirits warmed with Wine than those of a Goat staring upon the Mountains. Our Physicians talk of it as altogether worthless, but because the People are willing to be cheated with Bezoar and Pearl they dare not deceive them.

The sickly fancy that Pearl will will revive the Blood and brisk up the Spirits and Mind because of its being dear and fashionable. Most writers agree that it has no more value than the other Animal Alkalis as Shells of Fish, Craws of Crabs or the Tips, the two Stones of the Craw Fish and the Shells of Eggs. These will imbibe the Acid Humor of the Stomach and make an easy sweat if the Patient is in his warm Bed and happens to be bid to think of Sweating at that time.

Gold and Silver he affirms are of no value and precious Stones on account of their hard gritty character are more like to corrode or offend the Stomach and Bowels than do any good.

Some Physicians thrust into the Stomachs of their Patients
not only the most loathsome but the parts of Animals which after their death are a dry and unactive Earth. Mummy claims the preference. This was worn on the bosom next the Heart by the Kings and Princes who could then bear the Price. 'Twas pretended with the greatest Assurance that it was able to preserve from the most Deadly Infections, and that the Heart was secur'd by it from the Invasion of all kinds of Malignity. A piece of the dead body of an Egyptian Prince or of a Slave advanced by him, taken inwardly was able to give new Life and Motions to all the Spirits. The dry'd Hearts of many Animals, the Liver, the Spleen, burnt to a powder, the Skins of the Stomachs, or Guts of Cocks, and Worms and the dry'd Lungs of Foxes, ought to be rejected as loathsome and offensive. Pitt ridicules the use of the Powder of Vipers or of its flesh as a Food. You may compare the fam'd Skulls of a dead Man, now presum'd to command the Epilepsy and other violent Diseases, to this, if the Skull has been long in Powder, or has long surviv'd the Criminal. The Skull of the Head preserves the Brain, and the Powder shall not fail to preserve the Spirits of all the Brains, which can be persuaded to use it. It may seem useless to speak of the Gainfull Industry which has brought the Horns of the Elk, Bufalo, Rhinoceros, and of the Fish, the Unicorn, or of the Hoofs of the Elk, and the Ounce or the Bone of the Heart of the Stag, or the Jawbones of the Pike, etc., or of the use of the Nest of the Swallow or the Cast-off Skin of a Serpent.

Dr. Pitt then describes the Simples then used in Physic, their virtues and their Prices in the Apothecaries' Shops.

He then discusses the number of Visits the Physician and the Apothecary ought to make to the Patient and the care which should be exercised in prescribing those drugs which ought to be given during the day as contrasted with those which are hurtful if given at night.
The Use of Coral in Medicine.
by Authentical authors in all Ages never found out plainly till now. By Theophilus Garencières, Doctor in Physick.


It is dedicated to the Hon. Sir Walter Long, Bart., and the treatise is prefaced by a dedicatory poem to the Author by Petrus Cottereau.

The first chapter treats of Coral and the divers kinds thereof. The author says that it is a shrub which grows at the bottom of the Sea, and that it becomes stony when exposed to the air. This is really a translation from Ovid's "Metamorphosis" 4: "Sic Coralium, quo primum contigit auras Tempore, Jurescit: mollis fuit herba sub undis". The author says that coral occurs in a variety of colours, red, black, green, yellowish, ash-coloured, or a mixture of these.

The red, which is called the Male, is preferred above the others. Anselmus, physician to the Emperor Rodolphus, describes a coral of several colours upon the same body: this body was coral and stony, whereas the branches were ligneous or woody. This is not improbable, and he goes on to say:

"I have seen in the North of Ireland a Lake called Lake Maugh wherein if a piece of Wood be planted, that part which is in the ground is turned into iron, that which is in the Water, into Stone and that which remains above the water, remains wood. We may guess that coral under water is not altogether soft and flexible, and this happens to many stones also which lie newly digged out of the ground, are as soft as cheese but grow hard when exposed to air. Now whether coral growth out of the petrifying Juice or is at last altered by this Juice is a question. For my part I believe that it
does not petrifie until it dieth. Nature maketh use sometimes of the Petrifying piece for the producing of the Plant, for it hath been observed that Coral hath grown out of the pieces and fragments of Earthen pots. Now the reason why Coral should petrifie and other plants not, is because of its peculiar disposition. No reason can be given for its colour, no more than for that of a Rose. God hath been pleased to adorn things with such colours. Many plants that I have seen that were not wholly petrified were of a Husky, green or such colour as we see in Trees, and these onely began to be red that had nothing woody in them, as we see in Apples and Pears; the red colour is a sign of their ripeness. The best Coral is found on coasts of Tunis and Tripoli. Theophrastus includes Coral among precious Stones. The author narrates the story of a Captain of a vessel fishing for coral who affirmed from his own experience that coral while in the Sea was as hard as when exposed to the air, and that when coral is broken, a milky fluid runs from it, and that this produces coral on any substance on which it may fall, adducing the circumstance that he has seen the skull of a man in the Cabinet of the great Duke of Pisa upon which was grown in the sea a great branch of coral. Though coral may be hard at the bottom of the sea, it is nothing so hard as when it hath been exposed a while to the air. According to Dioscorides and Matheolus, coral is moderately astringent and cooling, but his specifick qualities are so many and wonderful that I should show myself too prolix and tedious if I would treat of them one by one.

Garenèièrès then quotes from Anselmus de Booth's work, entitled "De Gemmis et Lapidibus".
"A certain man testified that by taking six drops of the tincture of Coral he was cured of a pestilential fever which had almost killed him, and this it did by a certain Celestial power that eradicates all diseases out of the internal parts. It curseth the Falling Sickness in a few weeks and is commended above all against the immoderate Fluxes of Women. In a word, Coral strengthens the Heart and therefore is a sovereign Remedy against the Plague and all venemous contagious and malignant Diseases. Arnaldus Villanovus relateth, that if ten grains of the Tincture of Coral be given to a Child newly born mixed with some of the mother's milk, before the child have taken any other Meat or Drink, the said Child shall never be troubled with the Falling sickness.

Crollius, the Prince of Chymists, says that the secrets that are in Coral are altogether admirable and its Faculties beyond expression. Then there follows a long list of diseases which it cure.

Our worthy Countryman, Roger Bacon, in his learned Treatise De Retardanda Senectute commendeth Coral as of a wonderful vertue against the infirmities of old age.

I could bring the authority of all the best Physicians in all ages that have made mention of Coral. Many grave and authentical authors did not stick to say that Coral was an Amulet or Charm against Fearfulness, Bewitchings, Sorceries, Poysons, Falling Sickness, Assaults of the Devil, Lightnings, Sea-storms and other dangers whatsoever. Anciently, it was among the indians it was almost of an equal value with Pearls of the same bigness, It is also certain that Red Coral, if worn by a Man, hath and preserveth its colour better than that which is worn by a Woman; and the vapours which exhale out
of his Body are purer. Moreover it is an undoubted truth that Red Coral will grow pale, bleuish and maculated with several spots, when it is worn by one that is nigh death or dangerously sick and will foretell diseases by the changing of its colour. This I found by a sad experience of my own; for having a girl about twelve months old that wore a Bracelet of Coral, she fell into a pestilential Fever; so that when I spied the Coral quite altered, I began presently to despair of her recovery, which I would not have done, if I had known then the Tincture of Coral, as I do now. She lived but two days in that ease. After her death I would have taken the Bracelet from her, and tried whether I could have brought it to its former colour again: but the Mother would never suffer it, and would have it buried with her, and so depraved me of so just a curiosity.

What affliction it is to Parents to see their young children sick, whereas a spoonful of this Tincture may preserve them alive to the honour and glory of God and the satisfaction and joy of their Parents and Relations.

The Tincture or Essence of Coral is the most secret and internal substance that Nature had enclosed and concealed in the Intrals of it, to preserve it from all external injuries and accidents.

Our author explains the method of making the Tincture of Coral, and says:—

(What) remaineth in the Viol is not to be thrown away, for out of it by chymical art may be extracted the Salt of Coral which in all respects emulateth and cometh very near the Tincture except in the curing of malignant and pestilential diseases.

I do undertake (with the Grace of God) to cure the fiercest Plague with Venice Treacle and my Tincture of Coral.
Seeing that there is no member in an Humane body but hath its proper and peculiar infirmities, the most high provided Remedies against them all, seeing also that there be members hidden and concealed in the most retired places in the Body, where there was no access for Herbs and Plants to come to, He hath given them like as it were Beams of Light, spreading themselves round like those of the Sun which passing through all the Body, do by their Actinobolism or Irradiation penetrate to that member which is correspondent to them and hath need of their Faculties and Virtues. Thus all Cordials by their actinobolism do not meddle with the Liver, Brains or Spleen, but with the Heart. The Actinobolism of the Catharticks and Diaphoreticks gather together into the Intrals all the choler lurking in the Body and from thence carry it away as a superfluous and noxious thing. The biting of a Mad-Dog giveth to a Man the Dogs manners; and that of a Mad-Cat imparteth the Cats manners; Skenkius relateth of a Maid that had eaten of a Cats Brains and did perfectly imitate a Cats manners, expressing its voice and hunting after Mice with her crooked fingers and Nails.

In Malignant and Pestilential Disease, Bleeding and Purgation are not to be admitted unless there be an extraordinary fulness of Humours. As little significant is the new way they go about by Blistering. This practice seemeth onely to be invented to beget Apothecaries practise and Physicians something to say when they are at their wits end. But Cordials go directly to the Heart, clear it up and fight against the malignity.

Garencières then relates the method of taking the Tincture of Coral as "set down in our Book of the last great Plague 1665. The book however is hard to be had, there having been three impressions.
dispersed in six weeks time and none to be had at present." In brief, A dose of the Tincture is to be given, then the patient is to be put in a hot moist pack for three or four hours. This course of sweating twice a day must be continued for four or five days together and in this space of time all the Malignity and Pastilential poison will expire. The dose is to be continued four times each day. He then demonstrates the "dangerous and poissonous quality and use of Blistering Playsters which contain Cantharides" He quotes many authorities to show the poisonous properties of this blistering agent. He applied a Vesicatory of Cantharides to the neck of his own daughter, aged fourteen, to cure her inflamed eyes. Within three or four hours she fell "stark lame of her right hip, and this continued for three or four weeks. It is thus apparent what a dangerous thing Cantharides is." He ends by giving a long list of the diseases which Tincture of Coral will cure, and concludes by thinking: "This list will be sufficient for any reasonable and ingenuous person. Those that will know more may advise with the author, advising them seriously that if they receive no benefit by this Remedy in those Diseases they can hardly expect it in any other. The Author also having a peculiar Talent to judge of diseases and the Remedies thereof, by the Inspection of Urines, desireth those that will save charges or lives afar off, to send their water: by the examination of which, they shall receive all reasonable satisfaction and for these purposes and others, he shall give his constant attendance at his own House from eight of the clock in the morning, till eleven; and from three in the afternoon, till five. The rest of the time it will be known where he is and when he will be at home again.

As for the said Tincture of Coral with the vehicles proper
for it, they are only to be had and ministered by him, to prevent all supposition, falsification or mistakes, the world at present being so full of Envy, Backbiting, and Deceitfulness that he dares trust nobody with it, but is resolved as he is the sole Author of it, so to have all the praises of it, and bear all the blame alone, if any be

Garencieres.

From my House in Clarkenwel close
the second on the left hand.
The Unicorn's Horn in Medicine.
The Unicorn's Horn in Medicine.

In ancient Medicine substances which were rare or very difficult to find were deemed to possess special curative properties, and the rarer they were, the greater were their therapeutical effects. It is therefore not difficult to understand why the horn of this animal, so difficult to come by, was employed in medicine. Not only was the animal rare, but it dwelt in inaccessible places, and when provoked, was fierce and formidable. To secure its horn was an undertaking which involved much time, trouble, danger and expense. The value which was attached to supposedly veritable examples of unicorn horns, even in comparatively recent times, was very great. During the reign of Queen Elizabeth there was one in Windsor Castle which was valued at £10,000: in 1665 one was sold in Russia for £6000. Indeed the article was so costly that it could only be employed as a medicine for the rich. Unicorns' horns were sent as Royal gifts; the Venetian Senate presented one to Solyman, "the Magnificent", Sultan of Turkey (c.1650); while Clement VII (Pope) made a gift of one set in a silver stand, to Francis I, King of France.

There are several allusions to the Unicorn in the Scriptures, where it is taken to represent power or strength. It is more than likely however, that there has been a mistranslation of the Hebrew word. The translators have probably followed the Septuagint version, where the Greek words mon keras were employed (single horn). The original writers may have meant a species of buffalo, as; "He hath as it were the strength of an unicorn" (Numbers XXIII,22) or "Will the unicorn be willing to serve thee, or abide by thy crib?"
Canst thou bind the unicorn with his band in the furrow? or wilt thou harrow the valleys after thee? wilt thou trust him, because his strength is great? " (Job XXIX,10 - 12.). Such attributes were common to the cattle which could be tamed and used domestically. Primerose (1651) says that "The Jews do confess that they do not understand many of the names of Birds whereof Moses speaks in Leviticus." Ctesias, the Greek historian, is the earliest writer who describes the unicorn (B.C.400.) He says it was about the size of a horse, with a white body, a red head, blue eyes, with a horn a cubit (20 inches) long on its forehead. Towards the base the horn was white, black in the middle part and red towards the extremity. The animal was very swift and strong, and though not fierce by nature fought desperately when attacked, using its horn, feet and teeth, so that it was impossible to capture it alive. Drinking cups made from the horn preserved the drinkers from spasms, epilepsy and poisoning.

Aristotle describes it as the Indian ass (B.C. 342); while Pliny (A.D.100) says that it has the head of a stag, the feet of an elephant, the tail of a boar and the body of a horse; its single horn is black and two cubits in length. There is no doubt but that Pliny was describing the Indian rhinoceros. Other observers may have been deceived by the appearance of the two almost straight horns of a certain antelope (oxynx) which in profile appear as a single horn.

According to certain legends of the Middle Ages, the unicorn could only be caught by placing a virgin near his haunts. By the keenness of his scent, he soon finds the maid, and running to her, lays his head on her lap, and falls asleep.
The Abbess St. Hildegard relates that one day a philosopher went hunting along with a number of men and women. A unicorn, seeing the girls, sat on his hind legs and stared at them. The philosopher reasoned that by such a stratagem he might capture the animal. The unicorn being fascinated by the sight, was unaware that the hunter had come up behind him, and so was captured. The unicorn when he sees a girl, marvels that she has no beard, while she has the form of a man. If there are several girls, he marvels the more, and so is caught still more easily. She goes on to say that if one takes the liver of a unicorn and makes it into an ointment with the yolk of egg, it will cure any kind of leprosy if the patient uses it often, unless his death is fore-ordained or that God willeth not that he shall be healed. If one makes a belt of unicorn's skin and wears it next to one's own skin, one will never take the pestilence or any other fever. ("Physica". The abbess lived from 1098 - 1179).

"For there is in their nature, a certain savour, wherewith all the unicorns are allured and delighted; for which occasion the Indian and Ethiopian hunters use this stratagem to take the beast. They take a goodly, strong and beatifull young man, whom they dresse in the Apparell of a woman, besetting him with divers or odoriferous flowers and spices. The man so adorned they set in the Mountaines or woods, where the Unicornce hunteth, so as the wind may carrie the savour of the beast. The Unicornce deceaved with the outward shape of a woman, and sweete smells, cometh to the young man without fear, and so suffereth his head to bee covered and wrapped within his large sleeves, never stirring, but lying still and asleep. Then the hunters come upon him, and by force, cut off his horne, and send him away alive."

There was also a belief that the unicorn could detect poison in a liquid by dipping his horn into it: "insomuch as the general Conceit is, that the wild Beasts of the Wilderness use not to drink of the Pools, for fear of the venomous Serpents there breeding, before the Unicorn hath stirred it with his Horn."

Gesner says that the lion and the unicorn are at mutual enmity with one another like the cat and the dog. As soon as a lion spies the unicorn, he betakes him to a tree. The unicorn in his blind fury, running pell mell at his foe, darts his horn fast into the tree, upon which the lion falls upon him and devours him.

( Historia Animalium. 1550 ). Spencer in his "Faerie Queene " describes this occurrence:

"He slips aside: the whiles that furious beast
His precious horne, sought of his Enimyes,
 Strikes in the stroke, ne thence can be released,

But to the victor yields a bounteous feast."

John Guillim, the famous herald who wrote " A Display of Heraldrie ", 1610, says:

" Some hath made Doubt whether there be any such Beast as this, or no. But the great esteem of his Horn (in many places to be seen) may take away that needless scruple...... His vertue is no less famous than his strength, in that his Horn is supposed to be the most powerful Antidote against Poison.......It seemeth, by a Question moved by Farnesius, That the Unicorn is never taken alive ; and the Reason being demanded, it is answered "That the greatness of his Mind is such, that he chuseth rather to die than to be taken alive; Wherein (saith he) the Unicorn and the valient minded Souldier are alike. Which both contemn Death, and rather than they will be com-
pelled to undergo any base Servitude or Bondage, they will lose their Lives."

In "Timon of Athens," Shakespeare makes Timon say: "Wert thou the unicorn, pride and wrath would confound thee, and make thine own self the conquest of thy fury." (Act IV, Sc. 3)

Topsell, in his "Historie of foure-footed Beasts" (1607) devotes much attention to the unicorn. He writes: --

"These beasts are very swift, and their legges have no Articles (joints). They keep for the most partin the desarts, and live solitary in the tops of the Mountaines. There is nothing more horrible than the voice or braying of it, for the voice is strain'd above measure... It fighteth with his owne kind, yea even with the females unto death, except when it birnith in lust for procreation... when once his flesh is tickled with lust, he groweth tame, gregall, and loving, and so continueth till she is filled and great with young, and then returneth to his former hostility."

From about the year 1500 the Scottish Royal Arms bore two unicorns rampant. At the Union of England and Scotland in 1603, King James I ordained that in place of the Red Dragon of Wales (which had been introduced into the royal arms by Henry VII) the figure of a unicorn should be inscribed.

Turning now to medical writers who have treated of the unicorn's horn, we find Ambroise Paré publishing in 1582 a

"Discours, à sc savoir, de la mumie, des venins, de la licorne et de la peste." He is sceptical as to the existence of such an animal, and remarks that no traveller living at that time had seen one alive. If the Roams had been acquainted with it, he says, they would
have engraved it on their coins or arms. Scarcey two writers, he continues, agree in their description of the animal. Pliny says that it is so fierce that it cannot be taken alive, and that it has a great bellowing voice. Cardan states that it lives in the deserts of Aethopia, a region squalid and filthy, abounding with toads and such-like venomous creatures. Others again say that it is a most mild and amiable and gentle creature. She cannot feed on the ground because of the length of her horn, and must therefore content herself with the fruit that hangeth from trees, sheaves of corn, pears, apples, oranges and pulse. They feign that they will love virgins, enticed by their beauty, so that stayed in the contemplation of them and allured by their enticements, they are by this means often taken by hunters. Vartoman denies that they are fierce, and says that he saw two shut up in pens in Mecha, a city of Arabia Felix.

Paré concludes: "I therefore think that this name unicorn is not the proper name of any beast in the world, and that it is a thin only feigned by painters and writers of Natural things to delight the readers and beholders. As regards the horns, Andrew Thevet thinks that they are the bones of elephants turned and made into the fashion of Unicorns' horns, in the same way as crafty and cunning merchants soften the teeth of the fish called Rohard (which lives in the Red and Aethopian seas) and draw them to what length they like. Being so fashioned, they sell them as the horns of unicorns. For what is there in the world that the thirsty desire for gold will not make men to adulterate and counterfeit. If one grants that the unicorn exists, is its horn efficacious against poison? I have often made trial thereof, yet could I never find success in its use against poisons.
A large number of physicians of reputation have long since bid it adieu, and so it has suffered detraction as regards its divine and admirable qualities.

Rodeleutius says that the chief property of the unicorn's horn is that of drying; he therefore prescribed it for the rich, while he gave ivory for the poor. Shavings or scrapings of unicorn horn were sold for their weight in gold, and were employed for the treatment of worms and poisoning.

Hippocrates and Galen make no mention of unicorn's horn, though they frequently refer to hart's horn.

Paré concludes by stating that he has no belief in the curative properties of the unicorn's horn, but "if any do not approve of this, he shall do me a favour; if, for the public good, he shall freely oppose my opinion, while in the meantime, take this in good part which I have done." (Œuvres. Book 21. Chapter 39)

As may be readily imagined, such an opinion was a medical heresy, and almost the whole of the medical faculty in Paris rose against him. At a later period, Paré had to publish a defence for his belief.

In 1651 Dr. James Primerose published his "Popular Errors" and in this work he gives a long account of the unicorn's horn:—

"It can scarce be said whether to the Bezaar stone or to the Unicorne's Horne the common people attributes greater virtues, for those are thought to be the prime Antidotes of all. It is a thing doubted of by many whether there be any such horne or no. Divers sorts of creatures have but one horne in their head. Aristotle names only the Oryx and the Indian Asse; others to these adde the
Rhinoceros and that which is properly called the Unicorne. But it is not yet manifest what this Unicorne is properly, seeing hitherto it could not bee certainly found out in any Indian voyages. And they that do report they have seen such a creature, doe much differ in their description of it as that they seem in a manner fables. Plinie and Solinus who never saw such a creature, do yet describe it without doubt from other mens relation. Plinie says "the Unicorne to be a very fierce beast, in other parts of his body to be like a Horse, in his head like to a Stagge, in his feet to an Elephant, in his tail to a Bore with a terrible voice, having one black horne in the middle of his forehead two cubits long, and they say the wild beast cannot be taken alive. Solinus says that the horne is so sharp that it pierces anything, and being alive he is not subject to man, he may be slaine indeed but cannot be taken." But Ludovicus Vartomannus, a famous writer, reports that he saw two Unicornes, and Scaliger report that at Nice he saw one whole horne and others elsewhere, but differ from Plinie in his description, for he saith that hee is a gentle and meek creature and he attributes to him the feet and legges of a Stagge.

Amatus, the Portugal, says that the horne is of a blackish colour and that if it bee too old, it is of no vertue, and that there are many counterfeit and adulterate ones made up of Chaulke and other things after the forme of a horne; and that others doe sell the bone of a whale for it; yea, and I have heard that Sea-horse teeth, and Elephant's teeth have been taken for it. But some will say, the Holy Scripture doth in sundry places make mention of that creature as the most fierce of all others. But perhaps that word translated Unicorne is not properly known what it is. But it is likely that it
was not the Rhinoceros for it has rather two than one horne and is not nimble but slow having a very short horne, but the hornes of the Unicornes which are brought unto us are very long and taken from that creature which the Scripture saith is very nimble. I do not say that the Unicorne is a fained creature, but it is very rare and not certainly known. Further Caesar in his Sixth Booke, makes mention of an Oxe that hath but one horne. The Water also hath its Unicorne Monsters, which perhaps live both in the water and on the land, as Garcius ab Horto reports of a monster about the Cape of Good Hope which hath but one horne in the forehead wherewith he boldly fights against the Elephant. Not many yeares agoe there were brought into this towne of Hull (where I write these things) out of Greenland two heads of Sea-Unicornes that were found upon the shore with large hornes upon the forehead, from whence it is evident that there are many creatures which have but one horne. But besides this Daniel Sennertus mentions a certaine horne which is found in Thuringia and other places of Germany and digged out of the earth. It is taken for the Unicornes horne to which they ascribe a great vertue against the Epilepsie and malignant diseases. There are therefore divers sorts of Unicornes and yet they have not all vertue against the poysone. Aelian, who describes the Unicorne does not attribute any Antidotary facultie thereunto, but onely to the Indian Asse; for he writes that the wealthier sort among the Indians are wont to drinke out of these hornes, and that whosoever drinketh out of these is healed of incurable diseases, nor is hee taken with Convulsions nor the Falling-Sicknesse nor hurt with poysone. Moreover if he drinks any deadly thing, he vomits it up and returns to his health againe.
But the horne of the Indian Asse is very rare, the upper part of it is reddish, the lower white and the middle black, but the unicorne's horne is all black. Ambrosius Pareus and other most famous physicians have found no effect at all of this horne, and he doth not approve of that custome of touching the King's meate with the Unicorne's no horne, which custome, I hear, he hath abolished who is the chiefe physician in Ordinary to the King of France.

Garcias reports of this Monster that lives both in the Sea and on the land, which resembles a horse in shape, that the horne thereof is very much recommended for a counterpoyson.

All that have written of them, doe prefer those that bee digged out of the earth, for they have an antidotary and preservative facultie and doe mightily provoke sweat. The vertue of these medicament can be found out no other way than by experience onely, it will bee easie for any one that hath a piece of such bones to give some poyson to a dog or chicken and if it bee preserved by taking some of the powder thereof, he may keepe it as an excellent antidote. If we allow of Harts horne, why shall not other hornes have the same vertue. Yea there are some that will have a certaine wholesome quality to bee in all hornes, even of oxen, and therefore the Ancients did drink out of hornes.

Wherefore I would not curiously enquire, whether it bee an Unicorne's horne, or some other creatures so it be good and efficacious. Cardanus saith that Elephants teeth may be made so pliable by art that they can be made straigh like hornes and so set out for the Unicorne's horne. We must not give credit to those that say that if poyson or some venemous creature be neare unto Unicorne's horne
it sweats, as if it did suffer with the poison, and also they bid make a circle of the powder of it into the middle of which or into an hollow horne, they put a spider which if she pass over, they will have it to be a counterfeit horne, but if she burst and die, it is natural, all which are false.
The Use of Stones in Medicine.
The Use of Stones in Medicine.

In all times and amongst all peoples certain stones have had a magical power attributed to them. Hung round the neck they acted as charms to ward off evil influences, to protect the wearer against witchcraft, to preserve the health, to prevent infection, to relieve pain or cure disease.

In the very last letter which our unfortunate Queen Mary of Scotland wrote from Fotheringay on the day of her execution, February 8th, 1587, to her brother-in-law, Henry III, King of France, she sends him two stones, rare for the health, and wishes him perfect health, together with a happy and long life. ("L'ay pris la hardiesse de vous envoyer deulx pierres rares pour la santé, vous la desirant parfaicte, avec heureuse et longue vie.")

To go back to the dawn of human history, in many of the caves once inhabited by Magdalenian men, curious spotted, striped or painted stones are found. It is of course not known to what use these were put, unless, as is most probable, some magical property was attributed to them. In the Grottes de Grimaldi in Italy, a small smooth stone had been placed in the mouth of each of the bodies found there. These skeletons belonged to the type of the negroid race of the Cromagnon period; and in the graves of a neolithic cemetery found at Monte Carlo, these stones, placed in the mouth, were small and round and either white or black in colour.

Whether these stones had been placed in the mouth of the deceased for a magical purpose, we know not. The practise might adumbrate some such superstitious belief as that of the Romans and Greeks during their early period. These classic peoples placed a
small coin (an obolus of the value of three halfpence) in the mouth of the dead body. This was to pay the fare of Charon, who ferried them across the river Styx to the Elysian fields. Prehistoric man may perhaps have had some such object in placing the stone in the mouth of his dead relative or slave.

In Australia and Melanesia, the witch doctor often told the patient that his illness was due to a stone situated at the sore part. He pretended to suck it out, and exhibited it to the afflicted one—a stone which he had secreted in his mouth as the one which had been the cause of the illness.

That our predecessors in the practice of medicine had a complete confidence in the value of stones of various kinds as absolutely reliable therapeutic agents is well known. We have only to glance at the prescriptions of many of the older writers to see that their materia medica included practically all the known precious stones. These were believed to have been dewdrops which had been condensed and hardened by the sun's rays, and were consequently endowed with special properties in the cure of disease.

Lapis lazuli in doses of 30 to 60 grains of the powder, produced emesis and evacuation and was good in epilepsy and fever. Margarites or pearles were employed but seldom alone. The coarse, rough or very small ones were used. "A confection of Perles of Doctor Nicholas called Diamargaritum calidum was made up of twenty-eight ingredients." Amongst these were "little balles of roses, little balles of violets, one drachm of perles, the bone of the heart of the red deere. It comforteth the lively partes of those whiche be pensiful and sad, sighing or be in a consumption."
To another Confection of Perles, we find ivory, gold, sapphire, jacinth and emerald are added. Jasper was the lapis sanguinaria and was employed to staunch the flow of blood from wounds. Michael Psellus (1020-1105) describes the healing properties of precious stones. He recommends amethyst in the treatment of mania induced by over-indulgence in alcohol; amber for fevers and diseases of the genito-urinary tract; jasper for epilepsy and beryl for jaundice.

At a much later date we find the Electuarium de Gemmis prescribed by many writers. This consisted in a mixture of pearls, coral, emerald, jacinth, cornelian together with many other ingredients. It was reputed to cure diseases of the brain, heart, stomach and matrix. Nicholas Praepositus (1140) says that kings and noblemen have used it for their great comfort: "It causeth them to be bolde and spyrte the body to smel wel and engendreth good colour."

Restricting our observations however to single stones, we see that our ancestors made use of a stone which was found in the nest of the eagle. It was called by the Greeks αἰτίτις or the eagle-stone and they believed that the eagle could not lay her eggs without this stone being present in the nest. This stone was really only a lump of argillaceous oxide of iron, often hollow in the centre. Sir Thomas Browne in his "Vulgar Errors" (11.5) says "Whether the aetitus or eagle stone hath that eminent property to promote delivery or restrain abortion, respectively applied to lower or upward parts of the body, we shall not discourage common practice by our question."

This stone was employed for a variety of purposes, but perhaps its most successful application was when it was bound to the thigh.
of a parturient woman inorder to facilitate the birth. It might indeed accomplish this, the mere idea of its efficacy lending greater power to the patient's efforts. To ward off the attacks of epilepsy the stone was hung round the neck.

The Bezoar Stone has had from the earliest times a great reputation. Large sums of money were paid for what were considered veritable stones, as the potency of these was implicitly believed in. In reality they were calculi found in the bladder or intestines of any herbivorous animal, as the wild goat, ox, antelope, llama. The "Oriental bezoar Stone" often consisted of a ball of felted hair or vegetable fibre consolidated to a solid mass. This lapis occidentalis was obtained from the stag or Wild Goat of Persia; The lapis Simiae came from a Brazilian monkey and was most expensive on account of its greater potency; the lapis porcinus was very bitter, on account of its being found in the gall-bladder.

Primerose in 1651 says that this stone was supposed to have:
"an admirable vertue of corroborating the heart and of being a very strong Cordiall to which they fly as to some sacred anchor. But they erre in three particulars;-
(1). They attribute too much to that stone.
(2). They are ignorant of the quality of it.
(3). They have not mete out a due quantity of it.

Some derive the name from Paser which amongst the East Indians signifies a kinde of Goat in which the stone is found. Some would have it called Belzaar which in the Moores language signifies the Lord of Poyson or as we call Antidote. Averrhoes and Avicenna call it an antidote. Amongst us it is a stone which comes from out of India. The Arabians do highly commend it against poysons, the plague,
jaundice and all obstructions of the body and bowels. Avenzoar says he saved one that had taken deadly poison with three grains of Bezaar, but if we read his own book, we find that it is not our stone but the teare of an Hart of which he talks so much. The Hart as Flinie also testifies by the breath of his Nostrils draws serpents out of their holes and eats them; immediately he is taken with a grievous thirst, for the quenching thereof he runs to some standing poole, in which he plunges himself up to the neck, but through nature's instinct hee drinks not; for if he should, he would fall down dead presently. Then a certain humour distills to his eyes, which by degrees thickens unites and compacts together and grows to the bignesse of an acorne, which afterwards being come out of the water the Hart shakes off, and is fought for by men which some call the Bezaar Stone. But this stone of ours is not the teare of an Hart which is too rare if ever there was such a stone, but this stone which wee use is very common. It is of different colours, but the yellow is the best. Rhazes writes that it is a soft stone, of a yellow colour without any tast and he used it with success against Wolves-bane. Garcias, Physician to the Viceroy of India, will have it to be dark green and saith that all must be brought to the King of the Country and that they cannot without much difficulty bee had from thence, and now seeing they are so common much doubt is to be made touching their goodnesse.

One sort of this stone is brought out of the East from Persia which is found in a certaine kindes of goat; the other brought from the West from America which is found in divers creatures. Bezaar is not to be relied upon, for some authors write that they provoke
sweat and sometimes vomit, which thing if a man make triall in ours, he shall not finde to be alwayes true. I have very often given it to my patients but I never perceived any of the effects.

Vallesius, a most learned man, chief physician to Philip the second King of Spaine thinks that there is not a true Bezaar in Spaine, and if so it is lesse likely that there should be a true one sold among us, and if true then its very probable ours are all sophisticate. He thinks there would not be sufficient animals to provide all the stones sold in this and in other sountries. There are no sure and infallible tokens whereby the true may be distinguished from the false. Stones are found very like the Bezaar in divers creatures, as horses, swine, which are of no vertue at all.

Some would have it that this stone is temperate, others cold, but none hot. It is therefore more probable that it works by an occult property to wit, in corroborating the heart and fortifying it against the malignity of poysen and unless this be present it doth no good. The dose may be three graines as given by Avenzoar but Garcias gave thirty. Now because the right Bezaar is seldome found, and that which wee have is sold at too deare a rate, my counsell is that it be prescribed onely for rich men and that a large dose be given."

One writer however wisely asks that if the stone cut out of the bladder of a goat be used, would it not be better to use that cut out of the bladder of a man as being a more noble creature, fed with meat and his spirits warmed with wine, than that of a goat starving on the mountains.

This idea seems actually to have been pit into practice,
because we find it stated that "A man's stone drunk fasting is most powerful of any to break the stone and expel it with the urine. It had also the power of acting as a sudorific or ass a diuretic. ("The Poor Man's Physician." 1716)

Dr. Frederick Slare wrote two books on Bezoar Stones. He says that the stones come from Madras, Borneo, Batavia, etc. They are usually half a drachm in weight and are laminated in structure, and cost at that time (1719) £3.10/ per ounce or almost their weight in gold. He refers to the many diseases for which it is reputed to be a cure. Petrus de Albano speaks of it as if he were delirious. "a veneno, morte, gravi morbo liberat, et quisque lapidem gestarit ab omni morbo Lethali securus esto."

Slare records cases where the Bezoar stone had been used without benefit, as in Smallpox or Maligant Epidemic Fever—indeed in one family two children died from the latter disease in spite of the Bezoar stone having been used. He got the charge of other two children suffering from malignant fever, and both recovered. They were treated with the "highest Alexipharmak or Cordial Medicine of Serpentary, root, treacle and volatile salts. He did not dare to use Bezoar stone in severe cases; he used it however in mild cases but it did not seem to have any effect.

Gascoin's Powder or the Powder of the Black Tops of Crabs' Claws. This consists of Oriental Bezoar, White Amber, Hartshorn in powder, Pearls, Crabs' Eyes, Red Coral and the Black Tops of Crabs' Claws. He does not believe that it has any curative power.

He thinks that the large number of Bezoar stones are imported because of their high price, and that they are not true stone
but fictitious. They recall the story of the poor fellow who was cut for the stone by a mountebank, who produced the stone from his own palm and got £20, though two doctors had affirmed that the patient had no stone but only ulcers at the neck of his bladder.

Concretions found in the alimentary tracts of birds and other animals also found a place in ancient materia medica. A work published in 1582 by Fioravanti gives a prescription for breaking the stone in the bladder:

"You must give the powdered stone which is founde in the bellies of ryng doves. These birds are so subject to this stone, that if kept in cages they soon dye, because their meate can not passe through them and that is because the poore birde can not goe and helpe hym selfe with that medicine which Nature hath taught hym. For those al likeellie flie unto the sea side and there finde a certaine kinde of small stone very harde, the whiche stone has vertue to dissolve the stone in the belie of the birde.

Truely the vertues of stones are very greate unto those that knowe them. I saw once in Rome two stones of inestimable vertue. On one beyng laied upon the flesh of a man or woman, it causeth them to pisse out greate aboundance so that it were to bee wondered at. The other was of such vertue that beyng laied upon a wound, presently the bloud stenchd so that there fell not doune one droppe."

In the Highlands of Scotland belief in the miraculous properties of certain stones to cure disease was common until a very recent period, and indeed, it is very likely that it still persists in certain localities. One of these magic cure stones was called Clach Leigis or "the little subduer of pain". This property it exerted when placed
on the painful part. When not in use, it was preserved rolled up in a rich piece of cloth and kept in the best chest in the dwelling. In many cases the stone was immersed in water for some time, and the patient then drank the water which had absorbed the magical virtues from the stone.

Snake Stones. It was a common belief amongst the natives of northern nations that on Midsummer's Eve all the snakes had an assembly. They were in great excitement and hissing and writhing they exuded great quantities of saliva which on drying became solidified into what were called "Snake Stones". These were shot up into the air by the snakes, and in order to preserve their virtue they had to be caught in a cloak before they touched the ground. The lucky possessor had then to fly on horseback as fast as he could as he was pursued by the enraged snakes. He was safe from further pursuit as soon as he had crossed a river. Pliny had seen one of these stones and describes it as of the size of an ordinary apple and with a covering similar to that of a sea-urchin. (Pliny. Nat. Hist. xxix. 50-54)

In Scotland they were commonly used for the cure of bewitched persons or animals, being dipped into water which was then drunk. The possessor of one of these stones was said to enjoy a peculiar prosperity. They were also employed to cure children of Whooping-cough and other diseases. One writer states that he had seen over fifty of these stones in the Highlands of Scotland and in Wales. (Philos. Trans. Vol. xxviii. No. 9.) Doubtless many of these were really glass beads which had been taken from prehistoric tumuli. These are often found along with human remains and are of vary-
ing colours, often very beautiful.

In the folk-lore of many different races it is stated that snakes had the power of enabling mortals to understand the language of birds and other animals. This gift was conveyed some times through the agency of the precious stone which was lodged in the head of every snake. The possessor of such a stone had many benefits, one of these was the property of making himself invisible.
REFERENCES.

1. Conservandae Bonae Valetudinis Praecepta longe Saluberrima Regi Angliae quondam a Doctoribus Scholae Salernitanae.
   Edinburgh. Printed by Andro Hart. 1613.

2. Prepositus His Practice, A worke very necessary to be used for the better Preservation of the Health of Man. Translated out of Latin into English by L'T M. London 1588.


(2) Bulleins Bulwarke of Defece againste all Sickness, Sornes and Woundes that dooe daily assault Mankinde. London. 1560.

10. John Hall (primus) A Historiall Expostulation against the beastlye Abusers, etc. London 1565.

II. John Hall (secundus) Select Observations on English Bodies and Cures both Empiricall and Historicall now put into English for common Benefit by James Cooke. London 1567.


II. Peter Droet. A new Counsell against the Pestilence. London. 1580.


II. Walter Cary. A Briefe Treatise called Caries Farewell to Physick Imprinted at London by Henrie Denham at the Signe of the Starre. 1583.

II. William Clowes. A Profitable and Necessarie Booke of Observation for all those that are burned with the Flame of Gun-powder. 1596.

II. Peter Lowe. The Whole Course of Chirurgerie. 1597.


II. Thomas Moffett. Healths Improvement, corrected and enlarged by Christopher Bennet. London 1665.

II. Patrik Anderson. The Colde Spring of Kinghorne, Craig. 1618.


24. The Oyly-Well at Libberton. Ibid. 1664.


29. Sir Kenelm Digby. A late Discourse made in a Solemne Assembly of Nobles and Learned Men at Montpelier in France by Sir Kenelm Digby, etc. Touching the Cure of Wounds by the Powder of Sympathy. Rendered out of French into English by R. White. 1658.


32. Nicolas Culpepper.
   (1) Culpepper's Character by Matthew Mackaile. 1664.
   (3) Medicaments for the Poor. Edinburgh. Printed by a Society of Stationers, 1664.
   (4) Health for the Rich and Poor by Dyet without Physick. Ibid. 1665.

Enchiridion Medicum. London 1612.


38. William Sermon. A Friend to the Sick or the honest English Mans’ Preservative. London. 1673.


43. Alexander Russell. An Essay of Medicine, Detecting the unaccountable Arrogance of Quacks. Published by Authority of the Royal College of Physicians of Edinburgh. 1712.


tions to Prevent being Cheated and Destroy'd by the Prevailing Practice. London 1703.

