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JOHN LOCKE PHYSICIAN AND PHILOSOPHER

A Medical Biography



KENNETH DEWHURST

SHEPHERD COLL COLL/DEW

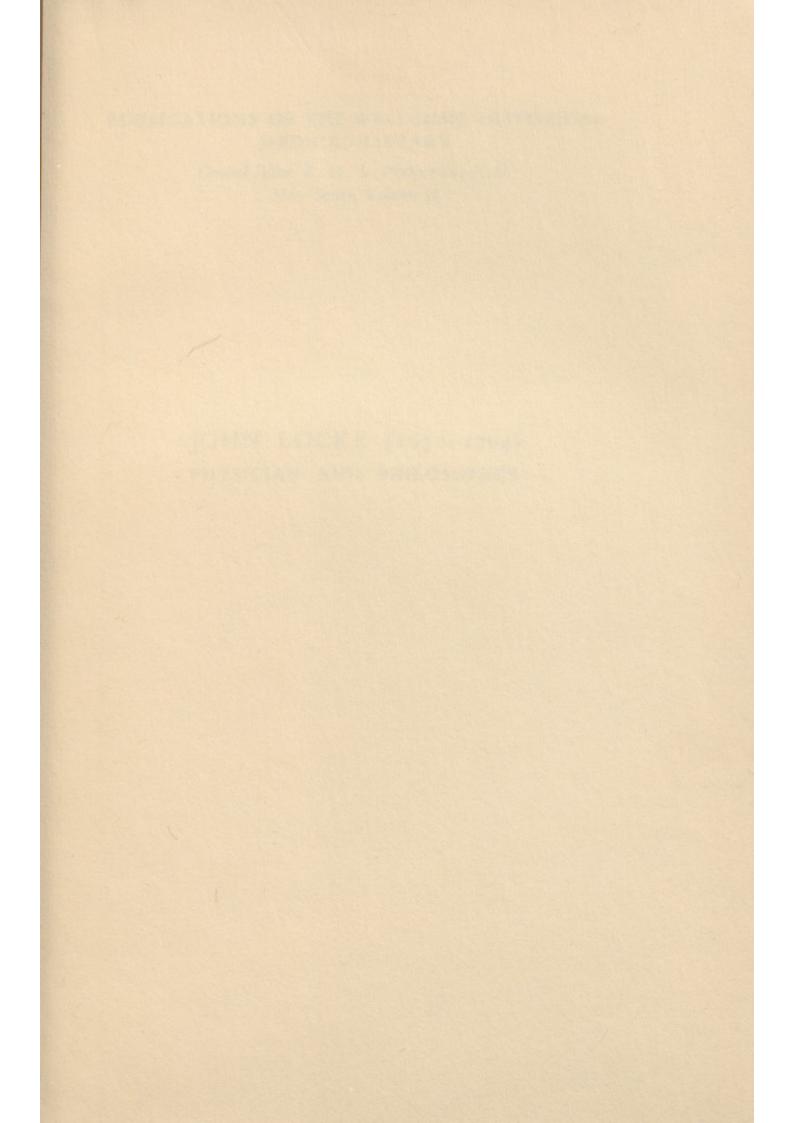
JOHN LOCKE A Medical Biography

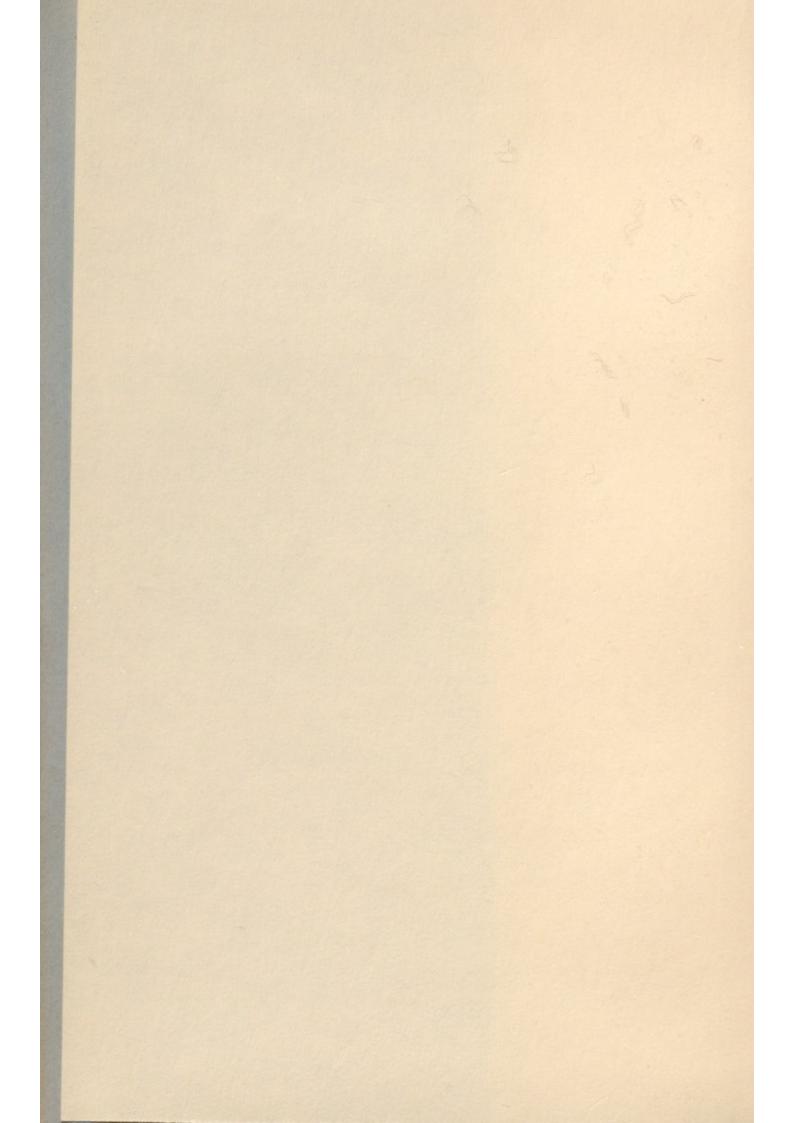
When he went up to Christ Church, Oxford, from Westminster School in the autumn of 1652, John Locke began the study of medicine which he continued during his fifteen years' residence at Oxford and with varying interest for the rest of his life. Locke's restless, inquiring mind illuminated many other subjects, but the extent of his medical and scientific interests, which have been completely disregarded hitherto, can be judged from the sixteen medical notebooks, three thousand letters, one thousand miscellaneous papers and ten volumes of his journal which form part of the Lovelace Collection of Locke's papers acquired by the Bodleian Library in 1948. From this mass of unpublished material, Dr. Kenneth Dewhurst has written a medical biography of Locke which incorporates an edition of the medical notes in the journals he kept between 1675 and 1698.

This book is primarily of interest to the medical historian as Locke's journals reveal a more dynamic aspect of seventeenth-century medicine than is to be found in current textbooks. Here details of preparing medicines, methods of treatment, notes from books and journals, mingle with Locke's own clinical observations and the opinions of the leading doctors of

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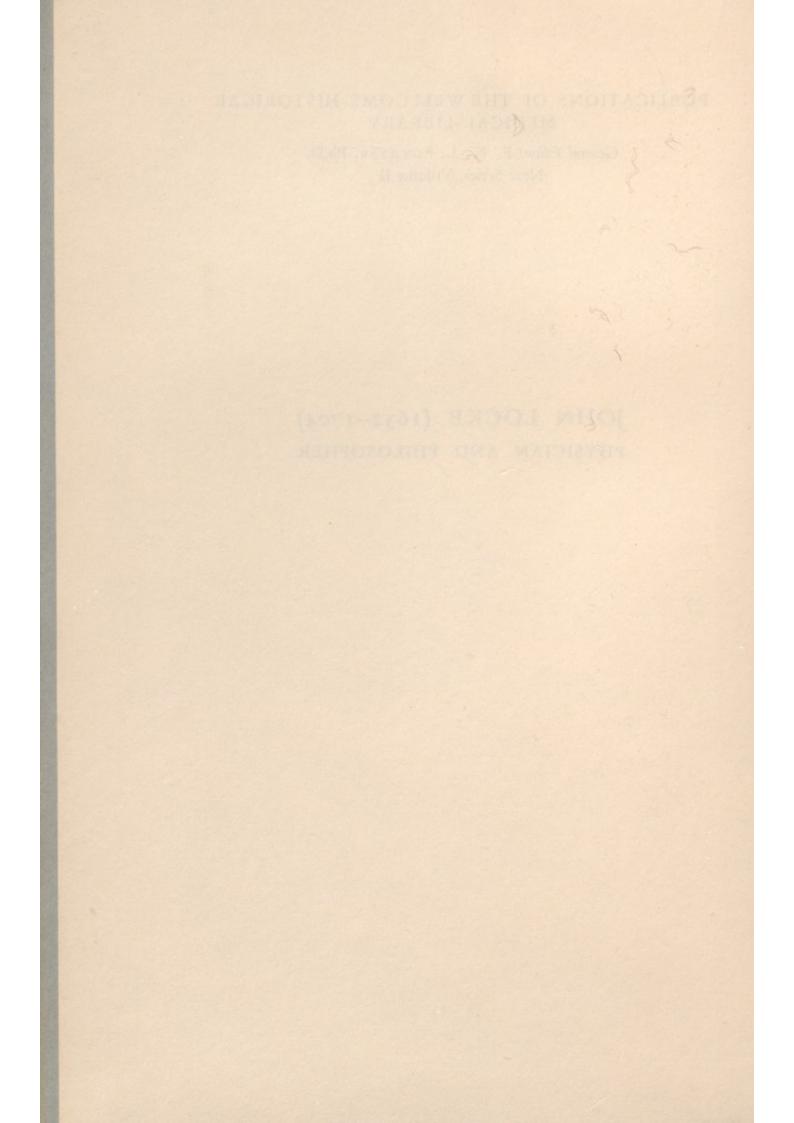


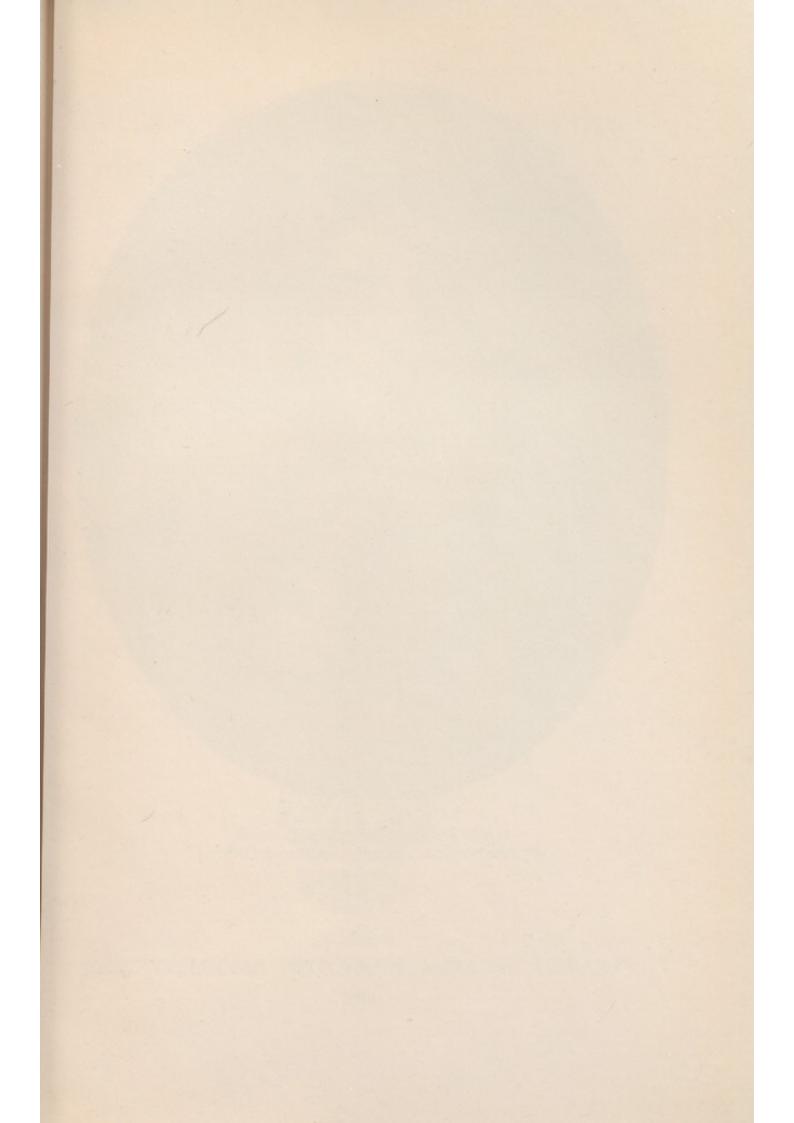


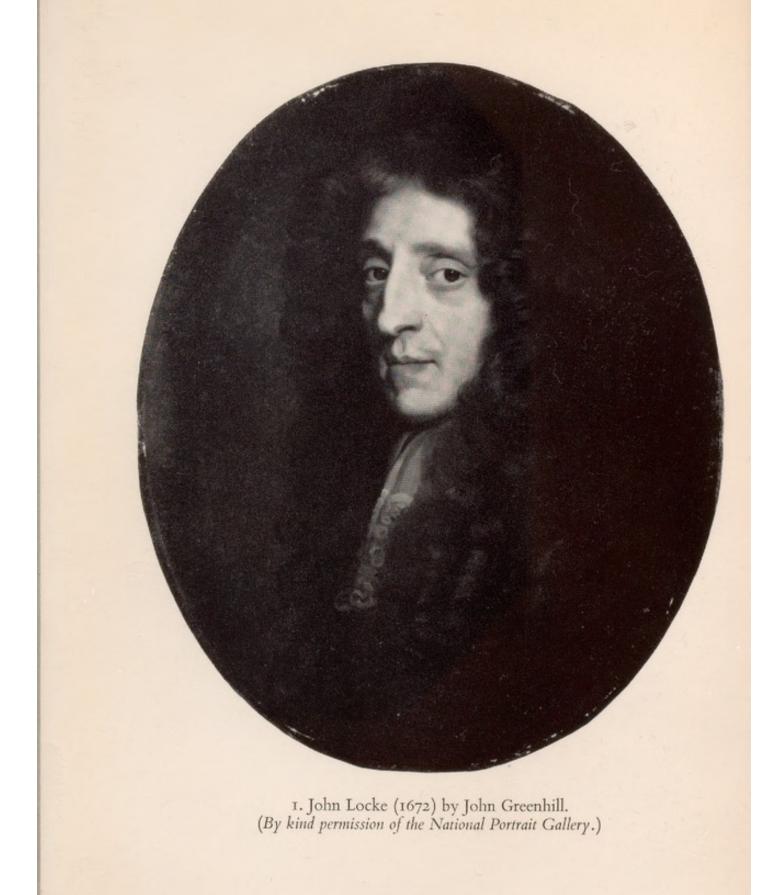
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JOHN LOCKE (1632-1704) PHYSICIAN AND PHILOSOPHER







JOHN LOCKE (1632–1704) PHYSICIAN AND PHILOSOPHER

A Medical Biography

WITH AN EDITION OF THE MEDICAL NOTES IN HIS JOURNALS

by

KENNETH DEWHURST Wellcome Research Fellow in Medicine, Corpus Christi College, Oxford



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Introduction

WHEN John Locke died in 1704 his personal papers went to his cousin, Peter King, a lawyer, who later became Lord Chancellor. This large store of manuscripts, notebooks, and journals remained unpublished until 1829 when the seventh Lord King included a few extracts from his journals in his Life and Letters of John Locke.1 This was not a good biography: excerpts from Locke's writings were selected at random, inaccurately transcribed, and strung together with patrician abandon. It was replaced by H. R. Fox Bourne's² monumental work. Although he did not have access to the many papers in Lord King's possession, Fox Bourne showed great enterprise, in carefully examining the many other sources of new material, and he presented a reliable, scholarly, and balanced account of Locke's life: even his medical writings were revealed, and an attempt was made to assess his worth as a physician. This biography aroused the interest of two medical historians: Dr. E. T. Withington³ and Sir William Osler.⁴

Withington presented the clinical histories of patients treated whilst Locke was physician to Lord Ashley. Having described these case reports as "most satisfactory", he then compared Locke's strict adherence to Hippocratic principles with Sydenham's excellent, though more general, descriptions of diseases, which have "detracted very considerably from the knowledge of his actual practice". Osler published part of Locke's notes on Lord Ashley's illness (a chronic hydatid abscess of the liver); part of his notes on the Countess of Northumberland's case (trigeminal neuralgia), together with shorter extracts touching upon his inquiries into preventive medicine, meteorology, and the essays written in collaboration with Sydenham. Both Withington and Osler concluded that Locke was an experienced and skilful physician of sound judgement and advanced views. They also hinted that he devoted much more time and study to his chosen profession than was revealed in the manuscripts which were then available. Their assumptions were found to be true in 1948, when the Bodleian

¹ Lord King, The Life and Letters of John Locke (1829), London.

² H. R. Fox Bourne, The Life of John Locke (1876), 2 vols., London. ³ E. T. Withington, "John Locke as a Medical Practitioner", Medical Magazine (1898), 7, 47-50, 375-87, 573-9; Janus (1899), 4, 393-8, 457-63, 527-32, 579-87. ⁴ Sir William Osler, An Alabama Student and Other Biographical Essays (1926), Oxford

⁽reprinted from a special issue of the Lancet, ii, 10, 20 October, 1900, entitled "John Locke as a Physician").

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Library¹ purchased from the Earl of Lovelace (a descendant of the first Lord King), a large collection of Locke's unpublished papers. Amongst the three thousand letters, one thousand miscellaneous papers, sixteen medical commonplace books, and ten volumes of Locke's journals there is much new material of medical interest.

This book presents a complete edition of the medical notes in Locke's journals (1675-98) together with a biographical survey of his other medical writings which have, hitherto, received little attention. The journals provide a unique source of new material for the specialist historian, as Locke knew most of the famous physicians and scientists in England, France, and Holland. And although this study is primarily intended for medical historians, I trust that the biographical outline of Dr. Locke will stimulate further research into the relation between his medical work and his philosophy. For too long philosophers and literary men have focused all their attention on Locke's philosophy, as outlined in his celebrated Essay, whilst ignoring his long experience of medicine and science which provided a constant focus for the growth of his empiricism.

Locke began to study medicine at the beginning of his career, and continued, with varying interest, for the rest of his life: it is an ironical fact that these studies received a great stimulus from the endless disputations of the Oxford philosophers whom he found to be boring, pretentious, and futile. These stagnant pools of Scholasticism were stirred by two seventeenth-century streams of thought which came together in the Oxford of Locke's youth: the rational theorizing of Descartes merged with the oftentimes crude scientific empiricism of Bacon, Boyle, and Sydenham. The other purpose of this study is to trace the influence on Locke of the great ferment of ideas cast up by the empirical observations of these giants of the scientific renaissance.

I began in 1954 with a series of papers on various aspects of Locke's medical work,²⁻¹⁸ and although these essays are somewhat repetitive

¹ With the help of the Clarendon Press.

² "Truss designed by Locke", Brit. Med. J. (1954), ii, 44.
³ "Locke's Midwifery Notes", Lancet (1954), ii, 490-1.
⁴ "Sydenham's Letters to John Locke", Practitioner (1955), 175, 314-20.

"The Genesis of State Medicine in Ireland", Irish J. Med. Sci. (1956), 363, 365-84.

"A Symposium on Trigeminal Neuralgia with Contributions by Locke, Sydenham and other Eminent 17th Century Physicians", J. Hist. Med. (1957), 12, 21-36. 7 "Locke and Sydenham on the Teaching of Anatomy", Med. Hist. (1958), 2, 1-12. 8 "An Oxford Medical Student's Notebook (1652-9)", Oxf. Med. Sch. Gaz. (1959),

II, 141-5.

"An Essay on Coughs by Locke and Sydenham", Bull. Hist. Med. (1959), 33, 366-74. 10 "Sydenham's Original Treatise on Smallpox with a Preface and Dedication to the

Earl of Shaftesbury by John Locke", Med. Hist. (1959), 3, 278-302. """The Correspondence between John Locke and Sir Hans Sloane", Irish J. Med. Sci. (1960), 413, 201-12.

12 "Locke's Essay on Respiration", Bull. Hist. Med. (1960), 34, 257-73.

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and limited by the demands of journal space, they do serve to remove some of the froth from the heavy medical brew of his unpublished work. Four¹ major publications based on the Lovelace Collection have also appeared: Lough's edition of Locke's Travels in France,2 von Leyden's Essay on the Law of Nature,3 Laslett's Two Treatises of Government,4 and Cranston's biography.5 The first three works do not primarily deal with Locke's medical or scientific interests, and Professor Lough makes this clear in his introduction. "The aim of this book", he writes,6 "is to offer an edition of the journals which contains with the above exceptions (medicine, astronomy, meteorology, religion, etc.) everything which Locke wrote down in its pages about what he did, observed or heard in conversation during three and a half years which he spent in France." It is unfortunate that Lough had to exclude Locke's medical notes, which he describes as "numerous enough to form quite a considerable volume in themselves", although he indicated the more important missions in his footnotes.

Dr. von Leyden introduced his book with a brief, though excellent, biography of Locke based on the new material available in the Lovelace Collection. Of particular interest is his reference to Locke's early medical notebooks (1652 and 1659) which show that he began the study of medicine right at the beginning of his university career. Von Leyden was the first to decipher Locke's system of shorthand; and all students of the Lovelace Collection are also indebted to him for his detailed catalogue, which has recently been abridged and edited by Philip Long.7 The text of Mr. Laslett's Two Treatises is superior to anything in print, and he cogently argues that Locke

13 "A Seventeenth Century Symposium on Manic-Depressive Psychosis", Brit. J. Med. Psychol. (1962), 35, 113.

14 "A Review of John Locke's Research in Social and Preventive Medicine", Bull. Hist. Med. (1962), 36, 317-40.

15 "Some Letters of Dr. Charles Goodall (1642-1712) to Locke, Sloane and Sir Thomas Millington", J. Hist. Med. (1962), 17, 487-508. 18 "Post-Mortem Examination on a Case of Rickets Performed by John Locke",

Brit. Med. J. (1962), ii, 1466.

¹⁷ "Dr. Robert Pitt's Letters to John Locke", St. Bart's Hosp. J. (1962), 11, 258-67.
¹⁸ "Locke's Contribution to Boyle's Researches on the Air and on Human Blood", Notes and Records of the Royal Society of London (1962), 17, 198-206.

¹ Also of interest are: Gabriel Bonno, Les Relations Intellectuelles de Locke avec la France (1955), Los Angeles; and H. O. Christophersen, A Bibliographical Introduction to the Study of John Locke (1930), Oslo.

² Locke's Travels in France 1675-9 (1953), ed. John Lough, Cambridge.

⁸ John Locke's Essay on the Law of Nature (1954), ed. W. von Leyden, Oxford. ⁴ John Locke: Two Treatises of Government (1960), ed. Peter Laslett, Cambridge.

⁵ Maurice Cranston, John Locke, A Biography (1957), London.

6 John Lough, op. cit., p. xxiii.

7 A Summary Catalogue of the Lovelace Collection of the Papers of John Locke in the Bodleian Library, ed. P. Long, Oxford Bibliographical Society Publications (1956), Oxford, New Series, vol. VIII.

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wrote most of this treatise on political theory between 1679 and 1680, whilst still closely associated with Shaftesbury; but his biographical introduction adds nothing to our knowledge of his medical work.

Mr. Cranston faced an immensely difficult task in writing a new life of Locke with such a vast amount of material testifying to the depth and catholicity of his subject's interests. His canvas is necessarily crowded with portraits of Locke as economist, theologian, political theorist, educationalist, physician, scientist, philosopher, and man of affairs. He rightly chose to paint him most vividly in his most renowned roles. Unfortunately, his wispily authentic charcoal sketch of Dr. Locke has been overlooked by one of his reviewers. "Locke's medical discoveries were negligible," writes1 one critic, "and his medicinal remedies always remained eccentric-later in life he recommended the leaves of kidney beans as a specific against bed bugs and counselled the wearing of thin leaking shoes by young children-he established a reputation as a physician which led him to the heart of the political world." Such a misleading summary shows the need for closing this biographical gap: the text of Locke's journals, do in fact, reveal a more dynamic aspect of seventeenth-century medicine than is to be found in the current textbooks. Here details of preparing medicines, methods of treatment, notes from books and journals, mingle with Locke's own clinical observations, and the opinions of the leading medical men of England, France, and Holland. No comparable record exists of the thoughts, reading, and clinical observations of a physician whose friends included Boyle, Sydenham, Lower, Willis, and the other leading medical men at home and abroad. The scanty notes of a country practitioner, John Symcotts² (?1592-1662) who once treated Cromwell, cannot really be compared with the range and rich variety of Locke's interests. More comparable is the diary of the Reverend John Ward³ (1629-81), who was a Master of Arts at Christ Church when Locke came up as an undergraduate. He recorded the activities of the Oxford physicians, and on moving to London, attended dissections at the Barber Surgeon's Hall. Ward could not make up his mind whether to apply for a Bishop's licence to practise medicine, or graduate from a foreign university, until this dilemma was solved in 1662 when he accepted the living of Stratford-on-Avon, and spent the rest of his life there. But these are not the notes of an obscure country practitioner, nor the random jottings of a medical student turned priest: they are the journals

¹ The Times Literary Supplement, 12 July, 1957. ² A Seventeenth-century Doctor and his Patients. John Symcotts (?1592-1662), ed. F. N. L. Poynter and W. J. Bishop. Bedfordshire Hist. Record Soc. (1951), vol. xxx1, Streatley, Bedfordshire, xxxiv+136 pp. 3"John Ward and his Diary", in Sir D'Arcy Power, Selected Writings (1877-1930),

Clarendon Press (1931).

INTRODUCTION

of John Locke whose medical training helped him to begin the whole empirical movement of modern philosophy.

In transcribing the text I have constantly striven to allow clarity of interpretation to supersede the demands of pedantry. It has not been an easy task. Locke wrote in English, French, Latin, and shorthand as the nature and delicacy of his subject required: he also used frequent abbreviations, alchemical and pharmaceutical symbols. His handwriting, though small, is neat and legible. He uses many obvious abbreviations such as yu, wch, ye, agt; and occasionally, less well known ones such as phia (philosophia), nāāl (natural), and māāl (material). He used them to save time, and herein they have been expanded. In all other respects the English text is unaltered. Dr. von Leyden was the first to investigate the nature of Locke's shorthand which he used for secrecy and speed. It is a modification of Jeremiah Rich's method which was deciphered by comparison with identical longhand passages in the notebooks. Locke adopted Rich's system of consonants, his method of indicating vowels, and some of his contractions: the rest was his own system, interspersed with the occasional word in longhand. The shorthand, French, and Latin passages have all been translated into English, and a marginal note in round brackets opposite each translation indicates the language of the original text.

Locke's prescriptions have been simplified by substituting the written word for the symbols of ounce, drachm, scruple, etc. Whenever possible, the English name of the many herbs mentioned has been substituted for the Latin, for which the following books have been useful guides: The Works of Thomas Sydenham (1848), 4th edition, ed. R. G. Latham; Chronicles of Pharmacy (1910), A. C. Wootton; London Pharmacopoeia (1678) which is bound behind Locke's medical notebooks (B.L., MS. Locke, f. 23) of 1681; Anecdota Sydenhamiana (1845), ed. W. A. Greenhill, and The English Herbal of Physical Plants (1694), compiled by John Pechey. Finally, the current name of a chemical has been substituted for the alchemical symbol found in the text, and square brackets have been placed around the word replacing the symbol. Keys to these alchemical symbols are to be found in the works of Holmyard¹ and Reid.² Square brackets are also used to indicate any additions to the text such as those which give Locke's whereabouts, whenever this is not clear from his own entries. The following abbreviations have been used in the footnotes: B.L. (Bodleian Library), B.M. (British Museum), and P.R.O. (Public Record Office).

A number of people have helped in the preparation of this book,

¹ E. J. Holmyard, Alchemy (1957), London, pp. 149-50.

² John Reid, Prelude to Chemistry (1930), London, p. 90.

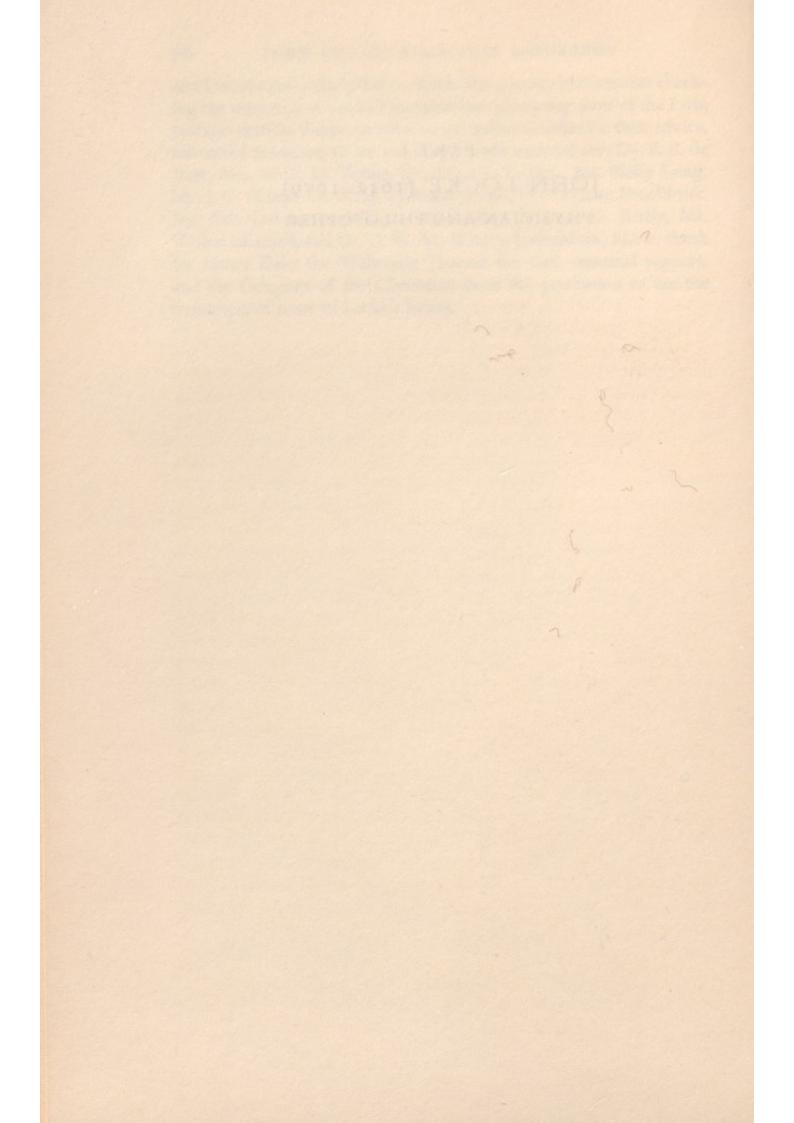
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and I would particularly like to thank Mr. Alastair McCann for checking the transcript of Locke's journals, and translating most of the Latin passages therein. Others to whom I am indebted either for their advice, secretarial assistance, or the use of copyright material are: Dr. E. S. de Beer, Mrs. D. E. M. Birtles, Dr. W. von Leyden, Mr. Philip Long, Mr. I. G. Philips, Dr. A. H. T. Robb-Smith, Dr. William Brockbank, Mr. Dan Davin, Sir William MacArthur, Mrs. A. D. Kirby, Mr. Walter Mitchell, and Dr. C. W. M. Whitty. I would also like to thank Sir Henry Dale, the Wellcome Trustees for their financial support, and the Delegates of the Clarendon Press for permission to use the transcripts of some of Locke's letters.

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PART I

JOHN LOCKE (1632–1679) PHYSICIAN AND PHILOSOPHER



CHAPTER I

An Oxford Virtuoso (1652–1667)

WHEN John Locke came up to Christ Church, Oxford, from Westminster School in the autumn of 1652, the University was under Puritan sway with Cromwell as Chancellor. It was an austere, hardworking Oxford which took in this twenty-year-old undergraduate son of a Somersetshire lawyer, and presented him with a tantalizing contrast between the academic orthodoxy of the schools and the unofficial new philosophy of the "Invisible College", whose members later formed the Royal Society. But the Oxford degree course allowed no choice between the old and the new, so that Locke again found himself reading the subjects of his Westminster days: rhetoric, grammar, Greek, Latin, logic, and moral philosophy for which, as in Chaucer's time, he would need:

> Twenty bookes, clothed in black and reed Of Aristotil and his philosophie.

Three of Locke's old schoolfellows had already settled in Oxford where they were beginning to take a practical interest in experimental philosophy: Christopher Wren¹ had illustrated Dr. Charles Scarburgh's anatomical lectures with pasteboard models demonstrating muscular action; Robert Hooke² was assisting Thomas Willis with his anatomical dissections, and Locke's particular friend, Richard Lower, soon to take Hooke's place, was then well advanced with his medical studies. It was Lower who first fostered Locke's interest in medicine, which linked them both, whilst still undergraduates, to the group of experimental philosophers then meeting at the Wadham rooms of John Wilkins. The founder-members of this "experimental philosophical clubbe" were drawn from an alliance between the higher clergy, the landed gentry, and the physicians who formed more than half their number.³ William Petty, who had played a leading part in their early activities,

¹ Sir John Summerson, "Sir Christopher Wren (1632–1723)", Notes and Records of the Royal Society of London (1960), 15, 99–105.

² Margaret Espinasse, Robert Hooke (1956), London, p. 25.

³ T. P. R. Laslett, "The Foundation of the Royal Society and the Medical Profession in England", Brit. Med. J. (1960), ii, 165-9.

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had now joined Cromwell's Irish army as Physician-General, leaving Thomas Goddard, Warden of Merton, Ralph Bathurst (later President of Trinity), and Thomas Willis, then practising from his home at Beam Hall opposite Merton College, as the foremost medical representatives. It was the work of these physicians (and their better-known assistants Hooke and Lower) which interested Locke more than the exponents of the mechanical sciences (such as Wilkins and Wallis), until Robert Boyle turned his interest to medical chemistry.

The scientific revolt of the Renaissance which had burst the medieval bonds of Scholastic philosophy and Aristotelian physics, was primarily confined to the physical sciences. But once men ceased to be slaves to an intellectual system they began to look at other disciplines in a new way; and Galileo's mathematics, which had revolutionized the dynamics of motion, was then being applied by his disciples to accelerate the progress of the lagging biological sciences. One of Galileo's pupils, Santorio Santorii, designed a small pendulum for measuring the pulse-rate, a clinical thermometer, and a large balance for estimating loss of body weight through "invisible perspiration". Harvey, though not directly influenced by Galileo, had used mathematical principles in his demonstration of the circulation,1 and Descartes, in his De Homine (written two years before Locke came to Oxford though unpublished until 1662), had likened the human body to a complicated machine differing from animal structure by possessing a "rational soul" conveniently situated in the unilateral pineal body.

Although the iatromechanists advanced some aspects of medicine (notably Borelli's demonstration of muscular action) during Locke's Oxford residence, he was more interested in the work of the opposing iatrochemical school. Paracelsus, that restless combination of mystic, genius, and charlatan, first jolted physicians out of the narrow furrow of Galenic orthodoxy; and J. B. van Helmont of Brussels then took over his mantle of unorthodoxy with such effect that chemistry came to be regarded as the key to medicine rather than its mere handmaid. In spite of the vague mysticism of his writings, van Helmont made several practical contributions to medicine and chemistry such as improving the clinical thermometer, investigating the properties of gases, and using a balance in qualitative experiments.² More important was his identification of acid digestion in the stomach, which he likened to fermentation of wine, both being regarded as essentially chemical reactions. Other Helmontians (notably Sylvius and De Graaf) began to test the juices of the body for acidity or alkalinity, so that eventually

¹ Kenneth J. Franklin, William Harvey, Englishman (1961), London.

² W. Pagel, Nature (1944), 153, 675; Brit. Med. J. (1945), i, 591; Osiris (1949), 8, 347.

they came to explain all physiological processes in terms of their acidalkali theory: it was the universality of vesting all physiological processes with chemical concepts which strongly stimulated chemist and physician alike. These twin strains, developing from chemistry and mechanics, which greatly influenced the more progressive seventeenthcentury physicians were not really as divergent as their present labels suggest. Willis and Goddard, within the limits which they allowed any theoretical considerations to govern their actual practice of medicine, leaned heavily towards iatrochemistry; but like Boyle, they adhered to mechanistic theory, whilst constantly using chemical remedies in practice.

Baconian philosophy also shaped medical thought in the Oxford of Locke's youth. This empiricism was more likely to lead to steady progress in clinical medicine than research based upon *a priori* hypotheses. Bacon urged physicians to study the natural history of phenomena by making a series of specific inquiries, so that the accumulated mass of observed facts would lead them to formulate some general explanation. Boyle aptly expressed this idea when he defined science as "the interrogation of nature".

Such then were some of the mingling influences and contradictory notions which fretted the minds of the experimental philosophers, and contributed to the great upsurge of scientific progress during Locke's Oxford residence. These trends are reflected in his medical notebooks, during the next fifteen years, when he gradually became more closely associated with those experimental scientists who later formed the Royal Society.

Locke began to keep a medical notebook¹ right at the beginning of his university career. It is really a family recipe book; although there are some extracts from his reading in medicine, together with the occasional scientific observation. At the end of the recipes he usually added either the name or initials of his informant, several being initialled "A.L.", probably Agnis Locke, his mother, which explains the following entry on the inside cover: "Farrago John Locke Agnis Locke '52". Most of the early notes are simple remedies for treating agues, sore eyes, and measles. His early friendship with Lower is reflected in several recipes such as those for a sciatica ointment, a purge for gout, "the water that grows in the bladders on elm trees" for bathing injured eyes; and their joint remedy for aiding the clotting of blood is not far removed from the fairly recent one of applying the white of an egg: "Spaune of froggs spread on a cloth and dryd and afterwards kept and

¹ B.L., MS. Locke, e.4, extracts printed in Kenneth Dewhurst's "An Oxford Medical Student's Notebook (1652-9)", Oxf. Med. Sch. Gaz. (1959), 11, 141-5.

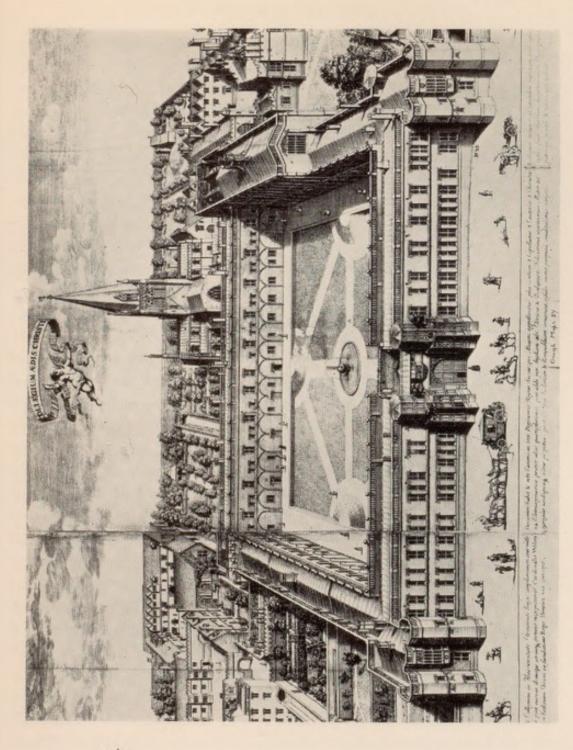
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applyd stops any blood. J.L. R.L." The next entry shows that Locke confirmed Harvey's work on the circulation of the blood, and demonstrated, in a simple animal experiment, the reflex activity of the nervous system. "Take a frog and strip it. You may see the circulation of bloud if you hold him up against the sun. Take out the hart and the frog will leap about a great while after." A long note on "Dr. Bathurst's method of curing a gent. woman of the scurvy" shows his early interest in the Oxford natural philosophers, as also do extracts from Francis Glisson's newly-published De Rachitide (1650), containing an excellent description of infantile rickets (although Whistler's account was earlier); whilst notes for making "the single perpendicular water glasse whose water ascendith with cold and descendith with heat" may well have been passed on to him by either Hooke or Wren. Locke's early reading included the works of the Hippocratic physicians collected by Aetius of Amida; Campanella the anti-Aristotelian philosopher; the works of the versatile Jerome Cardan; and the iatrochemistry of van Helmont and Sir Theodore de Mayerne.

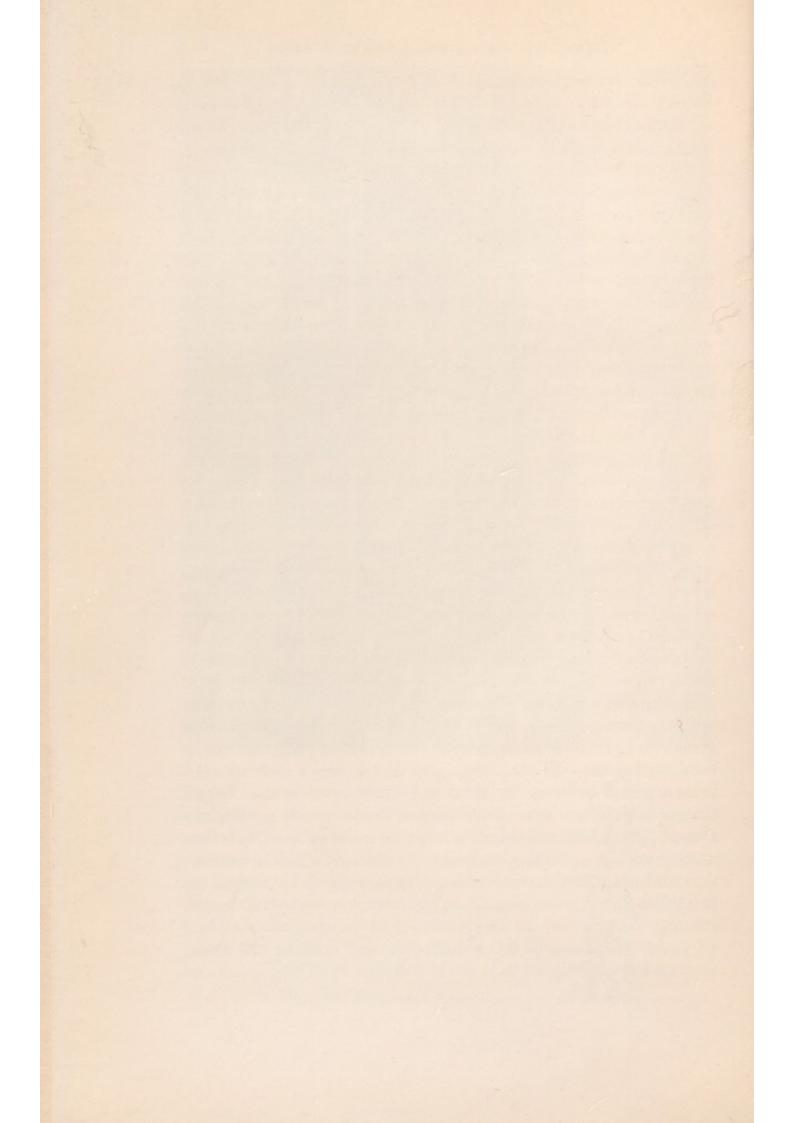
Locke graduated Bachelor of Arts on the 14 February, 1655/6, and proceeded to his Master's degree in June 1658 after more lectures and Augustinian disputations. He spent the long vacation with his father at Pensford in Somerset where he became friendly with Dr. Ayliffe Ivie, a local physician greatly interested in the preparation and use of chemical remedies. On returning to Oxford he was elected to a senior studentship at Christ Church, where his official duties were those of a classical don; but a second notebook,2 begun in 1659, shows that his medical studies were not neglected. He read anatomy from Vesalius's De Humani Corporis Fabrica (1543); ophthalmology from Walter Bayley (1529-92); and medicine from Ingrassia (1510-80), known as the Sicilian Hippocrates on account of his study of epidemic diseases, which he tried to relate to variations in the weather. Locke's growing interest in iatrochemistry is shown in many chemical remedies, particularly from Dr. Ivie, together with long notes from the collected works of Daniel Sennert (1572-1637). The latter left excellent descriptions of scarlet fever, scurvy, and dysentery; but his main contribution was the revival of Greek atomism which he applied to chemical theory. Sennert maintained that all substances, subject to generation and corruption, are made up of simple physical particles derived from each of the four Aristotelian elements. A second order of elements (suggesting molecules) could also be prepared from solutions of the two primary elements which still retained their individuality. He illustrated his theory by recovering gold from a solution of one of its compounds, and mercury

¹ B.L., MS. Locke, e.4, f. 136.

² Ibid., f. 18.



2. Christ Church, Oxford, in 1676. (By kind permission of Bodley's Librarian.)



after sublimation.¹ These notes from Sennert show that Locke knew about the atomic theory and its application to chemistry, which greatly influenced Boyle before the latter's works appeared. Locke's practice of combining recipe collecting with notes from his reading (which had a pronounced iatrochemical bias) is continued in another notebook² begun in 1660 with details of "Prince Rupert's oyntment for a Burne or Scald wherewith the Lady Chichley cured her son Mr. Norton when his face was exceedingly burnt with gunpowder." He then collected other methods of treating burns to which he occasionally added his own opinion.

These early notebooks clearly show that Locke had already developed an interest in chemistry and medicine before the summer of 1660 when he met Robert Boyle who greatly accelerated these studies. "I hope Sir," wrote Dr. Ivie to Locke,3 "you will lett slippe noe occasion whereby you may better yourselfe, and soe me, by your acquaintance with Mr. Boyle. I longe to have an accounte of my Quaeries. I made the Panacaea last week and have sent you two dragmes. ... " Boyle was then thirty-three (five years Locke's senior) and at the height of his inventive powers. Locke and Boyle were probably then only slightly acquainted as the latter had recently returned to Oxford from Beaconsfield, where he had spent nearly two years writing up his previous experiments, whilst Locke had probably been too busy working for his degree to make his acquaintance earlier. Boyle returned to his laboratory at the High Street house of Crosse, an apothecary, which now became the headquarters of the Oxford experimentalist. It was here that he had spent the first four years of his Oxford residence in busy experiment which was now bearing fruit in a spate of publications. His first book, New Experiments physico-mechanicall, touching the Spring of the air, and its effects (1660) altered the course of science, and immediately established his reputation.4 This work owed much to Torricelli's demonstration of a vacuum in his barometer experiments (1643), and later to Otto von Guericke's (1654) invention of the air pump of which Boyle read an account in Casper Schott's Mechanicum hydraulico-pneumaticum (1657). Boyle got his assistant Gratorix to construct an air pump which proved too cumbersome until modified by Hooke, who had lately joined his team. He then performed a series of experiments from which he concluded that only a part of the air, variously called the "vital quintessence" or "spirituous" part, was

¹ J. R. Partington, "The Origins of the Atomic Theory", Ann. Sci. (1939), 4, 245.

² B.L., MS. Locke, f. 9.

⁸ Ibid., c. 12, ff. 1–2, 20 May, 1660. ⁴ John F. Fulton, "The Honourable Robert Boyle (1627–92)", Notes and Records of the Royal Society of London (1960), 15, 123.

essential for both respiration and combustion. He believed that this vital quintessence was not part of the air, but a different substance incorporated into it.1 Boyle's early work with the air pump gave a great impetus to other Oxford scientists (particularly Lower and Hooke) who continued his experimental work on various aspects of the physiology of respiration. A few years later Locke also joined them, but in 1660 he probably felt inadequately grounded in the basic subjects cognate to medicine, and was then beginning to study botany.

The Oxford Botanical Garden,2 where Locke sought most of his specimens, had been founded only forty years earlier by the Earl of Danby, who engaged Jacob Bobart as curator with a salary of £,40 per annum. Bobart came from Brunswick where botany was more advanced than in England. Plants were then studied solely for their medicinal properties, and botanists were trying to rediscover those used by the physicians of antiquity. Unfortunately this led to great confusion in Locke's day. The first British textbook, The Grete Herball (1526) was a translation from the French in which all the illustrations were copied from classical sources, and hence were often gross distortions of the actual plants.3 The German writers made better progress as they went straight to nature, and described the wild plants growing around them.⁴ On the whole the works of Brunfels (1530) and Fuchs (1542) were better illustrated than those of Bock (1539), Cardus (1561), and Bauhin's Pinax (1623), although the later authors gave better descriptions. In seeking to recover a knowledge of the medicinal plants of the Greeks, most sixteenth-century physicians fell into the error of trying to identify plants growing north of the Alps with those of the Mediterranean basin. This confusion led to the revolt, a century later, against the Aristotelian tradition which ended in the replacement of book knowledge by direct observation of plants.⁵ Locke was well aware of the distortion contained in the standard botanical works, and he set about compiling his own textbooks from plants growing in the Oxford area. During the next four years he collected about 1,600 specimens which he mounted on his pupil's Latin exercises, adding the Latin and English name of each plant with the date of gathering. It may well be that his pupils collaborated by appearing before him with

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¹ Locke made the following entry in one of his notebooks: "A pint of aer ways about gr. ii. Mr. Boyle." (B.L., MS. Locke, f. 19, f. 286.) ² Sir D'Arcy Power, "The Oxford Physic Garden", Ann. Med. Hist. (1919), 2, 109-25.

³ Agnes Arber, Herbals, their Origin and Evolution (1938), 2nd edition, Cambridge, pp. 26-8.

⁴ Julius von Sachs, History of Botany (1530-1860) (1890), Oxford.

⁵ Agnes Arber, "Medieval Herbalism to Modern Botany", Science, Medicine and History, ed. E. A. Underwood (1953), Oxford, vol. 1, pp. 317-36.

a Latin poem, and a flower for this vast 'herbarium', as he calls the two vellum-bound¹ volumes containing his collection, which closely follows Bobart's catalogue published in 1658.

In the autumn Locke interrupted his botanical work to visit his sick father, then under the care of Dr. Edmund Meara, an Irish graduate of Reims, and one of Bristol's leading physicians. Meara's success probably depended more on his Irish charm than a knowledge of medicine, as some years later he revealed the extent of his conservatism in his criticism of Willis. At all events his prescriptions for "weakness and decays of the liver"² failed to check his patient's decline, and he informed Locke that he held little hope of his father's recovery.

I am still of opinion that Capt. Locke [wrote Meara], hath the regions of the liver and mesentery so much out of order that there are little hopes of repayreing them, and can scarce resolve on sending any thing to him as well because of his aversion from all things as because I allmost despayre of successe: if you please to cause Gellyes of hartshorne and Ivery to bee made for him with agrimony, liverwort, hartstongue, maiden hayre, raisins, red rose budds, anise seeds and veale or pullett it will be convenient nourishment for him; and if it can have the effect as to strengthen nature and make him capable of further meanes I shall upon notice make use of the occasion and endevour further to serve him: in the meane tyme I have sent you Sanctorius....³

A few days later Locke called his friend Dr. Ivie in consultation.

The painefull increase of my fathers weaknesse with the addition of a feavourish distemper last night hath by any persuasions made him not only willing but desireous to see you here this morning—your own eys and enquiry may possibly give you better discoverys of his disease and condition than my descriptions could. I the more earnestly begge this trouble of you, not only because I hope it may be more conducing to my fathers recovery, but also that when you are in an other place than Bristoll I may finde you of another minde....⁴

Unfortunately Dr. Ivie's chemical remedies were as ineffective as Dr. Meara's Galenic ones, and the patient died a month later.

Locke's father was a landowner, as well as an attorney, and although his fortunes diminished after the Civil War, there was still a sufficient income to keep his son in modest independence. This was supplemented, on his return to Oxford, by his appointment as Praelector Rhetoricus, a post primarily concerned with the teaching of philosophy rather than the delivery of Latin orations. One of his tasks was to conduct disputations with the Bachelors of Arts, for which he chose the

¹ B.L., MS. Locke, f. 7 and d. 9. ⁸ Ibid., c. 16, ff. 82-3, 2 Jan., 1661.

² Ibid., c. 29, ff. 3-4. ⁴ Ibid., c. 24, ff. 58-9, 8 Jan., 1661.

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Law of Nature¹ as his main subject. In the following year (1663) he was elected to the disciplinary office of Censor of Moral Philosophy for twelve months, which left him little time for medicine or science. It was then that he thought of becoming a clergyman, as the statutes of Christ Church allowed for fifty-five senior studentships which went to those already in holy orders, or others preparing to take them.2 There were also two medical studentships and, as these were firmly held, it seemed that Locke might be forced into the Church if only to keep his college place. He sought the advice of an old friend, John Strachey, who suggested a journey abroad instead.3 Locke deferred making a decision until his twelve-month term of office had ended. Meanwhile, probably on Boyle's advice, he began a course of chemistry under Peter Stahl, whom Boyle had brought to England four years before.

Stahl, who had previously practised medicine on the Continent where his preparation of spirits of salts (hydrochloric acid) was highly regarded in the treatment of gout and the stone, was Oxford's first public lecturer in chemistry.4 He was essentially an iatrochemist, teaching the technical craft of preparing new drugs, a branch of medicine then uneasily poised between the mysticism and secrecy of alchemy and the Galenic remedies of traditional medicine. Locke joined Stahl's third chemistry course: his previous students had included Lower, Wren, and Bathurst. Stahl had recently moved to the house of a draper where he "built his elaboratory in an old hall or refectory in the backside (for the house had been an ancient hostle)" of the Ram Inn. Here Locke met Anthony Wood who described their teacher as a "Lutheran and a great hater of women", and after paying a fee of thirty shillings they began on the 23 April, 1663. Wood soon disapproved of Locke's sceptical inquiries, and his disdain for note-taking.

This John Lock [he wrote],5 was a man of turbulent spirit, clamorous and never contented. The club wrot and took notes from the mouth of their master who sat at the upper end of a table, but the said J. Lock scorn's to do it; so that while every man besides of the club were writing, he would be prating and troublesome.

Wood's harsh judgement is misleading, as Locke had already read more chemistry than the other students, many of whom were attending merely because chemistry had become the current Oxford novelty.

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¹ Locke's lectures in the hand of an amanuensis are in Bodleian Library, MS. Locke, f. 31, ff. 120 et seq. They are published in W. von Leyden, op. cit.

² Maurice Cranston, op. cit., p. 74.
³ B.L., MS. Locke, c. 18, f. 214, 18 Nov., 1663.
⁴ G. H. Turnbull, "Peter Stahl, the first public teacher of chemistry at Oxford", Ann. Sci. (1953), 9, 265-70.

⁵The Life and Times of Anthony Wood (1632-95) (1892), ed. Andrew Clark, Oxford, vol. 1, p. 472.

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Furthermore Locke's notebooks show that he was, in fact, a most diligent practical student. But Locke did make one lifelong friend at Stahl's lectures, who thereafter constantly sought to revive his interest in chemistry whenever it began to wane. This was David Thomas, a Fellow of New College, who came from a Puritan family in Salisbury, and was then a licensed Oxford medical practitioner. Thirty years later when Thomas realized he was dying of consumption, he reminded Locke of their early work with Stahl.

I have often designed to acquaint you [wrote Thomas],1 that I have your cabinet in which are all those preparations I think you made with Stahl and what we with Dr. Blunt did together. I have only opened it as well as I could without a key, but have not tried the goodness of any one of them. You may now dispose of them as you think fit.

The course ended on the 30 May with the payment of another thirty shillings. It was well worth it, as Locke not only gained a knowledge of the techniques of preparing medicines, but this common interest brought him closer to Boyle.

The year after, Locke attended the Christ Church lectures of Thomas Willis (1621-75), who had then been practising medicine for nearly twenty years. He had once "every Monday kept Abingdon market", but on becoming Sedleian Professor of Natural Philosophy at the Restoration his practice prospered.² Willis adopted a theory of disease which was partly mechanistic and partly Helmontian. He believed that both physiological and pathological processes were forms of fermentation brought about by the vibratory motion of loosely combined particles which were able to enter into new combinations.³ His views provoked a bitter controversy with Edmund Meara, and Locke read all the contributions to the pamphlet war which ensued. He also read Willis's Cerebri Anatome (1664) embellished with Wren's illustrations of the circle of arteries around the base of the brain, and owing much to the anatomical skill of Lower and Millington.⁴ Willis was, therefore, a famous though controversial physician when Locke filled half his notebook⁵ with detailed Latin notes of his lectures on therapeutics.

⁵ B.L., MS. Locke, f. 19 (1664-9), 412 pages.

¹B.L., MS. Locke, c. 20, ff. 121-2, 11 Dec., 1693. ² Sir Charles Symonds, "Thomas Willis", Notes and Records of the Royal Society of London (1960), 15, 91-7. ³ Thomas Willis, "Dr. Willis's Practice of Physick", Of Fermentations (1684), London,

ch. 3, p. 8.

⁴ Sir Thomas Millington (1628-1703/4) was educated at Westminster and Trinity College, Cambridge. He later moved to Oxford where he graduated in medicine and became a Fellow of All Souls. He was one of the founder-members of the Royal Society, succeeded Willis as Professor of Natural Philosophy, and eventually became President of the College of Physicians.

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Amongst the topics he discussed were pain, sleep, nutrition, epilepsy, hysteria, arthritis, purging, narcotics, and the medicinal use of sulphur which was one of his favourite remedies for chest complaints.

Dr. Willis imparts his receipts chiefly to 2 Apothecaries in Oxford [writes Ward],¹ so farre as I can perceive, Mr. Hazelwood and Mr. Crosse. Hee hath a syrup of sulphur which hee makes much use of. Itt is his owne composition and no Apothecarie hath itt or knowes itt but the two forementioned. It may be taken and is so usually with a Liquorish stick. It is a compound not above 4d an ounce, but it is most used in Colds and distempers of the lungs.

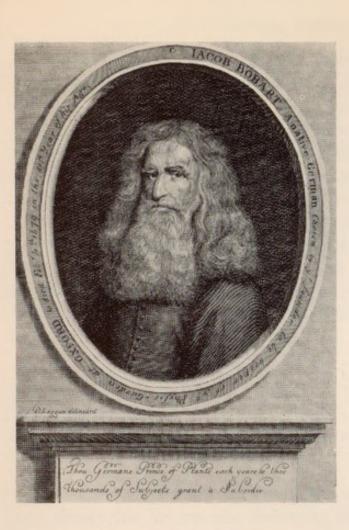
In 1658 Richard Lower began to investigate the problem of the physiology of respiration.

Dr. Willis and Dick Lower opened a Dogg [wrote Ward],² and they first let him blood in the jugulars to discover whether arterial and venal blood did differ in colour and constitution.

This was the first of a series of experiments and observations made by Lower, Hooke, and Boyle during the next decade, which greatly extended the knowledge of pulmonary physiology. Locke was also interested in their work.

The prevailing theory of respiration was still that of the Galenists. They believed that breathing served to cool the innate heat of the heart, whose pumping action removed foul vapours, and allowed air to mix with the blood, so that the vital spirits could be generated in the left ventricle. Both foul vapours and pure air were thought to flow through two separate channels in the pulmonary vein in spite of the fact that Harvey's discovery of the circulation had demonstrated the absurdity of this notion. His work had shown that venous blood was changed to arterial during its passage from the right to the left side of the heart. How had this colour change been brought about? What was the role of the air in respiration? What was the function of the diaphragm, and what physiological purpose did respiration serve? These were some of the questions the Oxford scientists were trying to answer when Locke began to follow their experiments in 1664. Boyle's investigations four years previously had given a great impetus to their research, although one of his conclusions was misleading. He failed to realize that this essential element or "quintessence" was actually part of the air; and his notions of the heart's role in respiration were archaic. Lower, with a better knowledge of anatomy and physiology, was particularly interested in the part played by the air in altering the colour of the circulating blood. He noticed that the upper surface of a blood clot was florid, whereas the under surface remained dark until the blood clot

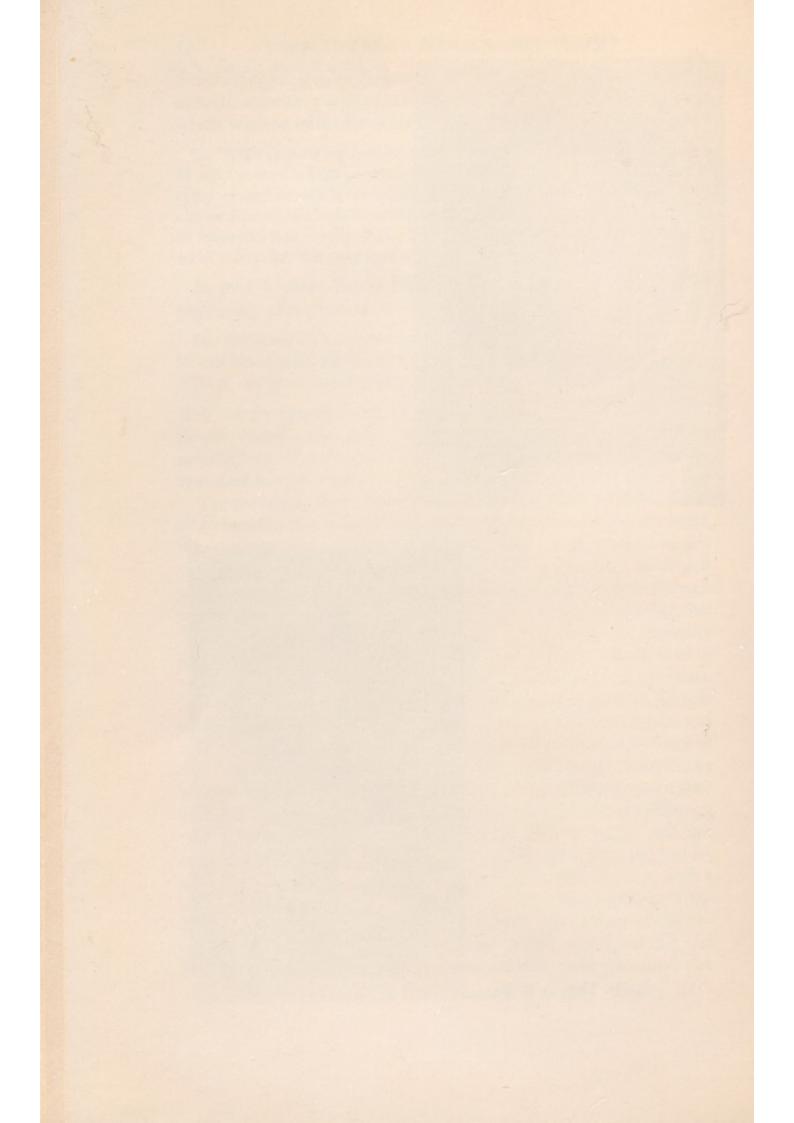
1 "John Ward and his Diary", Sir D'Arcy Power, op. cit., p. 191. ² Ibid., p. 186.



3a. Jacob Bobart, Keeper of the Oxford Physic Garden.



3b. Dr. Thomas Willis.



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was inverted when the colour changes were reversed. It seemed to him that the air (or some constituent of it) had brought this about, and he informed Boyle on 24 June, 1664 that he intended to investigate "the reason of the different colour of blood in the veins and arteries: the one being florid and purple red, the other dark and blackish".¹ Various aspects of this problem occupied him during the next four years, when Locke recorded the results of his experiments, and occasionally made his own deductions from them. Lower first took blood from the pulmonary artery which he found to be dark in colour, and this led him to deduce that bright red blood arose from the ventricles "by a mixture of the aire with it which gives it volatilization and colour".² After noting Lower's views, Locke then made this important deduction:

Probably it is the nitrous salt in the aier that gives it this tincture and volatilizes it, and the volatile part in circulation being either transmuted into nourishment of the part, the remaining blood in the vains is lesse spirituosus and both in colour and consistence comes nearer a caput mortuum and therefore is returned by the vains and soe by succession is made all volatile. J.L.³

His next shorthand entry, written in a memorandum book dated 1664, shows that he was also following the work of other Oxford scientists.

Respiratio: Q. Whether the aer, as we are told by travillers on pike Tenerif and the Andes in Peru and other great heights, be lesse usefull to respiration, because of any extraordinary quality or that it wants some of those salts which by Mr. Hooke are thought to be Niter which mixes with the blood and helps to its fermentation, and which are found in the aer of lower regions, or else bicause the pressure of the aer being lessend by the height of the place, it is scarce sufficient to lift up the lungs and soe respiration is hindred.⁴

These notes, written before the works of Lower or Hooke were published, show that Locke was closely associated with them. The initialled next entry suggests that Locke may have carried out experiments himself

Open a hole in each side of a dog and cut off the nerves that go the diaphragm, the dog will die immediately. But if you cut off the 9th paire that go to the [lungs]⁵ he will live 2 or 3 days. Bloud will be congealed in the vessels. J.L.⁶

¹ The Works of the Hon. Robert Boyle (1772), ed. T. Birch, New Ed., London, vol. vi, p. 472. ² B.L., MS. Locke, f. 19, f. 226.

³ *Ibid.*, f. 19, f. 227. ⁴ *Ibid.*, f. 27, ff. 3-4. ⁵ Partly in shorthand with this word difficult to decipher.

⁶ B.L., MS. Locke, f. 19, f. 158.

This experiment gave him an understanding of the diaphragm's role in respiration, and his next entry implies a grasp of the mechanics of artificial respiration.

If upon cutting off the nerves of the diaphragm the cause of sudden death be want of respiration, why cannot the motion of the thorax supply that at least for a little time unlesse the looseness of the diaphragm hinder it. J.L.¹

The problems of the Oxford physiologists could only be solved by animal experiments which Locke occasionally planned, and probably also helped to carry out.

Query: Does the air enter the cavity of the thorax through the lungs? Try this experiment. Make a wound in the thorax so that air enters. When the thorax is full shut up the wound, then if anything is breathed out through the mouth it must have passed through the membrane of the lungs. To this it can be objected that the pores of the lungs are more constricted when the lungs are collapsed than when they are expanded. J.L.²

Robert Hooke's work led to the next advance. He opened the thorax of a dog, and then blew air from a bellows into the trachea: the air escaped through puncture holes made in the outside of the lungs. This experiment, incorporating some of Locke's and Lower's suggestions, demonstrated that a continuous supply of fresh air (as well as the pumping action of the heart) was necessary to sustain life. Hooke informed Boyle of his work which he felt squeamish about repeating.

The other Experiment (which I shall hardly, I confess, make again, because it was cruel) [wrote Hooke],³ was with a dog, which, by means of a pair of bellows, wherewith I filled his lungs and suffered them to empty again, I was able to preserve alive as long as I could desire, after I had wholly opened the thorax, and cut off all the ribs, and opened the belly. . . . My design was to make some enquiries into the nature of respiration. But I shall hardly be induced to make any further trials of this kind, because of the torture of the creature; but certainly the enquiry would be very noble if you could any way find a way to stupify the creature, as that it might not be sensible.

Although Hooke did not publish his results until three years later, Lower's modification of this experiment led to a great advance. Earlier he had believed that the difference in colour between venous and arterial blood was due to fermentation taking place in the heart, until he found that this theory was not borne out by experiment. He first cut the larynx of a dog and plugged it with a cork, so that air could not get into the lungs. Then he examined blood in the cervical artery of

² Ibid., f. 19, f. 338.

¹ B.L., MS. Locke, f. 19, f. 158.

³ T. Birch, op. cit., vol. VI, p. 498, 10 Nov., 1664.

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this suffocated dog, which was the same colour as that in the jugular vein and the left ventricle. Furthermore, when venous blood was forced through the vessels of the collapsed lungs of a strangulated dog it returned dark in colour through the pulmonary vein. But when this same procedure was repeated with the lungs inflated and perforated (as in Hooke's experiment) the blood then returning through the pulmonary vein was bright red. Lower attributed these differences in colour wholly to a change in the lungs which he summarized thus:

It appears, therefore, that this scarlet colour is wholly due to particles of air insinuating themselves into the bloud since it is returned florid throughout just as in the lungs; because in them the air diffused through all the particles of the bloud is mixed more intimately with it.1

Although many of these experiments were done between 1664 and 1665 they were not published until three or four years later.² Hence Locke's notes and deductions link him with the work of these pioneer physiologists, who certainly took him into their counsels, and probably also allowed him to assist at some of their experiments. Locke used some of this information in one of his earliest medical essays, Respirationis Usus.³ It is not a good essay as he neglected to support his theories with experimental evidence, and included many out-dated ideas of the classical physicians, together with Swammerdam's notion of respiration serving to cool the blood. In all his notes on respiration Locke never mentioned the writings of another Oxford contemporary, John Mayow (1643-79), whose small treatise appeared a year earlier than Lower's book. His writings have caused Mayow (in spite of his lack of experimental work) to be hailed as the pioneer who came within an ace of discovering oxygen⁴ until both Patterson⁵ and McKie⁶ showed that his opinions were based on the practical work of Boyle, Hooke, and Lower, embellished with his own fanciful speculations. The fact that his contemporary Locke ignored his works supports their opinion.

Just when he seemed to be truly launched upon a scientific career, Locke accepted an appointment as secretary to the diplomatic mission of Sir Walter Vane with whom he left for Brandenburg in the autumn

¹ Richard Lower, Tractatus de Corde, etc. (1669), p. 52.
² Garrison-Morton (p. 67) states that Lower's book came out in 1668 as a British Museum copy has that year inscribed on the inside cover. This is quite likely as publishers tried to keep a book apparently new as long as possible.
⁸ P.R.O., 30/24/47/2, ff. 38-47. Latin and English versions published by Kenneth Dewhurst in "Locke's Essay on Respiration", Bull. Hist. Med. (1960), 34, 257.
⁴ Notably in Sir Michael Foster's Lectures on the History of Physiology (1901), Cambridge,

p. 198.

⁵ T. S. Patterson, "John Mayow in Contemporary Setting", Isis (1931), 15, 47-96, 504-46.

⁶ D. McKie, "Fire and the Flamma Vitalis: Boyle, Hooke and Mayow", Science, Medicine and History, ed. E. A. Underwood (1953), Oxford, vol .1, pp. 470-88.

of 1665. Diplomacy provided Locke with his first opportunity for foreign travel without driving medicine out of his mind; for soon after arriving in Cleves he became acquainted with several German physicians and chemists of whom he sent Boyle the following account:

There is one Dr. Scardius, who, I am told, is not altogether a stranger to chemistry. I intend to visit him as soon as I can get an handsome opportunity. The rest of their physicians go the old road, I am told, and also easily guess by their apothecary's shops, which are unacquainted with chemical remedies. This, I suppose, makes this town so ill furnished with books of that kind, there being few here curious enough to enquire after chemistry, or experimental learning.¹

After commenting on the mild weather, and promising to send Boyle a catalogue of books, he adds the following postscript:

I met with a Jesuit, who had been in Hungary. I enquired whether he had seen the mines; he told me that he had gone down into a copper mine near Neisol (if I mistake not the name) six hundred fathoms deep; that at the bottom, in a hollow of some bigness, there dropped down water, which they received in a wooden trough, wherein they cast pieces of old iron, which by the water would be turned into good copper. That a piece of iron of the bigness of a man's finger would be changed in three months, and that the mutation began from the superficies inwards with streaks (or to use his own words—striatum). That he had a horseshoe whose exterior part was copper, and inside iron. I asked him, whether it were cold or hot; he told me it was warm enough, so that the workmen were naked from the waist upwards and sweat in working.

Locke's foreign mission was of short duration, and in March 1665/6 (having declined diplomatic posts in Spain and Sweden) he was on his way to Somerset to supervise his property. Boyle, hearing of his visit to the West Country, sent him his "pneumatic engine" with a request to take barometric readings in the lead-mines of Mendip. Unfortunately, the miners refused to co-operate, and Locke's experiments had to be modified, and finally abandoned. "The sight of the engine," wrote Locke, "and my desire of going down into some of their gruffs [i.e., pits] gave them terrible apprehensions."² Instead, Locke tried to take some barometric readings whilst ascending a steep hill, but unfortunately these observations proved to be inaccurate owing to an airlock in his apparatus. In his report to Boyle he makes up for the lack of meteorological facts by describing the life of the lead-miners, mentioning their main occupational hazard: fire-damp.

¹ T. Birch, op. cit. (1772), vol. vi, pp. 535-6, 12 Dec.-22 Dec., 1665.

² Ibid., vol. v, pp. 686-7, 5 May, 1666. Printed in Boyle's The General History of the Air (1692), pp. 686-7.

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Sometimes the damps catch them, and then, if they cannot get out soon enough, they fall into a swoon, and die in it, if they are not speedily got out; and as soon as they have them above ground, they dig a hole in the earth, and there put in their faces, and cover them close up with turfs; and this is the surest remedy they have yet found to recover them. In deep pits they convey down air by the side of the gruff, in a little passage from the top; and that the air may circulate better, they set up some turfs on the lee side of the hole, to catch, and so force down the fresh air: but if these turfs be removed to the windy side, or laid close over the mouth of the hole, those below find it immediately, by want of breath, indisposition, and fainting: and if they chance to have any sweet flowers with them, they do not only lose their pleasant smell immediately, but stink as bad as carrion.

Boyle replied, hoping that these misfortunes would "not discourage you from embracing and seeking further opportunities to search into the nature of minerals, in order to which I wish I had time and convenience to send you some sheets of articles of enquiries about mines".1 He enclosed a medical recipe, with a postscript asking to be remembered to their common friends, "Dr. Willis, Mr. Lower and Mr. Thomas".

The Great Plague, which had erupted with volcanic fury in the metropolis, now reached the provinces: it drove Locke back to Oxford, and also brought about Boyle's return from his sister's house at Newington. They now became more closely associated (as Locke had finally resisted the clerical overtures of his college), and began to devote more time to medicine. Boyle now had an international reputation. Within the space of five years (when he frequently lost time owing to illness) he had published ten scientific books and five papers, most of them based on experimental work. This vast and varied profusion of his genius cannot simply be ascribed to a combination of experimental dexterity and lucidity of expression; and More² has suggested that he was really the director of a laboratory, rather than an individual experimentalist. He employed a team of secretaries, mechanics, glassblowers, and apothecaries to carry out the less exacting tasks under his direction, but worked on equal terms with other virtuosi who wished to make their contribution to the "new" philosophy. His laboratory was then the Mecca of the younger men, who came to discuss their proposals with him, and began to test their hypotheses by working according to an agreed list of "titles", or headings, under which they gathered facts, or carried out experiments. Finally this mass of

¹B.L., MS. Locke, c. 4, f. 150, June 1666. There are several entries on "Mines" in Locke's Goldsmith's Almanack for 1667 (now in the private collection of Mr. Sydney Edelstein of New York City), so evidently Boyle kept his word. ² L. T. More, The Life and Works of the Hon. Robert Boyle (1944), Oxford, p. 95.

information (frequently involving several workers) was discussed, and presented to the scientific world at Boyle's dictation with appropriate acknowledgment to his assistants. Locke now joined this scientific circle. He was primarily interested in three somewhat dissimilar aspects of medicine: the weather and its bearing upon epidemic diseases, the natural history of human blood, and the preparation of medicinal remedies.

The idea of the spread of epidemic diseases by contagion had long been known, but during the seventeenth century a miasmatic doctrine of epidemics was more in vogue.1 It was thought that an infective principle was diffused in the air in some mysterious way. Boyle and Sydenham favoured this theory of aerial emanations influenced by weather variations which led to outbreaks of epidemic diseases at certain times of the year. The droughts which preceded the severe outbreaks of pestilential fevers of London in 1624-5 and again in 1665² lent support to their theories. As a chemist and corpuscularian, Boyle went further, and regarded epidemics as being due to subterranean effluvia in the air which became noxious by association with other corpuscles. He assumed that mineral deposits in the earth's crust were the source of these miasmata.3 A thorough study of the weather, therefore, seemed to offer a solution to the nature of epidemic diseases; and several Oxford scientists had already begun to tackle this problem when Boyle encouraged Locke to begin in the summer of 1666. Wren and Hooke invented the tools for the job. Wren made a self-emptying rain gauge,4 an automatic wind recorder, and a self-registering thermometer,5 which were later improved upon by Hooke, who contributed a wheel barometer and a hygroscope fitted with the beard of a wild oat which would "unwreath and wreath itself" according to the moisture of the air.6 Wren repeatedly urged physicians to undertake a study of the weather in relation to sickness.

The physicians of our society [he wrote],⁷ should be desird to give us a good account of all epidemical diseases of the year; histories of any new diseases that shall happen; changes of the old; difference of operation in medicine according to the weather and the seasons, both inwardly and in wounds; to this should be added a due consideration of the weekly and annual Bills of Mortality in London.

² Charles Creighton, A History of Epidemics in Britain (1894), Cambridge, vol. 11, p. 33.

¹ Major Greenwood, "Miasma and Contagion", Science, Medicine and History, ed. E. A. Underwood (1953), Oxford, vol. 11, pp. 50-7.

^a Ibid., pp. 399-402.

⁴ Robert Plot, Natural History of Oxfordshire (1676), Oxford, p. 232.

⁵ Ibid., p. 228.

⁶ Margaret Espinasse, op. cit., p. 68.

⁷ J. S. Wren, Parentalia (1750), London, p. 223.

Hooke also drew up some notes on a Method for Making a History of the Weather in order to find "what effects are produc'd upon other bodys, as aches in the bodys of men, as what diseases are most rife as colds, feavers, agues, etc., or what other changes are produced".1 Boyle's own contributions are to be found in his History of Cold (1665) and Observations and Directions about a Barometer (1666).2 Using Boyle's barometer John Wallis³ found that the quicksilver never ascended much above thirty inches nor fell much below twenty-eight inches. There was, therefore, considerable interest in this subject when Locke began his register⁴ on 24 June, 1666, wherein he made daily recordings until 28 March, 1667. These observations, which included the strength and direction of the wind, the atmospheric pressure, the temperature, rainfall, and a few general remarks, were later published in Boyle's A General History of the Air (1692).5 Locke continued to keep a weather register until a few months before his death, and when publishing his results he stated that he had undertaken this lifelong study in order to "collect severall Rules and Observations" which he hoped would be to the "Great Advantage of Mankind".6

These weather observations occupied only a fraction of Locke's time in 1666 when he was busy studying the theory and practice of iatrochemistry. He began by making extensive notes on all Boyle's books as soon as they came out: Certain Physiological Essays (1661), The Sceptical Chymist (1661), Usefulnesse of Experimental Naturall Philosophy (1663), Experimental History of Colours (1664), Experimental History of Cold (1665), and The Origins of Formes and Qualities (1666). His other reading was restricted to medical chemistry in which the works of van Helmont were his main guide; and for practical work, he used Le Fèvre's Traité de Chymie (1660), newly translated into English as A Compleat Body of Chymistry (1663), when the author found an urgent need for such a manual on his arrival in England as apothecary to Charles II. Locke also read all the works of Basil Valentine who followed the alchemist's traditions, and though his writings were well laced with mysticism, they contained much useful information on preparing compounds of antimony, a commonly used emetic. The iatrochemists had reached the peak of their influence in England, and were then challenging the authority of the College of Physicians, the citadel of Galenic

² Philosophical Transactions, no. xi, 2 April, 1666.

⁸ R. T. Gunther, *Early Science in Oxford* (1923), Oxford, vol. 1, p. 319.
⁴ Observations beginning 16 Sept., 1666 and kept intermittently until 22 May, 1703 are to be found at the end of Locke's medical notebook (B.L., MS. Locke, d. 9).
⁵ T. Birch, op. cit., vol. v, pp. 609–750. His original manuscript, revised and corrected by Locke, is in the Bodleian Library (MS. Locke, c. 37).

6 Philosophical Transactions (1705-7), 25, nos. 295-312, pp. 1917-37.

¹ Thomas Sprat, History of the Royal Society, ed. Jackson I. Cope and Harold Whitmore Jones (1959), London, Appendix C, p. 75.

orthodoxy. In 1665 they formed a separate "Society of Chymical Physitians"¹ in opposition to the College, the members of which they engaged in controversy which lasted with diminishing fury throughout the century. A list of professional adherents of this society is to be found in George Thomson's Loimologia (1665), and although Locke was not included they clearly gained his sympathies.

Locke's practical work was done in a laboratory he shared with David Thomas and another doctor, Thomas Blount. It was dirty, hot, and complicated work, as there were then several involved methods of preparing the same substance. The raw chemicals from which medicines were prepared contained many impurities, and the use of different types of furnace was a further problem.² Chemical compounds were then mainly broken down by fire, leaving a tarry substance, the caput mortuum, in the retort. These distilled oils and phlegms (as watery substances were called) were then analysed by such crude tests as smell, taste, and volatility. During 1666 Locke made nearly every commonly used medicine, which he described in detail in a series of "Adversaria Pharmacopaea",3 only one of which can be traced. He began by systematically preparing balsams, elixirs, or spirits from alcohols, metals, and oils. One of the first preparations was the spirits and oils of the common acids; and then from six gallons of wine he distilled off one gallon of aqua vitae from which, with further distillation, he prepared rectified spirit of wine. He then made several preparations of sulphur, including the balsam and elixir, antimony tartrate, several mercurials; solutions of all the metals, preparations of opium, oil, and spirit of Hartshorn, syrup of roses, oil of tobacco (recommended for healing ulcers); a balsam for apoplexy, oil of guaiacum, and at Boyle's suggestion, the salt of vipers. He analysed various medicinal waters, and identified metals by their colour when flamed. Occasionally his work was tinged with alchemy, as shown by his attempt to prepare the alkahest and elixir vitae of Paracelsus. Some of this work was done at the suggestion of Boyle, Lower, Peter Stahl, Sir George Ent, and Dr. Schardius of Cleves with whom he had arranged to correspond on medical subjects.

I have acquainted Mr. Perrott with your desire of a Correspondence with Dr. Scardysse [wrote Thomas],⁴ and he will, what may be expected of him

¹ Sir Henry Thomas, "The Society of Chymical Physitians", Science, Medicine and

"Adver. 5" on f. 64, and again on f. 45).

4 B.L., MS. Locke, c. 20, ff. 3-4, 19 July, 1666.

History, ed. E. A. Underwood (1953), Oxford, vol. 11, pp. 56-71. ² Richard Lower probably supplied Locke with information on the Oxford furnaces as he made a detailed description of them: "Fornacum descriptio ex MS Mr. L. transcripta" (B.L., MS. Locke, f. 25, f. 36). ³ B.L., MS. Locke, f. 25 (marked "Adversaria 4 Pharmacopaea"; there is a reference to

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faythfully performe: he freely offered to convey letters from and to you as oft as you please. I have bought antimonium mineralis 6 lbs which I am told is hungarian. I will send some of it to Mr. Boyle to be assured of the truth. Keffeler dyed of the plague last summer; and I cannot heare of any one that grinds glasse stopples in the whole towne. This day I shall goe to the minerys and enquire for Hungarian vitriol and mineral sulphur. Too morrow I shall receave 6 vipers which if I canne I will send by the Coach.¹

Finally Locke's pharmacological notebook contains this curious entry on the 1 July, 1666:

Having got some good man's bloud we evaporated the phlegme in a pipkin and put the remainder in a retort . . . distilled it with the greatest heat we could make from h.7 to h.6. In the reciever we found a thick chaos with some red oyle swimming on top. It smelt more strong than spirit of Hartshorn: a soot in the distillate. About h.9 there came white fumes but I saw noe salt stuck to the receiver.

Why did Locke hope to see salt? He may well have been trying to reduce blood to the four elements from which Aristotle believed all matter was formed. This theory was discarded by Paracelsus, in favour of salt, sulphur, and mercury, and later van Helmont substituted fire and water for Aristotle's four elements. Boyle had already satisfied himself that Aristotle was wrong. By distilling blood he had recovered more than four elements, and Locke may well have been repeating this experiment. Alternatively, Locke may have hoped to find traces of the nitrous salt of the air which was taken up by the blood during respiration. At all events, this laboratory work gave him an opportunity of finding experimental confirmation of Boyle's corpuscular theory of matter.

A revival of Greek atomism greatly stimulated the research of the Oxford natural philosophers. Locke had already read the works of Sennert, Bacon, Junge, van Helmont, and Cardan, all of whom had in some degree brought the concept of the atom into their works. But the seventeenth-century revival of Epicurean philosophy owed most to Pierre Gassendi (1592–1655) whose writings were popularized in France by François Bernier (1620–99), and in England by Walter Charleton (1619–1707).² He argued that all matter consisted of minute particles or atoms linked with hooks and eyes into larger combinations called "moleculae" or "corpuscula"; and mentioned as evidence that particles too small to be seen by the naked eye could be demonstrated under the newly-discovered microscope. Boyle had modified atomic theory into his own corpuscular philosophy in his works on the air

1 Ibid., f. 25, f. 33.

² J. R. Partington, op. cit., p. 245.

(1660), and The Sceptical Chymist (1661). The co-operation between Locke and Boyle was at its height when the latter further developed his corpuscular theory in The Origins of Formes and Qualities (1666) which has been said¹ to present a theory of perception similar to the one adopted by Locke twenty-four years later. Some likeness is to be expected as their creations sprang from a common root, but evidence from Locke's notebooks suggest that Boyle's influence was mainly in the practical sphere.

Boyle conceived the whole fabric of the Universe to consist of particles or corpuscles (which joined together to form more complex groups) whose only difference were those of size, shape, configuration, and motion. But whereas the ancients had attributed the existence of corpuscles to mere chance, Boyle (and later Locke and Newton) believed them to be created by God to serve His purpose. After adding the spirit of the Almighty to this heathen brew, Boyle then proceeded to dilute the pious mixture with crude mechanism: he then devoted all his experimental skill to detecting traces of this last ingredient. There are several simple laboratory tests which support the theory that matter is made up of minute particles in motion, and Boyle was particularly interested in colour dilution tests, which he demonstrated to Locke. He worked out the degree of dilution of water when small quantities of coloured chemicals were introduced. He also showed that several elements gave a specific colour when put to the flame, and that this test (which Locke repeated)² was also a useful analytical tool sufficiently accurate to detect minute traces of an element. Boyle found other evidence in his study of magnetic and electrical effluvia; in measuring the almost imperceptible loss of weight of bodies due to the absorption of moisture; and this theory also served to explain such diverse phenomena as the spread of contagion, and the pervading odour of scents.3 It was this mass of experimental evidence assembled by Boyle in support of corpuscular philosophy which gained Locke's interest and general acceptance. But when their atomism in the perceptual sphere is compared, Locke is found to be the more subtle theorist. They both distinguished between the primary and secondary qualities of matter: these latter qualities of material objects are central to both their theories of perception. Boyle argues that objects produce their "sensible qualities" on the sense organs of the observer. They are subjective manifestations and not true copies of the original object. Locke⁴ differs from him in postulating that we always perceive an idea,

¹ Notably by Richard I. Aaron, John Locke (1955), 2nd edition, Oxford, pp. 121-3.

² B.L., MS. Locke, f. 25, f. 230. ³ Marie Boas, Robert Boyle and Seventeenth Century Chemistry (1958), Cambridge, p. 93.

⁴ John Locke, An Essay Concerning Human Understanding (1894), Oxford, vol. 1, pp. 1-3.

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and not a thing, as represented by a bundle of sense-data. There are, therefore, three elements in Locke's theory of perception: the observer, the idea, and the object the idea represents which (though in some ways similar) is a more sophisticated view than that of Boyle whose theoretical influence has probably been overrated.

In 1666 Locke took the short step from medical chemistry to medical practice¹ and began assisting David Thomas. One of his first patients was Lord Ashley, a rising politician, who visited Oxford in order to drink Astrop waters, a chalybeate spring near King's Sutton, whose medicinal properties had been recommended by Willis and Lower. As Astrop was remotely and unfashionably situated, carriers were engaged to bring the water to Oxford, and Ashley asked David Thomas to arrange this. Thomas happened to be in London at the time, so he asked Locke to supply his lordship's needs.

I must request one favour of you [wrote Thomas],² which is to send mee word by the next opportunity, whether you can procure 12 bottles of water for my Lord Ashly to drinke in Oxford Sundy and Monday morneing; if you can possibly doe it, you will very much oblidge him and mee. I this day spake with C. Grant and will give you an account of vipers by my next.

Lord Ashley was greatly impressed by Locke's ability at their first meeting, of which Lady Masham gives this account:

My Lord Ashley, designing to spend some days with his son at Oxford, had resolved at the same time to drink Astrop medicinal waters there, and had accordingly written to Dr. Thomas, a physician in Oxford, to provide them against his coming. The Doctor, being obliged to go out of town, could not do this himself, and requested of his friend Mr. Locke to take the care of getting the waters against my Lord's coming. Mr. Locke was no way wanting in this care, but so it fell out that through some fault or misfortune of the messenger employed by him to this purpose, my Lord came to town, and the waters were not ready for his drinking them the next day, as he had designed to do. Mr. Locke much vexed at such a disappointment, and to excuse from the blame of it Dr. Thomas, who had entrusted him herein, found himself obliged to wait upon my Lord Ashley (whom he had never before seen) to acquaint him how this had happened. My Lord, in his wonted manner, received him very civilly,

¹ There is some indirect support for this statement. Locke's medical chemistry was, in fact, pharmacology: he actually made preparations which he believed had some therapeutic value, and there is some evidence to show that he treated patients with them. He sent one of his medicines to Sir Paul Neile (and refused a fee for it); and in Dr. Thomas's absence he treated Lord Ashley. Furthermore Locke's friend, John Strachey, had heard that he was a doctor, and addressed him as such. He had probably heard that Locke was practising medicine, as he had not, at that time, even acquired a Bachelor's degree in medicine. Anthony Wood also mentioned that Locke practised medicine for a short time in Oxford. But it is doubtful whether Locke did much more than act as a medical assistant to David Thomas, as he had no need to earn a livelihood.

² B.L., MS. Locke, c. 20, ff. 1-2, 9 July, 1666.

accepted his excuses with great easiness; and when Mr. Locke would have taken leave of him, would needs have him stay sup with him, being much pleased (as it soon appeared) with his conversation....

My Lord, when Mr. Locke took leave of him, engaged him to dine with him the next day, which he willingly promised: and the waters being then provided against the following day, and Mr. Locke having beforehand thought of drinking them himself, my Lord would have him drink them with him, so that he might have more of his company. When my Lord went from Oxford he went to Sunninghill (where he drank the waters some time) and having (before he left Oxford) made Mr. Locke promise that he would come to him thither, Mr. Locke within a few days followed him.

Another patient was Sir Paul Neile (1613–86), an influential courtier, and wealthy amateur of science with a particular interest in astronomy. He was one of the twelve founder-members of the Royal Society, and hereafter was frequently the bearer of messages between the King and its members.¹ He was a friend of Ashley, and like him, was said to be much addicted to the modish pleasures of the town, so that Locke's present of some home-made balsam may have been intended to soothe the painful arthritic deformity which attended these nocturnal dissipations.

I see the great care you take of mee [wrote Neile],² and should be glad you would lett me have the bill of your ballsome that I might gett it made heare, and then I should hope it would cure mee.... The next convenient oportunity I shall not faile to acquainte my lord with as much of your letter as I finde by his present temper is necessary.

Locke's friend John Strachey,³ hearing that he was practising medicine, wrote for confirmation and sent him details of the antimony controversy then ranging in Paris.

Mr. Doctor: For soe I am told you are, though you are willing to conceale your honour from your Friends, yett I was loth to write you soe in the superscription, least it might bee otherwise... Dr. Cross is desirous that such things which he hath received lately from Paris might be known to you... He said that whilst he was there Antimony was accus'd as hurtfull to Mans bodys, and since the Faculty have consulted and have concluded it not hurtful and have pas't it into an Act of Parliament, only Patine⁴ the Great Droll wash't his hands and would not bee found guilty of the blood of the King's Subjects.

One Philip a Hollander hath discover'd a liquor clear like water in the Chrystalline humour about the bignesse of a pea conteyned in its own tunicle

¹C. A. Rowan and Sir Harold Hartley, "Sir Paul Neile (1613-86)", Notes and Records of the Royal Society of London (1960), 15, 159.

² B.L., MS. Locke, c. 16, ff. 129-30, I Dec., 1666.

^a Ibid., c. 18, ff. 215-16, 30 Aug., 1666.

⁴ Guy Patin (1601-72), Dean of the Paris Faculty of Medicine.

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shown to the Virtuoso's at Mr. Bourdelos (as alsoe a clear liquor betwixt the Vitreau and Retine) you may make the experiment by putting of a needle into an Oxes Crystalline and you shall see the liquor come out. Mr. Steno¹ hath written from Rome to Mr. Burdels (and Dr. Croane² att London hath received a letter to the same purpose from Steno) that a Tortoice which had his head cut off liv'd 24 hours after, and beeing prickt on the side did putt forth his foote on the same side to remove the instrument (which also was shewn at Mr. Burdelo's) whence he concluded that paine and sence is not communicated from the head. Mr. Graffe³ a Hollander hath shewn in the same house that succus pancreaticus mixt with the Bile made a fermentation and afterwards turn'd the Bile into a greene colour, the juice was salt, hence he deducteth intermitting flavers (in confirmation of Dr. Crosse his Thesis) to which purpose Graaf hath written.

There was a woman that had a great tumour on the outside of her thigh, sometimes greate sometimes scarce appearing and a greate paine on the Region of her ventricle with vomiting, the tumour was opened, and there came out a liquor like chyle or milke in greate quantity, which is one of Mr. Burdelo's proofs that the chyle is carried through the whole body betwixt the membranes. The woman is a nurse and hath noe milke when the tumour appears, and a comparison was made betwixt it and milke and noe difference found.

As Locke had neither taken holy orders nor qualified as a physician, his studentship was in danger of being withdrawn, as had already happened to his friend Richard Lower.⁴ To prevent this happening he obtained the Chancellor's dispensation to take the examinations of Bachelor and Doctor of Medicine at the same time. This was a reasonable request as he had completed the necessary seven years' university residence after graduating Master of Arts. During the first three years, which led to the degree of Bachelor of Medicine, a candidate was expected to attend lectures of the Professor of Medicine: the higher degree was awarded four years later after attendance at further lectures, and disputations on Galen's works.⁵ Locke had probably also complied with the loosely regulated attendance at lectures, and hence his application for a dispensation was a routine procedure which certainly did not signify that he was "already a man of resource and influence".⁶

¹ Nicolaus Steno or Niels Stensen (1638-86).

² Probably William Croone (1633-84), physician and founder of the Croonian Lectures. He was Secretary of the Royal Society, and Professor of Rhetoric at Gresham College.

³ Regner de Graaf (1641-73), a Dutch physician and pupil of Sylvius who demonstrated ovulation anatomically, pathologically, and experimentally. He was a iatrochemist who made a particular study of the juices of the body. De Graaf studied the bile through an artificial fistula and the pancreatic secretion by tying a tube in the duct of Wirsung.

⁴ T. Birch, op. cit., vol. vi, pp. 468-74, 24 June, 1664.

⁶ Ward's Oxford Statutes, vol. 1, pp. 52-4.

⁶ Maurice Cranston, op. cit., p. 96.

Lord Clarendon's recommendation for a dispensation dated 3 November, 1666 reads as follows:

Mr. Vice-Chancellor and Gentlemen: I am very well assured that Mr. John Locke Master of Arts and Student of Christ Church, has employed his time in the study of physic to so good purpose that he is in all respects qualified for the degree of Doctor in that faculty for which he has also full time; but not having taken the degree of bachelor in physic, he has desired that he may be dispensed with to accumulate to that degree, which appears to me a very modest and reasonable request he professing himself ready to perform the exercises for both degrees. I therefore give my consent that a dispensation to that purpose be proposed for him.¹

This was sent to Locke, who could submit it to the Vice-Chancellor whenever he was ready to take his examinations. David Thomas² had offered a similarly worded dispensation on 26 February, 1665, which had been rejected; whilst Richard Lower's³ application was accepted on 6 June, 1665. It has been stated that Locke's application "was not well received by the medical faculty": it was never submitted, as no transcript is to be found in the Convocation Register. Why then did Locke want a dispensation? It confirmed that he had been preparing to take a medical degree and provided some justification for temporarily retaining his studentship. He did not submit it, as he probably realized that his application would, like Thomas's, be rejected. Instead he ensured his college place by getting a royal dispensation⁴ to continue his studies without the necessity of taking holy orders.

Having secured his studentship, Locke gave up teaching grammar and philosophy⁵ in order to devote all his time to pharmacology and medicine. He was not attracted to the official university teachers who were regrettably undistinguished during the whole of his residence. The Regius Professor of Medicine was Sir Thomas Clayton (1612–93) who "by graft became Warden of Merton",⁶ and appropriately represented the University in Parliament. He was also the Tomlins Reader in Anatomy, but being "possest with a timorous and effeminate humour, could never endure the sight of a mangled or bloody body",⁷ so he delegated these duties, first, to Sir William Petty and later, to Henry Clarke (1619–87). The latter was also President of Magdalen

¹ P.R.O., 30/24/47/8.

² Convocation Register (Ta 27), 1659-71, p. 212 (examined by the kind permission of the Keeper of the University Archives).

⁸ Ibid., p. 202.

4 P.R.O., 30/24/47/22, 14 Nov., 1666.

⁵ Maurice Cranston, op. cit., p. 99.

⁶ A. H. T. Robb-Smith and H. M. Sinclair, A History of the Teaching of Anatomy in Oxford (1950), Oxford, p. 12.

⁷ Anthony Wood, Athenae Oxonienses (1813), Oxford, vol. IV, p. 215.

and described by Wood¹ as "lazy and idle, scarlaticall;² contrould diseases and let the College rule itself". The squeamish Sir Thomas Clayton was succeeded in 1665 by Dr. James Hyde (1618-81) who owed his appointment to his inflexible Papist convictions and his refusal to yield to Cromwell's demands, rather than to his professional capabilities. These university teachers were all traditionalists: they had nothing new to offer Locke, and as several practised in London they were only able to lecture by proxy. It is not surprising, therefore, to find that Locke makes no mention of them in any of his notebooks.

Nine medical commonplace books indicate the range of Locke's studies. He collected a great number of medical recipes, kept a record of all his experiments, and most numerous of all, are notes from his wide reading. The work of Willis, Paracelsus, Boyle, Sennert, van Helmont, Glisson, and Swammerdam, together with his notes on botany and chemistry, have already been mentioned. He also read Bacon, Descartes, and Gassendi. Locke collected these extracts from his readings into three large notebooks, the earliest of which is undated. He probably began about 16583 with long extracts from Harvey's Exercitationes de Generatione Animalium (1651) which gave rise to the "ovist" theory of generation, according to which the female contributed to the whole of the embryo. This was the accepted view until Leeuwenhoek's microscope demonstrated spermatozoa, and started the opposite school of "animalculists". Other notes came from Sir George Ent's (1604-89) defence of Harvey in his Apologia pro circulatione Sanguinis, etc. (1641); Conrad Schneider's (1614-80) De Osse cribriforme (1665) wherein he disposed of the current theory that nasal mucus came from the brain; and Jean Fernel's (1497-1558) Universa Medicina which was still the standard medical textbook, and one of the earliest to formulate a nosological classification of disease. A later notebook⁴ includes extracts from the writings of Gideon Harvey (1640-1700), Thomas Bartholin (1606-80), Leonhard Fuchs (1501-66), and Henry Stubbe's attack on "the mechanick philosophy" of the Royal Society which brought forth Joseph Glanvill's defence in Plus Ultra.⁵ Locke also made notes from the books of two well-known anatomists: Nathaniel Highmore (1613-85), Harvey's friend, who gave his name to the antrum of the superior maxillary bone, although Casserius⁶

¹ Anthony Wood, Athenae Oxonienses (1813), Oxford, vol. 11, p. 243.

² Wood adds a footnote explaining that this word was "coined for the occasion to express the stiffness of a Doctor-Don".

⁸ B.L., MS. Locke, f. 20. 4 Ibid., d. 11.

⁵ The Stubbe-Glanvill controversy is summarized by W. H. Jones, "Mid-Seventeenth Century Science: Some Polemics", Osiris (1950), 9, 254-74. ⁶ Sir D'Arcy Power and C. J. S. Thompson, Chronologica Medica (1923), London, p. 166.

described it earlier; and Marcello Malpighi (1628–94), anatomist and microscopist, who described the Malpighian corpuscles of the kidney and showed that bile was secreted by the liver cells and not the gall bladder. Thirty-seven medical books are cited in a third notebook¹ (1659–66), together with a long note on "Morbus", which probably represents Locke's own theory of disease. Therein the opinions of Galen and Paracelsus are opposed: instead it is argued that diseases are caused by a "seminall principle", the cure of which depends on remedies which will destroy these particular ferments and "fortifye the parts against their operation". This concept is similar to van Helmont's theory that specific ferments in the stomach, liver, and other organs control their function. These notions are later more pronounced:

How these small and insensible ferments this potent Archeus works I confesse I cannot satisfactorily comprehend, though the effects are evident. . . . I beleive 'twould be worth considering to finde what deseases spring from these ferments.

Here we have the essence of Helmont's concept of disease as an alien archeus imposing itself on the ferments and archei of a healthy system. This is one example of the strong iatrochemical bias discernible in Locke's wide reading and confirmed in his practical work. It was Boyle who fostered his practical chemistry, whereas Helmontian theory, with its emphasis on the chemical aspects of bodily functions, then seems to have dominated his theoretical concept of disease.

Towards the end of these three notebooks which summarize Locke's reading, are numerous notes from Thomas Sydenham's (1624-89) Methodus Curandi Febres (1666), which he read as soon as it came out. Sydenham was later destined to influence his views on clinical medicine as much as Boyle and van Helmont had done in the sphere of medical chemistry. It is doubtful whether they then knew one another, although they may well have met when Sydenham left London during the Great Plague. But Locke certainly knew of his work through their common friend Robert Boyle, to whom this book on fevers was dedicated. It was the result of Sydenham's own observations of epidemic diseases which then formed more than two-thirds of medical practice. He divided them into three types: smallpox, intermittent fevers or agues, and continued fevers. This last group was rather vague and included such common diseases as typhus, typhoid, and relapsing fever. Sydenham regarded smallpox as a natural process rather than a disease, which everybody had to go through at some time during their lives. His general concept of fevers was essentially Hippocratic. He believed that the seasonal variations in their nature and severity

¹ B.M., Add. MS. 32,554.

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depended upon the particular epidemic constitution of the year, and his treatment was modified to suit each patient's constitution.

But Sydenham's admirable book failed to divert Locke's interest from medical chemistry. He was then helping Boyle to investigate the general properties of blood, on which they had agreed to make a series of specific inquiries. Nothing came of their proposal until nearly twenty years later when Boyle published them with a dedication to his former assistant, "the very Ingenious and Learned Doctor J.L.". This is the first English treatise on the biochemistry of blood, wherein Boyle described the taste, colour, temperature, weight, and specific gravity of the blood with an explanation of the process of coagulation.¹

Many years ago [writes Boyle² in his Preface], I propounded to some Ingenious Physicians a History of the Fluid parts of the Body, such as the Humours and other Juices and also the Spirit of it; and did particularly draw up a Set of Enquiries and make divers Experiments in reference to the Blood, yet those papers being since lost and a long Tract of Time and Studies of a quite other nature, having made me lose the memory of most of the Particulars; I find my self unable to contribute to your laudable design. And as all the search your Commands obliged me to make after my Papers, has hitherto proved fruitless, so they have been written when I had far more Health, Vigour and Leisure than I now have, and when my Thoughts were much more conversant with medical subjects.

There can be no doubt that Locke was one of the "Ingenious Physicians" with whom Boyle first discussed his proposed work; and there is a striking similarity between the "Articles of Inquiry (to use our illustrious Verulam's phrase)", which Boyle used to guide his investigations, and a list of headings in Locke's notebook written twenty years earlier.³

The fourth part of Boyle's book on The History of the Spirit of Humane Bloud begins with an "Epistolary Discourse on a very learned Dr. J.L.", and deals with the use of volatile alkalis which

have been in England so prosperously made use of in Physick, since the year 1656 (about which time I had the good fortune to contribute so to introduce them, as to bring them by degrees into request, by easy ways of making them as well as by declaring their Vertues) that I see small cause to doubt but that they will hereafter be more generally esteem'd and employ'd than yet they are.⁴

³ Discussed in Kenneth Dewhurst, "Locke's Contribution to Boyle's Researches on the Air and on Human Blood", Notes and Records of the Royal Society of London (1962), 17, 2, 198-206.

4 Boyle, op. cit., p. 94.

¹ John F. Fulton, op. cit., p. 130.

²Robert Boyle, Memoirs of the Natural History of Humane Blood (1683/4), London, Preface, pp. 2-3. ³Discussed in Kenneth Dewhurst, "Locke's Contribution to Boyle's Researches on the

It was to this section of the book that Locke contributed his experimental work on the action of acids, alkalis, and various volatile spirits on the blood.1

During his last two years in Oxford Locke was a virtuoso in his own right, as he had now joined practice to theory. This practical work (though more diverse than penetrating) touched upon the physiology of respiration, chemistry, botany, meteorology, pharmacology, and he had also taken a few tentative steps in clinical medicine. Behind all these varied inquiries looms Boyle's restless, directing mind: he was the mainspring of Locke's research, and it was to him that Locke always turned for advice.

According to the directions you gave in your last letter to Mr. Thomas [wrote Locke² to Boyle], I have endeavoured to provide paronychia, and I think I shall be able to procure [a] pretty good store of it. The fittest time I suppose to gather it will be when it begins to be in flower, which will be about a fortnight hence, the spring hereabouts not being over forward. How I shall dispose or order it for you, I must desire to be directed. Though by your approving of that way in other like cases, I have some thoughts to pound and seal up some part of it in a bolthead, and so keep it, since the juice being the thing desired; and not being fully acquainted with the way Helmont mentions he made use of to so preserve juices, I know not how otherwise well to keep it. In the process of [oleum vitriolum] with [spirits of wine] you did me the honour to send me, I must beg an additional favour, to know, whether in each distillation I must draw off the [spirits of wine] ad siccitatem; for I find that if the fire be a little augmented, the volatile [spirits of wine] being pretty well first gone over, the remaining liquor will rise in plentiful very white fumes; but I suspect this too violent a way for proceeding. After having distilled it in this manner, I let it stand above 24 hours to cool; and though when I took off the head from the body, it had been several hours quite cold, and my nose were not within a foot of the mouth of the body, yet there came out so quick and penetrating a steam, that it made me cry out and made my eyes run over, but the effects of it quickly ended, and I was soon at ease again; though I dare be confident it is one of the briskest, and most pungent steams in nature.

Meanwhile Locke kept in touch with Lord Ashley through his secretary, who had already urged him to come to London in order to use his medical skill to succour the victims of the Great Plague.³ Final arrangements were made in the spring of 1667 for him to live at Exeter House as physician to Lord Ashley. His next letter to Boyle⁴ shows that after visiting his Somersetshire property they proposed to meet in London.

¹ B.L., MS. Locke, f. 19, ff. 302-3.

² T. Birch, op. cit., vol. vI, p. 537, 24 Feb., 1666. ³ B.L., MS. Locke, c.3, f. 164, April 1667.

4 T. Birch, op. cit., vol. vI, p. 538, 24 March, 1666/7.

The warts you speak of, I doubt not that I shall be able to provide you in the place I am going to, though I would be glad to know whether there hath been any difference observed in the operation of those of stone-horses, geldings and mares, since (if I forget not) Helmont some where says, that if in hysterical fits (for in that disease he commends them) you use those that are taken from a horse aestuante venere, they have different effects from others. I desire also to know how much of [spirits of sal ammoniac] may be thought a large dose, and whether it be that [spirits of sal ammoniac] which is made with [mercury] whereof we have prepared some. The particulars of the process Mr. Thomas has undertaken to give you an account of. Sir, having from a passage in your writings taken the first notice of the time of gathering paeony roots; and since finding it in the observations communicated to Riverius, where the observer says that it must be inclinante luna in ariete existente, which also F. Wurtz confirms with this addition, that it must be April, when Sol is in Aries, and at a plenilunium before the rising of the sun, I rode to a place, where was pretty good plenty of male pacony, and on the 14th instant between ten and eleven in the morning had some roots dug up, and am promised others to be dug up on the 30th instant before sun rising. If there be any advantage in the time of gathering, I owe the knowledge of it so much to you that I should be an unworthy reader of your writings, if I should not return my thanks, and offer you some of those roots, from whom I learnt the usefulness of them; if you please to make trial, whether these have any more virtue than those gathered at another season, I having chosen those times that I think come nearest to these directions. . . . Having followed your directions the best I could with [spirits of wine] and [oleum vitriolum], having drawn [spirits of wine] from it till it comes off sweet, I find the remaining matter when dried regains its acidity, and will not any part of it to dissolve in [spirits of wine] and to pass through a filter, but will easily make a mash with it, but being set to digest it subsides, and leaves the upper part of the [spirits of wine] clear; whether it should be so be I know not. I intend to go between this and Easter into Somersetshire, where if I can do you any service about Mendipp, or any other way, you will oblige me with the employment. . . . After some little stay in that country, I hope to kiss your hands in London.

Before leaving Oxford, he entered his share of the laboratory expenses in an account book, which reads:

"Mr. Thomas	£,22. 5. sd.
Mr. Blunt	£, 5.15.11d.
J.L.	£ 4.13. 5d. (besides £ 5 I had already paid
	to Mr. Thomas."1

Locke was thirty-five years old when he decided to leave Oxford, where many other interests had gained his attention. He had read widely in politics, philosophy, and theology; written poetry, lectured

¹ B.L., MS. Locke, f. 12, April 1667.

on the Law of Nature, given tutorials, and made a brief excursion into diplomacy, all of which have been fully surveyed by Fox Bourne and Cranston. In spite of these varied interests a continuous medical thread can be traced throughout the whole fabric of his Oxford career. He was then more concerned with the basic medical sciences than with clinical medicine which is only represented in his commonplace books by a great mass of prescriptions and notes from his reading. But when he finally left Oxford for London, where he was soon closely associated with Thomas Sydenham, the direction of his medical interests changed: henceforth he gradually forsook the laboratory for the bedside, which was the only place where Sydenham believed that clinical medicine could be properly studied.

CHAPTER II

Shaftesbury's Physician (1667 - 1675)

WHEN Locke went to Exeter House in the Strand, David Thomas alternated between the Oxford laboratory they had shared and his practice in Salisbury, where he eventually transferred their chemical apparatus. Thomas remained there for the rest of his life and, whenever he could spare time from his patients, continued to increase his therapeutic resources with home-made remedies. He informed Locke1 of his disposal of their joint property, but the latter no longer needed any equipment, as he was using Lord Ashley's laboratory. Chemistry was a fashionable pursuit, and Ashley, a member of the Council of the Royal Society, frequently joined Locke in busy experiment.² But Ashley's chemistry was curtailed by politics in the autumn of 1667, when he joined the Cabal Ministry as Chancellor of the Exchequer. His promotion brought more administrative duties for Locke, who deplored his lack of time for chemistry in a letter to Boyle,3 wherein he included an account of a woman with phantom limb pain.

I shall be able to send but a very ill furnished letter to my friend4 in Germany. I some time received from him one of those Scarabei I formerly mentioned to you, which I guess to be the proscarabeus foemina mentioned by Moufet, 5 cap. XXIII and would be very glad to know, whether Jacob Bobert, or any other, have found that kind in England, for he very much commends the use of them in the disease I told you. The place I am at present in, and the remove I am likely to make (for I believe I shall once more cross the seas before I settle) have kept me from attempting any further experiments in chemistry, though I find my fingers still itch to be at it, and I have not met with anything worthy your notice. I can only inform you, that I am acquainted with a young gentlewoman, who some years since had the misfortune to have one of her legs cut off, which yet very frequently does so pain her, that I have heard her more than once greviously complain of vehement torture, sometimes in the heel, sometimes in the instep and at other times in the toes of her dead and buried foot; and she tells me, that sometimes being wakened by the pain, she has (before recollection)

¹ B.L., MS. Locke, c. 20, ff. 5-6, 22 June, 1667. ² Details of their experiments are given in Locke's notebook, now in the private collection of Mr. Sydney Edelstein of New York.

³ T. Birch, op. cit., vol. vI, p. 579, 21 Nov., 1667. ⁴ Dr. Schardius of Cleves.

⁵ Thomas Moffett, Insectorum . . . theatrum (1633), London.

put her hand down to feel for the grieved part, as if her leg had not been cut off. I return you my humble thanks for that preparation of Helmont, and the other favours of your letter. The ordiferous oil of vitriol, if it be made by any other or shorter way than by digesting [spirits of wine] or [oleum vitriolum] you will do me a favour to let me know it; for such trials I may perhaps get conveniency this winter, and I would not willingly be idle, where I might be encouraged and directed by so skilful a hand.

The Oxford iatrochemical partnership between Boyle, Thomas, and Locke continued for some time in London. Locke passed on to Boyle information from abroad and sent Thomas advice and drugs for his experiments. Hearing that Locke intended to visit Oxford, Thomas¹ asked him to bring $\frac{1}{2}$ to $1\frac{1}{2}$ lbs. of mercury; and on his return to Salisbury² he sent him this account of a remedy for agues which he had recently prepared:

And for Ens Veneris I have cured two Quartans with it, the last of which it cured without any method, the patient mistakeing my directions, and the first time soe that he had noe manner of fitt. I shall this weeke try in a Double Quartane which was first a quartan.

Just when Locke seemed likely to apply these iatrochemical notions to clinical medicine he became associated with Thomas Sydenham. They probably became acquainted through John Mapletoft, who had known Locke at Westminster School before going on to Cambridge to read medicine. He was then physician and tutor to the Percys at near-by Northumberland House. Sydenham was forty-four, eight years Locke's senior.3 He was already plagued with sickness and burdened with professional and political adversity. His Oxford studies had been interrupted by the Civil War in which he lost three relatives in the Parliamentary cause; and later, whilst a Fellow of All Souls, he had been recalled to serve as a Captain of Horse in the army which repelled the Scottish landing of Prince Charles. He had been practising in Westminster for nearly seven years before Locke made his acquaintance. His subsequent path was rarely smooth. He never acquired a large practice; his book on fevers reaped the spiteful criticism of his colleagues; and his crippling gout was later complicated with the more painful affliction of renal calculus, for which he took liberal quantities of small beer "to cool and dilute the hot and acrid juices lodged in the kidney, out of which the stone is formed".4 These trials made him a religious, though deeply bitter, man. Sydenham's manner was forth-

¹ B.L., MS. Locke, c. 20, ff. 7-8, 18 Nov., 1667.

² Ibid., ff. 9-10, 29 Nov., 1667.

⁸ Sydenham's life has been reviewed in detail by Kenneth Dewhurst, "Thomas Sydenham (1624-1689) Reformer of Clinical Medicine", Med. Hist. (1962), 6, 101-118.

4 Entire Works of Thomas Sydenham (1753), London, 3rd edition, ed. John Swann, p. 492.

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right, manly, and simple: it was more characteristic of a cavalry officer than of the polished courtly physicians who were his main critics. They were mostly bookish men, these orthodox doctors, whereas Sydenham was essentially a man of action, basing his treatment not so much on the authority of ancient writers as upon his own carefully observed natural history of a patient's illness. He set aside all vain philosophical hypotheses in studying the manifest phenomena of disease and, like Hippocrates, realized that nature often works her own cure with a few simple remedies, and frequently without any medicine at all. Sydenham believed that the remote causes of disease were not only outside the scope of the physician's art, but beyond the range of human understanding, and he resisted the temptation to speculate upon their true nature, confining himself instead to healing in harmony with nature.

The treatment of infectious fevers was his main concern. The Great Plague which two years earlier had ravaged the metropolis leaving over 100,000 dead, had now spent itself; but bad drainage, poor ventilation, overcrowding, and a general lack of cleanliness provided a steady focus for the rapid spread of epidemic diseases, which still caused such a heavy mortality that the population of London could only be kept at a constant level by a regular supply of fresh blood from the country. Epidemics of smallpox were then causing most havoc. Out of a metropolitan population of about 500,000, there were 16,000 deaths in 1667 and 17,000 in the following year, of which smallpox accounted for 1,196 and 1,468 respectively.1 Sydenham believed that many of these deaths were due to the hidebound incompetence of physicians who still treated their patients with heating medicines in the vain hope of forcing out the seeds of the disease, instead of adopting the more natural cooling regimen which he was then advocating. Locke was interested in this cooling treatment, and began to accompany Sydenham on visits to patients, where he saw its efficacy. When sending Boyle a copy of the second edition of his book on fevers, to which Locke had prefixed a Latin poem, Sydenham mentioned their visits.

I perceive my friend Mr. Locke hath troubled you with an account of my practise [wrote Sydenham],² as he hath done himself in visiting with me very many of my varioulous patients especially. It is a disease, wherein as I have been more exercised this year than ever I thought I could have been, so I have discovered more of its ways than ever I thought I should have done.

Here we have clear evidence of Locke's clinical work with Sydenham, particularly his interest in the cooling treatment of smallpox, which he

¹ Charles Creighton, op. cit., vol. II, p. 10.

² T. Birch, op. cit., vol. VI, pp. 648-9, 2 April, 1668.

was then modifying in the light of further experience. This simple treatment met with strong opposition. Sydenham advised his patients to keep on their feet as long as possible, but when they eventually took to their beds they were only lightly covered. He then bled them, applied soothing lotions to the eruption, gave copious fluids, and an emetic in the case of young men. These simple measures were designed to aid a natural healing process by counteracting the high fever and preventing dehydration. The majority of his patients recovered with this regimen, which was slightly modified for each person.

Lord Ashley had need of Locke's medical services in 1668. He had long been troubled with abdominal pain, recurrent jaundice, and a swelling below the right costal margin which was thought to be due to a malformation of the liver, rather than a neoplasm.¹ In May he consulted Francis Glisson, Physician in Ordinary to Charles II, for a recurrence of pain and vomiting. Pepys recorded his illness as an "imposthume in his breast", but Osler² diagnosed a suppurating hydatid liver abscess. Glisson gave a purge which increased the severity of the pain and caused a soft tumour, the size of an ostrich's egg, to appear below the costal margin. A conference of physicians was then called, the majority of whom were in favour of operating. When a surgeon cauterized the tumour on 12 June, "a large quantity of purulent matter many bags and skins came away"; and Locke's detailed notes of Lord Ashley's progress show that four days after the operation "a great quantity of matter came forth, with many bags to the number of at least 80". A week later "a wax candle was put deep into the abscesse and after the drawing it out some matter and divers stuffs succeeded". Ashley made a slow recovery. To hasten the evacuation of pus and cysts a thicker wax candle was inserted, followed by "a sponge tent" which, when left in the wound for the afternoon, brought forth over twenty cysts. The wound was irrigated daily, and sloughs, pus, and cysts poured forth for six weeks after the operation, when a silver pipe was inserted through which a watery discharge continued to drain. Ashley was much improved by the beginning of September when, with Locke's assistance, he drew up a questionnaire to determine the opinions of several leading physicians on his future management. The main point at issue was whether the silver tube should be left in place as long as the wound continued to drain. Three Court physicians, Francis Glisson, John Micklethwaite, and Sir George Ent, together

¹ These attacks of pain and jaundice are said to have begun when Ashley was eighteen years old, *Memoirs, Letters and Speeches of Anthony Ashley Cooper, Lord Chancellor* (1859), ed. W. D. Christie, London, p. 32.

ed. W. D. Christie, London, p. 32. ² Sir William Osler, "John Locke as a Physician", Lancet (1900), ii, 10, reprinted in An Alabama Student and Other Biographical Essays (1926), Oxford, pp. 69-74.

with Locke and Sydenham, all suggested that Ashley should wear his silver tube until the discharge ceased. Only Dr. Timothy Clark disagreed with them. Locke also wrote¹ to an eminent foreign physician, the Abbé de Briolay de Beaupreau, of Angers, whose reply compliments Locke for "both the elegancy of his stile and his judicious remarks".²

Lord Ashley's illness was one of the earliest instances of a successful operation on a suppurating hydatid abscess of the liver, and Locke's clinical history is the first detailed account of this condition. As the aetiology was then unknown, Locke inquired about the prognosis in similar cases. He heard from Thomas Bankes,³ a Yorkshire surgeon, whose patient recovered after his liver abscess had been opened, letting out "much korruption and bladders to the quantaty of one quarte of the largenesse of wallnuts and some greater and some lesser". This was confirmed by his doctor,⁴ and also by Sir Thomas Strickland,⁵ who described the cysts as "blethers like winde egs, some as big as turky egs, others as hen egs". This well-authenticated account of hydatid disease was followed by Dr. Arnold's⁶ report of an operation for what was obviously empyema, and not hydatid disease.

Two years later Lord Ashley was quite well. He still wore a six inch long silver tube which, every other day, was cleaned in warm wine and replaced. Locke sent a progress report to the Abbé de Briolay de Beaupreau, to which Ashley added a note on the "scrupulous accuracy" of his doctor.⁷ He was still wearing his tube when he became Lord High Chancellor of England, and raised in the peerage to the Earldom of Shaftesbury. His prominent office, together with the curious nature and treatment of his illness, attracted much satirical comment. The wits of the day called his silver pipe "Shaftesbury's Tap", and its wearer was bitterly satirized by Locke's old schoolfellow John Dryden in *Absalom and Achitophel*:

> Of these the false Achitophel was first; For close designs and crooked counsels fit, Sagacious, Bold and Turbulent of Wit, Restless, unfix'd in principles and place, In power unpleas'd, impatient of disgrace; A fiery soul which, working out its way, Fretted the pigmy body to decay And o'er-inform'd the tenement of clay.

¹ P.R.O., Shaftesbury Papers, 30/47/2, f. 48 (1668).

² Ibid., ff. 20-1, April 1669.

4 Ibid., f. 23, 22 Jan., 1668.

6 Ibid., f. 26, 24 Sept., 1668.

³ Ibid., f. 22, 6 Nov., 1668. ⁵ Ibid., f. 24, 26 Oct., 1668. ⁷ Ibid., f. 1–2, 20 Jan., 1670/1.

Conflicting opinions have been expressed about Shaftesbury's life, but he certainly faced political adversity and chronic illness with great courage. He believed that he owed his life to Locke's care, and with becoming modesty tried to direct his physician's talents to the affairs of State.

After this cure [wrote his grandson],¹ Mr. Locke grew so much in esteem with my grandfather that as great a man as he had experienced him in physics, he looked upon this but as the least part. He encouraged him to turn his thoughts another way, nor would he suffer him to practise physic except in his own family and as a kindnesse to some particular friend.

But Locke had other ideas. He was beginning to collaborate with Sydenham in writing a number of essays, which they probably intended to expand into an ambitious survey of medicine. The most important one is *De Arte Medica*² (1669). This essay is in Locke's handwriting, but contemporary evidence suggests that Sydenham was the author, and Locke's role was probably a secretarial one. "Dr. Sydenham is writing a book which will bring physitians about his ears", writes John Ward, "to decrie the usefulness of natural philosophie, to maintaine the necessitie of knowledg in anatomic *in subordination* to physick." Sydenham really proposed to demonstrate that clinical experience was more useful to a practising physician than a knowledge of the basic sciences, and he intended to present his views under the following headings:

(1) The present state of the faculty of medicine, as it now stands in reference to diseases and their cure. (2) the several degrees and steps whereby it grew to that height it is at present arrived to, which I suppose are the following:— (1) experience; (2) method, founded upon philosophy and hypothesis; (3) botanics; (4) chymistry; (5) anatomy; in all of which I shall endeavour to show how much each hath contributed to the advancing the art of physic, and wherein they come short of perfecting it. (3) what yet may be further done towards the more speedy and certain cure of disease; i.e., by what means and method the practice of physic may be brought nearer to perfection.

After distinguishing between "a knowledge of physick", and "the rules of the art of medicine" which gain his respect only when founded upon unbiased observation, he goes on to accuse his more conservative colleagues of confining medical knowledge within the narrow bounds of their favourite hypotheses. He even suggests some of them deliberately discard facts gleaned from their own experience in order to conform to the dogmatic assumptions of their classical textbooks. In

¹ Amsterdam Remonstrant's MS., J. 20, 8 Feb., 1705/6.

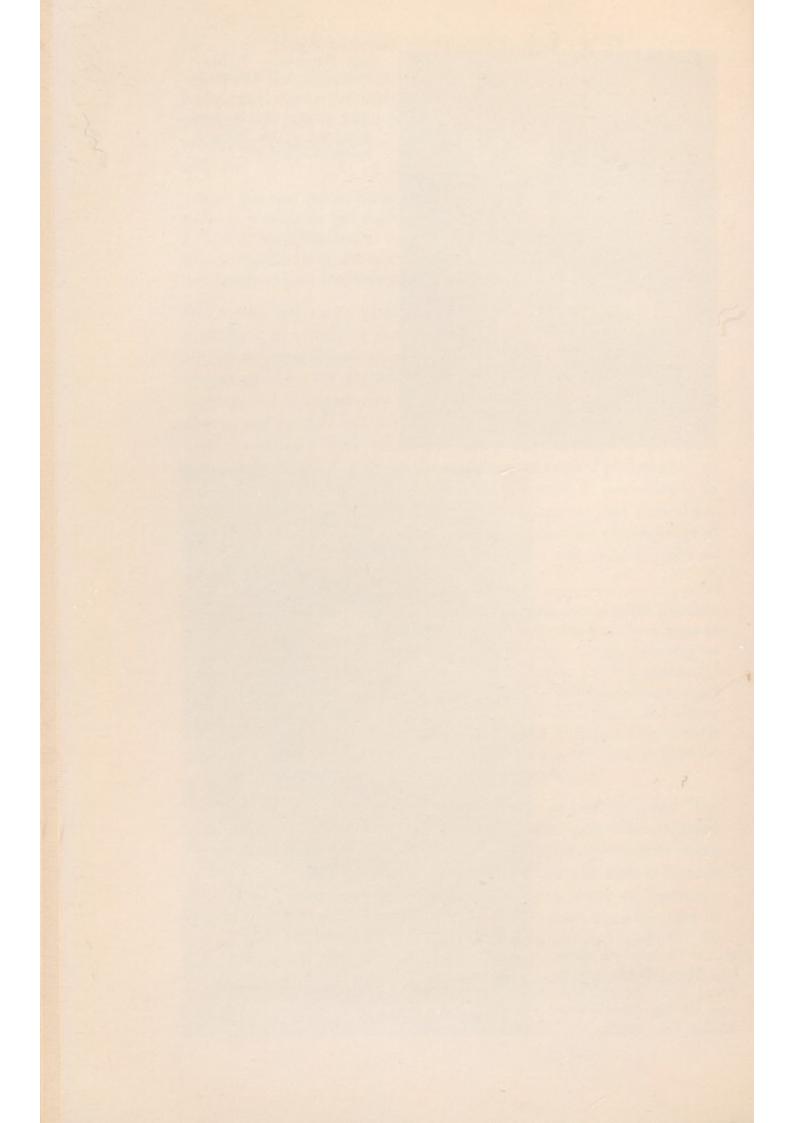
² Printed by H. R. Fox Bourne, op. cit., vol. 1, pp. 222-7. An accurate transcription appears in A. G. Gibson's The Physician's Art (1933) Oxford, pp. 1-13.



4a. Anthony Ashley Cooper, First Earl of Shaftesbury, 1672. By John Greenhill. (By kind permission of the National Portrait Gallery.)



4b. Dr. Thomas Sydenham, by Mary Beale, reproduced from the first edition of his *Obesrvationes Medicae*, etc. (1676).



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this advocacy of medical empiricism Sydenham compares the physician's art with a cook's, in that they both primarily learn their jobs by experience rather than from "speculative theorems".

True knowledge grew first in the world by experience and rational observation [he wrote], but proud man, not content with the knowledge he was capable of, and which was useful to him, would needs penetrate into the hidden causes of things, lay down principles, and establish maxims to himself about the operations of nature, and thus vainly expect that nature, or in truth God should proceed according to those laws which his maxims had prescribed to him.

Although this essay was never completed, Sydenham again revealed his strong empiricism in this extract from his published work which probably influenced his younger colleague Locke:

I must limit the function of a physician to industrious investigation of the history of disease [he wrote], and of the effect of remedies, as shown by the only true teacher, experience. . . .¹ True practice consists in the observations of nature; these are finer than any speculations. Hence the medicine of nature is more refined than the medicine of philosophy.2

Sydenham began another essay,3 Anatomie (1668), which was probably meant to form part of De Arte Medica, with this sentence:

Others of them have more pompously and speciously prosecuted the promoting of this art by searching into the bowels of dead and living creatures, as well sound as diseased, to find out the seeds of discharging them, but with how little success such endeavors have been or are likely to be attended I shall here in some measure make appear.

The rest is in Locke's handwriting. He argues that a knowledge of anatomy, though essential for a surgeon, or the physician who directs him in performing operations, is only of limited value in the doctor's main task of diagnosing and treating sick people. Clinical experience had brought him to realize that a knowledge of anatomy was of little use to a physician unacquainted with the natural history of the disease he was treating. Anatomical dissections, which were then fashionable, did not greatly attract either Locke or Sydenham who believed that more useful knowledge would be gained by analysing the juices of the body than by studying its structure.⁴ Another essay

¹ The Works of Thomas Sydenham (1848), ed. R. G. Latham, London, vol. II, p. 12. ² Ibid., p. 22.

³ P.R.O., Shaftesbury Papers, 30/24/47/2, printed by Kenneth Dewhurst as "Locke and Sydenham on the Teaching of Anatomy", Med. Hist. (1958), 2, 1-12. ⁴ Boyle in the preface to his Memoirs of the Natural History of Humane Blood (1683/4), expressed a similar view: "I will not be so rash as to say, that to mind (as too many Anatomists have done) the Solid parts of the Body, and overlook Enquiries into the Fluids, and especially the Blood, were little less improper in a Physician, than it would be in a Vinter to be very solicitous about the Structure of his Cask, and neglect the consideration of the Wine contained in it."

Tussis¹ (undated), with a note on the preparation of an elixir for asthma² was probably written about this time. One sentence, recommending horse riding in the treatment of consumption, is in Sydenham's handwriting; the rest was written by Locke, probably at his dictation.

Sydenham was then revising and expanding his book on fevers with the help and encouragement of Locke and Mapletoft. The former accompanied him on visits to patients and occasionally acted as his secretary, whilst the latter translated his English text into Latin.³ The younger men reaped the fruits of Sydenham's wide experience, and as physician at two of London's most patrician households they were also able to bring his methods to the notice of people of rank and fortune. Evidence of their collaboration is to be found in a series of medical notes⁴ amongst Locke's papers. They were written in English in 1670 before Sydenham's Observationes Medicae (1676) appeared, and probably represent the rough drafts of this work. Notes on dysentery,⁵ smallpox,⁶ pleurisy, and various fevers were written by Locke, who clearly states that they are Sydenham's observations and not his own. They are heavily corrected, with several marginal notes inserted later, suggesting that they may have been dictated or hastily copied from Sydenham's rough drafts. Other manuscripts in Sydenham's handwriting appear amongst Locke's medical papers. These short essays deal with aspects of humoral pathology7 in relation to gout,8 but the most convincing evidence is Locke's copy of Sydenham's original treatise on smallpox,⁹ which was intended to be separately published, and to which Locke contributed a preface¹⁰ and dedication to Lord Ashley.¹¹ This treatise is based on Sydenham's further experience of smallpox during the severe epidemics of 1667 and 1668 when Locke accompanied him. Earlier, Sydenham had argued against submitting

¹ P.R.O., Shaftesbury Papers, 30/24/47/2, ff. 31-4 (R), printed by Kenneth Dewhurst, "An Essay on Coughs by Locke and Sydenham", Bull. Hist. Med. (1959), 33, 366-74.

² P.R.O., Shaftesbury Papers, 30/24/47/2, f. 35. ³ The evidence is in Latham, op. cit., vol. I, Introd., p. 50; a letter from Rev. John Mapletoft, Gentleman's Magazine (1743), 13, 528, and John Ward, The Lives of the Professors of Gresham College (1740), London, p. 275. ⁴ B.L., MS. Locke, ff. 19-28. Locke copied shorthand versions into his notebook

(Ibid., f. 1, ff. 40, 66, 61, 82).

⁵ B.L., MS. Locke, c. 29, f. 19, printed by Kenneth Dewhurst, "Sydenham on a Dysentery", Bull. Hist. Med. (1955), 29, 393-400.

⁸ B.L., MS. Locke, c. 29, f. 22, printed by Kenneth Dewhurst, "Sydenham on Smallpox", Brit. Med. J. (1955), ii, 432-3.

7 B.L., MS. Locke, c. 19, f. 170, printed by Kenneth Dewhurst, "The Four Constitutions", Med. Press (1955), 234, 303-4.

⁸ B.L., MS. Locke, c. 19, ff. 171-6.

⁹ Ibid., f. 21, pp. 3-17.

10, 11 P.R.O., Shaftesbury Papers, 30/47/2, ff. 54-61 and ff. 50-2. Printed by Kenneth Dewhurst, "Sydenham's Original Treatise on Smallpox with a Preface and Dedication to the Earl of Shaftesbury, by John Locke", Med. Hist. (1959), 3, 278-302.

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the smallpox patient to too high an ebullition (by heating cordials and the like) which he thought would bring about a too rapid separation of variolous matter, and he was equally against allowing too slow a course by the use of purges, bleeding, and cooling medicines. His initial views were moderate, but in this essay he favoured a downright cooling treatment. Locke copied Sydenham's essay into his notebook with this concise statement as to its author: "Written by that Great Genius of Physick Dr. Sydenham in July 1669." It was never published separately, although Sydenham incorporated these same opinions into his chapter on "Regular Smallpox during the years 1667, 1668 and part of 1669", which appeared in his Observationes Medicae (1676). The earlier essay, and the printed text, have only slight differences in phraseology due to the distortions of translation. Locke's preface and dedication were never used: they remained with his other papers at Exeter House during his travels in France, whilst the distinguished patron to whom they were dedicated was languishing in the Tower. Times had changed. During Locke's absence abroad Mapletoft, who had undertaken the Latin translation, had replaced him as Sydenham's closest colleague. It was to Mapletoft that Sydenham rightly dedicated his Observationes Medicae, although he also paid tribute to Locke's clinical judgement:

You know also how thoroughly an intimate and common friend [he wrote], and one who has closely and exhaustively examined the question, agrees with me as to the method that I am speaking of; a man who, in the acuteness of his intellect, in the steadiness of his judgment, in the simplicity (and by simplicity I mean excellence) of his manners, has, amongst the present generation few equals and no superiors. This praise I may confidently attach to the name of John Locke.

Locke looked after the sick staff at Exeter House, and occasionally consulted Sydenham in difficult cases. He kept clinical records¹ of some of his patients, beginning in September 1667 with "Lucy a kitchenmaid", whom he treated for dropsy. He then attended his cousin, Peter Locke, for bronchitis, and William Sydenham aged eleven, the physician's son, for measles. Locke fully described each patient's symptoms, and their subsequent progress in such diverse diseases as rheumatism, lichen, hysteria, dyspnoea and oppression in the chest, gonorrhoea, pleurisy, and several inflammatory fevers. In March 1670 he treated a patient for a quartan ague with an infusion of water-lily, marshmallow, St. John's wort, linseed, and fenugreek rather than

¹ E. T. Withington, "John Locke as a Medical Practitioner", Janus (1899), 4, 393, 457, 527, and Med. Mag. (1898), 7, 47, 395, 313.

Peruvian bark which had been known, though not popularly used, in England for several years. At the end of his notes Locke occasionally questioned the nature of the illness, or his own management; and when looking after a youth with an "inflammatory fever" who developed petechial haemorrhages on the sixth day, he wrote:

Query, since the constitution of this year was characterised by measles, was this fever thus influenced, for petechiae are common in measles if a too stimulating regimen be used? Or has the fever some relation to smallpox, the fluxes and pain in the loins being due to an inflammation causing either affection?

Locke's preoccupation with the epidemiological aspects of fevers is reflected in another query: "Is a reduplicated quartan, occurring at the vernal equinox or other period, a sign of the speedy disappearance of the fever?" He also tried to correlate the clinical features of a woman who died of retention of urine with the pathological findings.

A certain woman suffered for three or four years from continuous and intolerable pain in the bladder, especially when she passed water, so that she could not leave her bed; she micturated frequently but little at a time and with such pain that she cried out. After standing a little a thick white purulent sediment always formed in the urine. At length she died worn out with torments. The body being opened, the bladder, uterus and rectum were seen to be so grown together and connected with the peritoneum and bones of the pelvis that neither bladder nor rectum could be expanded. Hence the reason that she never conceived, that the bladder could not contain sufficient urine and that she suffered the usual vesical pains on defaecation. The right kidney was much swollen and filled with a quantity of putrid pus from an old abscess. This explains why she complained of pain in, and could not lie upon, the right side. For her pain began in the right kidney whence it passed to the bladder and persisted there till death. Certain skilled physicians had confidently declared that she suffered from stone in the bladder, but I conjecture that the source of the disease was in the kidney where the pain began with the abscess, and the pus gradually passing down into the bladder excited by its acridity those sharp pains, and finally was excreted with the urine. This conjecture is favoured by the fact that the opening of the right ureter into the bladder was patulous and almost large enough to admit the ring finger.1

This clinico-pathological survey of tuberculous nephritis with peritoneal involvement has a decidedly modern flavour. His last note records the illness of the Rev. John Grig (a Canon of St. Paul's and Locke's cousin by marriage) who died of a fever, which was probably typhus.

Lord Ashley's hopes of posterity were pinned on the fertility of his daughter-in-law, Lady Dorothy Ashley Cooper, who suffered a

1 Withington, Med. Mag., 7, 576-7.

serious abortion during the early months of her pregnancy, when Locke's careful management brought about her recovery, and gained her mother's gratitude.

"I acknowledg the favour of your letter," wrote Lady Rutland,¹ "although an account most unwelcome, yet bless God, that since it was not sollid she was so soone freed of; I am sure I owe much to your care of my deare child." Six months later, another abortion was narrowly averted of which Locke gave this account:

August 19th, 1670: Lady Dorothy Ashley, aged [Blank in MS.] years of sanguine temperament and rather phlethoric habit noticed on the morning of the 19th (being at the end of the 12th week after conception) a sudden swelling of the abdomen without any pain, sickness, or other bodily derangement.

20th: In the evening she felt a sudden and copious flow of liquid blood from the pudenda without any pain. The flow ceased of itself, but recurred to a slight extent from time to time. She was at once bled, and two hours afterwards passed, without pain, some thin membrane with some flesh-like substance or parenchyma adherent to it, apparently part of the secundines. During the night there was neither pain nor bleeding and no sinking of the breasts or abdomen. By the physician's advice² nothing was done, but everything left to nature till the 23rd. No further bleeding having occurred, in order to strengthen the uterus and foetus, there was prescribed extracts of acorns eight ozs. to be taken twice a day.³

When Locke informed Lady Rutland of these melancholy events she appealed to "the Lord to preserve her and reward your compassionate cares for her",⁴ which was granted on 12 February, 1670/1 with the birth of a son. Overjoyed at her daughter's safe delivery, Lady Rutland thanked her doctor.

The Lords name be blest and praised for her well doeing [she wrote],⁵ and safely bringing that noble familie so hopefull an heire, that early accosts ladies in bed and manages a weapon at 3 days olde to my wonder and joy.

Her expectations were misplaced, as when Anthony Ashley Cooper grew up he wielded a pen more dextrously than a pistol.

Locke was now moving in the fashionable milieu of Exeter House, and amongst Lord Ashley's friends and political associates who contributed to his collection of medical recipes were Prince Rupert, the Duke of Albemarle, Sir A. Cope, and Sir Paul Neile who proposed him as a Fellow of the Royal Society. He was elected in November

¹ P.R.O., Shaftesbury Papers, 4/185, 31 Jan., 1669/70.

² Probably Sydenham, who was an exponent of expectant treatment when meddlesome interference was more common.

³ Withington, Med. Mag., 7, 578.

⁴ P.R.O., Shaftesbury Papers, 4/190, 27 Aug., 1670.

⁵ Ibid., 47/11, 7 March, 1671.

1668, and shortly afterwards appointed to a committee of eleven for "considering and directing experiments". He was present at a discussion on 6 November 1672, when an experiment was designed to show that a sulphur ball possessed powers of attraction similar to those of the earth. "Mr. Locke intimated that himself had made experiments with such a ball", wrote Birch,¹ "and promised that he would bring it to the Society at the next meeting." But a week later he "excused himself that he had forgot it, promising to bring it at the next",2 and when again it slipped his mind, Boyle demonstrated the experiment instead.

Locke was probably more interested in clinical medicine than experimental science, as his closest friends were Mapletoft and Sydenham. Occasionally he visited Boyle who had moved in 1668 to his sister's home in Pall Mall, where he suffered his first stroke two years later.3 He corresponded with David Thomas, who occasionally asked him to get Sydenham's medical opinion, and frequently tried to lure him to his Salisbury laboratory. During a widespread dysentery epidemic in 1669 Thomas wrote:4

Pray let me know whether the grypeing of the gutts of which soe many dy in London and are sicke in the country be cholera morbus and what way of cure Sydham useth. . . .

Thomas was busy preparing medicines from the recipes of Boyle, Schardius, van Helmont, Glauber, and Paracelsus. He had tried to prepare a tincture of antimony for which Locke had sent some of the ingredients. He then asked Locke to seek details of its preparation from the London chemists and apothecaries, and ended by inviting him to "spend this winter a fortnight or 3 weekes in Sarum wee might, it may be, performe some good operations".5 But Locke was then busy with the informal meetings of a small club which met at his rooms to discuss medical, philosophical, and theological topics. Sydenham, Mapletoft, and James Tyrrell were probably amongst these "five or six friends" who, whilst "discussing on a subject very remote from this",6 gave him the idea of inquiring into the limitations of human understanding. These discussions led him to write the first draft of his Essay in 1671;7 and, as at least half of those present were doctors, medicine was probably the "remote" subject which provoked these studies.

¹ T. Birch, History of the Royal Society (1756), London, vol. III, p. 59.

² Ibid., p. 61.

³ L. T. More, op. cit., p. 110.

⁴ P.R.O., Shaftesbury Papers, 47/2, ff. 27-28, 14 Oct., 1669.

⁵ Ibid., ff. 29-30 (C), 18 Nov., 1669.

⁶ John Locke, An Essay Concerning Human Understanding (1894), Oxford, vol. 1, p. 1. ⁷ An Early Draft of Locke's Essay (1936), Oxford, ed. R. I. Aaron and J. Gibb, p. 12.

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Even more remote from philosophy is the highly practical occupation of rearing children, in which incongruous role this middle-aged bachelor don was gaining a high reputation. Having already looked after Lady Dorothy Cooper, he now cared for her son. When the child's parents went to stay with Lady Rutland at Belvoir, and Lady Ashley was also away, Locke was left in sole charge. The child's mother sent him this charming account of her health:¹

I am sure this place would at this time doe you all the good in the world, for though I be breeding I have no manner of cough or heaviness at hart as I had of De: one but grows both fatt and big though I eat litell meat but butter and salletts; and porridg when I can get them: so that I belive being in the sweet aire I shall have two boys. .:.

But a fortnight later she sent her doctor a less favourable report.

I cannot stay heare [she wrote],² unless I am commanded by his Lordship, for this 2 or 3 days; I doe find my condition mak's me most unfitting for to be heare, where I find every day so many wonderfull disturbances; that I must be at rest somewhere for I finde need to be at ease; for I am so sick every day; and cannot indewer; to wait for my Jar: as I have till now....

Another nursing mother who confided her woes to Locke was his cousin, Mrs. Blomer, wife of Thomas Blomer, chaplain to the Earl of Northumberland. She was companion to Lady Northumberland, and when staying with her at Petworth invited Locke to see her new baby.

My owne health is much better than it was when I writ to you last [she added],³ which I impute a good deale to my takeing of whey these 3 or 4 dayes finding that it agrees with mee, and that Dr. Sydneham is a friend to it, I hope I may safely continue to take it (at least till further orders from him) my dos is about a quart and sweetned either with sirup of violets or syrup of buglose. I am willing to get a little strength before I take the Physick which Dr. Sydneham has appointed mee however (if hee think it fitt I shall delay it noe longer).

These demands for his services in midwifery and pediatrics prompted him to gather more information from David Thomas's marital experiences, which he summarized in his notebook:

Let not the midwife touch her at soonest til her water breaks away and the childe come fully to the birth and then she may have an easy travell. Let her also not take white wine to promote her delivery and the flux which without it wil be half menstrum; and 9 months she wil not be very weake, or at least not soe much weakend as a greater and indeed too great evacuation wil cause. I finde the common regimen of women in child bed to be as senseless as the

> ¹ P.R.O., Shaftesbury Papers, 47/2, 1 July, 1671. ² Ibid., 47/15, 15 July, 1671. ³ Ibid., 47/13, 10 July, 1671.

practise in other cases, they expecting as much from all women as they finde in any, without respect to strength or constitution. A cooleing and not too full a diet as at any time appears best. D.T.

Q. His further observations in his owne wife.1

After many years experience which had brought him the high regard of influential people, Locke was still an unqualified practitioner in November 1670, when the Chancellor of Oxford University was preparing to award a number of honorary degrees to celebrate the visit of William, Prince of Orange. Ashley nominated Locke for the degree of Doctor of Medicine, but his proposal met with some opposition. As soon as Locke heard that John Fell, Dean of Christ Church and Richard Allestrey, Provost of Eton, were opposed to his award, he asked his patron to withdraw his nomination, although the latter expressed his indignation in this letter to Fell:

You are well acquainted with the kindness I have great reason to have to Mr. Locke, on whose behalf I prevailed with the Duke of Ormonde for his assistance towards the attaining his doctor's degree at the reception of the Prince of Orange, and I am apt to think the instance of your Chancellor, and the relation he has to me, would not have been denied by the University. But Mr. Locke, understanding the Provost of Eton declared himself and you dissatisfied with it, has importuned me to give him leave to decline it, which, upon conference with my worthy friend the Bishop of Rochester I have done, and returned His Grace's letter, though my Lord Bishop of Rochester can tell you I could not but complain to him that your chapter had not been so kind to him in Mr. Locke's affairs as I thought I might justly expect, considering him a member of their House, having done both my life and family that service I own from him, and I being that quality I am under His Majesty, under which title only I pretend to any favour from them.

All that I request now of you and them is that since he will not allow me to do him this kindness, you will give me leave to bespeak your favour for the next faculty place, and that a more powerful hand may not take it from him. I rely very much on my Lord Rochester's mediation and your own kindness to me...²

These early years at Exeter House were amongst the busiest of Locke's industrious life. He wrote a treatise on economics; and whilst secretary to the Lords Proprietors, helped to draft "The Fundamental Constitutions for the Government of Carolina".³ He read widely, drafted his *Essay*, wrote on toleration, and continued his interest in theology, particularly the latitudinarianism of Benjamin Whichcote, whose sermons he attended. Locke undertook all these varied tasks when ill-

¹ B.L., MS. Locke, d. 9, p. 45.

² P.R.O., Shaftesbury Papers, 30/24/47/10, 8 Dec., 1670.

³ Maurice Cranston, op. cit., pp. 117-20.

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health frequently caused him to exchange the smoke-laden metropolitan air for the country where his cough "sensibly abated". He took great care of himself, as he believed he was consumptive, although a diagnosis of asthma and chronic bronchitis seems more likely in view of his longevity. Autumnal weather aggravated his cough, and caused him to spend September 1670 at Oxford (where "I mended apace"); and October with Thomas at Salisbury. Next autumn he visited John Strachey in Somerset, and frequent excursions to Shaftesbury's country residence at Wimbourne St. Giles enabled him to ward off serious illness. Sydenham gave him this advice:

Your age, ill habitt of body, and approach of winter concurring, it comes to pass the distemper you complaine of yealds not so soone to remedies as it would doe under contrary circumstances. However, you may not in the least doubt but that a steddy persisting in the use of the following directions (grounded not on opinion but uninterrupted experience) will at last effect your desired cure. First, therfore in order to the diverting & subdueing allso the ichorose matter, 'twill be requisitt to take your pills twice a weeke as for example every Thursday & Sunday about 4 a clocke in the morning, & your clyster in the intermitting dayes about six, constantly till you are well. In the next place, forasmuch as there is wanting in bodyes broken with business & dispirited upon the before mentioned accounts, that stock of naturall heat which should bring the matter quickly to digestion, 'twill be highly necessary that you cherish your selfe as much as possibly you can by going to bed very early at night, even at 8 a clock which next to keeping bed, that is unpracticable, will contributt more to your reliefs then can be imagined. As to diett, all meals of easy digestion & that nourish well may be allowed, provided they be not salt, sweet or spiced, and also excepting fruits, roots & such like. For wine a totall forbearance thereof if it could possibly be, and in its steede the use of any mild small beere, such as our lesser houses do afford, would as near as I can guess be most expedient, for therby your body would be kept cool, and consequently all accidents proceeding from hott & sharpe humors grating upon the part, kept off. As to injections, in your case these things disswade the use of them:-First your more then ordinary bothe naturall tenderness & delicacy of sense. Then the blood that twice allready hath bin fetched by this operation, which if we are not positively certaine (as how can we be) that it proceeded not from the hurt of the instrument, will (if often repeated) endanger the excoriating the part & making it liable to accidents. Besides they have bin already used (perhapps as often is wont to be don) & this is not a remedy to be long persisted in by the confession of everybody. Sure I am, as I have over and over sayd to you and you know it to be true by my written observations which you have long since seen, that I never use any, where I am concerned alone, there being noe danger nor less certainty of cure in the omitting; & in relation to this business I have now asked myselfe the question what I would doe, & have resolved that I would lett them alone.

This is all that I have to offer & I have thought of it, and all circumstances relating to your case, with the same intention of mind as if my life & my son's were concern'd therein. T.S.

Notwithstanding that by this way the cure is certainly to be effected yet nevertheless I observe that in ancient bodyes, especially in the declining part of the year, some little kind of gleeting or moisture (but voide of all malignity) will now and then appear by reason of the weakness of the part and will scarce totally vanish till the returne of the warme spring.¹

At the beginning of 1672, when Shaftesbury became Lord Chancellor, Locke was appointed Secretary of Presentations; and later, his services were needed at the newly-established Council of Trade and Plantations of which he eventually became Secretary. These duties, together with the nominal post of Registrar to the Commissioner of Excise² which he had held since 1670, virtually made him a full-time civil servant with little time for medicine. In 1673 he handed over most of his Exeter House practice to Sydenham, at whose request an apothecary's bill for medicines to the value of \pounds_{31} 12s. 6d. was compounded. It included a pot of ointment costing eighteenpence, "two purging lotions" at 3s. 6d. each, and several cordials made up from Locke's prescriptions.³

Dr. Sydenham and I mention you sometimes [he informed Mapletoft],⁴ for we do not now meet often, my business now allowing me but little leisure for visits, but I hope I shall in a short space bring it to better terms. Here is a friend of mine,⁵ troubled with a paralytic distemper, solicits me to desire you to procure him from that part of France you are in some of the Queen of Hungary's water,⁶ which he hears is best made thereabouts. If you can get him three or four quarts and send it to London by way of Marseilles or shipp it at any port, you will much oblige me. The use and effects of it here would be worth your enquiry: and if you can inform yourself concerning Bourbon waters, how it be taken, in what diseases, and with what success, you may possibly bring home with you a new use of our Bath waters, for which I should thank you.

His job of fostering trade brought Locke into contact with British residents living abroad with whom he corresponded on such varied topics as Scandinavian superstitions, Lapland witches, and West Indian medicines. He got them to send foreign plants, medicines, and other natural curiosities. From the West Indies he received a parcel of

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¹ P.R.O., Shaftesbury Papers, 47/2, ff. 11-12 (undated), printed in "Sydenham's Letters to John Locke", ed. K. Dewhurst, *Practitioner* (1955), 175, 314-20.

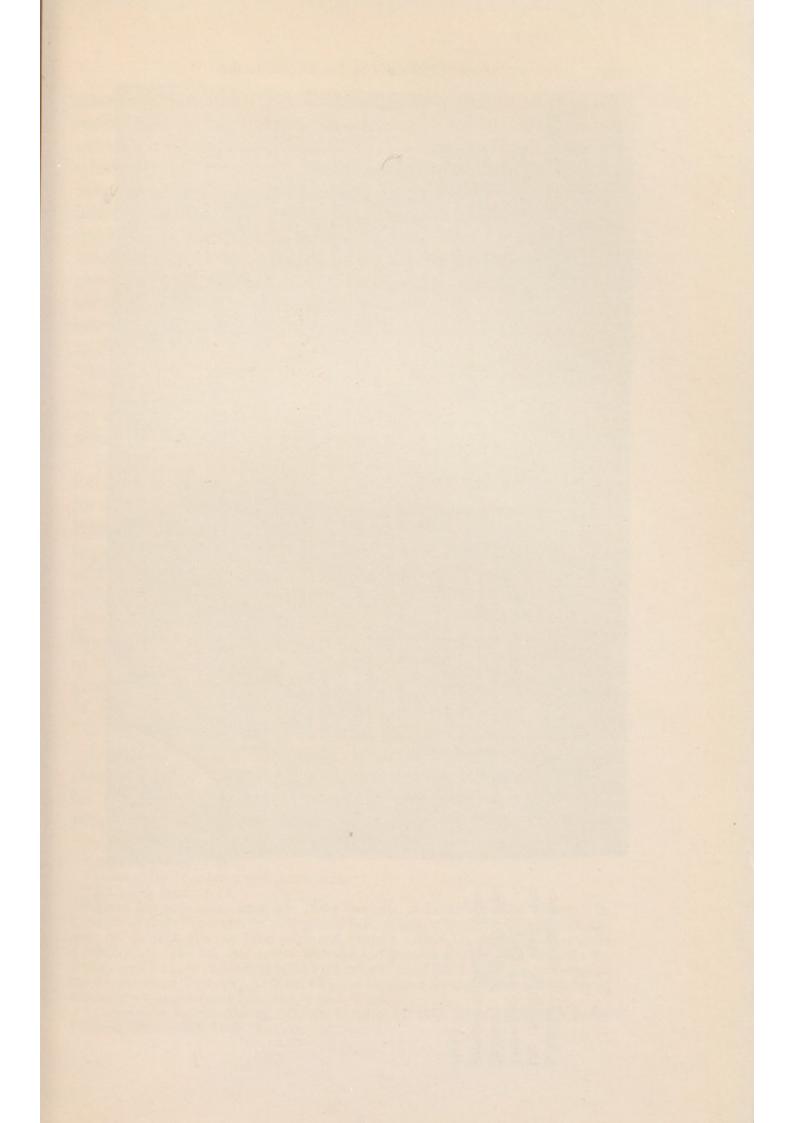
² His certificate of appointment in: B.L., MS. Locke, c. 25, f. 12, 29 Oct., 1670.

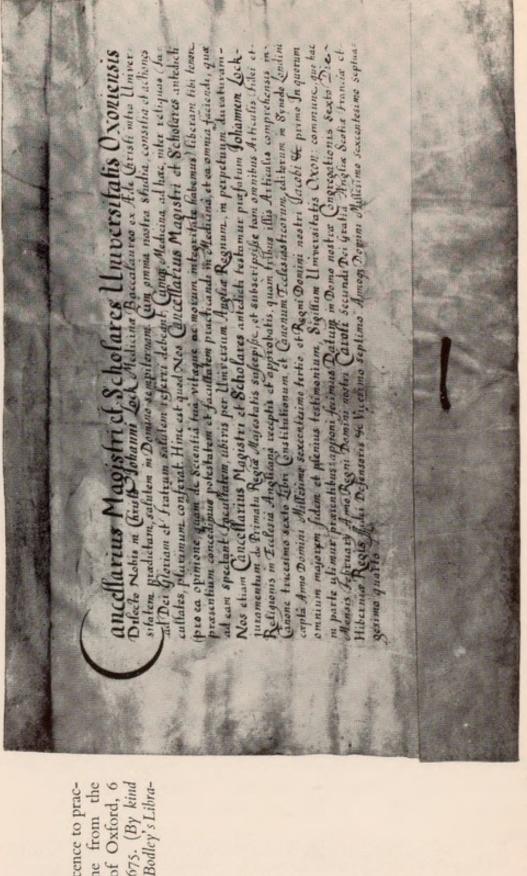
⁸ P.R.O., Shaftesbury Papers, 2/216 (1673).

⁴ European Magazine (1788), 14, 402, 14 Feb., 1672/3.

⁵ Probably Robert Boyle who suffered his first stroke in June 1670.

⁶ A distillate of rosemary.





February, 1675. (By kind permission of Bodley's Libratise medicine from the University of Oxford, 6 5. Locke's licence to pracrian.)

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Carolina China root, a jar of bitumen recommended in sciatica; the roots of a white lily for glanders, a pot of "tarara-root" used by the natives as an antidote to poisons;1 and an account of a poisonous fish2 which he passed on to the Philosophical Transactions.³ Exotic and bizarre natural phenomena always interested Locke; but unlike other virtuosi, including his friends, Charleton and Sloane, he never collected these specimens into a "cabinet" or private museum, which was then the usual practice. These cabinets, displaying tangible evidence of natural phenomena, represented one aspect of the great upsurge of empiricism, although some of them were merely repositories of all that was exotic or curious in nature and art, rather than systematic collections designed to illustrate a natural law, or represent an orderly collection of fauna. Such a bizarre and disorderly jumble was Tradescant's collection, which formed the nucleus of the Ashmolean. Locke passed his specimens on to his friends: he preferred to collect information rather than accumulate objects.

With Shaftesbury's fall from power in the summer of 1673, Locke lost his job as Secretary of Presentations, although he continued to work for the Council of Trade until that body was dissolved in March 1674/5. Freed from these administrative duties, he returned to medicine and began summarizing his reading in another commonplace book.⁴ Most of the notes are from Francis Bacon's Natural History, and the works of Felix Plater (1536-1614), formerly Professor of Medicine at Basle, a pioneer in the nosological classification of diseases. Plater regarded any illness merely as a collection of symptoms and, without speculating as to the nature of morbid processes, he divided them into three main groups: disturbances of sense and motion, febrile diseases, and defects of formation and secretion. He also classified mental diseases into "mentis imbecillitas", "consternatio", and "defatigatio".

Locke summarized his reading under these headings: Exempla, Descripta, Prognosis, and Curatio, as he was then preparing to take his degree. He graduated Bachelor of Medicine on 6 February, 1674/5,5 and was granted "facultas practicandi in medicina".6 He was

¹ P.R.O., Shaftesbury Papers, 10/3, 12 Aug., 1673.

² Ibid., 10/5, 6 Aug., 1674.

³ Philosophical Transactions (1675), 10, 312.

⁴ B.L., MS. Locke, f. 22.

⁵ There has been some confusion about the date of Locke's medical degree. The Catalogue of Oxford Graduates (p. 418) gives 6 Feb., 1673/4, whereas Wood's Fasti Oxoni-enses (pt. ii, 343), gives 27 June, 1674, and Foster's Alumni Oxonienses (p. 932) states 6 Feb. 1674/5. The last date agrees with the Congregation Register (Bd. 19, 1669-80, f. 260), which I have checked with the kind permission of Mr. I. G. Philip, secretary to the Keeper of the University Archives. Grace to supplicate for the degree of Bachelor of Medicine was granted on 3 Feb., 1674/5 (ibid., f. 148). ⁶ Congregation Register (Bd. 19, 1669-80, f. 128 and f. 201). Locke's diploma is in the

Bodleian Library, MS. Locke, b. 5, 10.

immediately appointed to a medical studentship at Christ Church, which was his only reason for graduating in medicine. Locke's fellow dons now assumed that he would settle in Oxford, and proceed in due course to a doctorate. "Locke hath wriggled into Ireland's faculty place," wrote Humphrey Prideaux,¹ "and intendeth this Act to proceed Doctor in Physic." But Locke was content to possess free rooms in college without the necessity of teaching or even keeping terms: he had no wish to acquire expensive academic honours, nor was there any need for him to remain in England. With the approach of winter, he began packing up his belongings in readiness for a journey to France, where he hoped that the benign air of Montpellier would relieve his cough.

¹ B.M., Add. MS. 28,929, f. 13, 7 Feb., 1674/5.

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CHAPTER III

Travels in France (1675 - 1679)

WHEN Locke left for France he began to keep a daily journal in vellumbound almanacs1 which he continued, with diminishing regularity, until near the end of his life. It is from these entries that an outline of his medical interests can now be traced. He collected all manner of information : notes from his reading, recipes from doctors, apothecaries, and laymen; observations on patients, accounts of operations, and the organization of French hospitals. It must not, however, be assumed that he necessarily believed in the efficacy of all these remedies; he merely noted the precise details and, whenever possible, illustrated them from his own, or his informant's, experience. These journals are, therefore, mainly repositories of plain measurable facts, mingled with information based on the experience of others which might subsequently be useful in practice: they were never intended to be vehicles of artistic expression. Locke preferred dull facts to the vaguely mystical medieval glamour which still veiled the medical art, and hence his journals represent the sober detachment of the medical scientist, rather than the eager involvement of the artist. It was this aptitude for cool precise inquiry in a passionate age which led to his signal achievements.

With George Walls, another Christ Church don, he crossed to Calais, and stayed ten days in Paris. They then travelled by road to Châlons and thence by boat to Lyons. Here they met William Charleton (1642-1704), a wealthy amateur scientist whom Locke had previously known in Oxford under the name of Courten. A warm friendship sprang from their meeting, and Charleton later joined Locke at Montpellier. After a few days sightseeing at Lyons they turned south-west to Nîmes, and thence journeyed south to Montpellier.

The town had been a spa since Roman times, and during the seventeenth century reached the height of its reputation as a fashionable place to take the waters. The University was one of the most ancient in Europe, founded in the twelfth century by physicians from Salerno: it was here that Rabelais graduated in medicine, and Sir Kenelm Digby²

¹ B.L., MS. Locke, f. 1 to f. 10; B.M., Add. MS. 15642. ² John F. Fulton, "Sir Kenelm Digby (1603–16)", Notes and Records of the Royal Society of London (1960), 15, 199-207.

lectured on his powder of sympathy¹ seventeen years before Locke's arrival. Montpellier had three attractions for Locke: its benign climate, the famous medical school, and a friendly British community with whom he shared similar tastes and interests. He lodged with M. Puesch, an apothecary, "being told that that part of the town which lay towards the sea was less healthy . . . the south and south-east winds being counted unhealthy, coming off the sea".²

His earliest French friends were Protestant physicians, whose nonconformity prevented them from holding university appointments. Charles Barbeyrac (1629-99) was the best known. He had offered himself as a university candidate in 1658, knowing full well that he would not be elected, but the excellence of his public disputation brought him a large practice, and an international reputation as an unofficial teacher. Sydenham is said to have been one of his pupils for a few months, but the evidence is unconvincing,3 and Payne4 has been unable to trace any common features in their published works. Barbeyrac always taught medicine at the patient's bedside, and on the way there outlined the clinical features to his students, whom Locke accompanied. Locke also met Pierre Magnol (1638-1715), another leading physician with a particular interest in botany, whose name has come down to us with the magnolia blossom. He became a professor after his conversion to Roman Catholicism. Locke knew Pierre Jolly, doctor and astronomer, with whom he witnessed a solar eclipse; and Dr. Paul who occasionally gave him the fruits of his clinical experience.

Information on the preparation and action of medicines he gleaned from his landlord, M. Puesch, and also from Sébastien Matte La Faveur, who had been appointed Démonstrateur Royal de Chimie at the University in the previous year. These busy physicians and apothecaries were Locke's only medical informants throughout his stay in Montpellier. With the exception of La Faveur, they were all unofficial teachers, as Locke was clearly out of sympathy with the conservatism of the university doctors. Academic ceremonials were heavily cloaked in tradition, and he "found little for edification" in the pompous Latin disputations which accompanied them. Locke attended a degree ceremony, where he dismissed the Chancellor's speech as being "directed against innovation", and he was soon disappointed with the Montpellier Medical School, where he found the same legacy of dogmatic Scholasticism against which he had rebelled in Oxford. Instead of listening to lectures he visited patients with Barbeyrac and Magnol,

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¹ A preparation of ferrous sulphate, with powerful astringent and antiseptic properties.

² B.L., MS. Locke, f. 1, 4 June, 1676.

⁸ F. Picard, Sydenham sa vie, ses Oeuvres (1889), Dijon.

⁴ J. F. Payne, Thomas Sydenham (1900), London, pp. 94-5.

or discussed the preparation of medicines with the apothecaries, and frequently wandered round the excellent botanical gardens,1 making notes on the plants, and getting practical tips from the head gardener. Unfortunately, Locke did not visit St. Eloy Hospital where Raymond Vieussens (1641-1713) was performing post-mortems, which provided facts for his Neurologia Universalis, etc. (1683) with its description of the inferior medullary velum which is still known as the valve of Vieussens.² He is said to have conducted over five hundred post-mortem examinations, upon which he based his pioneer work on the pathology of the heart.3

Locke stayed in Montpellier (apart from brief excursions to Provence and along the Mediterranean coast) for the next fifteen months. With Charleton he visited Balaruc and made notes on the medicinal properties of the waters, and in the spring of 1676, journeyed into Provence, staying at Aix, Avignon, Hyères, and Toulon. At Aix, Locke was warmly received by Dr. Claude Brouchier, physician to Archbishop Grimaldi, and Professor of Chemistry, who gave him much information.

Locke's own health was not improving as quickly as he had hoped, and through Mapletoft he got Sydenham's opinion.

I acquainted Dr. Sydenham with all that relates to your health [replied Mapletoft],4 of which I found you had given him a later account than mine was. He threatens to write to you himself but in the mean time desires me to tell you that he lays the main stresse of your Cure upon Alteresty as he calls it, and would therefore advise you to give yourselfe up to the Dyet of the Country you are in, eating and drinking as they doe, without which he doth not expect much from the aire. He thinks you should drink wine and water together, as they doe rather than the pure Element, and that you should forbeare Milke then make so constant use of it. He mislikes not your being bled once, but doth not advise to repeate it, nor take any kind of Physick. I hope you will find all the advantages you could propose to yourselfe in your journy and that you will shortly return to us in perfect good health. I am glad you found Dr. Brouchier so much the Man I promised you, he expresses great satisfaction in you likewise so that I pretend to have served you both. Dr. Coxe⁵ laments your not coming with his Son, but ows his obligations to you for the kindness you did him whilst you were together. My Lady Northumberland hath been at Bristoll and Bathe and dranke of both those Minerall Waters, but without any great effect.

¹ Reviewed by Hervé Harant, "Le Jardin des Plantes de Montpellier", Endeavour (1959), 13, 97-100.

² C. G. Cumston, "The Portrait of Vieussens", Ann. Med. Hist. (1921), 3, 86.

³ Sir D'Arcy Power and C. J. S. Thompson, op. cit., London, p. 121. ⁴ B.L., MS. Locke, c. 15, ff. 205-6, 28 June, 1676.

⁵ Dr. Thomas Coxe came from Somerset. He studied medicine at Padua, and was incorporated M.D. at Oxford in 1646. Coxe was one of the original Fellows of the Royal Society, and became President of the College of Physicians in 1682. According to Payne he persuaded Sydenham to devote himself to medicine on his return from the Civil War.

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I beleive she will try Bourbon in the fall, Mr. Mountague desynd (as the King says) to goe Embassador into France in the room of Lord Barclay. . . . Dr. Sydenham's Book runs the Gauntlet luckily enough here with us. . . .

When he heard of the publication of Sydenham's Observationes Medicae Locke was about to leave Montpellier for Paris, and was unable to get a copy. He had been asked by Dr. Thomas Coxe,¹ on behalf of Sir John Banks, a wealthy merchant, to take charge of his son, Caleb, during his tour of France.

My service I beseech to you [replied Locke],² to all my friends in your walke, particularly Dr. Sydenham. The spell held till I had left Montpellier, for by all the art and industry I could use, I could not get a booke of his to Montpellier till the weeke after I had left it. I shall be glad to heare that it every day gains ground, though that be not always the fate of usefull truth, especially at first seting out. I shall perhaps be able to give him an account what some ingenious men thinke of it here; though I imagine he is soe well satisfied with the truth in it, and the design that made him publish it that he matters not much what men thinke. And yet there is usually a very great and allowable pleasure to see the trees take and thrive in our own Time, which we ourselves have planted.

Locke travelled north by way of Toulouse. At Agen, just short of Bordeaux, he was stricken with a severe ague which interrupted his journey for six weeks and left him weak and easily fatigued for several months. It was midsummer before he met his charge in Paris; and soon afterwards sought Boyle's introduction to some of the French virtuosi.

I would beg the favour of two or three lines from your hand [wrote Locke],3 to recommend me to the acquaintance of any one of the virtuosi you shall think fit here. I know your bare name will open doors, and gain admittance for me, where otherwise one like me without port or name, that hath little tongue and less knowledge shall hardly get entrance....

As soon as he was better Locke began to explore the Paris of Louis XIV, whose l'état c'est moi expresses the absolutism of his reign, as also does Locke's contrasting descriptions of the splendours of Versailles, and the squalid poverty of the French peasantry. But Locke soon found that these excursions taxed his strength, although Sydenham lightly dismissed his complaints as "noe other than what are usual after agues". He advised plenty of exercise, especially riding, adding: "If you would but ride on horseback from Paris to Calis and from Dover to London upon that and drawing in the aer your symptoms will vanishe."4

¹ B.L., MS. Locke, c. 7, ff. 180-1, 22 Feb., 1677.

² European Magazine (1780), 15, 10, 22 June, 1677. ² The Works of the Hon. Robert Boyle, ed. T. Birch, vol. v, pp. 539-40, 4 June, 1677.

⁴ B.L., MS. Locke, c. 19, f. 169, 4 Jan., 1677/8, printed by Kenneth Dewhurst, "Syden-ham's Letters to John Locke", Practitioner (1955), 175, 314-20.

Locke and his pupil stayed over a year in Paris, where they moved in the intellectual milieu. Locke met François Bernier (1620-88), physician and Orientalist, who abridged and popularized Gassendi's philosophy; Adrien Auzout (1622-91), a leading mathematician and astronomer who improved Huygen's astronomical micrometer; Hubin and Hautefueille, well-known inventors, and Samuel DuClos (d. 1715), physician to Louis XIV, and founder-member of the Académie des Sciences whose meetings Locke attended at King's Library, Versailles. He met more friends through Henri Justel, Secrétaire du Roi, who held a weekly salon, where Locke was introduced to Nicolas Thoynard (1629-1700) with whom he corresponded on scientific subjects long after his return to England. Thoynard, born at Orleans, had travelled widely before settling in Paris, where his interests ranged from Biblical studies to science and technology: at his home Locke witnessed experiments on fermentation, and collected information on the technicalities of artillery.

Locke lodged with Moïse Charas (1618–98) in the Rue de la Boucherie off the Faubourg St. Germain, near the Faculty of Medicine. Charas, then demonstrator in chemistry at the Jardin des Plantes, was particularly interested in the medicinal properties of viper's flesh, and the effects of the venom.¹ Locke witnessed some of his experiments. They were designed to test van Helmont's theory that a reptile's saliva was normally free from venom, which accumulated only when the animal was enraged or terrified. The unorthodox nature of these experiments, and the fact that Charas was a Protestant, brought about his prosecution a few years later on a charge of attempting to overthrow an established belief. He sought asylum in England where he became apothecary to Charles II.

In the summer of 1677 Locke had hopes of a medical appointment on his return to England, as Mapletoft had long promised him the Chair of Physic at Gresham College, but rumours of his impending resignation brought forth one eager applicant ready to purchase his appointment.

I shall acquaint you with an overture lately made to me [wrote Mapletoft],² by a good Friend of mine who suspecting I might be more inclinable to Matrimony then formerly came on purpose to tell me, that when I designed to leave, he will take it as a favour if I would accept £200 from him, and assist him in being my Successor, which he doubts not of Compassing almost by his

¹Locke's notebook (1660-93) (MS. Locke, d. 9, f. 31) contains the following entry: "We have experimented that vipers skins doe perfectly heale the inveterate mange in dogs making them eat it boiled or raw. Charas of Vipers, p. 157, 70. Q. Whether it may not be as effectuall for scab or leprosie in men? J.L."

² B.L., MS. Locke, c. 15, ff. 209-10, 11 Oct., 1677.

own interest, but thinks himselfe very sure if I joyn mine. He frankly told me he had offered another Professor \pounds 300 to resign to him, and that if I desired more he would give it. I told him what obligation I had to you (though without naming you) and that I could promise nothing till I knew your minds: but did beleive you would not value it at the rate he did, which is the top of his hopes. He offers me too the use of my Stables and Coach-house rent-free as long as I please, and will stick at nothing that I can reasonably demand. I need not tell you after this that he is a very young man¹ (wholly designed to live) res ipsa loquitur. When I receive your answer I shall know what to say to him.

Nothing came of these intrigues, owing to Mapletoft's coy indecision, as a month later, he mentioned that he

was not in so much hast as you suppose to putt on the Yoke, be the Terms what they will, and believe that in the Spring you will find me in Statu quo, and not advanced at the most above the degree of a Seeker.²

He also mentioned attending the Royal Society, where he had met Moïse Charas who

if he would have stayed a little longer wee could have shewed him about 200 animalls, by Dr. Wallis's³ computation, in the fifth or sixth part of a drop of water. Wee had such storys written us from Holland⁴ and laught at them as perhaps you may doe at this: But seeing is beleiving and to that I referre you. I made your Complement to Dr. Sydenham who would return it under his hand but that he cannot prevayl with himselfe to write A Monsieur Monsieur which he rayles at as a very impertinent way of adres.

Whilst Mapletoft wavered in England, Locke studied medicine in the wards of the Charité Hospital rather than with the pompous physicians of the Faculty of Medicine whose hypocrisy and affectations were then being exposed by Molière's caustic wit. Paris was the citadel of Galenic orthodoxy, whereas Montpellier leaned more towards the teaching of Hippocrates: the doctors of the two universities were bitterly opposed. The Parisian Medical Faculty was an autocratic body with strong family connexions who limited their numbers by imposing six years of study, and a succession of medieval formalities on all

¹ Mapletoft resigned in 1679, and was succeeded by Dr. Henry Paman, aged fifty-four. The young man who tried to buy the professorship was probably the unsuccessful candidate Dr. Tancred Robinson who graduated M.B. (Cantab.) in 1679, John Ward op. cit. (1740), London, p. 279.

² B.L., MS. Locke, c. 15, ff. 211-12.

³ Dr. John Wallis, a mathematician and founder-member of the Royal Society, the foundation of which he mentions in "Account of Some Passages of his own Life" printed in Thomas Hearne's *Works* (1810), London, vol. III, 140-70.

⁴ Anthony van Leeuwenhoek first described the dentinal tubules in a letter to the Royal Society: "Microscopical Observations of the Structure of Teeth and Other Bones", *Philosophical Transactions* (1678), **12**, 1002-3.

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aspirants to the doctor's title.1 They were then only allowed to prescribe Galenic remedies;² and a few years before Locke's arrival Dr. Guy Patin³ had condemned the use of laudanum, antimony, quinine, the Arabian polypharmacy of the apothecaries, and the chemical remedies of such physicians as Sir Theodore de Mayerne. These Parisian doctors had even forbidden their colleagues from Montpellier to practice in the capital, until Théophraste Renaudot, with the apothecaries' connivance and Richelieu's support, organized the southern doctors into the rebel "Chambre Royale de Médecine", membership of which conferred the right to practice.4

Autocratic, intolerant, and conservative were the doctors of Paris, when Locke, leaving them to their squabbles, wandered around the wards of the Charité Hospital, where he saw Jerome Collet,5 the famous lithotomist, cutting for the stone. He followed the treatment with mercurial inunction of a syphilitic woman, and his precise notes give a unique account of the whole course of her illness. He also saw a boy with "horny excrescences growing out of his fingers and toes", and his account when published twenty years later, was the first description of onychogryphosis.6 Locke also visited l'Hôpital Saint-Côme where he attended the lectures of Joseph Guichard Duverney? (1648-1730) whose skilled dissections later revealed the structure of the inner ear.

Dr. Locke's medical services were constantly requested by British residents. He had treated William Charleton and Sir John Chicheley8 at Montpellier, and soon after his arrival in Paris, looked after Thomas Herbert, later the eighth Earl of Pembroke, whose febrile illness was complicated with painful orchitis. He also treated John Robinson⁹ and

1 H. W. Jones, "The Faculty of Medicine of Paris", Ann. Med. Hist. (1939), 3rd series, I, I-29.

² The medicines authorized by the Paris Medical Faculty were listed in Codex Medicamentorius seu pharmecopoeia parisiensis (1628). ³ Francis R. Packard, "Guy Patin and the Medical Profession in Paris in the Seventeenth

Century", Ann. Med. Hist. (1922), 4, 215. * E. Wickersheimer, Médecine et les Médecins en France (1906), Paris, p. 68.

⁵ A member of a family of lithotomists who passed on their art from father to son from the sixteenth to the eighteenth century. The first of the line was Germain Collet, who was consulted by Louis XI as to his likelihood of surviving the operation. The cautious monarch arranged for a trial operation on a condemned criminal before submitting himself to the knife. The experimental operation was unsuccessful, so the prudent monarch bore his affliction for a further nine years (W. Doolin, Wayfarers in Medicine (1949), London, pp. 150-1, and opening chapter of J. Swift Joly's Stone and the Calculous Diseases of the Urinary Organs (1929), London).

⁶ Philosophical Transactions (1697), 19, 594-6.

7 Gabriel Bonno, Les Relations Intellectuelles de Locke avec La France (1955), California, p. 80.

8 Rear-Admiral Sir John Chicheley was a Commissioner for the Navy (1675-80) and later a Member of Parliament.

Possibly John Robinson (1650-1723) who became a Fellow of Oriel in 1675 and was given leave to go abroad in 1677. After a distinguished diplomatic career be became Bishop of London.

Mrs. Sandys for dysentery; Caleb Banks for malaria; and the Countess of Northumberland¹ for trigeminal neuralgia, which he described in his journal and in letters to Mapletoft.² Locke and Mapletoft had previously accompanied this young, and exceedingly attractive, widow on a short tour of France, undertaken, it was said, to protect her person from the King's carnal designs.³ When Locke was called to see her she had dismissed her foreign advisers after they had aggravated her facial pain by removing two sound teeth from the affected side. His successful treatment, together with his long correspondence concerning her proper management, greatly enhanced his reputation amongst the leading physicians. Throughout his travels in France Locke was frequently pestered for advice on both the physical and spiritual wellbeing of Denis Grenville, an Anglican clergyman who poured out the torments of religious doubt in long letters which Locke patiently answered; but he referred the physical ailments of his relatives to Dr. Brouchier's care.4

In the summer of 1678, Locke and his pupil set out to explore the valley of the Loire. They stayed for a time at Orleans, where Locke gleaned much medical information from Dr. Godfroy, and he also met a famous priest-physician, the Abbé François Gendron (1618–88) who had treated Anne of Austria⁵ for cancer, and gained an abbey for his services. Their next stop was at La Rochelle, where Locke again made the acquaintance of the two leading medical men: Dr. Richard and his cousin Dr. Bouchereau. Journeying south by way of Bordeaux they came to Montpellier, where they spent a fortnight sightseeing and renewing old acquaintances. It was then decided to visit Rome, but on reaching Lyons they heard that the Mt. Cenis Pass was blocked with snow so they prudently returned to Paris.

Whilst travelling south Locke received a letter from Sydenham giving him important details on the use of Peruvian bark in the treatment of agues. It had been introduced into England twenty years earlier as the Jesuits' powder,⁶ and Sydenham had already noted its

¹ Elizabeth Wriothesley (1646–90) was the daughter of the Earl of Southampton. In 1662 she married Jocelyn Percy, eleventh Earl of Northumberland who died in 1670; three years later she married Ralph Montague.

² Published by Kenneth Dewhurst, "A Symposium on Trigeminal Neuralgia, etc.", J. Hist. Med. (1957), 12, 21-36.

³ Maurice Cranston, op. cit., p. 145.

⁴ Later Locke supervised the treatment of Grenville's wife who suffered from manicdepressive psychosis. The opinions of some of her medical advisers are published by Kenneth Dewhurst in "A Seventeenth Century Symposium on Manic-Depressive Psychosis", Brit. J. Med. Psychol. (1962), 35, 113.

⁸ Mother of Louis XIV. She was afflicted with cancer of the breast in 1666, from which she died in 1672.

⁶ A. W. Haggis, "Fundamental Errors in the Early History of Cinchona", Bull. Hist. Med. (1941), 10, p. 417.

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benefits in 1666. But later he regarded the bark with disfavour, until he finally decided on its efficacy in his Observationes Medicae (1676). There are several reasons for Sydenham's indecision, and for the delay in accepting the bark as a specific remedy for agues in fever-ridden England.¹ It was associated with the Jesuits; and the high cost led to the sale of many bogus preparations. One fraudulent practice, discovered by Sloane,² was to use the cheaper bark of the cherry which was given a bitter flavour by dipping it in a tincture of aloes: it was more likely to cause diarrhoea than cure malaria. Sir Robert Talbor, an apothecary, used the bark as a secret remedy with which he cured Charles II's ague after Richard Lower had refused to use it. The fact that Talbor kept his remedy secret, much to Sydenham's annoyance, brought him a fashionable practice in credulous seventeenth-century England. Locke, with his customary caution, cut out the words "cortex Peru" from Sydenham's letter.

Understanding how much Tabor, now knighted here, hath bin admired for his skill in curing agues [wrote Sydenham],3 I thought fitt to let you know a way, if you have not allready observed it in my book page 99. Tis thus, The fitt being for example on Sonday, lett that fitt pass (it being dangerous to checke the aguish matter that is now ready to be discharged by a paroxisme) and give 2 drams [cut out] Monday morning, 2 drams Monday night, 2 tuesday morning, 2 tuesday night, and you shall be certeyn twill miss comming Wensday. Or thus: Take [cut out] I oz. syr. ros. sicc., 2 ozs. aut q.s. Take it 4 times as before in the intermitting dayes, drinking a draught of wine after it. If it be a double quarten run over the bastard fitt and I give notwithstanding. As in a quarten so in a tertian begin at morning or at night, as soon as the fitt is over (and be sure the next fitt will not come). If a child then boyle 3 drams [cut out] in a pint of clarett and give 2 or 3 spoonfulls every third houre. Now to prevent a relaps, be sure to give it agayne ether within 8 or 9 dayes, or if you will, the day after the missing of the first fitt, as thursday morning, thursday night, friday morning, friday night. Thus you shall be sure to cure, for I never affirmed anything to you which failed. Sic vos non vobis. I never gott 10£, by it, he hath gott 5000. He was an apothecary in Cambridg wher my booke and practises never much obteyned. . . . If the ague be a new one twill be fitt to purge before you give the powder or stay till it has worn it selfe a little, but if an old one begin presently. I am I thank God nearly well of my pissing blood, gout etc. and understand my trade somewhat better than when I saw you last, but am yet but a Dunse.

These were Locke's first instructions on the use of Peruvian bark, as none of the many French physicians he had met on his travels had used

¹ It first appeared in the third edition of the London Pharmacopoeia in 1677. La Fontaine published Le Poème du Quinquina in 1682. ² G. R. de Beer, Sir Hans Sloane and the British Museum (1953), Oxford, pp. 27-8.

⁸ B.L., MS. Locke, c. 19, f. 166, printed by Kenneth Dewhurst, "Sydenham's Letters to John Locke", Practitioner (1955), 175, 314-20.

it. He, therefore, passed on Sydenham's method to Dr. Magnol, who remained unimpressed with it. "He thinks he knows [a] better thing than Kina Kina to cure agues." Quinine was less appreciated in France, as in 1679 Talbor was invited there, and amongst his distinguished patients were the Prince of Condé, the Dauphin, Colbert, Cardinal de Retz, and his "miraculous" cures were often mentioned in Madame de Sévigné's letters.1 When the "English remedy" became popular in France, Talbor tried to corner the market by buying up all the bark, which at one time reached £15 per pound, until Louis XIV bought large amounts in Cadiz, when the price fell to between f_{4} and f_{5} .

Locke and Caleb Banks stayed in Paris for a further five months, and again they mingled with the scientific élite. They met Father Chérubin, the writer on optics, who demonstrated his lenses and telescopes; the Abbé Jean Picard, the astronomer, who taught Locke the mechanics of the pendulum; and Oläf Römer, mathematics tutor to the Dauphin and later Professor of Astronomy at Copenhagen, where he first measured the speed of light. It was with Römer (whom he introduced to Boyle) that Locke returned to England on 16 May, 1679 after three and a half years abroad.

In presenting only these medical notes from Locke's journals the breadth and catholicity of his other interests should not be overlooked. During his first visit to Montpellier Locke made notes on the cultivation of corn, vines, olives, and he closely questioned the peasants on all manner of agricultural topics. He also made notes on technology: the processes of silk weaving, oil pressing, gunboring, soap-making, and the use of heated containers for conveying food. More appropriate for a Fellow of the Royal Society were his notes on botany, astronomy, meteorology, and the mechanics of various gadgets and instruments. During most of his visit France was at war, and hence his entries on the general organization of the army, with details of the clothing, pay, and welfare of its soldiery. His work with Shaftesbury had given him an insight into public administration and the world of affairs, which probably accounted for his notes on finance, coinage, weights, architecture, water supplies, and other aspects of government in France.² He translated Pierre Nicole's Essais de Morale into English, and more leisure gave him an opportunity of revising his philosophy.³ His journals contain passages on space, reflection, memory, imagination, sensation, and judgement: his notions on simple ideas, the extent and measure of knowledge, and a long note on Cartesian philosophy entitled "Methode

¹ George Dock, "Robert Talbor, Madame de Sévigné and the Introduction of Cin-chona", Ann. Med. Hist. (1922), 4, 241-7. ² Reviewed by John Lough, Locke's Travels in France, 1675-79 (1953), Cambridge.

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³ R. I. Aaron and J. Gibb, op. cit. (1936), p. 26-36.

pour bien Etudier la doctrine de Mr de Cartes" was probably suggested by Pierre Régis whom he met in Montpellier. Professor Lough¹ has published a list of all the books Locke read during his travels in France, and of particular medical interest are his many references to the *Journal des Savants* founded by Denis de Sallo in 1665.

¹ "Locke's Reading during his Stay in France, 1675-79", The Library (1953), 5th series, 229-58.

CHAPTER IV

Journals (1675–1679) 1675¹

4 Dec. In Paris I saw the great hospital which the King of France has built for his maimed soldiers, called Les Invalids.² 'Tis a magnificent building capeable, as they told us, when finished, of 1000 soldiers. Length of front 320 of my paces.

At Paris the greatest part of the people had colds as they had in England when we left it, so that they called it the maladie à la mode. [Locke reached Lyons on 20 December.]

25 Dec. I saw the town from the hil on the north side where is a fair prospect of it lying on the promontory south from this riseing, the greatest part between the two rivers. I saw also the Hostel Dieu,³ a fair, large Hospital, containing, as they told me, 500 sick persons. They lye in a room which is a large crosse, and 3 rows of beds in each and in one part 2 in a bed, in the other but one, as I observed. Two arms of the crosse have men, the other two women. In the center is an altar.

We went also to see the Charite, where bastards are received and bred. We could get noe farther than the outer court and the Chappell, where we staid and heard the women there sing Vespers which they did well, both in vocal and in instrumentall musick. They performed a great part of the evening service and were of those that had been bred up in that house.

26 Dec. I saw the Charite, consisting of 9 square courts, and there were in it then, as I was told, 1500 maintained and lodgd there. There they receive bastards, male and female, and, as soon as they are able, are imploid in winding silk, the manner whereof, it being holy day, we could not see. The most considerable thing we saw was their granary, 100 steps long and 36 broad, windows open all round. It stands on the banks of the Rhosne. There are constantly in it 6,135 asnees of wheat. When we were there, they told us there were more in it. One asnee is

² Founded by Louis XIV in 1670, the Hôtel des Invalides was begun in 1671 and completed, except for the dome which was added later, in 1676.

Invalides p. I (Shorthand)

Cough Tussis p. 2 (Shorthand)

Hostel de Dieu Nosodochium p. 14

la Charité

Ptocodochium

Lyon Ptochodochium p. 17

Granary Horreum p. 17

¹ B.L., MS. Locke, f. 1.

³ François Rabelais was appointed physician to this hospital in 1532.

an asse load of 6 bushells. They turne all the corne every day, about which 7 men are imployd. When the boys are grown up big enough, they binde them out to trades, and the girles they either marry or put into nunnerys. It is a very noble foundation, and hath a large revenue.

[After a short stay in Lyons, Locke continued his ride to Montpellier where he arrived on 4 January, 1676.]

1676

Sund. 19 Jan. The Physick Garden¹ well contrived for plants of all sorts, even to shady and boggy, set most in high beds, as it were, in long stone troughs, with walks between, and numbers in order graved in the stone, to direct the student to the plant. I gathered blew violets there, full blown and very sweet.

T. 28 Jan. At Montpellier.

	ntral ² continet		
1 lb. ³			 16 ozs.
I OZ			
I drachm			
1 scruple			 20 grains

A pan is $9\frac{3}{4}$ and almost 1/16 English measure. This is the common weight, but in all medecinal praescriptions they allow but 12 of these ounces to the pound, soe that pondus medicinale is but $\frac{3}{4}$ of the civilis; and in weighing gold, silver, ambergris, musk and civet the scruple hath 24 grains, and soe the drachm⁴ 72, and consequently the scruple, drachm and other weights are all 1/6 bigger.

Dr. Barbirac⁵ told me he had never had but 7 patients of a Diabetes, and all died but in 2 or 3 years time; and all died of inflammations of their lungs and spit bloud a day or 2 before their end. Milk he found the most beneficiall but not sufficient. He used [bleeding] and purgeing but ineffectuall, baths and cooleing things best. He knew one man had it 7 years, and was cured at last with drinkeing plentifully of water cooled with ice, and lived afterwards to 70 years. Noe purgeing mineral waters in this country.

¹ Founded by Henry IV in 1593 as part of the Faculty of Medicine, the Jardin des Plantes of Montpellier is the oldest in France.

² Quintal.

³ Locke uses the letters lb. (libra), and in a later entry in his journal (MS., f. 3, f. 239) he gives the following explanation: "1 pint of water weighs lb of 16 ozs. to the pound; 8 gros the oz. and 72 gr. the gros. Apothecary's and Goldsmiths weights, soe that their scruple here is 24 gr., equall to 24 gr. of barly." Throughout the text this symbol has been recorded as I lb. or $\frac{1}{2}$ pint according to the context.

"Locke's "ounce" here is clearly a mistake for "drachm".

⁵ Dr. Charles Barbeyrac (1629-99).

King's Garden Hortus regius p. 43

> Weights Pondera pp. 50-1

Diabetes p. 51

Pox Venerea p. 104

King's Garden Hortus pp. 107-8

. 129 (Shorthand)

p. 138 (Shorthand)

Balaruc pp. 140-2

Fr. 14 Feb. Mr. Cox¹ told me that Dr. Kirbon at Florence cures the pox or ill curd claps after this method. First he gives them a purgeing decoction distilled for 10 or 14 days togeather. This gives them every day 6 or 7 stools. After this he gives them everyday in broth a salt liquor for 20 or 30 days and this perfectly cures. Mr. Plat.

Monday, 17 Feb. The herbs in the physick garden are set in long beds wald in on both sides. The beds are in the cleare 3 large pans² broad and the walls on the sides 2 large pans high, coped with hewn stone with numbers on one side and on the other a gutter cut all along to convey water to any part of the bed. These stones are about 5/8 pan broad.

W. 26 Feb. Disputation at the physick schoole.3 Much French, hard Latin, little Logic, and little Reason. Vitulo tu dignus et hic.4

Tues. Mar. 3. At the Physick Schoole a Scholler answering the first time, a Professor moderating. 6 other professors oppose with great violence of Latin and French, Grimasse and hand.

Th. 5 Mar. The Bath at Ballaruc⁵ is a pretty plentifull spring of water which rises but a little way from the Estang and the end of a valley that opens upon the Estang, and the water in the bath is soe neare the levell of that in the Estang that that in the Estang boys it up. It rises in a roome 12 foot square, partly coverd with boards, and hath rooms only for 6 persons to bathe at once, each going downe a pair of Stairs between 2 beams, and soe sit 2 and 2 opposite to one an other. Here they bathe starke naked and often times men and women togeather. The water is as hot as of the King's Bath⁶ and hath a very salt taste. I had noe Galls7 nor other things for experiments, but they say it colours blew with Galls. From hence to the town of Ballaruc is about a mile, a wald towne on high ground on the side of the Estang. It hath the shortest, narrowest, crookedest streets that I ever saw any where, and I believe never were soe few pitifull and ill placed houses girt with a wall any where else.

Round about the room where the Bath rises, are rooms for beds, bad enough and fiter for an hospitall then receit of strangers that come here for health or diversion.

¹ Probably the son of Dr. Thomas Coxe (1615-85), who thanked Locke in a letter (MS. Locke, c. 7, f. 182) of 2 June, 1678 for his kindness to his son at Montpellier.

² Locke has a note to the effect that $\frac{1}{4}$ pan= $2\frac{1}{2}$ inches.

³ The Faculty of Pharmacy is now housed in this building.

⁴ "Both of you deserve a prize." (Virgil, *Eclogues*, III, 109.)
⁵ Balaruc-des-Bains is on the Mediterranean coast between Sète and Aigues-Mortes. For account of the medical value of the waters see 5/7/77.

⁶ At Bath.

7 The aqueous extract of powdered gall-nuts, used as a reagent in testing for the presence of iron in waters. When the solution was added to water containing dissolved iron salts a dark blue colour appeared owing to the presence of tannins in the original gall-nuts.

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Sund. 8 Mar. Dr. Barbyrac told me that in diging cellars etc. they often finde here in Montpellier great quantitys of running quick silver, and that he hath often seen it him self amongst the earth.

Tues., 17 March. Clysters are very frequently prescribed in the practise of physick here and Apothecarys' men administer them indifferently to men and women. Only the meaner sort of women about Montpellier are with difficulty brought to take them after this manner.

W. Mar. 18. The manner of making a doctor in physic was this. First came in an officer with a mace on his shoulder, very much like one of the squire bedles' staves in Oxford. On the end of it hung a square, black cap such as the Doctors usually weare, but coverd upon the top with Sleasie¹ silk, red, which was like a buff² rampant, for it spread on each side as far as the edges of the cap. After him followed one of the professors in his scarlet robes which were of damask, and a black cap on, coverd with sleasy silk as the other. After him followed the inceptor,³ bare in a black gown like a batchelor of arts. The Doctor ascended into the chair and sat him downe. The inceptor followed him and stood just at the entrance. The chaire is a large, stone pulpit much like that in the Divinity Schoole at Oxford. As soon as they were got into that station, a company of fidlers that were placed behind the company in a corner of the room, strooke up. When they had plaid a little while, the professor made signs to them to hold that he might have opportunity to enterteine the company, which he did with a speech against innovation as long as an ordinary declamation. When he had don, the musick took their turne, and then the inceptor began his speech, wherein I found litle for edification, it being, I beleive, cheifly designed to complement the Chancellor⁴ and other professors who were present. In the midle of his speech he made a pause, and then we had an interlude of musick, and soe went on till he came to thank us all for our company and soe concluded. Then the Doctor put on his head the cap that had marchd in on the Bedle's staff in signe of his Doctorship, put a ring on his finger, girt him about the loins with a gold chain, made him sit downe by him, that haveing taken pains he might now take ease, kissd and imbraced him in token of the friendship ought to be amongst them, and afterwards deliverd a booke into his hands, and soe the ceremony ended with the inceptor making legs⁵ to

- ⁴ Michel Chicoyneau, who held office from 1667 to 1701.
- ⁵ O.E.D., an obeisance made by drawing back one leg and bending the other: a bow, scrape.

Mercurius p. 150

p. 152

Doctoratus pp. 152-4

¹O.E.D., sleazy: of textile, fabrics, or material. Thin or flimsy in texture; having little substance or body.

²O.E.D., buffalo.

³ The Archives of the Faculty of Medicine gives his name as Jodoun, of Auxerre.

each of the professors when he was come down into the midle of the roome, they sitting on both sides, and turning at every leg to salute them in their order. The professors are the Chancellor and 6 others. Monsieur Reniac,¹ a gent of this towne in whose house Sir J. Rushworth² lay, about 4 years agon, sacrified a child here to the devill, a child of a servant of his, upon a designe to get the devill to be his friend and help him to get some mony. Severall murders committed here since I came hither and more attempted: one by a brother on his sister in the house where I lay.

Thurs. Mar. 19. At the Physic Garden they make use of bislingua, which is a winter green, to set out beds. It grows thick quickly and will be cut. It is raised by slips. But a better thing to me seems to be Sabina baccifera which grows to a pretty high tree, but will be kept cut at any heigth, as box, and endures the excessive cold of the mountaines and is raised by seeds.

Frid. Mar. 20. When the Doctor had don his speech, he put on the cap and ring and used the other ceremonys to the inceptor, and then after that it was the Inceptor made his speech. When all was don, they retird, professors and inceptor, into another room and there the Chancellor, takeing the cap coverd with Slesy crimson silke and in his crimson damaske robes, goes along with the inceptor through the great streets to his lodging, the musick playing al the way before, the other professors accompanying him and the schollers following, where the dore was all hung round with bays. The Chancellor enterd, where he and the rest of the professors dine with the inceptor. Of the rest he took leave at the dore.

Sat. Mar. 21. Salade herbs used at Montpellier:

Lettice 8 days old. Chervil Balm Rocket Balsam Nasturtium Caepa Iscalonica—Angl: Sithes Pimpinella Dracunculus

[Locke left Montpellier on 24 March and reached Aix on 17 April.]

Sund. Apr. 19. Rx. 6 drachms of crude iron filings, 3 drachms of ground red coral and an equal weight of white sugar. Take 1 drachm every morning. Drink in addition after an hour or two one mouthful

¹ There is a full account of the crime of Rignac in André Delort, Mémoires Inédits sur la Ville de Montpellier (1876), vol. 1, p. 261.

² Could this possibly be the John Rushworth, Clerk Assistant in the Commons, 1640, who wrote the *Historical Collections* and died in the King's Bench Prison in 1690? There is no baronet or knight of that name. But see Lough, op. cit., p. 58, n.5.

Homocidia p. 155

Hortus pp. 156-7

pp. 157-8

Acetarium p. 158

Chlorosis p. 213 (Latin)

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of broth. In the treatment of chlorosis and cachexia this cure, with a slight purge at intervals and clysters, has never failed Dr. Brouchier,¹ whose courtesy is unsurpassed.

For a Quartan Fever: take senna plaster 2 ozs., yellow myrobalans $\frac{1}{2}$ oz., and equal parts of flowers of bugloss, lesser centaury, St. John's wort. Make a decoction of a sufficient quantity and cook all these in the required amount of whey. In a straining of this steep for 12 hours $\frac{1}{2}$ oz. of picked rhubarb, I drachm of root of spurge (i.e., infused in vinegar for 24 hours), $\frac{1}{2}$ drachm of cinnamon.

Then let them be pressed out with the addition of 3 ozs. of a syrup made from sweet smelling apples. Make a mixture in 3 doses. The first dose must be given one hour before the paroxysm, the other two on the following recurrences, if they take place. See Quercitan² in *Pharmac*. *Restitut*, p. 56.

In this way Dr. Brouchier has often cured quartans, both of recent standing and those of longer duration and inveterate.

Take whatever amount you wish of prepared Tutia,3 fresh quick lime and vitriol all pulverised and mixed. Place in an ignited crucible and then cover over, and let a very fierce heat be applied for 4 hours. Afterwards allow it to cool down in the furnace. Afterwards place your material with which you must mix an equal amount of sal ammoniac, in a fairly large phial (a quarter of the phial is to be taken up by the material, and the whole phial is not to be buried in sand until it begins to be red-hot. The neck of the phial is to be buried gradually in sand, but the sand must not be of such a kind that it forms a crust on the phial, it should be very fine. Better results would be obtained with a silver vessel), and sublimate in the fierce heat of a sand bath. What has been sublimated must be thrown away, and what remains in the bottom must be sublimated again, and this must be repeated 3 times. Then the gritty matter remaining in the bottom must be placed in a hollow, so that it may turn into oil, which is to be precipitated with oil of tartar. The dust which is precipitated is of a grey, sometimes a red colour; it is to be washed with ordinary water.

¹ The original of the medical notes of 19 April, in Brouchier's hand, are in MS. Locke, c. 4, f. 163.

² Joseph Du Chesne or Duchesne (1521–1609) who latinized his name to Quercitanus, was physician to Henri IV and a follower of Paracelsus who, like Turquet de Mayerne, reaped the hatred of the physicians of the Paris Faculty of Medicine. Under the name of Panchymagoga, or purger of ill-humours, he used calomel which he strongly recommended in his *Pharmacopoea Dogmaticorum Restituta* (1607), Paris. He also wrote on the preparation and use of mineral, animal, and vegetable medicines, and his polychrest pills are mentioned in 11/8/81.

³ Tutty, or tutia, was an impure oxide of zinc (with generally some oxide of lead and copper); it was obtained from the flues of smelting furnaces where zinc ores were being purified. Ointment of tutia was properly made up with viper's fat.

4 O.E.D., Caruncle, or fleshy excrescence.

Quartana pp. 213-14 (Latin)

Ad Carnositates⁴ (Latin) pp. 214–15 Before the dust is introduced into the canal, it must first be opened by the introduction of a candle smeared with oil of sweet almonds; afterwards on the end of the same candle as small a portion of this dust as possible is placed and is introduced as far as the lesion which it certainly cures (so the illustrious Cavaliere Borri¹ asserts). Indeed it also cures hernias by a kind of irradiation if dust of this kind be introduced to the mouth of the bladder (it must not be introduced inside the bladder), and afterwards various filaments are excreted through the canal, together with the urine (this is also asserted by Borri).

For Venereal Disease and its attendant conditions and even for advanced Gonorrhoea. Take 3 drachms of sarsaparilla root chopped finely and shredded cinchona bark, 1 drachm of sassafras and colchicum, 6 drachms senna leaves, 1 drachm mineral crystall, 2 drachms of anis and liquorice, one apple, a cucumber of 6 drachms weight. Tie in a bundle. Infuse the lot for one night in 3 glasses (i.e. $4\frac{1}{2}$ pints) of white wine in a well sealed vessel. Then strain and place it in a phial. Let one tablespoonful be given in the morning hours and at four in the afternoon. The patient can have a rest every eighth day. One tablespoonful would suffice in the event of an excessive evacuation. From what remains a posset can be made for an ordinary drink minus the cucumber. This has been tested very often and never fails.

Dr. Brouchier commended to me Medecin des pouvres,² and in it an artificial mineral water made with [vitriolum] which he hath dranke himself and often gave others. In makeing it, the pot you put it in must be hung up from the ground else the [vitriolum] will not subside. You must be sure to take noething but the very cleare water otherwise it will vomit. There are 2 other mineral waters in the book, but he used none but this simplest.

[Locke arrived back in Montpellier on 24 April.]

Frid. 1 May. Dr. Barbyrack hath often purged in fluxes after childbirth with good successe.

Sat. 2 May. At Toulon 3 ozs. of Essence of Jasmin Tuberos etc., the 6 glasses it was in and the box for the glasses cost 4 livres.

Sat. 9 May. Mr. Upton tried Balaruck waters with galls and found them not change colour at all.

Tuesd. 12 May. The use of opium in Industan. v. Bernier,³ p. 61, 182 pp.

¹Le Cavagliere Giuseppe Francesco Borro was writing on medical matters between 1660 and 1690.

² Le Médecin et Chirurgien des Pauvres by Paul Dubé. An English translation was printed in 1704.

³ F. Bernier, Histoire de la Dernière Révolution des Etats du Grand-Mogul (1671), Paris. See footnote, p. 318, 5 Nov., 1677.

Venerea pp. 215–16 (Latin)

Acidu ae artificiales p. 218

Puerperium p. 235

Jasmini ol. p. 248

Balaruc waters pp. 252-3 (Shorthand)

Opium p. 254 Tuesd. Jun. 2. Query whether the vessels of the lungs are usually broken in apoplexy and whether blood be coagulated in the veins? If so, query whether [oleum vitriolum] injected into the veins be not good? Query whether lean men are more liable to rheumatism and lienterics than fat?

Frid. Jun. 5. Excrement of Lizard infused in water, gr. i or ii in spring water, I oz. turns water white. This is an excellent medicine for inflamation of the eyes, and is often tried. Mr. Peau.

Sund. Jun. 14. The way of distinguishing true from false bezoar¹ is to put it on a hot fire and redden it in the fire; if good it is not harmed. Or else they weigh it: if it looses no weight it is true bezoar.

Balde ap. Denis, Memoirs,² 11 June '72.

Sund. June. 14. Most of the inhabitants of Porca in the country of Malabar have their legs swollen because of the bitter, saltpetre water which they normally drink. *ib*.

Thursday, June 18. Hysteria is a species of epilepsy. First [Bleed]. Second, vomit with Mercury of Life.³ Third, Baths repeated and other medicines, and diet cooling. Dr. Barbirac.

In infants that suck and have epileptic fits he gives infusion of saffron of the metals 2 drachms, in a decoction of senna and fruit; and children of four years old he bleeds.

Thurs. July. 9. Dr. Magnol⁴ told me that he had once a hysteric patient who could beforehand foretell when she would have a fit by something which she did describe, but the fits were very admirable. First she would have a convulsive motion of her thumb, then was added to it that of her forefinger, then that of her midle finger, that of the ring finger, then all the fingers, then the joynt of the hand, the wrist,

¹ A bezoar stone is a calculus, taken originally from the Persian wild goat (*lapis bezoar* orientale) and introduced into European medicine by the Arabs as an antidote to poisons. Later, stones from other rare animals were used in the treatment of skin conditions, fevers, and leprosy. According to A. C. Wootton's *Chronicles of Pharmacy* (1910), vol. II, p. 15, the price of bezoar varied between \pounds_3 and \pounds_5 per ounce, and hence many bogus preparations were sold.

² During 1672 J.-B. Denis issued a Recueil des Mémoirs et Conférences sur les Arts et les Sciences as a supplement to the Journal des Savants.

⁸ Mercurius vitae or powder of Algaroth, contained no mercury. It was a white oxychloride of antimony, and was introduced by Victor Algarotti of Verona, who died in 1603 (see also 22/2/77). See A. C. Wootton, op. cit., vol. I, p. 380, for the various compounds of antimony, which included: mercury of life or Algaroth's powder; saffron of the metals, or liver of antimony; Argentine flowers of antimony; mineral bezoar; diaphoretic antimony; thick soft butter of antimony; and everlasting pills of antimony. Vinum benedictum, or antimonial wine, was formed by digesting antimony with Rhine wine. Most of these preparations were first suggested by Basil Valentine. In Alchemy the lunar butter of antimony, or martial regulus of antimony, was converted into the powder of projection.

⁴ Dr. Pierre Magnol (1638-1715) whose Botanicum Monspeliense Locke mentions on 10 February, 1680. Apoplexie p. 268–9 (Shorthand)

Rheumatisme (Shorthand)

> Ophthalmia p. 273 (Shorthand)

> > Bezoar p. 283 (French)

Crurum tumor p. 283 (French)

Hysterica p. 288 (Shorthand)

Epilepsia p. 288 (Shorthand)

Hysteria pp. 311-12 (Shorthand)

then of the elbow and then of the whole arm. This ceasing, a like convulsive motion would begin in the thumb of the other hand, and make the same progresse on the other side, which being ended it would seize in order the foot, leg and thigh of one side and then of the other. After that it would seize the muscles of the neck and turn the head from one side to the other, almost quite round, and from thence made its progresse to the breast. This he saw several times, beginning always with the same thumb and so regularly from one place to the other, keeping the same sequence, and these fits took her several times in a weeke.

Friday, July 10. Leaves of Convolvulus Minor boiled and beaten to a poultice is an excellent remedy in inflamation in venerea, especially if cooled. Dr. Magnol tried it.

Wed. July 15. Query whether mania be not putting together wrong ideas and so making wrong propositions from them, notwithstanding the reason be right? But madness is a fault in the faculty of reasoning.

Sat. July. 18. For pox they anoint the first day from the soles of the feet to the knees. Next morning they begin again at the soles of the feet and anoint to the groin. The next morning all that and the buttock, and on the fourth they add to the former spina dorsi, shoulders and armes. The head, breast and belly are the only places not anointed. Anointing the belly causes great pains, diarrhoeas and dysenterys. If after the first or second anoynting the flux be like to rise high, which can be known by the swelling of the gums and glanduls of the mouth, you must make your anointings but lightly espetially in tender bodies. The flux rises till the ninth and sometimes the twelfth day and lasts ordinarily till the twentieth or 25th and sometimes till the fortieth. If the flux be too high and violent you must take it down with [bleeding] and purging repeated as that is occasioned. The purges must be potions in a large glass of liquor, but small doses of purging ingredients would be most proper in this case, such as sena and cassia. They that anoint the patient rub in the ointment with their hand for half or 3 hour at each anointing and to prevent any effects that happen to them from their hands touching so much ointment, they shower their hands presently with bran and vinegar notwithstanding which their teeth sometimes grow loose and they sometimes get loosenesse.

Gonorrheas of a year or two's standing is seldom or never cured but at last produce caruncles.

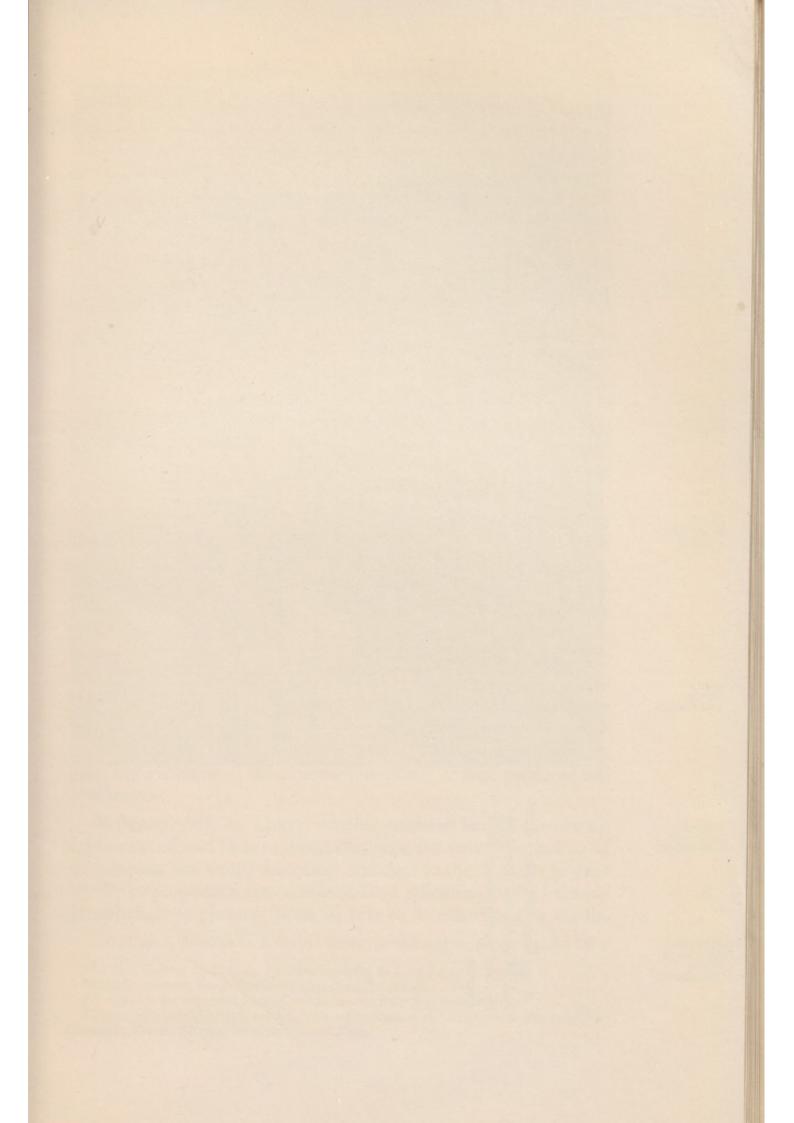
Best way of curing the caruncles is by incision, at which Jerome Collot, famous lithotomist at Paris is most skilful. Dr. Barbyrac. Q. whether anointing with [mercury] and diverting the evacuation

Inflammation p. 315 (Shorthand) 70

Mania p. 320 (Shorthand)

Venerea pp. 350-2 (Shorthand)

Collot p. 352 (Shorthand)



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6. A specimen of Locke's short-hand (MS.Locke, f. 1, pp. 350-1). (By kind permission of Bodley's Librarian.)

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down by a small dose of some gentle purgative every day, is as effectual, but a much less troublesome and nauseous way of curing their salivations. For example, anoint till you see the gums begin to swell and then give a gentle purge which you let run out as long as it will. If the gums upon ceasing of the looseness swell again of themselves, repeat your purge. If not, anoint again and so continue the diarrhoea 20 to 30 days as you see occasion or find the patient's strength able to endure. J.L.

[Take sublimate of mercury] or arsenic 2 parts, opium 1 part, and sufficient amount of gum tragacanthe. Use a tube. Put this into the ulcerated tunnel of the Kings evil. This after 12 or 15 hours pain will eradicat it and sometimes 2 or 3 together. This topical application with [bleeding], purging, bathing and other cooling regimen often cures Kings evil. Dr. Barbyrac.

Mund. July. 20. Among the Persians healing a wound consists in sewing it together properly and then covering it with gunpowder, which they set alight. This is a sovereign method of treating wounds, because the fire consumes all the moist parts which generally harbour disease. Chinon,¹ p. 126, 481 pp.

Tuesday Jul. 21. At all times their sole method of curing illness is by total abstinence from flesh. For to cure, it is not in any way the custom of this country, neither among the Mohammedans nor the Christians, that the sick should eat meat or broths; they are not allowed ordinarily to eat until 10 days after the fever has left them; during all which time they use only cooling potions and other easily-digested things.

Chinon, p. 319, 481 pp.

Wed. Jul. 22. A solution of silver nitrate turned green ribbon into phyllymort² immediately with a circle of blue about the edges of the fyllymort. Red vinegar turned grass green into willow green. Verjuce³ turned it into sky colour, and claret wine into willow, aqua regis into blue, and a solution of silver nitrate put on any of these produced still phylimort.

Wednesday, July 22. Query whether madness be not the wrong application of mad ideas to things that exist, but are neither having of wrong ideas nor wrong reasoning, and then so that it seems to exist wholly in proposition into simple ideas or syllogisms, as for example [those] made in phantasy [such as] him to be either king or candle.

Sat. Aug. 1. Monsieur Regius⁴ stung in the night in one eyelid by a

Struma p. 353 (Shorthand)

> Vulnera p 354 (French)

Febris pp. 356-7 (French)

Colours p. 358 (Shorthand)

Madness pp. 358-9 (Shorthand)

Scorpionis ictus p. 377 (Shorthand)

¹ Le Père Gabriel de Chinon, Relations nouvelles du Levant (1671), Lyons.

² O.E.D., fillemot (from feuille-morte): dead leaf colour.

³ Verjuice is the expressed juice of unripe or sour fruit (e.g. crab-apples).

⁴ Pierre Sylvain Régis (1632-1707) was a popularizer of Cartesianism. He taught a Toulouse, Aigues-Mortes, Montpellier, and Paris.

Scorpion. It swelled as big as an egg by morning, but with no great pain. He only anointed it with oil of Scorpions which took it down and cured it quite without anything else.

Sund. Aug. 9. One learns by reading these Councils that there were a great number of Lepers and Jews in France. (Perhaps the Jews had introduced and spread leprosy.) The bishops took care to feed the former and prohibited Christians from communicating at all with the latter. Mezeray,¹ Abrégé, année 628

The disease of Worms was very common, almost epidemic, as was also the disease of Burning, and St. Anthony's Fire. *ib.* année 707.

Sat. 15 Aug. For blind and painful haemorrhoids take sufficient quantity of cork dust, yoke of hardboiled egg and olive oil. Mix and make into ointment. Mme. Michard.²

Tuesd. Aug. 18. A lady of Montpellier that was extremely troubled with rheumatism, so as to be in extreme pain all over and not able to stirr hand nor foot. First she bathed in sea water brought from the sea on purpose. This made her able to move her foot ten to 14 times repeated. She was able to walk without a staff, and by this bathing and interring was perfectly cured, as she told me herself. But both her legs swelled, thus she had some return of pain. Afterwards she repeated the bathing and interring two or three years successively, and had on Friday last been bathing at sea with several other persons of quality. Some that had swelling of the legs interred them. Others that had pain in the arms interred their arms. But by her interring all over, she was wet more than those. At about 8 o'clock in the morning she bathed in the sea.

Having changed her wet linen and being rubbed dry, she put on a dry smock and so laid herself in a long pit dug in dry sand, only leaving her head out. When she was so laid, they covered her all over with sand which was dug out wet. She lay as long as she could endure it, with sand both above and below her, being exceedingly hot, having been beat on by the sun a good while. Her head lay upon a little pillow, being the only part not buried, and fearing the beams of the sun, she was defended by several parasols. Thus she bathed three times a day, viz. at 8, 11 and 2, and was interred twice. This she spoke of as a certain cure for rheumatism and pain in the limbs and swelling of the legs.³

Dr. Barbyrac never saw an ulcer in the kidneys cured, but it usually

Leprosie p. 400 (French)

Mal de Vers p. 400 (French)

Haemorrhoids pp. 401-2 (Latin)

Rheumatism pp. 407–8 (Shorthand)

Renis ulcus p. 408 (Shorthand)

¹ François Eudes de Mézeray. An Abrégé Chronologique of his History of France was published in 1667 and reprinted many times.

² Locke lodged with Mme Michard at Celleneuve, six miles out of Montpellier, from 25 June till 18 September.

⁸ Locke mentions this treatment in another notebook (B.L., MS. Locke, d. 9, 1666–93) in which he refers to this entry.

ended in phthisis and death. Pus in urine usually stinks. Jerom Collot was at Paris, that cuts so well for the stone.

Haemorrhoids opened after 5 or 6 days' pain and swelling, and two vaporings with decoction of mallows.

To prepare the bodies by unction. First, [bleed] and purge two or three times, then bathe seven or eight times. It helps well to make salivation easy, for bathing mollifies and moistens the humours. Then [take mercury] with mollified turpentine one part, pig's grease three parts, mix together well in a mortar, adding the grease gradually. With this ointment, anoint the patient by beginning with the feet. For the first ten days of ptyalism,¹ do nothing to the mouth for fear of stopping the flux. Afterwards make a decoction to wash the mouth with; which make of a spot of rose honey, if he can bear it. But the most gentle and best thing to begin with is milk, and 'twere made where he can bear. The best thing to wash the mouth is spirits of wine rubellum. Diet cooling, and honey broths. If the flux should run too high, [bleed] and purge. Sometimes the flux hath been so high that I was constrained to purge every other day for a good while together, but yet never found purging to produce dangerous diarrhoea. Take cassia I oz., senna 2 drachms; boil in a sufficient amount of ordinary water to 1/2 pint. It brings relief to them and helps with the ptyalism to drink plentifully and afterwards I order them decoction of barley. In hot weather or when the flux runs high, I sometimes allow them the drink cooled. Once he had drunk in the middle of his salivation a large glass of water cooled in ice. When the flux stopped his tongue shrank up and other ill symptoms followed. Being called presently, [bled], purged, and masticating pyrethrum, which recalled the flux and he escaped. In such patients you usually find one who with little anointing they can eat. In every flux I anointed them exceedingly, giving sweet [sublimate of mercury] and white [sublimate of mercury], which anoint but could not excite ptyalisme. This may be cured notwithstanding without any sensible evacuation. They still wear their anointed linen during the time that the flux lasts, but otherwise noe thing. I make their shirts be changed when the flux has risen to a pretty good height. Those who were cured without ptyalism had after it no ill symptoms. If the flux continue too much towards the latter end, let the patient expose himself to cold air and that will abate it. When scabs of the mouth fall off and ulcers appear there, to cicatrize, you must take care that the patient often opens his mouth, for otherwise sometimes when the cicatrix are grown hard they cannot open them at all and they are fain to be cut. Dr. Barbyrac.

¹ O.E.D., Ptyalism: excessive secretion or flow of saliva.

Haemorrhoids pp. 408-9 (Shorthand)

> Venerea pp. 434-6 (Shorthand)

Empyema pp. 438-9 (Shorthand)

Species^a pp. 442-3 Friday Sept. 11. Empyema I have often seen cured by opening the breast. The incision must be made between the 5th and 6th ribs, upwards and in a line drawn directly downwards from the point of the omoplator.¹ First give vulnerary injections. If the wound burst, it is to be opened, and if the patient be fat, so that they cannot, bind the ribs with thread girt all round just from scrobiculus cordis and from point of shoulder blade. Let fall the other limb and where the intersection of these two is, there make the incision, or three fingers below the point of said bone. Barbyrac.

Sat. Sept. 19. How many sorts of insects are there that we have not distinguished into species but passe under the generall names of flies or wormes etc. because haveing little use of them we have not ranged them under more distinct and precise names and consequently into species. Nature in things that have life keeps them in the distinct classes by the order of generation wherein those of the same species produce their like but the inherent qualitys or essentiall differences whereby we pretend to distinguish them into species are unknowne and we only make specific Ideas as the subjects of our denominations and the sub-stratum to our words. But though there be such a measure to distinguish the species of things where there is propagation there are scarce any in inanimate which being but as it were severall collections of matter without any organicall constitutions or parts adapted to nutrition or generation may be capeable of infinite variety within the same species, there being a latitude for a great variety of mixtures where we are able to make noe distinction whereas the principall difference of animate beings seems to depend on that internall principle that organizes the parts and contributes to and is the principall cause of generating the like.

Frid. Oct. 9. The juice of Carduus-stellatus takes away [Rheumatism]. Du Boys.

Mr. Barbyrac told me that they sometimes recommend interring in hot sea sand after bathing, with success for rheumatism, but only gross bodies, it being dangerous in lean.

Wednesday, Oct. 14. Dr. Barbyrac sometimes bleeds the week before lying-in, once or twice, both for other occasions as also to ease birth and often in difficult labour. [Bleeding], with draught of cooled water facilitates labour. Sometimes he repeats [bleeding]. The reason he gives this, is that by labour and pressing of those parts blood flows to that part causing swelling and inflammation and so hinders the birth.

¹ Scapula.

² Printed in Locke's Essay: An Early Draft (1936), ed. R. J. Aaron and J. Gibb, Oxford, p. 83.

p. 466 Rheumatism (Shorthand)

Partus p. 468 (Shorthand)

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Let [blood] to 8 ozs., after birth. A light diet and a clyster every other day. If the birth does not take place naturally and the infant cannot be put into the natural position, surgery must be at once applied to bring forth the foetus while the mother still has strength. If the afterbirth does not follow, let it immediately be brought forth by gentle manipulation by the midwife. If any part of it remains in the womb, things to produce sneezing and even vomiting when given sometimes promote the ejection: for he has not yet found the much praised specifics very useful. If the labour is excessive [bleed] and soothing julebs of rose plantain water, etc. with [sublimate of vitriol].

Tuesd, Oct. 27. Paid Mr. Puech for 6 vipers £,2-5-0.

Sat. Nov. 14. Sr. W. Waller,2 having had convulsioning fits when a child till 4 years old, was at that age cured and so remained till between 20 and 30. Taking by the Apothecary's mistake a violent purge that wrought excessively with him, the fits returned and he was troubled with them for a year after and then he was quit of them again. This summer, having had a dangerous fever in England in spring, he by the advice of Dr. Cox came into France to be cured, by the use of the medicinal bath, a trembleing hand which he hath naturally. In the country by Lyon he made use of these baths morning and after noon 9 times successively, 11 hour each time. The last time of his using them he fell into fits which lasted all night in continuall succession and so by intervalls troubled him ever since, and up the road hither and after his arival here, espetially when he was going to sleep about 10 at night. Dr. Barbyrac being called, he blooded him in the arm moderately and afterwards purged him with Mana. He having a very easy body Wednesday night last, at going to bed he was taken with the fits which lasted in quick returns to trouble him all that night. Next morning Dr. Barbyrac gave him Mana one oz. which purged him twice, but his fits lasted all that day with so quick repetitions and such violence that I, who was with him all day, have never seen the like, for he had scarce any respit but was either constantly in horrible convulsions of outward parts, espetially the breast and shoulders, or else perfectly senselesse with universall convulsions of the whole body and violent agitations of it. At night we gave him a Narcotick and after the fit applid a cataplasme of raw worm wood, lettuce and salt, all beaten to a poultis. This abated the fits so that by the next day they were almost gone and last night and today he was quite free. I imputed all to filling

Puerperium p. 468 (Latin)

Dr. Thomas¹ P. 474 Epilepsia p. 483 (Shorthand)

¹ A previous entry on 26 September (p. 447) reads "delivered to Mr. Hunt 6 vipers for Dr. Thomas".

² Sir William Waller, described in the D.N.B. as "an informer". He played a prominent part in politics, and was a Middlesex justice during the Popish Plot.

the head with fumes of grape husks, for he lay in the same chamber where they were kept, and sending up blood to the head by that kind of bathing $[\ldots^1]$ so violently, and therefore after those the Indications were to quiet and draw down the blood to the lower parts, for all ways before and in the fits the feet and legs were cold. He had besides a cooling Juleb and drink plentifully of cold water, aqua de cedro. He found the first night that a little after the poultises has been on, the legs and feet began to be hot and sweat. He kept on the poultises 24 hours and had them removed the night following, but took nothing else.

Mund. Dec. 7. Phthisis sometimes makes an ulcer in the lungs, which is very dangerous.

Stone or gravel in the kidney often produces severe pain when the stone is of the same side. Barbyrac.

Thursd. 10 Dec. Mr. Verchand,² after having scaled and filled my teeth, even allayed the inflammation of the gum by touching it with water which he said was made from 3 parts of dilute [vitriolum] and I part of myrrh, and as soon as he rubbed them with this with cotton on the end of a stick, he presently rubbed them likewise with cotton dipped in water.

His opiate for teeth is dragon's blood, sanders and ambergris together. Sat. Dec. 19. In Constantinople they purge with sherbets which soe taken offend neither pallate nor stomach. *ib.*³ 5 p. 105.

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Sat. Jan. 9. Mlle. Verchard, having been weak began to be much tormented with toothache, had three of four years since, both her ears punched and kept from healing up again, with roots of Thymilaea [flax-leaved daphne]. whereby she found great benefit to her eyes and hath never since been troubled with toothache but once. When the root of Thymilaea which keeps them running, gives her pain by making a little inflammation in the part, she soaks the root in water and sometimes changes the water, and then drying them together (i.e. little pieces of root ready cut and fitted for the hole), keeps them for her ear. Sun. 10 Jan. Balsamine Cucumerina. The leaves and fruit of this plant dried and infused in oyle per insolationem makes an admirable balsam for soars and wounds. This Jaques at the King's Garden had from a Gent. who had often tried it.

¹ Indecipherable in MS.

² Henri Verchant was a Protestant apothecary who divided his time between Paris and Montpellier. Locke lodged with him in Montpellier from 17 October, 1676.

⁸ From Pietro della Valle, Viaggi (1667), Venice, Part I. These voyages had already been translated into English and French by 1665.

4 B.L., MS. Locke, f. 2.

Phthisis

Stone p. 502 (Shorthand)

Gums p. 505 (Shorthand)

Teeth p. 505 (Shorthand) Purges p. 513

Oculi debiles p. 5 (Shorthand)

Dentium dolor pp. 5-6 (Shorthand)

Vulnera p. 6 Friday, Jan. 29. Take some Turpentine, Bolus Armenic,¹ and Frankincense; make an amulet to apply to the pulse. With this my Ld. Dunnegale was cured of quartan ague but it was spring, after having it six or more months.

Sat. Jan. 30. I made for Sr. Jo. Chichley's² wound, a drink with herbs infused in water with about a twentieth part of honey. One part of it filtered, and that which filtered grew sour in two days and the other kept well much longer. Query whether it [...³] was by [...³]. A good part of honey was kept back for it filtered very slowly.

Thursd. Feb. 4. Rx 2 parts of pig's lard and 1 part of quick [mercury]. Make an ointment of $1\frac{1}{2}$ oz. for the first anointing as far as the knees; 2nd. of 3 ozs. for the upper part of the thigh; 3rd. of 4 ozs. for the arms; 4th. of 5 ozs. for the feet, thighs, arms and spine. If too violent salivation follows [bleed] and purge with cassia and senna in moderate dose, but in a large glass if you like. At little repeated. When in a flux the mouth is inflamed, give a gargle of milk or whey, and when the patient can bear it, wine.

Take sufficient quantity of honey, cook to required consistency, and make a possett which can be smeared with [mercury] which has been quenched in turpentine. Introduce it and let it be kept there as long as possible—a whole night if possible. Take also quenched [mercury] in purging pills. This is the best way to kill off the worms. Dr. Barbyrac has cured women up to 5 months pregnant with salivation. He has sometimes observed convulsions rising from salivation which he has cured by [bleeding] and purgation.

Sat. Feb. 13. Paid Mr. Upton for 2 botles of a pint peice of the Queen of Hungary's water⁴ £ 5-9-4, which he sent into England in his case. We paid to La Faveur⁵ 50s. per pound. Others sel it for 40s.

Wed. Feb. 17. Aristolochia climatitis 2 or 3 of the seeds are a violent purge. Mr. Paul.⁶

Mon. Feb. 22. The instruments to open the breast are: first, a silver pipe designed to book model. [There is a diagram in the journal.] If

¹ A bolus was a medicine a little thicker than an electuary (which was a thick syrup). It was taken in pieces the size of a bean. Bolus armeniae was a favourite drug of Alexander of Tralles (sixth century) for epilepsy and melancholy. The original Bolus armena rubra was a species of red earth found in Armenia. But later this bolus was manufactured out of pipe clay and Venetian red (red oxide of lead).

² His wife gave recipes to Locke on 14/3/77 and 11/10/79.

⁸ Indecipherable in MS.

⁴ A distillate of rosemary (for further details see A. C. Wootton, op. cit., vol. Π, pp. 296 and 298).

⁵ Sébastien Matte La Faveur.

⁶ Probably the Paul who took his M.D. in Montpellier on 7 October, 1677 and is several times mentioned as sending greetings to Locke in the letters of W. Charleton of 1680 and 1681 (MS. Locke, c. 5).

Quartan p. 33 (Shorthand)

Vulnerary p. 33 (Shorthand)

Filtering p. 33 (Shorthand)

Venerea pp. 39-40 (Latin and Shorthand)

> Ascarides p. 40 (Latin)

Convulsio

Queen of Hungary's water p. 59

> Purge p. 60

Empyema pp. 61-2 (Shorthand) there be any difference in silver, the pipe must be a little less where the slits are and a little more in obtuse, i.e. not so tapered just at the point. Three slits, whereof one was marked on the model with ink. Second, a silver pipe just of the same dimensions, but cut away at the end like a pen. Third, a silver pipe of the same bigness as the first, but cut off at a quarter inch from the little end and so left open and blunt with a little ring or nut rubbing round at the little end and three slits as in the first, reaching quite down to the nut or ring. Fourth, a silver pipe of the same figure as the third, but shorter by almost a quarter of an inch. Each pipe hath a collar at the large end like my drawing. Six of them which were used with caustic to open the skin and membranes; and then probing in the first pipe and if at first it be not easy, as it sometimes happens, to find passage, one puts in the second probe on it and so slipping the pipe by the same probe, one directs in the third or fourth and so keep it in as long as there be occasion, and so keep it open with the pipe, candle or linen tent as is most to his purpose. The place to open is between the fifth and sixth ribs, i.e., between last of notha and first of vera in direct line perpendicularly from point of omoplate bone.

In great inflammations where there is fear of gangrene, scarify the part and wash it with [spirits of wine] to give vent and prevent gangrene. If the part be a little gangrened, prick it round about with a lancet to give vent and then wash it with myrrh and aloes dissolved in [spirits of wine]. Barbyrac.

Mercury of Life, or the powder of Algaroth, cures Tertians and Quartans in the beginning and certainly epilepsies in children, says La Faveur, and with three grains of this he says he cured a woman of warts over the right eyebrow. *ib*.

[On 26 February, 1677 Locke began his tour of Languedoc.]

Tues., March 2. From St. Ponx to St. Amand 4 leagues. Mr. Barton in Angell Court neare the maypole was cured of corona venerea in 28 days by [mercury] and purging. The two first were very violent. After that he had eight or nine stools a day and drank of [the] woods all the time after the two first days.

Fri. March 5. From Castlenaudary via Canales side to the Basin¹ 2 leagues. We were told there by one that came from Revel that day, that lying there not long before, there happened this sad story. A mad dog had bitten several people, among others a young maid who was bathing in the sea. Thirty-five days after the bite she grew mad and

Inflammation p. 62 (Shorthand) Gangrene

Tertian Quartan Epilepsy Clavus p. 62 (Shorthand)

Venerea p. 68 (Shorthand)

Hydrophobia p. 74 (Shorthand)

¹ This note was made during his tour of the Canal du Languedoc, the greatest engineering achievement of the reign of Louis XIV. He began his inspection in the Basin of St. Ferréol, near Revel, where the streams from the Montagne Noir collect.

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the officers of the town ordering her to be strangled. Her mother herself was executioner and strangled her with a napkin, but so that in doing it she was bitten by her daughter.

[Locke returned to Montpellier on 11 March.]

Sun. Mar. 14. Rx. Yellow wax $\frac{1}{2}$ lb; Venetian Turpentine 4 ozs; Cinnabar $3\frac{1}{2}$ oz; minium 1 oz; Roots of Florentine Iris 1 oz; Nutmeg gr. 2. Let the cinnabar and Minium be reduced to alcohol and strained, and when everything is mixed together let them liquefy together without ebullition. Let pieces of linen be dipped into it, and make a plaster. If it gets too hot, it must be removed from the fire so that it may not coagulate too much. Lady Chichley.

Ointment of may butter, oil of bitter almonds, oil of dill and oil of Vervin with herbs of dill and Vervin boiled in it. Anointing the breast and below, cures rickets. *ib*.

When cooled and given every morning and evening with $\frac{1}{2}$ lb. of malt and sugar.

Tues. Mar. 30. At Tholouse, at the Cordiliers in a vault we saw several dead bodies, which were very intire, that have been dug up severall years after their buriall in their church and cloister, I believe between 20 and 30 that we saw standing round the sides of the vault, besides others that lay heaped one on another. A grave was making in the Church when we were there, and a coffin was dug up as fresh as when laid in. They said it had lay there 8 or 10 years.

Mon. Apr. 5. From Cadillac to Bordeaux 5 leagues. Rx. a handful each of Mugwort, Agrimony, Bugle, ground ivy, Matrisylva, prunella, pimpinella, Mouse ear, sanicle and half a handful of St. John's Wort. Infuse in sand for a night in sufficient spring water. Mix with sufficient honey to a pleasing sweetness. This was the wound drinke I prescribd Sr. Jo. Chichley at Montpellier which I thinke contributed much to his cure. I drank of it two or three times myself, a glasse in the morning and at night. Found it exceeding diureticall to that degree, that not reflecting on my drinking this vulnerary, I was extremely amazd and wonderd what aild me, my water even all that I made in the night was as clear as rock water. Q. which contributes most to it, the hony or the herbs?

To make a water which will stop bleeding. Take 20 lbs. of [vitriolum]. Put in a steel cauldron and pour on it enough water to make it dissolve. Let it begin to boil and then on to the boiling liquid pour 8 ozs. of vinegar to precipitate the sulphurous matter of the vitriol. Leave undisturbed for two or three hours and a yellowish powder will be precipitated; wash this till it is tasteless and dry it. Then take 2 oz. of Issue plaster p. 84 (Latin)

Rachitis p. 84 (Shorthand)

Corps pp. 102–3 (Shorthand)

> Vulneraria pp. 106–7 (Latin and English)

Haemorrhagia pp. 112-13 (French) this yellow substance and 4 ozs. of rectified spirit of [vitriol]. Put them in a retort and distill. When you see that the distillation is complete break open the retort, and powder up the matter which remains and put it in a fire-resisting pot. Place this pot among the burning coals and keep up the fire till the powder takes on a yellowish colour while it is hot; for when cold it will turn white. Put two ozs. of this powder in a matrass; add 3 ozs. of water and bring to the boil. Filter while hot through a paper, and your preparation is made.

Another.

Rx. 4 ozs. of [vitriolum] calcined to whiteness; put it in a retort, having formerly been in powder form. Pour on it 8 ozs. of [oil of vitriol]; distill to begin with over a small fire to make the phlegm come out if there is any. As soon as the oil begins to distill you must change the receptacle and blow up the fire as much as possible. Put this oil in a matrass; pour on it double the quantity of [spirits of wine]. Let it digest for 8 days. Disperse the [spirits of wine] by a little heat and your liquid will be perfect. La Faveur.

To strengthen the teeth and gums. Take 12 ozs. of water of roses and orange flowers; 1 drachm of well-broken cloves; 3 drachms of alum; $\frac{1}{2}$ drachm of fine candy; 6 ozs. of sugar royal; $1\frac{1}{2}$ pounds of spring water. Soak all this cold for 24 hours, and then filter through paper, and mix with it some drops of essence of amber. They wash their gums with it cold. Mr. Verchant.

Rx. some Spinage and boile it in water. When it hath boiled a while put to it a good peice of butter. When it is sufficiently boild, take the yolkes of 2 or 3 eggs, beat them well with a litle vinegar, and when they are well beaten, take a litle of the liquor where in the spinage is boild and mix with the egs, continually stiring them that they curdle not, and when you have thus mixed a pretty good quantity of the liquor with the eggs, then pour the egs into the bouilon, and soe pour the bouilon, egs and all, forwards and backwards in two vessells till they are well mixed and then put all into a dish where slices of bread are, and this is noe ill soope. This may be donne with other hearbs, or lettuce, purslane and divers others which, put togeather in a good mixture, may produce a very good taste. They say that if the butter be put to the hearbs first, and soe set to stew gently togeather before the water be put to them, they will eat tenderer and better.

Fri. May 14.¹ Fri. Apr. 2, I was taken ill at Agen,² feaverish and an extraordinary pain in my head, haveing between Tholose and that had

² He continued his journey and arrived at Bordeaux on 5 April, as is shown by earlier entries.

Dentes p. 122 (French)

Herb potage pp. 123-4

Tertian pp. 143-6

¹ There is a gap in the entries between 5 April and 9 May, and another from 14 to 18 May which were probably due to Locke's illness.

a very cold and untoward passage by water, and a great pole haveing fell upon my head in the boat. Not knowing which to impute it to, but willing above all to secure my head as much as I could, if that had received any harm, I tooke a clyster in the afternoon, and the next morning, the pain in my head continueing with great violence, I bleeded, I believe, between 11 and 12 ozs.

It proved afterwards a tertian ague but very irregular for the intermitting days I was constantly in a feaver, noe stomach, great decay of strength, and had usually to every fit 2 sweats, one after the first hot fit, and the other the night before the comeing of the following fit. Q. Whether the bleeding in the beginning occasioned this great disorder, or my Journey from Agen to Bordeaux, for I stopd not till I came hither? After about endureing it a fortnight or more, and being much worne out, I tried the cure by fasting but it succeeded not. Wednesday 28 Aprill I tried the cure of vomiting, but considering the weaknesse of my lungs, I tooke but vini emetici 6 drachms. This gave me but two vomits, however, takeing six drachms six-hourly, it put off my ague, but presently upon its ceasing my belly began to swell. Noething passed with me but winde, which kept a continuall rumbling in my belly soe that from thence till Monday May 3rd, haveing never a stoole, I thought it necessary to take a purge which wrought well enough, and gave me some ease in bringing downe my belly. But as soon as the purge was over the swelling, rumbleing, winde, and costiveness returnd. Haveing endurd it some time, and loath to purge my thin body again, I betooke my self to whey, and drank pretty largely of it one day, hopeing to allay that internall heat I felt within, and remove those obstructions in my belly.

The next day my ague returnd again. Q. Whether by drinkeing the whey or any other cause? But this I observed that upon returne of my ague the tautnesse and rumbleing of my belly much abated, and it became more easy and lank. This fit was the most regular I had at all. The shaking, hot and cold fit succeeding one an other in order, and being with much less pain and uneasiness than the former, though each of them longer. The next fit was without shaking; the next nither any hot fit only a sweat, and Sat. 15 May it quite left me. But my stomach returned not but constantly after eating I had a feaver i.e. heat and quick pulse, and a dull pain in my head, and the windynesse and costiveness of my belly in great degree remaining, and according to the last of my observations, I was worse the intermitting days, i.e. 16, 18 etc. of May, which were the intermitting days of my ague after its returne, but the days of arrest of my ague had [it] continued on its first course. All the time my ague was gon the first time, besides the toatness of my belly, I was hot, feaverish, and weake, litle stomach and less nourished when I eat and very much out of order.

Q. Whether this tautnesse, winde and costiveness were from the matter of the ague precipitated and fixd on those parts, and whether that was for want of carrying it of by more copious vomiting before the bindeing medicin laid hold upon it, or whether it were that the fermentation of any of those parts being vitiated, it generatd these ventositys?

Q. Where in lyes these tensions of the belly? After the going away of my ague the 2nd time this tension, and rumbleing and costivenesse, still troubld me, but not soe much as before.

[At Poitiers.]

Mon. May 24. I took two clysters. Neither of them gave me a stool. First, one oz. of soothing electuary and 2 ozs. of syrup of violets in $\frac{3}{4}$ pint of common decoction. This stayed with me from morning till the afternoon without any motion. The other was 4 ozs. of sugar in the common decoction which gave me a motion but came away clear. I had a large loose stool next day, which I impute to the purging clyster.

Wed. Jun. 2. From Estampes to Chatres 6 leagues from Chatres to Paris 8 leagues. Take of the juice of Chervil 3 parts in white wine one part. Drink of this a good glasse every morning 8 days togeather. It cures a swollen body.

Rx. Hemlock cooked in oxycrat [vinegar and water] a half. Soak the paralytic part with this as hot as the patient can stand. Then wrap the part in the hot dregs. For paralysis.

The juice of an herb that grows upon walls that hath noe leaves, but a sort of grapes or rather figurd like the grain of wheat or barly, rubd on warts cures them. De La Charité. By the description she made of this herb it seemed to be prick Madam one of the Sedums.

Thurs. Jun. 17. When the child is born [i.e. On the Gold Coast] they give the mother a gourd of a drink made with rice, maize, water, palm wine, and guinea-pepper; then they cover her up and leave her sleeping for 2 or 3 hours. Then the mother gets up, washes her child, and works as if nothing has happened. *ib.*¹ p. 233.

When the infants are 7 or 8 months they [i.e. the people of the Gold Coast] leave them on the ground so that you see them dragging themselves along like kittens on four paws; this is also the reason why they walk earlier than European infants. *ib.* p. 235

Sun. 20 Jun. To melt silver quickly and in an ordinary fire put with

¹ This and the following observation are taken from Villault, Relation des costes d'Afrique appellées Guinée (1669), Paris.

Clyster p. 151 (Shorthand)

Tumidum corpus p. 158

Paralysis p. 158 (French)

Naevi p. 158

Puerperium p. 162 (French)

Infants p. 162 (French)

Silver melt p.174

it a small quantity of [mercury sublimate] and antimony v.g. take of silver one oz., [corrosive sublimate] gr. [...¹], antimony gr. 2.

Mr. Herbert.²

Spirits of Wine is an infallible remedy to kill the worms formed in the ears. Journal des Scavants., 18 Jan., '77.

Everyone knows that the white of an egg is a good cure for inflammation of the eyes. Cornflowers and their coverings, a little crushed and soaked for 24 hours in snow or snowwater, communicate such virtue to this water that they distill it on a gentle fire of sand. It is marvellous not only for inflammations of the eyes but for all eye complaints. We already have this secret in the Pharmacopoeia of Mr. Charas.

In the road between Clagenfort and Gratz (about 3 leagues from Gratz) one crosses a litle brooke wherein if you put a stick or any wood it will in an hower's time swell considerably, and the water of this river is soe apt to produce Goitres (swollen gullet) that they that drinke it, but a litle while, are soone to have Goiters. This brooke casts up on its banks litle hollow long white stones or rather tiles creased on the outside cald $[\ldots ^3]$ which hung upon the throat prevents and cures goiters and all other swellings of the throat. Mr. Herbert.

A woman that had an ulcerated cancer in her breast found not only ease but much amendment by the use of Empl. Magnetic Angeli Salae. It is also good in the soars of the Kings evill. Mr. Charas.

Mr. Charas, as he told me, has cured several quartans and never failed but in one which can come at all times of the year. Dose, 2 drachms, commonly in a powder but sometimes it is an infusion in white wine, taken just at very beginning of fit.

Thursday 1 July. For the memory they take the dried flowers of sage and rosemary infused in the spirits of wine which they use.

Fri. 2 Jul. The animals producing Bezoar are billygoats and cows, Monkeys and nannygoats. Those produced by cows are large but not very powerful. The normal bezoar comes from goats. That from monkeys is better and comes from Macassar; that from goats comes from Golconda. Soak the Bezoar in water; if water changes colour and the Bezoar loses weight this is a sign that it is adulterated. Others prick the Bezoar with a red-hot needle; if it enters and makes the Bezoar brown, this is a proof that the Bezoar is a mixture and not natural.

Journal des Sçavants, 29 March '77.

¹ Blank in MS.

³ Blank in MS.

Vermes aurium p. 174 (French)

> Oculorum inflammatio p. 174 (French)

> > Goiters p. 175

Cancer p. 176 Strumae p. 176

Quartan p. 176 (Shorthand)

Vins Medicamenteux p. 192 (French) Bezoar pp. 193–4 (French)

² Thomas Herbert (1656–1733), eighth Earl of Pembroke, entered Christ Church, Oxford in 1672, and in the course of a distinguished career became Lord High Admiral. He and Locke were much together at Montpellier during 1676.

Balaruc pp. 195-7 (French) 84

Mond. Jul. 5. Remarks on the Mineral Waters of the Baths at Balaruc. These waters may justly be called miraculous because of the admirable effects they produce when taken with care and under the direction of a doctor well experienced in mineral waters. They take their origin from the little hills to the south, which are very close to them, and pass through 4 different mines. The first, the most westerly, is of sulphur, the 2nd of bitumen, the 3rd of salt and the 4th of nitre. These 4 mines unite about 250 paces beneath the baths and from there flow through a very deep underground canal so as to emerge in large bubbles and form this marvellous spring which you see. At the bottom of it and at the beginning of the aquaduct, apart from the above minerals, I've found pieces of pumice stone, Karabe and jet.

The water is saline and a little bitter; it smells of bitumen and sulphur, and is very hot to touch especially when it flows freely. It therefore seems that its temperament is hot and dry to the third degree, or thereabouts; and that it melts and dissipates humours which are thick, glutinous, slow, viscous and clinging; warms and dries scrofulous humours and watery phlegm; attenuates and breaks up thick vapours and spirits; dissipates winds; easily penetrates and resists all kind of putrefaction. It follows that it is very salutary (taken internally or externally) for all cold ailments of the head, stomach, lower belly and extremities, which we list here briefly in order.

Among the maladies of the head we notice especially loss of hair through excessive humidity; white hair due to a corruption of the pituitous fluid, dandruff, nits, lice, scabs, scurf, etc.

On the epidermis, swellings or scurf, the rash and little ulcers etc. On the Pericranium, Hydrocephalitis etc.

On the eyes, Ophthalmia etc.

A pituitous tongue., the watery eye and a flux of cold humours. (3) v.p. 191.

Sun. Jul. 11. (3) v.p. 189. cold humours, emphysema (a humour similar to Oedema and caused by phlegm or serosities); Ectropion, or reversal of the eyelid; Anchilops and Egilops, which are abcesses at the large angle of the eyes caused by a pituitous or serous or melancholic humour: Chalation, a softening of the pupil because of a flux of cold humours; Sty, or a little tubercle of phlegm or melancholic juice betwen the lashes of the pupils; Ptilosis, a thickening of the pupil because of pituitous blood; films, spots, clouds, obscurities, feebleness, suffusion, cataracts etc.

In the Ears: intemperate cold; painful abcesses; ulcers; dirty outgrowth of flesh; noise or ringing sounds; worms; deafness through thick raw humours etc.

Balaruc waters pp. 197–205 (French) In the Nose: impaired powers of smelling, through a viscous humour which stops the Os Cribriform; Polypus, an excrescence of skin due to a thick and viscous phlegm; Ozena, or purulent ulcer etc.

In the Mouth: Aphthae; toothache; excrescence of skin on the gums; humour of the tongue; split lips, etc.

On the Face and Neck: Pustules; freckles; oedemas; hardened scirrhosis; scrofulas; fistulas; and Goitre. All of these diseases are caused by cold, thick and viscous humours.

In the membranes of the Brain are: pains; headaches; migraines etc. In the Brain and its conduits and ventricles, and in the nerves are: Melancholy; Reverie; Vertigo; Epilepsy; Incubus; Apoplexy; Hemiplegia; Paralysis; Convulsions; Trembling etc; Torpor; Drowsiness.

Cold and moist distempers, Catarrh, and distillations on the Chest are followed by: Coughs; Asthma; Orthopnoea; Dyspnoea; Haemaptosis, or spitting of blood; Ulcers on the lung; Phthisis; and a host of similar ailments, which cannot fail to receive a perfect cure, or at least much relief, by means of our baths, provided that they are used with the precautions necessary to each of these complaints, and with due regard to the temperature of the patient's body.

In the Heart we see: Palpitation and all kinds of fevers caused by cold humours, such as quotidian, Tertian, Quartan, etc.

For crudities of the Stomach also our waters are excellent: Pain; Nauseas; Bleeding; Lack of Appetite; Canine Hunger; Depraved appetite; Diarrhoea; Coeliac lientery; Worms; Colic; Hernia; Aqueous obstructions; swellings of the mesentery, liver and spleen; jaundice caused by thick gluey humours, which block the bile duct and make the excremental bile spread throughout the body; cachexia; dropsy; pains in the kidneys; stones, gravel and urinary difficulties; coldness of the womb; sterility; suffocation; retention of menses, excessive menstruation; gonorrheas, and all sorts of venereal ailments, except those of longstanding; haemorrhoids; cold gouts, and all kinds of maladies of the joints proceeding from cold, thick and viscous humours; and even the persistent pains remaining after blows, falls, ruptures and dislocations.

And if our waters are so marvellous in the cure of all sorts of cold maladies, both recent and of long standing, when taken according to the directions of some doctor experienced in their use; they are no less efficacious for maladies proceeding from some hot cause. (I have proved this during the last season in the case of several important patients.) This is because drunk in small quantities (e.g. 5 or 6 glasses) they evacuate the hot humours through the similarity of their own substance;

likewise, if one stays a very little time in the bath, it will open the pores of the skin and give passage to any abnormal heat, which was previously enclosed.

It must be pointed out that everyone who comes here does not receive a complete cure. This is because of their misuse of the baths; they come without preparation or instructions, and drink or bathe all in the same manner, as if all had the same bodies, temperaments and maladies. Some drink and bathe on the same day, so exposing themselves to two contrary movements and to two great and sudden evacuations, with great prejudice to their health (for does not Hippocrates say: "Nature does not tolerate sudden changes"?) Others, after staying here only two or three days, return still covered with the sweat of the bath and expose themselves to injuries from the air, which penetrates permanently into the depths of the body and stirs up ailments far worse than those for which they first came to the baths; and so, in place of the relief which they had promised themselves they reap the reward of their imprudence, not having borne in mind that our baths are still making their effects appear even 15 days after their return, as many know by experience. Furthermore it is absolutely necessary to make proper preparations beforehand, and to keep strictly for a length of time to a regime fitted to their bodies and to their maladies.

by Monnier, Doctor of Medicine at the University of Montpellier and Professor of Mathematics.

Tues. Jul. 20. At the Invalids they had at the first Institution 1 pint of wine, $1\frac{1}{2}$ lbs. of bread per diem and half a pound of flesh per meale, but now its abated, and they have but half so much. They have a new suit of clothes and 2 pairs of shoes once every 2 years and a half.

Tuesd. Jul. 27. In Moroco every man has 2 or 3 wives and as many concubines as he can support. He gives to these concubines each day 2 or 3 Tomins for living expenses. A Tomin is worth half a Real. Moquet, p. 179, 442 pp., Voyages of J. Mocquet,¹ 8° Rouen, '45, 442 pp.

Thursd. 29 Jul. To surgeon for bleeding him 3-0.² To one that had a feaver, and his leg gangrend soe that it was resolved to cut it off, there was prescribed an hypnotique to give him rest and recover his strength he haveing not slept in 2 or 3 nights before. In the morning when they came in order to the operation they found the patient yet soundly sleeping and without a feaver. Haveing wakend him, and opened the

¹ Jean Mocquet, Voyages en Afrique, Asia, Indes Orientales et Occidentales.

² This entry refers to bleeding Caleb Banks, Locke's pupil.

Invalids pp. 211–12

Polygamie p. 216 (French)

Gangrene pp. 217-18

soare they found the dead flesh of the gangrene quite separated from the sound. They were astonished at these good and extraordinary accidents, but knew not to what to impute them. At last goeing to cleanse the ulcer with some [spirits of wine] they had there, and calling for it, the nurse instead thereof brought the hypnotique [that] had been prescribd the day before. They demanding the [spirits of wine] she said that must be it or noe thing, for there being there but 2 botles, one whereof she had given to the patient, whereby it appeard that she had given the patient [spirits of wine] instead of the paregorique to which they ascribd all these good effects. Dr. Donalson.¹

Sund. Aug. 1. There are at the Invalids 5 courts. The length of the whole building from East to West 360 steps, in depth from North to South 240, besides a chappell and lodging for preists that run out beyond the square of the courts south ward. The front stand[s] North ward towards the Seine, and the building is 5 storys high, besides sellars, and the forme of the whole as you see.²

The pricked line a long entry or vista from one end of the building to the other with lodging chambers on both sides numbered. These entrys or gallerys are both below and in the 3rd story and are open at the two ends like cloisters in the Court Royal which, both above and below, hath a cloistered walke on the sides, soe that one may walk round it in the drie.

In the gallery from North to South, which is 240 steps long, there are of each side 33 chambers, each haveing 5 beds; in the length, which is 360 steps, a proportionable number; soe that, without takeing in the crosse partitions where the Kitchings stand, the number it will hold, considering that there are 5 storys and 5 soldiers in each chamber, will be 1155, but then, deducting out of this the halls marked 6.6, which run all along the side of the Court Royall, which halls also in their length take in 2 storys, adde to this the Chappell in the front, the Apartments both of the officers, belonging to the house and of the officers of the army receivd into it, and that, as I remember, the buildings round about the Court royall is single and soe there are not chambers double as in the other parts where the gallerys have chambers on both sides, the number will be a great deale lesse. But the building not being yet finished, nor the passages all open, one cannot yet come to see the whole soe particularly Q. the use of the 5th story which is cocklofts?

They say there are at present about 15 or 1800 in it.

Invalids pp. 218-19

¹ Probably refers to Dr. Alexander Donaldson, the son of Walter Donaldson (1575-1630), the Scottish Principal of the Protestant College at Sedan.

² There is a diagram at this point in Locke's journal.

Ulcers p. 221 (French)

Faciei pustulae Charas p. 221 (Latin)

Menstrua p. 229 (French)

Mauriceau p. 229

Haemorrhoids p. 234

Hysterica p. 235 (Latin) Vulnera p. 235 (Shorthand)

Haemorrhoids p. 235 (Shorthand)

Dysenterie p. 257

Menstruum p. 287 (Latin)

Venerea p. 288 (Shorthand) Mund. Aug. 2. Crushed apples without anything added are a sovereign remedy to cure ulcers.

Aldovrandus,¹ ap. Journal des Scavants, 12 Nov. '68.

Tuesd. 3 Aug. Pimples on the face. R. the Confectio Regia of Alkermes of Charras. p. 313 of the Pharmacopée of Charas, 4° Paris, '76, 1060 pp.

Wed. Aug. 11. The quantity of menstrual blood ought to be altogether about 2 Hemines. The Hemine was an ancient measure holding about 9 or 10 ozs. Mauriceau,² p. 49.

Treatise on the Diseases of Women in Pregnancy and Childbirth, by F. Mauriceau, 4° Paris, '75, 501 pp.

Fri. Aug. 20. Oake apples will prevent the pain of haemorrhoids and soe the knot of a Thistle that grows on the confines of Picardie and Champaine.

Dr. Donalson cures hysteria by the use of sal volatile.

Mme. Charas, having by a fall a large cut in her face, so that the flesh of her cheek fell down below her mouth, was cured only by binding the flesh close into place and anointing the lips of the wound with Balsam of peru, and laying compresses dipped in [spirits of wine] upon it. *ib*.

Take the nail of horse shoe that was flung off of a suddaine, beaten into a ring cold, i.e. without putting it in the fire. Wear this and it will cure haemorrhoids.

Mon. Sept. 6. Ananas and Cocos eaten in abondance caused dysenterys in Formosa. Q. Whether all fruit doe not doe soe? See "The Capture of Formosa", ap. Thevenot,³ p. 37.

Mon. Oct. 4. The best means of provoking menstruation is oil of amber, according to Mr. Donalson.

In gonorrhoea, purging and the woods and volatil [vitriolum] when the acrimony of the first symptoms are over, which he allays with emulsions, and if fluxation be inveterate, after using the ordinary medicaments, he gives Zwelfors astringent pills which he uses with Laudanum and balsamick things with them, and particularly Frankincense and in his purges always [mercury] with confection of Hamec⁴ or other proper pills. *ib*.

¹ Ulysses Aldovrandus (1524–1607) was an encyclopedic botanist, and first Director of the Botanical Gardens at Bologna.

² Mauriceau's book was translated into Latin in 1681 and English in 1683.

³ Melchisédec Thévenot, *Relations de divers voiages curieux* (1672), Paris, is a collection of the reports of travellers. The quotation here comes from a section on Formosa. One of Thoynard's letters to Locke contains a note by Thévenot (MS. Locke, c. 21, f. 55).

⁴ The purgative hamech, together with bleeding, was recommended by Paracelsus as a cure for the itch (see also 5/3/80).

Wed. Oct. 14. Take three spoonfulls of best vinegar, 10 grs. white pepper and 2 drachms of manna. Mix, cook and reduce by half. Let some drops of this liquor be poured into the rotten and acheing tooth and let it be repeated every hour up to three times. It removes the pain which never returns. Mr. Scawen.

Q. Whether giving suck only 3 times a day as the Peruvians did, and making the nurse drinke only water, or feeding the child only with panada [boiled bread flavoured with sugar, etc.] will not cure the epilepsie?

Frid. Nov. 5.1 Madnesse seemes to be noething but a disorder in the imagination, and not in the discursive faculty; for one shall find amongst the distract, those who phansy them selves kings, &c., who discourse and reason right enough upon the suppositions and wrong phansys they have taken. And any sober man may finde it in himself in twenty occasions, viz.-in a towne where he has not been long resident, let him come into a street that he is pretty well acquainted with at the contrary end to what he imagind, he will find all his reasonings about it soe out of order and so inconsistent with the truth, that should he enter into debate upon the situation of the houses, the turning on the right or left hand, &c., with one who knew the place perfectly, and had the right Ideas which way he was going, he would seem little better than frantique. This, I believe, most people may have observed to have happened to them selves, especially when they have been carried up and down in coaches, and perhaps may have found it some times difficult to set their thoughts right, and reforme the mistakes of their imagination. And I have known some who, upon the wrong impressions which were at first made upon their imaginations, could never tell which was north or south in Smithfield, though they were noe very ill geographers: and when by the sun and time of the day they were convinced of the position of that place, yet they could not tell how to reconcile it with other parts of the towne that were adjoining to it, but out of sight; and were very apt to relaps again, as soon as either the sun disappeard, or they were out of sight of the place, into the mistakes and confusion of their old Ideas. From whence one may see of what moment it is to take care that the first impressions we setle upon our minds be comformable to the truth and to the nature of things, or else all our meditations and discourse there upon will be noe thing but perfect raveing.

¹ An entry dated 8 October shows that Locke had met François Bernier (1620-88) physician, traveller, and philosopher. He took his M.D. in Montpellier and then spent thirteen years travelling in the East. In 1670/1 Bernier published his *Histoire de la Dernière Révolution des Etats du Grand-Mogol*, which Locke read and made notes from during his stay in Montpellier. In 1678 he published his *Abrégé de la Philosophie de Gassendi*, which Locke also read with great interest (see Locke's Travels, ed. Lough, p. 177, and L. V. S. Reddy, *Ann. Med. Hist.* (1940), 3rd series, **2**, 225-33.

Dentium dolor p. 298 (Latin)

Epilepsia p. 298

Madnesse pp. 317-18

Madnesse Folly p. 348 90

Febris pp. 353-4 Thursd. Nov. 11. Where a man argues right upon wrong notions or termes he does like a madman, where he makes wrong consequences he does like a foole. Madnesse seeming to me to lie more in the imagination, and folly in the discursive.

Tuesd. 16 Nov. Monday night goeing to see Mr. Herbert I found him in bed a sleepe and in a litle sweat with a feaverish pulse. He had been taken the Saturday before in the after noon with a pain in his stomach. Next day swelling in his face and throat which with an inclination to vomit, want of appetite and sleepe these symptoms increased till today.

H. in good high feaver, pain in the head, tongue white and moist, great sicknesse in the stomach and inclination to vomit, red swelling outwardly in his face and throat which were soe far inwardly that there was difficulty of swallowing, and symptoms of slight angina. [Bled] up to 8 or 9 ozs. Because of the failing of his spirits an extraction of a large quantity was prevented. Blood pleuritic.

A clyster at 4 of the afternoon. Rx. $\frac{1}{2}$ pint of common decoction for clysters. 1 oz. of [honey of Mercury], 4 ozs. of red sugar, the yolk of one egg. Mix. Make a clyster. This produced 4 motions. Diet—no flesh or wine.

Take 6 ozs. of plaintain water, 4 ozs. of red roses, 4 whites of egg reduced in water, 1 oz. of white sugar candy. Make a gargle. This was often employed and afforded relief.

Wed. Nov. 17. The preceding night almost sleepless, swelling and other affections of the throat lessened. Pulse febrile, tongue coated but moist; sickness and vomiting. In a short time he took $1\frac{1}{2}$ pints of a warm thin posset. Then the sicknesse and vomiting stopped. Consider whether it was on this account that he seemed to employ copious draughts of liquid, and if in at least some fevers this very uncomfortable condition of a sick person could not be cured comfortably by this method.

At the first hour the clyster was repeated and worked three times with alleviation. His appetite was restored to some extent and he himself was more cheerful and the headache was quite cured. Up all day hitherto.

pp. 355-6 (Latin)

p. 355 Latin)

> Thurs. Nov. 18. On the preceding night H. slept twice, for 4 hours each time. Half an hour after his last nap a sweat came on of itself and not excessive. During his sweat the pulse was febrile, the tongue coated and moist, the affections of the throat ceased, and the pain and fatigue of the throat which had wearied the patient for two or three days vanished. When the sweat stopped after two or three hours a slight ailment of the stomach returned, which remained all that day. His

temperature was moderate and not greater than normal, the pulse febrile, the tongue coated, the mucous membrane damp. He lay in bed the whole day. Slight headache.

Frid. Nov. 19. H. restless night. Slight and broken sleep. In the morning moderate temperature, headache and pain of the stomach.

Sat. Nov. 26. H. yesterday purged 6 stools without great relief. As the result of a slight blow the left testicle swelled and there was a twisting pain. It appears to me that the texture of these parts has been weakened, because the cause was trivial and the same thing had once happened to him at Rome when he was ill of a fever there.

Take a quantity of Mallow, Bismalva; Tips of St. John's Wort, Mugwort and absynth; flowers of camomile and melilot; and half the quantity of red roses. Cook in sufficient quantity of spring water, finally adding red wine. A fomentation was made from which the patient felt relief. But he acted wrongly in that when he first showed me this symptom he did not mention the bruise and spoke about this condition as if it ordinarily occurred to him when he had a fever.

The previous night almost sleepless. In the morning moderate temperature, but pulse swift, and the coating of the tongue aggravated. No appetite. Thirst increased.

H. haemorrhage at the nostrils and a slight sweating without alleviation. Up to 10 ozs. by [venesection]. Blood very pleuritic, appetite spiritless.

Sund. Nov. 21. Some sleep in the night, headache alleviated, tongue almost normal. At night a slight haemorrhage, as in the morning also, and his condition was much improved, which I think should be attributed to the bleeding. For nothing else in the treatment had been changed, and his drink was the ordinary one of a posset and small beer and a soothing juleb. The pulse less agitated and appetite to some extent restored.

Mon. Nov. 22. H. Quiet and natural sleep at night with great alleviation. In the morning pulse normal, tongue little coated, appetite increased: the patient more lively and showing all the signs of convalescence; again slight haemorrhage of the nostrils.

Mr. Briot¹ haveing been for severall years hypocondriac troubld with palpitation of the heart, fainting turns and dizzinesse of the head, Aegritudo ventriculi p. 356 (Latin)

> Febris. Testiculi Tumor p. 359 (Latin)

> > Fever (Latin)

p. 361 (Latin)

(Latin)

Hypocondriacus pp. 366-7

¹ Pierre Briot, who translated various English works, including Ricart's Present State of the Ottoman Empire. Locke has just given an account of some of M. Briot's researches into the gold and silver coins of France and England, and the last ten pages of this journal consist of notes on the French currency by M. Briot.

swelling of the stomach after meat etc., consulted Sylvius¹ who commended to him volatile [salts] which he took begining with gr. 6 of sublimate of Hartshorn once a day and soe increased to 12, and tooke them 2 or 3 times a day and even at meales which he was advised to doe whereof he found extreame benefit and a perfect cure haveing by the constant use of them been quite cured of all those troublesome symptoms and been well for severall years. He used also when he was in this course to take some pills that purged gently once a weeke made up with some gentle purgatives and the gums as ammoniac, myrth, frankincense, amber etc., which are full of volatill salts. He took them in pure wine without any other mixture. If you mix sugar with them it hinders their operation.

He has also found this benefit by them, that haveing before the use of this remedy voided a stone as big as a litle olive stone, he has never since had the least symptom of the stone. Q. Whether the constant use will not cure gout and stone? He takes them still ever now and then. They cure also obstruction of the menses. Mr. Briot died the beginning of the following winter of an Apoplex.²

H. all symptoms gon but weaknesse. He rose for 3 or 4 howers.

Tues. Nov. 23. H. better. Everything indicates convalescence, and his testicles having returned to normal size, he rose for 2 or 3 hours.

Wed. Nov. 24. H. ate now for the first time meat broth, which he bore well: pulse somewhat agitated as a result.

Thurs. Nov. 25. H. ate a very little chicken flesh, which pleased his stomach but pulse quickened as a result. Tongue also still somewhat white.

Frid. Nov. 26. If you be bit with a dog take a litle bloud that comes from the wound upon a peice of bread, or if it hath don bleeding make it bleed afresh. If it be a mad dog that hath bit you though you cover it with butter etc. an other dog will not eat it but leave it with a kinde of abhorrence. Mr. Hubins.³

H. purged with the common potion and got better.

Mr. Robinson's nephritic paroxysm was cured by Thomas Sydenham's⁴ method within 5 to 6 hours.

¹ Sylvius or Francis de le Boë (1614-72) was a leading iatrochemist who studied fermentation and the nature of the juices of the body. His treatment was directed towards adjusting the acidity or alkalinity of the internal secretions on the principle of *contraria contrariis*. He first described the Sylvian fissure, and was an able clinician.

² This last sentence was added later and written between the lines.

³ Described by Lister as an eye-maker. According to Lough he was probably the author of Machines Nouvellement Exécutées et en Partie Inventées par le Sieur Hubin (1673), Paris.

⁴ Sydenham recommended bleeding, a marshmallow posset, and a clyster, which should be followed by a sufficient dose of liq. laudanum to ease the pain.

Febris p. 367 p. 367 (Latin)

p. 368 (Latin)

Febris p. 368 (Latin)

Hydrophobia p. 368

Nephritis p. 368 (Latin)

Thurs. Dec. 2. About 6 or 7 a clock I was cald to my Lady Ambassadrics1 whom I found crying out in one of her fits. I had not stayd long but after a litle intervall an other began wherein she gave many shreeks. At every shreek her mouth being drawn towards the right eare, and when the fit was over she told me that the pain shot it self all at once like a flash of fire all over that side of her cheek up to her eare, into her teeth and that side of her tongue, into which she complained there was immediately, when the pain came, as if it were scalding liquor thrown. Her tongue on that side, as I afterwards found was also in these fits convulsed, the contracting where of she tooke for swelling, it indeed making it thicker, but as soon as the violent paine ceased it returned to its naturall state. There was in the intervalls commonly a paine in the teeth, sometimes more sometimes less, and sometimes scarce any at all, but when the fits came there was noe one place in all those parts it seised on where my Lady could feele it began, only she had a premonition of the coming of a fit, by a throbing she felt in her lower jaw where a tooth hath been drawn in the like fits the last sommer, and a throbing like wise in the upper jaw just over against it.

These violent fits had begun Wednesday morning and continued till now and were preceded by 3 or 4 days ordinary toothach in which my Lady finding a drynesse in her lips apprehended these violent fits to follow it, being a symptom she had observed to attend them when she was tormented this last sommer. Her pulse was very good, and her temper naturall, and all the symptoms were wholy confined to that part of her face, the other being wholy without pain and the least inconveniency, though the other extended it self some times to the last four teeth of that side, but never went any farther. There was noe swelling or red inflammation any where to be observed noe flux of humor noe thing that appeared outwards. Soe that I found noe indication for bleeding besides that my Lady had beene aboundantly bled in the same case the summer last without the least benefit by it. These fits troubling her then 8 or 10 days to extremity.

It being night I thought at present there was noe thing to be donne but to give her present ease, if I could, by some topicall applications, it not seeming reasonable to me to apply a blystering plaister (which by the note that summoned me I was desired to bring with me and she had a minde to trie) before I had made some generall evacuation. I therefore desolvd about $\frac{3}{4}$ gr. of Laudan: in some black chery water, and mixing a litle spirits with it, applyed it with lint to those parts of the gums where she felt the most pain out of the fits. This gave her soe much ease that she cald for more of them, and applyd them to other parts of

¹ The Countess of Northumberland.

Countess of Northumberland's case pp. 370-4

> Dentium dolor cum convulsionibus

her gums where she found paine. After some time they had been on, she fell a sleepe and had 2 or three howers quiet rest without the interruption of those fits, and for the remainder of the night had some pretty considerable intervalls of rest and sleepe but not without violent fits between, which increaseing again the next morning and the weather (Friday 3 Dec.) being extreemly cold with an exceeding hard frost, I apprehended that a purge which I thought very necessary would be dangerous in such a season because if weake it might cause disorder with very litle or noe evacuation, and strong in soe delicate a temper, I could not tell how to venture. Besides that I feard she might take cold in the wakeing which might increase the mischeife, I therefor was willing to trie first whether a litle aetherial [oil] of turpentine (which is very agreeabel to the nerves in which alone the whole disease seemed to lie, and to proceed from some litle nerve about the place of the tooth drawn which either an impostume or some sharp humor might offend) might not give her ease and procure a truce till fiter weather for purgeing. I therefor put a drop of [oil] of turpentine on a litle lint which she applyd to the gap but it was soe far from allaying the pain that it exasperated the fits which continueing violent and frequent I thought there was noe longer time to balance, but that I must purge, and to secure the effects as well as I could gave pil. cochiae major 1/2 drachm, [sweet mercury sublimate] seven times sublimated gr. 5. This wrought very well 7 or 8 times, the fits still continueing whereof she had usually one every time it wrought after the pills had don working severall hours I gave her this following paregoricum, she haveing been always used to such cordials after purgeing and now more necessary than ever.

Rx. Water of Black Cherries, 3 ozs. Syrup of Meconium,¹ 3 drachms. Laudan. gr. i. Mix and make a draught.

I caused the Apothecary to prepare two of these into one of which I causd him to put some tincture of Castor in regard of some vapours I had observed in my Lady, but I gave her that without the castor. This night there was some rest and some abatement of the violence but the fits neverthe less continued at distances.

Sat. Dec. 4. In the morning fits still and towards noon something increaseing. A blistering plaister put on about noone. All this afternoon the fits moderate and seldome. In the night good naturall rest with some

рр. 374-6

Convulsio

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¹ Syrup of meconium, diacodium or syrup of poppies, was made from the macerated heads of poppies, in contrast to opium, which is the juice exuded while the poppy is still growing (see 18/7/78). It was probably its opium content which gave confection of theriac its value. Some medical men, such as Stahl and Hoffmann, thought that opium was over-used; but others, including Paracelsus, Platerus, Sylvius, Helmont, and Sydenham frequently used it.

litle shootings between while noe medicins taken but a litle temperate perle juleb, 2 spoonfuls, once in 3 or 4 howers.

Sund. Dec. 5. This day better than the night before. The paine little more than the grumbleing of the tooth ach for my Lady slept severall times in the day quietly a good while togeather. She had some times shootings, but they caused not crying out, nor extended but from the gap from the drawn tooth to those forwards on the right side all her cheeke, and up towards her eare being quite free. The night also pretty quiet noe sleep from 11 to 3, which I imputd to sleep in the foregoing day for there was noe violence of paine and scarce any shootings. From 3 till 8 good sleepe.

Mond. Dec. 6. All this morning abatement of symptoms and noe other medicin taken from the paregoricum after the purge but perle juleb till this time. The blister run well. This day about one in the afternoon she had all of a suddaine a very violent fit without any visible cause she complaining again of the scalding liquor in her tongue and a hot burning in her care. I observed all day that whether it were in the time when her fits were great or litle talkeing was apt to bring them. Sometimes touching her teeth also of that side presently gave her twitches and fits, and a litle while after she could touch them freely without the least accident. Soe uncertain was it when the touching of them gave her pain they seemed, as she said, to stand in a quagmire. Opening also her mouth to take in any thing and the motion of eating were apt to putt her into fits, and soe was touching any parts of that side her face where any nerves passed when she had the violent fits, but afterwards when her fits were abated the tendernesse extended not soe much backwards but from the gap of the tooth drawn forwards. This is also to be observed that though in her fits her pains often extended some farther than others, and changed place soe as wholy to quit these which before they had tormented, yet she told me that she never had a fit where in she had not pain in the place of the lower jaw where the drawn tooth stood, and the fore part of the same on that side neare about where the lip was set to the gum where also in the inside of her lip she used to have a throbing goeing before the fit which seemd to me who have felt it a litle beginning at a convulsive motion for the pulses of it rose very bige and strong, and soe these two parts lead the dance to the others in their disorderly motions and pullings. The constancy of the pain in these two parts confirmes me in the opinion I was before of, that the root of the mischeife lies in some harme that is donne to the nerve in the place where the drawn tooth stood, and soe when the irritation is not great enough to draw into consent the parts of that branch which

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pp. 377-83

are nearer the root yet the least disorder that affects it, and makes it straine ever soe litle, draws into consent that part of the branch that lyes beyond it (which perhaps is weakened by some stresse it might receive in the drawing of that tooth) and soe makes a painfull convulsion in that part just where it terminates. That which inclines me to this opinion is that in the fit that she had this sommer soe violently, after 2 or 3 days endureing the pain of them, and finding noe abatement, by all applications were made to her, she resolved to have this tooth drawn where it seems she found the seat of her pain. The tooth when drawne was found a sound one, and the drawing of it provd soe far from a remedy, that it increasd the violence and frequency of her fits. In this torment, willing to finde ease any how, she made use of one of the infallibles that cures the tooth ache which was salt and brandy, but this also with as bad successe as drawing her tooth, it bringing an increase to her paine which from the time of the drawing the tooth till they quite left her were much warmer then before. She had besides a litle impostume gatherd in the place whence her tooth was drawn. Now what the originall mischeif was, and what the drawing of the tooth, the brandy and salt, and the litle impostume, hath contributed to the paine she has since sufferd, either then or now, is worth considering, and what part of it also is oweing to the bloud.

This violent fit soe unexpectedly breaking out this day at one a clock was followed pretty close by severall others not altogeather soe violent and at last abated again soe that she had a pretty good truce of 4 or 5 howers conversation which was yet sometimes interrupted by importunate but yet more moderate shootings. At night about 9 or 10 o clock the pains increasd again, and though I was fain to give her this following cordiall which I had had by me ever since Saturday, but findeing things goe on well without it, I forebore to give her that or any other medicins, but now and then, a litle perle juleb hopeing the matter soe spent by the purge and blyster that I should need noe such powerfull remedy. But this unexpected returne of them spoild these hopes and forced me to give her this:

> Rx. Water of Black Cherries 3 ozs. [Sublimate of oil] of viper gr. 6. Laudanum gr. 3.

By this I hoped to gaine two points; present ease and rest and to carry of the peccant matter by a freer transpiration—her former long fit having been terminated by a sweat. But obstinate humors will not always obey remedys which one has reason to expect succes from. She sweat pretty freely and with ease, but had frequent sharp fits and litle

rest. About 2 howers after she had taken it she was very sick in her stomach and soe much inclind to vomit that some sower matter was forced up into her throat which yet she would not let come up, willing to reteine the remedy, which I was sorry for. In these disquiets she passed the night, and about 6 a clock vomited, tooke a litle perle juleb, and after 7 vomited again. She vomited some of the bread undigested which she had eaten in her broth about 7 the night before, though she took not the Cordiall till 10. After this last vomiting she lay quiet till 9, and then had a fit. It is to be remembered that dureing the favourable truce she had yesterday in the afternoon she complaind of being swollen with vapours which the fumes of [sublimate of sal ammoniac] a litle alaid.

Tues. Dec. 7. All this morning she mended soe that in the afternoon she had very few and those small fits and was free from pain between them. In the night large sound naturall sleeps. All this day eat noe thing but a litle watergruell at night, not for want of stomach, but because I thought it more convenient then strong broath that she had taken 2 or 3 times a day all along hitherto, and I thought the humor would spread it self better with a low and fleshlesse diet. Hystericall discomposures in the afternoon.

Wed. Dec. 8. All things better. Menstruation beginning. Tomorrow was the day completing the month and she was not yet expecting this evacuation until four or five days later because they generally recur only 4 or 5 days after a complete month of 4 weeks. Their premature arrival on this occasion should apparently be attributed to drinking a stimulant on the evening of the day of the Moon [or Monday]. All this day from the morning free both from grumbling and fits and the night sleepless till 2 in the morning, and from thence till eight sound sleep.

Thursd. Dec. 9. Grumbleing againe of the tooth ach this morning which I impute to the change of weather a thaw was beginning. Two or 3 litle shooting fits this day in the morning and grumbleing all the rest till midnight then noe night fit.

Frid. Dec. 10. Fit again from thence intermission till 2 or 3 and then severall severe fits and from thence sleepe till past eight, and then very frequent and sharp fits all the morning. Abatement by degrees in the afternoon till 8 or 9 at night and then an hower or 2's sleepe.

This day flesh broth again which since Monday had been changed into watergruell for feare of vapours from too low diet, for she wept to houers at least the last night and often this day.

Q. Whether these new and unexpected attacks did not arise from the interruption of the menstruation in the middle of its course? For it is

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(Latin)

usual with her Ladyship for the menstruation to stop on the third day and break out again on the fourth.

All this day and the night and day foregoing there was aboundance of vapours mixed with the pains and often dissolved in tears, and I thinke raised a great part of this storme.

Sat. Dec. 11. Large portions of sound sleep in the night, fits moderate and but seldome. In the morning great amendment and abatement of all symptoms. In the afternoon better and better. In the night good sleepe and when awake totall exemption from paine soe that she could presse all parts of her cheeks gums and teeth without any the least sense of tenderness and yet after this about (Sund. Dec. 12) 3 in the morning one sharp fit, after that, sleepe and rest till noone, and then rose the first time and was well all the rest of the day. Yesterday night between 9 and 10 she sweat very much without any provocation either of medecins or clothes, and from hence she had a gentle sweat all the fore part of the night.

Memd. that the fits which returnd on Friday morning last extend to her temple and eye and that part which was higher and more that way than they had been before. (All this time her bowels were functioning normally without either constipation or looseness.)

Mond. 13 Dec. All day very well. Part of a roasted chick for diner. This and the night before apt to sweat.

Tuesd. Dec. 14. Some return of fits in the night and all this day, but seldome and moderate; and mostly, I think, caused by her hysterical state and mental sufferings. Rx. Burgundy Pitch, 2 drachms; Powdered cantharides (without their wings and heads) I drachm. This was laid between the shoulderblades and after twenty hours it had drawn a blister on my Lady Ambassadrice, and when taken off, pulled off the cuticula with it, which I think is better than cutting it.

Wed. Dec. 15. In the night foregoing some few fits moderate which quite left her in the day so that this night perfect ease and good sleepe.

Thursd. Dec. 16. Quite well.

Frid. Dec. 17. Water and sugar the best thing for chapd lips. C. of Northumberland.

Mond. Dec. 20. Memorand. that my Lady Ambassadrice's gums itchd vehemently after the pain was gon, and did soe for severall days after and used to doe soe for severall years before any tooth was drawne. Q. Whether the excrescence of the amygdalus on the right side hath not some influence on the nerves on that side? She had a creek in her neck the last night 24 howers before. It seems a litle to depend on the

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p. 386

(Latin)

Vesicatorium p. 387 (Shorthand and Latin)

Convulsio p. 388

p. 388

Labia fissa p. 388

Convulsio pp. 388-9

same cause which caused the convulsions in her face. Q. Whether humor or vapor?

Tuesd. Dec. 21. A maid at my Ld Ambassadors that had a quartan ever since $[\ldots^1]$ and to whom they had given severall hot cordialls to make her sweat at the later end of her fits which by that meanes they could not doe 1 ordered to cover her head hot and to drinke a good large draught of posset drinke very warme which she did in a fit about a fortnight since, which put her into a sweat and ever since that she has sweat regularly every fit.

Frid. Dec. 24. Acosta, talking of this indisposition which effects those unaccustomed to mountain air, has given a masterly account of the causes and the effects in his third Book of the Natural History of the Indies.

Vega,² c. 36, p. 288, 631 pp.

Sat. Dec. 25. [Oil] of Chartae has alleviated toothache in the King of France. Vinegar also with a tincture of marcasita³ is an effective remedy for toothache. Mr. Hubins.

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Sat. Jan. 8. Cut them close and then lay to them the juice of garlic for one night and next morning put on a plaister of green wax. This cures cornes. Mr. Hubins.

Take curds of runnet, presse it and keep it dry. Take of this about $\frac{1}{2}$ drachm, dissolve it in wine, broth or ptisan⁵ and give it to drink. This was experimented as a camp remedy for looseness in soldiers. To the same purpose, they eat heads of poppy with the seeds and also rice meal boiled or raw in water. *ib.*

For the cure of syphilis salivation and humect the body by batheing and diet then anoynt the ankles, groine (without touching the belly), armepits, and tie a cloth about the neck seasoned with oyntment. Rest the next day then anoint 2nd time after the same manner and rest one or two days to see how the flux begins to rise, which one shall tell by the smell of the breath, and by the whitenesse and swelling of the gums.

¹ Blank in MS.

² Garcilasso de la Vega, Histoire des guerres civiles des Espagnols dans les Indes (1658), Paris, pp. 631. Vega was an Inca and wrote also a Commentaire royale des Yncas de Peru (1633), Paris.

³ Marcasite was a kind of iron pyrites.

4 B.L., MS. Locke, f. 3.

⁵ Tisanes, formerly ptisans, are mentioned by Celsus as a favourite form of administering the simpler kinds of remedies. The word is derived from "ptissein", to crush, and was first used to describe barley water made by infusing crushed barley. Tisanes, mostly infusions of herbs, are still commonly used in French pharmacy. (A. C. Wootton, op. cit., vol. II, p. 299.) Quartana p. 389

Acosta p. 390 (French)

Dentium dolor p. 390 (Latin)

Cornes p. 1 (Shorthand)

Looseness Diarrhoea p. 1 (Shorthand)

> Venerea pp. 1-3

The flux after its beginning usually increases 7 days, continues at its height 7 days, and decreases other 7 days. About the 16th or 17th day when it has a litle decreased purge gently with cassia, and after the flux is over, purge again stronger which may be donne a third time. The nourishment dureing the flux is every 3 howers night and day a draught of good but simple broth of veale, capon, and beef, only instead of the broth at 6 in the morning, and 6 at night, a raw egg swallowed without any thing else.

If by swallowing their spitle they have, as it often happens, gripeing in the belly a good draught of warme milk and a clyster of milk and sugar cure it and the loosenesse, or syrup of meconium. *ib*.

Mond. Jan. 9. What I have said about poison is fully recounted by Diego Fernandez Palentin,¹ who has some strange things to tell about it. Vega, Bk. 4, c. 36, p. 603, 631 pp.

Sat. 15 Jan. Q. Whether it be not the aire that begets inflammation, pus, paine and the other accidents in wounds since we see that bullets lodgd in fleshy parts doe by degrees change place and work downwards which they cannot doe but by makeing new wounds which yet nature cures without any of these accidents? Q. Also whether the insensibility of the motion contributes at all to this?² J.L.

Sat. Jan. 22. When we revive in our mindes the Idea of anything that we have before observed to exist this we call Memory, e.g. to recollect in ones minde the Idea of ones father or brother. But when from the observations we have made of divers particulars we make a generall Idea to represent any species in generall as man, or else joyne severall Ideas togeather which we never observed to exist togeather we call it Imagination. Soe that memory is always the picture of some thing the Idea whereof hath existed before in our thoughts as neare the life as we can draw it. But Imagination is a picture drawne in our mind without reference to a patterne. And here it may be observed that the Ideas of memory like painting after the life come always short, i.e. want something of the originall, for whether a man would remember the dreames he had in the night, or the sights of a foregoeing day some of the traces are always left out, some of the circumstances are forgotten, and these kinde of pictures like those represented successively by severall lookeing glasses, are the more dim and fainter the farther they are off from the originall object. For the minde endeavouring to

Palentin Poison p. 3 (French)

Vulnus p. 4

Memory pp. 16-17

¹ Diego Fernandez of Palencia published a book on Peru (Seville, 1571).

² This is a good example of Locke's deduction from a clinical observation. It was written when many of his contemporary physicians were still staring at the signs of the Zodiac for an explanation of infections, rather than suspecting the presence of specific organisms in the air.

retaine only the traces of the patterne looseing by degrees a great part of them and not having the liberty to supply any new colours or touches of its owne, the picture in the memory every day fades and growes dimmer and oftentimes is quite lost. But the imagination not being tied to any pattern but addeing what colours, what Ideas it pleases to its owne workmanship makes originals of its owne which are usually very bright and cleare in the minde and sometimes to that degree that they make impressions as strong and as sensible as those Ideas which come immediately by the senses from externall objects soe that the minde takes one for tother its own imaginations for realitys, and in this (it seems to me) madnesse consists and not in the want of reason; for allowing their imaginations to be right one may observe that madmen generally reason right from them, and I guesse that those who are about madmen will finde that they make very little use of their memory which is to recollect particulars past with their circumstances but haveing any partiall Idea suggested by their memorys phansy dresses it up after its own fashion without regard to the original. Hence one may also see how it comes to passe that those that thinke long and intently upon one thing come at last to have their minds disturbd about it and to be a litle crackd as to that particular. For by repeating often with vehemence of imagination the Ideas that doe belong to or may be brought in about the same thing a great many whereof the phansy is wont to furnish, those at length come to take soe deepe an impression that they all passe for cleare truths and realitys though perhaps the greatest part of them have at several times been supplied only by the phansy and are noething but the pure effects of imagination. This at least is the cause of great errors and mistakes amongst men even when it does not wholy unhinge the braines and put all government of the thoughts into the hands of the imagination as it sometimes happens, when the Imagination by being much imploid and geting the mastry about any one thing usurps the dominion over all the other facultys of the minde in all other, but how this comes about or what it is gives it on such an occasion that empire how it comes thus to be let loose I confesse I cannot guesse. If that were once known it would be no small advance towards the easier cureing of this maladie and perhaps to that purpose it may not be amisse to observe, what diet, temper, or other circumstances they are that set the imagination agog and makes it very active and imperious. This I thinke that haveing often recourse to ones memory and tieing downe the minde strictly to the recollecting things past precisely as they were may be a meanes to check those extravagant or turning [?] flights of the imagination. And tis good often to divert the minde from that which it hath been earnestly imploid about, or

Madness pp. 19-21

which is its ordinary businesse to other objects, and make it attend to the informations of the senses and the things they offer to it. J.L.

Mond. Jan. 24. Q. Whether [mercury] congealed by lead ["or tin" is crossed out] and soe powderd, be not better to be given inwards than mercurius dulcis and so mixed with proper grease be not better for ointments than crude [mercury]?

This morning my Lady Northumberland had, till she eat at dinner, perfect ease in her teeth without any paine, itching or any the least alteriety which she had not had (for soe long an intervall as this which was of 4 or 5 howers) these neare 3 months last. Q. Whether this be to be imputed to her sweating a litle gently this morning upon the use of Godard's drops1 or from any alteration they have made in her bloud or succus nervosus, she haveing now taken them these 3 nights last past in this methode. Thursday last she was purged. Friday night at goeing to bed she the first time tooke the drops and was orderd to exercise the next morning till she found her self begin to glow, and then to leave off and drinke a glasse of warmed sack. The exercise the two former days she neglected. This morning she went out in her coach which is a kinde of exercise. Neither did the drops till this morning ever make her sweat, but this morning she had a gentle breathing as I expected. Though she took but 6 drops, the dose of her daughter in convulsion fits when she was but [...²] years old and which my Lady thought would be two [sic.] small a dose for her, she haveing formerly taken 20 drops in the morning and as many in the afternoon for severall days, togeather without being ever able to be put into a sweat by them, but they constantly made her burne for an hower or two after taking.

Sudor diaphoretique

C. Northumberland Thursd. 27 Jan. My Lady Northumberland haveing found good in the use of these drops tooke last night her old dose of 20 drops but

J.L.

noething more contributes then time and sleep.

But by this way of giving them though she tooke them only in

orange flower water, whereas she formerly tooke them in sack, I doubted not if there were occasion to make her sweat which is very visible in that gentle mador³ she had this morning. The effect that is to be expected from diaphoretiques not lying in the vehemence of the medecin, nor the largenesse of the dose but in the methodicall use, soe that they may digest the matter and prepare it for expulsion to which

¹ Goddard's Drops were a popular remedy invented, according to Munk, by Jonathan Goddard, Cromwell's physician and Warden of Merton College, Oxford. Wootton disagrees with Munk's account and suggests Dr. William Goddard (who became F.R.C.P. in 1634 and was dismissed from his Fellowship for a combination of non-attendance at college meetings and malpractice) was the more likely originator. The original formula is in A. C. Wootton, op. cit., vol. II, p. 179.

² Blank in MS.

³ O.E.D., dampness, moisture.

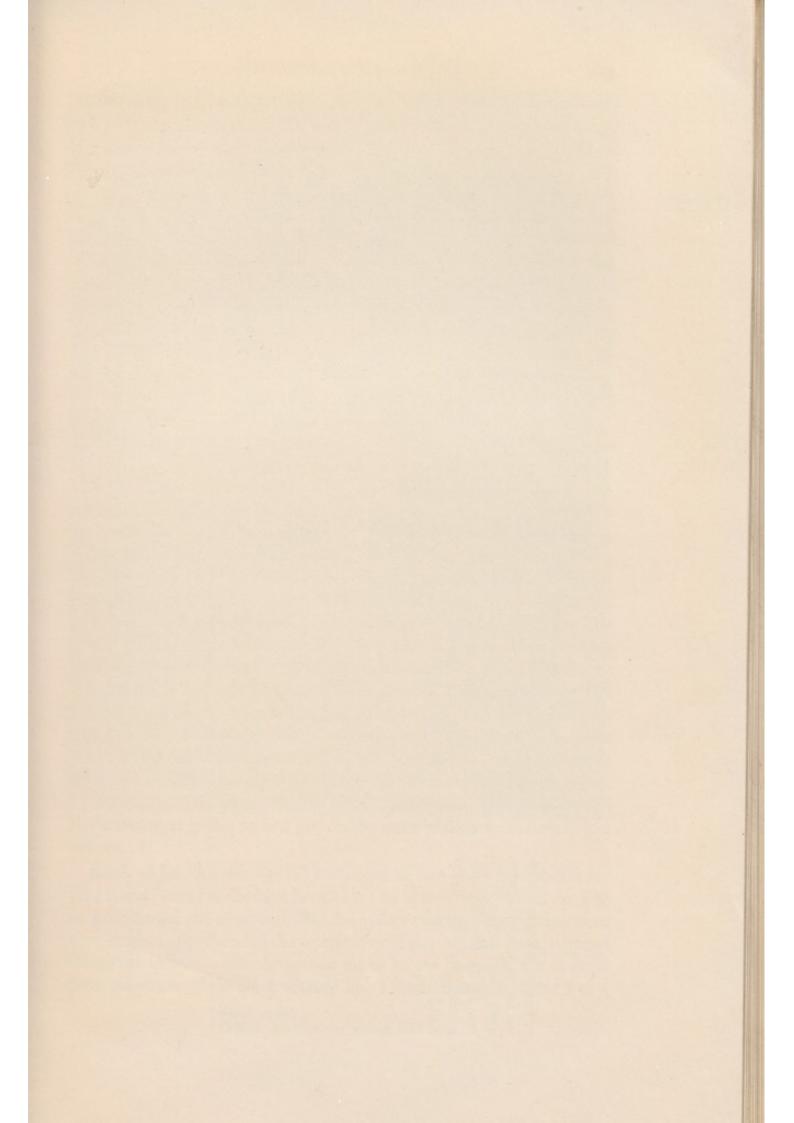
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Mercury p. 22 (Shorthand)

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pp. 22-4

C. Northumber-



29 3 Jews P whether it 00 e quid ちち 1x1 Tan Ter! ALC ten 3 3 Canada Questo 1 Diarties musily with will all of grown A and C quick great thrund the R.K Contral of hard ant in Kel al BB K. d Let RA sich E is 28

7. Entries in Locke's journal for 29 and 30 January, 1678 (MS. Locke, f. 3, pp. 28–9). (By kind permission of Bodley's Librarian.)

considering the time of the yeare towards spring when the bloud is apt to have ebullitions and grow warme of it self and that to perfect the cure she ought to take those drops for a good while, I thought that dose too great and therefor desird her to reduce it to 10 drops.

Sat. 29 Jan. Mr. Robinson haveing been soe well ever since $[\ldots^1]$ that he tooke noe medicine since, eat flesh twice a day, went abroad and had noe thing but ordinary stools once or twice a day. The ordinary constitution of his health only forbore drinking of wine (as being new and green apt to give fluxes and gripeings) but instead of it beare and ptisan, was on Thursday morning taken again with a great loosness which I think may be imputed to Marcasin² or a young wild roasting pig which he dined of the day before a meat in its self as they say apt to give a loosnesse. After 5 or 6 large stools which he had this morning his loosness stopd soe that he eat roast beef for dinner and remaind pretty well all the afternoon and the night following.

Friday morning his loosness returned again violently enough, and that which came from him very much undigested soe that about noon he sent for me. I found by his pulse, as formerly, very lowe and quick, his voice alterd but not soe much as in the former fit, and he had also a great deafness which he told me he had observed in him self still as these fits of loosness broak out. I contended my self to trie what a fleshless diet would doe to take of this without [bleeding] if it were possible, soe that all this day he cat noething but water gruell and drank ptisan and his former emulsion being very drie but making litle or noe water. This afternoon till morning the looseness well moderated. This Saturday morning his pulse much higher and better than the day before, but yet quicker than ordinary. To take away therefore this freting humor I gave him Extract rhubarb one drachm dissolvd in two ounces of plantaine water soe that after the takeing of it he had but 3 stools this day, but made more water than before. About an hower after he had takn it his pulse was lowe and quick as yesterday morning. Q. Whether it were not owing to the phisique? This night he had good rest haveing at going to bed put on the same plaister he formerly had worne.

Sund. 30 Jan. All this day till 8 at night he had but 2 litle stooles soe that when I came to see him he told me he was very well, and designd to goe abroad the next day. But his pulses continueing quicker than they ought I apprehended the matter would not end soe. As it happend for about an hower after he sent to me to let me know he was in great pain. About 10 of the clock visiting him I found that he had had 2 or 3

> ¹ Blank in MS. ² O.E.D., Marcassin: a young wild boar.

Diarrhaea pp. 27-30

stools with great gripeing, and examining them, I found them to be water and slime but he had noe more but rested very well all night.

Mund. 31 Jan. Mr. Robinson continued still pretty well. Had but 2 stools all day and those without gripping.

Tuesd. 1 Feb. This day Mr. Robinson eat the leg of a chick haveing kept a flesh lesse diet till now, on which I laid the great stresse of his cure.

Mond. 7 Feb. Mr. Robinson, who since the last fit took him had had but 2 stools a day the ordinary sort of the time of his health, had this morning nine with some litle bloud wherefor I ordered him [to be bled] eight ounces. The bloud did not stream out, but yet the palets being warmed the bloud in one of them appeard pleuritical and rough.

Tuesd. 8 Feb. The last night Mr. Robinson had noe stoole but in the day 7, his diet only watergruell. It is to be observed that 2 or 3 days before the breakeing out of this last loosness he complaind of sore pimples on one side of his tongue. They were not white like apthae¹ but his tongue on that side was very red.

Wed. 9 Feb. Mr. R. tooke extract rhubarb two scruples and had 7 or 8 stools this day. Chicken at dinner.

Thursd. 10 Feb. Mr. Robinson 7 stools, tooke at night Plantain water two ounces, Syrup of meconium two drachms, Laudanum opiate gr. i. He eat flesh at dinner and in the evening had a quick pulse.

Water sealed up in a glasse tube out of which the aire is drawn, being shaked, strikes against the end of the tube and gives a knock as if it were a solid body. But if it be let stand still a while, the first time you shake it, it makes noe more noise than that wherein the aire is included. This I tried at Mr. Hubin's in the Rue St. Martin over against the end of the Rue aux Ours, in glasses about 8 or 9 or so inches long and about an inch diameter. The cause he assigned was the parts of the liquor turnd into aire, and upon shakeing returnd into the liquor again. Q. Whether this will doe in all liquors, and in longer tubes (they were about half full) and in all weathers alike? This was a moderate day for this time of yeare.

Frid. 11 Feb. Mr. Robinson 2 stools. Narcotic drink repeated.

Sat. 12 Feb. Mr. Robinson 3 stools. Chicken at dinner.

Sund. 13 Feb. Mr. Robinson 3 stools. Flesh at dinner.

¹ Aphtha: Stomatitis, with small white vesicles in the mouth, commonly seen in children.

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Dysenteria p. 35

Dysentery p. 36

Dysentery pp. 36-7

Water in vacuo p. 37

Dysentery p. 38 p. 38

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Mond. 14 Feb. Mr. Rob. tooke extract of rhubarb 2½ scruples, from which he had 6 stools. At bed time he took lettuce water two ounces, syrup of meconium 2 drachms, Laudanum opiate one grain.

Tuesd. 15 Feb. Mr. Rob. 3 stools. Opiate draught at bed time.

Wed. 16 Feb. Mr. Rob. 3 stools figured and twisted.

Mond. 21 Feb. Take I drachm of [oil] of Saturn, shake it with oil and water of roses, pouring on a drop of the former and the latter alternately and shaking well, until it has absorbed a sufficient quantity of the liquid so that it fills a 3 or 4 ounce bottle. This is called Balsam of Saturn.¹

This balsam allays inflamations, hot humors and erysipelous conditions, and is an excellent cure for them.

Recipe for blind painful and swollen haemorrhoids: apply Balsam of Saturn for one or two days until the pain and inflammation subside, then Rx. 1 oz. of oyster shells calcinated and reduced to a powder, 1 lily bulb cooked on the cinders, 2 ozs. of old rancid pork fat, the yoke of one egg. Mix and make an ointment, which is to be applied to blind and swollen haemorrhoids after the Balsam of Saturn has been used; it will completely cure them.

Rx. one drachm of the aforementioned calcinate of oyster shells moistened in wine; this promotes sweating and cures the bite of a mad dog. Mr. Hubins.

For advanced gonorrhaea, if all the virulence has been purged out, it is useful to give decoctions and electuaries, either astringent, drying or strengthening, even adding purgatives in small quantity. The following is especially recommended: Rx. any quantity of china root, in sufficient ordinary water. Make a decoction of a third or a half. With this decoction and skimmed virgin honey make an electuary, to which can be added powder of sarsaparilla, red rose, even of rhubarb if need be.

Rx. two or three ounces of sarsaparilla, one ounce of crude antimony tied in a little bundle; a small amount of filings of ivory and [hartshorn]. Make a ptisan for ordinary drinking with the necessary amount of spring water. This is an effective remedy.

Rx. One ounce of fish glue; cut into slivers; steep overnight in warm water, or until it swells; cook in $\frac{1}{2}$ pint of milk; while hot strain and press out. This can be sweetened with 2 or 3 ounces of crystal sugar or flavoured to taste with a little cinnamon. Let him take a few spoonfuls each day night and morning; it is very useful for stopping the flux.

¹ This is probably another name for balsam of sulphur which was highly recommended by van Helmont, Boyle, and Willis. p. 38 (Latin)

p. 38 (Latin)

Imflammatio pp. 39-40 (Latin)

> Erysipelas p. 40 (Latin)

Haemorrhoids p. 40 (Latin)

Sudorific Hydrophobia p. 40 (Latin)

> Venerea pp. 40-2 (Latin)

When recovering from gonorrhoea nothing helps more to dry it up at once than an extract of sarsaparilla. Astringent or strengthening injections are also useful, such as White Trochiscs of Rhasis, with opium, the astringent stone of Crollius¹ ("the painter's stone"). But he found the following decoction the most effective: Rx. I drachm of Aloe [extract]; cook in $\frac{1}{2}$ pint of red wine; when the decoction is complete add a half pint each of Rose and Plantain water. For injection. Astringent and strengthening fomentations can also be used.

Mr. Hubins.

Sat. Mar. 5. Researches into the Origin and Movement of the Blood of the Heart and its vessels; of the milk of intermittent fevers; and of the humours. 8° Paris, '77, 407 pp. by Jacques Chaillou.

You have only to bind the blood vessel under the swelling to cure it more easily. Chaillou, 407 pp., p. 113.

Amatus Lusitanus writes that he saw two women whose courses were stopped, and who passed blood at intervals through their breasts. Brassavolus had seen another who passed it in the same manner. Chaillou, 407 pp., p. 145.

One sees women who spurt milk through their breach, either because it is made to flow by medicines or it may happen through other causes. *ib.* p. 147.

Milke a cow cleane 4 howers after she has eaten, and give her noe thing to eat before you milke her again, and you will finde noe milke. *ib.* p. 150.

Milk Fever never comes but in women whose lochia stop. *ib.* 163. Massarias knew a woman at Venise that had a quartane 22 years. Maecanas had an ague, every day all his life. V.Plin., 1.7, c. 51.

Antipater the poet, who lived to a good age, had a fit of ague every year on his birthday of which at last he died. And lately a lady consultd me for an ague which for 4 years last tooke her every day and held her 4 howers. *ib.* p. 244.

Actius, the learned Greek doctor, says that the quartan fever never takes the same person twice. *ib.* 246. See also Hippocrates: De Hebdomatibus [On Seven-Month Births].

The seed, flowers and rind of the root of the broom arouse vomiting. Mountain Spinach causes vomiting and purges through the anus with violence. One drachm or 2 scruples of Wild Spikenard root is a vomit or $\frac{1}{2}$ oz. of the root or leaves in Decoction. *ib.* p. 334 [the "4" is smudged].

¹ Oswald Crollius, who described himself as Medicus et Philosophus Hermeticus, was one of the leading advocates of the doctrine of signatures, in his *Tractatus de Signaturis*. (A. C. Wootton, op. cit., vol. 1, p. 185.)

Chaillou p. 44 (French)

Varice p. 44 (French)

Menstrua p. 45 (French)

Milk p. 45 (French)

Febris lactea p. 45 Intermittentes p. 46

Quartan p. 46 (French)

Vomitoria p. 46 (French)

I've often given with good success: I drachm Theriac with 2 scruples of powdered gentian in white wine at the cold phase of quartan fevers. *ib.* p. 339.

Mund. Mar. 7. Rx. [mercury] one ounce; dissolve in 1¹/₂ ounces [aqua fortis]. When dissolved work into 1 lb of pork fat. This ointment cures all shingles and similar skin diseases, which the French call "dartres".

Mr. Hubins.

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Mrs. Sandys was seized the Tuesday before with a violent loosnesse which held on till this morning, soe that she had at least 20 stools a day, and in the beginning much more. The matter that came from her was very thin and of a dirty colour which when I saw it this morning after the first or 2nd day of her loosness. She used to wake with convulsive pullings in her armes, and always sick in her stomach and an excessive drought all of her mouth, throat and stomach which noething could alay, she growing thirsty again as soon as ever she had drank. This symptom she complaind of more than all the rest upon eating any thing also she was apt to vomit. By the physitians orders, that had been all this time with her, she had a juleb, and to stop the vomiting a mixture of Mint Water, Laudanum, etc. But she found litle benefit by all this. She and her husband desireing to put her wholy into my hands this morning very early I gave her extract of rhubarb two scruples ordering her to drinke in the workeing of it a very large quantity of very thin broth to dilute the humor. About noone her loosenesse, drougth, and inclination to vomiting, stoped, soe that all symptoms ceaseing, she was perfectly well and her stomach better than it had been a good while before, and she eat with better apetite. However to secure all I gave her Plantain Water two drachms, Meadowsweet half an ounce, Laudanum opiate 11 grains, syrup of meconium two drachms at bedtime. She waked often in the night, but not sick nor dry.

Tuesd. Mar. 8. Mrs. Sandys free from all her symptoms and her tongue, which when I came to her was dry, foule, and ill colourd towards the root, was now foule still towards the root, but white and very moyst. She continued thus well all the morning, eat sauce of a pullet at dinner, and rose in the evening. She found a litle paine in her belly which about 9 grew to extremity, and, as she expressed it, girded her all round, and she complaind as much of her back as of any other part. This pain continueing very acute and without any intermission. Rx. of marshmallow and chamomill flowers¹ one handful each; take Quartan p. 47 (French)

> P. 47 (Latin)

Diarrhoea pp. 47-8

Diarrhoea pp. 60-1

¹ Camomile flowers are the dried and powdered flowerheads of Anthemis nobilis (family Compositae). These flowers are also called "apple on the ground" as the plant grows close to the earth and gives off an odour resembling that of apples. It has been used as a carminative since early times (T. E. Wallis, *Textbook of Pharmacognosy* (1955), 3rd edition, pp. 174-7.)

¹/₂ pint of this decoction, four ounces of red sugar, one ounce of mercurial honey, one ounce of soothing electuary. Mix and make a clyster. This was injected but not retained at all and brought nothing out with it. (Query: was the clyster too cold through the dispenser's carelessness? The patient complained about this.) As the unbearable pain continued the clyster was repeated, which brought away with it a very large stoole and gave her ease. This was the first stool she had after her being purged yesterday morning from this time which was betwixt 11 and 12. She slept till 3 in the morning and then took these following pills.

pp. 61-2

pp. 62-4

Wed. Mar. 9. Rx. Extract of rhubarb one drachm as soon as she had swallowed them she took one ounce of mint water to keepe them from comeing up again, she being the night before very inclined to vomit. This mint water she used again after wards when ever she found her stomach riseing; this I ordered both to assure the workeing of the pills and to prevent an Ileus to which this violent cholic seemd to tend. These pils purged her 4 times she drinkeing as before a large quantity of broth so as to dilute the humor. She was very drowsy in the working of her physique. In the afternoon she slept, and about 6 was waked with returne of the colic as tormenting as the night before. N.B. That both now and the night before at the time her pain endurd she complaind of exceeding cold in her legs and feet which addition of more cloths could not warm, but her pulses notwithstanding all a long from the time I first saw her were temperate and equall. There being now noe time to delay I gave her presently Mint Water 22 ounces Laudanum opiate, gr. 3, which gave her ease in lesse than half an hower, and soe she continued without pain all night but waked often.

Thursd. Mar. 10. At 7 in the morning she tooke pilulae cochiae majores¹ $2\frac{1}{2}$ scruples, which workd not with her till betwixt eleven and 12 and then she had 3 large stooles and 2 or 3 howers after three more. N.B. I did not finde that this Laudan. made her more sleepy than ordinary, but that by the workeing of these pills tis visible that the efficacy of it died not in 12 howers.

N.B. I observe both in this Lady and Mr. Robinson that those who have a diarrhaea make very litle or noe urin, but as soon as you give them purgeing medicins they begin to make urin freer though they ceese not at the same time to purge as much as they did before. Q. Whether it be not that the purgeing medecine destroying that ferment

¹ Pil. cochia contains aloes and colocynth. The early London Pharmacopoeias give formulae for pilulae cocciae majores (from Rhazes) and pilulae cocciae minores (from Galen). (A. C. Wootton, op. cit., vol. II, p. 152.)

which causes the diarrhaea gives nature an oportunity to digest and separate the humors into their ordinary chanells?

In the evening between 7 and 8 she took the same paregorecum that the night before, she had broken sleeps and about midnight 5 or 6 stools.

Frid. Mar. 11. In the morning free from paine but sickish in her stomach. Rx. Water of Borage and Bugloss¹ one ounce each; cinamon I scruple, Laudanum gr. i. Make a draught to prevent the returne of the colick.

About 2 or 3 in the afternoon she had a violent rigor and horror. Between 5 and 6 I saw her, and then her pulse was quicker than formerly and feverish, but her temper not very hot but she was disturbed with vapors that made her talk idly a litle by fits.

Sat. Mar. 12. Mrs. Sandys slept the night but unquietly, had a stoole or two, but in the morning was much better. Complaind still of drought, heavynesse of the head, and faintnesse, all which accidents were much abated and her pulse much better then the last night, and was in a sound sleepe when I came and was a litle disturbed when waked out of it by her husband, but after a litle while recovered it. At dinner she eat of a pullet with a good stomach. In the after noone the drougth and faintness were pretty well over, but she had a stool or two but slept soundly in the afternoon. Q. Whether all this disorder and bustle were not from the contest of the cochiae pills and the Laudanum² whereby one may see that the efficacy of the Laudanum lasts much about 12 howers, at least in that quantity which was necessary to be given in this case to prevent the return of the colic.

Her tongue that was dry last night was this morning moister and soe I suppose grew more and more as the effect of the Laudanum went off.

Sund. Mar. 13. Mrs. S. All the symptoms appeased and she got better. She only kept her bed 2 or 3 days longer.

Sat. Mar. 19. Mrs. Sandys free from all symptoms, and her tongue most clean, and well coloured which at the beginning of the week remaind for some time white furd.

Wed. Mar. 23. Mr. Rob: loosenesse returning again increaseing by

¹ Borage (Borago officinalis Linn.) and bugloss (Anchusa officinalis Linn.). (W. E. Greenhill, Anecdota Sydenhamiana (1845), p. 72.)

² Locke was always interested in the action of laudanum which Sydenham did so much to popularize. He almost certainly used Sydenham's formula, which the latter first exhibited during the dysentery epidemic of 1669–72. This liquid preparation replaced the solid pills, and became very popular in continental practice. Sydenham prescribed strained opium 2 oz., saffron 1 oz., cinnamon and cloves of each 1 drachm, in 1 pint of canary wine. p. 64

Diarrhaea pp. 65-6

Diarrhaea p. 67

p. 67

Dysenteria pp. 80-1

degrees since his last purgeing which was about 10 days since (for by gentle purgeing once a weeke and narcotiques after purgeing the same night and the night after I had from some time kept it down) he came yesterday to have at least a dozen stooles with slimy matter and gripeing it being come again almost to a perfect dysenterical lientery.¹ I bleeded him today 8 ozs.-his bloud is pleuriticall. His pulse was also for these 2 or 3 days last past very quick and he complaind yesterday of blisters which troubled him on the side of his tongue which was a symptom that he always complaind of when his loosenesse was grown very high though lookeing on his tongue there was noe thing there to be observed but that all the side of his tongue on both sides was reder then ordinary, but noe aphthae to be seen which usually accompany this disease. He felt the same pain also in the inside of his lower lip, where one might see some very litle pimples as this symptom always accompanied the flux when it was violent, soe a quick pulse also not only accompanied but fore run it whereby I thinke we may conclude that the cause of this loosenesse was in the bloud which from its very first beginning in August last continued there. He eat mutton broth for dinner.

Thursd. Mar. 24. Mr. R.'s loosenesse abated after bleeding soe that his stools were not soe many as the day before, but he was very dry. Rx. Water of purslane, lettuce and water lily, 4 ozs.; of Red poppy and red rose, 2 ozs. each; Syrup of red poppy and lemons 1 oz.

Make a julip for patient to drink when he fancies. Of this he dranke last night which alaid his thirst and he slept well. This morning he tooke extract rhubarb one drachm and had all this day 4 stools but in some litle slimy matter and litle streaks of blood, with gripeing as always happens with slimy matter. His meal only watergruell and drinke ptisan with a litle sorrell roots in it, and his former juleb. His pulses better then they were. Rx. Water of plantain, 2 ozs; Laudanum opiate, 2 gr; syrup of meconium, 2 drachms.

Make a draught to take at bed time.

Frid. Mar. 25. He rested pretty well but had 2 stools, was loose in the night. Next morning his pulse pretty good, but in the afternoon being downe upon his bed to sleepe, and not being sufficiently coverd up, he rose very cold and had a litle horror like the beginning of an ague, and complaind of cold all over. His pulse low and quick afterwards goeing to bed he grew hot and his pulse high soe that he had a perfect fever but with all this his tongue was moist and red. His loosnesse continued soe that he had 5 stools in the day and 2 in the night.

¹O.E.D., Lientery: a form of severe diarrhoea in which the food passes through the bowels partially or wholly undigested.

pp. 81-2

pp. 82-3

Sat. Mar. 26. Rx. Tamarind ½ oz; Rhubarb and Senna, 1½ drachms each; Red roses 1 handfull.

Cook in spring water and strain. In 3 ozs. of the liquor dissolve $\frac{1}{2}$ oz. each of Manna¹ and Rose Syrup solution. Make a potion. This he took this morning.

Mrs. Sandys haveing had after her being ill some litle swelling towards evening in her feet which although lessend of it self, and complaining also of a fulnesse at her stomach and sicknesse there, I gave her the common potion with only Manna and Rose Syrup solution, 6 drachms each, on Wednesday last. She was sick in her stomach when she tooke it but haveing swallowed it she found her self better and soe dureing the workeing which gave her 6 stools. After it had don workeing her head aked again as it did before she took it, so I gave her noe paregoric at night, it being apt to disturb hysterical persons after purgeing more then quiet. Next night which was Thursday I gave her:

Rx. Water of Wormwood, 2 ozs; of pennyroyal, 1 oz; Laudanum,

 $1\frac{1}{2}$ gr., Sublimated oil of vipers,² 3 gr.

She haveing complaind of fullnesse at her stomach more then the day before. This night after the takeing of this she slept unquietly and not much next morning when she went to rise had a swimming in her head and inclination to vomit. After she was up was sleepy, sick in her stomach, and after haveing dranke, vomited but not the bear she dranke but phlegm. (The same effect of Narcotick I found in my Lady Ambassadrice.) Q. Whether it be always the same in hystericks and whether given in a good dose of Theriac etc.³ would not hinder it, and whether volatil salts given with laudanum does not hinder its produceing of sleepe in the beginning by the agitation of the spirits. She sat down to dinner with noe appetite, but eat her self into one. After dinner found her self better and the next, i.e. this morning, quite well.

¹ Manna is the exudate from a shrub whose branches have been punctured by insects. Sicilian manna from the ash tree, *Fraxinus ornus*, was most commonly used in Europe. (A. C. Wootton, *op. cit.*, vol. I, p. 60.)

² The flesh of vipers, and broth made from them were popular remedies. M. Charas, Locke's friend, recommended the head of a viper hung around the neck as a cure for quinsy, and Madame de Sévigné mentioned their use in a letter to her daughter written in 1679: "Madame de Lafayette is taking viper broth, which much strengthens her eyesight." (A. C. Wootton, op. cit., vol. II, p. 21.) Locke also mentions viper salts, oil of vipers, and powdered vipers.

³ Venice treacle. The long formula is in R. G. Latham, op. cit., vol. 1, p. 105 and Pharmacopoea Londinensis (1682). There are sixty-five ingredients. It was used in the treatment of hysteria. Andromachus had improved on the old confection of Mithridates by adding vipers to it. pp. 83-5

With this purge Mr. Rn. had but 5 stools, 3 larger ones in the morning and 2 litle ones in the afternoon. His diet broth and watergruell. He made more water, and his pulses were better then the day before. His drink barly water, emulsion made of almonds and seeds of ripe melons and white poppies, $\frac{1}{2}$ oz. each, with Decoction of Barley, 12 ozs., and the juleb p. 81 only instead of Syrup of Lemons, Syrup of Dried Roses. At bedtime the paregoricum p. 82 and the emplastra¹ de caramna in the region of the stomach as formerly.

рр. 85-б

Sund. Mar. 27. This last 24 howers but 3 stools 2 early in the morning, and one very litle one at night. His drougth much abatd, urine plentifull appetite the same. More drousy in the day then in the foregoeing night and heavynesse in his head. His pulse still pretty high but his tongue very well.

N.B. Many upon takeing Laudanum sleep not well in the night, but have their heads heavy the next day whereby I guess Narcoticks extend their efficacy neare 24 howers, and I believe more or less according to the dose.

Mrs. Sandys haveing had this day a pain and fulnesse in her stomach tooke of her own head a clyster of milk and eggs. But at night her pain continueing I was sent to:

Rx. Theriakon of Andromachus, I drachm;

Rose Conserve, 2 scruples;

Syrup of cloves.

Mix and make a bolus.

Mond. Mar. 28. Mrs. Sandys upon takeing the bolus last night found ease in a litle time, slept very well all night, and about 6 or 7 in the morning, findeing her self a litle inclind to sweat, laid on, as I directed, more clothes and dranke hot sage posset to promote the sweat which with great ease and without any symptom she continued til $[\ldots^2]$.

N.B. That not withstanding the bolus gave her ease in the night, and disposed her to sweat in the morning, yet she found her self not at all hot with it.

Mr. Rn. had one stool in the night and some litle sweat. At 6 this morning he tooke the common potion with Manna and Rose Syrup solution, 6 drachms each. At 10 when I saw him he had had but one stoole his pulse much mended and come to be naturall and all signes of feaver off.

Q. Whether it were his litle breathing in the night or the purgeing that removed the feaver?

¹ Implastra were mentioned by Celsus. They were made with a lead and plaster base, usually litharge and olive oil boiled together. (A. C. Wootton, op. cit., vol. II, p. 289.)

² Blank in MS.

p. 86

p. 87

Rx. [mercury], [sulphur] and lead, one ounce of each. Make an amalgam of the [mercury] and lead, which is to be poured into the crucible, gradually pouring on the 1 oz. of [sulphur] which will boil up and there will remain a black powder. This is wonderfully effective in dissolving swellings and hard humours of that sort.

Rx. one ounce of ointment of Arcoeus¹ or of any other digestive, 10 grains of Corrosive [mercury sublimate]. Mix very well. Soak a linen thread in this ointment, then dry and keep for use. This thread cut in short peices and put 1, 2 or 3 into any wound where there is need of corrosion. Eats as one would have it, by putting in more or less sublimate. One makes it more or lesse corrosive. Mr. Hubins.

Mr. Rn. had but 4 stools all day but the last about 11 in the morning with gripes, slimy matter and litle bloud. At 7 at night a very litle stoole but without gripeing.

Mrs. Sandys sweat till almost noon, dranke after her sweating a glasse of warmed muscat, rose, dranke some caudle² of small beare, oatmeall and egs, a litle first, and slept after it. Presently after a 2nd larger draught of her caudle she felt her pains again, fulnesse in her stomach, pain about her heart, and left side—like a socald stich. Lying on the bed gave her ease but removd it not quite. In the evening comeing to see her I gave her an other draught of warme muscat with a tost and in a litle while after she found her pain removd.

She told of a Lady [...³] that used to have violent fits of the mother, and to sound away with them soe that burning of feathers and all that which they could doe used not easily nor quickly to bring her to her self. But one day by chance laying her in hast with her heels higher than her head she came to her self presently. And thus ever since by laying her in that posture when she falls into a fit she is recovered and well presently. Try in others.

Tuesd. Mar. 29. Mr. Rn. had last night a very large stool of very stinkeing corrupted matter of various colours about 8 at night. After this he took the paregoric p. 82, rested well all night, had a breathing sweat towards the morning and had never a stool all this day. At night he tooke again the paregoric p. 82.

Mrs. Sandys continued well all last night and all this day eat flesh and had a very good stomach.

¹ This ointment was introduced by Arcaeus of Amsterdam in 1574 for healing wounds. Arcaeus was a Spaniard by birth, and an authority on the treatment of wounds. The original formula was six parts of gum elemi and turpentine melted together with the addition of six parts of melted stag's suet, and two parts of oil of St. John's wort. This ointment remained in the British Pharmacopoeia until 1898. (A. C. Wootton, op. cit., vol. II, p. 133.)

² O.É.D., a warm drink; thin gruel mixed with wine or ale, sweetened and spiced, given to sick people. ³ Blank in MS.

Strumae pp. 87-8 (Latin)

Corrosion p. 88 (Latin) and English)

> Dysenteria p. 88

Diarrhaea pp. 88-9

Hysterica p. 89

Dysenteria p. 90

Diarrhaea p. 91 Wed. Mar. 30. Mr. Rn. slept ill but continued well and had never a stoole from his last purge till to day noon and that a very small one. Eat a litle flesh at dinner, but his usual food broth, and most drie bread, and his drinke barly water and sometimes small bear.

This day I saw the water drinker,¹ who drank at once as fast as he could pour them in 16 or 17 ordinary glasses of warme water and then spouted them up again, and this he did 5 or 6 times, whilst we were there, i.e. lesse than $\frac{1}{2}$ hour. The last time he dranke 25 and says he could 40 or 50. He shows this 2 or 3 times a day and oftener if one will. He has used this 40 years, and is as he says very healthy, has not been sick these 18 years, has a good stomach, but eats not but at nights when he has donne his drinkeing, and then eats what other people do. When any thing makes him sick in his stomach he voluntarily spews it up as he does the water, and then washes his stomach with warme water and is well.

Thurs. Mar. 31. Mr. Rn. tooke the common potion and had 4 stools, at night took the usual paregoric. His diet has been broth, watergruell and bread and a day or two agon he began to eat a litle flesh. His drink ptisan, emulsion and cooling juleb.

Thursd. Mar. 31. To die red haire brown: In a pound of ordinary powder a quarter of plumbago and an ounce of Briançon chalk. This gives a brown colour to the white powder. Mr. Lambert, Rue d'Arbre sec.

Tuesd. Apr. 5. Mr. Rn. tooke the common potion and had 10 or 12 stools all this time, between these purges he took the paregoric p. 82 every night except that before he purgd.

Among these Naires of Calicut there are some who have feet and legs as thick as the body of another man; they are as hard and harsh as a wart. There are some who have only one leg as thick as the two legs of another man. They feel no pain from them and continue to be agile. It is a racial trait. Pyrard,² p. 417, 486 pp.

Wed. 13 Apr. Mrs. Sandys, that three or 4 days successively the last week, had taken a clyster of (Rx. a handful of chamomile flowers: cook in sufficient whey; in $\frac{1}{2}$ pint of the strainings melt 5 ounces of red sugar) and kept a diet of watergruell haveing complaind of a fulnesse of her stomach, found good success in it and was 4 or 5 days very well after it. But today (riseing very well and having been exceeding well all day

¹ Could this man's extraordinary capacity for fluids be due to an oesophageal herniation or similar abnormality?

² François Pyrard de Laval wrote on his travels to the East Indies, Maldives, Malaccas, Brazil, etc. The third edition of his *Voyages* appeared in Paris in 1619. There was a new edition in 1679. The condition he describes is elephantiasis.

pp. 91-2

Dysenteria p. 92

Red Hair p. 93 (French)

Dysenteria p. 93

Tibiae p. 94 (French)

Diarrhaea p. 97 yesterday) was taken of a suddain with a violent loosenesse sicknesse and pain at the pit of her stomach and working all over. She had this day 20 stools. At night it stopd of it self. She slept well. Q. Whether all this hystericall?

Thursd. 14 Apr. I gave her the common potion of Manna and Syrup, each 6 drachms, which purged her about 5 times and she was much better.

Mr. Robinson purged with the common potion and paregoric at night.

Rx. a quantity of glass of Antimony¹ by itself; extract a tincture in distilled vinegar, evaporate the supernatant fluid; sweeten with spirits of wine; $\frac{1}{2}$ gr. of this powder cures quartans and all intermittents. Sometimes it purges, sometimes sweats, sometimes vomits, and sometimes has no sensible operation at all. Mr. Hubins [says] it is better if it be circulated a long time with [spirits of wine].

Mr. Robinson haveing had a dysentery at Venice in August last which seems not to have been very acute, gripeings and slimy matter not comeing on till towards the later end, was there by bleeding and purgeing redeemed from the acuteness of the disease but not soe but that he had frequent returns of his loosenesse which followed him till he came here to Paris only he found that he was freest from it between Turen² and Lyons which part of his journey he made on horseback. Being here at Paris his looseness still continued but he did noething to it.

Being taken with a nephritique fit 26 Nov. last he sent for me. I bleeded him and cured him of that fit according to [Thomas Sydenham's method]³ in 2 or 3 howers, of which he hath been free ever since, except only one litle touch. Upon this treatment too he was better of his loosness for a good while after, which I impute to [bleeding].

About the beginning of Dec. his loosnesse beginning to trouble him again and I thinking it might be from weakness in his bloud ordered: Rx. 12 gr. each of Amber and Frankincense; $\frac{1}{2}$ scruple of myrrh; 8 gr. of [sublimated oil] of viper; old Theriac of Andromachus equal in weight to all the other ingredients; mix and make 9 pills of which take 1 twice a day at the usual times for medicine. 1 Dec. Afterwards 6 Dec. I repeated these pills doubling the viper salts.

Rx. ½ drachm of Theriac of Andromachus; 2 scruples of Rose Conserve, I gr. of Laudanum; sufficient Syrup of Cloves; take at night before sleep. II Dec.

¹ When crude antimony was heated in a crucible some of the silica of the crucible combined with the antimony to form glass of antimony (generally an oxide combined with a sulphide).

² Turin.

³ Thomas Sydenham's method is indicated in the text by the following symbols: M.Æs. (methodus Æsculapius). Dysenteria p. 98

Nephritis pp. 98-9

pp. 100-1

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The same bolus was repeated 14 Dec. But by all these strengthening and bindeing things I found not that we advanced much towards the perfect cure of his loosnesse, though sometimes it made some litle stop.

After this for a weeke takeing noething, and, as I suppose committing errors in his diet in which he was very irregular, his looseness broke out again with violence, and he not sending for me but leting it run on 3 or 4 days without doeing any thing, it came to a perfect lienteria soe that every thing came from him in colour and smel as it went in, soe that when I came to him he could hardly stand and his tongue faulterd. I presently bled him. Rx. A handful each of Tips of absynth and Lesser Centaury; flowers of Red Rose half a handful; cook in sufficient spring water and Meadowsweet water equal quantities; adding finally $\frac{1}{2}$ pint of Astringent Red Wine. Apply a series of hot fomentations of this decoction to the region of the stomach; when the fomentations are finished apply this plaster:

Rx: 2 parts each of Gum tachamahac and Caranan [a hard resin]; 1 part of pressed Nutmeg oil;¹ mix and make a plaster; apply to stomach region.

Rx. 6 ozs. of Meadowsweet water; 2 ozs. of Plantain and Purslane water; $2\frac{1}{2}$ ozs. of dried Rose Syrup; sufficient spirits of vitriol to cause a pleasant acidity; mix, make a julep; from this and from the emulsion as it gets thicker he can drink alternatively.

20 Dec. The next day I purged him gently with the extract of rhubarb gr. xv and gave him a paregoric at night.

22 Dec. He had some nephritique pains. For it he dranke syrup of Althaea² in barly water and anointed the place.

Rx. Unguent of Althaea, $2\frac{1}{2}$ ozs.; oil of scorpions, $\frac{1}{2}$ oz.; Distilled oil of Aniseed, gr. vi.; Mix into an ointment; and soe the pain went away.

23 Dec. Extract of rhubarb, $\frac{1}{2}$ drachm. And thus he recovered and was well soe that he had figurd stools and outward symptoms of health, neither of which he had had since his first being ill till now.

29 Jan. Haveing transgressed in his diet and eat Marcasin which gives loosness even to healthy people sometimes he relapsed and was very ill again. But by bleeding purgeing paregoric plaister and his former diet he recoverd again. The diet I found always best was no flesh and no wine but he would not keep to it, noe, not to plain mutton and chicken.

² Syrup of marshmallow root.

p. 102

¹ Nux moschata (nutmeg) was used as a stimulant and carminative, and the volatile oils obtained from it were applied externally for the treatment of chronic rheumatism. (T. E. Wallis, op. cit., p. 226.)

Wine I found always hurt him. A quick pulse always preceded and accompanied his loosness, and bleeding always rather strengthend than weakend it. And thus by frequent purgeing and paregoricks he kept on pretty well till what you finde in the last month.

Tuesd. Apr. 19. Mr. Jerom. Collot cut a young German of about 19 years old of the stone who had been tormented with it all his life. He has cut children of 18 months and beleives that some children are borne with stones in the blader.

At his chamber¹ I saw by chance an experiment which confirmed me in an opinion I have had a long time, viz. that in fermentation new air is generated. He produced a large bottle of Muscat or Jenetine wine of Orleance, stopd with a glasse stopper. The wine was cleare when he set it on the table, but as soon as he had drawn out the stople,² there rose such a multitude of litle bubles that they swelld the wine above the mouth of the bottle and made it run over, and also raised the lee3 with them soe that the wine grew thick and troubled. When the violent ebullition was a litle abated, the wine sank again, but there still continued to rise a great number of those litle bubbles very fast. I then stopd the botle again and the bubbles continued still to rise as before, but lessend by degrees in number and quicknesse of motion. After the bottle4 had stood thus for some time well stopd, and the litle bubbles had very much ceased riseing, I opend it again and presently upon opening they rose thicke again, which comes from this that the aer which was included and disseminated in the liquor, had liberty to expand it self and soe to come visible and, being much lighter then the liquor, to mount with great quicknesse.

Q. Whether this be aer new generated or whether the springy particles of aer have, in the fruits out of which these fermenting liquors are drawn, by the artifice of nature been pressed close togeather and there by other particles fastend and held soe, and whether fermentation does not loose these bonds and give them liberty to expand themselves again? J.L.

Take a botle of beare as soon as it begins to worke in the kyve,⁵ or of mustum,⁶ tie a bladder on to the mouth. Q. How much new aer it will produce? Q. Also whether this has the qualitys of common aer?

Frid. Apr. 22. Dissertationes Physicae of François Bayle, 12°, Tolosae, 192 pp.

- ² O.E.D., Stopper. 4 MS. has "bottled".
- ³ O.E.D., sediment of wine. 5 O.E.D., Kive, arkeeve; vat, tun.

⁶ Latin for must; new or unfermented wine.

Calculi sectio p. 106

Fermentation pp. 110-11

> Acr p. III

¹ Locke saw this experiment at the house of Nicolas Thoynard (1629-1706), with whom he later kept up a long correspondence. His Evangeliorum harmonia graeco-latina appeared posthumously in 1707.

Venerea p. 116 (Latin)

Suppurative p. 116 (Latin)

Venerea salivatio p. 117

pp. 118-19

Sat. Apr. 30. Rx. Equal weights of [mercury] and pork fat; subdue the mercury with sufficient venetian turpentine by shaking, then mix in the fat.

Rx. 2 ounces each of white lily oil and Rosat. of sapin and elder flowers; $\frac{1}{2}$ pound each of sheep and calf fat; $1\frac{1}{2}$ ounces each of powdered myrrh and incense; melt the whole on a slow fire; then add 1 lb. of melted naval pitch; 6 ozs. of yellow wax; $\frac{1}{2}$ pound of clear turpentine; 2 ounces of Rosemary and Lavender oil; make into a suppurative and anodyne ointment; this is a good anodyne after the operation of Caustic medicines. Mr. Hubins.

A very effective local anodyne can be made with women's milk, oil of eggs, breadcrumbs, saffron, powdered linseed and a little camphor. Some mix a little opium in place of the camphor. *ib*.

Sund. May 1. N,¹ haveing been bathd 9 days foregoeing twice a day an hower or more at a time and purged in the beginning, midle and end of her batheing, takeing her purge just as she went into her bath, had this day the aforesaid oyntment applyd.

1°. Upon a linin cloth treble folded about 3 inches brode or more was spread some of the oyntment, pretty thick, and this coller warmed put about her neck.

2°. Some of the oyntment was rubd and chafd in about her ankle, and soe downewards to almost her toes, and one, being donne and wrapd up in linin 4 or 5 times double, the other was served soe too, and after that all a long the spina dorsi from one end to the other the breadth of a hand or more, and soe quite round the shoulder joynt and from the shoulder along the clavicla to the neck. The time taken up in all this chafeing etc. was as I guess, about $\frac{1}{4}$ an hower, and about $1\frac{1}{2}$ ozs. of the oyntment.

Mund. May 2. N. was anointed again after the same fashon only with this addition, that a litle of the ointment was rub on both her groins with the point of the forefinger but very litle chafed in. I guess that at this time about 1 oz. of the oyntment was imploid, i.e. $\frac{2}{3}$ or $\frac{3}{4}$ of a pot which held $[\ldots^2]$. Her diet from the first day of the anoynting, and sole to continue all along the salivation, was twice every 12 howers a draught of plain but good broth and without bread and reare new laid eg once to be taken every 4th hower, sole that she had in 24 hower 4 draughts of broth and 2 egs, and for drinke barly water with succory roots³ and a litle liquorish boiled in it, of which she might drinke as much as she pleased, the cold being taken off.

² Blank in MS.

¹ A female patient at the Charité Hospital.

³ Alteration of "chicory". The plant is *Cichorium intylus*, which grows wild in England and France. Its leaves and roots are used medically.

These anoyntings were in her bed out of which she was not suffered to rise and great caution used that she tooke not cold, there being a fire kept constantly in the chamber the weather being cold for this time of the year.

This day I saw 2 young pigeons kild with vipers.¹ They died very quickly after the biteing, vomiting up a good deale of liquor just before they died. There was also a young cock bit soe as to fetch bloud. I applyed my stone which stuck of it self and the cock lived above an hower after without any great signes of harme but the impatience of the people not suffering me to let it stay on as long as it would stick, I was fain to pull it off and let the young cock goe, who for a good while after (all the time I was there) run up and downe the haye without any signe of sicknesse.

I must investigate further the working of this stone.

Tuesd. May 3. N. Anoynted just as yesterday about $\frac{1}{2}$ oz. of oyntment imployd. Her pulse quicker than ordinary and her face began to swell a litle and look red and hot. In the after noon she had some gripeings in the belly but a draught of milk and sugar with the yoalke of an egge in it and a clyster of the same alaid them.

Wed. May 4. The ptyalisme began and she spit pretty much, and complaind of her mouth being sore, and her teeth loose. She had to day about 10 stools but without gripeing, but they stopd of them selves. She spit pretty much.

Thursd. May 5. She spit this past 24 howers as they said about 1 pint and had at 2 in the afternoon another noynting just as May 2; but not soe much of the oyntment imploid, not above $\frac{1}{4}$ or $\frac{1}{3}$ of a pot full. Her pulse pretty quick, her tongue and nose sore, and being able to swallow at once not above half a potanger of potage she tooke it every 3 howers, and 2 egs in 24 howers as before.

Frid. May 6. Q. Whether plants that have an yellow juice have any property with the eyes, as Salandine. v. Pyrard, 434 pp., p. 384.

N. spit not much more than yesterday and though pulse quick, stomach gon, face red and swollen.

Tuesd. May 10. N's spiting increasd Saturday and Sunday, soe as Sunday between 6 in the morning and 6 at night she spit about 1 pint. But Monday her courses came on which slackend her flux, and therefor at night she was anoynted again feet and back and claviculae as at first. She pissed much and very fetid, and high colourd. Monday had 2 or 3 loose stooles, her stomach not craveing egs, she contented her selfe with a draught of broth every 3 howers. She had sometimes sicknesses in

¹ Locke was probably witnessing the experiments of Moïse Charas.

Salivatio p. 120

p. 121

Oculi p. 121

Salivatio p. 121

Salivatio p. 125

her stomach and then she spit lesse, but they goeing over she spit more again. She had sometimes convulsions in her fingers, they sufferd her to sleep but litle for feare of swallowing her spitle. Her broth was soe good that being cold it gelleyd.

Wed. May 11. N. spit in 24 howers about 2 pints, had two stools without gripping but pretty loose. Complaind of pains all over, and sometimes numbresse in her limbs and sometimes convulsions.

Thursd. May 12. N. spit the last 24 howers about 2 pints, yesterday her courses stopd, otherwise she was the same.

Frid. May 13. N. continued to spit as yesterday 2 pints in 24 howers. Some part of it was bloudy but whether from her gums which about one of her teeth was sweld mightily and bloudy or from any other part? She made more urin than before, but not soe often nor soe stinkeing, and it was still high colourd. Her look was lively or, and her stomach better then it had been ever since she began to flux. Her diet the same, i.e. something more than $\frac{1}{4}$ pint of broth every 3 howers, but her pulse still quick.

People of good condition serveing the sick in the Hostel de Dieu.

Sat. May 14. Take the powder that comes from the horse which is incurable $[\ldots^1]$ I drachm in a convenient liquor 3 days togeather; this certainly stops the running of a gonorrhoea venerea. Mr. Toynard.

Rx. Take the skins of the inside of the gizards of hens, dry them, and of the powder take I drachm at a time night and morning in the intervalls of a quartan and it will cure it. *ib*.

L'Abbé Gendron of Orleans that has donne many admirable cures espetially in chirurgie has observed that in purgeing bodys, wounded, ulcerous, or otherwise, to evacuate the humors and prepare the bodys for the effect of outward applications, that these medecins that doe very well one yeare doe noe good at all another, and that 3 or 4 years after (as it happens) it comes to be good and effectuall again. He hath observed also that when any medicin hath proved good to one body at any time it is soe to all, and purges all, with euphoria and alleviation, though perhaps their cases be different. M. Toynard.

This perhaps may not ill agree with Dr. Sydenham's doctrine of diseases.²

Salivatio p. 126

p. 126

Salivatio pp. 126-7

Gonorrhoea (Shorthand)

Venerea Quartan

p. 127

Purgatio pp. 127-8

¹ Indecipherable.

² The essence of Sydenham's teaching was that diseases change their characters according to the constitution of the year and the nature of the prevailing epidemic. This concept of a definite epidemic constitution in a particular year echoes Hippocratic teaching. Hence, from this supposition, Sydenham argues that certain medicines which were effective for one epidemic constitution may be ineffective when a different epidemic constitution prevails.

Wild succory is good in Salades, but to take away the bitterness of it, it must be soaked 3 or 4 howers before in faire water. The buds of Tragopogon¹ or asparagi are also very good in Salads, wholesome and diuretick. Mr. Frelin.

It often happens to them [i.e. in the Maldives] that, having been long in the sun at the height of the day, after sunset they cannot see a speck, whatsoever fire or light is brought near them (be it even a hundred torches); they feel no other ill effect. This is called the Rosnans Disease. To cure it they cook the liver of a cock, write on it words and charms, and swallow it at the moment of sunset. My companion and I suffered greatly from this for some time, but having learned the above prescription we took the cock's liver and omitted the charms, to see if that would suffice, and found that we were cured just the same.

Pyrard, 486 pp., p. 201.

This has often succeeded with Limmesin Masons working in the heat of the day, who becoming thus blind have been curd by this remedy. Mr. Toynard.

N. spit as formerly about 2 pints in 24 howers.

Sund. May 15. N's spiting abated very much wherefor there was imploid about half a pot of oyntment again upon her feet, back, groine and claviculae but very lightly rubd in. Though she spit less she was sicker then when she spit more, her pulse still quick.

Mund. May 16. In a maid that died of hysterical fits was found one of her stones quite corrupted and in the other an egg about $\frac{1}{2}$ inch long.

I saw today at Mr. Fobert's Academy² a beast got between a bull and mair. About the head, espetially the mouth, it has something of mixture in the make between horse and bull, and just at the foretop it had two litle hornes which one might easily feele with one's finger. The taile also had a mixture of both species, and the teeth in the lower jaw over reachd those of the upper. It was but litle, but very hardy and laborious. They are never big. In Languedoc they are often to be found and they call them Gimar.³

N. spit last 24 howers $1\frac{1}{2}$ pints and urined not for some days past soe much nor soe stinking as formerly, nor her pulses soe quick as they had been.

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Caecitas p. 126 (French)

Salivatio p. 130

p. 130

Hysteria p. 130

Jimar pp. 130–1

Salivatio p. 131

¹ Tragopogon or goat's beard. The flowerheads of the British species close at midday and hence the popular name "John-go-to-bed-at-noon". (J. C. Willis, *Flowering Plants* and Herbs (1925), 5th edition, p. 656.)

² Salomon de Foubert, who ran a riding academy in the Faubourg St. Germain.
³ Jumart.

Bayle p. 131 (Latin) 122

Anatomy of the brain p. 133 (Latin)

Wepferus p. 133 (Latin)

Salivatio pp. 133-4

Salivatio p. 135

Salivatio p. 136

Cornua digitorum pp. 137-40 *Tuesd. May 17.* Bayle de Apoplexia, 12°, Toulouse, '77, 125 pp. Massaria¹ says he prefers to make mistakes with Galen, than to adopt the fashion of more recent writers, however correct they be. *ib.* p. 15.

Wed. May 18. On the anatomy of the brain the following are outstanding: Willisius, Malpigius,² Stenon,³ Graaf.⁴ Bayle, 125 pp., p.3. Malpigius is most skilful. *ib.* p. 18.

Thursd. May 19. The eminent doctor Wepferus⁵ made most careful observations of the symptoms of apoplexy and investigated its causes with his usual skill by post mortem dissections of the brain.

Bayle, 125 pp., p. 31.

Frid. May 20. N. spit yesterday about 1 pint and as much to day. Was very weake, her tongue very white and full of blisters soe that she could hardly speake. She had today a stoole, but never an one before since Sunday last.

Sund. May 22. N. spit yesterday about 1 pint in 12 howers, but it was very cleare like water, and not stinkeing as the rest, and at night she tooke a clyster. This morning she tooke a purge and sarsaparilla was put in her ptisan. Her purge wrought 6 times.

Mund. May 23. N. had her sheets and all her linnin changed. Used a gargarisme⁶ before eating. Rx. Leaves of agrimony and periwinkle; cook in sufficient barley water, add a little rose honey; make a gargle. But she continued still to spit though with some abatement.

Tuesd. May 24. I saw at the Charity a young lad⁷ of between 19 or 20 years old who had upon the ends of all his fingers as it were horns grew out one whereof upon the midle finger of his right hand was 310 grys long and 170 gr: circumference, of which a good peice was broke off in my presence of above 150 gr: long; as also a shorter peice off the fore finger of the same hand, and an other lesse peice off the annularis of the

¹ Alessandro Massaria (1510–98) succeeded Mercurialis as Professor of Medicine at Padua in 1587, and was regarded as one of the most authoritative writers on the Plague. In his *De Abusu Medicamentorum*, etc., Massaria shows himself to be a strong adherent to the views of the classical physicians.

² Marcello Malpighi (1628-94). This note probably refers to his De Viscerum Structura Exercitatio Anatomica, which appeared in 1666 with a classical description of the kidneys (Garrison-Morton, op. cit., p. 48).

(Garrison-Morton, op. cit., p. 48). ³ Niels Stensen (1638-80) was a Dutch anatomist who published his Observationes Anatomicae (1662), wherein he gave the first account of the excretory duct of the parotid gland (Stensen's duct), and first mentioned the ceruminous glands.

⁴ Regnier de Graaf (1641-73) was a Dutch anatomist who discovered the graafian follicles of the ovary and made observations on the salivary and biliary secretions.

⁵ Johann Jacob Wepfer (1620-95) published his Observationes Anatomicae in 1658, wherein he showed that apoplexy was the result of haemorrhage into the brain. He described four such cases, with clinical and post-mortem findings (Garrison-Morton, op. cit., p. 233). His talent for experiment is shown in his treatise on Cicuta Aquatica (1679), Basle. His son-in-law was Brunerus. ⁶ A gargle.

⁷ Locke gave Boyle an account of this boy's condition, which is the earliest description of onychogryphosis. (Boyle, *Works* (1744), vol. v, p. 569.)

left hand. He told me [he] had one formerly on his thumb much biger and longer then this on the midle finger before mentioned, but it was now very short, haveing been either takn off or dropd of, I knew not whether; for on all the rest of his fingers on both his hands were the like, only on some of them, they had been taken off by the chirurgons since he came into the Hospital, but in those that had not been touchd there was a great inequality in their length, some of them beginning to sprout much since the other. The same also was upon the toes of his feet, only excepting the two least toes of each foot where there were now none, and upon 3 of them there never had been; upon the 4, i.e. the litle toe of the right foot, as I remember, there had been one but it haveing fallen off about 6 months since it came noe more but left the naile very little different from naturall. This horny substance grew not out of the end of the fingers but was as it were a thickening of the naile, which instead of growing out in length increasd in thicknesse, but rose not up straight in a perpendicular line to the finger but as it augmentd bended forwards and soe grew some what into the shape of a birds claw but that it was not taper and sharp like that, but blunt at the end and almost of the same bigness all along, and full of pretty deep chaps1 in the convex part but the concave without any. He had noe sense in the horny part it self, for I saw the peices before mention'd brok'n of by wresting several ways, but he complaind of paine when bending the upper part. The part that joyned on to his finger was not held very firme and steady, and those of his feet were soe tender that he complaind upon very gently touching of them, but the sensibility is not in the horny excrescence but in the part where it joyns on to the flesh i.e. where the naile formerly did grow.

There is also in severall parts of the back of his hands horny excresences, some pretty broade, and others lesse, but none riseing much above the skin, but they looke there those that are broad like flat but very broad warts, but to the touch they feele much harder.

This disease began upon this lad about 3 years since after haveing had the small pox which is the only thing to which he imputes it. v. p. 146.

I saw at the same time in the same hospital a stone that was yesterday cut out of a lad of eleven years old. It was of an irregular figure nearest an ovall, whose circumference the long way was 450 gr: and girt crosse above 360 gr:

The matter of the stone was very fryable and consistd of severall cotes one over another like an onyen as most of the stones generatd in the bodys of animals are. I thought it not strange to finde soe large a

¹ O.E.D., Cracks or fissures.

Calculus pp. 140-1

stone in the body of a lad of that age, but that which made me take notice of it was that the same lad had been cut for the stone in the same place but this time twelve month, soe that this stone was but of a years growth. His usuall drink he told me was water.

N.B. That 310 gr: etc. markd above stand for 3 inches, 1 line, 0 grys, of that which may be cald the philosophical or Universall foot which being $\frac{1}{3}$ of a pendulum of 2^{ds} : I devide into 10 parts which I call inches, each inch into 10 which I call lines, and each line into 10, which I call grys soe that a gry is 1/1000 of such a foot.

N. spit the last 24 howers neare 1 pint.

Thursd. May 26. N's spiting abatd very litle but she sick often in her stomach and very weake, and the ulcers of her mouth and sides of her tongue caused of the fluxing continued stil.

Frid. May 27. N. spit this last 24 h. above 1 pint and last night tooke an emollient clyster. This morning tooke a purge, had 6 stools, and eat bread with her broth now the first time.

Sat. May 28. N. since her purge yesterday her spiting abated very much.

Sund. 29 May. N. spit the last 24 howers about 1 pint but her great flux was now in the day time. In the night she slept well and spit but litle. She eat yesterday at diner.

Mund. May 30. N. spit about $\frac{1}{2}$ pint and got up, and eat a litle flesh, but her stomach was willinger than her mouth, which was soe sore that she could not chew it. There was now put into her gargle a litle spt. of [vitriolum]. She tooke a clyster last night and had one stoole and 2 this morning. She rose to day and lay down on a couch, and had a litle aire let into the room.

Rx. equal quantities of scammony, gummi gutti, kernels of American ricini nuts with sufficient Theriac of Andromachus; make a mass; I or $1\frac{1}{2}$ gr. of this mass purges adequately; given 3 or 4 hours before the onset it cures quartans, as Mr. Hubins claims he has often found.

I saw again at the Charité the boy with (v.p. 137) hornes on his fingers. He is of Brie and between 19 and 20 years old. His food was the usuall food of the country, he has been purged twice since he came into the Charité and some of the hornes of his fingers begin to loosen at the root.

I saw several young lads from 5 or 6 years old and upwards dressd, that were cut of the stone. Some had hardnesse in the virge¹ under the scrotum and neare it towards the root, and they were in danger to have a fistula.

¹ O.E.D., a rod or wand; a rod of office.

Pes philosophicus pp. p. 141

Salivatio p. 141 Salivatio p. 142

Salivatio p. 143

Salivatio p. 144

Salivatio p. 144

Salivatio p. 146

Quartan p. 146 (Latin)

Cornua digitorum pp. 146-7

Calculus sectio p. 147

At. Mr. Collet's I saw the kernell of a stone that he had severall years since cut out of a lad. The stone he said was as big as his thumb and oblong but it breaking this was found in the midle of it: viz. the stalk of a cherry 38 gr: long and at the end of it a litle rough stone just of the bignesse of a litle cherry stone. It seemed friable and as if it were of white morter, but the stalke was a perfect cherry stalke. Q. How it came into the bladder? He told me that 50 men have the stone for one woman, and that where there are more stones than one in the bladder they are usually smooth and pollishd. That he once tooke out of the bladder of a man 103 stones which were there all togeather.

I saw again the boy at the charity of 11 years old who was cut the last yeare and now this again. After his cuting the last yeare he complaind again in about 2 months and this last stone was much biger then the first. I saw there both his father and mother, who had neither of them ever had the stone, nor any of their progenitors that they had heard, and they had also other children that had noe thing of it. His diet was as the rest of their children, and being poore people hard by Paris, they drank not much wine. (Note how the individual's diathesis is usually the predominant factor.)

Tuesd. May 31. Severall experiments of the turning white of both spring and destild waters upon the mixture of water distild in a lead still.

N. spit the last 24 howers $1\frac{1}{2}$ pints and soe also the day before. The flux augmenting again since her last purge. She has had noe stool since Monday morning, eats a litle flesh, but has noe great stomach to it, and today begins to drinke a decoction of China, sarsparilla and sassafras instead of her ordinary ptisan.

Thursd. Jun. 2. Mr. Auzot had 10 years since a quartan ague for five years, but with some intervals. Since that when ever he comes neare one that has a feaver he findes him self presently ill. His pulse changes, and he has a kinde of feaver upon him, soe that he going lately to visit a friend of his that was sicke of a feaver he found himself soe indisposed by it that he was fain to keep his chamber 10 days after, and this he told me him self. (He is well-educated and trustworthy.)

Rx. Spt. [vitriolum] 2 ozs., [spirits of wine] 1 oz. Put them togeather in a dish of forged iron. Take the solution and keep it for use. This is Sr. T. Maherens¹ anima hepatis, good for obstructions of the liver, fumeing to the head, etc. This put into a glasse and sealed hermetically and put in the sun, will be calcined white. On a reverboratory fire it becomes red and is astringent. Used by Maherne in Dysenterys. Mr. Briot.

¹ Sir Theodore de Mayerne (1573-1654/5).

Calculus pp. 147-8

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Calculus p. 148

> Water p. 149

Salivatio p. 152

Quartana pp. 152-3

Dysenteria p. 153

Hepaticum p. 153

Quartan pp. 154-5 126

Salivatio pp. 155-6

Invalids pp. 156-7

Salivatio pp. 157-8

Frid. Jun. 3. Mr. Auzot (see p. 152) told me again today that he had once a quartan which he could not get rid of in 5 years, though he had some intervalls in that time free, and that it was more severe to him in the summer then the winter, and that he was not purged after its goeing away as he ought. Since this ague has left him, which is now ten years, he has ever had this indisposition, that when he is surprised or vexed with any thing, or comes into the room where any one is sick of a feaver he feels as it were some thing shoot into his left side about the short ribs, which is as if there were a flash of some troublesome humor that way, and the night following he has as it were a fit of an ague but without horror, or rigor, or cold, but has a feverish pulse, sleeps not, is hot, and commonly sweats at the end of it. And this continues sometimes one, sometimes 3, sometimes ten nights togeather, he being in the meane time well a days but that the other is enough to change his looks. And that the impression he receives from those that are sick of a feaver is not from conceit, is evident from hence, that sometimes wakeing in the night and findeing himself out of order, he has examind himself what he has donne in the day to cause it, and has sometimes found that it has been only a visit to a freind sick of a feaver on which he had made no reflection till he found him self ill.

N. tooke a clyster Wednesday night. Yesterday she spit about 1 pint and today $\frac{1}{2}$ pint. Eat a litle flesh once a day, and could have eat more had it been permitted. Rose and could walke a litle. In other things kept her former diet and dranke a decoction of China, sarsa and saxafras. The ulcers of her tongue and mouth almost well.

Sund. Jun. 5. One double p. lib.¹ amounts to \pounds 1,700 per diem for the building the Invalids. Abbays and priorys and monastarys were formerly obleiged to entertaine, some one, some 2, some 5 lay brothers which were mayind soldiers. This maintenance in kinde came to be changed into a pension of 100 \pounds , per annum for each person. This, some few years since, was augmented to 150 \pounds , per annum and presently after taken from the present possessors and applied to the Invalids, besides which all maladries² or lands and revenues belonging to the hospitals for leapers are appropriated to the said Invalids, and whatsoever accrues from the Knights of St. Lazar, an order newly revivd.

Mund. Jun. 6. N. was purged on Saturday had 9 stools. Since that her spiting is much abated but not quite gon. Yesterday she had a sharpnesse of urin which today is pretty well abatd, and she complains still of some flyeing pains espetially in the small of her back. She eats now

¹ i.e., one double pair livre.

² Originally maladeries; the more modern form is maladreries.

flesh twice a day, but moderately, and is very thirsty, and continues her broths mornings and nights.

Thursd. Jun 9. This day N. went first abroad her spiting continueing still a litle.

Mond. Jun. 13. I saw Mr. Hubin cut the tendon of a dog's leg. His way of reuniteing him was this. 1° to run a needle of raw silk waxed (about an inch or 2 from the end whereof was a litle role of parchment staid by knot) through one end of the cut tendon and then through the other, and then through another like peice of roled parchment which was about the bignesse of a barley corne, and soe drawing these 2 litle bolsters of parchment togeather with a knot draw togeather the two cut ends of the tendon, and then layd on them a plaget coverd with a balme made of the oyle of yolkes of egges and turpentine and another plaget a little larger with the same balme over the first and over all 2 defensitives one upon an other made of bolus armen. and the white of an egge, and this to remaine soe 3 days without opening.

He said that oyle of Hypericon¹ many times infused with turpentine would make as good or better balme or Unguent of Arcoeus with turpentine.

Wed. Jun. 15. N. had Friday last her courses till to day and that in great abondance. She used, in the time of her health, to have them every 3 weekes but this last time she stayd a month dureing her disease, also she had them a great quantity. She complains still of wandering pains of head and limbs, spits yet a litle a mornings, and is not quite rid of her sharpnesse of urin. The tumor² she complaind of in her matrice³ since her salivation is quiet wasted away. But she told me the winter following the tumour troubled her there stil.

Mund. Jun. 20. Mr. Bernier told me that in the East Indies the gout and stone are diseases scarce knowne and a quartan very rarely. The endemial diseases of the country are burning feavers and dysenterys.

Wed. Jun. 22. Mr. Duclos⁴ at the King's Library. Rx: 2 parts of [antimony] butter prepared in the ordinary way, or better still prepared

¹ This was probably another name for oil of bricks. It was made by quenching red hot bricks in olive oil, and then breaking them up and extracting a distillate from them. Other names for this empyreumatic olive oil were oleum philosophorum, oleum sanatum, and oleum benedictum. (A. C. Wootton, *op. cit.*, vol. II, p. 55.) Hypericon is not to be confused with hypericum=St. John's wort.

² Probably a gumma.

³ O.E.D., Uterus, occasionally used for ovary.

⁴ Samuel Cottereau Duclos (d. 1715) was a foundation-member of the Académie des Sciences and Physician to Louis XIV. His principal writings were Observations sur les Eaux Minérales (1675), Paris, and Dissertation sur les Principes des Mixtes Naturels (1680), Amsterdam. Locke probably attended a meeting of the Académie des Sciences as they met at this period in the King's Library. p. 158

Tendo sectus pp. 159-60

> Salivatio p. 160

Podagra Calculus Quartan Febris Dysentery pp. 161-2

Arthritis pp. 162-3 (Latin)

with [corrosive sublimate], one part of regulus of [antimony]; let it simmer on a slow and even flame for 30 or 40 days in a well stoppered flask; the process is complete when little drops of quicksilver rise and stick to the upper part of the glass. Care must be taken that too fierce a flame does not break the flask. When it has sufficiently cooked pour off into pure spring [water] and a white powder will be precipitated which must be mollified by washing. This is a very benign vomit; dose 8 gr. This emetic taken every month at the waning of the moon cures gout.

Mr. $[\ldots^1]$ who is now alive and in Paris, being crippled by gout, was cured by taking this vomit every old moone for three or four years together, and after that twice a yeare so that he is able to walk and dance etc. as a healthy man, but after this he has had a stone for which he was cut and so cured. This also cures falling sickness, when it is from the stomach, as it is often, but when it is from the head you must trepan.

Calcine [gold] in sea salt in which way it will swell and be spungy. Rx: Take spirit of vinegar and dissolve in it Calx. of [antimony] calcined with niter, and it will be sweet. This will dissolv the [gold]. Evaporate this solution and draw a tincture from it with [spirits of wine]. This is Antonius' Gold Drink,² where with he did soe many cures as is to be seen in his *Apologia pro auro potabili*³ and his treatise *De Auro potabili*. And with this Mr. Duclos hath cured quartans and dropsy. Mr. Briot told me Duclos was a great liar.⁴

Q. of Sr T. Williams concerning the processe of this aurum potabile of Dr. F. Anthony found amongst the papers of the Bishop of Winchester. In his treatise the Spirit of vinegar is cald spirit of wine, and the Calx of [antimony] cald Calx jovis.⁵

Dropsies that come from the corruption of the liver or spleen are not to be curd, but those from stopage in the kidneys where in litle water is made and thick and red, they are to be curd with decopulative and diuretical things togeather with those that loose the kidneys. He has cured dropsies with Powdered Crabs Eyes only which are diuretical.

He giveing to an Epileptic the bloud of a mole in a fit vehicle by the persuasion of Sr. K. Digby as a specific for that disease, instead of cureing it, much increased the fits, soe that those which before were

^a Salmon's New London Dispensatory (1678) gives the recipes for aurum potabile of Drs. Anthony, Clossaeus, Quercitanus, Billichius—it was a universal remedy.

⁴ This is an example of Locke's use of shorthand in order to conceal a sharp critical opinion.

⁵ Calx jovis is the binoxide of tin. (A. C. Wootton, op. cit., vol. I, p. 425.)

Arthritis p. 163 (Shorthand)

Epilepsy p. 163

Aurum potabile pp. 163-4

Quartan Hydrops p. 164 (Shorthand)

Williams p. 164

Hydrops pp. 164-5

Epilepsia p. 165 128

¹ Blank in MS.

² Dr. Francis Anthony was a noted empirick who invented and sold his so-called "aurum potabile" which led to long judicial proceedings against him by the College of Physicians. (Sydenham had a good word for the "aurum potabile" of the quacks, v. J. F. Payne, op. cit., p. 160.)

but in severall days returnd 6 or 7 times every day, with this odde circumstance, that when he was in a fit he would run his nose against the ground like a mole to get into it which he did not before that specific. This man was cured by trepanning.

Tuesd. Jun. 28. Mr. Duclos tels me that the best water about Paris is at Auteuil, a litle towne upon the Sein below Paris neare the Bois de Bologne, and next to that is Luxembourg water. With that of Auteuil he hath cured diseases even virulent gonorrhaeas as with medicinale waters giveing 2 pints in a morning. But the best way of takeing them is to steepe senae I drachm in 4 or 5 ounces of the same water all night and give that first in the morning and then take the remainder of your 2 pints, which is good for fluor albus. The sena carys off the water. In weake and decaid bodys where the stomach is infirme to give a large quantity of mineral waters which it cannot master often increases the weakeness instead of cureing the disease. Instead of mineral waters I have often with great successe used this secret: Take half the lungs of a calf boile them in up to 3 pints of spring water eight or twelve times. Let the patient drinke 1 of this warm in bed and it will ease sweat; 1 whilst a dressing, and it will passe by urin, and 1 some time after, and it will give a stoole or two, and this being a liquor agreeable to the stomach may without injury be taken without any harme to it, and soe cure many diseases where cure lyes in diluteing whereof there are many.

That the soule quits not the body presently upon the disorder of the organs necessary to the motion of the machin is his opinion, and upon this occasion he tells this story whereof he himself was an eye-witnesse. There was a young fellow hanged himself who loved and was exceedingly beloved by his father. The father came into the place where the body lay a good while after he was dead, upon which the bloud came fresh out of his nose. After he had left the body, there was an occasion that made him returne again, and upon his approaching again the dead body, fresh bloud boubled a fresh out of his nose, which being taken notice of, the experiment was tried over severall times by makeing the father goe and returne, and always succeeded. What love did in this, other passions will doe in the like occasions. So far Mr. Duclos: see his booke of Salts¹ which is now going to be printed.

Mr. Duclos [great liar.²]

Br.3

Water p. 169

Aquae minerales

Gonorrhea venerea

Fluor albus pp. 169-70

Diluteing p. 170 Soule pp. 170-2

¹ This would seem to be his Observations sur les Eaux Minérales, which appeared in 1675. His Dissertation sur les Principes des Mixtes Naturels did not come out until 1680. ² Shorthand.

³ There is no doubt that this stands for Briot, whose name is given in full in an entry for 22 June when he is reported to have made the same remark about Duclos's claim to have effected various cures.

Rabets p. 185

130

Lame and crooked p. 192

Arthritis pp. 192-3

Bruta sentiunt p. 193

Trochisques pp. 194-5

Mund. 4 Jul. The way to have fat rabets is to gueld them young and let them run and this will make them excellent. Mr. Toynard. [Locke left Paris on 9 July, 1678, for his tour with Caleb Banks.]

Tuesd. July 12. [Orleans]. The town abounds in lame and crooke backed people.1 Dr. Godfrey,2 a physitian of the town, imputed the crooked backs to the coughs the children are apt to have here when they are young, and the coughs to the subtilty³ of the aire and strength of the wine which, making the young children cough, puts out their backbones when they are yet tender. Their lameness he imputes more to the negligence of nurses then any thing else, carrying them always wraped up and on one side, and he thinks this to be the cause, because this lameness lights more on girles that are tenderer, then boys who are stronger and sooner out of their swadleing clouts.

They are also much troubled with the gout here which he imputes also to their wine which is very strong, and abstinence from wine cures it, of which he gave this example, that a friend of his designeing to make himself a frier because his gout made him unfit for any thing gave of [sic] wine by litle and litle, the better to prepare himself for those austeritys. But haveing left of wine a litle he found himself cured of the gout and soe remains ever since.

How birds can imitate sounds if they doe not heare and retaine the idea of those sounds in their memorys, and consequently have sence, is hard for me to conceiv.

Wed. Jul. 13. Trochisques.⁴ Mr. le Professeur en Medicine. Rx: 1 oz. of Arsenic, 11 ozs. of yeast moistened with saliva, 1 oz. each of white lead and red lead (one may take all red lead instead of white lead): mix all together and make trochisques of any size you wish.

The usage of this vid. page 21. When the scar is taken out put a large plagot of lint upon it that may be broader than the lips of the sore, and upon that on the outside of the lint an ovall roule of lint to lye on the midle of the opening which may make the sore by degrees grow longish and take off its roundnesse which hinders its healeing. It is the best way to cover the whole sore, even beyond the lips of it with a plagot of lint, than to doe as ordinarily the Chirurgens doe to stuff it with lint, which widens the lips; hinders its healeing, and makes the scar very great, whereas this draws the lips togeather and leaves but a little scar. In this way of cureing strumas, etc. you must use noe plaster nor oyntment.

¹ La Fontaine makes a similar note in his "Relation d'un voyage de Paris à Limousin" (Œuvres, G.E.F. ed., vol. 1x, pp. 241-3). ² Dr. Godefroy furnished a large number of medical notes during Locke's stay in Orleans.

⁸ Subtilty: thinness, fineness, a rarefied form.

⁴ Troches, from the Greek, trochiscos, a cure. They were subsequently called pastilli in Latin, and in English lozenges. (A. C. Wootton, op. cit., vol. II, p. 299.)

Instead of Eau Celeste,¹ one may use Aqua phagaedenica² made of Lime Water and sublimate.

He also told me that he had found by experience that the same purges and playsters that did extremely well in some years and were very effectuall did noe good but rather harme in the same diseases and cases an other yeare.³

Frid. Jul. 15. Dr. Godefroy imputes hysterical fits to the disorder of the spirituous aire in the hollow of the cranium above the nose when vapours rise from the particular fermint of the wombe. He knew a preist extremly continent who was troubled with these fits, giveing him at night a pill of tachamahaca. It gave him in the night a nocturnal pollution, which he used not to have, but took away the other hysterical symptoms. 3 or 4 grs. of Galbanum⁴ or assa foetida⁵ taken allays hysterical fits in women.

Take some of the drie congealed bloud of the wild goats that are in the Alpes of Savoy, (they call them Boukin and Shamoys, there are two sorts of them) and mix it with the coagulated bloud of a man in the dish. It will dissolve it. This Dr. Godfrey hath seen, and also that I drachm of it given to one that hath a pleurisy from coagulation as in those that get pleuritys by drinkeing cold liquor when they are hot, it cures it certainly by dissolving the coagulation, and produceing [a] large sweat. But if the pleurisy be from inflammation, and the Erysipelas of the pleura, it cures the pain by dissolving the coagulation, if there be any there, but increases the feaver and inflammation. Soe that in that case it does noe good. In pleurisies that are from inflammation, the feaver precedes the pain. For want of this bloud of goats one may use the quantity of a nutmeg of Frankincense in a roast aple to the same purpose. Vid. Helmont of which Dr. Godfroy vouches the experience.

In colic bitterness is useful, acids and alkalis harmful.

Sat. Jul. 16. Dr. Godfroy told me that in Epilepsies, convulsions and vertigos, he has found the cause often to be in the stomach, and that in

¹ Aqua caelestis has thirty-one ingredients. The formula is given in R. G. Latham, op. cit., vol. 1, p. xci.

² Aqua phagadaenica was a popular lotion for venereal ulcers which was first used by Jean Fernel (1497-1558) as eau divine de Fernel. It was originally made by dissolving 6 grs. of corrosive sublimate in 3 ozs. of plantain water. Charas changed the name to aqua phagadaenica in his *Pharmacopoeia*, and recommended the following recipe: $\frac{1}{2}$ oz. of corrosive sublimate in 3 lb. of lime water, and $\frac{1}{2}$ lb. of spirit of wine. (A. C. Wootton, *op. cit.*, vol. I, p. 414.)

^a This is in keeping with Sydenham's observation which he explained on the basis of a change in the epidemic constitution of the year.

⁴ A gum resin obtained from *Ferula galbaniflua*, one of the umbelliferous plants indigenous to, and widely distributed over, Persia. (T. E. Wallis, op. cit., p. 488.) ⁵ Asafoetida is an oleo-gum resin obtained from the root of *Ferula foetida*, an umbelli-

^o Asafoetida is an oleo-gum resin obtained from the root of *Ferula foetida*, an umbelliferous plant. It is used for treating hysteria, to expel flatulence, and to relieve constipation. (Ibid., p. 489.) Celeste phagaedenica p. 195 MM p. 195

> Hysterica p. 197

Pleuritis pp. 197-8

Colica pp. 198–9 (Latin) Epilepsia Convulsio Vertigo p. 203

such cases convulsions of the hands, espetially the right hand, with pain in the fingers commonly accompanys. This, he says, happend to him self who with a vertigo that lasted him 6 months, when he looked up or downe or lay downe in his bed, which he cured at last with a vomit of gummi gotti.¹ He had accompanying it a flatulent tumor of his right hand, and great pain in his fingers, and after that numbnesse in his fingers. The like happend to a woman who haveing convulsiv fits but without seiseing on her senses, soe that she knew all was donne to her in her fits, but had violent convulsions in her hands was curd at last by vomiting up an impostume which broke in her stomach. For he says he has often observed great sympathy betwixt the stomach and the hands, espetially the right hand, which he imagins to communicate by the great musculus adducans which draws in the arme and extends it self over the breast quite downe to the region of the stomach.

Rx. 20 or 30 seeds of Lathyris longa [pea] and 10 or 20 shelled sweet almonds; pound together in a marble mortar; and with sufficient spring water make an emulsion, which promotes gentle vomiting and can be given even to small children. *ib*.

Take the leaves of kidney beans [phaseolus] and put them under your pillow or some convenient place about your bed. They will draw all the puneses² to them and keepe you from being bit.

Mr. Labdonier desired me to see his wife who has had for these 4 or 5 or 6 years, but more of late, a heat about her reignes,³ which one may cover with a half crown, which give now and then flushes all over her body. It troubles her more in summer then winter, and she cannot endure the least heat of fire or sun on that part without sensible torment. She miscaried some time before of a dead, putrified child, and when this came first had a great flux of bloud and water. She has her stomach good, has had children since, but it hinders her stiring much for exercise. Wine, spice, salt meat, and every thing that heats increases it and makes her worse. She is commonly bound.

Sund. Jul. 17. In Poictou where there grows a great deale of Safron those that gather it, if they doe not take care, finde the narcoticall effects of it, and also have tumors on their head. The antidote against these evils is to take about I scruple of dried safron in a convenient vehicule before they goe to gather the safron, and that preserves them, attracting to it self those steames which otherwise would hurt them.

Dr. Godfrey.

² Fr. Punaise=bug.

³ Kidneys.

Stomachus pp. 203-4

Vomit p. 204 (Latin

Puneses p. 204

Renum calor pp. 204-5

Crocus p. 206

¹ Ghatti gum (gummi indicum) is obtained from Anogeissus latifolia of the family Combretaceae, a large tree indigenous to India and Ceylon. It has excellent emulsifying properties. (T. E. Wallis, op. cit., p. 462.)

Reduce [nitre] by simmering to a fixed salt, and by melting dissolve into a yellowish liquor. This is the Alkahest of Glauber;¹ for it dissolves zinc and stannum also into a white fluid, and calcinated [silver] into a blue fluid, all without fire. But it does not dissolve amber. *ib*.

Mund. Jul. 18. He observes in fevers that the motion of the humors follows the motion of the moone, but because the moone moves sometimes faster and sometimes slower in the Zodiac hence it is that sometimes those criticall motions are sometimes 7th and sometimes the eight day according as the moon comes sooner or later to the quadratures² and other aspects.

He observed that in the plague that was in 1666 at Orleans most people were taken sick, either in the conjunction,³ opposition, quadrature etc. of the moon with Jupiter. *ib*.

[Bleed] first if need be, then purge and cool the patient, then give filings of stannum [alloy of silver and lead] as much as an ordinary pill; repeat if necessary, for the crude stannum halts the fluor albus, the excessive menstruation and all the haemorrhage by concentrating the spirits; as Dr. Godfroy reports from experience.

The thickened juice of the oak makes the best Scammony.⁴ The rind of the root of the same tree, in doses of up to 15 gr. cures even intermittent fevers, by purging either upwards or downwards according to the motion of the humours. To check its bitterness it can be diluted with a great quantity of watery fluid. But this bitterness is better avoided by drying the root in the sun or by a fire; which causes the bitter and fiery parts to evaporate.

Heads of the white poppies which grow in these districts if cut in the evening, yield the next morning a transparent gummy juice far superior to the opium imported from the East. The most improved kind of opium, according to Dr. Godfroy, seems to be produced by simple drying; he thinks the narcotic elements are thus evaporated and the anodyne elements retained: but it must not be scorched to dryness, but moderately heated to a point when it still keeps a certain flexibility.

¹ John Rudolph Glauber was a German alchemist born at Carlstadt in 1603. His most important discovery was glauber salts. The alkahest was supposed to be a universal solvent, which he kept secret as he feared that a knowledge of it might "encourage the luxury, pride, and godlessness of poor humanity". (A. C. Wootton, op. cit., vol. I, pp. 260-4.)

² An astronomical term which in this case refers to the position of the moon relative to other heavenly bodies. The moon is in the quadrature when the difference of longitude (between the moon and the other planets) is 90°.

³ The moon is in conjunction with Jupiter when they come in the same longitude. ⁴ A purgative. The Earl of Warwick's powder (in the *Pharmacopoeia* of 1721) is composed of "Scammony, prepared with the fumes of sulphur, diaphoretic antimony and Cream of Tartar." Diagrydium was composed of scammony prepared with quince seeds. Alkahest pp. 206-7 (Latin)

Pestis pp. 207-8

Fluor albus p. 208 (Latin)

Intermittentes (Latin)

> Opium p. 208 (Latin)

Deauratio p. 209 (Latin) 134

Magnetisme (Latin)

Vertigo p. 210

Haemorrhoids p. 210

Hysterica p. 211 (Latin)

Septalius p. 211 (Latin)

Pestis pp. 211–13 (Latin) Tuesd. Jul. 19. Dissolve [gold] in [aqua regis], evaporate it, mix the remaining powder with an equal quantity of [nitre] and evaporate; you will have a red powder, which moistened with saliva will gild silver simply by rubbing. This powder is dissolved into a red liquor by the aforementioned Alkahest of Glauber. *ib*.

Certain bodies by long habit seem to acquire a kind of magnetism; not only iron objects kept for long in a certain position, but even wooden ones, so that pieces of wood which have had the same relative positions (e.g., beds or chairs) if they are pulled apart and thrown into still water, they return in the water to the same relative positions which they had previously out of the water, e.g., parallels will be parallel, transverse will be transverse.

Dr. Godfroy tells me that haveing hung a bag of litle peices of elder, growing upon sallow, upon the pit of the stomach of one who was troubld with a vertigo, he has been well of it ever since. But whether it be to be imputed to the elder or the vomit he gave him he determins not. This he tried upon the Credit of Hartman,¹ though he minded not his criticall gathering of it. He gatherd his about September. He vouches also Hartman's Linament for painful haemorrhoids.

Wed. Jul. 20. In hysterical attacks Dr. Godfroy found great value in up to 5 gr. of camphor mixed in clysters.

L. Septalii² animadversionum et cautionum medicarum libri 9, 8° Patavii 1652, 608 pp.

The use of vesicatories [blistering plasters] is treated in my book on The Plague, written in my youth during my country's calamity when I was immersed in treating that disease. *ib.* Bk 5, para 45.

I can assert from experience that in cases of plague the body should be purged from the start, for I and my colleagues had enormous success during the great pestilence in this great city, since we used purging medicines almost from the beginning of the treatment. Gentilis Fulginas also declares that experimentally he hit on the same method in Bk. 4, where he says: "I saw our colleagues, men of experience,

¹ Probably George Hartmann who was Sir Kenelm Digby's laboratory assistant. After Digby's death Hartmann published a *Book of Chymicall Secrets* (1682). (Wootton, op. cit., vol. I, p. 196.) His "aqua viridis" is mentioned in 6/2/80 and his "arcanum vitrioli" (perhaps sulphate of iron) in 17/6/80 and 17/6/82.

² Ludovico Settala (Septalius) (1552–1633) studied medicine at Pavia and became a professor at the age of twenty-three. Practised most of his life at Milan where he was appointed Chief Medical Officer to the State in 1627. He studied the Plague during the big epidemic of 1628. His books on the Plague are De Peste et Pestiferis Adfectibus (1622) and Della Preservazione della Peste (1630). His Animadversionum, et Cautionum Medicorum libri vii, published in 1614, was based on his experiences during forty years of medical practice. Septalius also wrote In Librum Hippocrates Coi de Aeribus, etc. (1590) and De Naevis Liber (1606). (Biographie Médicale (1855), Paris, vol. 1, p. 316.)

who in that bad outbreak of plague, as soon as possible on the first or second or at the latest on the fourth day, gave purging medicines, dissolving materials like rhubarb or agaric,¹ and sometimes gave medicines strengthened with a little scammony. And we saw more had recovered under their treatment than at the hands of those who did not purge except with light clysters and sometimes only with Cassia." The same opinion is held by Avicenna,² Bk 4, F.I, T.4, C.4; Avenz,³ 3 Theisir T.3, C.I; Rhasis,⁴ 3 Continentis and Lib. de Peste; Averroes,⁵ collect 36; Manardus,⁶ 5. Epist. 3, and 13. Epist. 1; Trincavellius,⁷ Lib. de Febre Pestilentiali; Septalius, 608 pp., Bk 5, para 47.

Long experience in this plague of ours has taught me that cakes of arsenic put in the region of the heart are not only useless to ward off the plague but even induce in some the most serious symptoms: I advise against their use. Septalius, 608 pp., Bk 5, para 58.

We have seen the violence of this remedy cause many to fall into swoonings, fainting fevers, and heart quakings. *ib*.

In stubborn and continuous headaches which fail to yield to other really powerful remedies I have often found it of value to cut off the hair and apply blistering medicines either to the aching area or the whole head. Septalius, 608 pp., Bk 6, para 18.

In an epileptic fit be careful not to provoke vomiting; for I have seen this attempted during an attack, bring the patient to a sudden end. *ib.* para 48.

From long experience I declare I have never seen a case where an

¹ Agaric is derived from a species of fungus (*Boletus pini laricis* Linn.). It was a constituent of Minderer's famous pill, which was mildly purgative and generally tonic. It was also, along with rhubarb, one of the ingredients of the first mercurial pills.

² Avicenna (980-1037) was the greatest Arab physician. His Canon, which dominated the medical schools of Europe and Asia for five centuries, is a complete exposition of Galenist doctrines. (Garrison-Morton, op. cit., p. 5.)

³ Avenzoar (?1092-1162) was the greatest Moslem physician of the Western Caliphate. He was the first to attempt total extirpation of the uterus, and he described pericarditis, mediastinal abscess, and otitis media in his *Liber Teisir*. (Garrison-Morton, *op. cit.*, p. 6.)

⁴ Rhazes (? 850-923) ranks with Hippocrates and Galen as one of the founders of clinical medicine. His *Almansor* was one of the first textbooks to be printed. (Garrison-Morton, *op. cit.*, p. 5.) He was particularly careful in the use of purgatives. White trochiscs of Rhasis are referred to here.

⁵ Averroes (1126–98) was the last of the great Arab physicians. His *Colliget* (Book of Universals) was an attempt to found a system of medicine upon the Neoplatonic modification of Aristotle's philosophy. (Garrison-Morton, *op. cit.*, p. 6.)

⁶ Giovanni Manardi (Manardus) (1461–1519) practised at Ferrara until 1513 when he became Physician to King Ladislas VI of Hungary. His Epistolarum Medicinalium libri XX appeared in 1521. (Biograph. Med., vol. 1, p. 148.)

⁷ V. Trincavelli (Trincavellius) (1496-1568) was born at Venice, and studied medicine at the Universities of Padua and Bologne. He was appointed Professor of Medicine at Padua in 1551, where he was the first to lecture on Hippocrates from the original text. His book on the Plague (*Tractatus de Febre Pestilenti*) appeared at Venice in 1575, and his Opera Omnia in 1586. (Biograph. Méd., vol. 1, p. 177.) Epilepsy p. 213 (Latin)

Apoplexy pp. 213–14 (Latin)

epilepsy due to the actual condition of the brain was cured by the stronger emetics: they all caused a deterioration in the patient. But I have observed occasional advantage from strong doses of medicines which purge through the stools, only they were not so often employed. For the animal spirits are exhausted by the frequent fits.

Septalius, 608 pp., Bk 6, para 54. Chronic epilepsy due to the actual condition of the brain, the best method of curing is to shave off the hair, and use blistering ointments over all the head, so drawing the virulent humours to the surface; leave the little ulcers longer to infect the skin of the head, so that over a period of time those serous humours may seep out through the ulcers. I have even seen the most stubborn head diseases cured in this fashion. *ib.* para 55.

Fri. 22 July. The eminent scholars Joubert¹ (writing in French) and Scipio Mercurius² in his book on Obstetrics and on Popular Errors have included almost all the points about childbirth in which mistakes are usually made both by women and by ordinary doctors.

Septalius, 608 pp., Bk 7, para 170.

All doctors up to the present century seem to me to have failed, because in the cure of diseases they have given little thought, or none at all, to the specific nature or peculiar ferment or fault (whatever in fact that is) of each disease, and considered solely the bile or phlegm or serum which are only the external symptoms of the diseases, and no more concerned with their specific natures than the type and richness of the soil is to the species of plants which may grow in it. For, although the nature of a soil seems more liable to produce one plant rather than another (just as certain types of bodily diathesis seem to contain in themselves the seeds of certain diseases, or be more fitted to produce them) and to cultivate better plants, the earth in which they grow has to be improved; yet I have no doubt that to cure each type of disease either a fixed method or fixed remedies are needed. When these are known for certain, then the Rules, which the philosophers have built up from their hypotheses of humours, plethora etc., can be exceedingly useful in applying the method or remedies and modifying them according to the particular diathesis of the patient. For these Rules and medical Axioms, divorced from this knowledge about rooting out the minerals of a disease, and destroying or eliminating the ferment, seem to serve

¹ Laurent Joubert (1529-83) was Professor of Medicine at Montpellier and Physician in Ordinary to Henri III, whose wife he treated (unsuccessfully) for sterility. He published the following works in French: *Traité du ris, son Essences, ses Causes, et Effects* (1574), Paris, *Traité des Arcbusades* (1581), Lyons, and *Traité des Eaux* (1603), Paris. (*Biograph. Méd.*, vol. 1, p. 276.)

² Scipione Mercurio, La Commare & Riccoglitrice, printed in 1621, with a German translation in 1652; De Gli Errori Popolari d'Italia (1603), Venice.

Epilepsy p. 214 (Latin)

Joubertus Mercurius p. 217 (Latin)

MM p. 217 (Latin) 136

rather to avoid wrong treatments and the new illnesses which they might lead to, than to actually cure diseases.¹ J.L.

Swimming in the head and sicknesse in the stomach when they sit up commonly accompanys those who by any acute disease have been brought low, as long as they keepe a very spare diet though the disease be quit gon. But as soon as by eating flesh they recover strength those symptoms vanish which seems to depend on noe thing but want of spirits. But how the siting up gives occasion to it? And whether the disorder be original in the stomach and communicated to the head, or rather (which I imagin) originally in the head and communicated to the stomach. Q. This was Mr. Banks² his case in the loosenesse with the fever he had here where in I found it necessary to keep him to a diet of watergruell some days after his disease was quite cured, but as soon as he began to eat flesh it put an end to those remaining marks of weaknesse. J.L.

Mon. July 25. Take strong vinegar 10 pints, good [spirits of wine] 4 pints. Slake in it lime $2\frac{1}{2}$ pints with arsenic 2 ozs. in powder. Stomach also in powder 3 drachms. Stirr all together for the space of three hours and then let it settle for four or five hours and then pour off the clear supernatant fluid into a bottle and add to it [corrosive sublimate] $1\frac{1}{2}$ ozs., [spirits of vitriolum] $\frac{1}{2}$ oz., and good [spirits of wine] 1 pint, which being done, store well and then bottle and shake it often during three or four years. It becomes of a deep amber colour, and the older the better, for gangrene.

Thurs. Jul. 28. Take $\frac{1}{2}$ or 1 drachm powdered leaves of sunflower for 10 or 20 consecutive days; this cures advanced virulent gonorrhoea, as Dr. Godfrey has experienced.

Take 1 or $1\frac{1}{2}$ ozs. of powdered violet seeds and infuse overnight in 4 or 5 ozs. of wine. An excellent purgative in chest and kidney diseases and the colic; for it purges gently and without any griping.

Take a quantity of a green root (Hound's Tongue as I remember), cut into slivers, thread on a cord and hang around the neck like a necklace; in 24 hours cures ulcers of the mouth (in English cankers),

² Locke's departure from Orleans was delayed for sixteen days on account of Caleb Banks's illness, which was probably dysentery. Vertigo p. 219

Gangrene pp. 222-3 (Shorthand)

> Venerea p. 223 (Latin)

Catharticum pp. 223-4 (Latin)

> Oris ulcera p. 224 (Latin)

¹ This initialled note gives the essence of Locke's views on medicine; and it also shows the extent of Sydenham's influence. He was now turning away from humoral pathology (which was to dominate medical thought until Virchow's time), and in suggesting the use of specific remedies for each disease, Locke predicted the modern approach: specific organisms eliminated by appropriate chemotherapy or antibiotics. Humoral pathology still lingers on under the modern classification of body types, and as Locke suggests, there is some evidence to show that a certain body build has a greater propensity to one type of mental illness than another. But an awareness of a certain diathesis does not, in the least, help a physician to cure diseases, although it may, on occasion, help him to prevent them.

especially in children: it is the common cure for thrush: he has often tried it.

Put a peice of Iron amongst burning charcoales and it hinders the malignity of the smoke and fumes. This is constantly practised in France by those that make use of such fire. Dr. Godfroy.

The leaves of Solanum¹ beat to a pultis cures almost any paine even that like the sciatik. *ib.*

Take a quantity of myrtle berries or leaves, pulverise and mix with water or oil: excellent cure for bruises: dissolves clotted blood: well tried remedy of Dr. Godfroy.

Highly recommended as a cardiac: conserve of Fumitory or Caryophyll.² ib.

Take some rich unwashed wool, or wool growing on the belly near the anus; apply to the toe nails: you will see them presently eaten away; he had this recipe from his friends; has not tried it himself.

A dose of up to 15 grains of the rind of the root of aesculus minor, dried and powdered: it purges and cures intermittent fevers. *ib*.

Father Ange, the Capuchin, with a pill of 3 or 4 grains weight cures intermittent and even quartan fevers, and purges satisfactorily without violence. Dr. Godfroy's sister took two of these pills and was cured of an intermittent fever. Dr. Godfroy supposed that this pill is the sap of cyclamen,³ which Father Ange says purges and never deteriorates.

For consumptive chests, i.e. dry and hot, he says the continual use of [oil] of [sulphur] is a certain and infallible remedy.

There was also [in the Capuchin's Garden] the Mervaile of Peru which Dr. Godfroy says is the true Jalap.⁴

Dr. Godfroy cured quite long established scabies by doses of powdered Vipers, and asthma (without an impure mixture of humours) with laudanum opiate.

[Locke left Orleans to explore the Loire Valley on 30 July, 1678.]

Sat. Aug. 6. [Blois.] I saw a litle girle of 3 years old, who had the right hand very extraordinary. The palme of the hand was instead of concave, convex and protuberant. The thumb, litle and ring fingers of the natural size, the fore finger twice as big as ordinary, but the strangest, and most irregular of all was the midle finger which was biger than

⁴ The purgative root jalap came originally from Mexico. In 7/6/82 its use is suggested as a purge for a child suffering from worms.

Charcoals p. 224

Dolores p. 224

Contusio p. 225 (Latin)

Cardiacum (Latin) p. 225

Clavus pedis p. 225 (Latin)

Intermittentes p. 225 (Latin)

Phthisis p. 225 (Latin)

Jalap p. 226

Scabies p. 226 (Latin)

p. 240

¹ Probably the leaves of Solanum nigrum (black nightshade), of the family Solanaceae, of which the other common species are Datura stramonium (thornapple), Solanum dulcamara (bittersweet), Atropa belladonna (deadly nightshade), and Hyoscyamus niger (henbane). (G. E. Trease, A Textbook of Pharmacognoscy (1957), 6th edition, p. 493.)

² This probably refers to avens or geum urbanum.

³ Cyclamen europaeum Linn. or saw-bread (J. C. Willis, op. cit., p. 138).

any man's ordinary thumb, and much longer than any man's finger. It had also a great naile proportionable upon it bent something bacwards and towards the litle finger, very white, but had noe motion. It was the most like in shape and bignesse and length to a great beane cod of any thing I know. The child was borne thus. Only since its birth this finger is grown in proportion as the rest of the body hath donne. [From Blois they travelled via Tours, Véretz, Saumur to Angers, where they arrived on 19 August.]

Tuesd. Aug. 23. But the things of most veneration [in St. Maurice, the Cathedral of Angers] were a thorn of the crown of our Saviour, some wood of his crosse which I beleive was there though I saw noe thing but the gold and silver that coverd it. There was also some of the haire, a peice of the petticoat and some of the milke of the virgin, but the milke was out of sight. And one of the waterpots wherein our Saviour turnd water into wine. That which made this marvell pretty hard of digestion was that it was porphyre, a sort of furniture a litle to costly in all appearance for the good man of the house where that weding was kept, and which made it worse was a face in demy releive on that side that stood outwards, a way of ornament not much in use amongst the Jews. However I could not but wish for the pot because of its admirable effects to cure diseases, for once a yeare they put wine into it consecrate it and distribute it to beleivers who there with cure feavers and other diseases.

Fri. Aug. 26. For old lacrymations noe thing soe good as chewing tobaco. Mr. Beaulot by chewing tobaco was cured of a long and very acute head ache. It preserves also from the tooth ache.

[After travelling from Angers back to Saumur and thence through Chinon, La Meilleraye and Niort, they reached La Rochelle on 2 September, 1678.]

Tues. Sept. 6. Sal prunellae and peper are a certaine cure for that which we call the pallate downe. Mr. Richard¹ and Dr. Bouchereau² of Rochelle. This Dr. Richard is the author of the treatise at the end of Lortie in Answer to Rohault.³

Wed. Sept. 7. He says [Mr. Beaulot] there is a man here in town that makes rings of a mixture of silver and Iron togeather which people Reliques pp. 260-1

Miracles p. 261

Gonorrhaea Capitis dolor Dentium dolor p. 266

> Pallate fallen p. 279

Megrim p. 282

¹ Élie Richard (1645-1706) took his M.D. at Montpellier in 1666. He visited Oxford and was made a F.R.S.

² Élie Bouchereau (1643-?) was Dr. Richard's cousin. They were both well known La Rochelle physicians. Dr. Bouchereau took his M.D. at Orange in 1665 and after the Révocation he migrated to Dublin where he ended his career as a pastor and librarian.

^a This essay, entitled Discours Physique sur la Transsubstantiation, contre Monsieur Rohault was published at Saumur in 1675 along with André Lortie's Défense du Sermon de Monsieur Hesperen, from which Locke made notes in the entry for 14 November, 1677.

were for the Megrin and head ach. He sells many and therefor Mr. Beaulot1 thinks they may have some effect.

The endemial disease of this country² was for some years colica which terminated often in palsys. In the beginning they tried strong purgatives, which wrought not at all but increased the distemper, but upon triall they found hot gentle lenetives3 of senna and rhubarb would worke when stronger would not, and soe by these they cured. This disease he imputes to the drinkeing of small white wines which were then in use in this part, but since they have planted and dranke red they have it not but very litle, to which I thinke may be added the revolution of diseases.

He curd once a man of 60 years old, much swollen and deepe in a dropsy by purgeing him every day with senna, rhubarb, sal prunellae etc. and reduceing by degrees to drinke in 24 howers only 8 ozs. of an aperient decoction, and take noe other liquor, but this method has yet failed in others.

Spirit of salt rectified will dissolve [gold] and [aqua regis] dissolves [gold] only because of the common salt that is in [sal ammoniac] for corrosive [sulphur] dissolved in [aqua fortis] dissolves [gold] as well or better.

Glauber's spt [vitriolum]4 which is distild in his open retorts with melted lead in the groove, he thinks good in Epilepsies. V. Glauber. Q. If it have not this way that [sulphur] dulce and anodynum which they say is in [vitriolum] and is probably lost by calcineing. J.L.

Aqua phagaedenica in Charas his Dispensatory he thinks very good against Gangrenes and effectuall in such kind of cases. Thus far Mr. Beaulot.

Thursd. Sept. 8. From Rochelle to Rochefort 5 leagues. [Rochefort] is like to be the prettyest towne in all France. All that is likely in my opinion to hinder it is the sicklynesse of the aire, for strangers that come here seldom scape a disease to season them. And at this time we were told $\frac{3}{4}$ were sick, the marks whereof we saw in the forgery where they were fain to give of workeing not haveing people enough well to

² The La Rochelle area.

³ Lenitive electuary appeared in the first London Pharmacopoeia. The main ingredients were raisins, polypody of the oak, senna, herb mercury, jujubes, maidenhair, violets, barley tamarinds, prunes, and liquorice. (A. C. Wootton, op. cit., vol. II, pp. 146–7.) ⁴ Spirit or oil of vitriol was prepared by distilling vitriol; but this entry probably refers

to Glauber's distillation of sulphuric acid with sea water which yielded spirit of salt, or hydrochloric acid. Glauber called it spirit of rectified salt, which he recommended as an excellent cordial. (A. C. Wootton, op. cit., vol. 1, p. 263.)

Colica pp. 282-3

Hydrops p. 283

Aqua regia p. 283

Epilepsia pp. 283-4

p. 286

Rochefort pp. 287-8

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¹ Locke seems to have been impressed by this remedy for migraine as, two years later, he wrote to Thoynard asking him to send one of these rings for a friend. (Lettres inédites de John Locke à ses amis, Nicolas Thoynard, Philippe van Limborch et Edward Clarke (1912), ed. H. Ollion, The Hague, p. 69.)

continue it. They impute this to the over flow of the river, the spring tides, which rise here 20 ft., overflowing a great plain of meadows which lies on the other side. This morning we had here a very thick mist. [Locke and his companion travelled through Saintes, Petit Niort, Blay to Bordeaux where they arrived on 13 September.]

Thurs. Sept. 15. Mrs. Kerby being extremely troubled with the spleen, i.e., a pain and riseing in her left side soe that she could neither breath nor sleepe, tooke by the advice of a neighbour a quantity of foliage and oats, yolks of 2 eggs, beat together well and make a plaster; apply hot to the painful spot. This gave her present ease, soe that she slept and breathed well after it. But there was this strange effect of it that when she awoke in the night and they took of the poultice, they found the poultice and the quadruple cloth that coverd it all bloudy, which she was told was the usuall effect of this herbe, to draw bloud but yet noe sorenesse nor inflammation but only an itching in the part. This at least she is sure she is well of this paine ever since. Mrs. Kerby. [They left Bordeaux on 26 September and travelled via Cadiliac, Agen, Moissac, Montauban to Toulouse, where they arrived on 1 October.]

Sund. Oct. 2. Rub your hand over with a pounded snaile, and then pour on it boileing wax, and it will not scald. Mr. Bretaile. Oyle or soape does the same for melted lead. *ib*.

Mond. Oct. 3. As soon as the child was born the women washed it in wine instead of water, thus testing the strength of its constitution, because delicate babies, and those liable to epilepsy, are enfeebled as a result and gain nothing in consequence; while robust, healthy babies are strengthened and receive added vigour.

Plutarch: Life of Lycurgus.¹

The Spartan nurses had such skill and ability, that they brought up their children admirably without swaddling them. Their limbs were well made, their faces very pleasant, they were not dainty feeders, but content with any food put before them. *ib*.

Plutarch says that feeding children with a spare diet makes them grow tall, but chargeing their stomachs employs the spirits below, and soe makes them thick and short. This made the Spartans proper men. He says also that the children of those who are purged dureing their breeding are leane and slender. v. *ib*. Pl.

[Locke left Toulouse on 9 October and reached Montpellier on the 13th.]

Wed. Oct. 19. Take good hony, a spoonfull; flowers of brimstone as much; give them the horse in his oats twice every day till his cold or

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Lienosi p. 294

Scalding p. 306

Infants pp. 306–7 (French)

> Epilepsia p. 307 (French)

Veterinaria pp. 310-11

¹ See Plutarch's "Life of Lycurgus", chapters 16.2, and 17.4.

cough be gon which they never faile to cure. First mix the hony with the oats and then sprinkle the pouder of brimston on them for then it will stick, and the horse cannot blow it away. Earle of Meath.¹

Botanica pp. 311

Farcy pp. 313-15

Thurs. Oct. 20. Clusius² gives a good description of plants and speaks only of what he has seen, and soe also Lobelius³ with Pena.⁴ Prosper Alpinus⁵ and also Caesalpinus⁶ are both good botanists and describe the plants well and on their owne observation. Gaspar Bauhinus7 a good botanist and his Pinax an admirable worke, but many faults in it. Matthiolus⁸ has not very well describd the plants, but has set downe the vertues as he found account of them amongst the country people where they grew and who had had experience of them, and there are there many excellent remedies amongst them. John Bauhinos⁹ is but a Magnol. compilator.

Mon. Oct. 24. (1). Let your horse bloud. The next morning take of the tender tops of rue one handful, wash them, cleane and beat them small in a mortar then put thereto $1\frac{1}{2}$ spoonsful of fine hog's grease. Beat them togeather to an oyntment which being made into two balls put into the horses ears and put some wooll after them to keep them in. Then stick up his ears for 24 howers. Then take out the wooll and let the rest remaine.

Then take a handful each of rue and savin, and 2 handfuls of Celandine leaves and roots; wash them and beat them some what small and bake them in wine or strong bear 2 pints till a 1 be consumed. Then strain the liquor and put to it a litle fresh butter and give it the horse luke warme. Ride him after it till he begin to sweat, tie him up to the rack, litter him well and cloath him warme and let him eat noe thing for 2 or 3 howers then give him meat, and at night a mesh and warme water for 2 or 3 days. This certainly cures the Farcy.¹⁰ [On the recommendation of] Mr. Cheny.11

¹ William Brabazon (1635-85), who succeeded to the title in 1675.

² Charles de l'Écluse (1526-1609).

^a Mathias de Lobel (1538-1616). ⁴ Pierre Pena and de Lobel published their Stirpium Adversaria nova in 1571.

⁵ Superintendent of the Botanical Garden at Padua at the end of the sixteenth century. 6 Andrea Cesalpino (1519-1603).

7 Gaspard Bauhin (1560-1624). His Pinax Theatri Botanici appeared at Basle in 1596.

⁸ Pietro Andrea Mattioli (1500-77). In 1558 he published commentaries on the six books of Dioscorides de Materia Medica, and an apology against Amatus Lusitanus. He was a noted botanist and Physician to the Archduke Ferdinand of Austria. He is said to have been the first to administer mercury internally.

⁹ Jean Bauhin (1541–1613), brother of Gaspard.
¹⁰ O.E.D., Farcy, a disease of horses, closely allied to glanders.

¹¹ Mr. Cheney was an Irishman. A letter from Denis Grenville, of 24 October, 1678, is addressed to Locke, "Chez Monst, Cheny, Gentilhomme Anglois, Habitant proche l'Eglise de St. Pierre A Montpellier." He seems to have acted as a tutor, since Charleton informed Locke in February 1679 that "Mr. Cheney has order from Sir John Champante to conduct his son to Ireland towards Aprill." (MS. Locke, c. 5, ff. 29-30.)

For a galled back. Wet hay or the dung of the stable will doe it if taken in time.

Take red wine lees $\frac{1}{4}$ pint, rie bran $\frac{1}{2}$ a handful; Mutton suet 2 ozs; wine vinegar 2 or 3 spoonsful. Boyle them to a pultis and lay it on hot renewing it once in 2 or 3 days. If any proud flesh arise lay a litle burnt alum on it. [At the recommendation of] Mr. Cheny.

Thurs. Oct. 27. The juice of the common solanum applied to phagaedanic ulcers cures them. This Dr. Magnol learnt of a paisant who had cured the like in his owne finger, and severall others, and hath since experimented it him self. The paisant applied the juice but $\frac{1}{2}$ hower at a time once or twice a day, but Dr. Magnol continues the application. v. Botan. Monspeliens.

Gallium luteum. The juice or the distild water of the faetid [distilled] oyle of the dryed hearb given in the [distilled] water cures Epilepsies [according to] Dr. Magnol, but it is of more efficacy in women than men, though he has knowne it succed in men too. The [distilled oil] is very faetid at first but after some time being exposd to the aire it gets a very sweet smell. *ib*.

He thinkes he knows a better thing than Kina Kina to cure agues. Q. Mr. Sydenys way was when a horse was surbated or lamed in the soale or heele to stuff the foot with bran and grease and soe puting a cloth over it set in the shoe. [Locke and his pupil left Montpellier on 30 October, 1678, and after travelling through Nîmes, Remoulins, Loriol, Tain, Le Péage, and St. Symphorien they reached Lyons on 4 November, 1678.]

Mon. 7 Nov. We saw the Charité, a very large and well regulated hospital where young children, male and femal, not under 7 years old, are taken in and set to worke. Their great imployment is about Silke. They are taught also to reade and some of the girles to sing, and thus they are bread up. When they are of age, they may goe out or marry if they will, and then they give the maide that is maried \pounds 100 to begin the world with, or they may stay in all their lives, and of these there are usually in the house about 1,500 poore and orphans, and if they have any thing, as it happens to some of the Orphans, the principall is restord to them when they goe out and the house has the use for their breeding. Some of the girls are taught to sing, and sing well enough.

They rise at 5 and worke till darke in winter, and in sommer till 6 at night, but, counting their masse and breakfast in the morning, collation in the afternoon and time of dinner, their worke is not hard.

Their break fast and collation is bread and water. At dinner and supper they have a litle morsell of boiled flesh, each one about an ounce Gall p. 315

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Ulcers pp. 315-16

> Epilepsia p. 316

> > Surbat p. 316

Charité pp. 322-4

or two, and soope at dinner, but never roast meat, unlesse it be the singers who are treated better than the rest. They have all trades necessary for the house within them selves.

They bake, one week with an other, 100 asnes of wheat, partly for the use and consumption of the house, and partly to be distributed to the prisoners and poore of the towne. Though the portion of flesh be limited to every one, yet every one may have as much bread as he can eat.

They usually have in their granary a provision of 6 or 7,000 Asnes of wheat which 10 or 12 men are dayly imploid in turning. It lyes about a yard or more thick and the roome open to the aire without glasse or paper to the windows.

Thurs. Nov. 10. Rx. Oats cleane as they come from the barn $\frac{1}{4}$ peck; wild or bitter chicory, one handful; hony 2 spoonsful; mineral chrystal $\frac{1}{2}$ oz; cook in spring water, 6 pints; strain. Take a glasse or two in the morning as much in the afternoon. It is admirable good to carry away gravell and chlorosis. Mr. Selapris.¹

Sat. Nov. 12. Rx. Smalage or wild selery (about Nismes² they call it Api sauvage) cum toto q.s. Pound it and in a porenger of the juice [and] dissolve sugar q.s. Take of this morning and night 3 spoonfulls as hot as you can. Doe this till you have taken it all and it will cure a quartan. Some times it goes away before you have taken out the whole porenger. This cured both Mr. Selapris and another of quartans in the month of August.

Q. The litle hearb that grows on walls that hath the under side of the leaves of a gold colour (i.e. asplenium or ceterach)³ which boild in water makes it of a red colour, and being drannke for some time brings a florid colour into the cheeks after agues and other maladies.

M. Selapris.

For the Stone. Take Venice turpentine, the size of a thumb; mix it with good rhubarb powdered, the weight of a golden Demi-Ecu. Take one of these doses three separate times, each time during the 3 or 4 days of the waning moon. Note that the Rhubarb must be fresh, and that the first time you take only the weight of a gold Demi-Ecu, and the two other times of a whole gold Ecu. Mr. Selapris.

This brings away the gravell and preserves from the stone.

Ptisane of Health.

Take a half measure of best clean washed oats, and a little handful of

Nephritis p. 326

Chlorosis p. 326

Quartan p. 327

p. 327

Convalescentia

Nephritis p. 328 (French)

Polycrest pp. 328-32 (French) 144

¹ Jacques Selapris. Locke appears to have got to know him through Charleton, who informed him in 1681 of Selapris's death from cholera. He is described in Locke's letters as: "Jacques Selapris l'aisné, marchand, rue de l'arbre Secq, à Lyons."

² Nîmes.

³ Both belong to the fern family. The words in brackets were added by Locke later.

newly dug Wild Chicory roots; put to boil gently in 6 pots of river water (i.e. 6 pints) for three quarters of an hour; then add $\frac{1}{2}$ oz. of mineral crystal and 3 or 4 spoons of eating honey—chose the best, making about a quarter [of a pound] in weight; put the whole to boil again for $\frac{1}{2}$ an hour, then strain the whole through a cloth and put the strained liquor in a crock to cool. You must note that for those of a bilious temperament only half the dose of honey is needed.

Take two good glasses of this liquor or ptisane in the morning fasting (and eating nothing else for several hours afterwards), and in the afternoon 3 or 4 hours after dinner take two more glasses; continue this for 15 days; there is no need for staying in bed or in the house, nor for bleeding, soups, fresh eggs nor other dainties; go about your ordinary affairs and live as you usually do when you've not taken any medicine.

The weak and the invalids after only one glass cannot fail to feel a great relief. Those who are too replete can well begin by taking an enema or gentle purgative to promote an evacuation, after which this remedy can do its good work more easily. It is a perfect purge for the kidneys; causes good urination, spitting and clearing of the nose; relieves the brain; cleans the lungs, the liver and the spleen; expels all filth, headaches, gravel, and even newly formed stones; all tertian and quartan fevers, colic, and side ache; all gall itch, and carbuncles, and all awkward heaviness and drowsiness or tiredness of the limbs. It awakens the senses; enlivens the sight; improves the appetite; causes good rest and sleep. It refreshes and fattens; gives force and vigour and complete health; its good effect seems to continue for one or two months after it is taken; moreover it is very nourishing.

It also has such quality and benignity that you can take it every day without any harm (except in very cold and frosty weather, unless you can keep in the warm). However to keep yourself in full strength and vigour for always, or for many years, it is enough to take it for these 15-day periods once or twice a year, especially in the heatwaves of summer, which is the best season and the proper one for its use.

Proved by the famous doctor, Le Sieur de Sainte Catharine, who took it thrice a year (before winter, towards Easter and at the hottest part of summer), and through its power lived to be nearly 120.

There is a great deale more said in the paper of this remedy which is there in recommend and vouchd as universall. Mr. Selapris also commends it on his own knowledg.

The plaister of Nuremberg is good for soares, aches, cornes, wounds and a gald horse back, Mr. Selapris, and for aches. Apply it to the place and let it stick till it falls of. It is made and sold at Nurnberg. Vulnus clavus p. 333

dolor p. 333 Haemorrhagia pp. 333-4

Dentium

Gall p. 334

Surbat p. 334

Veterinaria pp. 334-5

Hydrops pp. 337-8 The herb in German Shoskrout applyd in a crosse on top of the head cures the shooting of the teeth which shoots up into the head. *ib*.

Rose vinegar dropd into the eare of the same side cures the tooth ache from defluxion. The powder of papaver rhaeas stops nose bleeding etc.

Mon. Nov. 14. For the wringing of a sadle apply to it presently either [spirit of wine] or the white of an egge. Mr. Bruning.¹

For the soale of the foot hurt by goeing without a shoe. Shoe him before he stands still to coole his foote and then clap to the soale of his foot an hot roosted onyon or 2, or the hard yolke of an egge hot. The same for surbated. *ib*.

To keep horses coole in their bodys and soluble give them of Marc² as much as you take up with both your hands at twice, and half as much bran once or twice a day. *ib*. Q. Whether the pomise of cyder will not doe as well for our horses in England.

The way of keeping the Marc is this. Put it in a great vessell, and pressing it downe with boards that it rise not, cover it with water, and thus under water it will keepe a great while. Bruning. [Locke left Lyons for Paris on 15 November.]

Fri. 18 Nov. The master of this house, [The Lion d'Or at Moulins on the Allier] haveing some time since a dropsy, asthma and cough was cured by an empirik. with an infusion of a certaine pouder in the redest wine he could get, which infusion purged him at first 17 or 18 times at each takeing, and after the use of it for some time only 7 or 8 times. This he tooke above 2 months togeather every day instead of weakening him it made him stronger, and whereas at the beginning he was leane and dry before he left takeing it he grew much fater. Since that time, also by order of the same Empirick he drinkes noe thing but pure wine, and eats noe fish but flesh, and when he takes his drinke he eats noe Salads nor fruit nor other raw things, and by this means is recoverd. He also being lately sick of a feaver by order from his said Dr. tooke the same infusion and it recovered his feaver. He says that wine quenches his thirst and that water makes him dry.

His powder as much as I can guesse by the discourse I had with him consists of these things: Flowers of lesser Centaury; selected Leaves of betony and Salvia; all dried in the shade; and grains or seed of dwarf elder [or Danewort] which he cald yble and said was ripd when grapes were. This, I suppose, has the purgeing quality. He talked also of a litle cinamon and of ambergrise, as much as would cost 4 livres 10 francs

¹ Mr. Bruning is unknown. Could he perhaps be the previous employer of the German Sylvester Brownover whom on this very day Locke engaged as a servant?

² Marc is the residue after wine has been pressed from grapes.

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for 16 doses. All these made into pouder and infused 36 howers in deepe claret I suppose was his secret. And counting as he did 16 doses, I suppose the dose of the pouder might be for each infusion 1 oz. Q. Then the dose of dwarf elder seeds and all the rest is easy.

He says if one makes the infusion in water it will make [in] an hour a pain in the belly and will not doe well. When he takes this purgeing infusion he keeps not in but goes abroad as at other times.

Take the top leaves of sage dryd in the shade, infuse them a weeke in [spirits of wine], then drye them again, and infuse them a second time as at first in the same [spirits of wine]. Then drye them and keepe them for use. One of those leaves taken and kept in the mouth draws out abundance of water and is good for rheums, defluxions, head ache, and toothach. The infuseing the sage thus in [spirits of wine] keepes it from blacking the teeth in mastication which it will doe other wise. *ib*.

Thurs. 24 Nov. To Orleans 6 leagues. Mist still. The Microscopes that soe magnifie are noe thing but litle lens of glasse, made of the smallest threads of glasse melted, which run of them selves into that figure. But in melting them in the flame of candel there mixes some grease with them, which is to be avoided, either by the flame of well burnt charcoals as I imagin, or the flame of [spirit of wine]. For Mr. Hautefeuille¹ who tells me this, says he has in vain tried to melt them with a burning glasse and Mr. Godfroy says a burning glasse will not melt snow.

The manner of useing this little microscope is to place it between a doubled plate of brasse or lead pierced with a very small hole and soe applying it to a thin peice of talke² which holds the object to a peice of cleare glasse; hold it as close as one can to the eye, opposite to the light.

Fri. Nov. 25. Take the stick of elder that grows on a sallow.³ Cut it into short peices, and soe threaded and hung to the pit of the stomach. This after vomiting Dr. Godfrey has found succeed in epilepsies of grown people as well as infants and vertigoes too. This Hartman relates but he addes some superstition to it [in order to mystify].⁴

Q. Whether any elder will not doe as well as that which grows on a willow, and whether it will not doe as well if gatherd at any other time as well as in November? J.L.

⁴ Shorthand.

Masticatorium pp. 338-9

> Orleans Microscope pp. 344-5

> > p. 345

Epilepsies p. 346

Vertigo

¹Jean Hautefeuille (1647-1724), a well-known inventor. On 15/4/80 Locke mentions his book *Pendule Perpetuelle* (1678).

² O.E.D., Talc; (1) mica or muscovy glass, (2) laminae or plates of hydrated silicate of magnesium.

^a O.E.D., a plant of the genus Salix, a willow. Applied to several species of Salix of a low-growing or shrubby habit and also to one of the shoots of a willow.

[Locke left Orleans on 25 November and arrived on Paris on 28 November.]

Fri. 2 Dec. To make horses' hooves grow.

Rx. Yellow wax 4 ozs.

Black shoemaker's wax 2 ozs.

10 sous worth of turpentine.

Grease which is between the clefts of the feet of oxen or cows, to be found in tripe-shops, 2 ozs.

Ox marrow (if possible, of a red ox) 4 ozs.

Boil all together for a good half hour, stirring well with a little stick. Then leave to cool. You can use it half an hour afterwards.

Mr. Selapris.

Mon. 5 Dec. Mr. Toynard told me of one that had found out the secret to sweeten salt water. Q. Dr. Wilkins?¹

P. Ange of Orleans told me that Infusion of wood ash with purgeing cures dropsys and that he had often tried it.

Wed. 7 Dec. Guidobaldo Duc of Urbina a very wise prince always unfortunate and unsuccessful in whatever he undertooke.² *ib.* p. 3. Besides that he was disabled with the gout at 20 years old.

Wed. Dec. 14. The story of the Nuns of Lodun possesd was noe thing but a contrivance of Cardinall Richlieu to destroy a man, Grandière, he suspected to have writ a booke against him, who was condemnd for witchcraft in the case and burnt for it. The scene was managed by the Capucines and the nuns plaid their tricks well, but all was a cheat.³

Wed. 28 Dec. Take the heart, lungs and pluck of the guts of a calf, with a chicken, in whose body put a handful of husked barley, the same of Damascus raisins and 10 or 12 Jujubes. Put the lot into a new earthenware pot holding at least 3 pints, and boil continuously over a small fire; when it is reduced to half (i.e. to three good helpings) add a handful of chest herbs or wild Chicory; allow to boil a good quarter of an hour, then strain the whole very gently, for fear the soup be too thick. You must take these three helpings fasting on the same morning at hourly intervals; if you find no improvement at first continue the treatment 3 days running. With this broth taken only two mornings a boy at the Espé at St. Germains was cured of a kinde of hoopeing cough which he had had 3 months, and which they could finde noe cure for, haveing tried the advice of severall physitians. It was a cough

¹ John Wilkins (1614–72), first Secretary of the Royal Society and Warden of Wadham. Later he became Bishop of Chester.

² Quoted from Le Cortegiano (1547), by C. B. Castiglione, 8°, 195 pp.

³ Locke had just been reading La Défense de la Réformation (1673), by Claude, 378 pp.

Horse Hoofe p. 350 (French)

Salt water p. 379

Hydrops

Arthritis p. 379

Possessed pp. 382-3

Tussis pp. 384-5 (French) 148

which with a kinde of hollow sound like a hickup troubled the lad perpetually soe that he was scarce ever a moment free, but yet never spit up any thing. It was the strangest cough I ever saw or heard, but seemd to have noe tendency to a consumption, nor to be any thing of that kinde. That which I imputed it to was to an hurt of the nerve of the eare which hath a communication with that of the lungs, for it came presently after a box of the eare he had received at schoole from his master. But yet I see not how it came that this broth cured it, if that were the cause.

1679¹

Mon. Jan. 16. At Paris the Bills of Mortality usually amount to 19 or 20,000 per annum, and they count in the town about 500,000 souls, about 50,000 more then at London where the bills are less.

Mr. Auzout.

Q. Whether the Quakers and Anabaptists and Jews that die in London are record in the Bills of Mortality? J.L.

Thurs. Jan. 26. Take a sufficient amount of Tansy,³ bath it in water and haveing wrapd your fist in a linnin cloth, hold it in the strains as hot as you can possibly suffer, half an hower at least, and afterwards put some of the herbs upon it. They will upon the pores make it sweat and it will soon after begin to swell. This Mr. Claude⁴ who has had the gout this 7 or 8 years, findes to give him ease commonly at the first useing, and if not, he repeats it again, and it never failes him. After this to strengthen his foot he uses a plaister calld manusdei.⁵

Sat. Feb. 11. In the Ile d'Elva in Italy there are toads above a foot broad which the inhabitants will not suffer any one to kill, imagining that they draw to them the venom of the Country.

Tues. Feb. 14. In Canada a French woman has been maried at 11 years old and had children before 12, and soe in Spain and Portugal; and in the Indies they mary them at 8.

In Portugal they are usually 9 girles borne for one boy. They impute it to this that the men marry not till they are pretty old and wasted

¹ B.M., Add MS. 15642.

² Locke was always interested in the mortality rates of various cities. His work on this aspect of preventive medicine has been summarized by Kenneth Dewhurst, "A Review of John Locke's Research in Social and Preventive Medicine", Bull. Hist. Med. (1962), 36, 317-40.

³ Tansy is an abbreviation of athanasia, a herb mentioned by Lucian. Jupiter tells Hercules to take to him the beautiful Ganymede; "and when he has drunk of Athanasia [immortality] bring him back, and he shall be our cupbearer".

⁴ This is probably Jean Claude (1619-87), pastor at Charenton and the adversary of Bossuet.

⁵ Manus dei was the name of an old plaster containing myrrh, frankincense, ammoniac, and galbanum.

Bills of Mortality² p. 4

> Arthritis pp. 7-8

> > Toads p. 36

Childbeareing p. 39

> Sexus p. 39

with debauchery and the pox, and then they mary the women very young.

Fri. Feb. 17. The French borne at Canada are very handsome people, but the women have hard and dangerous labour.

Sat. Feb. 18. The Dubroa of the Indians. With 30 or 40 grains of which 10 is seed, the wives there intoxicate their husbands with Stranraneur.¹

It is transplanted and grows in Portugal and has its effects there, the Antidote is to drink some wine before and then it operates not upon you.

Pomey and Chanson² were burnt at Paris about the yeare '64 for keepeing a baudyhouse of Catamites. Mr. Toinard.

Wed. March 8. The stranromeum above mentioned (p. 17) grows in Portugal, where Mr. St. Colombe³ has seen 3 seeds of it given which hath made him that took them maz'd, and afterwards fall a sleep and quite forget all which happend, but afterwards felt pain and disorder. The antidote is [spirits of wine] drank before. Mr. Toinard.

Tues. 11 Apr. Within this year past were bills set up about Paris with a priviledg for a receit to kill lice where of the Duke of Bouillon⁴ had the monopoly and the bills were in his name:

By permission and privilege accorded by the King in perpetuity to M. le Duc de Bouillon, Great Chamberlain of France, by letters patent of 17 Sept: 1677, verified in Parliament by a decree of 13 Dec. of the same year.

The public are hereby advised that there is on sale in Paris a little Sachet the size of a 15-sou piece to guarantee all sorts of persons against vermin, and to free those infested with vermin without the use of mercury etc.

It is forbidden to all persons to make or counterfeit this preparation, on pain of a fine of three thousand livres. [Extract from the bill.]

Fr. Apr. 14. Mr. Toynard gave me a great peice of Angola wood with the powder whereof the grandees of the country make a paste with which they cover them selves all over and then wash it off. This, they say, cleanses and refreshes them very much.

¹ Probably stramonium, a species of datura, which was known to the ancients as a poison. It was used in Eastern countries by thieves and sorcerers to induce delirium and coma. (A. C. Wootton, op. cit., vol. II, p. 118.)

² Jacques Chausson and Jacques Paulmier, burnt at the stake in December 1661 (see F. Lachèvre, Le Libertinage au XVIIe Siècle, vol. v, Les Oeuvres Libertines de Claude Le Petit (1918), Paris, pp. 202-9).

³ Sainte Colombe was a friend of Thoynard.

4 The Duc de Bouillon (1639-1721) was appointed Grand Chamberlain in 1658.

Puerperium p. 39

Stranraneur p. 39

Sodomy p. 39

Stranromeum p. 45

Lice Bouillon

p. 69 (French)

Angola

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This wood also, ground upon a stone with water, workes into a sort of past which, anoynted on the temples and forehead, is admirable for pains in the head or heat or want of sleep. The wood has a pretty sort of smell, is very hard and very heavy.

Sun. 23 April. Take a sufficient amount of the powder of white hellebor. Put it in a copper basin over a very gentle fire, and stir it till it comes to be of a brown ash colour. This will require abundance of fire to doe it. This is an admirable sneasing powder. A little of it also in cotton put into the eare of the same Dr. stopped the bother in 2 Dentium dolor known at Mr. Toynard. Q. Whether in solution one makes this sympatheticall powder will need be of a good way of preparing it? I.L.

Mon. 24 April. Mr. Toinard give me a peice of wood cald Angarian of Angola-the infusion is believed very good for the stone.

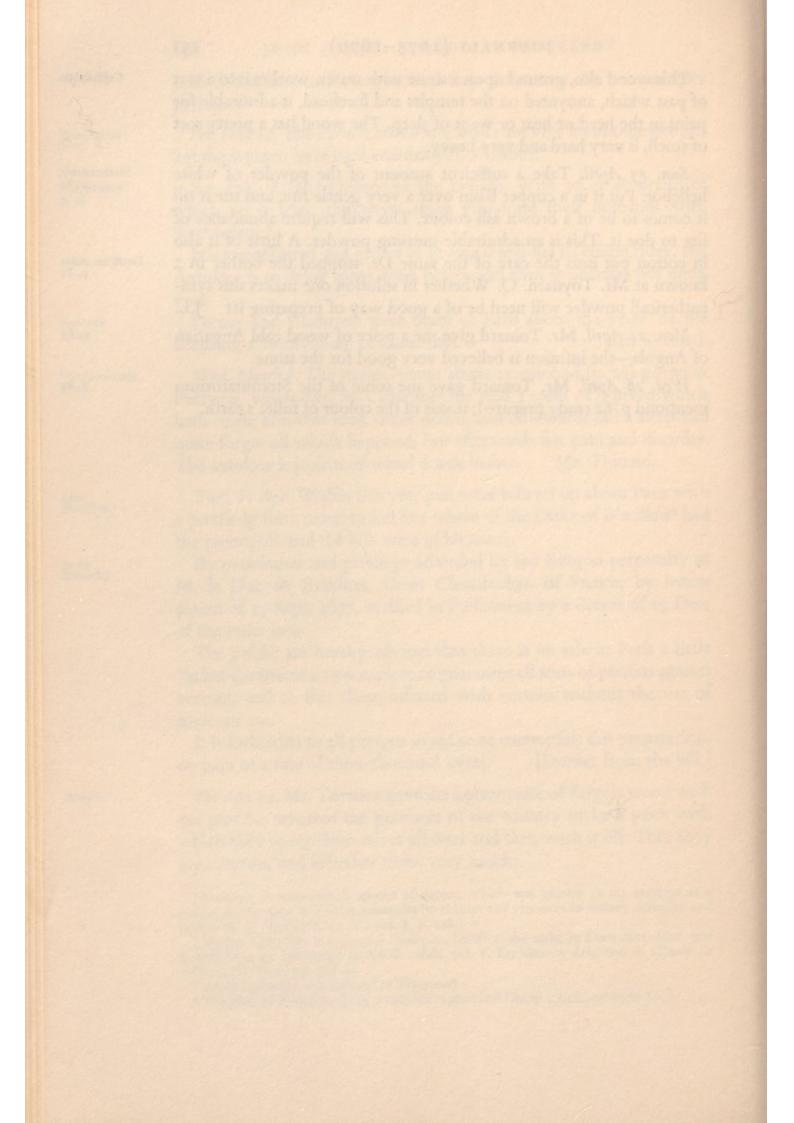
Wed. 26 April. Mr. Toinard gave me some of the Sternutatorium mentiond p. 82 ready prepared; it was of the colour of fuller's earth.

Cephalalgia

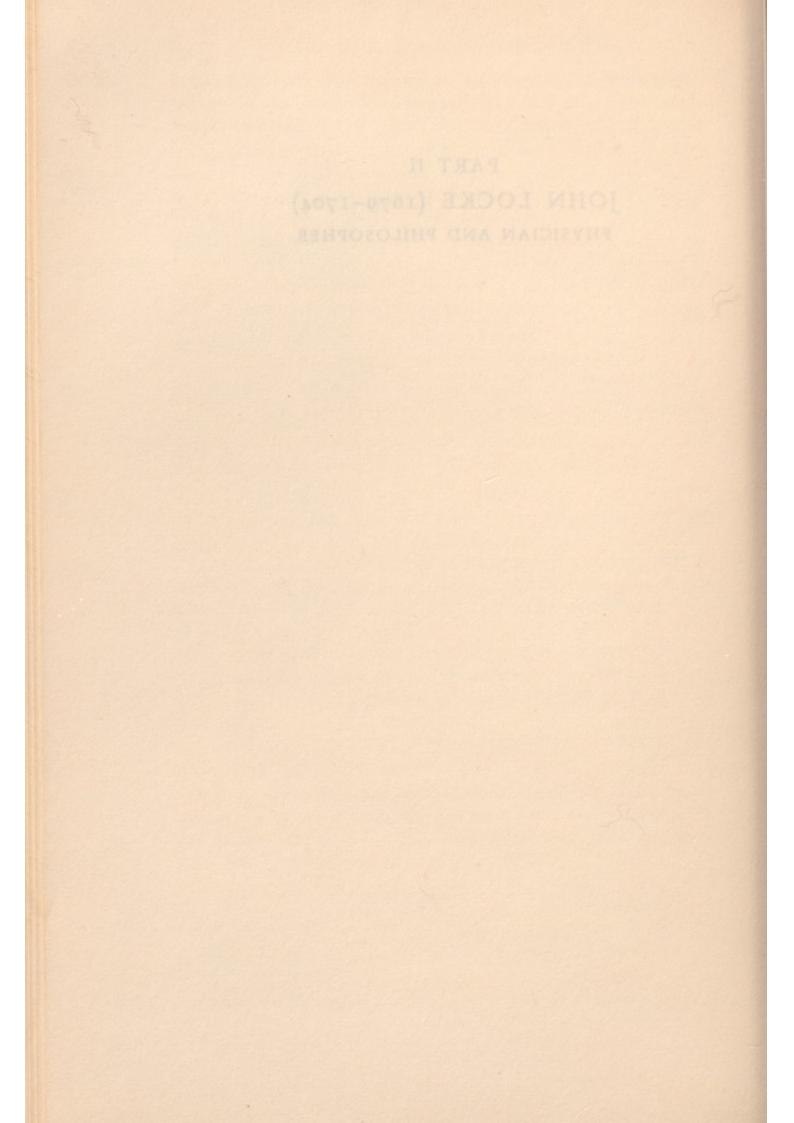
Sternutatoria p. 82

> p. 82 p. 83

> > p. 85



PART II JOHN LOCKE (1679–1704) PHYSICIAN AND PHILOSOPHER



CHAPTER V

The Revolutionary Doctor (1679 - 1683)

AFTER his return to England Locke's own affairs were, to some extent, bound up with the varying fortunes of the Earl of Shaftesbury whose political star was again in the ascendant. He had been released from the Tower in 1677/8, and was now Lord President of the Council in the Coalition Government which followed upon Danby's downfall. The political and religious issues of the day, though infused with deep and conflicting passions, were clearly defined. The King, his brother James, and the Court, were Papist sympathisers, whereas the nation was overwhelmingly Protestant. As the people's champion, Shaftesbury's policy was designed to exclude Charles II's Roman Catholic brother from succession: a lesser aim was to extend civil liberty at the expense of royal authority. He succeeded, to some extent, in attaining the latter objective by getting the Habeas Corpus Bill through Parliament; but his efforts to exclude James met with the King's uncompromising opposition, and ended in his own loss of office in the autumn of 1679, and two years later, in his flight to Holland.

Shaftesbury's policy of rallying the nation under the twin banners of Freedom and Protestantism certainly met with Locke's approval on his return from despotic, Catholic France; and during the next three years he divided most of his time between his patron's new London residence, Thanet House, and his rooms in Christ Church.

Although Locke was frequently away on political errands, he prudently kept details of their nature out of his journals and correspondence. He was probably Shaftesbury's liaison officer; and his other role as medical adviser now included supervising the health and general education of his patron's grandson, which frequently took him to Clapham, where the boy was under the care of his nurse.

After a brief visit to Shaftesbury's secretary, Locke was summoned1 to attend Caleb Banks, at Olantigh in Kent, where he hastened to join Dr. William Jacob,² the local practitioner. His patient's slow recovery prompted him to consult Sydenham, who recommended the more

¹B.L., MS. Locke, c. 24, f. 50, 16 Sept., 1679. ² William Jacob (1623–92) graduated M.D. in 1660 from Christ Church, Oxford. He practised at Canterbury, which he also represented in Parliament.

persistent use of Peruvian bark. Six weeks later, when Banks was convalescing, Locke went down with a feverish illness which kept him in bed for a fortnight, so that it was mid October before he returned to London, and was promptly asked to attend Captain Greenehill, David Thomas's brother-in-law. "His case will require hast," wrote Thomas,1 "for he hath been sicke of a feavor about 8 days with a violent cephalaea, other particulars you will learne of him." When his patient recovered, Locke deferred visiting Thomas,² as Shaftesbury's affairs kept him in London, where he occasionally met Boyle and Sydenham. He kept in touch with the French doctors, through Thoynard who sent him particulars of a "monster" born with two heads and four arms;3 recipes for preparing various ointments,4 and notes on stramonium used by robbers for putting a household to sleep:5 in exchange Locke sent6 this method of healing wounds:

... I'll tell you a very easy and simple way to heal flesh wounds without suppuration. Take the membrane covering an egg inside, and with it, close the entrance of the wound, first if necessary sewing together the edges of the wound; then immerse the wounded part in cold water if this is convenient to do, or otherwise bathe it with tow and sponges soaked in cold water. Repeat this till no unnatural heat is perceived in the wounded part. As soon as the smallest healing of the part returns dispel the inflammation by cold applications, and quickly avoid pain and suppuration. The wound will speedily consolidate. Speak to M. L'Abbé Gendron about it; and if he intends one day to publish his secrets I shall be very pleased if he will tell me how to treat an ulcerated cancer so as to stop pain and augmentation. But though this would make me able to be very useful to an important personage here, I would not dare to ask if M. l'Abbé does not intend to publish it.

Locke spent Christmas at Oxford, after an interval of nearly five years. He stayed just long enough to write a small manuscript book7 on the growth and cultivation of vines and olives and to collect £,176 4s. 10d., which represented the accumulated rent of his college rooms. He then left for the West Country, staying with David Thomas at Salisbury. At the beginning of April, he returned to Oxford, spending a fortnight with James Tyrrell, another undergraduate friend, who lived at Oakley with a large number of relatives. At various times Locke treated Mrs. Tyrrell for an ague,8, 9 her two sons for

3 Ibid., c. 21, ff. 21-4, 16 Aug., 1679. 2 Ibid., f. 15, 25 Nov., 1679. ⁵ Ibid., ff. 26-9, 9 Sept., 1679.

¹ B.L., MS. Locke, c. 20, ff. 13-14, 15 Nov., 1679.

⁴ Ibid., ff. 36-9, 6 Dec., 1679.

⁶ Ollion, op. cit., pp. 36-43, 13 Oct., 1679.

⁷ P.R.O., 20/24/47/35, published by W. Sandly as Observations on the Growth and Culture of Vines and Olives (1766), London.

⁸ B.L., MS. Locke, c. 22, ff. 42-3, 26 June, 1681.

⁹ Ibid., ff. 44-5, June 1682.

measles,1 and one of their tenants' children who had been bitten by a mad dog.²

His Oxford visit was cut short by political events. Thanet House was now the centre of Whig intrigue, as Shaftesbury, who had lost office in the previous autumn, was working on the Exclusion Bill, and Locke was sent on several secret political missions. During these restless months he went on amassing medical information from home and abroad. He asked Thoynard to send particulars of "new discoveries in all branches of medicine",³ and they were soon exchanging information with M. Gendron⁴ on the surgical treatment of fistulae; the most efficacious method of administering quinine,⁵ and details of an Indian remedy for jaundice.6 But Thomas, who also sought Locke's advice on the use of quinine,7 seemed unaware of his political work, and assumed that he would shortly lead the placid life of a medical don.

If your business at Oxford be not to doe exercise and proceed Doctor [wrote Thomas], or other businesse which will not deteine you long there I should desire you to contrive as much time at Salisbury as you canne, that wee may consider of a febrifugium to cure agues with, without the assistance of cortex Peruv, which often proves soe deare that few canne willing submitt to the charge. I have tryed severall ways & what was successful at the beginning was not soe from the middle of September to this time.

The use of quinine, and the correlation of information from physicians practising in various parts of the country, were two of Locke's main medical interests, as shown in Dr. Jacob's⁸ reply to his inquiries:

Truly Sir I have often thought how desirable a paper commerce might be between Phisitians living at some convenient distance, especially in empericall medicine. For usually the presse gives us notice of what hypotheses rise and fall in the world, but for the Arcana's, men usually suppresse them, or doe not deliver them faithfully and fully provd by many successes. Sir, I did lately by accident meet with that method of application, beginning at the End of one fitt to the accesse of a subsequent for no doubt those periodicall and morbifick ferments, have great analogy to the flux and reflux of the sea, where no sooner those reciprocations are come to the Ebbe, but the floud begins and from the instant of the floud the Ebbe begins: so as that when the hott fitt ends, is

¹ Ibid., c. 22, ff. 46-7, 16 Jan., 1683.

2 Ibid., ff. 48-9, 29 May, 1683.

⁸ Ollion, op. cit., pp. 47-52, 20 May, 1680. ⁴ B.L., MS. Locke, c. 21, ff. 49-51; ff. 53-4; ff. 55-6, 26 June-24 Aug., 1680; Ibid., c. 10, f. 1, and f. 2, 1 July and 22 Aug., 1680; and Ollion, op. cit., pp. 57-60, 4 July, 1680.

⁵ Ollion, op. cit., 65-72, 4 Sept., 1680.

⁶ B.L., MS. Locke, c. 21, ff. 62-3, 18 Oct., 1680.

7 Ibid., c. 20, ff. 19-20, 19 Sept., 1680; f. 23, 13 Oct., 1680.

⁸ Ibid., c. 12, ff. 13-14, 27 Sept., 1680.

doubtlesse the individuall point, when to begin the application of such medicines as may suppresse the succeeding ferment: otherwise to bring out medicines neare the fitt, is to make a dam at half or three quarters floud, whereas every man would say, make your banke at low water.

At the beginning of 1681 Locke was back in Oxford. He had been sick, and whilst recuperating at James Tyrrell's house, Thomas Stringer asked him to find accommodation for Shaftesbury's party during the coming Parliamentary session. Oxford now became the centre of affairs, and the magnet of important personages. The Duke of Buckingham was the first to arrive, then Sir Christopher Wren (who as Surveyor-General was in charge of arrangements for the King's reception); and, on 19 March, 1681, Charles II arrived in the city, which had so loyally supported his father. He was met at the East Gate by the Mayor and Recorder, who knelt down by the side of the royal coach whilst the latter "smoothly spoke an English speech".1 But when the Duke of Monmouth arrived a few days later he was "very quietly received". The brief session disappointed Locke, who informed Stringer that there was "a general despair that nothing would be done for the protestant settlement and security".² Two days later, Parliament was dissolved "to the annoyment of all".3 Locke's pessimism at the turn of events is apparent from his journal:

The three great things that governe mankinde are Reason, Passion and Superstition. The first governs a few, the last share the bulk of man kinde and possesse them in their turne. But superstition most powerfully and produce the greatest mischiefs. J.L.4

A few days later Locke joined Shaftesbury, and was at Thanet House on 2 July, 1681 when his patron was arrested, and imprisoned in the Tower, on a charge of high treason. Several witnesses to the Titus Oates Plot were found to have been perjurers, and all Whig sympathizers now came under suspicion. There was the same feeling of insecurity at Oxford when he returned. Stephen College, one of Shaftesbury's humble supporters, was hanged in the Castle Yard, where "he spoke and prayed more than half an hour";5 and Locke's own association with the Whig Leader now brought him under the scrutiny of the Reverend Humphrey Prideaux, the Librarian of Christ Church, who informed the Under-Secretary of State: "The pamphlet entitled

¹ B.L., MS. Top. Oxon., c. 257 (1660-1737) (1917), ed. C. M. Neale, p. 221. ² B. Martyn, Shaftesbury (1836), London, vol. 1, pp. 269-75, 26 March, 1681.

⁸ Neale, op. cit., p. 224. ⁴ B.L., MS. Locke, f. 5, p. 59, 16 May, 1681.

⁵ Neale, op. cit., p. 224, Aug. 1681.

'No Protestant Plot' is now with us, and John Locke is said to be the author of it."1

The winter brought on a recurrence of Locke's asthma, which Thomas promised to relieve with his "pill pectoral".2 Locke made a note of the ingredients, but he did not take them: nor did he follow Sydenham's advice, which was "strong drinke keepeing in bed and a clyster every day": instead, he recovered by staying in bed for a fortnight ("a month I thinke had been better could I have spared it"), and taking a normal diet, with one drachm of treacle every night.³ Locke now resumed his correspondence with doctors and scientists from whom he amassed a great number of notes on astronomy, meteorology, and mathematics;⁴ post-mortem reports,⁵ recipes for the treatment of arthritis and the King's Evil,⁶ and a survey of the works of the leading botanists from Dr. Magnol.7 Thoynard, his main foreign informant, sent him a book on respiration by M. d'Hautefeuille.

I have read cursorily the treatise of M. d'Hautefeuille, [replied Locke]8 and though there are in it many good remarks and observations, I notice also that experience destroys his system; for I have been persuaded for a long time that the purpose of air in respiration is not to cool but to heat and set alight the vital flame in the blood; for to take the extreme example, respiration is as necessary for the Laplander and people of cold climates as it is for those breathing in the heat of the Torrid Zone.

Locke then asked him to get M. Spon's newly-published treatise on quinine for Dr. Charles Goodall,9 whose acquaintance he had lately made through their common friend Sydenham. Goodall was then preparing a book on quinine, and Locke supplied him with information from abroad.¹⁰ But Thoynard was unable to get the treatise, and sent instead a journal with a report of a woman who died in childbirth, when her stomach burst open and a flame emerged.¹¹

Locke was friendly with all the leading London physicians. He renewed his acquaintance with Walter Needham (1631-91), another

² B.L., MS. Locke, c. 20, ff. 30-1, 20 Jan., 1681.

⁸ Ibid., f. 5, pp. 68–9, 18 June, 1681. ⁴ Ibid., c. 31, ff. 44, 47, 190, 193; and c. 42, f. 16.

^a Ibid., c. 29, f. 18.

6 Ibid., c. 29, f. 15; f. 19 and f. 27.

7 Ibid., c. 42, f. 166.

⁸ Ollion, op. cit., pp. 95-9, 20 Feb., 1681. ⁹ Sir Humphry Rolleston, "Charles Goodall M.D., F.R.C.P., 1642-1714", Ann. Med. Hist. (1940), 3rd Series, 2, 1-9.

¹⁰ Their correspondence is reviewed in Kenneth Dewhurst, "Some letters of Dr. Charles Goodall (1642-1712) to Locke, Sloane and Sir Thomas Millington", J. Hist. Med. (1962), 17, 487-508.

11 B.L., MS. Locke, c. 21, ff. 15-16, 8 Oct., 1681.

¹ B.M., Add. MS. 28,929, f. 77, 25 Oct., 1681.

of Sydenham's friends, whom he had known at school, and later at Oxford, where they attended Willis's lectures. In 1680 Needham resigned as physician to the Charterhouse in favour of Goodall, and was then practising in Great Queen Street, where Locke occasionally visited him. He also knew Sir John Micklewaite, President of the College of Physicians, and Edmund Dickinson, a Court physician and iatrochemist, described by Munk¹ "as the highest authority on that subject in this country".

Meanwhile, Shaftesbury had been acquitted of treason amidst scenes of public acclamation. Hitherto, he had persistently sought to secure a Protestant succession by constitutional means, but as all his designs had been crushed by the King's arbitrary acts, he now set out to achieve his ends by revolution. But there was dissension amongst the Whigs: Shaftesbury favoured the Duke of Monmouth for the throne, whereas Halifax's candidate was William, Prince of Orange. Although he did not command the full support of the opposition, Shaftesbury went ahead with his plans; and Locke's frequent travels mystified the Tory spy, Prideaux,² who twice reported his suspicions of Whig intrigues.

At the beginning of 1682, Locke made two new friends who were destined to play an important part in his life: Damaris Cudworth, daughter of Ralph Cudworth, the Cambridge Platonist, who came "closer to Locke than any other human being",3 and Edward Clarke, a wealthy landowner who had married Locke's cousin. He soon became the Clarkes' medical adviser; and many of his other friends chose to consult him in preference to their local practitioners. Shaftesbury's high regard for Locke's services is apparent in his secretary's letter.

My Lord's Ague being returned [wrote Stringer],⁴ and his taking of the Jesuits Powder not having its usuall effect to stopp it, he is reduced to an extream weaknes, and we all feare in exceeding danger. We have therefore sent this bearer on purpose to drive you to hasten to Toune, for we all hope better successe from you than he is like to have from the other doctors. ...

When Shaftesbury recovered, Locke treated Stringer's pox with mecurial salivation, and the patient's wife⁵ reported satisfactory progress, as he "spitt three gallons since he entered into this course".

Throughout 1682 Thomas repeatedly urged Locke to join him in

¹ The Roll of the College of Physicians of London (1878), ed. William Munk, vol. 1, p. 472.

² B.M., Add. MS. 28,929, 14 March, 1681/2; *Ibid.*, f. 96, 19 March, 1681/2.

⁸ Maurice Cranston, op. cit., p. 215. ⁴ B.L., MS. Locke, c. 19, ff. 112–13 (undated).

⁵ Ibid., ff. 97-8, 8 April, 1682.

preparing chemical remedies. He first proposed to prepare Glauber's Alkahest,1 and a month later, suggested2 that

if your affayres would permitt I would fayne see you here to try if Chymestry might not be improved to the cure of Agues [optimistically adding]: I wish the honourable³ would impart to you his cure of a Cancer, I haveing 2 or 3 patients to try it upon.

For several months Thomas searched for a cheaper substitute for Peruvian bark, and Locke supplied him with the chemicals. Thomas informed him of his progress, and frequently asked: "When you have thoughts of seeing the country, which I wish soone because it is a leisure time for Chymestry, pray let me know."4 But Locke was then too closely associated with Shaftesbury's secret designs, which were not going well, to spare time for chemistry. Monmouth came into conflict with Government forces in Cheshire and was arrested. Shaftesbury urged him to return there, as soon as he was released, whilst he mustered forces in London. But Monmouth hesitated, and the Whig plans leaked out. A warrant was issued for Shaftesbury's arrest. He went into hiding, just as Locke was reaping his wife's5 gratitude for their grandson's recovery. On 28 November, 1682, Shaftesbury escaped to Holland disguised as a Presbyterian minister.

Whilst the undertones of an abortive revolution rumbled throughout the country, spreading fear and suspicion, Locke calmly recorded in his journals such commonplace details as medical prescriptions, money matters, and notes from his reading. He also advised the Clarkes on rearing their children. In general he believed that children of either sex should be brought up alike; they should wear the same type of clothing and take plenty of outdoor exercise.

There are only one or two things⁶ [he continued] whereof I think distinct consideration is to be had. You know my opinion is that boys should be much abroad in the air at all times and in all weathers, and if they play in the sun and in the wind without hats and gloves so much better. But since in young girls care is to be taken too of their beauty as much as health will permit, this in them must have some restriction, the more they exercise, and the more they are in the air the better health they will have, that I am sure: but yet 'tis their tender skins would be fenced against the busy sunbeams, especially when they are very hot and piercing: to avoid this and yet to give them exercise in the air, some little shady grove near the house would be convenient. ...

¹ Ibid., c. 20, ff. 40–1, 11 Jan., 1682. ² Ibid., ff. 42–3, 8 Feb., 1682. ³ Boyle. ⁴ B.L., MS. Locke, c. 20, ff. 48–9, 25 July, 1682.

5 Christie, op. cit., vol. II, p. 450, 27 Oct., 1682.

⁶ The Correspondence of John Locke and Edward Clarke (1927), ed. Benjamin Rand, London, p. 103, 7 Jan., 1683/4.

He also held forthright views on the prevention of nervous illness in women.¹

Idle and delicate women who haveing little business to take up their time and thoughts give way to their imaginations and phansys, have more longings & more marked & monstrous children than women either of strong mindes or constant imployment. Therefor the lazy dames of Citys are more subject to the inconveniencys than the strong country labourers. And the French more than the Canadiens as Sagand 1005 has observed. To women that are much liable to this it may prove a rational remedy to finde some constant imployment for them that may keepe them busy. J.L.

Whilst Locke was paying one of his regular visits to Clapham he heard of his patron's death in Holland. Shaftesbury was buried at Wimborne St. Giles, whither Locke and Thomas, who had introduced them nearly twenty years previously, made their melancholy journey: his journal contains only the cryptic entry, "E[arl] of Shaftesbury buried." Locke stayed on with Lady Shaftesbury for a few weeks; and then removed his belongings from Thanet House to Charles Goodall's in Warwick Lane. He was back in Oxford in June, visiting his friend Tyrrell on the way; but soon afterwards ceased to record his movements, as the disclosure of the Rye House Plot brought about a greater concern for public security in Oxford, where Sergeant Holloway now joined Prideaux in reporting his movements.

It is taken notice of in Oxford [wrote the Sergeant],² that from Mr. Locke's chamber in Christ Church, that was a great confidante if not Secretary to the late Earl of Shaftesbury, in a clandestine way several handbaskets of papers are carried to Mr. James Tyrell's house at Oakely, near Brill, in Buckinghamshire, about 7 miles from Oxford... Though Mr. Tyrell is [the] son of a very good man, Sir Timothy Tyrell (KT) yet he and Mr. Pawling are reported to be disaffected. It is thought convenient to make a search by a deputy Lieutenant at Oakely, but who is Lieutenant or deputy of the county I cannot say, and if you at the same time direct and send your Lord Lieutenant, or one of his deputies at Mr. Pawling's, and then if the Bishop of Oxford and Vice Chancellor then search Mr. Locke's chamber, it may conduce to His Majesty's service.

Locke was well aware that his long association with Shaftesbury exposed him to grave suspicion, if not danger of imprisonment, and he decided to seek freedom in Protestant Holland. He left to settle his affairs in the West Country, staying with Thomas on the way. He was there when Clarke³ consulted him about his wife's

¹ B.L., MS. Locke, c. 42, p. 182.

² C.S.P. Dom. (1683), p. 109, 13 July, 1683.

³ Rand, op. cit., pp. 93-4, 27 March, 1683.

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illness, for whom he suggested bleeding and purging, but had left for Wimborne St. Giles, when Thomas asked him to treat his sick wife.

I find by my sonne Will [wrote Thomas],¹ that his Master's humor is much changed and that whereas he was very kind to his scholler's before my Lord Shaftesbury's death he now beats them for little or no cause . . . Parthenice² hath a very bad cough and on bleeding fell into a loosenesse. If you can come to Salisbury your advice might much conduce to her life.

The same political tensions which frayed the schoolmaster's temper, also drove Locke out of England, and early in September he was safe in Rotterdam.

During these unsettled years, Locke never practised medicine in a regular way, although he treated many patients, and was obviously highly regarded by his colleagues: he remained a diligent student of medicine, rather than a practising physician. In addition to the medical notes in his journals, letters, and miscellaneous papers, many more are contained in three large commonplace books.3 One begins in 1681 with recipes and notes from his reading. Most of them are taken from Sydenham's works, with others from Boyle, Thomas, Barbeyrac, Goodall, and Gendron, together with extracts from the works of Sennert, Plater, van Helmont, and Bacon. Part of another notebook⁴ contains Locke's weather register from 1681 to the end of June 1683: the other half is full of miscellaneous notes, of which the following is a bizarre example:

Cancer Mammae⁵ D.W. Much afflicted with a wolf in her breast, for some time swaged the pain of her sore by batheing it with strong malt beer which it would suck in greedily as if some living creature. When she could come by noe beer shee made use of Rhum with which it was luld to sleepe. At last (to be rid of it all together) she put a quantity of Arsenick to the Rhum & batheing of it as formerly, she utterly destroyd it, and curd her self. But her kinde husband who sucked out the poyson as the sore was healing lost all his teeth, but without further danger or inconvenience. Josselyn p. 93. '72.

In spite of such occasional extravagant entries, Locke's commonplace books show that he was now more sceptical of medical theories: his interest in the iatrochemists had waned, and occasionally he criticized their works. Of van Helmont's book on fevers he writes:6 "Helmont elsewhere so intelligent is yet completely extravagent in his theorising", and of M. André's favourite acid-alkali theory he comments:7 "I feare his Doctrine wants proofs and that he does not always

¹ B.L., MS. Locke, c. 20, ff. 52-3, 31 May, 1683. ³ B.L., MS. Locke, f. 23; d. 9, c. 42.

⁵ *Ibid.*, f. 23, p. 64. ⁷ B.M., Add. MS. 15642, f. 151.

² Mrs. Thomas. 4 Ibid., d. 9.

6 Ibid., f. 7, p. 19.

reason clearly." Locke was beginning to find that the holistic theories of his youth broke down when probed with the stern rod of experience: this realization caused him to amass a great repository of empirical observations, and quickened his study into the aetiology of diseases in the spheres of epidemiology, and social medicine. In a third commonplace book¹ he drew up some important "articles of enquiry", and, had he been able to implement them, medicine would have been advanced by two centuries. This world-wide survey was planned to discover the influence on health of such varied factors as climate, diet, soil, occupation, weather, and the individual's age, sex, and constitution. His preliminary notes show that he was trying to explain the prevalence of goitres in Switzerland, dysentery in Ireland, malaria in Kent, and scurvy in Northern countries. He also sought the cause of the high incidence of palsies amongst plumbers and gilders, gout in males, and the variation in virulence of epidemic diseases.

Medicine and politics were not Locke's only interests. He studied theology; and between 1679 and 1680, wrote most of his *Two Treatises* of *Government*.² Several philosophical entries also appear in his journals which were later incorporated into his *Essay*. One passage, "On Knowledge",³ gives the essence of Locke's empiricism in an apt clinical analogy. He first defines two sorts of knowledge, general and particular, founded on different principles: "true ideas", and matter of fact or history; and then argues:

That the three angles of a triangle are equall to two right ones is infalibly true whether there be any such figure as a triangle existing in the world or noe, and it is true that it is everyman's duty to be just whether there be any such thing as a just man in the world or noe. But whether this course in publique or private affairs will succeed well, whether rhubarb will purge or Quinquina cure an ague is only known by experience, and there is but probability grounded upon experience or analogicall reasoning but noe certain knowledg or demonstration.

- ² Peter Laslett, op. cit. (1960), p. 35.
- ³ B.L., MS. Locke, f. 5, ff. 82-8.

¹ B.L., MS. Locke, c. 42, pp. 98–100.

CHAPTER VI

Journals (1679–1683) 1679¹

[Locke stayed at Thanet House, Lord Shaftesbury's London residence.]

Weds., 4 Jun. Saw with Mr. Romer when he was here at Mr. Boyles a limpid liquor as clear as rock water that turned skie colour only by admission of the aire. It began to change colour on the surface and so descended into the body of the liquor by blewish streaks.²

N. being sick of a fever bleeded and after that a jaundice appeard, The Apothecary that treated him gave hot medecins whereon followed a very violent diarrhoea. To stop this AE gave as much whey as would quench an equal thirst whereof he dranke 2 quarts and this stopd the loosenesse which proceeded from hot steams of the bloud empting it self into the guts. To give Laudanum in this case would kil.³ Q. Cure of Rheumatisme by a diet of whey.

Rx. Croc. grad. and Balsam of sulphur, 1 drachm each; Powdered liquorice, cooling confection of Tragacanth, Frankincense, 2 drachms each; Salt of amber, 1¹/₂ scruples; Make 30 pills. D.T.

Thurs., 12 June. Take Mustard seed unbruised a good spoonfull, swallow it whole in a litle beare. This stopd vomiting in one who was fallen into it by a surfit and the physitians could not stop it but gave him off. Lady Shaftesbury.

Take powder scuttle bone and tutty in equal parts. Blow them with a quill into the eye and it will take away any thing that grows in it. *ib*.

Take camomile and betany in equal quantities. Pound together, apply to the forehead between two cloths, as you weare a forehead cloth. This stoped the defluxion into the Duchess of Richmond's eyes which threatened them much after the smallpox.

By Dr. Turbervil's⁴ praescription.

Take 6 or 7 large onions. Scoop them out and put in a little saffron.

¹ B.M., Add. MS. 15642.

² Boyle used these colour dilution tests to illustrate his corpuscular philosophy.

³ This is an acute observation as the detoxication of morphia would be hindered in the liver of a jaundiced subject.

⁴ Daubigny Turberville, M.D. (Oxon.), of Oriel College, died at Salisbury in 1696, aged eighty-five. He was an expert oculist; Boyle and Pepys benefited from his advice.

Colour

Diarrhoea pp. 97-8

> Tussis p. 98

Vomitus p. 99

Oculi

Icterus p. 100 (Latin)

Roast by the fire. When cooked press out the juice. Take 3 spoonfulls for jaundice.

Take the complete herb Dove's Foot.¹ Up to $\frac{1}{2}$ spoonful of the powder of this taken mornings in a little claret; or take equal parts of Dove's Foot and waterfennel. Crush. Take half a spoonful every day in a suitable liquor for hernias; or take equal quantities of the powder of Dove's Foot and powder of red snailes in the same manner for hernia in an old man.

Take powder of gall nuts and cypress, powder of earthworms. Clean with a little Mastic. Make a Hernia plaster with some pitch, wax and goose fat. Mrs. Stringer.²

Frid., 20 Jun. Purge 2 or 3 days following then give assa foetida $\frac{1}{2}$ drachm m.v. 4 or 5 days. If assa foetida do not agree, as it happens to some, give still pp gr. 6 made into a pill with conserve of wormwood every morning for 20 days, drinking with a draught of wormwood wine or beare. Beware purging or clyster all this time. This cures hysterica and spleen. AE.

Drinking whey without eating or drinking anything else for 14 days together cured Rheumatisme. Aes.

Sat., 21 Jun. 3 or 4 gr. of sweet spirits of venus³ made of vitriol made [a] mad woman sleep and she waked sober next morning. ib.

Gather bellis major⁴ when in flower in July, dry it and take the powder in milk for a cough.

ib.

This he hath tried; it is a good wound hearb.

Frid., 27 June. Recd. of my Lady Percivall⁵ by the hands of Sir Robert Southwell⁶ ten shillings for money laid out for the Queen of Hungarys water for her.

Jul. 24. Rabil Water. Take 4 drachms of sublimate of vitriol and 8 ozs. of [spirits of wine]. Let it digest for 14 days. Then distill till it is dry. Keep and digest again for 48 hours; afterwards distill and save the rubicund liquor of Viganius.⁷

¹ Dove's Foot (Geranium columbinum vulgare) was also recommended for cleaning wounds, stopping bleeding, and easing the pain of colic. (The English Herbal of Physical Plants (1694), of John Pechey, p. 40 of 1951 ed.)

² The wife of Thomas Stringer, Shaftesbury's secretary, with whom Locke stayed in June at their house at Bexwells in Essex.

⁸ Venus is copper, a metal not much used in medicine. In these journals there is mention of essence of venus (10/8/80), balsam of venus (31/8/80), and the igneous element of venus is a major component of the Arcanum Universale (24/3/83).

⁴ The greater wild white daisy, recommended by Pechey, op. cit., for asthma, consumption, and difficulty in breathing.

⁵ Probably a relative of Peter Percivall, Shaftesbury's banker.

⁶ Sir Robert Southwell (1636-1702) was Envoy to Portugal in 1672, and Secretary of State for Ireland under William III. He was President of the Royal Society, 1690-5.

7 Joannes Franciscus Vigani wrote Medulla Chemiae in 1682.

Hernia p. 100 (Latin)

Hysterica

Hypochondria

Rheumatisme

Mania

Tussis

p. 123 (Latin)]

This is Monsieur's secret for wounds; common vitriol poured in water with an iron spoon is Butler's¹ Stone, if one is to believe Viganius.

Wed., Jul. 30. Lent Mr. Boyle Journal des Scavants, 14 Feb., 28 Feb., 7 Mar. '78.

Munday, Aug. 18. From London to Rochester 26. From Rochester to Sitingburn 11. To Lees Court. To Olantigh 7.

Found Mr. B's² sick in his stomach having taken a clyster some time before, and his pulse very quick soe that there was noe perfect afebrile and his tongue very white. About 8 p.m. his nose began to grow cold afterwards his fingers, followed by a coldnesse all over—a litle shaking, sicknesse, vomiting and all the other accidents of an ague.

Tuesday. Aug. 19. Hot and feavourish still and sick in his stomach at night, he having been vomited in the beginning, about 8. I gave him decoction C.P.³ which was repeated—it being made in claret wine boiled from $1\frac{1}{2}$ to I pint which alaid all the symptoms; took clearly away the sicknesse of the stomach, and his tongue was perfectly well only sour a little.

Wednesday, Aug. 20. Heat continued Wednesday early in the morning but continuing to take the decoction. His pulse stronger; tongue and stomach were all as one could wish.

About 4 or 5 p.m. he had a cold fit during which he was well in his stomach but when his hot fit came on he had soe violent a weight and oppression in his stomach that he could not lie still one moment; his pulse very quick and lowe and thus he continued all night.

Thurs., Aug. 21. And this morning a clyster of milke and sugar being injected it came away clear at first but afterwards gave him a large stool without relief. After this clyster his tongue which had continued moist all night grew dry and the oppression of his stomach continuing we tooke manae 3 ozs., boild it in I pint of milk and soe turnd it to a posset with small beare which being of a very agreeable taste we thought he might be able to take without offending his stomach, but he vomited it up which soe finding and to promote it there was put into it oxymel and a few drops of Vinum emeticum⁴ which gave him

¹ William Butler (1534–1617), of County Clare in Ireland was an alchemist greatly esteemed by James I. His claim to have discovered a stone, by means of which he cured the most dangerous diseases, was investigated by Sir Kenelm Digby.

² Caleb Banks.

³ Cortex peruviana, cinchona bark, from which quinine was isolated in 1820.

⁴ Vinum emeticum was made by letting wine stand in special cups made of an alloy of tin and antimony. The tartar of the wine then acted on the oxide of antimony which had formed on the inside of the cup. These cups were used by many generations of one family. Emetic tartar, a similar medicine, was invented by Adrian Mynsicht about 1630, but it was really little more than an up-to-date version of the Earl of Warwick's powder. Lapis Butler (Latin)

C.B. Fever

severall vomits, and dureing this night he had severall stools. This helpd away pretty well with the disorder of his stomach but there being remains enough of it to trouble him.

Frid., Aug. 22. In the morning we vomited him again with plaine posit drinke in large quantity and a feather which brought away some choler and very tough flegm in abundance which gave him perfect ease in his stomach and he had lesse of either that weight or burning that he complaind of before.

About 3 p.m. was given him by Dr. Jacob a draught of decoction of Cortex Peruvianus which settled his stomach perfectly and his tongue moist. About 7 or 8 p.m. without any previous cold, unlesse it were of the tip of his nose, he had a hot fit without any great sicknesse of stomach, his tongue moist. Moderate rest in the night; some small interuppted sweats.

Sat., Aug. 23, in the morning, and all other symptoms well except the pulses which continued still very quick and low as they had been from the very beginning of the disease except only Tuesday till the fit came. The inclination to sweat promoted with about 20 grains of Gascoigne's powder:1 which gave either through the inconcoction of the humors or the inquietude of the patient who could not be persuaded to lie still in his sweat. It amounted to noe great matter though the heat abatd and the pulse mended thereupon. In the evening he being troubled with a burning in his stomach which I suppose was occasioned by nothing but small beare which he dranke souring there. Dr. J. was again for vomiting him with posset drinke which was donne but with noe very good event, for though the pain of his stomach ceased yet it very much increased his heat set him into a burning with a drie tongue and jumping of the nerves, there was orderd also if he slept not before 12: theriacon of Andromachus 1/2 drachm and some perle juleb at intervalls upon which there followed noe rest but an increase of the drynesse of his tongue and convulsive movements in the fingers, hands and arms.

p. 138

Atheroma

Sund., Aug. 24. About day break, having from this hour of his taking the treacle drink nothing but cold barley water and that prety plentifuly, the symptoms abated. He lay quiet and had some sleeps and his tongue grew moist again.

Dr. Jacob told me that a miller he knew having a large wen on one

¹ Gascoigne's powder, or powder of black tips of crab's claws, was a very expensive compound, and brought large profits to those who prescribed and supplied it. The formula is printed in Latham's edition of the *Works of Sydenham* (vol. 1, p. xcviii). It contains pearls, crab's eyes, coral, amber, hartshorn, Oriental bezoar, powder of black tips of crab's claws. Mr. Slare, in a paper read to the Royal Society in 1714, claimed that as good results could be obtained simply by chalk and salt of wormwood.

JOURNALS (1679-1683)

side of his face was cured of it, and being asked by him how he was, told that he was bid to prick it with a sharpe thorne in the lower side of it and then from time to time to squeeze it which he did and soe wrung out of it, ever now and then, the matter it consisted of and thus brought it quite downe without any other trouble and that when he saw him the Miller did it before him and squeezed out a kinde of milky substance out of a litle hole which he had made and was at other times imperceptible in the dependent part. This Method the Dr. tried after with success upon others.

A woman brought very low by a quartan desired his assistance, he gave her powder of moss growing upon an oak, 1 drachm in sack after the end of the fit, which cured her quartan, which he has tried on others with the same success.

C.B. sweat by fits a great part of the day but without any relief. Drinesse of tongue and weakenesse and quickness of pulse returning as soon as the sweat was over.

Mund., Aug. 25. Take some Philandrium or marsh hemlock. Cut it up and boil it in claret wine. Take Carifil, part and apply it. It cures gangrene.

Dr. Jacob has had the experience of it more than once.

Take some Sium Aquaticum. Cook in white wine posset drinke. It gives present ease in a nephritical fit and brings away the gall.

Dr. Jacob confirmed by Mr. Thornhill¹ severall times tried on himself. vid. Sium Aquaticum apud Dodonaeum.²

After an inquiet night's rest and sicknesse there followed in the morning a sweat at noon, a perfect remission, and at night again an exacerbation.

Tuesday, Aug. 26. In the morning a generall sweat again and then an intermission. The blister that was drawn on Thursday last began now to heale; the melilote plaister upon his great complaining being changed into one of candle grease dropd into water.

Dr. Jacob cured a young man of a dropsy only by making him lye in bed for about 14 days or 20 days. For judgeing that it proceeded from the indigested serum of his bloud which by being uprooted out of the vessells into the habit of the body which increasing thus every day did cool and destroy the concotion of the bloud and so by degrees grew into a dangerous load. He therefore concluded that if he could keepe it within the veines it would there be

¹Locke met Mr. Henry Thornhill while staying at Olantigh in Kent during Caleb Banks's illness. There are two letters extant to Locke, from Henry Thornhill (1679) and F. Thornhill (1682).

² Rembert Dodoens (1518-85) wrote numerous books on systematic botany.

Quartana (Shorthand)

C.B. Fever

(Latin and Shorthand)

(Shorthand)

C.B. Fever

Vesicatoria p. 140

Hydrops

concocted and to this purpose with success ordered the patient to keep his bed and eat drying meals. In an old man that he tried this it succeeded not.

Dysentaria

Aparition

He told me also that he cur'd a woman in a violent dysentery, wherein she voided $\frac{1}{4}$ pint of bloud at a stool, by making a posset of sugar of Saturn¹ and ordering her to drink the posset and cat the curd which cured the dysentery, in an hower or two. This he hath also found successful in others.

Mr. [...] Jacob² of Merton Colledg in Oxford dying at Dr. Jacobs house in Canterbury. About a fort night after his death the Dr. (lying in the chamber where he died) was waken'd by a cold hand that griped him hard by the wrist. Lookeing up he saw the said Mr. Jacob by his bed side in his shirt, it being cleare moon shine from thence the Spectrum retir'd and sat him downe at a litle distance from the bed where he in a setled posture fixed his eyes on the Dr. and the Dr. on him; but doubting whether it might be a dream he shut his eyes concluding if it were a phansy he should see it as well with his eyes shut, but then he saw noe thing; opening them again he saw him still siting in the same place and posture and it was soe light of the moonshine, that he plainly saw his black whiskers which he had as in his life time turnd up, and to assure himself that he was awake he look'd about the roome and saw plainly severall things there very plainly all which he found in the same places in the morning. Having continued thus about 1/2 hour he turn'd away on the other side and soe lay without sleeping till the morning but heard or saw noe thing more.3

C.B. quiet rest all night.

Weds., Aug. 27. Sweat in the morning and a perfect intermission all day.

The next night he lay also without sleeping all night but nothing appear'd but he was heard to walk severall times in the house after but was never seen but once by his maid and an other woman siting on

² This refers to Henry Jacob (1608-52), a notable scholar and Fellow of Merton. During his last illness he retired to Canterbury where he was well cared for by Dr. William Jacob, who cured the gangrene in his foot, but soon after "a tumour broke out from one of his legs from which moisture did violently run forth".

³ The story of Dr. Jacob's ghost is told in a life of Henry Jacob by Anthony Wood (ed. Bliss, vol. III, p. 329). In a footnote Wood gives a similar account by Aubrey who had it from Dr. Jacob himself when he was Physician to Lord Teynhans, and was treating Aubrey's eldest son for a fever.

¹ The two lead compounds used by the ancients in medicine were ceruse, or white lead (carbonate and hydrate), and litharge (oxide). The preparation of sugar of saturn or sugar of lead was recommended by Basil Valentine. The general effect of lead is sedative. In the eighteenth century Goulard prescribed the acetate of lead because of its anti-catarrhal and astringent properties.

the back side on a wood pile where the maid affirm'd she saw him without knowing he had appear'd to the Dr.¹

The Dr. also once at [...²] near Rie where the said Mr. Jacob was borne felt something pull the clothes of the bed from him which he held fast, and the same has happened to him in other places.

He says that lome earth made into an oyntment with vinegar cures the shingles topice which he had tried.

And that one that made it his trade to cure mad men used to put cups of clay to their shaved heads.

C.B. well all night.

Thurs., Aug. 28. And this morning about 4 or 5 he eat 2 eggs within an hower after headach, pain in the neck, high pulse and heat, a disturb'd night.

Fri., Aug. 29. In the morning sweat and then intermission: a clyster one large stool, quiet and sound sleep in the evening. The night endifferent.

Sat., Aug. 30.³ Sleep from 8 till almost 12. After waking pulse somewhat quick, pain in the head and balls of the eyes, heavynesse without sleep.

Sund., Aug. 31. A gentle sweat in the morning which put an end to all the symptoms. Flesh very moderate at dinner which agreed well and a perfect afebrile all the rest of the day.

Aug. 31. Take [blood]. To the painful side apply a soothing and softening plaster. Every third or fourth day give up to 4 drachms of linseed oil. Pleurisy is very often cured by this method—failure is rare. Dr. Jacob.

¹ "Another night the maid going out of the house saw the said resemblance standing on a woodpile." Anthony Wood stated that he had these stories by second hand from Dr. Jacob, "who had averred their truth to Dr. Peter Moulin, Preb. of Canterbury", and also to others of note including Dr. Meric Casaubon. "Not long after this the cook maid going to the woodpile to fetch wood to dress supper, saw him standing in his shirt upon the woodpile. This account I had in a letter from Dr. Jacob (1673), relating to his life for Mr. Antony Wood, which is now in his hand."

² Blank in MS.

³ Dissatisfied with his patient's slow recovery Locke consulted Sydenham who replied on 30 Aug. (B.L., MS. Locke, c. 19, f. 167):

"That the exhibiting the Cortex hath not met with the same success as here I ascribe to the vomiting the patient; any evacuation whatsoever rendering the medicine ineffectual. I would advise that you give him a dram thereof, finely powdered and made up with syrup of oranges into a bole and every eighthe hour untill he hath taken an ounce drincking a draught of any wine that best likes him after it; and that he be allowed to eat and drink what best pleases his appetite, excepting onely fruit and all cold liquors. But when he shall have mist two or three fitts and hath strength I wish he were in London under my eye for a few days, provided it consist not with your occasions to be with him, in regard that somewhat is to be don that is a little nice in order to the preventing accidents that usually follow these things...."

Printed by Kenneth Dewhurst, "Sydenham's Letters to John Locke', Practitioner (1955), 175, 320.

p. 143

p. 143

p. 145 (Latin)

Take oil of distilled Tobacco. Wipe the ulcer clean and pour on 2 or 3 drops. This induces extremely painful vomiting but cures longstanding ulcers and indisposition, as Dr. Jacob found with two of his patients.

Query about Cancer?

Mond., Sept. 1. Flesh at dinner and a glass of claret. Some euphoria.

Frid., Sept. 5. Flesh every day, and haveing increased his wine to 3 glasses a day besides some cordialls as aq. Mirabilis¹ in milk water; he became much better soe that the two last nights he had noe manner of fit nor inquietude as formerly but rested very well, urina sanorum and his temper and pulse natural; his appetite good. Only today his pulse a litle quicker than ordinary but his temper good, noe sicknesse at all neither of head or stomach and though when he began to eat his appetite worse than the former days, yet his stomach easier in eating and the faintness he complain'd of before, lessened and when he rose to have his bed made which he did ever since he drank wine he had not his ordinary faintnesse.

When I waked this night I found myself something ill in my stomach but without any rigor or horror or any sense of cold.

Sat., Sept. 6. In the morning about 8 or 9 I began to fall into a sweat which without increasing the clothes I ordinarily had upon my bed or taking any thing but a litle warme small beere once or twice continued with great violence and a greivous pain in my head till about 8 or 9 at night and then it being gon off, I rose but when I was up I was very sick in my stomach and had an inclination to vomit. I then drank a litle sup of claret which gave me present releife and soe at 3 or 4 times taking the quantity of one glass of claret, it put an end to all my sickness, soe that, though I was hot and inquiet in the night, yet I was without pain or sickness.

Sund., Sept. 7. The next day and soe for 3 or 4 days after when ever I found my self faint or ill at my stomach I took a litle claret which presently relieved me and mended my pulse which was always very quick when I was ill at my stomach. There was this odde circumstance that dureing my sweating the night after and all the following day my pulses were extremely unequall sometimes beating, exceeding quick and then of a suddaine changing to a sober naturall stroke for a pretty many pulses and then running exceeding quick again and thus changing every minute. And this inequality, though something diminished, continued severall days after.

¹ An infusion of many herbs which first appeared in the London Pharmacopoeia (1650); see also Latham's edition of the Works of Sydenham, vol. 1, p. xcii.

Sweat J.L.

C.B.

Q. whether it were from any idiosyncracy of my pulse having some thing of this inequality even in the time of my health, or from the nature of the disease.

Q. whether this sweat were a crises of the distemper which was an epidemicall tertian very apt to run into a continued fever, which was all in this country, and as far as I heare all over England—because I found my self very apt to have a kinde of faintyness from my stomach that which they all complaind of. Or else whether it were a change at once of my bloud by this sweat into such a crasis as suited it to the constitution of the airs of this season and yeare.

The night after my sweat, as I remember or else dureing my sweat it self, I found an irregularity something like the strokes of a pulse but unequall and at uncertain distances but never fail'd to be severall times in a minute in that part of my left hand which lies along betwixt the little finger and the arme wrist and is the softest fleshiest part of the hand. This irregularity went off as my stomach and strength came to me and by Tuesday night left me quiet.

Q. whether this be from that sympathy between the hand and the stomach mention'd by Dr. Godfrey.

Tuesday, *Sept. 9.*¹ C.B. continued in his drinking his claret and eating flesh and every day recover'd strength and slept well all the last night; his tongue and urine naturall but his pulse now and then a litle quick which is ordinary to him in health.

Today he tooke a Clyster of milke and sugar which gave but one and that a figured stool he having not gon to stool since his last clyster which was the Friday seventh night before. But yet in all this time he suffered nothing by not going to stool, though 10 last days of the 12 he eat flesh every day, and towards the latter end plentifully enough, but his pulse, his temper, his tongue, his appetite, and sleep everyday sensibly mended.

¹ As Locke was still unhappy with his patient's progress he again wrote to Sydenham who replied on 6 September (B.L, MS. Locke, c. 19, f. 168): "Had you observed the counsell which I gave you your patient had by this time been free from the symptoms of dejection of appetite, weakness etc. which you mention. Nor can there be a more expeditious way thought upon to procure his health and your dismission than the giving the C. as I prescribed; and it must still be done for if he have his fitts with what else can you put them away? If he have not them, how else can you prevent their returne, which will certainly happen without the repeating of this medicine every week for two or three weeks longer—he having been reduced to so great a weakness of blood? You must not scruple the allowing him any sort of meat or drinck whatsoever that he desires and his owne pallate will be the best judge what is fit for him; but above all be sure not to use any evacuations of any kinde, and the longer he shall be bound the better it will be for him. This is all I could offer if he were my owne son; but why are you so unkinde to me as that knowing the great obligations I have to you to invite me by a promise of making some acknowledgement to give my opinion in this matter? You may command me in everything that you please and shall be obeyed without spoiling that friendship which ceases to be when it ceases to be gratuitous." Printed by Kenneth Dewhurst, "Sydenham's Letters to John Locke", *Practitioner* (1955), 175, 320.

Q. whether his great spiting be a degree of salivation dureing this time which began sometime before he began to eat flesh caried of the matter of the disease soe that he needed not any stools? Or whether in the cure of this disease where wine and corroborating are good and lessen the fever, evacuation by stool would not be hurtfull? Or perhaps both togeather. For after the taking this clyster his stomach was this day worse, his temper hotter and his pulse more out of order than it had been a day or two before and his head ached a litle which it had not donne for some days before. But after it he had a pretty good nights rest (though not soe good as the night before) which got all right again. Hot and out of order a litle in the afternoon.

Thurs., Sept. 11. I was taken again with my sweating fit which held me as before 12 howers but without any pain of the head or other sicknesse. I drank nothing but claret all this day which did well with me.

Sat., Sept. 13. C.B. growing worse and worse this day after taking C.P. 1 drachm, was hot and had a quick pulse and unquiet rest the first part of the night but Sun. 14 Sept. in the morning was very well and soe remaind all day.

Monday, Sept. 15. Take an egge and roast it hard, divide it in two and soe apply it hot to the jugulare vains binding it on very close. This stops vomiting when a vomit works too much. Mrs. Thornhill.

Frid., Sept. 19. "Entretiens sur l'Acide et sur l'alkali" by Fr. André,¹ began and ended about the same time, wherein he would make the Acid and Alkali to be the sole active principles of All bodys and their operations and indeed the Acids to be the specifying principle. And that all sulphurs as brimstone oyles, spirits of wine, etc. to be acids invelopd and that gold particularly abounds in sulphur. But I feare his Doctrine wants proofs and that he does not always reason clearly. He has two or 3 very good experiments about inks, v.p., 14:20:74:58 95:111:112:122:196. 8° Paris, '77, 205 pp.

Sat., Sept. 20. When a fat man galls himself with walking leaves of wild tansy put on the affected part are a sovereign remedy.

Sund., Sept. 21. C.B. continueing from his last taking of C.P. as it were at a stay, and his stomach not good. I gave him this morning C.P. 1 drachm, upon which he found his stomach better.

Monday, 22 Sept. And this morning again 1 drachm and another drachm in the afternoon upon which he mended exceedingly and his appetite came as well as might be et convaluit.

¹ The full title of Fr. André's book continues, "in which are examined Mr. Boyle's objections to his principles". André belongs to the iatrochemical school.

J.L.

Vomitus p. 151

André (Shorthand)

(French)

JOURNALS (1679-1683)

Thurs., 25 Sept. He took a glasse of the decoction of C. which made him for sometime sick in his stomach but it passed over. Q. whether it were that the decoction being made in wine the boyling had taken away all the spirits of the wine (for when ever he tooke it in powder he drank a glasse of claret after it) or else from the illness of the tastes.

Frid., Sept. 26. N., Mr. Thornhill's gardener, had had for about a month or 6 weeks a quartan his last fit took him Thursday last at 5 p.m. The next morning I gave him pulveris regalis¹ made up with syrup of July flowers² 1 drachm and in the afternoon as much. The next day 3 drachms at the three usual times during the day, and today 3 drachms at 4 p.m. and to each dose of 3 or 4 drachms I gave him a glass of infusion of the same powder in claret wine. He had noe fit nor symptom and soe continued perfectly well till the midle of November, but afterwards his fits returned.

N. of Wye who had been sick of the fever of this years constitution from Sunday last when he was first taken and had been continued ever since without any visible intermission with a great looseness and sickness in his stomach and vomiting of all he took, sweating sometimes but without releif, a great pain in his head and not two howers sleep in these 4 days when I came to him. I found his pulse quick and weak and his tongue dry with the other symptoms. I orderd him presently to take whey as much as he would which he was glad of. Complaining of great heat and drought inside the stomach. He drank this night about a bottle of whey which gave him abundance of stools but gave him great ease and allaid the internall heat and pain of his head and in the afternoon when I saw him his pulse and temper were good and his tongue moist and continued to take whey and nothing else 48 howers which quite broke his fever and brought it to an intermittancy but without any cold fits or regularity of time but he had perfect intervalls of good temper and pulse but complain'd of a weaknesse in his head and a returne sometimes of internall heat.

Mond., Sept. 29. Rx: Water of borage, balm, penny-royal, beanpod, black cherry, unripe walnuts, saxifrage and purslane, of each 3 spoonfulls; mint, 2 spoonfulls or a little less; syrup of balm, cloves, cowslips, violets, maidenhair and peony flowers, of each 3 spoonfulls; roots of paeony, 2 drachms. p. 154

Quartan pp. 154-5

(Shorthand)

Febris N.

(Shorthand)

Epilepsia pp. 157-8 (Latin)

¹ Probably a preparation of one of the compounds of gold which had been known from remote antiquity. Called rex metallorum by the alchemists. Powder of gold was prepared by rubbing leaf gold with potassium sulphate and washing in boiling water to remove the sulphate.

² July flowers (caryophylus) are recommended by Pechey, op. cit., p. 63 as being "cephalick & cordial".

Make a juleb. Take three days before and after the conjunction and opposition of the moon. A certain cure for epilepsy in infants. Mrs. Thornhill who had it from Mrs. Cooper.

Powder of tea leaves, 1 drachm given in sack after fit cures tertian or quartan. Dr. Jacob.

[Locke returned to London on 2 October.]

Frid., Oct. 10. Mathews's pills¹ is a good remedy to cure shattered agues. The Hellebor in them serves to irritate the bloud into a sweat. AE's dose from gr. 10 to 15.

Sat., Oct. 11. First take [blood]. Then purge 5 or 6 successive days. A cure for violent hooping cough in children. This cough is caused by the blood which irritates the lungs and gives rise to convulsions. AEs.

Rx. 3 ozs. of Mana. Cook into a posset. After each stool take 1 spoonful of juice of lemon to aid the working. ib.

Peruvian bark is the best hysteric.

Manae 2 ozs. I have known give 12 stools.

Geloofs are a people 4 or 500 miles or more up the river Gambia. They are a very large people much bigger than the English and have the best horses in the World. A stout and warlike people but know not the use of guns but are admirable horse men. Salt is the commodity they purchase almost at any rate. The English that went up the river in a pinace about 400 miles (where they came down) could not go any higher, being offended by the muskid smell and taste they found in the river there abouts ariseing from the great number of Crocodiles inhabiting it. Mr. Boyle.

The solution of bones though it be wholesome enough yet he that eats it hath observed it to binde him very much. ib.

Take I scruple of spermaceti,² dissolve in Canary wine and give to the infant. If it purges more than 5 times lessen the dose, if less than 4 times increase it and repeat several times. It cures rickets.

Lady Chicheley.

ib.

Spirit vitriolum drank in water cures internall wounds by its astringency. AEs.

Thurs., 16 Oct. The purgeing beans of Jamaica whereof 3 or 4 are a dose have all their virtue in a litle fluid that lies between the lobes.

Mr. Boyle.

² Spermaceti, a waxy substance drawn from the head of the sperm whale, was highly valued for inward bruises, and also for preventing pitting in smallpox.

Quartan Shorthand)

Febris (Shorthand)

Hooping cough (Latin)

Purgatio p. 159 (Latin)

Hysterica p. 160 (Shorthand)

Geloofs p. 161

Astringes

Rachitis (Latin)

Vulnus

Purgans

¹ Matthew's pills, or pilulae pacificae, were a noted nostrum, sold at first by a pharmacist Matthew, according to a formula supplied by a physician Starkey. On his death-bed Starkey disclosed a better recipe. They were included in the *London Pharmacopoeia* in 1746 as opium pills or compound soap pills. The original formula was opium, black hellebore, soap of tartar, liquorice, and saffron.

JOURNALS (1679-1683)

Wild Tansie (Argentine)¹ cures the galling of fat men in walking. Toynard, 9 Sept. '79, p. 1.

Sat. 18 Oct. Burn frankincense in a roome and it will drive out all the gnats. Col. Diggs.²

N.B. Peruvian bark does not sometimes neither in fevers nor hysterick cure. You must then as in other hystericks purge to make way for it. AEs.

Anonyt with ung. mercury on the limbs 3 times and it cures pox but be sure not to purge nor bleed before nor after. If [bleeding] or purging precedes it weakens the body so that it can not expell mercury. If you purge or bleed after it brings back the symptoms and spoyls the cure. If there is gonorrhoea with pox you must anonyt and treat gonorrhoea. Hinds salve. AEs.

Mrs. Duke³ of a phlegmatique and tender constitution often times conceived but in the 10th weeks always miscaried of a false conception. She had tried the aire and physitians of France; the waters and physitians of England for many years but all in vain. At last consulting Dr.S.⁴ he concluded those false conceptions to proceed from want of spirits and coldnesse in the habit and womb which he thought were to be warmed and strengthend to which purpose he gave her 2 spoonfuls in the morning of his grand cordiall which she has now taken these many months and haveing since conceived is now in the 8th or 9th month of her being with child. Elixir Alexipharmacum.⁵

Ad strumas. First, [bleed]. Second, purge. Then take diet drink in ale of 15 or 20 good herbs and then at a good distance [bleed] and purge again and then diet drink again for a good while. AE.

They will cure in children if not in men.

Rx: Tips of absynth, lily of the valley, golden rod, white houndstongue, germander, ground pine, lesser centaury, St. John's wort, tansy, chamomile, meadowsweet; of each I handfull; Safron 8 ozs.

Infuse them in as much [spirits of wine] as required, for 10 or 14 days or more as says Mr. N. B. that as much spirits of wine as required put them into vessell and cram it as full of the ingredients as you can and then fill vessell with as much [spirit of wine] as it will hold. When you find it hath drawn full to tincture and is thoroughly impregnated with

⁴ Sydenham.

⁵ An antidote to a poison.

Intertrigo

Gnats p. 164 (French)

Febris Venerea Strumas p. 165 (Shorthand)

Mola

Struma pp. 167–8 (Shorthand)

¹ The wild tansy (*Tanacetum*) was used for curing renal calculus and the worms. Here Locke probably means the silver weed (*Argentina*).

² "M. Diggs, a person of quality living near Canterbury" (Locke to Thoynard, 29 Oct., 79).

³ Richard Duke was brother-in-law to Sir Walter Yonge, one of Shaftesbury's old lieutenants.

10 or 14 days then draw it into large bottles which are well stopd and so keep it. The longer it is kept the better.

Memo. that secret of this great brandial is to have flowers of 10 or 12 sorts of best herbs and impregnate with them the weakest [spirits of wine] you can get. Any other liquor that will keep it without putrifying or fermenting would do better than [spirits of wine]. There must be opium before or else after. It will do nothing but [...¹] medicin.

AEs: to 80 handfuls of ingredients add 8 gallons of menstruum v.p. 178.

This is admirable remedy in hystericks or fluor albus and others [...¹] weakness in hystericks. Give in it crocus graduatus ad gr. xx. A wound drinke will cure kings evil in children but not in men.

Mon., Nov. 3. Delivered to Mr. Bromwich² of Crocus grad. about an 1 oz. and 4 ozs. at 1s. per drachm.

Sat., Nov. 15.³ The constitution of this Autumn was intermittent and quarternary though many of the fevers in the beginning were continued and severall made soe by ill management, but might be cured of agues or intermittents, being first procured by drinking whey 2 or 3 days.

In September severall children had hooping coughs. After October noe more ordinary agues but such as return'd. In November all the world at London had violent coughs without spiting which were from hot strains irritating the lungs. Whey taken without anything else 2 or 3 days cured. Or [bleeding] with 3 days purging.

Sat., Nov. 22. Diacodium⁴ does not stop women's courses as opium does. So if laudanum must be given during menstruation or the passing of the afterbirth assafoetida should be added so as not to impede a healthy cleansing. As an extra precaution in these cases, along with the diacodium you can give a mixture of bryony water ($\frac{1}{2}$ oz. diluted in water).

My Lady Cooper upon wearing of parfumed gloves but a few howers had all her hands and armes as far as they reached swollen and angrey the same night as if it had bin an Erysipelas. This redness and heat lasted severall days after with a great itching after eating. This always happens to her on the like occasion.

N.B. that opium mentioned before to be Elixir Alexipharmacum,

³ "In Nov. 79 at London almost everybody had a virulent cough without Rheum or deflection & it was as I suppose of the nature of the hooping cough in children for it was very violent without expectoration or very litle. It was cured as hooping cough by [bleeding], purgeing three times or by the whey drink." (B.L., MS. Locke, c. 42, p. 264.)

⁴ Diacodium is another name for syrup of meconium, a preparation of opium, the recipe for which is in Dioscorides.

Hysterica Fluor albus. Struma

Epidemia p. 203

(Shorthand)

(Shorthand)

p. 177 (Latin)

Idiosyncrasia p. 178

Herbaceum Rheumatism Opium p. 179 (Shorthand)

¹ Indecipherable.

² A London druggist with whom Locke frequently dealt.

p. 167, is made thus: Rx. flowers of red poppy q.s. Put them together in a shady or moyst place till they begin to dissolve or petrifie, then press out the juice and reduce it to rot in the sun. v.p. 181.

Rheumatismes sometimes follow the agues of this constitution which is to be cured as agues themselves with cortex Peru.

AEs. gave to Mrs. Seydamor's old women, gr. 50 croc. gr.1 in the morning for several days together in a hystericall disorder.

When croc. grad. flies up to the head and creates a disorder there, you must forbear it. It is not a fit remedy for such persons. AEs.

Wed., Nov. 26. Mr. Bromwich bought at my desire Bezoard 2 ozs. which Dr. Thomas² sent to me for a minerale.

Thursd., Nov. 27. The bills of mortality this week increased 222 as that of the week before 213, in all 435 the last fortnight. It is an increase scarce ever known out of times of pestilentiall diseases. The Epidemical disease that came in at this time and caused this mortality was a dry but violent cough which produced in many a peripneumonia.

Cure with (1) [bleeding], (2) blistering ointment, (3) thrice purging. AEs.

Mond., Dec. 1. Way to make elixir Alexipharmacum: Take flowers above mentioned. Drye off from them the external moisture or as I imagin til they begin to wither. Then beat them in a stone mortar and so make them up in balls as big as one's fist, which wrap up in linen cloth and so put them to dry in the sun till they be dry. Fain to keep without moulding but the red poppy is not to be pounded but to be placed in a wooden vessel till it begin to turn to mucilage which will be in 3 or 4 days and then make them up into balls as with the other flowers and so put them with the other sorts into the [spirits of wine]. AEs.

Hysterica has 5 remedies that cure it, but which will do is hard to know before trials; one commonly doing hurt where another does good. First assa foetida without any addition up to 1 drachm in the morning for several days. It must be the solid and good, not the greasy, for that is apt to make the patient vomit but some stomachs will not beare that neither.

¹ The term crocus was applied to various metallic combinations of a saffron colour, e.g. crocus martis=rust of iron; crocus metallorum=liver of antimony; crocus veneris=a copper oxide; crocus graduatus (often abbreviated to cr. gr.) is a favourite with Locke.

^a B.L., MS. Locke, c. 20, ff. 13–14, 15 Nov., 1679. ^b Locke collected details on all aspects of epidemics. In his notebook (MS. Locke, c. 42, p. 155) he wrote: "There is a hospital at Oudenard where the sick are served by Nuns & it is observed that the Novices when they first come, if they breakfast a mornings before they goe their service in the Hospital are not there long before they grow sick whereas those than can be perswaded to forbeare eating & drinkeing before they goe amongst the Mr. Thoynard. sick scape better.

Epidemica⁸ p. 181

> Methodus medendi (Latin)

Elixir 217 p. 181 (Shorthand)

Hysterica (Shorthand)

Secondly, still pp. gr. x in the morning in thickened juice of absynth. N.B. that you must give neither purging nor exercise with it. The best preparation is filings of needles.

Thirdly, crocus graduatus, but that flies up to the head in some and so must be forborne.

Fourthly, wormwood beer and other strong liquors, but this also fails in some.

Fifthly, cortex Peru, which is an excellent hysteric, $\frac{1}{2}$ drachm in the morning.

Assa foetida proves wholly successful in rampant. N.B. that it is usually best to use [bleeding] and purging afterwards of any of this to make way for them, for want of this often makes them unsuccessful.

[Bleeding] before the coming out of the smallpox commonly makes them flux. Purgeing makes them destinat. AE.

Mond., Dec. 8. Rx. some [spirits of tartar]. Dissolve by deliqium 4 or 5 times till it is fairly purified. Put this salt thus purified into a good crucible and keep it steeping over a fierce flame in a wind furnace until it is reduced to a fourth or a fifth. From the crucible pour it into a hot mortar, and as soon as it sets reduce it to a powder and put it in a jar. The whole process is to be done in such a way and the salt kept at such a heat that not a drop of atmospheric moisture is absorbed. When the salt is in the bottle pour on alcohol of wine many times rectified by [spirits of tartar] and keep it on hot ashes gently seething for 24 hours, taking particular care that the heat is not increased lest too violent seething cause the liquid to jump out. By this process you will obtain [spirits of wine] impregnated with a rosy tincture which you can abstract by distillation. Put the salt that remains at the bottom in a retort and heat it, extracting a pungent spirit. This is very useful to diminish the sharpness of the humours in arthritis, etc.

Dr. D. Cox.1

AE.

Take 10 grains of highly sublimated Calomel.² Give thrice a day in some opiate to prevent purging through the stomach. Repeat as often as necessary, even increasing the dose to 20 grains if need be. This method of inducing salivation is more easily controlled so as to produce the required flow; and, so long as you add the opiates to stop the flux of the stomach, it never fails. If occasionally a flux or

Arthritis p. 183 (Latin)

Venerea (Latin)

¹ Dr. Daniel Coxe (1639-1729/30) graduated M.D. (Cambridge) in 1669 and was admitted an Honorary Fellow of the College of Physicians in 1680. He was one of Boyle's literary executors.

² Calomel, a mild form of mercurial, was introduced by Sir T. de Mayerne about 1608. It was also called mercurial panacea, manna of the metals, and sweet sublimate. Another name was mineral panchymagogon, or medicine to purify all humours.

griping of the stomach causes trouble recourse must be had to clysters and opiates. *ib.*

Wed. Dec. 17. Paid Mr. Bromwich for:-

Cortex Peruvianum, ¼ lb.		0-18-00
Bezoar minerale, 2 ozs.		0-12-00
Marisol's narrative		0- 2- 6
		1-12- 6

The cortex and bezoard were for Dr. Thomas.¹

Tues. Dec. 23. Mr. Birches daughter being much troubled with the stone whereof she had voided more and bigger than ever I had seen in soe young a person found the greatest prevension in boyling wood of sassafras 8 ozs., feverfew 2 handfulls, in a gallon of water and drinking of this $\frac{1}{4}$ pint in the morning.

[Locke left London and spent Christmas in Oxford.]

16802

Thursd., 1 Jan., 80. A horse that will not stand still to be shoed, knock gently with a hammer on his forehead and continue to doe soe whilst he is shoeing and he will stand still. Mr. Fairfax.³

Sunday Jan. 18. Rx. I drachm of pulvis pyrii. Pulverize it, and take in 3 or 4 spoonfuls of milk. It cures the most violent coughs if taken in the mornings three times. Mrs. Pocock.⁴

Thursd. Jan. 29. I was called to Pricket⁵ who about a fortnight since had had an ague. I found him very ill and weake but the symptom that most afflicted him was a perpetuall belching or cholera sicca. He had had a feaver sometime before, which ended in this cholera sicca and the fever had been of the intermittent family. I orderd him to take a large quantity of posset drinke and soe charging his stomach to vomit severall times, and also at the same time to take clysters of the same liquor which he did. He dranke 7 quarts of posset drink and soe provoked many vomits and also tooke 3 clysters. This eased and removed his breaking winde upwards and gave him vent downwards. And soe giveing him a paregorique with 1¹/₂ scruple of Laudanum he rested well

¹ Requested by Thomas in his letter to Locke of 25 November, 1679 (B.L., MS. Locke, c. 20, f. 15).

² B.L., MS. Locke, f. 4.

³ An Oxford apothecary from whom Locke frequently bought medicines.

⁴ Probably the mother of Edward Pocock, Junior, who was Locke's pupil at Christ Church, and later became Canon of Salisbury. His father was Professor of Hebrew at Oxford.

⁵ Probably a college servant.

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Thomas

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(Latin)

Cholera sicca 5-7

that night and had an abatement of all symptoms and to it his tongue which was drie before became moist. The next day he cat only water gruell and drank barley water and was pretty well only the night following he had a hot fit or two upon which I gave him pil regules 3 drachms per day for some days and after a day or two beare instead of barley water and two or 3 times a day a litle wine as his stomach which was extremely weake would beare it and soe gently as his stomach would beare it a litle flesh etc. So he recovered.

N.B. that the way to make weake stomachs have a desire of flesh is to make them eat it a litle at first for when they have been brought very low they will soone begin to desire it of them selves.

Sund. Feb. 1. Hard frost and the weather glas mentioned Jan. 24 was now at 12 at 29°.1

[Locke left Oxford on 3 February and stayed in Salisbury with Dr. Thomas from the 4th to the 12th.]

Frid. Feb. 6. For kankers or apthae touch them with Aq. viridis Hartmanni and it cures them presently. D. Thomas. Rx. 1 handful of the central cortex of buckthorn. Cook in 1 pint of

milk. Let the patient take it. It cures or wards off hydrophobia in those ib. bitten by a mad dog.

Sat. Feb. 7. "The American physitian" By William Hughes, 12° London '72.2

See in Grulingii Florilegium Chymicum,3 p. 5, C. 15. A way of making a purge of noe tast by distilling [water] from purging things. An excellent way of preparing purgatives if it will doe and the vertues will come over without the tast.

In Quinsys and all inflammations of the throat barly water etc. made very sharp with [spirits of vitriol] syringed will cure them. D.T.

Rx. I scruple of Essence of Iron in I spoonful of juice of lemon [each morning] for several days together. This restores diminished or ib. suppressed menstruation.

Same effect in many patients from Diascordium, Theriaca and similar restoratives and tonics employed for a number of days. A cure for apoplexy or paralysis: first [bleeding], then a purge, continued over a ib. large period.

¹ On 24 January the glass "was at 12 a clock at 39^o". ² William Hughes wrote *The Compleat Vineyard* (1665) London, and *The American Physitian*; "Or a treatise of the roots, plants, trees, shrubs, fruit, herbs, etc. growing in the English Plantations in America; together with a discourse of the Cacoa-nut Tree . . . with all the ways of making chocolate"

³ Joannes Gerhardus Gruelingius, Florilegium Hippocrateo-Galeno-Chymicum Novum (1645), Leipzig. This was a prelude to his book on Practical Medicine (1684), Leipzig. He also wrote a criticism of F. Hoffman's book on the Cinnabar of Antimony.

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Aphthae p. 12

Hydrophobia p. 13 (Latin)

Hughes p. 13

Cartharticum p. 13

Angina p. 13

Menstrua suppressa p. 14 (Latin)

Tuesd. Feb. 10. Mr. Wall¹ writes me word that he had received Magnol's Botanicum Monspeliense of Jacob Bobert.² In feavers that throw off the matter on the lungs purgeing cures.

If a diarrhoea happen in a fever give whey copiously and it will allay the hot steames that vent this way and safely stop the flux. D.T.

Crocus graduatus and balsam of sulphur, made up with frankincense and mastick into pills soe as to take of crocus 2 graines morning and evening cures all coughs. *ib*.

Wed. Feb. 11. Pound green wormwood and put it in a vessel and there let it ferment. Distill it and you shall have plenty of oyle. [Bleeding] and purging kills, and crocus grad. cures epilepsy. D.T.

Thursd. Feb. 12. From Salisbury to Upton Lovell 12 M. Rx. Chalk in a sufficient quantity of milk; this stops diarrhoeas, fluor albus and cures heartburn. D.T.

[Locke stayed at Sutton Court, Somerset with his cousins, the Strattons, from 13 February to 6 April.]

Thursd. Feb. 19. To cure a founder; pare the horses hoofs very close and tack on shoes wide enough and soe let him goe to grasse in a moist ground, repeat the pareing close 3 or 4 times and it will cure.

D.T.

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Wed. Feb. 25. Rx. Pound some Millipedes in a lead mortar into an ointment, with which anoint the ulcerated cancer. Millipedes may also be drunk squashed in a suitable vehicle. Mrs. Foxcrosse cured an ulcerated cancer by this method and has even heard of the cure of a cancerous breast on which it had been decided to operate. E. Grig.³

Rx. snow water, steep swabs in it and apply them moist to the burned part with some hop flowers on top. Continue this so that the place does not dry for 12 hours or more, until all pain and heat ceases; swellings and scars are avoided by this treatment. But the application must be made promptly. If snow water be not to be had yeast alone will do the same thing. Q. whether spring water will doe the same with snow water?

For a horse with glander give him once in 2 or 3 days about the quantity of a nutmeg of tar. Put it with a stick into his mouth and soe rubing it on some part of the inside of his mouth let him lick it in.

R. Haroll.⁴

¹ George Wall of Worcester College, Locke's lifelong friend.

² The gardener at the Physic Garden in Oxford.

⁸ Locke's cousin and the wife of Thomas Grigg, sometime Fellow of Trinity College, Oxford, and later Prebendary of St. Paul's. Locke attended him in his last illness in 1670. Mrs. Grigg was then travelling on the Continent as a governess. p. 15

(Shorthand)

p. 19 (Latin)

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p. 21 (Latin)

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⁴ Robert Haroll was one of Locke's tenants in Somerset. His wife Anne was treated by Locke: see the entries for 2 and 4 April.

Thursd. Mar. 4. To Orcherly 11 M. [Locke went to stay with Mr. Champnis.]¹

Frid. Mar. 5. Sweating with Crocus gr. $[...^2]$ and [spirits of hartshorn] gr. $[...^2]$ carys off a fit of the gout in 24 hrs. D.T.

In weaknesse of the bloud after the gout or a fever soe that you have pains and weaknesse. Theriaca or other analeptiks will not restore but after a long time. But sweating the patient 3 or 4 times will advance his recovery a great deale sooner and faster and after that analeptiks are much more effectuall.

In the gout that falls on stomach, breast or head or any of the viscera give Theriac of Andromachus and it cures for it is noe thing but a weaknesse of the bloud to be strengthened and then the viscera skape. ib.

In the Aguish constitution of this yeare some of the Agues since Christmas being disordered the sick had constant sweating, some of them selves, some after hot and sweating remedys had been given; these sweats caried not off the disease though it hinderd the feaverish distemper from geting into a great heat but ill colour of the tongue and a dayly increase of weaknesse shewd disorder continued still within. [Bleeding] and whey alone 2 or 3 days cured it. This [method] serveing in Diarrheas and Sweatings.

Q. whether they doe not argue a disorder and agitation of the bloud which haveing a vent comes not to a great inflammation. Q. also whether the same [method] would not be suitable in fevers where there is salivation since in those hot medicines stop the salivation and commonly kill?

For longstanding lacrimations take I drachm of chalk in a drink of milk.

For [venereal] disease give some [sublimate of mercury dulcis], continue till the gums swell; purge several times, then give [sublimate of mercury dulcis]. By this [method] Barton,³ a surgeon of London, cures venereal disease, but to prepare the patient if he be leane he gives him first strong nourishing broths made with the decoction of the woods which is an effectuall way to get flesh.

Rx. Confection of Hamech⁴ and Cariocost., each I oz., mustard seed I lb., white wine I pint, infuse for 24 hours. One pint every day afterwards and strained through a sive. D.T. has used it for the dropsy. Q. the explanation?

¹ Probably John Champney of Orchardleigh in Somerset who in 1695 became Sheriff of the County.

² Blank in MS.

³ His name does not appear in Medical Practitioners in the Diocese of London Licensed under Act 3, Henry VIII. c. 11. (1935) by J. Harvey Bloom and R. R. James. Probably an unlicensed practitioner.

* A purgative favoured by Avicenna.

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(Latin and English)

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Thursd. Mar. 11. Rx. Leaves of Masterwort Junip Mugwort Germander Fetherfue Hogs fennell Nep Smalage Spignel Saxifrage Dogs mercury Wild marjoram Arum Lavender Cost. Mary. Cretan Dittany Centaury I handful of each. Roots of Bistort Galenga I oz. of each. Seeds of Dill Leaves of Rosemary Balme Scordium Savin Time Sage Reu Male peony Penny Royal Clary Wormwood Angelica Roots of Elecampane I oz. of each. Flowers of Lavender Marigold I handful of each. Seeds of Carrot

Rocket

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1 oz. of each. Castor 3 drachms. Berries of Laurel Juniper 1 oz. of each.

D.

D. T.

Infuse in Canary or white wine and make a distillation. Most successful as an Aqua Dialochia to facilitate childbirth.

Thurs. Mar. 11. Pil. Bechicae.1

Rx: Crocus graduates, I drachm Rubin of [Sulphur],² 2 drachms Solution of amber, 2 scruples Powder of liquorice 2 drachms { Cooling confection of tragacanth of each { Frankincense. Make 120 pills.

Sat. Mar. 20. I paid Mr. Hipposly for bleeding me twise 105.

Mond. Mar. 22. By eating very litle flesh but abundance of hearbs and drinkeing noething but very well defecated beare Mr. Welsted is eased of the gout and the stone that formerly tormented him.

He keeps small beare a 12 months where by it becomes as limpid and cleare as possible. The proportion of malt is 4 bushels to an hogs head but double or treble the quantity of hops usuall. This bitternesse he finds agreeable to his stomach.

Q. whether it would not make wholsomer drinke to brew it thus with heath. J.L.

To brew well he tells me that water must boile 3 howers and the wort one and for an instance that boyling the water by itself makes a great alteration in it, he says that to make good coffee the water must be boiled eight howers before the coffee be put into it which need then but a litle boyling after they are mixed. But if the water be not thus boiled before the coffee will have a raw tast and not soe good.

Q. whether this boyleing of water does not separate some earthy parts since he tells me that in the pots where water uses to be boiled thus continually a hard substance will be separated out of the water and fasten it self to the inside of the pot. Q. whether it would not be better to boile water about an hower and then set it to coole in quiet, and see what feces would subside? At least trie the experiment. J.L.

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¹ A Bechick medicine was one "good against Coughs, Colds, Asthmas and tickling Rhumes". Matthiolus, Compendium de Plantis, p. 813.

² Rubin of sulphur was a balsam made of sulphur and turpentine. (London Pharmacopoeia, p. 390.)

To make good ale that will keepe without hops boyle your water 3 howers as above said, then boile the wort one hower, set it to coole, decant the cleare, boile it again an other hower, set it to coole and subside and again decant the cleare. This afterwards set to work will make excellent ale and keepe a long time. Mr. Welsted.

He put an eg into a botle of sidre and stopt it up again close. This put it into a very strong fermentation. *ib*.

A bath of wormwood and Cummin seeds he has found very usefull to children in the Rickets and also olive oil wherein Cumin seeds had been infused to anoynt the joynte and backs etc. to give passage to the Spirit. As also lime water inwardly and outwardly is very usefull in the rickets as he has found by experience. And a decoction of Guaiacum made in it has great vertues.

In Cornwall they use the [distilled] water of Cardamine very much in convulsion fits. Mr. Westeed [sic.]

Tuesd. 30 Mar. Mr. Cole of Bristoll amongst many other things that he showed me, shewd me the seeds of ferne and Lunaria which are either of them above an 100 times lesse than small sand both neare of a size and shape which is roundish. But the one viz Lunaria white the other brownish. He at the same time shewd me the seeds of purple mosse or a sort of capillary 20 or 40 times smaller than either of the other and when you open the litle pods wherein it lies it flies away and mounts faster than the smoke of tobaco and soe may be concluded smaller than the parts of the smoke.

He gave me a tast of the infusion of severall hot hearbs flowers seeds roots and spices in Brandy which always gives ease in the Colik and pains of the Stomach. And told me that Petroselinum Macedonicum alias Silon alone would doe it and never faild.

Wed. 31 Mar. Rx. Common washing soap 4 ozs., gunpowder 2 ozs., make an unguent. This cures the grease or Scabby heels in horses.

James King.1

Frid. April 2. Recd. of Anne Hasol 5^s. She was cured formerly of violent hysterical fits that had troubled her many years with powder of Corall in white wine.

Sund. Apr. 4. Recd. of Anne Hasler 17⁵ 6^d. When she was about 20 years old she by a fright was put into Epileptical fits with which she was greivously and frequently tormented severall years. At last she tooke [15 grains of powdered coral every other day] in a draught of white wine for 6 weeks togeather. This perfectly curd her soe that she had not a fit in a 12 month only when she found her self melancholy

¹ Probably a relative of Locke's cousin Peter King who inherited his estate.

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she took it for prevension. Afterwards she maried, had a child, was not well cleansed, nor her courses never well after, soe that she grew very hystericall which fild her with extraordinary pains in her bowels and wandering pains of the trunk but most in the bowels with trances etc. Those fits returned very frequent and lasted usually 3 days and she was more of her time in than out of paine. Brandy in them gave her some ease. She was commonly loose in them.

Rx. some pul. Regii and Syrup of cloves. Make an electuary. Take some the size of a nut thrice a day in a spoonful of [spirits of wine] with a draught of Spanish wine. Take 12 gr. of croc. grad. in sugar at bedtime. This at first takeing gave her more ease in one of her fits and put her out of it the first night though they used to last 3 days soe that she came to me the next.

Monday 5 Apr. Yarrow laid under any ones pillows will make them answer to questions in their sleep. Mrs. Grig.

[Locke left Sutton 6 April and reached Oxford 8 April.]

Thursd. Apr. 15. A catalogue of seeds given Jacob Bobert which Mr. Charlton sent me from Montpellier. [Five pages in another hand.]

Wed. Apr. 14. Degree mony 0.10.0. [17 April Locke went to London.]

Tuesd. 27 Apr. Rx. oil of [vitriol] gr. 4 three times a day cures gout. Mr. Strode.¹ You must persist in the use of it for a long time.

Sat. May 8. A strong decoction of Water Pepper with the hearb applied cures all wounds gall and sores in horses in a very little time. Mr. Welden.

Tuesd. May 18. About ten of the clock there fell a storme of haile the bigest that I ever saw. Two of them of neare a bignesse I saw in my Lady Shaftesburys chamber and measurd the bigest. It was of a circular figure without any inequalitys flatish and thick above half the diameter it was in circuit $5\frac{1}{2}$ inches almost and measured a crosse $4\frac{1}{4}$ soe that allowing for the wast one may confidently say it was $5\frac{1}{2}$ inches. I have heard from credible people of some that were measured 9 inches about. It was of an hard icy substance, it lasted not long and came from the Eastward. Dr. Dan Cox told me he measured one $7\frac{1}{2}$ inches.

Wed. May 26. Rx. a litle cutings of the haire of the head and other parts, the pareings of the nailes cornes and other callous flesh of the foot. Put these all into a paper. Bore an hole in a growing oake with an Augur put them in and then stop up the hole with a pin made of a peice

¹ There were a number of Strodes living in Devon at this time.

(Latin)

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of the same tree driven in as hard as you can till it breaks. This cures the Sciatica. Mr. Wm. Glanvil names the man who had tried it in himself and told him.

[On 31 May Locke travelled to Hartford.]

Tuesday Jun. 1. I saw at Hartford litle young crafish just hatched lodgd in the taile of the old one where the eggs use to lie, and amongst these are eggs yet keepeing its round shape but softer than ordinary and two litle black speks in it answering the litle black eyes in the others that were hatchd and were perfect true formed crafish. This I suppose was just upon vivification.

Monday Jun. 7. Rx. a leg of beef put to it [aqua fortis] in [sufficient quantity], garlic [1 lb.], bake it very well drinke of the broth every morning. This cured the gout in a woman of 60 years after being 7 years decrepid and not able to stir. She takes it now spring and fall 6 or 7 days at a time. Mr. Kek.¹

Apoplexies. First [bleed] once or twice then purge every day to 10 or 12 stools for 3 months. The purge is made in a decoction of bitter things which is usefull to strengthen the stomach in all long purgeing. D.T.

Mania depauperationis. First [bleed] and purge twice. Then restorative treatment for 8 or 15 days. Keep in bed for 3 or 4 days after this. Then give up to 10 gr. of crocus graduatus with the customary cardiac medicine; the following morning promote a sweat with a posset containing either thistle or salvia. Repeat the sweating for 15 successive days, and then return to the restorative treatment. The sweating is to be repeated when necessary; it actually increases the strength.

Wed. Jun. 9. Rx. Diachylon² plaster with gums, 2 parts; Burgundy pitch, 1 part; make a plaster. This an excellent suppurateing plaister. D.T.

An old fistula in the anus is seldome curd, but it brings a consumption of which they not long after die, and therefor if it be but a litle one it is better to let it alone. *ib*.

An issue in the thigh above the knee of the same side often cures the Sciatica. *ib.*

See Scultetius' Chirurgia which D.T. found true in old Alderman Edmunds.

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p. 114 (Latin)

¹ Probably Anthony Keck, one of the Commissioners of the Great Seal who was knighted in 1688/9.

² Diachylon is a preparation of juices. Diachylon plaster was invented by a physician to the Emperor Tiberius. In many pharmacopoeias it is called plaster of the mucilages. Among the ingredients were foenugreek, linseed, marshmallow root, golden litharge, raisins, and figs. The gums which are here required to accompany the plaster are probably galbanum, thus, and turpentine.

Arthritis p. 120 190

Thursd. June 17. For the gout. Rx. the best olive oyle of Candie 1 lb.; minium 4 ozs.; Poplar ointment 4 ozs.; Virgin wax 2 ozs.; oil of Camomile 1 oz.; Rose oil 1 oz.; make into a plaster.

N.B. In boyleing the ingredients you must keepe them boyleing and stiring all the while else they will clot and the plaister will never be made if they boyle too much they will take fire of them selves and endanger the house. The plaister when well made is blacke and even.

The use. In extremity of paine before the part begins to swell apply a plaister of this (spread on lambs leather the way that will not stretch) about 3 or 4 inches broad round the limb above the part affected drawn as hard as you can like a garter for a defensative. And then another upon the part affected. They must be both cold before they be applied or else they will not stick. This seldome failes to give ease in $\frac{1}{2}$ hower, constantly in 2 howers at most. If the part be swollen it will doe noe good. With this he curd a fistula in a man's face.

Mr. John Amery.¹

Rx. 2 drachms of the fairest largest crystals of English [vitriol]. Dissolve in 1 pint of [aqua fortis]. Dose: 3 spoonfuls thrice a day which are to be increased as long as the patient's stomach can bear it. It cures leprosy.² See Hartmann's Arcanum [Vitrioli]. Dr. Goodal.

In a flux pox which usually kills [in] II days for want of salivation, which then usually stops, give to prevent this accident, I scruple of [sublimate of mercury] dulcis, on each of the 6th, 7th and 8th days which he supposes will continue on the spiting and soe preserve the patient and the rather because Dr. W. Needham haveing given Hues his powder to one in the small pox it gave him a ptyalisme but the small pox dried of much sooner than ordinary.

Rx. Ashes of Broom 1 lb., white wine $1\frac{1}{2}$ pints. Mix. Take $\frac{1}{4}$ pint each morning & evening. This cures the scurvy in those who have spots and scurf with it. Lady Brown.

Rx. I pint of barley water; heat this and soak in it halfe a handful of red and white roses. With this warme bath the eye. Dr. Tubervil's medecin to my Lady Banks³ in a red swelling in the inside of the lower eyelid. I suppose the liquor droping from snailes and white sugar candie hung up in a bag would doe better.

Thursd. Jul. 1. To London, 13.

Take new milke 4 gallons; whites of 36 eggs; Nutmegs 2 ounces; broad leaves of Rosemary.

¹ Probably John Amorye of Devon who matriculated at Balliol College, Oxford, in 1635.

² Written in shorthand.

³ Lady Banks was the wife of Sir John Banks (c. 1627–99), a wealthy East Indian merchant, and mother of Caleb Banks.

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Rx. The whites of 36 eggs and beat them in a large silver or earthen vessel till they come to be as thin as water. Then let them stand 1 hower then beat them as before. When soe done put in the nutmegs cut in very thin slices and the Rosemary leaves, beat them very well togeather then put in one gallon of new milk from the cow and beat for $\frac{1}{2}$ hower togeather and so let them stand all night. In the morning early put in 3 gallons of new milk from the cow and beat them all very well togeather till the milk taste well of the ingredients, then divide it into Rose stills and with a gentle fire distill off 10 quarts of water. Very often raise up the Head of the still a little to stir the milk to keep it from creaming and keep cold weat clothes on the head of the still. The 10 quarts of water must be strained through a tissany sieve, then put to it white sugar Candie I lb., tie papers over the bottles without corks. This must be drank as beare. This cured my Lord Bronkard of pissing blood and stinkeing pus and hath kept of the gout. He drinks a little wine but no beare at all. Lady Lynch.¹

Frid. Jul. 23. To St. Giles. Rx. Martimas beef. Roast it to a powder and blow it into a horses eye for a soare eye.

Earl of Shaftesbury.

[Locke left St. Giles on 31 July and spent 1 August in Salisbury.]

Sund., Aug. 1. Rx. 6 grains of prepared Crude iron and 2 gr. of asafoetida. Make pills. Take for several successive days for the hysteria. D.T.

Rx. some Conserve of Rose and Opium. Make a cataplasma for a blow with pain in the eye. *ib.*

A labouring man sick of a Rheumatisme was let blood and eased and restord to the use of his limbs, but his condition requireing labour and that heating him his pains returned. But upon bleeding he found ease still and that soe visibly, that haveing some times such extraordinary paine in his foot he could not stir he found soe present releife upon bleeding that he could with a few moments after walke without pain. But D.T. being weary of these palliatives resolved not to medle with him any more unlesse he would resolve to submit to a perfect cure which by repeated [bleeding] and fleshless and wineless diet and forbearing labour was obtained without any relaps till now, it being sevirall years since.

Tuesd. 3 Aug. From Baseing Stoake to Esher 30 M. Young Mr. Lynch recovered strength and flesh though he had quitted the milder diet and eat flesh at dinners, his loose and discoloured stools continue

¹ The wife of Sir Thomas Lynch who invited Locke to accompany him to Jamaica (see B.L., MS. Locke, c. 15, f. 185).

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once a day, and a constant feaver or burning (without precedent horror rigor or cold) for 4 or 5 or 6 howers every night ending in a sweat. I ordered him to be purged with Rhubarb.

[Locke reached London on 4 August.]

Sat. Aug. 7. Mrs. Cox¹ hysterical and as all hysterical women are very much discomposed by ordinary cathartics was purged with waters which she took in her bed without the least disturbance.

Tuesday Aug. 10. Dr. Sydenham continued her in the use of the bitter tincture I had given her or Elixir Alexipharmacon and besides gave her 10 graines of prepared steel; with thickened juice of absynthe make 2 pills; take these each morning and Rx. I drachm Assafoetida, Myrrh, Galbanum; 15 gr. of castor; make pills; take 3 every night, purge with mineral waters taken in bed every fourth day.

Mr. Boyle knows here in town Mr. Longueile² a good physitian and practitioner in physique who has a way of fluxing by giveing a dose in the morning which will begin to work in $\frac{1}{2}$ hower and continue to work 6 or 7 howers and then the ptyalisme will stop of its self as purgeing does after a cathartique, and this he repeats as often as he pleases till the cure be perfected. In this method Mr. Boyle knew a young gent curd of a Lues venerea and those in the house never suspected he took any thing, he purged him gently once in 5 or 6 days. D.T. told me he [cured quartan with]³ essence of copper in a large dose. Improve it.

[From about 20 August Locke was in Bexwells in Essex for a week.]

Sat. Aug. 21. My horse having a sore eye which waterd and he could not well open it, was curd only by batheing it well 3 times a day with spring water applied with a spunge.

Mon. Aug. 23. Take the powder of burnt Alum, spread it upon any boyle or other swelling and then put a leather over it, with some plaister about the edges to make it stick and keepe on the powder and it will ripen and bring it to suppuration in a very small time sooner Dr. Wood. almost than anything.

Frid. Aug. 27. Mr. Cooper, a skilful farier at Ilford, assurd me that the best thing he knew to breake the swelling of an horse back when wrung was Cornel and vinegar made into a poultis and applied hot, and that this would not only breake it but heale it too.

¹ This patient seems to be the same woman who later supplies Locke with various medical recipes (14/10/81, 7/11/81, 7/6/82). ² Probably an unlicensed practitioner as he does not appear in J. H. Bloom and R. R.

James, op. cit.

³ Shorthand.

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Alum and veriuce skin a soare very quickly in an horse.

Mr. Hoskins.1

Thrust a long pole into a pond or mote, the mud that sticks to it scrape off; this his grandmother was wont to use to womens breasts. ib. From Bexwells to London 24 M.

Tuesd. Aug. 31. Dr. Sydenham told me he curd the E. of Salisbury² of a totall suppression of urine by giving him a quieting medecin at night and purgeing him the next day. For it was from a disorder of the spirits. [Bleeding] would have been good too but he has an abhorrency of it.

In cases of suppressed menstruation and the consequent difficulty of breathing, hydropsy, wasting, pallor etc., an infallible remedy is essence [of copper distilled] in a suitable vehicle. V. Start with 6 grains and increase if the patient can stand it. Mr. Boyle.

For swollen and painful haemorrhoids local applications of Balsam of sulphur]. ib.

For a cough up to one spoonful of syrup of the juice of ground ivy.

For spitting of blood. Rx. 6 ozs. of fresh roots of comfrey³ cleaned without washing; 12 handfuls of plantain leaves. Beat up together and extract the juice by vigorous pressure. He has often tried a syrup made of it.

Frid. Sept. 10. The dysenteries of this intermittent Constitution are nothing but the fever inverted and so are curd with the cortex addeing a bridle to it.

Rx. I drachm of Peruvian Cortex powdered with alcohol (otherwise it gripes the stomach), 10 grains of saffron [croc. grad.], and some syrup of dried roses. Make a bolus. Repeat every 4th hour. This curses. AEs.

After the first violence of the gout is over repeat purgeing and it will carry off the fit. He preserves himself from it by taking manna once a month much exercise and abstinence from strong liquors. ib.

For epilepsy of adults I to 2 drachms of Bark daily; for epilepsy of infants while teething give one or two spoonfuls of an infusion of the same; for infants with a flux of the belly in the first month give Diascordium⁴ the size of a grain of pepper. ib.

For madness after a course of [bleeding] and other revulsions a purging once a week over a long period. AEs.

¹ A contemporary with Locke at Christ Church, Oxford. He wrote to David Thomas giving news of the capital.

² James Cecil, third Earl of Salisbury, one of Shaftesbury's lieutenants.

³ Recommended by Pechey as a wound herb and also for fluxes and consumption (Pechey, op. cit., p. 31).

⁴ Diascordium is a confection of Water Germander (scordium). The full formula is printed in Latham, op. cit.

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Menses suppressi p. 166 (Latin)

Tussis (Latin) Haemoptoe (Latin)

Dysenteria p. 168

> Arthritis p. 169

Epilepsia p. 169 (Latin)

> Mania p. 169 (Latin)

Hydrops p. 170 (Latin)

Phthisis p. 170 (Latin)

Ischuria p. 170

Haemorrhoid dolor p. 170 (Latin) p. 172 (Latin)

For dropsy, plentiful and repeated purgings (small ones only increase the disease). There is no more efficient purge than $\frac{1}{2}$ oz. of syrup of buckthorn¹ with 3 drachms of electuary of rose juice mixed in the usual purging drink. *ib*.

For phthisis: 1st [bleed]; second purge with Pilulae Cochiae Majores often repeated, resting every 4th day; then Chian Turpentine $\frac{1}{2}$ drachm, or, better, Balm of Gilead, 30 grains, with Balsam of Lucatelli² and powdered Liquorice in the morning. *ib*.

E. of Salisbury being taken with a totall suppression of urine and abhorreing [bleeding] took a paregorick at night for it was from an ataxy and the next day purgd and soe made water as freely as before.

ib.

ib.

For painful haemorrhoids: Bathe with water of pale roses.

Mond. Sept. 27. Rx. a quantity of posset charged with white wine; diffuse sufficiently with saffron, add the juice of sweet orange, and soften with a mixture of sugar and nutmeg and drink warm. This cured a colic pain after other remedies failed. Mr. Charleton.

Rx. equal parts of [vitriol] and arsenic, pound up and contained in a glowing crucible; keep in a liquid state for a little while, then over the pounded ingredients pour distilled vinegar until the effervescence cease sufficiently, abstract and repeat the process until saturation is reached and there is no more effervescence. Then pour on the alcohol of wine and abstract twice or thrice till it is dry. Then make a solution by diliquium. This is Helmont's balsam of Soot or at least his succedaneum which was highly successful for ulcers both venereal and due to poor health. Mr. Boyle.

Rx. $\frac{1}{2}$ scruple of prepared steel, i.e., reduced to a fine flour, with the thickened juice of absinth, make 2 pills, take these for 30 [days] with a draught of absinth wine; purge twice a week with mineral waters taken in his bed, which he must not leave before midday.

Rx. I drachm of Galbanum, myrrh and asafoetida; $\frac{1}{2}$ scruple of castor. Make 4 pills out of each scruple, take these every night unless waters have been taken the preceding day. But he could not tolerate these pills and therefore omitted their use after 3 or 4 doses, taking instead Elixir Alexipharmacum. These remedies greatly restored Mrs. Cox who suffered from hysteria and cachexia.

Wed. Sept. 29. Rx. powdered laurel berries 2 scruples; powdered crab's claws 1 scruple; Sal prunella ½ drachm.

Take it in white wine, ale or beer [every 4th hour starting from the

p. 173 (Latin)

p. 174 (Latin)

¹ Buckthorn is "spina cervina" in Locke's Latin and to Linnaeus Rhamnus catharticus.

² For the formula of Lucatellus or 'Locatellus 'balsam see Latham, op. cit., vol. I, p. cxiii. It was apparently a popular, and cheap, remedy for superficial maladies.

end of the previous fit] and ceasing 4 howers before the next fit. If it [make the patient heave] hold a little cold beer in the mouth and it stops it.

In the heat of the succeeding fit, Rx. Water of Meadowsweet, Chicory and Thistle 3 ozs. of each; Tincture of Saffron, $\frac{1}{2}$ oz.; Syrup of lemon juice, and if sleep be wanting add two grains of Laudanum. I have often experimented the powder with good success. Dr. Jacob. 27 Sept. '80.¹

Tuesd. Oct. 5. There came from here a clever artisan who has done much work for me who told me of another cure for the migraine: that is to make a ring of good steel, all in one piece without joints, and wear it on the little finger of the right hand. This ring can be made with a piece of steel which you pierce with a hole the size of a finger. There is no need to temper it. He has made over 80 which succeeded with everyone who wore them. Mr. Toinard, 9 Oct. '80.²

Wed. Oct. 6. For burns topical application of [spirits of wine] cures without a scar. AEs.

For perforating wounds drink [oil of vitriol] in spring [water]. ib.

For bruises: 1st [bleed], 2nd a purge, 3rd [bleed] and afterwards a purge.

Mr. Boyle showed me a tincture of bloud which was red. Mr. Boyle put two blew Liquors togeather which made a green.

and the set of the set

Thursday and Friday Oct. 7 & 8. From London to Oxford.

Thursd. Oct. 14. To Oakeley from Oxford, 6 miles. Take the stems and fibres of dock leaves, the leaves being pickd away, roast them in ashes as you doe a warden and apply this to any hard tumor, to brake it. This broake a hard tumor in a womans hand that had great pain in it and cured it after severall chalke stones had come out of it.

Mrs. Hobby.

Take the leaves of Solanum that hath purple or blew flowers with yellow in the midle (by which description I suppose it to be dulcamara), pound them to a poultis. This applyd to a womans breast that was extremely hard, red, swollen and in pain curd it. Lady Tyrrell.³

² A full account of this "cure" for migraine is given in Thoynard's letter of 9 October, 1680 (B.L., MS. Locke, c. 21, ff. 64-5). Locke was interested in this treatment and wrote to Thoynard on 24 November, 1680: "I want a description of the disease you call Megrain for I have a remedy already prepared, namely an iron ring made by a smith in the prescribed manner. I do not think its efficacy comes from the weight of the metal." (Ollion, *op. cit.*, pp. 80-3, 29 November, 1680). Thoynard replied on 15 January, 1681 (B.L., MS. Locke, c. 21, f. 08) to say the migraine is "called by abbreviation Hemicrania"

Locke, c. 21, f. 98) to say the migraine is "called by abbreviation Hemicrania". ³ The wife of Sir Timothy Tyrrell, Bart., of Oakley, near Oxford, and mother of Locke's lifelong friend, James Tyrrell. p. 182 (French)

p. 184

p. 183 (Latin)

рр. 185-б

¹ An extract from a long letter from Dr. William Jacob (B.L., MS. Locke, c. 12, ff. 13-14).

Sat. Oct. 16. From Oakeley to Oxford 7 M.

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Mond. Oct. 18. Given Jacob Bobert these following seeds which were sent me from Montpellier. [List of about twenty plants follows.]

Tuesd. Oct. 19. Rx. equal parts of sap of Marjoram and root of primrose. Make an Errhinum.¹ Taken through the nose this causes a salivation of 3 or 4 hours. To stop the salivation take some slightly warm potion. To make a milder Errhinum dilute with milk. Take a thimblefull in each nostril.

Sund. Oct. 24. Mrs. Eliz. Brereton, daughter to the Ld. Brereton,² aged about 13 or 14, was taken on Good Friday as she was going to church suddainly with a violent paine in one hippe which from thence extended its self to all the joynts below and afterwards affected all the joints of her body, but not all equally with the same acutenesse nor at all times alike, but she was soe weake and in such pain that she was faine to be turnd and moved only with a sheet, and she often would rore out with extremity of torment. This continued about 6 weeks in which time she grew about 6 inches. Mrs. Tyrrell.

Q. whether this paine were not from the Menstrua then fermenting in the body which caused both pain and growth and about that time her humor also altered, she haveing been a very melancholy child, but proved a very pleasant merry woman.

Frid., Oct. 29. Virginian snake root cures wormes better than any thing. Mr. Smith.

[Locke returned to London on 9 November.]

Tuesd. Nov. 16. The fever of the intermittent kinde now reigning has sometimes vomiting, great pains in the bowels and the back with red water as if there were a stone, and the Peruvian bark will not help.

[Method of Cure:] drink sack soe plentifully as to continue a little intoxicated for some days and this will soe strengthen the bloud as it will cure. AEs.

For hysterica convulsiva Peruvian bark is a cure. For hysterica vomitiva: though Crocus graduatus does it yet it often returns and soe at last requires great quantitys. Canary wine as above does the cure. *ib.*

Cachexia with swelling of the legs, cough and suppressed or certainly diminished micturition, following a fever; an old woman was cured thus:-

1st Rx. Water of gentian and anise 4 ozs. of each; powdered Hiera

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p. 188 (Latin)

pp. 188-90

p. 190

p. 193

pp. 193-4 (Latin)

¹ Usually given to provoke sneezing.

² William, third Lord Brereton, was one of the founders of the Royal Society. Aubrey refers to him as "this vertuous and learned Lord".

picra¹ 6 drachms. Take so many spoonsful as produce required effect, viz. 5 or 6 stools [a day]. This purge was made use of to divert the matter from the lungs which causd there a very troublesome vehement cough, and yet not to weaken the bloud which was already too much depauperated. This had the effect desired, abated the cough and brought it in a litle while to digested thick expectoration.

The remaining dropsy in the lower parts was not to be attempted by purgeing for want of strength in the blood and therefore rather to be tried by urine.

Rx. of Rhine wine 2 pints, of the ashes of broom 1 pound; horseradish roots 1 oz.; leaves of scurvy grass, tips of absynth and lesser centaury, 1 handful of each.

Method: Take 4 oz. of this infusion thrice daily. Large quantities of urine was passed, with lessening of the swelling of the legs: strength and appetite were restored and the patient cured. Ordinary drink, practically nothing but Canary wine which best strengthens the blood.

A dose in the morning repeated 4 times at intervals of 3 days cured the gouty paroxysm. But at first the pain shifted to the intestines, where it then ended in diarrhoea which after some flux from the movement of the carriage at last ceased. *ib*.

Wed. Nov. 24. All mineralls even steel its self weaken the bloud but they are very proper to kill ferments in the body and tis by that virtue that steel cures hystericks. AEs.

Wed. Dec. 1. Rx. 7 or 8 parts of [oil] of Aetherial Turpentine and I part of flowers of [sulphur]; boil to a balsam in a phial. Take from 20 to 30 grains every night, starting from 5 grains, in a Cephalic decoction. It cures paralysis. Mr. Boyle.

Mond., Dec. 20. Mr. P. Percivall² promised to send Peruvian bark 2 ozs. to Dr. Thomas by the Dorchester Carrier. Which Dr. Thomas received. [Last sentence added later.]

Frid., Dec. 24. For hysteria with convulsions: Peruvian bark. For hysteria with chlorosis: prepared [iron]. For hysteria with pains of the stomach: drink Canary wine. For hysteria of the weak and invalid: the same. For other kinds of hysteria: 1st [bleed], 2nd Pilulae Cochiae for 3 successive days.

¹ The holy and bitter confection, of which the chief ingredient has always been aloes, has been used for over two thousand years. For the formula see Latham, op. cit., vol. I, p. xcix. Alexander of Tralles (c. A.D. 550) explains that the purpose of the hiera was to spread throughout the body, correcting humours, opening passages, and removing obstructions to the nerves. The name hiera or "holy", suggests the origin of the formula in the temples of Aesculapius.

² Peter Percival was Shaftesbury's banker.

p. 195 (Latin)

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Thomas p. 201

> p. 201 (Latin)

Then, Rx. 1 drachm of asaefoetida, galbanum and myrrh, $\frac{1}{2}$ drachm of castor. Make 12 pills out of 1 scruple. Take 6 in the morning. If the patient cannot bear these, take Theriac of Andromachus in a large dose. [Bleeding] and purging always arouse the vapours. Therefore you must prescribe for that prognostic.

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[Locke travelled from London to Oxford on 13 and 14 January.]

Tuesd. Jan. 18. Given these following seeds to Mr. Bobert [then follows a list of one and a half pages]. In Magdalen College Library are an Excellent Collection of Botanik authors given by Mr. Goodyear.² Jac. Bobert.

Parkinson³ hath about 1,000 plants in him more then Gerard⁴ and writes more learnedly and is in intrinsique value worth 20^s more than Gerard. *ib*.

Sund. Feb. 6. Mr. Fisher told me that Dr. Sydenham let Sir Charles Cesar⁵ bloud (which was pleuriticall) and then purged him 6 days following beginning the next day after [bleeding] for a great cough he had lately got at London, and after the purgeing by Pilulae Cochiae Majores was over he ordered him to drinke a glass of sack every night goeing to bed which [method] had succeeded well.

Wed. Feb. 4. Rx. Crocus graduatus I drachm; Syrup of sulphur, Frankincense, powdered Liquorice, 2 drachms each; cooling confection of Tragacanth, flowers of Benzoin, styrac & Calaminth, I drachm each. Make 60 pills. Take 2 or 3 each morning for the Cough.

Dr. Thomas, 2 Feb. '80.6

My preparation of [sulphur] is only a tincture drawn by [sublimating] turpentine and abstracting the [sublimate] to the consistency of an extract. These pills cure colds when crocus graduatus does noe good as I tried upon myself etc. D.T. 8° Feb. '80-1.7

⁵ Sir Charles Caesar of Benington, Herts., was knighted on 4 October, 1671; The Knights of England (1906), ed. by W. A. Shaw, vol. п, р. 246.

⁶ In a letter from Thomas to Locke (MS. Locke, c. 20, ff. 32-3).

7 In a letter from Thomas to Locke (Ibid., ff. 34-5).

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p. 10

p. 13

pp. 12–13 (Latin)

¹ B.L., MS. Locke, f. s.

² When he died in 1664 Goodyear left his books to Magdalen College. See Gunther, Early English Botanists for a list.

⁸ John Parkinson (1567–1650) was Apothecary to King James. His Theatrum Botanicum, or a Herball of a Large Extent appeared in London in 1640.

⁴ John Gerard (1545–1612) published his *Herball* in 1597. His printer, John Norton, used many of the wood-blocks he had bought from the printer of the *Neuw Kreuterbuch* of Jacob Dietrich (Tabernaemontanus).

Thursd. Feb. 10. Others, against corns in the feet, take ivy growing on the ground and soak it in vinegar and wrap the corns in it and then pull it off. Mr. Toinard. 1 Jan. '81.¹

Tuesd. Feb. 15. If any part be mortified with cold (as it often happens in Sweden) tis a good cure to rub it with snow, but a better is to chew some raw pease and apply them. The place soe mortified turns white, but feels noe pain. *ib.*

Tuesd. Mar. 1. This day I saw one Alice George a woman as she said of 108 years old at Alhollentide last. She lived in St. Giles parish in Oxford and hath lived in and about Oxford since she was a young woman. She was borne at Saltwyche in Worcestershire. Her maiden name was Alice Guise. Her father lived to 83, her mother to 96 and her mother's mother to 111. When she was young she was fair haird and neither fat nor leane but very slender in the wast, for her size she was to be rekond rather amongst the tall than short women. Her condition was but meane and her maintenance her labour and she said she was able to have reaped as much in a day as any man and had as much wages. She was maried at 30 and had 15 children viz 10 sons and 5 daughters baptized besides 17 miscarriages. She has 3 sons still a live, her eldest John, liveing the next dore to her 77 years old the 25th of this month. She goes upright though with a staf in one hand but yet I saw her stoop twice without resting upon any thing takeing up once a pot and an other time her glove from the ground. Her hearing is very good and her smelling soe quick that as soon as she came neare me she said I smelt very sweet I haveing a paire of new gloves on that were not strong sented. Her eyes she complains of as failing her since her last sicknesse, which was an ague that seized her about 2 years since and held her about a yeare. And yet she made a shift to thread a needle before us though she seemd not to see the end of the thread very perfectly. She has as comely a face as ever I saw any old woman and age hath neither made her deformed nor decrepid. The greatest part of her food now is bread and cheese, or bread and butter and also sack revives her when she can get it. For flesh she cannot now eat unlesse it be roasting pig which she loves. She had she said in her youth a good stomach and eat what came in her way oftener wanting victuals than a stomach. Her memory and understanding perfectly good and quick and amongst a great deale of discourse we had with her and storys she told she spoke

p. 13 (French)

p. 14

pp. 19-22

¹ Contained in Thoynard's reply (B.L., MS. Locke, c. 21, ff. 94-5) to Locke's query of 13 December, 1680 (Ollion, op. cit., pp. 84-90) wherein he asks him to get a corn cure from M. Gendron. "I don't think he'd take it at all amiss", writes Locke, "if I begged him to tell me some remedy for corns. I've been looking for one for a long time since they sometimes make me very lame."

not one idle or impertinent word. Before this last ague she used to goe to Church constantly Sundays, Wednesdays and Saturdays, since that she walks not beyond her little garden. She has been ever since her being maried troubled some times with vapors and soe is still but never tooke any physique but once about 40 years since, viz one penny worth of Jallop which the Apothecary out of kindenesse makeing a large penny worth wrought more than sufficiently. She said she was 16 in '88 and went then to Worcester to see Queen Elizabeth but came an hower to late which agrees with her account of her age.¹

Mond. Mar. 7. Rec'd from Dr. Pococks which Mr. Thomas had sent thither: a large trunke marked J.L.; I large trunke. Both full of physique books.

Wednesday, Mar. 9. Rx. The juice of Groundsil half a sucking childs spoonfull, perhaps it may be about 20 grains, beare as much, sweeten it with sugar, and give it the child. It cures the frets. It will make the childe peuke a litle and keepe him soluble. Mr. Jam Tyrrell jun. tooke it when he was not 5 weeks old. He was never quiet half an hower together before. Upon the taking of this he slept quietly 3 howers. He was before apt to be bound and this kept him in order. Mrs. Tyrrell learnt this of an old woman that by long experience had found it a certain cure for the gripes in children. It was boyld also in posset drinke and given the nurse and was this way also of good effect to the childe.

Mrs. Tyrrell.

Sat. Mar. 12. Recd. of Mr. Fairfax for Peruvian Bark 1 oz. sent him by Mr. Bromwich, 14^s.

Thursd. Apr. 14. Left with Mr. Tayler, pulv. Regii 10 ozs. at 2^s per oz. or 3^d per drachm.

Mond. Apr. 18. From Oxford to Reading 20 M.

Tuesd. Apr. 19. From Reading to Marlebrough 32 m. For a bleeding of the nose put in a cupping-glass as hot as it can be borne which will stop it. This has been the experience of D.T. in the case of a virgin in whom a failure of menstruation was made up for by a nosebleeding at every monthly period.

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Wed. Apr. 20. From Marlebrough to Salisbury 22 m. Purge thrice,

¹ Locke sent Thoynard a similar account of this remarkable woman, with this addition: "I only await your arrival so that together we can consult her about her method of living and keeping healthy; if we follow the method approved by her example in the Bourbon Islands we shall probably live to the age of Nestor" (Ollion, op. cit., pp. 99–101). This alludes to a scheme which they frequently discussed of founding a colony on St. Helena or another remote island with an ideal climate which is "loin de toute la canaille Europeane".

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p. 24

p. 26

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p. 42 (Latin) then dissolve in plantain water as much Aegyptiac¹ as will make a mild pungency which the touch of the tongue can tolerate. Inject. The use of this on the first three days increases the gonorrhaea, and on the next three days cures and dries it. For virulent gonorrhaea. D.T.

Thursd. Apr. 21. Acute ear ache. [Spirits of wine] with purges were of no avail. But up to 12 gr. of Crocus Graduatus taken and up to 6 grains instilled [morning and evening] cured the ear ache without any recurrence.

[Between 22 April and 3 May Locke visited Gloucester, Worcester, and Tewkesbury. He was back in Oxford on 3 May.]

Sat. Apr. 30. Rx. [Spirits of wine] $\frac{1}{2}$ pints, crown soap about the quantity of an egge. Melt them togeather and chafe them into the place affected. It cures a shoulder spraine or any other sprain in a horse. Mr. Brown,

Rx. I pint of powdered root of Elecampane, and 2 parts of sugar candy. Make into a powder. Take as much as will lie on a sixpence every morning. Cures a cough. Mr. Hodges²

Paid for Castro's Medicus politicus.³ 3^s.

Mond. Jun. 6. Rx. Castile soape shaved into a spoon about 2 scruples, take it thus and drink after it a draught of small beare. This cures mictum sanguinis. Mr. Boyle.

The same is also good in the Jaundice.

Frid. Jun. 17. Take ordinary grosers pack thread dip in oil of amber and put it 3 or 4 times about the neck and it puts of the fit of an ague and cures. Mr. Hodges.

My Lady Lynch knew one cured of Dropsey and scurvy by a diet of oysters and was soe weake at the beginning that the patient could eat but three oysters.

Sat. Jun. 18. Dr. Sydenham's way of cureing a phthisis was strong drinke keepeing in bed and a clyster every day.

The way that I cured my self⁴ was keepeing constantly in bed for about a fortnight (a month I thinke had been better could I have spared it) eating and drinkeing as I use to doe at other times and takeing about I drachm of old Theriac of Andromachus every night.

⁴ This refers to Locke's illness of the previous January.

p. 43 (Latin)

p. 45

Cash

p. 65

p. 68

pp. 68-9

¹ Mel or unguentum aegyptiacum is slightly caustic in effect. The principal ingredients were verdigris, vinegar, and honey. Chemically it was largely oxide of copper and metallic copper. It was also used in veterinary recipes (see note to 21/6/79).

² Nathaniel Hodges was White's Professor of Moral Philosophy at Oxford, and an old friend of Locke's from his student days.

³ Estevam Rodrigues de Castro wrote *Medicus Politicus*, of which the subtitle is "A Treatise on Medico-Political Ethics." Editions appeared in 1614 and 1662.

Mrs. Mary Percivall¹ had a tertian ague last winter, was cured with Peruvian Bark. About the later end of May or in June (about what time many of these agues returned again) she was very much out of order again every other day, and could not eat her meat, lookd very ill, and was sick and though it were not a perfect ague was plainly an auguish distemper.

Rx. Old Theriac of Andromachus, I drachm. Essence of Copper, 6 grains. Make a bolus. Take nightly at bedtime. She tooke this about a weeke and recovered.

Wed. 22 Jun. Rx. Peruvian Bark, 3 drachms; Root of China, 1 drachm; prepared steel, ½ drachm. With this Dr. Watson² cured agues espetially in cachecticall bodies without any recurrence. Rx. powdered crabs' claws without the bezoar, [spirits of tartar] and Salt of Absynth, of each 2 scruples. Tartar vitriol, 18 grains. Make a powder for three doses, to be taken in Cydoniat.³ Take one at bedtime on the day of intermission and the other two hours before an attack, so long as there are 12 hours between the first and second dose; otherwise omit the second dose. By this remedy he often cured intermittent fevers where Peruvian Bark has been of no assistance. ib.

But he observed that if bezoar is included in the powdered crabs' claws the powder promotes a greater sweating but never cures the fever nor is of any avail. This or a similar remedy is in Decker.⁴ ib.

Thursd. Jun. 23. Rx. 3 drachms of Peruvian Bark; 1 drachm of prepared steel; I drachm of China root.

Mix with enough dried rose syrup to make a slightly thicker electuary. Take a quantity the size of a small nut every 4 hours, washing it down with a draught of red Burgundy, and not eating for $1\frac{1}{2}$ hours. Dr. Watson.

Rx. Spirit of [tartar] and digest it upon fluxed and well purified [spirits of tartar]. Digest it till it hath drawn a very red tincture and then put on it [spirits of wine] and it will then imbibe the [spirits of tartar] and bring it over with it. Mr. A. Stringer.

The Alcalis of severall plants are different from one an other which appears in this that severall of them being poured upon a solution of [corrosive sublimate] precipitate it in severall colours, e.g. the salt of ib. Mugwort purple.

¹ The wife of Peter Percival, Shaftesbury's banker.

² Praise Watson, M.D., educated at Jesus College (Cantab.) and the University of Utrecht where he graduated M.D. in 1667. Admitted L.R.C.P. 30 September, 1680. (Munk, op. cit., vol. 1, p. 416.)

Cydoniat is either quince wine or quince honey.
Fredericus Deckers published Medical Exercises "on Methods of Treatment illustrated with Observations" (1673), Leyden and Amsterdam.

pp. 70-1 (Latin and English)

p. 72 (Latin)

JOURNALS (1679-1683)

Friday, Jun. 24. Paid for Tilingius¹ Cinnabaris Mineralis Scrutinium physico-medico-chymicum 8° Francofurt '81,-0-1-3.

Sund. June 26. Mr. Boyle showed me a muddy liquor in a phyal close stopd with a cork, which when he opened in the dark the air seemed to rush in with a little noise and all the empty part of the glass seemed presently filled with a white fluid whereby I could perceive his white crevat and some other neare objects dimly. This light in the void of the glass increased mightily and was much brighter upon his shaking it though he kept it still stopt, and some times we should see upon the sides of the glass in the empty parts which had been wet with the new shaken liquor some specks brighter than the rest like little stars, which he said were thicker parts of the matter. He also rubd some of the liquor upon the back of my hand which shone and as it were flamed there without heating. When the phial was brought out into the light of the window though it were then candle lighting it lost its shining and the empty part seemed only to be filled with a mist or whiteish fumes. v. his treatise of it.²

Wed. Jun. 29. When anything is to be purified by washing in fair water great quantitys of water will separate more feces abundantly than lesser though in proportion to the thing to be purified and the feces from thence separated the small quantity seems more than enough, as for example for the washing of any chimicall preparation. Rx. Spring water $\frac{1}{2}$ pint and when you have washed it with this as clean as you think it is possible put to it I pint and you shall find it deposit feces in a greater quantity. This Mr. Boyle told me as a secret in Chymistry observed by few chymists.

Out of album Graecum³ may be distilled a very volatile spirit or salt better perhaps than that of [sal ammoniac] or hartshorn, but none out of horse dung, and he proposes to distill the excrement of a dog fed a good while only with bread to see if that will yield any volatile salt as well as that of a dog fed with flesh. *ib*.

¹ Matthias Tilingius wrote on anatomy and medicine from 1663 onwards. In 1674 he published his *Disquisitio Physicomedica* "on fermentation, or the internal movement of particles in each body, according to the fundamentals of Willis and Moebius . . . and adapted to the five principals of Paracelsus". See the end of the journal for 1685 for an adverse opinion on his book on Cinnabar.

² This is Boyle's Aerial Noctiluca: "Or some new Phenomena, and the process of a factitious self-shining substance" (London, 1680). This experiment demonstrated the phenomenon of phosphorescence.

³ Album graecum is dried white dog's turds. In Locke's day the excrements of animals were widely used; those of the cow, horse, mouse, goose, and wolf being among the many named in the London Pharmacopoeias of the seventeenth century. Glauber, writing his book On Salts about 1650, explains that human dung is so valuable because it is nothing but bread and meat reduced into their first matters, the essential constituent being a salt not unlike the sal enixon of Paracelsus (which was sulphate of potash). Paracelsus himself recommended oil of human excrement, twice distilled, for fistulae and baldness. p. 73

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Put insects in a box and fill the box several times, 7 or 8, with smoak of brimstone—this will imbalm and preserve them from putrefaction.

Dr. Goodall had a patient sick of a feaver which he judged to be variolosa because of the pain upon touching the scrobiculus cordis. He had a great many petechiae and pissed blood. Before he was called he had been bleeded and purged. He bleeded him again and gave him a clyster in the day between. He gave him large quantities of beare with oyle of vitriol in it, limon possett, and every night in water of cowslip, red poppy and plantain, syrup of meconium, 1 drachm, and distilled vinegar 2 spoonfuls. By this method these petechiae were lessened and his pissing blood stopped so that he made clear water. By this method he was perfectly cured.

[Shaftesbury was arrested on 2 July and imprisoned in the Tower. Locke went to Oxford on 9 July and then to Oakley on the 16th.]

Mond. 18 July. To make good vinegar, Rx. faire water 6 gallons, Malago raisins 18 pounds a little bruised. Put them in a barrell which will hold about 9 gallons, set it in the sun the months of May and June, paste a double paper over the bung hole and lay a Tile over it when there is feare of rain. Draw it off at the end of two months and it will be good vinegar. Mrs. Tyrrell.

[On 19 July Locke returned to London but on 1 August he again went to Oxford.]

Mon. Aug. 1. Take three stone quart jugs—fill them with the urin of [a patient] as it is made, stop them close, bury them a yard underground and lay a tile over them that the earth fall not close upon them; and so bury them in the earth. This was done to the Countess of Shaftesbury without her knowing of it, and she had not from that time till now any of those violent nephritical pains she was wont to have.¹

Thursd. Aug. 11. Quercitanus' Distemper Powder. Rx. 1 oz. of steel filings either reduced in very thin alcohol with plain water or calcinated with sulphur; $1\frac{1}{2}$ drachms of the dregs of Aron root; $1\frac{1}{2}$ drachms of Ambergris; 2 drachms each of essence of coral and pearl; 4 scruples each of prepared amber and cinnamon; enough sugar to make the powder palatable. Dose: half a silver spoon in the morning. This powder is the sovereign remedy for all pale and unhealthy complexions, and morbid states both of women, married and unmarried, and of men, young and old—anyone in fact who is liable to these conditions.

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¹ The transference of diseases to other people or to animals was a common practice. For example, the sufferer took a penny, some parings of his fingernails, and hairs of his eye-lashes, and left them at a crossroads wrapped in a clout. Whoever picked them up took over the disease from the sufferer. But in the present example to whom or what is the disease transferred?

This kind of ailment, according to Avicenna and Aurelian,¹ is especially a forerunner of dropsy. But I do not use this powder before I have prepared the patient's system by purging with my crystalls of tartar and my polychrest² pills; then for up to 15 days I employ this powder. After the third or fourth dose the patients are purged at night through the belly, emitting a certain thick black mass, like pitch; this black bile which is as it were the seedbed of these ailments, will be evacuated repeatedly until the cure is complete. In curing all morbid states I have seen wonderful examples of the effects of this powder, nor has it ever failed when once I have conceived a good hope of a successful cure. This powder holds an important place among my medicinal secrets yet I cease not to make a free gift of it. The whole special curative property I place in your properly prepared steel filings. This is the basis and foundation of the remedy. Quercit., P.D.R., chapter 15, p. 320, 630 pp.

Crush Coral³ into fairly large lumps. But pearls can be left whole and extinguished by fire and strong aqua vitae, which is more usual. This is the calcination of pearls. Afterwards they can be properly dissolved in the juice of lemons or barberries. After they have dissolved the juice is to be separated again and what remains in the bottom is called salts or essence of pearls, and it can afterwards be many times dissolved and congealed with cordial waters to take away the acidity of the dissolving acid. *ib.* p. 618

Quercitanus' Preparation of Amber. Rx. $\frac{1}{2}$ oz. of selected yellow amber. Put it on a silver dish. Pour on [spirits of wine] and mix properly the aforesaid powder. Set fire to the [spirits of wine] and shake till the flame is extinguished. Repeat four times. Dry and store for use. *ib.* p. 561.

[On 18 August Locke travelled to London.]

Mond. Sept. 5. Rx. equal parts of [iron] filings and crude white tartar. Mix into a paste in a mortar with some theriac water and make balls the size of a fist. Tie them in packing paper and hang up for 7 [days]. Then dissolve in alcohol. This is Willis's⁴ artificial iron. See p. 191 of his "Convulsive Diseases". (316 pp.)

Steel prepared thus is to be used in colder patients and conditions. Another mode of preparation, mentioned by Riverius⁵ in his chapter

¹ Caelius Aurelianus (c. A.D. 230) was a methodist.

⁸ A polychrest is a medicine alleged to have many virtues.

³ Breaks down to carbonate of lime used either as an antacid or in the treatment of ulcers.

⁴ Dr. Harris in his *Pharmacologia Anti-Empirica* of 1683 discloses the secret of Dr. Willis's preparation of steel.

⁵Lazarus Riverius was the author of a book on fevers (1640), Medical Observations etc. (1646). His Arcana was printed in Venice in 1673.

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on hypochondriac melancholy, which is by means of [oil of vitriol] and spirits of wine, is to be used in hotter patients and diseases, Dr. Goodall thinks.

Women and children scape much better in the smallpox than men.

AEs.

Sat. Sept. 10. Rx. Some juice of Carnation flowers together with some fresh flowers of the same species and some sugar. Make tablets. Mr. N. Hodges has found that they give great relief to his giddiness.

In delirium caused by pox use 30 grains of crocus graduatus. If the patient is not quietened after an hour give another 20 grains and continue to give 20 grains every hour until the symptoms abate. This is the surest sedative. Dr. Goodall has given many patients more than 200 grains and always with good effect even in desperate cases.

[Venereal] gonorrhea is cured by purging daily for 14 days and then at greater intervals. This is Sydenham's method. *ib*.

Venereal Decay, even when intricate, is cured by purging every 4th day and drinking a decoction of Sarsaparilla¹ alone. This is Dr. Clarges'² method. *ib.* N.B. Investigate this more fully.

Gout is a disease of malnutrition, which gradually but slowly accumulates and finally issues in paroxysms like those of the intermittent fevers; the cure therefore seems to be by Peruvian Bark and other medicines which help the digestion and assimilation of the food. *ib*.

Sat. Sept. 17. Query whether the use of steele in hypocondriacall people does not remove the disorder from the spleen to the head as it did in Mr. Hodges, Mrs. Pont³ and some others.

Dr. Goodall has found astringent saffron of iron most effective in all kinds of haemorrhage and most useful in fluxes of the belly.

Tuesd. Sept. 20. Dr. Tillotson⁴ wonders whether to use Balsam of Lucatolli for tumours of the foot.

[Then follow several notes on Ludolphus, *Historia Aethiopica* which Locke has just brought for Lord Shaftesbury from Mr. Pit.]

Frid. Sept. 23. The Herb Amadmagda heals broken or wrenched human bones: *ib.* e.g., Assazoe is effective against snake bites. Anyone eating the root of this herb can walk fearlessly amongst hydras and snakes. This immunity lasts for many years. *ib.*

¹When first introduced in the sixteenth century sarsaparilla was something of a wonder drug.

² Sir Thomas Clarges was Physician to the Army in his earlier life, but engaged mostly in politics from 1660 till his death in 1695. His sister Anne married General Monk. Pepys met him on committees.

³ The wife of Richard Pont vintner and citizen of Oxford who died in 1687 (Wood, Life and Times, vol. III, p. 243).

⁴ Dr. John Tillotson, Archbishop of Canterbury (1689-94) had been Locke's friend for some years. Mapletoft had introduced them.

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p. 120 (Latin)

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A handy antidote for the poison of venemous serpents in Abyssinia is human ordure taken in water. The panther perhaps taught men this; if it eats flesh which hunters have rubbed with aconite it cures itself with human turds. ib. c. 13.

Mond. Oct. 3. To preserve any insect put it in a little box and fill the box with the fumes of Brimstone 9 or ten times, and it will imbalm them. Mr. Boyle.

Fevers of this intermittent type, even if actually continuous, are cured by KinKina if the patient is not kept in bed but allowed to rise in the daytime. Continuous lying down results in a continuous fever.

Chlorosis is a part of hysterica.

Crude [mercury] mixed with purgeing medicins makes them worke well and easily in all cases but espetially in all scrofulus and tough obstinate humours. It is the most effectual remedy [that] can be used & very powerfully dissolves them. Dr. Bernard.¹

Frid. Oct. 7. Rx. Powder of Burs, i.e. the fruit of the burdock, 1/2 drachm, or 2 scruples. It cures dysenterys and other fluxes.

Mr. Boyle. Caricter² gives the best account of the vertues of hearbs and cures by them. *ib*.

Suckten a very good chymist.

Paracelsus commends Tabernae montanus for Botanicks.³

Sat. Oct. 8. Rx. Garlic and common washing soap. Pound together and make a plaster. Apply to the soles of the feet wherever there is Arthritical pain. This stimulates the small veins of the sole of the foot, draws out the cause of the disease and so cures the paroxysm.

Sir Jo: Michelthwait.

Frid. Oct. 14. Crown soap topice cures a fit of the gout. Sr. P. Pet.⁴ A spoonfull of good honey given to a child the first thing after it is

¹ Francis Bernard was created M.D. by the Archbishop of Canterbury in 1678, and incorporated at Cambridge in the same year. He was elected F.R.C.P. by Charter of James II, who appointed him one of his household. He was a physician at Bart's; and a man of learning with a valuable library; "the best collection of scarce books which had then been seen in this country".

² Bartholemaeus Carrichter was physician at the Imperial Court in the middle of the sixteenth century. He published his *Horn des Heyls Menschlicher Blodigkeit, oder Kreutherbuch*... at Strasbourg in 1576. The full title reveals the author's occult tendencies.

³ Jacob Dietrich (1520?-90) published his Neuw Kreuterbuch at Frankfort, 1588-91. In 1590 the illustrations were printed separately. His name was latinized as Theodorus Tabernaemontanus; he came from Bergzabern in the Palatinate. But how could Paracelsus (Theophrastus Bombastus von Hohenheim, 1493-1541) commend a book published long after his death?

⁴ The great ship-building family of Pett provided two founder Fellows of the Royal Society: Sir Peter Pett, Fellow of All Souls and Advocate-General; and Peter Pett, Commissioner for the Navy. p. 137

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AE.

AE.

ib.

borne and noe thing given 3 or 4 howers after purges the meconium and prevents the epilepsie. Mrs. Cox.

Sat. Oct. 22. [More notes on Ludolphus, Historia Aethiopica.] They cure jaundice with a curved piece of iron, heated and making a semicircle around the junction of the arm, on which a little cottonwool is laid; the bad humours then trickle out until all the disease has departed. ib., book 4, chap. 2., note 9. See what our Thoinard writes on the same subject.¹ They heal wounds with myrrh which is very common there. ib. Note 14. The Abyssinians treat Tertian and Quartan fevers with the cramp-fish, torpedo. The patient has to be bound to a strong table. This fish applied to the limbs provokes the most excruciating pain in all the members, after which the paroxysm of the fever does not return. ib. Bk. 1, chap. 11, Note 15.

Monday Nov. 7. Gather Sundew when the sun is in Leo and the moon beholds the sun with a sinister [quartile] aspect. Hang it in a little silken bag at the pit of the stomach.² Mrs. Cox.

Frid. Dec. 2. Jaundice: 1 drachm of [Castile soap]³ dissolved in milk repeated 3 or 4 times. Chronic cough—juice of pennyroyal: for infants, one spoonful with sugar. Blind painful swelling haemorrhoids, rub on balsam of [sulphur] and terebinth. Gangrene in its early stages— [oil] of terebinth as a fomentation in place of [spirits of wine].

To cleanse the uterus—a large white onion cut into slices and cooked in meat juice. Take this 3 or 4 times a day. Dysentery—1 drachm of dried pig dung in milk. Epilepsy—1 drachm of crow's liver and heart. Mr. Boyle.

Sat. 24 Dec. From London to Bexwells. 24 M.

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Wed. Jan. 4. From Bexwells to London. 23 M.

Frid. Jan. 13. Rx. a decoction of the inner or middle bark of elder. Distil with Castile soap⁵ and make a liquid to foment the relaxed parts in Erysipelas. Dr. Goodall finds this most effective.

In scabies, the itch and similar skin diseases use a decoction of elder flowers taken internally. This agrees with what I've read elsewhere, that men liable to erysipelas, if they drink milk in which elder flowers have been boiled, do not suffer a recurrence of the disease.

³ Written in shorthand.

4 B.L., MS. Locke, f. 6.

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p. 149 (Latin)

p. I pp. 2-3 (Latin)

¹ Perhaps this refers to Thoynard's letter in which was enclosed a note by Thévenot, who compiled a book on exploration and travels. See note to 6/9/77.

² The New London Dispensatory (1678), ed. Salmon, p. 97, says that sundew hung about the neck cures madness.

⁵ Castile or Spanish soap is prepared from olive oil and a solution of caustic soda, Jonathan Percival, The Elements of Metric Medicine (1854), vol. 1, p. 604.

Monday Jan. 16. [Silver] Pills.¹ One of the best purges known for it works easily and leaves the body open.

Rx. Purified [mercury], I oz., [sublimated nitre], or [aqua fortis] cleansed 2 oz.; if it be good 11 oz. will be enough to dissolve it. Then take a solution of cleane sea salt philter it and evaporate it till it be very strong. Drip it into the solution of [mercury] drop by drop, you will have a white precipitate. Wash it very thoroughly till noe acrimony be left with [distilled water]. It is a very good and safe purge, dose 8 or 10 grains. If in the solution of the [mercury] it crystallizes as it will some times happen, mix enough rain or distilled water with it to dissolve the crystalls. Besides the ordinary ways of cleansing [mercury] which is by passeing it through leather, or washing it with water and salt, the best way is to take fileings of iron scarsed soe that you may have the small parts, rub those with the [mercury] well together in a mortar with a litle water whereby the [mercury] will be impregnated and then [distill] off the [mercury] and it will be perfectly cleane. The way to cleanse [aqua fortis] is put in some plates of fine silver which will draw down a white powder which is [silver].

N.B. that this [precipitate] as well as [corrosive sublimate] dulcis and the like medicines made with mineralls and salts will keep a great while if stopd close but if they are exposed to the open aire will contract an acrimony and grow corrosive again after they have been never soe well washed. Mr. Boyle.

Frid. Jan. 20. My Lady Banks had a swelling on the edg of her eye lid with swelling and rednesse of the veyns in the insid as bloudshed. Dr. Turbervill cured it with a decoction of red rose and damaske rose leaves in barly water applyd with a spunge.

A pinte of aire weighs about 10 or 11 grains.

There is a matter which will extract and get a large quantity in a small time out of the air a fixed substance. This on the authority of Mr. Roberts. This fact seems very important and to contain a secret principle. Mr. Boyle has dilated air to 8,000 parts.

Frid. Feb. 3. In suppression of the afterbirth give aqua hysterica in water of mugwort and penny royal etc. If they want sleepe Rx. Cowslip water 2 oz., syrup of meconium $\frac{1}{2}$ oz., aq. hysterica 2 drachms, for syrup of meconium stops not but opium does unlesse given with assa faetida. If this does not doe help it by diaphoresis with spirit of [hartshorn] in large doses and if there be a feaver give large quantitys pp. 6-7

(Latin)

p. 10

Mr. Boyle.

pp. 13-14 (Latin and English)

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¹ The brain, the moon, and silver were supposed to form a sympathetic trinity, and silver was prescribed for such ailments as epilepsy and melancholia. Silver pills, or "pilulae lunares", were generally composed of nitrate of silver, together with opium, musk, and camphor.

of barley water with it to abate the heat. Spirit of [hartshorn] well rectified is the best of all those spirits for the genus nervosum, but if there be any of the oyle with it, it heats the bloud and disturbs the head. Apply also to the feet a Cephalic plaster with Euphorbium. I approve not of bleeding. D. Cox.

Spirit of [sal. ammoniac] is not soe good to the nerves as Spirit of [hartshorn], but [distilled] from [spirits of tartar] it may be used in feavers for it has noe oyle in it; [distilled] from quick lime it is good in Epilepticall cases.

Swelling of the belly in those who have just borne a child is a sign of retention of the afterbirth, which must be removed manually. *ib*.

[From 9 February to 30 May Locke was in Oxford, but made frequent journeys to Oakley, Abingdon, Burford, Reading, etc.]

Tuesd. 21 Feb. These following seeds given Mr. Bobart which were sent me from Montpellier by Mr. Charleton. Those marked P. were gathered in the Pyreneane mountains. [List extends to four pages.]

The juice of Savin or Egrimony cures warts. J. Bobert.

The leaves of arbor vitae¹ bruised and laid in the stocking cures agues and applied to the wrists much more powerfully but it will cause a tingleing over all the body when applied to the wrists. ib.

Dr. Eliot² says beaten into a conserve it would cure Consumptions. ib.

Aqua fortis applied by litle and litle to cornes and repeated twenty times till you feel the aq. fortis make the quick tingle cures them for a yeare. ib.

Wed. Feb. 22. Received of Dr. Fairfax 9^s which with the 15^s he paid me 16 of Jul. last is for KinKina 2 ozs. sent him by Mr. Bromwich one 16 Jan. '81 and the other 31 Jul. '81 both put to my account.

Mond.Mar. 7.³ From Oxford to Abingdon 5 miles. Rx. 1 drachm of [corrosive mercury sublimate]. Dissolve in $\frac{1}{2}$ pint of spring water. Take 2 spoonsfull a day. It will purge without any symptom. Continue this for many days. It will bring a cancer to suppuration. Dr. T. who tried it. In the anguish constitution of the last yeare where ever the disease fix in any part with pain as it often did in the head, pleura and hypocondria, [bleeding] was always necessary which with purgeing brought the ague to its regular type.

¹ Arbor vitae is the name of several evergreen shrubs of the genus Thuja.

² Possibly Dr. John Elliott, Doctor of Medicine of Cambridge by royal mandate in 1681, and incorporated of that degree at Oxford, 11 July, 1683.

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³ Here Locke gives an incorrect date. Monday was the 6 March.

In this constitution coughs would hardly be cured without Peruvian Bark which given with other pectorals was very effectuall.

[From 7 March to 22 March Locke was at Oakley.]

Wed. Apr. 5. Paid for Dr. Worthington's Catechiser 0-0-6. Lent Dr. Fairfax Bibliotheca Thuana.¹

Sat. Apr. 8. Paid for Sydenhams Dissertatio Epistolaris 8°, London '82, 193 pp. 0-1-7.

Sat. May 20. Paid for [sublimate of vitriolum] 17 ozs. -8-6. For the bottle and glasse stopper -2-0. Both sent to Dr. Thomas.²

Tuesd. May 30. From Oxford to London 47 M. [Locke stayed with Shaftesbury at Thanet House till August.]

Wed. Jun. 7. Rx. White Wine, I pint, single peony roots 4 ozs. scraped cleane and thin sliced. Put them in a stone botle and infuse them 24 howers on the heat of the ashes. Strain it and put in dead mans scul³ finely powdered, gr. 24. Mos of dead mans scul gr. 16, spirit of castor I oz., castor powder $\frac{1}{2}$ oz. Put all togeather and shake them one hower in a botle. Power it all into a glasse botle and keepe it for use. To a young child give a dose of $\frac{1}{2}$ spoonful; to one of 20 years old I or $I\frac{1}{2}$ spoonfuls. Give it when ever they have a fit and 3 mornings before and 3 after the change of the moon, shakeing the botle every time. For Epilepsia, from Mrs. Cox.

[Corrosive sublimate] dulc. ground fine with a double proportion of sugar will purge: gr. 6 with resin of Jalap gr. 1 made up into lozenges with sugar is a fine purge for an infant espetially troubled with wormes. One of 2 years old may take double that quantity. Dr. Goodall.

N. great with child haveing an ague tooke Cort. Peru: had a very easy labour. Tooke it on in her lying in. Had noe after pains and had her lochia very well. This he tried in one or two.

Sat. June 17. An infusion of English vitriolum is as effective a cure of leprosy as one of Hungarian vitriol. See Hartman.⁴ Dr. Goodall.

² Thomas wrote to Locke on the 25 April, 1682 asking him to send vitriol as "I have in a booke found a fam'd German febrifrugum which cures all agues, easy to make. In order to it, I desire you send me sp. vitrioli boni I lb. or 12 ozs. only take care that it may come safe and you shall both know the effect and composition. All that my booke is defective in is the proportions." (B.L., MS. Locke, c. 20, ff. 44-5.)

in is the proportions." (B.L., MS. Locke, c. 20, ff. 44-5.) ³ Bechler in his *Parnassus Medicinalis* (1663) states that "prepared human skull is a sure cure for falling sickness. Moss grown on a skull is a haemostatic." In his commonplace book Locke wrote: "Boyle's cure for nose bleeding with dead man's scul which is more plentyful in Ireland" (B.L., MS. Locke, c. 9).

⁴ George Hartmann in his Book of Chymicall Secrets (1682) explains that his "Powder of Sympathy" was made from "good English vitriol" of the recipe at 17/6/80. (A. C. Wootton, op. cit., vol. I, p. 196.) For Hartmann see note to 19/7/78.

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¹ On 13 March, 1679 during his stay in Paris Locke inspected the library of Jacques Auguste de Thou (1609–77), son of the historian, which was about to be sold. Sibelius's letter to Locke (4/14 Oct., 1684, MS. Locke, c. 18, f. 109) quotes Thuanus on the tenderness of fowls' flesh killed in a certain way.

The leaves of unsowed Vetches dried and the powder taken inwards cures ruptures. ib.

Mond. Jun. 19. Take 2 handfuls of feaverfue, 2 ozs. of Sassafras. Cook in 8 pints of spring water till $\frac{1}{4}$ is evaporated. Strain, clarify it by leaving it to settle, store for use in well-stoppered bottles. Dose: for adults, $\frac{1}{6}$ pint hot three times a day: for children, a smaller quantity.

In cases of kidney disease continue the use of this medicine for a whole month in spring and autumn, and at any other time when the patient feels pain, until it drives out the small stones or sand. Proved in the case of Mrs. Theodosea Birch.¹

Tuesd. Jun. 20. Mr. Stringer was fluxed with [sublimate of mercury] dulcis, I scruple, taken night and morning. The first ran through him, but the purgeing was stopd with Laudanum. He tooke in all about 10 scruples. He salivated about 21 days and then it was stopd by purgeing, his diet all the time water gruell and the like. He spit about 1 or $\frac{3}{4}$ pints per day.

Wednesday 28 June. Take some garlic. Boil in water and vinegar till it is well cooked. With some honey make a syrup for asthma.

Dr. Goodall.

Take sulphur, which has been used in the preparation of steel. Take half a drachm of this powder with a conserve of Dog-rose thrice for dysentery. Dr. Goodall.

Take 8 or 10 gr. of [sublimated sal ammoniac] in a suitable vehicle. This is the best and quickest remedy for heartburn, even more effective than quicklime.

Sat. Jul. 1. Take the white of one hardboiled egg, I drachm of Tutia and Calamine stone.² Mix with the water of pale roses, and then heat all together with $\frac{1}{4}$ pint of white wine, stirring all the time, in a tin vessel until they boil. Remove from the fire and cool, strain through a linen cloth and store for use in a phial.. Use this liquor to bathe the eyes when they are inflamed or discharging. Mr. Clark.

Mond. Jul. 3. Convulsion fits before tootheing are from gripeings in the belly. Method, 1st. Syrup of Meconium gr. 20, and when that has abated as it will doe next fit, give sweet [oil] of [almonds] 1 oz., and when that had done purgeing as it will in 12 howers, allay the pain again with syrup of meconium, the fits ariseing only from pain. And so it is afterwards in tootheing, if they are bound purge with sweet [oil] of

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¹ Perhaps a relative of the Mr. Birch, mentioned on 23/12/79.

² Calamine, or zinc earth (carbonate of zinc) was used by the Romans in the production of brass. Daniel Turner (*fl.* 1710) made high claims for his "Ceratum Calaminae". Note that here and in 20/3/83 it is used with tutia, which is impure oxide of zinc.

[almonds] and then allay with syrup of meconium. If they are loose syrup of meconium alone will doe, for tis the pains alone that cause convulsions in children. If the child be vigorous and a yeare old [bleeding] also to prevent height of bloud and feaver. D.T.

[From 8 August to 22 August Locke was in Tunbridge.]

Mond. Aug. 21. The leaves of Tee turne Tunbridg waters purple as galls doe.

Seen this night between 5 and 9 as well as the two or 3 foregoing a comet to the North West the taile not so long by much as that of the last, but the body of it much bigger than the former.

Tuesday Aug. 22. From Tunbridge to London 35 mile.

Friday 1 Sept. Mercury dissolves all mettals but iron. Copper it will not doe but with great heat, though almost every thing els works on copper. Mr. Boyle.

Water will not be compressed above 1/200.

Frid. Sept. 8. Leting cold water fall upon the head drop by drop staunches bleeding at the nose. Cordialls also applyd there operate very powerfully on the heart. Mr. Boyle.

A plaister of Bergundy pitch applyd to the nape of the neck is very effectuall for defluxions on the eys, and soe is spring water topice to the eys where in a small quantyty of white [vitriol] has been dissolved. Q. quantity.

Mond. Sept. 18. From London to Cassioberry is 15 miles. Crawfish will be fed by scurvy grasse.

Tuesd. Sept. 19. A man in $[\ldots^1]$ Shire cures the gout by drawing a blister on the joynt above the place affected, with speare wort, which will run till all the gouty humor be evacuated which will cure the fit and the first time keepe it off for a year and the next time cure the disease. He is said to have curd Mr. Somerset Fox. He lets the speare wort lie on eight howers.

[Locke returned to London on 20 September; on the 23rd he went to Oxford where he stayed from the 30 September to 11 October. From the 20 October to 8 November he was in Oakley.]

Tuesd. 24 Oct. Le P² of Rhodes remarks that in China as well as in the Kingdom of Cochin China doctors act also as apothecaries and that their medicines are not so expensive nor so troublesome to take as ours.

² This note is from Jean Nieuhoffe, L'Ambassade de la Compagnie des Provinces Unies vers l'Empereur de la Chine (1665), Leyden. Nieuhoffe quotes from the Memoirs of P. Rixius.

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ib.

p. 87

p. 89

p. 91

pp. 91-2

(French)

and English)

p. 23.

¹ Blank in MS.

Emplastrum Oxycroceum¹ cured vehement pains caught by a cold in my Lady Tyrrell applied to the place grieved, by the prescription of Dr. Thomas, when Dr. Lamphire² thought it to be the gout.

Lady Tyrrell.

Thursd. Nov. 9. Recd. then of Dr. Smith,3 Treasurer of Christ Church, £1-0-0 which was for degree money for the yeares '75 and '76 which had been omitted and unpaid these yeares.

Mond. Nov. 13. Rx. Aqua vitae 2 pints; pour into it 1 lb 5 ozs of Bruised Juniper berries; flavour with 1/2 oz each of Sarsaparilla and castor and & handful each of lavender, salvia and rosemary. Pound up the ingredients and make an infusion over a slow fire for 4 days. Then add 1/2 lb of rectified [spirits of wine] and 9 drachms of camphor, stirring all the time. This is a fomentation for paralysis. Lady Tyrrell.

[On 5 December Locke returned from Oxford to London.]

Frid. Dec. 22. For Epilepsy in infants whether from toothing, smallpox or other wise [apply blister plaster to neck]4 and crocus graduatus gr. iii to be repeated at new and full of the moon. AE.

For a burne or scald. Bath the part in stale small beare till all the pain and heat be gon and then anoynt it, morning and evening with a feather with this following oyntment. Melt mutton suet and straine it and when it is soe put into it a large proportion, as much as it will well take, of a thin yellow mosse to be found on old brick walls. Haveing boild a very litle take it off and strain it, the oyntment will be yellow. This Countesse of Marlebrough. cures and leaves noe scar.

16835

Mond. Jan. 1. Northwest Fox or Fox from the North-west Passage. by Luke Fox 4° London, 1635, 270 pp. A collection of voyages made in search of the North West Passage consisting most of observations relating to navigation:6

They (i.e. Inhabitants of Greenland) eat their meat raw yet they use fire. They drink salt water by the Ship side.

Hall ap. Fox 270 pp., p. 61.

Tuesd. Jan. 30. In 65d N.L. upon an Island we found great store of scurvie grasse with sorrell and orpen [a type of sedum]. The scurvie

¹ This was a plaster of saffron and vinegar. ² Dr. John Lamphire, son of an apothecary, Doctor of Physic, and Principal of Hart Hall, whose death Wood records in 1688.

³ Dr. Henry Smith was made Canon of Christ Church in 1675. Evelyn heard him preach I April, 1681. He died in 1702.

⁴ Shorthand.

5 B.L., MS. Locke, f. 7.

6 The title of Fox's book continues: "Beginning with King Arthur, Malga, Octhurtogether with Mr. J. Halls 3 voyages to Greenland."

pp. 101-2 (Latin)

p. 110

p. 110

p. 5

p. I

grasse he boyled in Beere by meanes whereof with Gods blessing his men were in perfect health in 8 days and soe continued untill his arrival in England. Fox 270 pp., p. 159. Wed. Feb. 14. Make an infusion of 1 oz. of Crocus of Metals, $\frac{1}{2}$ oz. of syrup of buckthorn, 3 drachms of Roses. Take daily or every other day for confirmed dropsy. AEs. Purging and turmeric boiled in wine and water cure jaundice. ib. Ashes of broom in white or Rhenish wine twice a day. ib. [Locke left London 23 February and reached St. Giles 25 February	p. 8 (Latin)
for Shaftesbury's funeral on the 26th.]	
Mon. Feb. 26. "Traiteé des Fièvres, where the author discloses the mistakes both in theory and practice of doctors ancient and modern." 8° Utrecht '82, pp. 94. Helmont, elsewhere so intelligent, is yet completely extravagant in	p. 19 (French)
his theorising. Fièvres, 26/94.1	
Wed. Feb. 28. Melancholy is nothing else but acid. Phlegm is simply	p. 19-20
one of our humours which, for lack of heat, movement and volatile	(French)
salts, thickens like stag's horn jelly. Fièvres, 42/94.	
Criticism of Willis book On Fevers. ib., p. 45.	
Graaf one of the greatest anatomists of our time. ib., p. 56.	
Sylvius' method of curing fevers was the best and most sure ever	
used up to his time. ib., 56. Acid the cause of plague. ib. 58. In all fevers	
(though more in some and less in others) the blood is thick and its	
movement so slow that it is almost congealed. p. 69.	
A man feels more heat in a fever not because the blood is hotter but	p. 21
because the circulation being slower the heat is more felt. ib., p. 75.	
This seems false. J.L.	
All purgatives, however mild, even senna, rhubarb and aloe, whose effect is not so much to evacuate the bad humours as to break up the	p. 21 (French)
good, arouse in the stomach and intestines a kind of little swellings or	
blisters similar to those caused by cantharides applied to the skin.	
Moreover, these draw off, not without some pain, a certain sticky	
humour, which stomach and intestines continually need. ib., 85.	
The author in this treatise confutes well enough the hypotheses of	p. 22 (English)
others concerning fevers and their cures and it were to be wished his	
other treatise wherein he promises his owne hypothesis, and his method	
of curing (whereof he speakes with confidence) were published.	p. 28
Wed., Mar. 7. In inflammations and ulcers purge not till they come	
to suppurate, because then it does good and prevents or cures coughs	
¹ The Traité des Fièvres was a translation of the book written in Dutch by Cornelis Bontekoe, against whom P. Bernagie wrote a polemic.	

and other accidents that then come on, but before that purging usually increases the evill. D.T.

Mond., Mar. 12. Sir Fr. Drakes men found Crayfish very restorative meat in an Island near Celebes. ib., p. 56. c. 3.¹

Q. whether the scurvy occasiond by long voyages be not cured by any fresh meat and wholesome vegetables, for I finde that where our Scorbificall seamen got fruit or salads and fresh meat they quickly recovered.² J.L.

The French pox is here (Java Major) very common to all and they help themselves siting naked from 10 to 2 in the sun whereby the venemous humor is drawn out. Purchas 57/748, L.2, C.3.

Thursd. Mar. 15. We saw them drink salt water out of the sea and give it also to their young children to drinke which we thought to be against nature. Purchas 96/748, L.2, C.7.

Sat. Mar. 17. The reason why the General's men stood better in health than the men of other ships was this. He brought to sea with him certain bottles of the juice of limons which he gave to each one as long as it would last, 3 spoonsful every morning fasting not suffering them to eat anything after it till noon. This juice worketh much the better if the party keepe a short diet, and wholy refrain salt meat, which salt meat and long being at sea is the only cause of breeding this disease,³ viz. the Scurvy. Purchas 149/748, L.3, C.3, para. I.

The flux (in our opinion) came with the waters which we drunk for it was in the time of winter when it rained very much, which caused great floods to overflow the country, soe that the waters were not wholesome, as in most places in these hot countrys they are not in the time of their rains. This disease also of the flux is often taken by goeing open and cold in the stomach which our men would often doe when they were hot. Purchas 151/748, L.3, C.3, para. 2.

Mond. Mar. 19. For a splint or windegall,⁴ take the root of Elicampan

¹ The quotations on this and the following pages are from Purchas's Pilgrimes (1625), London. Book I has 186 pages and Books 2-5 contain 748 pages.

² In 1680 Locke heard from Thoynard about M. Gendron's cure of scurvy (MS. Locke, c. 42, f. 148): "Eat oranges and limons and all things acidic. Eat the flesh half ready or very raw and chew it well, and repeated sweating. Neither purge nor bleed." Locke thought that two factors played a part in causing scurvy: excess of salt and lack of fruit acids. His observations were not put into practice until after James Lind's (1716–94) Treatise on the Scurvy (1753).

⁸ Locke also believed that an excess of salt was partly responsible for scurvy as is shown by the following note: "Since the use of salt in all America is very litle if at all known. And in the East part of the world we heare not much of it and yet these people live very healthy. It being certain also that it causes droughth which is never a good signe of health. And it is being more then probable that it is one great cause of the scurvy. Q. whether it would not conduce much to health to eat as litle of it as may be. J.L." (B.L., MS. Locke, c. 42, f. 100.)

⁴ A splint is a bony enlargement on a horse's legs; a windegall is a puffy enlargement.

pp. 37-8

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pp. 42-4

fresh out of the earth. Rost it in paper in hot embers. Apply it very hot to the splint let it stay on 12 howers then put on a fresh. Doe this for 2 days a windegall will be cured at twise. Out of a MS of E.S.

For a Malander¹ or Salancer.

Take Gunpowder, make it moist with aqua vitae, anoynt the melander with it. When 'tis coming again doe the same and after twice killing it will come noe more. ib.

For the cramp.

Take the tops of rosemary and put them betwixt the toes when you goe to bed. You must lie in linin socks. This is good for the gout. ib. A good bundle of rosemary smelt too cures it.

From Mrs. Eyers.²

For after pains in women.

Take of the parings of a stone horse hoof powdered as much as will lie on a groat in a spoonful of posset. Take this when the pains begin to come. Tis a certain cure not only for that time but for ever after. ib.

Aloe³ is only the juice of Sempervirens put into goats skins and so dried. Purchas p. 193, l. 3, C. 6, p. 3.

Tuesd. Mar. 20. For the red water in sheep.

Take soot, ginger and salt, 1 spoonful of each. Put them into urin 1 pint. Give it to the sheep and afterwards roule him 2 or 3 times over and over. M.S. of E.S.

Our Lady's nut is a most approved remedy against miscarriages if worne above the midle next the skin, if below it helps delivery.

From Mr. Thistlethwait, ib.

Parched oats will make hens lay well.

For the Farcy in a horse.

Rx. prepared Calamine stone and prepared Tutia, I oz. of each; Rue, Sage, of each I handful. Shread the hearbs and infuse all in ale 2 pints, on a slow fire till it is reduced by $\frac{1}{3}$ rd; adde to it [spirits of tartar] $\frac{1}{2}$ oz. before you give it. Let the horse fast 12 howers before and 12 howers after takeing it. ib.

To sodder broken glasses melt a peice of loaf sugar in the Candle.

Give the horse the mosse of an old oaken pale shread in his oats.

ib.

ib.

ib.

² There are letters to Locke from various members of the Eyre family in 1676, 1699, and 1703.

³ Aloes is the inspissated juice of the leaves of several species of aloe (Aloe socotrina, etc.). From Roman times onwards it was an esteemed purgative. It was the essential ingredient of hiera picra, which is perhaps the oldest pharmaceutical compound still in existence. pp. 46-7

p. 45

p. 53

For a drie cough.

¹ O.E.D. says "dry scabby eruption behind the knees of horses" and quotes from the Complete Farrier of 1759: "For a Mallendar. Take bay-salt, gunpowder, etc."

For an ague.

The rynde of wallnut steepd a while in Vinegar and apply a peice as big as $\frac{1}{2}$ crown to each wrist for 4 howers and $\frac{1}{2}$ hower before the fit. It will blister. ib.

For a violent cough to preserve the horses wind.

Take Liquorice, aniseed, sugar candy, $\frac{1}{2}$ oz. each. Make them into a paste with fresh butter as much as a wallnut and as much tar. Of this make balls as big as a wallnut and put a clove of Garlick in each. Give it the horse fasting after a little rideing, but ride him after till he sweat.

ib.

For a horse cough.

Spread on a clout tar, over that spread London Treacle, over that powder of Elecampan. Roule this on his snafle and let him chew on it when he rides. Doe this fresh divers times.

Milk set in a leaden cisterne makes the cheese the better. ib.

In Holland they give their cows when they milk them a peice of rape seed cake which increases theyr creame. ib.

To wear a Thistle apple about one will cure the cramp.

Thursd. Mar. 22. From St. Giles to Salisbury 12 M.

Frid. Mar. 23. For arthritis.

As neare the beginning of the fit as you can: first [bleed], second purge the next morning. [Bleed] again the next day, purge the next morning. This certainly puts off the fit. When the fit is over give Theriac of Andromachus etc. for a month togeather to restore the blood and if you will Canary wine. This method cured Mr. Reeves a gouty man that he had not a fit again in 7 years. D.T.

Pleuriticall blood I looke upon to be the effect of pain hindering due assimulation in the blood and not puerly of inflammation, because it is not to be found in all feavers, but is in all pleurisys, Anginas, Rheumatisms, High flox pox, Arthritical and nephritical pains. J.L.

The dosage of natural cinnabar must not extend beyond $\frac{1}{2}$ scruple. The dose of antimony and its compounds not beyond 4 or 6 grains. However Faber¹ cured X of pleuritis by giving up to $\frac{1}{2}$ a drachm of an Antimony preparation 4 times with great relief. I knew a famous doctor who gave up to 15 grains of often-purified antimony with [crabs'] eyes. But time will perhaps increase the dose of cinnabar just as it increased that of diaphoretic antimony of which 6 or 7 grains were once given with great caution, whereas now one to two scruples are prescribed quite fearlessly. I will say nothing about quicksilver.

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p. 56

p. 57

p. 57 (Latin)

¹ Albert Otho Faber wrote in High Dutch. Several of his books appeared in English, including De Auro Potabili Medicinali (1677) and A Relation of Some Notable Cures Accounted Incurable (1663).

Schultzius 143/192. Godofredi Schulzii,1 192 pp, Scrutinium Cinnabarinum 8° Halle-Saxon, '80.

Sat. Mar. 24. The Cinnabar of Diascoris² or Dragon's Blood of the pharmacists is the tear or gums of a tall tree called the dragontree, growing in Africa, Madeira, the Canaries and Spain.

Schultzius 1/192.

The Chemists' Cinnabar of [antimony] is sublimated from [antimony] and [mercury sublimate]. ib. It is a reddish substance, heavy, diaphoretic and anodyne. A specific for Epilepsy. ib. 32. Dose 10-16 grains. Good for headache and nerves.

Another cheaper artificial Cinnabar is made of common [sulphur] and quicksilver. ib.

Mineral Cinnabar, fresh, i.e. natural, is a purplish earth full of a kind of quicksilver. Or the Minium of Dioscoris. ib. It is the vein from which quicksilver is made. Another name is Anthrax from its bright colour-Cordus³ in Diosc.⁴ p. 526. The glowing colour is intense and brighter than that of Cinnabar of Antimony. It is a stone-like mineral, ruddy and weighty, rich in its special sulphur and quicksilver. ib. 67.

Dragon's Blood commonly is (1) Bloodwort Schultzius 2/192; or (2) the Tear or Gums of a tall tree called the dragon-tree, growing in Africa, Madeira, the Canaries and Spain; or properly speaking the Cinnabar of Dioscoris. ib. The gums are rendered down in iron pots and the scum removed. ib., p. 4. It is astringent and red. (3) Adulterated Dragon's Blood is a red mass of goats blood coagulated with the juice of sorb-apples and other fruits. ib.

For the Dragon Tree see Clusius: Observations on the History of Rare Trees.⁵ C.1, ib., p. 4.

The Minium of Dioscoris is the same as the Native Cinnabar of later writers; it is also called Anthrax from its bright colour.

Schultzius 7/192.

¹ The title of Scrutinium Cinnabarinum goes on thus: ". . . or the Triad of Cinnabars, which settles the nature of Cinnabar of Antimony, both natural and Manufactured; and also of the Specific for Head Diseases of J. Michaelis." Schultzius also wrote a Dissertatio Pharmaceutica on the tincture of bezoar of Michaelis.

² Cinnabar (bisulphide of mercury) was used in many nostrums. There was much confusion about the different forms of mercury: argentum vivum, hydrargyrium, cinnabar, etc.; and minium (red lead) was also thought to be related to mercury. (A. C. Wootton, op. cit., vol. I, pp. 408, 421.)

³ Valerius Cordus was the author of a Dispensatory (edition in 1554, 1639, etc.). He published an edition of Dioscorides' book on materia medica with notes in 1549.

⁴ Pedacius Dioscorides lived under Nero and Vespasian; he wrote "Six Books on Materia Medica". Many editions were printed, with commentaries by Amatus Lusitanus, V. Cordus, C. Petrus, I. B. Egnatius, P. A. Matthiolus, etc. ⁵ Charles de L'Écluse wrote a History of Various Rarer Plants Observed throughout the Spains (1576), Antwerp. He also wrote an Exotica in ten books, a description of unusual

plants, animals, fruits, aromas, etc., and with this were bound short works on the same subject by Acosta, N. Monardus, and P. Bellonius.

pp. 58-60 (Latin)

The Minium of recent pharmacists in a species of Vermilion.

Cordus in Diosc. p. 526.

Mr. Hunt a surgeon of this town curd a man bit with an adder whose arm was swollen with other symptoms, by burying his arme in a hole dug in the fresh earth which took down the swelling and allayed all the other symptoms. D.T.

For Venereal Gonorrhoea.

(1) Purge for 3 successive days. (2) Take some plantain water; add Acgyptiac to make it as bitter as the tongue can bear. Inject by syringe. On the first 3 or 4 days it will increase the flow of the Gonorrhoea, but after that lessen and finally stop it. If however any lachrymation remains, chalk boiled in milk or barley water will cure it. Take I ounce of chalk dust; boil in 1 pint of barley water. While boiling pour off the liquor for use, leaving the thicker part of the chalk in the bottom of the pot. A recipe of D.T.

Ludovicus the glory of the saner chemists. Schultzius 12/192. The dregs are exhausted. ib. 49.

The simple powder of Common yellow pellucid Amber, Mother of Pearl and Corall is superior to the official recipes. ib. 51.

The mineral Stone of quick silver is the same as native Cinnabar. ib. 67.

Miners' or Vitruvius'1 Anthrax is the same as Native Cinnabar. ib.

Pliny's Miltos is the same as native Cinnabar; the word signifies ib. reddish and reddening.

Arcanum Universale.²

Take of Elemt Ignis veneris 12 ozs., in it disolve of mercury sublimate 4 ozs., draw of in sand, put in it 12 ozs. more of the Elemt. Ignis veneris, draw it of as before. Put the water which you drew of both times upon the precipitate and draw of in sand with a very strong fire. Then wash it very sweet with [distilled] raynewater and dry it gently, then put upon it 3 pint of Sp. of vitrioll and draw it of in sand as formerly. Then put on it 3 pint more of spirits of vitrioll and soe doe the third with Spirits of vitrioll with a very strong fire then take out the precipitate and put it in a crucible makeing a gentle fire about it untill it leave fumeing. Then put spirits of wine upon it to from 4 fingers above it. And let it stand in a gentle heat 8 dayes. Pour of the spirits of wine and dry the precipitate. And burne sarsarised of spirits

pp. 61-2 (Latin)

pp. 65-9

p. 61

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¹ Vitruvius Pollio (fl. 10 B.C.) in his De Architectura, Book 7, Chapter 8, deals with the mining and preparation of minium; of which process quicksilver is a by-product. Pliny mentions miltos in Book 33, Chapter 38, of his Natural History. ² This account is in a different hand—but Locke has added "Wm. Smyth: D.T."

at end.

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of wine from it 4 times. Mr. Wilson a chimist next doore to the blew Anchor in bow lane have some which my father saw finished as above mentioned. Next you must boyle it 4 times in brandy untill the brandy will not soyle a white paper. Give it from $\frac{1}{2}$ a graine unto 2 or 3 never more and make it up in syrup and after wrap it in some purging pill that may give too or three stooles after 2 houres sweat, for it comandeth sweat in all cases. But you give some decoction after it, warmed according to the distemper you give it for, and if the patient is hard to sweat put one root of Tormentill in the decoction and set bottles of warme water to the feet as for the pox or cancer. He only used this drinke.

Sarsaparill	4 ozs.
Sassafras	4 ozs.
Guaicum	4 ozs.
Red Sanders	2 ozs.

One handfull of Laureola fixd in wine vinegar warmed 48 houres 12 qts boyled half away; licorish 2 ozs stript and put in it half an hour before you take it from the fire. Give a purge of Extract of Rhubarb one cleare day before the sweating pills, and then afterwards let him sweat every morning and drink noe other liquor but this decoction for 21 dayes and eat Sparing. As for the cures that my father sayth he have done it they are mentioned hereafter in his owne termes.

- I The true Lepra and all other Cutanious Distempers.
- 2 Cancers in severall parts of the body.
- 3 All ulcers as phagaedena and nomae.
- 4 Fistula lachrymalis.
- 5 Fistula in the anus without any locall application.
- 6 Ozena factida of long standing and without localls.
- 7 Pollipus without localls; it mortifying and so dropped out of the nose.
- 8 Fevers and Agues.
- 9 All sorts of worms in men women and children.
- 10 Most desperate Rheumes in the Eyes without localls as on Sr Francis Dodingtons¹ grandchild.
- 11 Fungus in the uterus. One famous cure I did on a Gentlewoman of 40 yeares of age who had had a fungus growing forth of her secret parts. I can give it noe better terme for it was large as a lamb's lungs and like it, which I cured with this in 21 days it dropping off without any outward application.
- 12 The french Pox it cureth infallibly with all its symptoms. It ¹ Sir Francis Doddington came from Hinton in Somerset; W. A. Shaw, op. cit., vol. Π, p. 89.

exfoliates and casts off without any exquamitories or actuall Cauterys at any time of the yeare in 14 or 21 dayes.

13 To the gangrene it separates the dead from the living and in gun shott it preventeth feavers and bringeth the wound to digestion but for most internall cures, it being besides my practice, I leave it to the learned and Experienced Doctors. But as to my own practice as a chyrurgion there have beene but few operations in it but have been performed by my hands with as good success as by any, and yet since I made use of this pill which I call my Arcanum I looke on all my Judgment to be Invalid without this, for I find it soe usefull that I doe add it in all cases whatsoever and it worketh very noble effects. Wm. Smyth: D.T.

[Extracts copied from Daniel Ludovicus, De Pharmacia Moderno Seculo Applicanda Disertationes Tres. (1671), Gotha, 12°, 924 pp.]

Tuesday March 27. In Poterius¹ there are purgeing pills for suppressed menstruation to be given a great while togeather, which will cure. Of these I was fain to give 9 to a maid which²... These pills she took soe long till one of the same pills would purge her sufficiently. Dr. T.

Wed. Mar. 28. On Suppression of menstruation see Poterius, Cent. 2, C.42, whose method and medicines are approved by D.T.

The Hiccough of intermittent autumn fevers is a very dangerous symptom. Peruvian Bark and Crocus Graduatus do not stop it unless accompanied by frequent clysters, according to D.T.'s experience. Platerus praises cathartics in such cases.

From Salisbury to St. Giles 12 M.

[Locke returned to London on 7 April.]

Frid. May 4. Borellus De motu animalium J.A.B. Neopolitani matheseos professoris opus posthumum pars altera 4° Romae, '81, 520 pp. The most skilful and learned Anatomists are C. Fracassatus et S. Bonfigliolus. Borellus, 520 pp. p. 457.

Thursd. May 17. The English Atlas vol. 1, fol. Oxford 1680. [Edited by Moses Pitt].

Those who went to Greenland infected with any venereall disease grew worse immediately and could not there be cured. ib. Northern Islands, p. 11 [of *The English Atlas*].

Tuesd. 20 May. This day	I removed	to Dr.	Goodalls.
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Tuesd. Jun. 5. Identity of persons lies not in having the same numericall body made up of the same particles, nor if the minde consists of

² Rest of line blank in MS.

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p. 78

p. 81 (Latin)

p. 82

p. 99

p. 100

p. 106

¹ Pierre Potier wrote Three Centuries of Notable Cures and Singular Observations, and a Spagirical Pharmacopoeia (1643), Bologna, and also De Febribus.

corporeal spirits in their being the same, but in the memory and knowledg of ones past self and actions continued on under the consciousnesse of being the same person wherby every man ownes himself.

[On 14 June Locke left London. He is in Oxford on the 15th, Cirencester on the 18th, back in Oxford on the 19th.]

Tuesd. Jul. 24. About I scruple of crude [antimony] at a time taken twise a day made up with turpentine into pills will make old ulcers digest and yield to topiks. D.T. Q. whether made up with Balsam Peru would not be better, for with that taken in larger doses Consumptions will be cured. D.T. Q. whether [antimony] thus taken would not cure schrofulae. J.L. Taken with the decoctum of Sarsparilla. I am told will cure [Venereal] Disease.

Wed. Aug. 15. Take some Hemlock Leaves; 1 pint of spring water; $\frac{1}{2}$ lb. of common treacle. Boil. Strain well with hard squeezing. Give warm in the morning. Then exercise the horse moderately and in the afternoon give white water or a mash. For grease in the heels. D.T. Afterwards wash the tumours and ulcers of the legs with this liquor. Take $\frac{1}{2}$ pint each of Vinegar and Spring water; one handful each of the leaves of salvia, rosemary, and red honeysuckle; $\frac{1}{2}$ lb of crude alum. Cook till $\frac{1}{4}$ part has evaporated. Strain and add 4 ozs. of Honey. Shave the hairs and apply this liquor.

Frid. Aug. 17. When the lochia suddenly cease and fever, sleeplessness and phrensy etc. follow. (1) Move the lochia if possible by the proper methods, blistering poultices to the thighs etc. If this fails, then up to 8 ozs. of [blood] from the arms for 2 or 3 consecutive days, and the same thereafter twice or thrice with pauses for the patient to recover strength. In the meantime drink wine and other palatable and stronger liquors to keep up the strength. Also apply [sublimate of sal ammoniac] to the nostrils and Plaster of Galbanum to the navel. If there be pains take 2 drachms of Myrrh, 1½ drachms each of Castor and Galban, 2 scruples of English Saffron. Boil in 3 ozs. of Rhine Wine. Strain and dissolve in the liquor 13 grains of liquid laudanum. This will allay pain and provoke Lochia.

If there be faintings and hysterical symptoms in childbirth where the Lochia flow give every night or every other night crocus graduatus 8 grains. This allays the hysterical symptoms and stops the lochia this way continued 6 weeks and began the 4th day and the weak woman was cured. D.T. p. 120

p. 122 (Latin)

CHAPTER VII

Exile in Holland

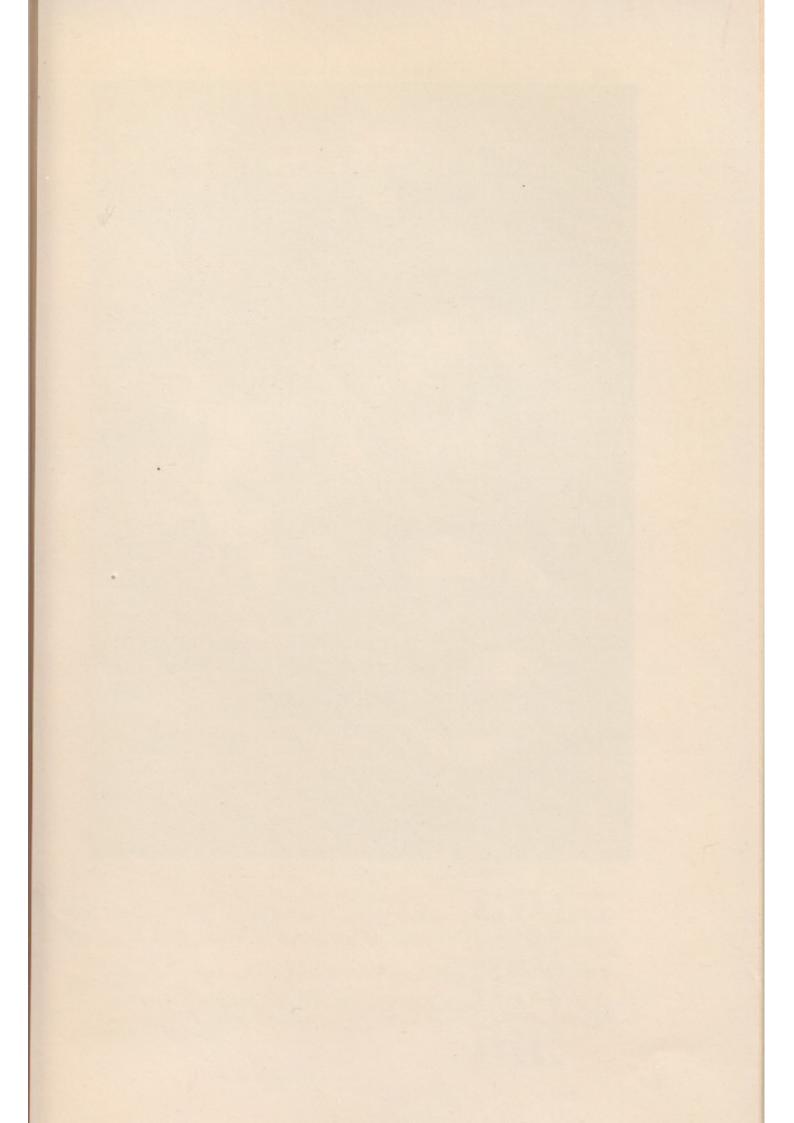
LOCKE was in his fifty-first year when he chose exile in Holland rather than intolerance at home. He landed at Rotterdam in September 1683 and went on to Amsterdam where his first friends were medical men. He had previously met Dr. Pieter Guenellon in Paris who introduced him to other doctors. Guenellon had married the nineteen-year-old daughter of Dr. Egbertus Veen, and his ability, allied to his father-inlaw's influence, brought him a large practice with hospital appointments, a lectureship, and the post of Chief Medical Officer to the Admiralty with responsibility for supervising the medical welfare of the Dutch fleet. A less successful practitioner in an over-doctored country was Caspar Sibelius, who soon moved from Amersterdam to Deventer where his search for patients was equally unrewarding. Ten years later he changed his name to Sibley and moved to England. With the encouragement of his Dutch colleagues Locke began to devote most of his leisure to medicine. He inquired from Clarke whether Sydenham had published anything recently, adding that he proposed to "apply myself close to the study of physic by the fireside this winter".1 It was the best place. A lioness froze to death in the zoo, and Locke accompanied Guenellon to the autopsy, where he met Philip van Limborch, Professor of Theology at the Remonstrant's College, and a keen amateur scientist.

The popularity of the Italian universities had declined after the Reformation, as they excluded non-Catholic students, and the Dutch medical schools had now replaced them as the foremost teaching centres.² Leyden, founded in 1575, succeeded Padua as the leading medical school,³ although the competitive spirit of the other cities of the Free Netherlands manifested itself with the creation of five Dutch universities each with reputable medical faculties: Franeker (1585), Gröningen (1614), Amsterdam (1631), Utrecht (1636), and Harderwyck (1648) all of them opening their doors to students, irrespective of race or religion.

¹ Rand, op. cit., p. 100.

² Douglas Guthrie, A History of Medicine (1945), London, p. 193.

³ Douglas Guthrie, "The Influence of the Leyden School upon Scottish Medicine", Med. Hist. (1959), 3, 108-22.





8. The Anatomy of Dr. Ruysch, by Johann van Neck. (By kind permission of the Curator of the Municipal Museum, Amsterdam.)

At Amsterdam Locke found a flourishing medical college whose early anatomical tradition is depicted in Rembrandt's painting of Nicolas Tulp's (1593-1674) "Lesson in Anatomy". It owed more to the work of Jan Swammerdam (1637-80), son of an Amsterdam apothecary, whose technique of preserving anatomical specimens allowed dissections to be carried out in summer as well as in winter. Swammerdam searched for an injectable liquid which would later solidify, and after trying suet, finally decided on wax.1 His method was published and later taught to Frederik Ruysch (1638-1731) who preserved the body of Admiral Berceley, killed in a naval action, so well that it was returned to England like "the fresh carcase of an Infant", an appreciative Government bestowing "a Recompence which was at once proportion'd to their grandeur, and the Artist's merit".2 By a combination of Swammerdam's technique of preparing specimens, and his own showmanship, Ruysch built up a bizarre anatomical museum in Amsterdam. Human skeletons arranged in quaint postures were labelled, each with an appropriate memento mori, adorned with exotic plants, and surrounded with stuffed animals. Both anatomists and artists sought subjects in the Dutch dissecting rooms, and shortly before Locke's arrival, Johann van Neck had completed the portrait of his uncle, "The Anatomy of Dr. F. Ruysch".⁸ It has a sombre and disturbing quality. Before four saturnine physicians richly clad in silk lined with frilly lace, Ruysch earnestly explains his dissection of a baby, whilst, near by, a small boy inquisitively fondles the mounted skeleton of an infant. This was the anatomy theatre where Locke, and other members of a private medical "college" occasionally met during his first winter in Holland.

In the spring Locke left Amsterdam, and began a short tour of Holland. He went north across the Zuyder Zee to Friesland where the small university town of Francker impressed him with its high academic standard; then he visited Leeuwarden, Gröningen, and after touring through the smaller towns of Friesland, turned south to Deventer where he stayed with Dr. Sibelius, a friend and admirer of Dr. J. J. Wepfer (1620-95) of Schaffhausen. Wepfer graduated from Basle, and eventually became State Physician at Schaffhausen, where he was joined by his son and his son-in-law J. C. Brunner. Sibelius had worked with Wepfer ten years previously, when a particularly severe epidemic swept the town, and he passed on to Locke the details

¹ Fielding H. Garrison, An Introduction to the History of Medicine (1924), Philadelphia,

⁴th edition, p. 251. ² "Johnson's Life of Ruysch", Bull. Hist. Med. (1939), 2, 324-34. ³ Bruno Gebhard, "From Theatrum Anatomicum to Medical Museum", Ciba Symposium (1947), 8, 566-83.

of his treatment. After ten days of medical discussions with Sibelius, Locke completed his tour by visiting Arnhem and Nijmegen, whence he sailed down the Waal to Utrecht, and returned to Amsterdam on 10 October.

He began to attend the meetings of the private medical "college"1 whose eight members included some of the most distinguished doctors: Veen, Guenellon, Limborch (the only layman) constantly attended along with the versatile Pieter Bernagie² (1656-99) who wrote on the therapeutic benefits of tea in the Pharmacopoea Amstelodamensis (1682), and combined the posts of Professor of Anatomy, and Director of the State Theatre. Another member was Abraham Cyprianus³ (1656-1724), a graduate of Utrecht, and then the leading surgeon, specializing in lithotomy. In 1693 he moved on to Franeker as Professor of Anatomy and Surgery, where he successfully operated on a ruptured tubal pregnancy. Three years later he emigrated to England where, through Locke's influence, he was befriended by Sir Thomas Millington, and in twelve years performed over 1,400 lithotomies. Other members were Abraham Quina, and Matthew Slade (1628-89) a friend of Swammerdam, and then Professor of Medicine, who, under the pseudonym of Theoderus Aldes, or "Anglus", challenged Harvey's theory of generation. Slade also came to England, where Locke gave him several introductions.

Locke learned a lot from these men during his first year in Holland. Occasionally he took part in their discussions, but most of his notes are to be found in a separate commonplace book⁴ rather than in these journals. It begins, like his other medical notebooks, with information on various diseases listed alphabetically; but this notebook contains many entries on midwifery, and the diseases of women, a branch of medicine in which Dutch physicians were then pre-eminent. We find that Guenellon discussed tumours of the breast, and Veen and Slade abnormalities of menstruation; from Guenellon and Veen there are instructions on dealing with suppression of the lochia, and Slade discussed the hazards of the puerperium. Dr. Quina contributed information on salivation, and the treatment of ulcers; but the most numerous entries came from Dr. Wepfer. There are also notes from

¹ The "Collegium Privatum" of Amsterdam was, like the "Invisible College", a society without a home. Founded in 1664 by Gerard Blasius or Blaes, Professor at Amsterdam, and author of three important works on comparative anatomy, the society published original scientific work from 1667 to 1673. The most distinguished member was Jan Swammerdam who joined in 1665. Locke was probably introduced by another foundermember, Matthew Slade.

² C. E. Daniels, Biographisches Lexikon der Hervorragenden Arzte aller Zeiten und Völker (1934), Berlin, vol. 1, p. 485.

³ Ibid., vol. II, pp. 162-3.

4 B.L., MS. Locke, f. 24.

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his English friends, particularly Thomas and Boyle; and the Earl of Pembroke and Mr. Huygens¹ recommended this strange treatment for mania:

Either common redish Horse redish or Spanish redish which of them it is he knows not certainly but one of them will doe. Boile them to a pulpe and therewith fil a roule such as children wear to defend their heads. Let patient wear it nights about his neck, when he finds himself begin to be disturbed, and it will allay the disorder.

Locke was soon off on his travels again. This time he spent a month in Leyden's famous medical school. There he met Lucas Schacht² (1634-89), "professor magnificus", who showed him the remarkable case of a girl who had recovered after one-third of her skull had been burned, and to his "extraordinary civility" he owed a "sight of Swammerdam's Musaeum". Schacht does not seem to have been particularly distinguished, if we may judge from his publications which are limited to an account of the Leyden epidemic of 1678-9, and the obituary of Sylvius. At the medical school, he also met Christian Margraf,³ Professor of Pathology, and a notable iatrochemical disciple of Sylvius; but he spent most of his time with Paul Hermann⁴ (1640-95), Professor of Botany who had lived in Ceylon. Locke's inquiries about strange tropical plants were doubtless stimulated by the current success of quinine, and Dr. Hermann, with his tropical experience and knowledge of botany, was just the expert he sought. Hermann was also an authority on exotic plants growing in Dutch botanical gardens, and was then cataloguing the flora of Ceylon, which eventually came out in three volumes. Not all Locke's Leyden acquaintances were professors: he gleaned much information on East Indian herbs from the local druggist, and he befriended a young Irish medical student, Thomas Molyneux, who later rose to the head of his profession in Dublin.

On his return to Amsterdam, Sibelius⁵ sought his advice in the treatment of one of his patients, and enclosed a long letter from Wepfer with whom they had arranged to exchange medical information. After mentioning his method of administering Peruvian bark in the treatment of agues, Wepfer described several experiments on dogs and goats which he had carried out with the assistance of his son and J. C. Brunner (1653-1727). They were investigating the effects of various poisons, and Wepfer inquired from Locke whether poisoned animals

¹ B.L., MS. Locke, f. 24, f. 91. ² C. E. Dat ³ Biographie Médicale (1855), Paris, vol. II, p. 94. ⁵ B.L., MS. Locke, c. 18, f. 105, 4/14 Oct., 1684. ² C. E. Daniels, op. cit., vol. v, p. 48.

⁴ Ibid., vol. I, p. 540.

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died with convulsions, or in syncope. At a later experiment, Brunner¹ discovered the duodenal glands which still bear his name.

After a lapse of two years Locke resumed his correspondence with Thoynard as part of his scheme of collecting and correlating information from physicians in many lands. Thoynard's letters brought him news from M. Gendron on the treatment of conjunctivitis, and a plaster which worked "miracles" in relieving his aches and pains.² He had another link with the French physicians through William Charleton, whom he asked to get Dr. Barbeyrac's recently published book on quinine;3 and he was also consulted by James Tyrrell who informed him that his wife was intending, "as soon as her Asse Foals, to begin another of her soveraign remedyes, Asses milk".4

Locke also heard that he had been expelled from his Christ Church studentship by the King's command, and was particularly worried about the fate of his library. In the winter of 1684-5 he left his Amsterdam medical friends, and moved to Utrecht where he met J. G. Graevius, philologist, archaeologist, and Professor of History. But he was soon forced to leave, as Monmouth's abortive rebellion led to a demand for the extradition of English exiles. He returned to Amsterdam where he lived with Dr. Veen, under the assumed name of Dr. Vander Linden. This was no haphazard choice: there had been a real Dr. Vander Linden (1604-64)⁵ whose works Locke greatly admired. After graduating from Francker with a treatise on De Virulentia venerea, Vander Linden practised in Amsterdam until his appointment as Professor at his old university. There he improved the library, botanical gardens, and the standard of anatomical dissection to such an extent that he was invited to Leyden, where he gained a reputation as a bibliographer and medical historian, publishing the collected works of Hippocrates. Locke clearly identified himself with this scholarly physician rather than his more practical colleagues.

For over a year Locke lived the life of a recluse, and medicine which had hitherto been one of his foremost interests, faded into the background. He spent most of his time in writing his Essay; and in a lengthy correspondence with Edward Clarke on the health and education of his children, he laid down the basis of his treatise on education. Locke urged science as a necessary subject in a young gentleman's education, and he particularly recommended the study of such "writers as have employed themselves in making rational experiments and observations

¹ J. C. Brunner, De Glandulis in Duodeno Intestino Detectis (1687), Heidelberg.

^a B.L., MS. Locke, c. 21, f. 142, Nov. 1684; and ff. 143-4, 7 December, 1684. ^a Ibid., c. 5, f. 62, 25 April, 1685. ^b George Sarton, "Johannes Antonides vander Linden (1604-64) Medical Writer and Bibliographer", Science, Medicine and History, ed. E. A. Underwood (1953), Oxford, vol. п, р. з.

than writing speculative systems. Such writings, therefore, as are Mr. Boyle's may perhaps be fittest."1 Although Goodall was now the Clarkes' doctor, Locke's confirmatory opinion was always sought. He advised them² on the method of taking quinine, whilst Clarke sent him various drugs which he needed for making up medicines. He also heard from James Tyrrell who, when sending him some books, mentioned that Sydenham's works "are all come out together with divers new additions, and if you please I will send you that likewise".3

For greater security Locke moved to Cleves in the winter of 1685, but soon returned to Amsterdam where he met Jean le Clerc, 4 a native of Geneva who had travelled widely before his appointment in the previous year, as Professor at the Remonstrant's College. Le Clerc was then bringing out his Bibliothèque Universelle, one of the earliest literary reviews, to which Locke contributed his first published work on a method of indexing a commonplace book. In May 1686 Locke emerged from hiding, and went to Rotterdam to meet Sir Walter Yonge, one of Shaftesbury's old supporters, who was touring the Netherlands with his sisters and brother-in-law. He accompanied them as far as Utrecht, and then went on to Delft whose placid charm is reflected in the paintings of Vermeer. But Locke had come to see bugs rather than beauty: it was here that Anthony van Leeuwenhoek (1632-1723) the greatest microscopist in Europe was working as Chamberlain to the Sheriff. In his spare time, he made microscopes which revealed the new world of micro-organisms. His great skill lay in the art of lens grinding, and Dobell⁵ believes that part of his success was due to the use of a form of dark ground illumination. Regnier de Graaf had earlier encouraged him to send his observations to the Royal Society, and when Locke made his acquaintance, Leeuwenhoek was already one of that society's most famous Fellows. He showed Locke some red blood-cells, a human tooth, and the spermatozoa of a dog, the discovery of which led to the "animalculists" theory of generation.

On his return to Amsterdam, Locke advised Sibelius on the treatment of a patient with pulmonary tuberculosis,6 and he was particularly interested in a letter which? Sibelius enclosed from Dr. Ten Rhyne of Batavia,8 a well-known botanist, physician, and Orientalist who became another source of information for his "paper commerce

¹ Rand, op. cit., pp. 144-56, 15 March, 1685.
² Ibid., pp. 131-3, 30 April, 1685; and pp. 124-5, 2 March, 1685.
³ B.L., MS. Locke, c. 22, ff. 54-5, 26 Dec., 1686.
⁴ The brother of Dr. Daniel Le Clerc (1652-1728), physician and medical historian.
⁵ Clifford Dobell, Anthony van Leeuwenhoek and his Little Animals (1932), London.
⁶ B.L., MS. Locke, c. 18 f. 106, 2422 June and f. 2022, 444, Aug. 1686.

⁶ B.L., MS. Locke, c. 18, f. 106, 3/13 June, and f. 107, 4/14 Aug., 1686.

⁷ Ibid., c. 31, ff. 51 and 62.

⁸ Biographie Médicale (1855), vol. II, p. 135.

between Physitians". Born at Deventer, Ten Rhyne had studied medicine under Sylvius, and was then Physician to the Dutch East India Company. He was the author of books on Hippocratic medicine, botany, the treatment of arthritis, and a history of the Hottentots. He sent Locke (through Sibelius) detailed notes on East Indian medicines used in childbirth, a method of cauterizing with moxa,¹ and general notes on the customs of the natives. Locke asked for his opinion of quinine, but Ten Rhyne preferred to use the native method of treating fevers of which he sent an account.² He also recommended *De Lepra Asiatica*, recently published at Amsterdam, which failed to impress either Locke or Sibelius as the author did not follow "the Style and Method of Sydenham".

From France Locke sought information on herbs used for treating ulcers in the mouth, but Thoynard³ bluntly replied: "I cannot ask M. Godefroi as he left us three months ago as the result of an apoplexy." It was some time before he received the herb which was a type of geranium called "chanerole".⁴ Thoynard also sent the recipe of M. Gendron's plaster which he had found effective, with the warning "not to tell anyone. It is a secret."⁵

Locke was working on the last part of his *Essay* in Utrecht in the autumn of 1686 when he was unexpectedly expelled from the town. He again sought refuge with Dr. Veen where he finished his book, and at the beginning of 1687, moved on to the Rotterdam home of Benjamin Furly, an English Quaker merchant, long settled in Holland. Furly was a jovial man with a liking for good conversation, and Locke formed a small club whose members met at his home where they spent convivial evenings drinking mum and discussing politics, philosophy, and medicine, as one of their number was Baron Franz Mercurius van Helmont, son of J. B. van Helmont. But his medical work was now limited to discussion, and corresponding with other physicians. Locke did, however, make a long note on the virtues of a herb, passed on to him by Furly, which was supposed to cure a great many illnesses; from Mrs. Furly he got a more palatable recipe for making flapjacks.

Clarke still sought his advice, and even though Drs. Sydenham, Goodall, and Thomas were treating his son's fever he "heartily wished it were possible for me to have your assistance".⁶ Tyrrell's wife was

⁸ B.L., MS. Locke, c. 18, ff. 108-9, 9/19 Sept., 1687.

³ Ibid., c. 21, f. 147, 22 Dec., 1686.

4 Ibid., f. 156, I May, 1687; and f. 157, 20 Oct., 1687.

⁵ Ibid., ff. 148-9, 20 Feb., 1687.

6 Rand, op. cit., p. 172, 25 Nov., 1686.

¹ Ten Rhyne introduced this method of cauterizing into Europe. He used the leaves of the artemisia which were placed on the affected part, set alight, and allowed to smoulder down to the skin. This method was adopted by van Swierten and Sydenham as a treatment for gout.

constantly ill, and taking ten grains of finely powdered antimony every morning on the advice of Drs. Dickinson and Thomas.¹ She was dead three months later.

I am sorry you were not in England [wrote Tyrrell],² for there was no man on whose judgement she did so absolutely relye as upon yours; and I never knew you prescribe her any thing but what did her good: so that she often wished her self with you or you here; for had wee bin so happy I beleive wee might have enjoyed her longer. . . .

Locke occasionally heard from William Charleton, now settled in the Temple, where his great collection of curiosities was attracting many visitors.

I have had the Honour [wrote Charleton],³ of some eminent Drs. of Physick Company lately to see my collection amongst others Dr. Goodall who is very much your servant.

He sent Dr. Barbeyrac's book on quinine, and Locke passed on to him various items for his collection including the drawing of the kinkina leaf, which Charleton gave to Goodall who, "told me that if he printed anything concerning it (if you saw fit) he would make mention of you".⁴ Shortly afterwards Charles Goodall⁵ sought Locke's help in his investigations.

I thanke you for the figure of the leaf of the KinKina tree you sent me by your worthy and good Friend mr Charlton. I have compared it with some leaves taken out of boxes or bales of bark sent into England, which I have kept long by me. It doth very much resemble them and seems to be of the same kind. I thanke you for putting me in remembrances of pursuing that treatise I intended upon that subject, which I have for some yeares laid aside; having been engaged upon writing that History you mention, as likewise hindered by sickness, loss of my father, etc., I now design in good earnest to fit it for the press, and am in hopes (whilst I am thus engaged) I may get better information about it from a learned and ingenious physician⁶ (an intimate Frend of mine) who is speedily going to Jamaica⁷ with the Duke of Albemarle. I have drawn up the following set of inquiries with which I intend to furnish him and some other Freinds, amongst whom I do particularly request your assistance.

Queries to be proposed concerning the KinKina tree. To any of the Natives of Peru brought into Europe: To any Spaniards, who were born and lived some time in that Countrey: To any merchants who have long traded at Lima, Quito, or other parts of Peru: To any Priests who have Spent some yeares there: Or in case None of these can be found in Europe, to Antonio Giminez

¹ B.L., MS. Locke, c. 22, ff. 56-8, 6 May, 1687.

² Ibid., ff. 59-61, 29 Aug., 1687. ³ Ibid., c. 5, ff. 66-7, 31 April, 1686.

⁴ Ibid., c. 10, ff. 19–20, July 1687.

⁶ Dr. Hans Sloane.

⁵ Ibid.

⁷ Or Jamajaca.

an eminent Physician of Lima, or any other inquisitive Physician or Naturalist, who may be found in that Countrey.

Where the KinKina trees chiefly grow, whether they be wild or propagated by Art, or both; what their size, figure, number, colour (of leaves, bark and wood), taste, and use amongst the Indians and Europeans inhabiting that Countrey are; when and how the first discovery of these trees and bark was made; As likewise whether they beare flowers, seed or fruit; How and when the Natives bark these trees, whether the trees are not thereupon destroyed, if not, what use are made of them; how they manage the bark in order to its transportation, what quantity they have transported in late years.

Questions to be proposed concerning the KinKina bark. To any Spanish or English Merchants living at Cadiz. When the KinKina bark came first into Rome or Spain, when into other parts of Europe; what different prices it hath been sold at, how unadulterated, what quantity hath been imported into Europe by the Spanish Galeons in one voyage, and how many they may have made of late yeares especially since 1677 when this bark began to be generally used, and how they have been fraighted therewith.

If you have any Freind at Rome I begge the favour of you to write to him to enquire of the learned Nazarius whether he hath published those observations he had by him.

Locke sent him all the information he could muster; and now, with more freedom to travel, he frequently left Rotterdam for visits to The Hague, Leyden, Harlem, and Delft. Between times he was working hard as a literary journalist, and according to Cranston,¹ wrote nearly everything published in the *Bibliothèque Universelle* over a period of two months. This is confirmed by Le Clerc who mentioned that Locke reviewed Boyle's latest book for him. "He [Locke] also made me likewise several extracts of Books, as that of Mr. Boyle² concerning specifique Remedies." But in spite of this brief excursion into journalism Locke's Dutch friends regarded him primarily as a physician, and after a financial misunderstanding, Furly³ wrote: "Thine of the 25th confirms that doctors are not well skilled in matters of exchange." He also treated Furly's son, and his advice to the boy's mother is an example of his rational use of expectant treatment when prompt intervention with dangerous remedies was the order of the day.

I commend very much the discretion of Mrs. Furly [wrote Locke],⁴ that she would not give him praeciptates. 1° Because physic is not to be given to children upon every little disorder. 2° Physic for the worms is not to be given upon

¹ Maurice Cranston, op. cit., p. 295.

² H. O. Christophersen, A Bibliographical Introduction to the Study of John Locke (1930), Oslo, p. 11.

³ B.L., MS. Locke, c. 9, f. 29, 21 Feb., 1688.

⁴ Original Letters of John Locke, Algernon Sidney and Lord Shaftesbury (1847), ed. T. Forster, 2nd edition, London, p. 44, 2 Feb., 1688.

bare suspicion that there may be worms. 3° If it were evident that he had worms, such dangerous medicines are not to be given till after the use of more gentle and safe remedies. If he continues still dull and melancholy, the best way is to have him abroad to walk with you every day in the air; that I believe may set him right again, without any physick; at least, if it should not, 'tis not fit to give him remedies, till one has well examined what is the distemper, unless you think, as is usually done, that at all hazard some thing is to be given, a way I confess I could never think reasonable, it being much better, in my opinion, to do nothing than to do amiss.

When Charleton was afflicted with giddiness and severe headaches he wrote to Locke, who reminded him of a previous occasion in Montpellier when "a continual headache which upon the forbearing of snuff, left him again". In return for regular copies of the Philosophical Transactions,1 Locke promised to send him "any rarities that I can light on in the East India fleet",2 and enclosed some seeds with a request for Bobart to plant them in the Oxford Botanical Garden. David Thomas³ also kept Locke informed of his progress in chemistry. He was trying to prepare a medicine from antimony, gold, and silver, and asked Locke to get the process, "as I believe if the medicine be made right it will prove of great efficacy, and I believe Faber both knowing and as a chymist honest".

Locke was ill with dysentery in August, for which Dr. Veen prescribed tincture of laudanum. His illness persisted. "I beg of you," Locke wrote⁴ to Limborch, "to ask Dr. Veen to send me eleven or twelve bottles of laudanum, of the same strength as before, as I have exhausted all the stock I had, and now need more for my own use." He was convalescing when he heard from Sibelius⁵ who asked him to send a letter to Dr. Barbeyrac of Montpellier. Sibelius, and his friend Dr. Cognatus Borckeloo, inquired as to the political allegiances of Sir Patience Ward⁶ who was then living in Holland at the home of a certain Dr. Moll: they were anxious to know whether he was in favour with the King of England, and likely to return to London. As Patience Ward had subscribed £,5007 towards fitting out Monmouth's ill-fated expedition, he was unlikely to return to London whilst James II remained on the throne.

At the beginning of 1688 Le Clerc was ill, and Locke referred his

7 B.M., MS. Harleian, 6845, f. 272.

¹ B.L., MS. Locke, c. 5, ff. 77-9, 2 March, 1688.

² B.M., MS. Sloane, No. 3996, 12 Aug., 1687.

⁸ B.L., MS. Locke, c. 20, f. 59, 17 July, 1687. ⁴ Amsterdam Remonstrant's MS., 6 Oct., 1687.

⁵ B.L., MS. Locke, c. 18, ff. 108-9.

⁶ Sir Patience Ward (1629-96), a London merchant, knighted in 1675, and Lord Mayor in 1680.

case to Drs. Sydenham and Goodall, who recommended some pills, an elixir of gentian, and a course of German spa waters.¹ Goodall's letter ends with another list of inquiries about the kinkina tree with insignificant differences from his earlier letter, apart from a request for "a bough or branch of the tree", and information as to when it was first used in England, and its varying cost since.

A French abridgement of Locke's Essay appeared in the January (1688) issue of the Bibliothèque Universelle, and Locke sent copies for the critical scrutiny of the Earl of Pembroke, Boyle, Thomas, Goodall, Dr. John Hutton,² and Sydenham. He also had the pleasure of entertaining some of his English friends who paid him a brief visit. David Thomas arrived at the end of March: Locke met him in Rotterdam, and together they visited Leyden, Utrecht, and Amsterdam. Thomas liked the Dutch medical schools, and on his return, he got Locke to arrange for Thomas Davis³ to be apprenticed as a surgeon to Pieter Verduin of Amsterdam; and he asked his opinion about sending his eldest son to Holland to be trained as a physician,4 but Locke recommended sending him to Sydenham instead.⁵ Edward Clarke and his family also briefly visited Holland.

Locke was now beginning to get favourable views from his friends who had finished reading the abridgement of his Essay, and Thomas jestingly mentioned that Sydenham and Goodall were busy physicians with little time for philosophy.

You cannot expect much concerning your booke from Dr. Sidenham or Goodall [wrote Thomas⁶], who neither understand the language it is writt in⁷ but you need not dowt commend it and are your very humble servants for it and would write their thankes if it were not somewhat dangerous as one of them told me or as gainefull as visiteing a patient.

But Thomas had little grounds for criticism as he was more interested in chemistry than philosophy, and was then trying to purify mercury and make

aurum potabile, which Mr. Boyle assures, though formerly of a contrary opinion, is of greate use and efficacy in physicalea. I have made a preparation

³ B.L., MS. Locke, c. 20, ff. 65-6, 18 July, 1688; and f. 67, 6 Sept., 1688.

4 Ibid., ff. 60-1, 25 April, 1688.

⁵ Ibid., ff. 62-3, 10 May, 1688.

⁶ Ibid., f. 64, 7 July, 1688. ⁷ In view of Thomas's statement that Sydenham did not understand French it seems unlikely that he had ever studied in Montpellier with Dr. Barbeyrac.

¹ B.L., MS. Locke, c. 10, ff. 21-2, Feb. 1688.

² John Hutton, M.D. Padua, later became First Physician to William III. He wrote two letters praising Locke's book which he described as "one off the best Systems that the world has yet seen" (B.L., MS. Locke, c. 11, ff. 249-50; and ff. 251-2, 6/16 March and 27 March/ 6 April, 1688).

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of his for at least cureing the faynty sweats of persons consumptive and am now trying it, and the effect you shall know as soone as I can be assured of it.¹

In November 1688 Locke advised Limborch on the treatment of his son's smallpox. He warned him to avoid giving any heating medicines,² and later scathingly dismissed orthodox methods in favour of Sydenham's cooling regimen.

Let me give you my advice [wrote Locke],³ not because I think you can need it when such a wise and experienced doctor as Veen is by your side, but because I know you have faith in me and will listen to what I say. After this disease, most doctors are in the habit of again and again administering purgatives with the object of clearing off all remaining traces of disease, but it seems to me that they are very apt to themselves encourage the evils which they deem it necessary to purge away. Patients recovering from the small-pox generally have an enormous appetite which, if a careful and moderate diet is not pursued, causes the stomach to be over-loaded and the blood to be brought into a condition for breeding fresh disease. Old women and doctors nearly always offend in this way, thinking that the more food they give the more the invalid will be strengthened. Now, nothing but what suits the stomach nourishes the blood, strengthens the body, and brings it into a healthy condition. Over feeding not only does no good, but breeds vicious humours and encourages disease. I entreat you to bear this in mind.

By following this regimen his patient recovered.

Meanwhile, a political crisis had arisen in England with the birth of a son to James II which would ensure a Catholic succession. There was much activity amongst the English Whigs in Holland. At the end of October William sailed with his fleet for England, and the Glorious Revolution ran its brief course. Locke prudently remained behind with the ladies until he heard that William had been proclaimed King from Charles Goodall who offered to accommodate him on his return. When he received the news, Locke was carrying on a mild flirtation with Lady Mordaunt whose husband had accompanied William's party, but he accepted the invitation and began to pack up his belongings. They consisted of sixteen boxes, thirteen of them containing books, and "a little casque with iron furnace in it" which suggests that he had spent some of his exile preparing his own medicines. He accompanied Princess Anne and Lady Mordaunt to England, landing at Greenwich on 12 February, 1688/9. During these five years of exile, he had greatly widened his knowledge of medicine.

¹ B.L., MS. Locke, c. 20, ff. 68-9, 20 Oct., 1688.

² Amsterdam Remonstrant's MS., 24 Nov., 1688 (printed in Familiar Letters, p. 323).

³ Ibid., 25 Nov., 1688.

CHAPTER VIII

Journals (1683–1688) 1683¹

Sat. Dec. 1/11. Arthritis is a paine of the periosteum which is distended by wind. Wilhelm ten Rhyne: Dissertatio de Arthritide 8° London, '83, 334 pp. Sometimes the tumour appears in the form of a pustule, the skin being a little distended, where the seat of the disease is, even though this be somewhat removed from where the pain is.

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Thursd. Jan. 6. On the outward part of the arme about an inch or two above the wrist in the line of the fore finger one may feele a litle kinde of a knot which seems to be noe thing but a tendon rideing over an other, for upon moveing of the wrist one may feele it stir. When the throat swells this they say swells too and a swelled throat will be cured if on the same side that the swelling is you thrust this knot upwards with your thumb beareing very hard upon it soe as to put one to pretty sharp payn. Doe this 2 or 3 times in the morning and soe again in the after noone and it will certainly cure a swollen throat. Let the patient at the same time that you rub this part swallow his spittle. Thus he was curd himself of a soar throat and has known several others cured.

Mr. Wilcock.

Dr. Sibelius told me that Dr. Wepfer had used himself that peice of a stick which is soe commonly used in Germany for the stoping of blood and found the effect of it. He, Dr. Wepfer, believed noe thing criticall in the time or manner of cuting the stick but only when it is full of sap. The manner of preparing and useing of it is noe thing but cuting away the barke and part of the wood on one side and applying that side to the wound. Mr. Dr. Sibelius thinkes the wood according to the best of his remembrance to be Ash.

Sat. Jan. 8. My Box of physical M.S. with Thevenots fol. are in Mr. C's hands, see his of 5 Dec.³

¹ B.L., MS. Locke, f. 7. ³ Mr. C. is probably Edward Clarke. The entry for 15 October, 1683 (f. 7, p. 129) mentions that the Thévenot folio has been moved to Mr. Tyrrell's.

p. 157 (Latin)

Angina p. I

Haemorrhagia pp. 1–2

Medica M.S. p. 3 Sat. Jan. 29. Rx: Split the thickness of Indian fig leaves into two parts and hang at the head of the bed; this scares off gnats so that they don't bite at night when one is asleep. Mr. Willcock.

Rx: Pound up [quick silver] with pigs fat. Then work it with some absynth into an ointment. Smear this on the joins and cracks of the bed frame to destroy the bugs which hide there. ibid.

Thursd. Feb. 10. Dr. Guenellon says he's never observed inflammation of the fleshy fibres of the muscles nor of the membranes of the tendons, because, he says, through these parts the blood has direct and free passage; it is the glandulous parts and membranes which become inflamed because the blood vessels belonging to these parts are far thinner and twisted so that the circulation of the blood is more readily hindered in them and causes inflammation. Further, he says that in the membranes of the tendons all the fibres are straight, whereas in those of the glands they are reticulated. Guenellon.

A plaster soaked in [spirits of wine] placed on the wound with gentle pressure stops bleeding in a few minutes (certainly in a $\frac{1}{4}$ of an hour). This never fails.

I have found that [spirits of wine] dephlegmated is even more effective. But it checks the bleeding not by forcing the blood into globules but by contracting the vessels and consolidating their wound. This will seem less astonishing if you have noted the great value of [spirits of wine] in thickening wounds and preventing gangrene. Acta Eruditorum, 83, C: Apr., p. 153.

Wed. Feb. 23. There is a certain aereal Nitre incorporated with all water; of a different nature from Nitre commonly soe cald and such as by noe means yet known can be visibly separated from the water. From hence cheifly it is I conceive that water obteins its cooleing quality and that when it freezes it is not because it is then only impregnated with this nitre but because then the Aire being surchargd throws off a greater quantity into it. New Experiments concerning Sea water made Fresh 15/40, 12° London, '83.¹

Tuesd. Feb. 29. Wepfer's method of curing Venereal Disease. A Venetian merchant aged 40 a few years ago used the sweating cure but was not perfectly cured of serious syphilis. Later on this flared up again. Ten years before he used the method of the famous Empiric Burrhus of Rome, and thought himself perfectly cured. This was in the month of October '75. Foetid pus oozed in quantities from his right ear. When this ceased to flow his right tonsil became ulcerated. When this ulcer

¹ R. Fitzgerald, Salt Water Sweetened to which Robert Boyle wrote an introduction (The Works of the Hon. Robert Boyle, ed. T. Birch, vol. IV, p. 593).

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Cimices (Latin)

Inflammatio pp. 3-4 (Latin)

Hacmorrhagia p. 4 (Latin)

> Congelatio p. 12

Venerea pp. 19-25 (Latin)

healed another arose in the palate the width of a nail and the depth of the back of a knife, clean, painless and not spreading further. On the lower lip little pustules emerged. He grew thin. 21 Nov. Palmarius'¹ method was suggested. And because he was of too hot a temperament the alexipharmac of Palmarius had to be tempered with conserve of rose pulp and lemon. The decoction of Syderis had to be weakened with liver herbs. He sweated on a bench. While sweating he was refreshed with the strengthening Water of Palmarius with cooling syrup added; this avoided the danger of inflammation. After using a gargle of rose honey with astringent powder the ulcer in the palate became worse.

After a drink of decoction of China he could not sweat in his bed. He took hot tow heated with [spirits of wine]. To the decoction of China he added sarsaparilla and sassafras. He did not want to add Guiac because the patient was of a hot temperament. However I know from Nic. Massa² that consumptives grow fat with Guiac; and I have seen this myself too.

27 Nov. Because the chronic syphilis was now attacking the throat it was necessary first to deal with the hidden creeping poison. Following Sylvaticus³ teaching I never trusted in mercury, nor was it safe in this case as the throat was inflamed. I preferred Palmarius method in a modified form. I would give 2 drachms of this confection each morning. Rx. 3 drachms of Alexipharmac Electuary of Palmarius, or (if this is not available) Diascordium of Fracastorius [Confection of Water Germander], adding to each ounce of Diascordium, I drachm of Theriac to sharpen it.

4 ounces of conserve of red roses 2 ounces of conserve of marigold flowers Powder of 2 lemons.

Make an electuary. Drink also 4 or 5 ounces of the following decoction:-

Take 3 ounces of resinous Guiac wood

I ounce of sassafras wood

2 ounces of sarsaparilla root

1 ounce of China root

1 ounce of Guiac bark.

¹ Julien Le Paulmier de Grentemesnil (1520–88) was a French physician, who worked for four years in the Hôtel-Dieu. He published books on pistol wounds, and contagious diseases.

² Nicolas Massa (c. 1532-69) was an anatomist and specialist on the pox and the Plague.

³ Jean-Baptiste Silvaticus (c. 1550–1621) was a professor at Padua. He wrote on theriaca andromachi, bezoar, and the Plague.

Cut up and stew in 3 pints of spring water in a well closed tin pot. Let them stand steeping in the warmth for 12 hours then boil strongly for $\frac{1}{2}$ hour putting the pot in a boiling pan. At the end of the cooking add:—

 $\frac{1}{2}$ ounce each of Scorzonera and chicory roots.

One handful each of leaves of Agrimony, Liverwort, and fresh endive

2 fistfulls of borage and bugloss flowers

2 ounces of large stoned raisins.

After the rapid boiling strain but don't press. Keep for use in a glazed earthen vessel.

After drinking this let him lie on the bench and there sweat for the first few days for $\frac{1}{2}$ an hour, gradually increasing this to I or $1\frac{1}{2}$ hours. While he is still on the bench refresh him with I or 2 spoonfuls of julep. Dry him with hot cloths and put him on a warm bed where he will continue the sweating as much as he can stand. If he feels faint then refresh him with this julep.

Take 2 ounces of Aelxipharmac Water of Palmarius

- 3 ounces of fumitory, Benedict Thistle and scabious.
- I ounce of water of borage and bugloss
- $\frac{1}{2}$ ounce of juice of fresh lemons
- 1 or 2 ounces of syrup of Raspberry.

In the evening 2 hours before supper he can be put on the bed again, but given only half the quantity of all the medicines, and he will stay there only half the time he spent in the morning. And again before supper he must be properly rubbed down and retire to bed.

I am not so scrupulous about diet. I allow soups, juicy meats, well cooked elixits and bones, also cooked fruit; and I forbid aromatic foods, those fried in butter, and vegetables. Let him drink a decoction of China with some pleasing syrup and avoid cold air. This cure must be continued at least 21 days to remove the faults of the temperament.

Topical remedies are generally not necessary. If however the disease continues to spread you can use green water of Plator¹ or Hartmann's remedy. The former I've found to be excellent, and most helpful and speedy in a case of malignant thrush. If this does not succeed recourse must be had to decoction of [mercury sublimate], but be careful that he does not swallow it. Afterwards gargle, washing the mouth with decoction of Guiac etc.

If the nostrils are dry:

Take juice of beetroot diluted with rose water, with honey of roses added. Make a nose wash. This is a good promoter of mucus.

¹ Felix Plater (1536-1614) of Basle.

When about to enter the bath-house he can take this bolus:

Take I drachm each of conserve of red rose and wood-sorrell

1/2 scruple of diaphoretic antimony

5 grains each of native cinnabar and prepared [hartshorn.] Make a bolus, to which sometimes can be added 4 or 5 grains of mineral bezoar.

[The next entry was later deleted.]

The Earl of Warwick, aged 20, of hot temperament, for 3 years has suffered from syphilis. In March '76 he complained of pains in the metapedia, tibias, fingers and shoulders. That was the beginning of the disease; and although before his recent diarrhoea they rarely afflicted him, and were dormant often for 3 months together, after the diarrhoea they grew worse but did not disturb his sleep. He can stand strong pressure everywhere on his body; there are no spots or pustules on his whole face, no ulcers on his mouth, no shedding of his hair. He breathes with difficulty, easily gets tired, is growing thin and salivates copiously. M. A. Severinus¹ illustrates the bench for sweating in his "Practical Surgeon". This is the method which Dr. Wepfer communicated to Dr. Sibelius.

Thursd. Mar. 2. H. Screta² from Zavorzis is a truely philosophical chemist. Wepfer³ p. 76, 336 pp.

The Power of Medicines has been happily described by Willis in his books on Fermentation and Fevers, on the Soul in Animals and especially in his Account of Herbs; by J. D. Lucovicus⁴ in his golden book on Pharmacy Applied to Our Age; by Wedel⁵ on the Power of Medicines; by Bruno's⁶ Beliefs p. 6, C. 2; and by N. Pechlin⁷ on Purging. ib., p. 77/336 pp.

The method of sewing large nerves—see Gab. Ferrara's⁸ Observations on Surgery, Bk. 1, C. 17, p. 32, Frankfurt edit. '25, says Wepfer, p. 92/336 pp.

¹ Marcus Aurelius Severini (c. 1580–1656) taught anatomy and surgery at Naples. His Synopsis of Surgery was printed in Amsterdam in 1664.

² Heinrich Screta son of Johann Screta, also known as Schotnovius von Zavorziz, studied at Schaffhausen. He wrote *Camp Fever* (in German, 1676), and *Malignant Fevers* (1684), Tübingen. Sibelius mentions the latter book in his letter of 4/14 Oct., 1684.

³ Wepfer's book on water hemlock was published in 1679.

⁴ Daniel Ludwig (1625-80) was Chief Physician to the Duchy of Gotha. His book De Pharmacia Moderno Saeculo Applicanda (1671), Gotha, marked an epoch in pharmacology.

⁶ George Wolfgang Wedelius (1645-?) was made professor at Jena in 1673. His book De Medicamentorum Facultatibus Cognoscendis et Applicandis appeared in 1678.

⁶ J. P. Bruno (c. 1630–1709) held the Chair of Medicine at Altdorf. He published his Dogmata Medicinae Generalia at Nuremberg in 1670.

⁷Jean-Nichols Pechlin (1646–1706) held the Chair at Keill in Holstein. He became a member of the Royal Society in 1691. *De Purgantium Medicamentorum Facultatibus* appeared in 1672.

⁸ Gabriele Ferrara lived in the sixteenth century and ended his life as a monk. His Observations were published in Italian in 1596 and in Latin in 1625.

Screta p. 27 (Latin)

Power of Medicines p. 27 (Latin)

Nervi Consuendi p. 28 (Latin)

p. 25 (Latin)

JOURNALS (1683-1688)

Frid. Mar. 3. Rx: Soak ivy leaves for some days in strong vinegar and then apply to corns on the foot, which will be eradicated.

Mr. Powell.

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Thursd. Mar. 16. To improve Thea. Take a crust of bread and burn to a black cinder. Take straight from the fire and while still hot take about I drachm with I or 2 grains of ambergris. Place the still hot powder into the bottom of a jar and on top of it I fluid ounce of Thea leaves. Keep thus till required; in this way its pleasing smell and taste will be mingled with the infusion. Dr. Sibelius.

Frid. Apr. 7. It is observed that in all animals who have died suddenly without any loss of blood, the right auricles and ventricles of their hearts are full of blood.

Wepfer: On Water Hemock, 4°, Basil, 336 pp.

Frid. Apr. 14. Mr. Bremen shewd us at Dr. Sibelius's the way of makeing Thée in use amongst the Japaners where he lived 8 years. He beat the yolkes of eggs with sugar candie in a basin and then powerd in it the hot infusion of Thee by degrees always stirring of it. When it was well mixed makeroons were broken and sopd in it and rose water added. This was a very pleasant drinke or rather caudle. The preparation was about 3 eggs to $\frac{1}{2}$ pint of the liquer.

At the same time he shewd us also the draughts of several people in the East drawn to the life in their usuall habits, amongst the rest an olive coloured man of the Island cald Papua with a taile which was as long as a dears a litle turning up crooked. It was not hayry. He said he knew not whether all the people of that place had such tayles, but he had been assured by several credible Hollanders who had seen them, that severall of them had such tayles.

Wed. Apr. 19. Paracelsus¹ most offensive to Hypocrates, Galen and Avicenna. ib. 46.

[Two pages of quotations from a book by Maghenus (455 pp.); judgments on Celsus, Lucretius, Tycho, Kepler, Galilaeus, Scheiner, Copernicus, Ficinus, etc.]

Thursd. Apr. 20. I saw again Mr. Bremen who had been soe long in Japan. He shewd me a paire of Chinese womens shoes which he said would serve a maid of about 15 or 16 years old. Those for grown women are about a fingers breadth or an inch longer. Those were 350 grys long and 130 broad at the broadest part which was behinde from which the soale is made evenly narrowing quite to the toe in this

¹ In 1527 Paracelsus burned the writings of Galen and Avicenna in the market place at Basle.

Thea p. 35 (Latin)

p. 56 (Latin)

Paracelsus p. 61 (Latin)

Chineses feet p. 63

fashion [sketch in the text]. They turn up round at the toe as it were with a hook, and the heele that was about an inch high or some thing more was set on like a piece of corke on the place marked O upon which only the women goe soe that the fore part of the shoe rests not upon the ground. These were made of red silke lined with linnin and the soles were of silk too with some stiffe thing under it that felt not unlike past board. All the women of the country are very litle but not in proportion to their feet which by bindeing hard they make thus litle.

Amongst the draughts he had of severall Esterne people in their natural colours and habits were the Kakerlacks and Papu's.

The Kakerlack had a very white skin but was dappled all over the body with darker coloured slashes as if he had been scarified only they were wider and longer than such sorts of cuts and more irregular and some waved. These people he says cast their skin once a yeare and then they are perfectly white for a litle time but afterwards their spots returne. They are very well shaped, were noething but a litle linnin or silk about their loynes to cover their nakednesse and are soe tender sighted by day that they are fain to shade their eyes with their hands. He said he himself had seen one of these Kakerlacks at Batavia, and that they inhabit one of the Islands towards Ternate to the south east of Batavia.¹

The Papua was an olive coloured man with a taile. He himself had never seen one of them, but he had spoken with Hollanders that had. These also I've seen when to the southeast of Batavia.

Sat. Apr. 22. Take $\frac{1}{2}$ lb. of Genoa Soape (for that is the whitest). Cut it into thin slivers, or preferably shred it. Dry the shreds by a fire in paper, then beat to a powder in a mortar till it is a thickish poultice. Put the powder into a large glazed pottery jar with a large mouth and with rose water make a thickish poultice. Put on the fire and heat with the gentle warmth of the coals stirring continually till it begins to rise. Then pour in drop by drop I drachm of [oil of sulphur] prepared by deliquium, stirring continually until it rises as far as it will. Pour off into a polished vessel so that it can be put into slivers or made into balls and cooled. The lighter and harder the better. See Secreti da Falloppia,² C. 55. Paid for 6 lbs. of Hungarian [antimony] for Dr. Thomas 2^s-8.

Wed. May 3. [Remarks by Dr. Sladus on the edition of Hippocrates by Lindenus.]³

¹ Could this be Bali?

² Gabriel Fallopia (1490–1563) was Professor of Anatomy at Padua, where his reputation was such that many remedies were attached to his name and published after his death as Secreti Racolti Dal Fallopia (1650), Venice.

³ Johannes Antonides Vander Linden (1604-64). His edition of Hippocrates' Opera Omnia was published in Leyden in 1665.

Kakerlacks p. 63

Papuas p. 65

Sapo p. 65 (Latin)

Hippocrates ed. p. 73 (Latin)

JOURNALS (1683-1688)

Thursd. May 4. There is an excellent catalogue of specifics for Epilepsy in Henry of Bra¹ the doctor of Zutphen according to Willis 21/146 [i.e. Thomas Willis: De Convulsivis (Amersterdam, 1682)].

Tuesday May 9. [Classification of his works as (1) written for publication, (2) written to remind himself, (3) observations gathered from the temples of Aesculapius or Apollo. This entry is a quotation from Horatius Augenius:² Episculae et Consultationes, Venice, 1592.]

Rx: One peck of Turnips, wash well and put in earthenware jar; sprinkle with 6 oz. of aniseed and cook on a stove with some old meat stock. Take out, squeeze out and filter the juice; add 2 lbs. each of sugar (white and brown) and stoned grapes and raisins; $\frac{1}{2}$ pint of crisp mint water; 6 ounces of liquorice. Cook till tender on a slow fire. Take 2 ounces each day morning and evening.

[Locke was away from Amsterdam from 12 to 15 May.]

Mond. May 22. Names of members of our private medical college. Philippus a Limborch Matthaeus Sladus Egbertus Veen Abrahamus Quina Petrus Guenellon Pr. Bernagie Abrahamus Cyprianus J.L.

Sat. May 27. Dooden ie dead this week in Amsterdam 173.

Mond. May 29. We opened an Egge that had been sat on 4 or 5 days. Not only the eyes were formed but the parts of the whole body which though it were only a kinde of mucilage, yet it often times movd it self motu animali. The feet and lower parts were the least distinctly formed. The length of the body was bent almost into a circle or oval soe that the head almost touched the lower parts. Chez Guenellon

Sat. Jun. 3. Dooden this week-274.

Tuesd. June 6. For scrofulas and hard tumours Dr. Slade tried that oil which was described from his own communication by Barbetti³ 28/95 in his chapter on Scrofulas, namely ¹/₄ pint of the Philosophic Oil of Bricks. This had long previously been described with a slight difference Epilepsia p. 74 (Latin)

Hippocrates pp. 75-6 (Latin)

> p. 76 (Latin)

Hatching p. 84

p. 84

Schrophuli pp. 85-6 (Latin)

¹ Henry a Bra (1555-c. 1604) was author of a number of compilations of medicines for treating calculus, jaundice, hydropsy, etc. The one dealing with epilepsy was published at Arnhem in 1603.

² Horatius Augenius (c. 1527–1603) held the Chair of Medicine successively at Rome, Turin, and Padua.

³ Barbetti was not an original author; he followed de le Boë in opposing bleeding and recommending sudorifics.

by Gesner¹ in the book entitled "Treasury of Euonymus", p. 280/580 pp.

Take 1 pint of laurel oil, some white frankincense, etc.: Unknown. For what the ash of earth is see p. 402. It can be used to rub in alone, or mixed with yolk of egg, daily, on alternate days, or only once a week, because on tender skins it sometimes ulcerates the joint. Dr. Slade has often used it in scrofulas of the neck and breasts. This oil is often mixed with mucilaginous ointment to counteract the tendency of the oil to dry the skin too much.

Sat. Jun. 10. Dead—143. Box of physick M.S. delivered by my cosin Bon.²

Sat. Jun. 17. Dead—110. On the south side of the town on the banke of the Amstel is a new large square building which is an hospital for old women of their church, i.e. the Calvanist. They call it Knorrenburg, i.e. Arx Grunnientium [or Citadel of Grunters]. It is capable of 400 persons, there were then 314. They lodgd 4 in a roome each in a bed. They have noe chimneys in their rooms which are paved with marble. Their foot stoves in the winter supply that.

[The number of dead during July is given as follows: Sat., 1 July— 147; Sat., 15 July—153; Sat., 22 July—127; Sat., 29 July—139.]

Wed. 19 July. Removed to Mr. Van de Veldes.

Mond. Jul. 31. For [Venereal] Disease. Take 6 grains of white [mercury sublimate], 6 grains of Diagridium [or confection of scammony] with conserve of pale roses. Make a bolus. Repeat this purge every second or third day, increasing the dose till 8 or 10 stools are passed. Up to 1 scruple of white [mercury sublimate] can be given. Continue this mode of purging till the symptoms cease (i.e., the pains and ulcers). Then give a decoction of woods for 21 days or a month. The cure depends largely on keeping to a slender and drying diet. Using this method I have effected many speedy cures, safely and pleasantly, without salivation, the patients being able to go out so long as they avoided cold and evening airs. An occasional anointing with Naples ointment³ can be helpful and if this causes a slight salivation that is permissible and of use. White [mercury sublimate] can even be given with Diaturbith, and if the throat is ulcerated a linctus can be made of pale rose syrup mixed with white [mercury sublimate]. If the patient is exposed to cold there is fear of gripings and flux of the Guenellon. stomach.

Bon p. 88

Hospital for Old Women pp. 88-9

p. 98 p. 103 (Latin)

¹ Conrad Gesner of Zürich (1516-65) was an encyclopedic naturalist. He published in 1554 his *Euonimus*; "De remediis secretis liber physicus, medicus, partim etiam chymicus et oeconomicus."

² Probably Bonville to whom there are many references in the 1690s.

³ Also called blue ointment. It is made by mixing mercury with lard and suet.

Sat. Aug. 5. Dead—122.

Mond. Aug. 7. The water in the Burgwalls, i.e., the Chanells in the streets being stird in the night it looks like fire and I thought I saw as it were sparks of fire rise of them selves out of it which is not to be thought strange since Mr. Dare¹ and others have told me that some nights walking along by them one may see litle flashes rise as thick as drops fall in a shower of rain [which I also have since seen].²

[On 15 August Locke set out on a tour of Holland which kept him away from Amsterdam till 10 October.]

Sat. Aug. 19. From Bolswert to Francker 4 l. by sayling 4 sl. It is a litle fortified town that one may walk round in half an hower and an university. The schools and library not extraordinary which shows that Knowledg depends not in the statlynesse of buildings etc., since this university has produced many learned men, and has now some very learned amongst its professors. The professors are 13 or 14 and the Schollers commonly about 300. In their Schooles they have the pictures of all their professors, a thing worthy imitation in other places. Any one may take his degree of Dr. here in any faculty (for they scarce take any other) when he pleases. Other abilitys and not time being only lookd after. The fees for it are as followeth:—

Pro Inscriptione apud Magnificum³ which is a sort of Matriculation f_{6-6} .

Pro Recensione which is an appendix of matriculation 0-12.

Pro Tentamine which is visiting the professors of your faculty and being examined in private 12-12.

18-18
12-8
15-0
6-6
6-6

Besides a collation for the professors of your faculty and some others of the University.

[Locke was in Deventer from 7 September to 19 September.]

Frid. Sept. 8. Tis a fashion here in Deventer when any one is dead to hang out a lanterne at the dore by day till the corps is buried. A litle lanterne if it be a child and a great one if it be a grown person, for they use very big lanterns in this towne wherein they put 3 or 4 candles.

² Added later, same hand, different ink.

pp. 129-30

pp. 106-7

pp. 111-13

¹ Thomas Dare, goldsmith and former Alderman of Taunton was a political friend of Shaftesbury. He fled to Holland where he helped Monmouth to organize his invasion in which they both lost their lives.

⁸ The Head of a Department was Professor Magnificus (17/11/84).

Frid. Sept. 15. N., who was liable to epilepsy, was cured of it by the use of the root of Valeriana Sylvestris (see Columna:¹ De Plantis Rarioribus) and abstention from wine. Wepfer's Observations [Observationes Anatomicae (1658)].

We notice that when old ulcers have become hardened, unless the precaution is taken of making small openings elsewhere, the matter settles in the lungs.

Give Consumptives sometimes cold draughts while their bodies are boiling.

Purgatives taken in the morning have a more violent action; give them an hour before lunch when you fear any disturbance or irritation. ib.

Take 4 ozs. of conserve of fresh red roses, 2 ozs. of Balm, 1 drachm of Theriac of Andromachus, 2 drachms each of Oriental Armenian Bolus and prepared Crab's eyes, and syrup of betony. Mix well and make an electuary. This is strengthening and absorbent; useful in thin catarrhs. Dose: 1 or 2 drachms at bedtime.

Palpitations of the heart, recurring at intervals. Irritation of the nerves from bitter or acid humours. This irritation occurs around the beginning of the nerves leading to the heart. Investigate these points is there headache, is the imagination often disturbed, are there attacks of dizziness, is the patient melancholy before the paroxysm, are the organs which share the same nerves (i.e. lungs, stomach and intestines) also affected by the paroxysm?

Method of Cure: (1) The Serum, lymph and sap of the nerves is to be deprived of bitterness and acidity; (2) Excessive moisture is to be drained off; (3) Dryness, narrowness and obstructions of the glands are to be dealt with, since these cause the lymph to be retained and so to ferment and become pungent; (4) Heart and brain are to be strengthened.

In a paroxysm: Use a cardiac made of Water of Balsam, Acacia, Camphor, distilled oil of Chamomile, Confection of Alkermes, Tab. man. Christ. perl., spirits of hartshorn, Essence of Castor, syrup of Raspberry, Syrup of whole lemons, Theriac of Andromachus, Diascordium, spirits of wine from Salvatella.

Let him inhale apoplectic balsam.

Anoint the neck with ointment of Alastr, pressed oil of nutmeg, distilled oil of lavender, marjoram, rosemary, castor. Drink no wine, but either a tincture of roses or a decoction of China with a cooling syrup.

¹ Fabio Columna (1567-c. 1650) suffered from epilepsy. He was a keen botanist, and finding that Dioscorides commended *Valeriana officinalis* for epilepsy made use of it with good effect.

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After the paroxyms: (1) Gentle purgatives to be given, not in the morning but an hour before lunch. (2) A diuretic and diaphoretic aperitive, which will modify the bitter humours and correct the bad tone of the glands; for example; slightly acid things or else whey flavoured with balsam, borage, bugloss, betony flowers and fennel seed, together with an aperient syrup of Mynderer¹ or even gelatine and broth flavoured with the herbs just mentioned, and even lime flowers, Alc. ointment, confection of Alkermes,² conserve of red roses, Scorzonera root, Crab's claws and eyes, white amber, red coral, mother of pearl, bezoar stone, ambergris, oriental Armenian Bolus.³ (3) A little bag of balsam moistened with wine on the affected part. [Bleeding], fonticuli and cauteries.

I used blistering medicines successfully in a case of excruciating pains in the neck and threatening opisthotony.

If the paroxysm is too prolonged and savage, use a Blistering plaster the size of a Dollar applied to both wrists and the inner sides of the shinbones; hasten its action by sharpening it with Cantharides or mix a ferment of Cantharides, parsley seed and Vinegar.

Diet should be easily digestible; avoid foods fried, cooked in milk, or containing seasoning or vinegar; especially lettuce, unripe fresh fruits, generous wine, spirits of wine, afternoon sleep, late nights and excessive study, anger, melancholy, and constipation. Wepfer.

Afternoon sleep very harmful to sufferers from catarrh.

In varicose veins we often find fibrous bodies fixed in the valves and retarding the return of the blood. ib.

Sat. Sept. 16. For hemicrania [migraine] in a Paroxysm apply Blistering medicines locally to wrist, middle of elbow, shoulder and behind the ear.

To prevent growth of varices apply to the knee lead sheets and a compressive binding with long broad bandages. Spasms of wind are removed by the same technique.

Wepfer's Powder for Cleansing the Kidneys.

Take I ounce each of prepared lynx and Jew's stone; $1\frac{1}{2}$ drachms of plum stones; 6 drachms of prepared [crab's] eyes; 4 ounces of white sugar candy; pound to a fine powder. Dose: $\frac{1}{2}$ drachm. For Lynx stone see in Schroder.⁴

Purgatives are bad for hypochondriacs and bring on paroxysms; ¹ Raymund Minderer, *Medicina Militaris* (c. 1620).

² Invented by Mesue a contemporary of Avicenna and a popular remedy in the sixteenth and seventeenth centuries for heart conditions. It was publicly prepared in Montpellier and exported all over Europe.

⁸ Ferrous oxide.

⁴ Johann Schroder published Compleat Chymical Dispensatory (1669), and in 1684 there appeared a Pharmacopoea Schrodero-Hoffmanniana.

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ib.

they spoil the stomach's fermentation, drain off too much of the bile and pancreatic fluid and completely upset the primary processes of digestion—hence the symptoms of hypochondria. Wepfer.

N. suffered first from colic on 10 Jun. '75; over 24 times in one day he passed bloodstained dysenteries accompanied by gripings. After 24 June he took a Bolus at bedtimes. Take $1\frac{1}{2}$ drachms of Rose Conserve, $\frac{1}{2}$ drachm of Theriac Androm; 1 scruple of Bolus Armen. Orientalis.

Before lunch and dinner he took 3 or 4 grains of pressed oil of nutmeg. In this way he was completely cured in 5 days and able to leave his house again.

The epidemic dysentery of June-July 1675 he cured thus:

1. Purge with 2 scruples of Jalap root.

2. Styptic powder with laudanum.

3. Painless clyster. Take 3 ounces each of Rose oil and oil of wild goat; 4-6 ounces of Cow's milk.

4. After a fortnight it is useful to give grated ginger root, as much as will go on the point of a knife in the first spoonful of broth, at lunch and dinner.

Wepfer's Regular Pills for soothing the acid humours by precipitation and strengthening the principal parts.

Take $3\frac{1}{2}$ ounces of the black tips of the claws of river [crabs], $\frac{1}{2}$ ounce each of prepared [crab's] eyes, grated [hartshorn], white amber, red coral and mother of pearl; I drachm each of prepared pearl and eastern bezoar stone; 2 drachms of western bezoar stone. Pulverise. To half of this powder add $\frac{1}{2}$ drachm of spirit of Ambergris, in solution of rose; I scruple of best moschatel with sufficient gelatine of [hartshorn]. Make pills of 2 drachm weight. Dose: $\frac{1}{2}$ scruple.

After his dysentery N. contracted a lienteria through drinking cold water and consuming acid milk. His legs swelled, his face became emaciated, and he suffered for 15 weeks.

Take $\frac{1}{2}$ scruple each of grated Ginger and nutmeg. Cut thickly. Take at 8 in the morning, and at the beginning of lunch and dinner. This gave relief. In addition Birkman's stomach powder with the pressed oil of nutmeg.

A year and a half before N. had been afflicted day and night with a savage cough, and had spat blood and pus; other symptoms were a loosening diarrhoea, sweating, shedding of the hair, a sharp nose, hollow eyes, sunken cheeks, feverishness, rapid shallow pulse—in short all deadly symptoms in such an emaciated body.

The following were of great help:-1. Take 1 drachm extract of

houndstongue; 12 grains of gum Benzoin; I scruple of Storax Calamita;¹ 2 scruples of Italian anti-consumption powder; I scruple of Laudanum extract. Make 45 pills. Dose: 4 nightly before sleep. These pills I dare affirm are an excellent remedy both in bitter and saline distillations and particularly in Haemoptysis. A young man who had often previously spit blood and brought up frequent pus and who showed the signs of physical Atrophy, was restored to complete health.

2. Take 2 drachms of egg shells; I drachm each of prepared [crab's] eyes and coral; ½ drachm of prepared osteocolla² stone. Make a powder. Dose: I scruple at each breakfast time.

3. In the spring he drank goat's milk with a little sugar and continual use of the flowers of spotted lungwort. In the summer he took slightly acid tincture of roses through the middle of the year three times each day. He also took gelatine of [hartshorn] cooked in suitable herbs and so at length recovered. Wepfer.

Dental decay and the accompanying pain is most satisfactorily removed by burning with a red hot iron; this makes one free of pain for the future. Distilled oil and spirits weaken the healthy teeth, as I have often seen.

Sund. Sept. 17. Antihectic of Poterius,3 or Diaphoretic of Jove.4

Take [no amount given] each of Starry Regulus of [iron] and white English [tin.] Prepare together with triple [nitric acid.] Dose: 6–10 grains. Wepfer.

Regulus of [Antimony] with [tin] gives the Antihectic of Poterius which is properly prepared by this method (for Poterius' description does not work):—

Take 5 parts of [tin] and 4 of Regulus of [antimony]. Melt in our regulus. Then keep in triple [nitric acid] for a whole hour till all the inflammable [sulphur] is separated and becomes white: for that which is bluish indicates unfixed [sulphur of tin], which however can be separated from the [water] by gentle manipulation. This is useful in Hectica, diseases of the uterus, childbirth, and burning and malignant fevers. E. H. Muller.

True Antihectic of Poterius according to Screta. Take Regulus of Fine [Antimony] with double of mixed English [tin] and triple of [nitric acid] fused into a liquid state; keep together in the usual way and then sweeten.

¹ A gummy resin from the Eastern Mediterranean.

² The bone-binder resembles coral and is found in Silesia.

³ A combination of tin, iron, and antimony to which potassium nitrate has been added.

⁴ Calx jovis, the binoxide of tin.

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1. The fused metal must be poured into a broad stone vessel or some clean stone so that it may set in thinner sheets and be more easily powdered in a mortar.

2. When powdered it must be sieved and mixed with good dry [nitric acid].

The crucible must not be filled too much and the sides must be protected to stop coals falling in, for this would reduce it again to a Regulus.
 After the firing do not remove at once from the fire but throw hot coals round it so that it keeps its liquid state a little while.

5. The sweetening process is not to be hurried but done slowly and carefully. From the pot in which the sweetening is carried out, it is possible by evaporation to separate a kind of white earth which can in fact be added to the former Antihectic (since it's been properly sweetened) which it will make whiter and more effective.

6. The oil which is separated in the sweetening is not to be thrown away but coagulated and fixed with [sulphur]. Thus you will have a salt which can be called universal and on occasion be used as a specific for purging, thus:—

Take 2 parts of Jalap powder and 1 part of this oil. To each ounce of this mixture add 6 grains of [oil] of Fennel and 4 grains of [oil] of Mace. Thus much Screta.

Screta's Fine Regulus of [antimony].

I. Take 4 ounces of [iron] (of the iron nails of a horse shoe) in vinegar. When it begins to liquify add 8 ounces of pounded [antimony]. Increase the [fire] till it flows easily, then throw in I minim of [nitric acid] mixed with powdered coals. When the hissing ceases and it is all liquified pour into a casting cup and make a Regulus.

2. When the Regulus is well purged of the dross melt it again and when liquified add $1\frac{1}{2}$ ounces of pounded [antimony]. Increase the fire till it is properly liquified, then add as much nitre mixed with coals as the first time. When it flows without hissing pour out as before and make a Regulus.

3. The Regulus being now more shining melt again, and when it is liquid add a spoonful of the aforesaid [nitric acid] and let it melt on a fierce [fire] (the [nitre] floating like regulus of [oil]). Pour off and make a Regulus.

4. In clean [vinegar] again melt the Regulus like silver, and when it is liquid add [nitre] and let it become liquid. Pour off and make a Regulus, and separate the dross (if some are golden that is proper). If you have proceeded correctly there will be 4 ounces of Regulus. Thus much Screta. Out of Suchter.

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Stomach medicine of Poterius is prepared from Martial Regulus of [antimony] with [nitre] more often refined. Wepfer.

To purify [nitric acid].

Take some [nitric acid]; put it in a glass vase or phial; place on the ashes; make up the fire so that the acid liquifies and the dregs go to the top and bottom. Break the glass and scrape off the dregs. Repeat 2 or 3 times till the [nitre] becomes very white. Purification with [sulphur] is useless.

Universal Key to Metals.1

Take Linseed [oil] and [sal ammoniac]. Mix these two with metallic stones or minerals. Distill in an [alembic] or in a pot over the coals. Mix with a spatula placed at the side until the linseed [oil] is burnt away—for you can extract [sulphuric acid]. Thus you will have the key to the metal; that sulphuric acid in it has the colour of the particular metal. Anonymous.

Put Regulus of [antimony] in a flask or phial hermetically sealed and sublimate on the heat of the ashes enough times till it no longer rises. Thus you will have a harmless [oil of antimony]; all the [mercury] and Arsenic of Martignius² have been extracted or fixed.

The heel of an old lady being touched with gangrene I excised over $\frac{1}{2}$ oz. of tissue without any sign of feeling. Apply a plaster of Scordium [water germander], ruta, absynth, lupin flour cooked in [vinegar] and water with honey. Add Theriac and a little spirits of Camphor around. The gangrened part began to separate from the healthy, and red furrows ran up to the tibia and metapedium. And so a certain surgeon mixed a powder of lithargyrum, alumen and a little [sulphuric] acid, and applied cloths dipped in this cold; thus the redness vanished and the gangrene remained. And so to $\frac{1}{2}$ pint of [vinegar] of Lithargyrum I added 1/2 ounce of [sal ammoniac] and wet a sponge with this and applied it hot to the gangrene which finally separated itself off all round somewhat bigger than a dollar. The living flesh appeared again. When the vinegar was biting I cooked the juice of rock-parsley with honey to the consistency of a syrup and mixed with a digestive of egg yolks and terebinth. The flesh stood out free from all disease, which I simply covered with dry bandages lightly dipped in oil of eggs; whence the skin began to grow over at once and the patient recovered. I am extremely surprised that anyone could tolerate a cold

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¹ Probably the alkahest or universal solvent of Glauber.

² Pierre Martin Martinière (1634–90) practised in France and Germany. He published a treatise on venereal disease (1664, 1684).

fomentation although the rustic surgeon could give a host of reasons Wepfer. why it should not be applied hot. Rx: Beat the white of one egg in a tin salver with a crumb of alumen till it is a jelly. Then, Rx: 1/2 oz. each of Rose oil and Vinegar of Lithargyrum; beat with a wooden or iron spatula into a white liniment. Then, [take] the jelly, the liniment, and $\frac{1}{2}$ oz. of rose ointment and mix well. The fresher this ointment the better. Spread over a linen cloth. Close the eye and apply to the eyelids: for ophthalmia.

Wepfer.

Rx. 1 lb. each of solar [antimony] and [mercury sublimate], rub over porphyry, and leave overnight in a moist place. Make little balls and put in an [alembic] by sand. Draw out the butter. When the butter is extracted take out the little balls and with $\frac{1}{2}$ lb. of [mercury sublimate] rub again over porphyry. Leave overnight, form little balls as before, put in an [alembic] with a larger neck, on a fire of sand, draw out firstly the butter, then on a hotter fire the Cinnabar. By this process from 1/2 lb. of antimony you extract 5 ozs. of cinnabar. With this cinnabar Brunerus,1 Wepfer's son-in-law cured convulsive movements attributed to witchcraft. I know of no more excellent antidote to Epilepsy: Brunerus.

Epidemic Fever at Schaffhouse 1672-76.

The onset was generally by shuddering or Rigor or Coldness in the back, followed by High Temperature, spontaneous tiredness of the appetite, thirst, headache, loss of energy, and an unexplainable anxiety. Some people missed out the shuddering and coldness and at once ran a high temperature, went off their food and suffered from thirst and a dry tongue. The fever was contagious; it attacked those recently purged and whose blood was exhausted by [venesections] more early and speedily than those who had not undergone these treatments. This was observed even at the time of the plague, that the untimely use of these treatments very often makes the disease more dangerous and prolonged. 1. Method of Curing the Fever: Alkalis, fixed and volatile. Early use of medicines to split up and resist the putrefaction; e.g. diaphoretic antimony; mineral Bezoar; water of fumitory, scabious, benedictine thistle² and Diascordium; syrup of raspberry; all of which elicit some moisture (but not a copious sweat-that would diminish the patient's strength). The patient is to lie in a warm room, moderately covered, and these drugs are to be used to elicit moisture until the high temperature and other symptoms cease.

¹John Conrad Brunner (1653–1727). ² This thistle (Carduus Benedictus) was called "blessed" or "holy" on account of its virtues against the Plague. It was used to promote sweating.

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 To give strength in cases of weakness. Heart stimulants every hour: Water of Borage, Woodsorrel, fumitory and burnt [hartshorn]; a Julep of Roses and Violets; a confection of Hyacinth, spirits of [hartshorn]; a Conserve of woodsorrel and pulped apples and lemons.
 If the mouth is very bitter and the chest feels heavy the patient will be inclined to vomit. Give an emetic but only on the three first days.

4. If there is plethora, sharp pains in the side, spitting of blood, give up to 5 ozs. of [spirits of wine] on the first three days; after that it is not safe.

5. If there is delirium, apply blistering plasters to the wrists and inside the shins below the knees.

6. If there is diarrhoea instead of the sweat-inducing medicines give a powder made of 2 scruples of rub. pann. and 1 scruple of the Preservative Confection.

7. Because the throat and tongue is dry let the patient from the beginning chew the leaves of the greater Houseleek.

8. Diet: Meat broths, with lemon juice or the acid of Bezoar.

9. Ordinary drink: Rx 1¹/₂ drachms of burnt [hartshorn], 6 grains of Nitre, cook in 2 measures of spring water. You may add syrup of blackcurratn or raspberry. Avoid wine like the plague.

10. If there is diarrhoea, Rx. 3 drachms each of Roots of Tormentil and Bistort; cook in 2 measures of spring water.

11. Though the patient be constipated the intestine is not to be stirred by purgatives; suppositories are enough. Purgatives bring on diarrhoea, dysentery, jaundice etc.

12. If there is heartburn, and emetics are no longer safe, give medicines to precipitate and dry up. Rx. $1\frac{1}{2}$ drachms of prepared crabs eyes, I drachm of cream of tartar, I scruple of vitriolated tartar, $\frac{1}{2}$ drachm of [oil] of absynth. Make a powder. Take as much as will go on to the point of a knife (or up to twice that amount) in 3 or 4 spoonsful of meat broth.

13. If Fixed medicines no longer promote sweating, and the palpitations of the heart etc. are excessive, recourse must be had to volatile medicines tempered and mixed with acids.

14. If because of sweating the sheets are to be changed avoid those fresh from the wash since by blocking the pores they hinder sweating. So far Wepfer. Dr. Sibelius who was stricken with this disease was cured by this method.

When D. Harderus¹ was in the throes of this fever he suffered for 3 weeks from diarrhoea, induced by damascene prunes cooked with

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¹ John Jacob Harderus wrote on bees, the snail (*Cochlea domiporta*), and also a *Dissertatio Anatomico-practica* (1686), Basle. Sibelius to Locke 4/14 Oct., 1684 (MS., c. 18, f. 105) says that Harderus compiled the index for Wepfer's *Historia de Cicuta Aquatica*.

senna, and complete physical prostration. In the corpses of those who had died of this disease it was possible to observe in both parts of the heart polypus-like growths stretching out into the cavities; hence disturbance of the heart's movements, inflammation of the lungs and brain, anxiety and exasperation. To dissolve these, the patient being in agony, he used spirits of [hartshorn] and sal ammoniac in double dose. The patient was at once recalled from death to life, to the great astonishment of the onlookers.

This whole cure turned on taking every day in the morning I scruple of diaphoretic [antimony], 5 grains of lesser Bezoar in 3 spoonfuls of fumitory water and a little raspberry syrup. This caused sweating for I hour and dampness for the whole day. They used to get up a little at midday while their beds were remade. This diaphoretic method was continued until the anxiety and other symptoms ceased. Purgatives, clysters and wine are to be avoided. Dr. Sibelius.

Greisselius¹ relates that many were cured of gout at Vienna by the use of milk. If they drank wine again the disease returned and they died. It is scarcely credible how drinking milk causes the disappearance of the tophus, so long as it has not yet reached the hardness of chalk. In the Count of Fürstenberg² it removed deposits the size of a hen's egg.

A maidservant, who had suffered dreadful epileptic paroxysms, with the obliteration of internal and external feeling, severe heartburn etc., for 12 out of the 24 hours, so that the disease was attributed to poisoning, took the following pills for 2 or more months and was cured.

Rx. I drachm each of diaphoretic [antimony], prepared white amber and grated [hartshorn]; 2 drachms of cinnabar of [antimony] with gelatine of [hartshorn]. Make pills. Take 7 each morning.

Every 4th or 5th day she took also I drachm of Spirits of [hartshorn] or spirits of [sal ammoniac] with one drachm of oil of amber. The paroxysms diminished and at length completely stopped. This cure Brunerus attributes largely to the Cinnabar of Antimony. For his preparation see p. 149.

Sign of worms; little bitings around the navel, discharges to the teeth Wepfer. and consumption of the gums.

A wound of the Cornea above the pupil so that a tiny spot of watery liquid exudes with great inflammation, swelling, pain and continual flowing of tears. First day: Rx. 3 ozs. of Rose water; 3 grains of juice of Greater Celandine; 1 grain of eastern crocus; 2 grains of Theban Opium. Mix and apply to the eye. Copious [bleeding]. Keep away

¹ Johan George Greissel (d. 1684) was a professor at Vienna. His Tractatus Medicus de Cura Lactis in Arthritide (1670), Vienna, proposes a milk diet as the best cure for arthritis. ² Antony, Count of Furstenburg, was an epileptic boy whom Wepfer had treated.

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See Sibelius to Locke 4/14 Oct., 1684.

from work, wine, and strong light. Use an ointment of white camphor with dragon's blood and plantain water, and thus clear the wound. Then Rx. White of one egg, dragon's blood, laudanum and opium; mix into a liniment with which cover the eye two or three times each day. Thus the sight was saved and he was cured in a week. Wepfer.

Patients affected with a bilious colic often subsequently contract a paralysis and cause much trouble to Swiss and German doctors. The people of Schaffhouse are very immune to this ailment because they generally drink red wine, which is well matured and spiritous, and very famous among all Swiss wines. If anyone in the Schaffhouse district is pained with the colic he never, as far as I know, becomes paralytic, nor do I find this to have occurred during the last 100 years according to the medical reports.

Gout and gallstones are rare in Schaffhouse, and convulsive fits are not frequent. So far I have ascribed this chiefly to the healthy red wine. For the opposite happens when they drink white wines, which have to be imbued with sulphur to make them keep, and which are fermented not in open jars, as the red, but in vats with a mouth scarcely the breadth of a palm, from which the narcotic [sulphur] of wine cannot exhale and consequently remains mixed in the wine.

This colic is most common in Alsace, by the lake of Acronium, and in the Duchy of Wurtemburg; not to mention other places further removed from Switzerland. There gout and nephritis are more common; and I have seen more of both sexes racked with the subsequent convulsions. Not so long ago some monks who drank Alsation wine and fell ill of a colic died of the subsequent convulsions. They said the wine was too imbued with [sulphur]. I suspect this was due to the sulphurated tunny fish which they call sweet and sprinkle with seed of anise, coriander, cinnamon, bismuth etc.

Th. Jordan¹ long ago in his "Phenomena of the Plague" condemned bismuth and thought, unless I am mistaken, that it was the agent of that disease in Moravia. For the value of lead reduced to a fine powder and taken into the body is proved by Fernelius and Palmarius.

Moreover there is a monastery near Schaffhouse called Rynoviensis where the fathers all drink sour white wine, and scarcely any of them escape this plague. Superstitiously they ascribe this disease so obvious in its outward symptoms to some secret ill doing.

I do not believe this colic arises from any obstruction but from a constriction and convulsion of the fibres of the intestines, on account

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¹ Thomas Jordan (1539-85) accompanied Maximilian II against the Turks in 1566, and four years later became the chief doctor of Moravia. His *Pestis Phaenomena* (1576) describes the "lues pannonica" or Hungarian disease; and his *Brunno-Gallicus* (1578) is an account of the new kind of plague which had occurred in Moravia.

of which they are blocked very tightly here and there and prevent the wind from moving up and down; hence the excruciating pain. The cause of this constriction I think is a thin sharp humour which follows the nerve duct and stagnates in some place in the stomach where the nerves twine together; hence the pains in the loins, the ship-like hollowing of the abdomen and the inward contraction of the navel. The humour accumulating because of the savage pain and continual sleeplessness seems to give rise to a paresis although I have observed that a paresis of the arms sometimes precedes the colic, presumably because the humour sticks around the neck and softens the nerves there before reaching the nerve plexus of the stomach.

In the treatment I have noticed that purgatives sharpen the pain and even hasten paralysis and death. More good is done by soups, flavoured with cooling herbs and slightly acid, and by cooling and softening clysters. Also ointments and poultices, (made of the juice of lettuce, groundsel, etc.) shorten the disease and usually prevent the paralysis. [Bleeding] recommended by Chifletius,¹ in some patients brought on paralysis. We dissected the corpse of one who died of the colic. The whole abdomen was full of pus, the whole stomach being as it were an abscess. We ascribed the cause of the evil to the softening and heating fermentations and overstrong purgatives. The one thing that worries me is how this constriction can be relieved in an early stage by some epilepsy-preventing specific, seeing that so far the disease has been dealt with by means of cooling, moistening and pain relieving drugs. So far Wepfer.

DISCHARGES BEFORE CHILDBIRTH

1. If the discharge be fairly heavy give frequently 3 spoonfuls of this mixture: Rx. 2 ozs. each of water of Horsetail and Plantain; $\frac{1}{2}$ oz. of syrup of berberis; 1 drachm each of prepared red coral, prepared Haemat stone or Dragon's blood: Mix together.

2. Afterwards drink an Emulsion of Almond in a decoction of roots of Tormentil and Bistort. Rx. 1½ drachms each of Root of Tormentil and Bistort; cook in 1 measure of water. Strain. You can also use 1 oz. of Almonds and Ambrosia. Make an emulsion.

3. Stay quietly in bed.

4. During the discharges the authorities suggest a decoction of grapes. Felver recommends fresh marjoram beaten up and placed on the navel. It is an immediate remedy.

*Pp. 161-9 are in a different hand. At the end of these notes Locke has written "Wepfer".

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¹ Jean Jacques Chifletius (1588–1660) was the son of a doctor of Besançon and had three sons distinguished in science and medicine. He was Physician to the rulers of the Low Countries. In his book *Pulvis Febrifugus Orbis Americani Ventilatus* (1653), Amsterdam, he opposed the use of quinine.

JOURNALS (1683-1688)

MANAGEMENT OF THE BIRTH.

I. At the onset of the birth pains take at once I or 2 spoonfuls of Almond oil, alone or in soup. Do not put the patient at once on her seat nor force her to give birth. If she is weak she can be revived by one or two spoonsful of Antihysteric Water:

Rx. I oz. each of the waters of Balm, Fleabane, and Mugwort; $\frac{1}{2}$ drachm of Castor Essence; 2 drops of distilled oil of Chamomile; $\frac{1}{2}$ ounce of Tab. man. Chr. Perl. Let her smell Hysteric Pills: Rx. 2 drachms of Castor; 2 of Asafoetida; I drachm of prepared white Amber; $\frac{1}{2}$ drachm of Rue seed; I scruple of Fennel seed; $\frac{1}{2}$ drachm of Angelica seed; reduce to a powder and mix with some oxymel; a 2 drachm pill of this is to be placed upon her, sewn up in a little bag of red or white muslin.

2. When the real birth strainings are upon her and the internal orifice is now open for some days before the birth foul viscous mucus has been issuing daily from the fold of the pudenda. Water is now beginning to ooze out in quantity with some noise after the breaking of the skin. The birth strainings are now becoming heavier and the true birth is approaching. Keep her on a chair or in her bed. Urge her to do all she can to strain hard. Keep up her strength with Hysteric Water and broths.

3. If the birth is proving slow give at once a little or I scruple of Expulsive Powder (prepared Testicles of Horses or Liver of Eel with water of white lilies and balm tinged with saffron). Rx. I drachm each of prepared horse's testicles and eel's liver; 16 grains of Venetian borax; 6 grains of Eastern Crocus; I scruple of Cassia wood; 2 drachms of tab. man. chr. perl. Make a powder, divide, into 6 doses. Take with cordial water. Rx. $2\frac{1}{2}$ ozs. each of water of Balm and Mugwort; $\frac{1}{2}$ oz. each of water of Cinnamon and Bugloss; I scruple of Castor essence; I grain each of distilled oil of Chamomile and Amber; $\frac{1}{2}$ oz. of tab. man. chr. perl. Hold the patient firmly and properly by the feet, hips, sacrum and shoulders; bend the head forwards.

4. If too violent a haemorrhage occurs either before or after birth, give $\frac{1}{2}$ to 1 scruple of powder of red coral and dragon's blood with the juice of quince diluted with Balm water. If the patient is weak refresh her with Hysteric water and broth.

5. If the afterbirth is delayed give I scruple of the expulsive powder described above each hour with chicken broth. Thus the placenta is forced out and gently driven downwards while the patient is standing; but do not in any way pull it out.

6. After the birth put the patient to bed and keep her quiet; avoid all possibility of milk fever by letting in cold air or otherwise checking perspiration. Do not let her talk too much and bring on a headache. p. 162

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7. For a few days avoid wine; for the first fortnight drink a decoction of 2 drachms of Cassia wood boiled in 2 measures of water.

8. Diet to be moderate if she is not suckling the child.

9. Stoppage of the bowels is quickly prevented by Spanish prunes, and other laxative foods; honeyed Suppositories or clysters of 8 ozs. of cow's milk, 1 oz. of sugar and $\frac{1}{2}$ oz. of distilled oil of almonds.

10. To begin with, even if she is suckling, she must not stuff herself with food.

11. Just before the birth give the pubes and thighs a good smearing with capon's fat.

12. It is to be impressed upon the midwife that, while using her hands to assist the birth, she does not press her middle finger upon the anus and so push the coccyx bone too far inside and hinder the birth strainings: experience shows it is better to apply the palm. (2) Cloths are not to be inserted (whether into the pudenda only or further in); that causes fainting. (3) No cuts are to be made, especially if it is not yet certain whether the foetus is near the opening. Remember that instead of the chorionic membrane a woman's urethra was ruptured and this caused irremediable incontinence. (4) Do not in any way pull out the afterbirth so as to cause pain, but if it does stick shift it in the way suggested above. It will slip out insensibly, just as a snake or other slippery body passes through a half closed hand.

13. In cases of excessive vomiting at the time of the birth, Rx. a Diachylon plaster, Theriac Androm. and oil of Nut Meg. Mix and place in position.

DISCHARGES AFTER CHILDBIRTH.

1. They are not to be suppressed. They will stop of their own accord.

2. If the continued bleeding causes excessive weakness give two or three times 10 grains of powder of prepared red coral and dragons blood.

3. If they stop apply a bruised onion mixed with vinegar and chalk to the inside of the thigh for a quarter of an hour.

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RETENTION OF AFTERBIRTH.

I. In this case, always promote the discharges and stimulate the excretion of the bad blood. Make a Powder of 2 drachms of Horse's Testicles or Snake's Liver; $\frac{1}{2}$ drachm of Cassia wood; I scruple of Venetian Borax, $\frac{1}{2}$ scruple of choice myrrh, 2 drachms of Tab. man. chr. perl. Mix and take in the broth of meat cooked with Salvia or Mugwort. Dose: I drachm morning and evening.

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2. Stimulate the uterus every third day with a clyster of equal parts of Mugwort, Balm flowers and Chamomile; I scruple of Aniseed; 2 spoonfuls of Honey. Cook in meat broth, strain. To $\frac{1}{2}$ a pint add 2 drachms of fresh butter and $\frac{1}{2}$ oz. of sugar (or a little salt instead).

3. Avoid the blood becoming infected by the decaying afterbirth and causing a fever; keep off decay-resisting things. Drink no wine but instead a decoction of $1\frac{1}{2}$ drachms of Cassia wood boiled in 2 measures of spring water; to which add syrup of Raspberry, Blackcurrent, Berberis and Red Coral. The decayed blood is also shifted if the patient lies on her stomach across a chair for a quarter of an hour morning and evening.

4. How to deal with various symptoms: Head Ache: a sleeping liniment. Rx. $1\frac{1}{2}$ ozs. of Alabaster ointment; $\frac{1}{2}$ oz. of Poplar ointment; 2 drachms of pressed oil of Nut Meg; 2 scruples of Theban Opium and Act. Sol. with some oil of nightshade. For suffocation from the Womb: Hysteric water. Rx. I oz. each of water of Balm, Fleabane and Mugwort; $\frac{1}{2}$ oz. of water of Cinnamon and Bugloss; $\frac{1}{2}$ oz. of Essence of Castor; I grain each of distilled oil of Chamomile and Amber; $\frac{1}{2}$ oz. of Tab. man. chr. perl. Mix. (Similar prescription for Hysteric Pills.) For Convulsions: to the said Hysteric Water add a powder of 2 scruples of Marchion and I scruple of prepared emerald.

5. Diet: thin rather than thick foods; for instance chicken broth, in which a little Mace and 2 laurel berries have been cooked; Spanish and Damascus prunes; Apples; a chicken boiled or roasted with a sauce of butter. Drink a decoction of cassia. Keep very quiet.

PAINS AFTER BIRTH.

1. It is very effective to give 1 or 2 spoonfuls of this Hysteric Water: Rx. $1\frac{1}{2}$ ozs. each of Water of Melissa and Artemisia; 1 oz. of Lily Flower Water; $\frac{1}{2}$ drachm of Essence of Castor; 2 grains of distilled oil of Chamomile; 2 drachms of Tab. man. chr. perl.

2. Anoint the stomach with oil of white lilies, chamomile and almond.

3. Let the patient smell Hysteric Pills of Castor.

TREATMENT OF THE NEWLY-BORN.

1. Soon after birth the baby can be given 1 or 2 spoonfuls of syrup of violets with almond oil, to loosen the bowels and keep it from convulsive colic. Or else distilled olive oil can be mixed with sugar.

2. If the newborn baby is in a weak condition you can blow on it the smell of chewed onions and cloves; smear its nostrils and lips with

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Cinnamon water; press warm slices of meat on its head and anus; wrap in bandages soaked in red wine and place in a bath composed of water or beer and fresh butter. If the baby is lively give a little after a mixture of I spoonful of distilled almond oil and syrup of Cowslip flowers and 1/2 spoonful of wine tempered with sugar, so that it can purge itself properly.

3. As soon as it begins to feed on pap, give it for the first few days a little powder of Marchion.

4. If it is weak apply to the region of the heart a cloth soaked with warm Embryon. Balsam. The best ways to stimulate its strength are baths, putting warm wine on its head, placing hot meat on its chest, smearing its nose and lips with cinnamon water, putting onions near its nostrils, etc.

5. If the birth was delayed and the foetus has drunk some of the Discharge, after warming and bathing it, purge it with honey and syrup of the flowers of Cowslip and violets together with lime flower water and distilled almond oil.

Wepfer.1

A Schaffhouse Measure contains about 21 libra [i.e. 11 pints] Dr. Sibelius. Religion is the governing of one's mind with regard to God. Poiret² Oct. 11/309. A woman who was married but barren and had suffered for three years from Fluor. Albus was cured by Dr. Sibelius by cupping of a decoction of artemisia, horsemint etc. for 21 days (i.e. from menstruation to menstruation); by this treatment the menses were restored to their proper times, colour and amount, previously having been insufficient and discoloured; furthermore after this proper purging of the uterus the woman shortly conceived and bore a son. In this cure it is to be noted that after the cupping had been continued for 8 days quantities of a pituitous liquid flowed from the uterus.

[After a stay of twelve days in Deventer with Dr. Sibelius Locke moved on to Utrecht where he remained from 23 September to 10 October.]

Frid. Sept. 29. Grube:3 de Ictu Tarantulae, 8° Francofurti '79, 76 pp. Account of a man, woman and cat who after eating pig's blood take on the habits of those animals. See Untzer⁴ on Epilepsy. Grube 15/76. The bite of a viper and a phrenetic from Ischia cured by music. ib. 69. The same treatment both caused and checked bleeding. ib. Purge moderately in a South wind and more fully in a North wind; for the

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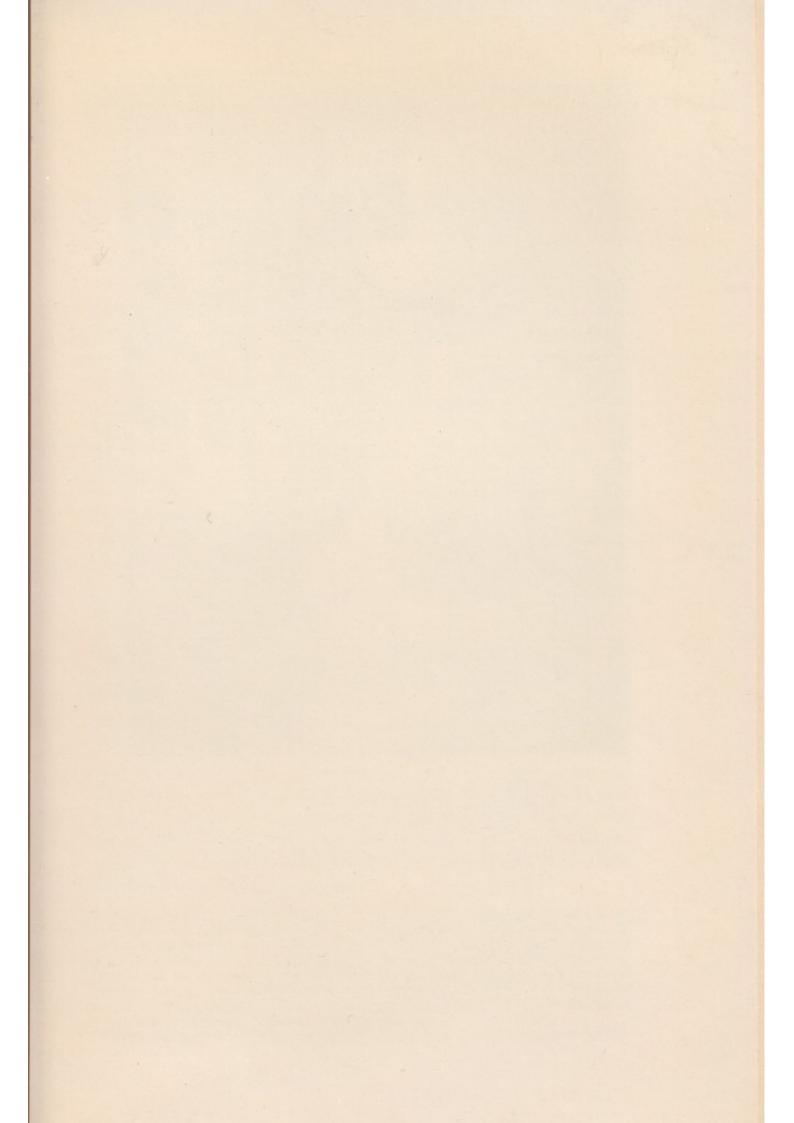
260

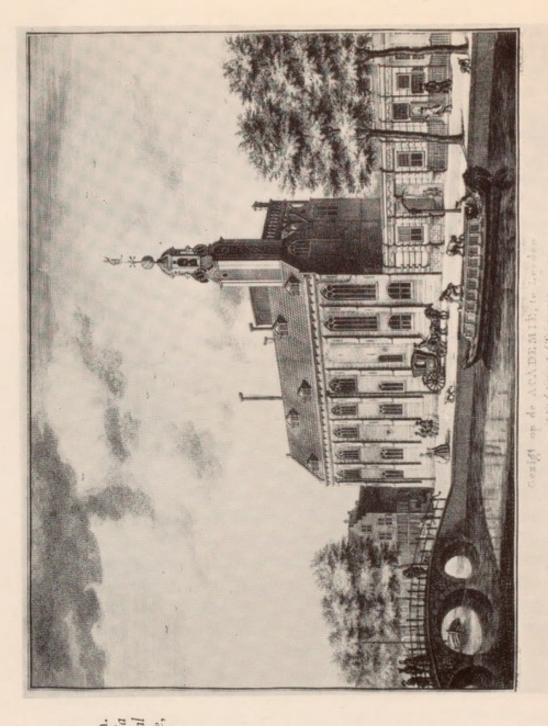
¹ In Locke's writing again.

² Refers to P. Poiret, Cogitationes Rationales de Deo, Anima et Malo (1677), Amsterdam.

³ Herman Grube (1637-98) practised in various North German towns. His Latin works were printed in Copenhagen around 1670.

⁴ The Opus Chymico-Medicum of Matthias Untzer contains a section on epilepsy.





 The University of Leyden.
 (By kind permission of Dr. Maria Rooseboom, Director of the National Museum for the History of Science, Leyden.) North wind strengthens and the South weakens. Sanctorius. J. C. Peyer's¹ Parerga Anatomica et Medica. 8° Amsterdam, '82, 140 pp.

Sund. Oct. 15. From Amsterdam to Harlem. From Harlem to Leyden.

Mond. Oct. 30. The physique garden is but litle but is well stored with plants espetially from the East Indies. There is besides a repository of natural raritys.

Tuesd. Oct. 31. The exercise for a Dr. of physiques degree is examination by the professors in Private and answering in the Schools for one hower in defence of whatever the candidate has presented in his thesis, any part whereof the opponent has liberty to oppose. The opponents are usually the freinds of the respondent each whereof before he begins askes leave of the promoter who is one of the professors the candidate makes choice of. They who are Drs dispute with their hats on the others bare. And those I saw dispute that they might not mistake had their arguments writt downe. I suppose their studys tend most to practise for in disputeing noe one that I heard urged any argument beyond one or 2 syllogisms.

Tuesd. Nov. 7. Rx. some amber; infuse overnight in alkali and dissolve; pour on spirits of wine to extract the essence. This also happens in other bodies so that I guess that the Alkahest which thus dissolves bodies is simply an alkali.

Saffron of metals taken in vinegar purges downwards.

Distil [sulphuric acid] till it is calcined to a whitish colour in an earthen [alembic] so that the phlegm and spirit is extracted. Then break the earthen [alembic,] take out the remaining matter and put it in a reinforced glass [alembic]. Distill on an open fire till the [oil of sulphur] is extracted (this is reddish). On to this red [oil of sulphur] pour spirits of terebinth which will extract the dye. Then mix with water and evaporate the water and the [oil of sulphur], or narcotic [copper], will remain. These are the instructions of Margravius.² He showed us this sort of [oil] or [sulphur] of [copper], very similar to peruvian balsam in consistency and colour. It even had the smell of terebinth, but I doubt whether it was narcotic or anodyne.

¹ Jean Conrad Peyer (1653–1712) described the intestinal lymphatic glands still known by his name which were then regarded as the site of fermentation or febrile action in all fevers. On the grounds of actual observation they were found about a century and a half later to be the seat of morbid action in typhoid fever. Peyer's patches were then the latest physiological novelty, and a French physician M. Spon in his Observations on Fevers and Febrifuges (1682), Lyons, states the seat of the ferment in all agues to be in the "glandules described by M. Payer [sic.]" and that a cure can only be effected by driving out the "sweat or insensible perspiration". Locke recommended M. Spon's book to Goodall.

² Christian Margraf (1659-87) Professor of Pathology, and a well-known iatrochemist.

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Sund. Nov. 12. Dr. Herman professor of Botany who lived 9 years in Zeylon told me that the natives of that country are not troubled with the gout but that the Europeans that have the gout here have it there also. The Endemical disease of the country is the Colick which is very severe and lasting, it is most commonly accompanid with costivenesse. In some few loosnesse is joynd with it and it often degenerates into a palsy. These several ways he has cured it, either by clysters of chamomel flowers, often repeated but the decoction must be made in a closed vessel that the volatil parts of the flowers may not evaporate or else they are unusefull and lose their virtue. An other method he found succesfull and tried also in himself was a large actuall cauter, a litle below the navel and another a litle above the pubes, by which he was eased in a few howers after 3 weeks torment and even despairing of a cure; some also apply the cauter to the sole of the foot under the heele and that with successe. It is an hard matter to assigne a cause of this cure upon the ordinary hypothesis. But if the Colik be as I imagin, from a convulsive constriction of the guts the archaeus1 being enraged tis possible that by combustions in these tender and nervous parts it may be diverted. That which seems something to make against this is that he told me he cured this colik in a freind of his by a blistering plaister applied below the navil who found the pain goe away with the water I. L. that was let out of the blister.

Concerning the Cinamon he told me that the trees grow naturally in Zeylon and as big as lime trees here, that neither the flower nor fruit has any smell of cinamon; that is peculiar only to the bark and in that too there is a great deale of difference according to the temper the tree is in. They gather it twice a yeare, viz. August and February, at which times the sap rises and soe makes it easy to separate the barke from the wood. They barke commonly none but young trees and that but of one side where the barke is smooth and will run easily, the falling of the fruit sowes new plants soe that they value not much the destruction or losse of the trees. He says that Cinamon trees grow also on the coasts of Malabar but that the cinamon is not soe good nor will not keepe above a yeare. Out of the roots of cinamon trees camphyr is extracted. There is an other sort of camphyr found in the clefts of certain trees in Borneo, litle where of is brought into these parts, it is not soe volatil and he thinkes it is not soe good as that made of the roots of cinamon-trees. He counts camphire good externally in herpes and gangran and inwardly in Hysterica and weakness of the stomach.

Assa faetida is the gum or resin of a tree in Persia. They use it in their sauces in Zeylon, but soe attemperd with other things, that when he

¹Here Locke seems to accept the Helmontian hypothesis of disease.

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first eat it, he found a new tast but not unpleasing either to his palat or stomach.

Areca is a fruit. Betol a biteing leafe of a kind of pepar, this temperd with the lime of shels burnt and several times washd they chew with as much delight as several amongst us take tobaco and cannot live without it. The calx tampers the betel soe that it allays the biteing of it. This they chew in their mouths till they are weary and then spit it out. It colours their spitle red, but neither of the things doe it without the addition of the calx. Areca is a great commodity of this Island transported to other parts for dieing. It gives noe colour it self but bindes the other colours, and is used as Woad is here, but not for black.

The Cyngales have the noon at 10; have twelve months in the yeare which they begin in March; have names for the twelve months of the yeare, and for the 7 days of the weeke which he shewd me; but their solemne returns of religious worship are the new and full moone and the quarters. The people are well made, but olive-colourd not oweing to the rays of the sun but their natural constitution for the parts coverd have the same complexion. They are Cuning and false and though counted the bravest men of all these parts yet ten Europeans will deale with an hundred of them.

Of the snake stone brought from the East Indies he has noe opinion. The stone is for the most part if not wholy factitious and of noe such virtue for extracting of poison as is reported. The Goa stone is a composite made by the priests and causes sweat noe other wise than by value of the muske ambergrise and gum in it which would be as effectuall if made with such ingredients here, for there is noe thing peculiar in it. And for the Bezor stone he has noe great veneration for it as a thing of any extraordinary vertue. Thus far Dr. Herman. He has made a great many collections and observations dureing his soe long abroad in those parts and he gave me hopes the world should ere long see some of them.

For the cure of the Colike he told me also this odde story that a gent. here in Holland being sick of the cholick with which he was often troubled a freind of his findeing him in a fit promised him a cure which was only askeing him which stocking he first put on in the morning. The sick man answerd, the right. For the future then, said he, put on the left. Which he observeing was cured not only of the fit but kept from the returne which he had often known succeed in others [if we are to trust what the Doctor says].¹ Thus far Dr. Herman.

Wed. Nov. 15. I saw Mr. Swammerdams remains, being a great collection of anatomical preparations of several parts of animals espetially ¹Latin. p. 219

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of human bodys, and of a great variety of insects.¹ Amongst other things very remarkeable is the spiral valves in the rectum and the circular in the ilium. In the ilium they reach not quite over the cavity of the gut, but are continued all round in circles about $\frac{1}{2}$ inch or lesse a sunder, in the colon they are not continued round but end in 3 seames that are continued all along the gut, but the direction in them is more spirall than circular and they stand at a greater distance than in the small gut. There was the parts of severall guts we know not of which animals that were perfectly spirall and reach to the midle of the gut.² The caecum had visibly a valve opening outwards and hindering the ingresse of any matter into the caecum.

The clitoris in a woman is perfectly made porous and spongious as the penis in a man, and the substance of the one is not distinguishable from the other.

Frid. Nov. 17. I saw Sarah Vander Speck a girle about $6\frac{1}{2}$ years old a great part of whose scul I had seen yesterday at Dr. Schafte³ who is professor magnificus, viz. 2 of occipitis and a great part of the 2 ossa bregmatis which togeather could not I think be lesse then $\frac{1}{3}$ of the scull.

The story in short is this. This girle when she was about $1\frac{1}{2}$ old being left alone by the fire in her standing stoole fell down on the hearth and was found lying with her head neare the moderately smal turf fire at her mothers returne quite senselesse. She had lain there soe long that not only her head clothes and haire were burnt but the flesh of her head also and the bones of her scul which were afterwards taken out were burnt black on the out side, and retaine that colour still, the fire seemeing also by the appearance it has still to have penetrated the inside of the scul but not soe as to make it blak. The uper part also of one (I thinke her right) eare was burnt away. This accident happend on the 6th December. She was in this posture committed to the care of a chyrurgion of the towne, since dead, who seeing soe dangerous a case desired a physitian might be joyned to him soe Professor Schaft was cald under whose care the case soe well succeeded that though they tooke out above a 3d part of the scul for the os occipitis was taken out with the ossa bregmatis as far as the os frontis forwards and as low almost as the top of the ears on both sides, yet all the time she had not any the least soporiferous or convulsive accident or any feaver only one fit of a tertian which was oweing to an other occasion. The pieces of the scul

¹ Published as Bybel der Natuur (1664), Utrecht, latinized by Gaub and prefaced by Boerhaave (Leyden, 1733).

² Thomas Theodor Kerckring (1640-93) is credited with the first description of the intestinal valvulae conniventes in his Spicilegium Anatomicum (1670), Amsterdam.

* Lucas Schacht (1634-89).

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began to be taken out in May following the burning and they are in 3 peices in the custody of Dr. Schaft. The girle is now fat and plump eats and drinkes sleeps and enjoys as good health and sense as any of her age and condition, goes to schoole and plays as brisquelly amongst her companions only when she falls some times the jolt will set her head a bleeding to that degree that the mother has apprehensions of the great haemorrhagie. The scul grows and insensibly covers the brains ever since the other was taken out, but it is but slowly though it be constant, for though the os occipitis be all restord, yet the top of the head is yet open and there is a large part yet there which wants its due armour. This I tried by feeleing which she endurd me to presse with my fingers as hard as I would venture to doe without complaining. There is noe haire grows yet on that part that was burnt but it lookes like a soare new skind and the blood starts out upon very gentle touching. Tis kept coverd with plaisters and over the part yet uncovered with scul, there is fited a sort of bolster to fence it from injury and this is all the peculiar care about her. At Dr. Schafts also I saw severall other natural and anatomical curiositys which he shewd me with an extraordinary civility. He told me the way of separateing the cuticula in a dead body in large quantitys where of he shewd me a great peice of his prepareing. The way is by a spunge dipd in hot water and applyd. To him also I owe the sight of Swammerdams Musaeum.

There was a sceleton there of a factus of 3 months. It was about 220 grys long but very perfect. I saw also there a Sceleton of a younger factus where the bones were as described by Kerkring,1 white and bony in the midle parts, but at the joynt not yet come to perfect bone. I saw also at Dr. Schafts a factus entire of about 6 weeks it was not in all above 100 gr. longue, if soe much, and of a proportionable bulk. Dr. Herman who as I noted above lived many years in Zeylon did me the favour to give me a branch of the cinamon tree with flowers on it. Told me of a sort of white ants that there mightily infests them, and it is a very hard matter to preserve any thing from them. The only way they have is to set the feet of their chests in dishes of water which water must be changed every day or else it gets a skin over which these devouring animals will march and then there is noe thing safe how close soe ever shut or strongly made, for they will eat through even the plates of iron. He had a chest wherein he had some things he valued and to preserve them the more carefully from those vermin his servants every day surveyd it carefully both top sides and bottom where observeing

¹Kerckring distinguished himself in both chemistry and anatomy. He wrote on the development of the foetus; discovered a method of preserving anatomical preparations in amber, and founded an anatomical museum at Hamburg. He also translated the works of Basil Valentine. On his conversion to Roman Catholicism he left Holland for France.

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noe attacques made by these legions they thought all safe, but he comeing to open his chest found the fortress taken and the enemy enterd. Upon this they searchd diligently for their avenue of which there appeard not the least suspition on the outside any where. At last upon a curious search he found where they entered the feet of the chest were round as big as his head and made of very hard wood under the bottom of this they had begun their approaches and soe eat through it into the chest. Wherever they get in to any such chest they spoile all things that are laid up there, either with their devouring teeth or a sort of earth they carry with them, wherever they goe which corrupts the things they cover with it and lay it amongst, for it is the custom of these animals wherever they make the roads to cover them with this earth, soe that they march always like miners coverd and ought of sight.

Sat. 18 Nov. From Leyden to Amsterdam 7 L.

Tuesd. 21 Nov. Dr. Herman of Leyden told me amongst other things, that boyeling the roots of Red Parsnip and after wards keeping them in pickle he could by the Season he gave the pickle give them the tast of mango or any other of those sauces brought from the East Indies and that they were as good.

Sayo he said was noe thing but the juice of a plumb squeezd out and boiled and then seasond.

Wednesd. Nov. 22. I saw at Mr. Braynes, a druggist, a very great collection of natural and artificial raretys most brought from the East Indies. Amongst other things the Calamus Aromaticus verus, which is now very rare, it grows like a reed, is solid and of a bitter tast.

Frid. Nov. 24. Dead-120.

Mond. Dec. 4. Dead—136.

Sat. Dec. 9. Pills of rhubarb and castor with which they overcame old and practically completed gonorrhaeas and foul colours and female fluxes. Ballonius¹ Epid. 53/273, 40.

Even repeated cutting of the veins of the foot does not promote menstruation in plethoric patients unless a vein in the arm is cut first. Dr. Sladus.

[Bleeding] up to 5 or 6 ozs. at once speeds up an approaching delivery.

For suppression of lochia in childbirth apply [venesection] at once to the foot and a blistering plaster to the tibia. Blistering plasters on the thighs are more effective but more liable to cause urinary trouble. Dr. Sladus.

¹ Guillaume de Baillou of Paris (1538–1616) anticipated many of Sydenham's methods. His book on *Epidemics* was printed posthumously in Paris in 1640.

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For longstanding gonorrhoea repeated purgings and decoction of burdock root—especially if this promotes sweating. ib.

Sund. Dec. 10. Dead-127.

Sat. Dec. 16. From Amsterdam to Utrech 8 L.

16851

Thursd. Feb. 1. From Utrech to Amsterdam.

Saturday Feb. 3. Joel Langelot³ that excellent naturalist and physitian philos. Transact. p. 5185.

Mond. Feb. 5. Natural History of Nitre, by William Clarke,⁴ 8°, Frankfurt, '75, 79 pp.

History and Mystery of Venereal Disease, by Edward Maynwaring,⁵ 8° Frankfurt, '75, 176 pp.

Sennertus, whom all agree to be an authority, has collected the best passages from ancient and modern writers, and added his own learned and worthwhile observations. His works cover thoroughly everything of any value on the art of medicine which had been written before his time. Maynwaring 32/176.

Wed. Feb. 14. From Amsterdam to Utrecht.

Tuesd. Feb. 27. The facts regarding crinones or parasites, of interest to the curious reader, have been fully expounded primarily for the use of doctors by G. H. Velschius⁶ in his Treatise *De Vermiculis Capillaribus Infantium*; this is a harmonious collection into one volume from various authors of everything that might be of practical or theoretical use; so that this one author can easily take the place of many other authors. The said Treatise is included with that *On the Median Vein* which he wrote so carefully and accurately and published at Augsburg in 1674. Acta Eruditorum '82, 317/402.

Thursd. Mar. 1. Ludovicus successfully described the effects of medicines.

Sat. Mar. 3. If [mercury] be sublimated by repeated distillation with certain minerals or metals it can take on something of their nature

¹ B.L., MS. Locke, f. 8 (second half).

² The page numbers are Locke's. The MS. journal has also been numbered in pencil and Locke's p. 1 is also p. 257.

⁴ William Clarke, B.A., was a Fellow of Oriel College, Oxford.

⁵ Everard Maynwaring wrote many popular medical books including, A Long and Healthy Life (1669), A New Method of Healing (1666), and The Mystery of Curing Comprehensively (1693).

⁸ Godfrey Welsch (1618-90) was a professor at Leipzig. Besides the treatise mentioned here he wrote on Illnesses of Childbirth (1655) and Lethal Wounds (1660).

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⁸ Joel Langelot (1617–80) was Chemist to Friedrich III of Schleswig-Holstein. He visited England in 1647.

while still remaining [mercury]. In this field credit is justly given to the little Treatise of Phylalethes,¹ who showed how a dry method applies in this connection more perhaps than anybody believed.

The preparation of ordinary [mercury] is adequately described by Kunkell² 20/122.

Tuesd. Apr. 10. Take 2 grains of solid phosphorus. Dissolve in 2 ozs. of [spirits of wine], over a slow heat. Pour 2 or 3 grains of this liquid into a small phial and you will see the surface gleaming with a blue flame. J.T.³

Take $\frac{1}{2}$ oz. of oil of cloves, dissolve in it 2 grains of solid phosphorus. Over a slow heat it will give out a continuous light. ib. Dissolve I drachm of solid phosphorus in some [oil of vitriol]. Drop on it 2 or 3 grains of ordinary water and you will see flashes. ib.

Thursday, May 10. I saw a young man take his Mr. of Arts degree after the manner which they call $[\ldots 4]$.

About 11 of the clock in the morning he with the professors of the University came into the great church, the two Beadles with their staves and two short gowns that reached but to their hams preceding. The Professor De Vryes the promoter tooke his place in a high deske and the candidate in a lower under him and the professors their seats on both sides, in the quire of the Church, the place for this solemnity. When they were seated Musique that was placed in a litle scaffold by began the solemnity. This was followed by a speech of Mr. De Vries which was in commendation of Diogenes and his tub, or of a meane condition; at the latter end of his speech he applyd to the candidate, pronounced him Artium Magistrum et Philosophiae Doctorem and gave him authority to goe into the deske and there reade with head covered; then cald him up into the upper desk to him and there first put on a cap on his head made after the fashion of a Dr of Physique's cap but set about with ribbands and bay leaves, then made him put of his cloke and put on a gowne, put a medal of Gold hanging in a gold chaine about his neck which is the guift of the towne, then put on his fore finger a ring and then deliverd him a book and then shooke hands and saluted him Dr and soe they sat downe togeather both coverd, the

¹ On 4/5/84 Locke sends Dr. Thomas "Philalethes: *Enarratio in Gebrum* 8°". The full title may be translated as "A methodical account of the three medicines of Geber, in which is contained the true recipe for the Philosopher's Stone" (London, 1678, 8°). The author took the pseudonym of Eirenaeus Philalethes.

² Jean Kunkel de Loewenstein was Court Chemist to the rulers of Saxony, Brandenburg, and Sweden. Journal 21/12/86 Locke reports Colehaus as saying that Kunkel "is noe chimist at all" compared with Michaelis and Ludovici. In Philosophical Transactions, Feb. 1684/5, 15, 186, there is a review of The Chymical Touchstone. De Acido et Urinoso Sale Calido et Frigido contra Doctor Voight.

³ Probably James Tyrrell from Robert Boyle.

4 Blank in MS.

p. 10 (Latin)

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professor with his hat and the other his cap. After an interlude of Musique the Inceptor stood up and enterteind the company with a speech in commendation of Mathematiques and sole the ceremony there ended with an Epilogue of Musique which whilst it plaid the Inceptor and professors with the friends invited marched out to his lodging where a feast expected them.

[Tables of Ghetaldus and Herigon giving gravity of variety of substances such as oil, water, tin, iron, alcohol, etc. (weights in Parisian libri of a cubic foot)].

Frid. Jun. 22. Dragon's blood is the gum of a tree in the island of Porto Sancto. At a certain time of the year the trees are gashed with a knife, the following year gum emerges from the cuts. These gums are boiled up in iron vessels, the scum is removed, and thus the so-called dragon's blood is produced. This tree produces in March a fruit like a cherry, of exquisite taste and a bluish colour. Aloysius Cadamustius,¹ chap 3, "In the New World", 5/584.

Thursd. Jul. 5. The Dwarf's Head is very large. Vossius 66/170, c. 19. [Quoted from Isa. Vossius De Nili Origine, 4°, Hague, '66.]

Wed. Aug. 1. Water in which molten lead has repeatedly been quenched softens iron. Poterius 323/744.

Sat. Aug. 4. They use in Holland a white wicker thing to warme their beds which does it much better than a warming pan. It is flat at the bottom and open at both ends but the top made some what convex and highest and largest in the midle. The length is about 3,000 and the breadth 2,000 and the heighth in the midle 1,000. There is an hole also in the side to put in the fire which is a turf coal in an earthen dish and to keepe it from fireing the sheets above or under there are 2 plates of latice of about 1,500 square fastend in the in side of this cradle one at the top and the other at the bottom. That at the bottom also has a ledg raised all round like a driping pan of about 60 or 70 high to keepe the coles from falling out if by chance that earthen dish wherein they are should fall down, which too is securd by a litle round tin frame to set it in.

Sat. Nov. 3. N. Lemery:² Cours de Chymie ed. 2^d, Jour. '77, 23/368. Molinetti,³ dissertationes Anatomico-pathologicae, Jour. '77, 68/368. pp. 18-19

pp. 22 (Latin)

p. 23 (Latin)

p. 29 (Latin)

pp. 30-1

¹ Luigi di Cadamusto wrote on exploration about 1540. Simon Grynaeus edited a volume of his entitled A New World of regions and islands unknown to the ancients.

² Nicolas Lemery (1645–1715) systematized chemistry and made Paris the centre of chemical study. Before he turned Catholic he was forced as a Calvinist to take refuge in England for a year (1683).

³ Antoine Molinetti (c. 1649-75) was a professor at Padua and much in demand as a doctor (e.g. by the Duke of Bavaria). The enlarged second edition of his work on anatomy appeared at Venice in 1675.

Tuesd. Nov. 6. Deception can be recognised by weighing the Bezoar and soaking it in water, for if the water in which it is soaked changes colour and the bezoar loses weight in the water, this is a sign that it has been adulterated. Others use a red-hot pointed piece of iron and prick the bezoar with it. If the iron goes in and roasts the bezoar this is a sign that the bezoar contains mixed ingredients and is not natural. Journal '77, 107/368.

[Journal ends p. 53. At the end of the MS. there are six pages of extracts in Latin from books Locke has been reading. *Cicutae Aquaticae Historia et Noxae*. Jo.Ja. Wepfero, 4°, Basiliae, '79, 336 pp. Gabriel Clauderus:¹ Inventum Cinnaberinum, 4°, Jena, '84, 68 pp.]

The famous Schulzius in his Triad of Cinnabars has described the Etymology of Cinnabar, its origin, synonyms, various differences, essence, constituent parts, usual modes of preparations and medicomechanical uses, etc. Clauderus 1/68.

M. Tillingius in his laboured Scrutinum Physicum Cinnaberis Mineralis has shown to the learned world a smoking lantern as it were at an Easter fair. Clauderus 1/68.

Clauderus on the universal tincture, ib., 5/68.

The Azoth of Heslingius² was Mercury precipitated with gold—a dangerous medicine and very harmful to nervous types. ib., 6/68. Jo. Michaelis³ the incomparable chemist of Leipsic. ib. 9.

The "red powder" of John Michaelis consists of 1 lb. of Cinnabar of Antimony (5 or 6 times sublimated, p. 36). $\frac{1}{2}$ lb. of the salts of peony roots etc. It is described by Fr. Hofmann⁴ in his Key to Pharmacy by Schroder, Book 2, Chapter 77, para. 252, p. 109 and Book 3, chapter 16, p. 293; and by G. Scholzius in his Triad of Cinnabars, Chap. 5., para 5, p. 46. This specific of John Michaelis for headailments has been proved throughout Germany; it is the mainstay of all who wish to strengthen and console the archeus when it is wearied by high temperature, terror, thoughts, hard work etc.; to provoke sweating, to purify the mass of the blood and correct its acidity. The last authority for some decades of his life added $\frac{1}{2}$ oz. of magistral horses tooth to the description which appeared in Hofmann.

ib. 16/68.

² Elias Johan Hessling, *Theophrastus Redivivus*: "that is the practical use of Azoth, the Medicinal Philosophic Stone of Paracelsus" (1663), Hamburg and Bern.

³ John Michaelis (1606–67) was Professor of Chemistry at Leipzig and introduced the use of chemical remedies there. He published the textbooks of Hartmann and Croll.

⁴ Frederick Hofmann (1660–1742) was the son of a doctor of Halle who wrote voluminously till 1740. Before 1684 he had visited England to see Boyle. His *Thesaurus Pharmaceuticus* was printed in 1681.

p. 43 (French)

¹ Gabriel Clauderus (1635–91) of Altenburg was doctor to the rulers of Saxony. The full title of his book is *Dissertatio de Cinnabari Nativa Hungarica*, "longa circulatione in majorem efficaciam fixata et exaltata".

Zwelfer,¹ a man of great experience in chemistry. ib. 24/68. He shows the method of sublimating native cinnabar, p. 37.

He approves of native cinnabar fixed by a yearlong digestion. In diseases of head or nerves give 2 to 8 grains at bedtimes the day before changes of the moon, 43. In fevers, both continuous and intermittent, it may be used, but is not invariably followed by a crisis with spontaneous sweating, 45. In the plague it is the best prophylactic and remedy, p. 47.

Tincture of sulphur of [vitriol] is made from sweet earth of [vitriol] or from the [oil] of spirit of [vitriol] from which all vitriolic flavour has been elixirated, and from which later the spirit of nitre and rectified [spirits of wine] is to be extracted. This always gave marvellous results to the great Michaelis, to me and to others. Give up to 30 or 40 grains in a drink in cases of haemorrhages, internal and external, bleeding from the nose, womb, and from wounds even of the most distant parts; and spitting of blood. Its action is very rapid. ib. p. 59.

Michaelis in more than a thousand cases, in which the excessive acidity of hypochondriac and scorbutic blood had to be corrected, obtained remarkable effects by mixing the essence of [iron] in a juice made from Borsdorf apples. Dose 30 drops. For calming the feverish circulation of overheated blood at night he added to the tincture 30 grains of flowers of daisy, poppy, violets.

1686^{2}

Mond. Apr. 15. I saw a stone voided out of the bladder of a maid above 70 years old without any chirurgicall assistance. It was oblong and round but unequall and rough. Its length was 236 gr., its diameter in the thickest part 146, its girt the longest way 574, its girt perpendicular to the axis where it was bigest 435. This woman after having voided this stone by the bare impulsion of her urin, was afterwards able to retain her urin.

Take a tub of sea water, 1 pint of finely powdered Moscow Talc (commonly called Marien glas). Mix together and shake well. Distill and sweet water will come out, the salt remaining in the bottom. In this manner water can be sweetened. [Here follows another recipe for purifying water. Locke's correspondence with Thoynard contains much on this subject.]

Take 1 pint of French wine, 1 pint of gummy galls.3 Expose to the sun for 10 days and then try whether the infusion has extracted a

¹ Joannes Zwelfer published the Pharmacopeia Augustana Reformata in 1683.

² B.L., MS. Locke, f. 9. ³ Blaeune galnoten in Flemish.

gummy tincture and acquired some consistency; then finally add some vitriol so that it turns black, and so store it.1 Mr. Limborch.

Wed. May 22. I saw at Mr. Braynes a leafe of Kinkina. It was in make something like an Alder leafe but a litle rounder, thicker and of a lighter colour, the ribs on the shady side big in proportion and standing high above the superficies with litle dents answering them on the sunny side.

I saw there also aboundance of Oriental and occidentall Bezoar that which is truly orientall and not counterfeit has this peculiarity that if you rub chalke or lime on paper and upon that rub true orientall bezoar it produces a green colour which the counterfait nor occidentall will not doe. Of this we made severall experiments.

Wild purslane heated in a baking pan and applied hot is very beneficial to tumours and inflammation of the throat, as Dr. Slade has often found.

Sat. Jun. 8. The following were sent to Dr. Van der Voort,2 doctor of the East India Society [there follows list of fourteen samples of cinnamon root, fruit, oils, etc., at the end of which is the name, Dr. Sladus.]

The root of Jensing or Nisi is considered by Asiatics as most powerful in Venereal disease. The Chinese make hardly any decoction in which some of this root is not included. An extract of it with spirits of wine so inflamed a salacious man that he perished of a burning fever. It has its use in those who are weak and cold. It is very conducive to them but must be used sparingly and soberly. It has a similarity with saffron which also must be employed with moderation. The Chinese value it more than the Japanese. It originated in the island of Corea. The root of Nisi seems a species of trefoil, 3 although I've seen neither its seed nor Clever.4 flower.

Frid. Jun. 14. To Rotterdam.

Sat. Jun. 22. [At Delft.] I saw several of Mr. Lewinhooke's microscopicall observations which answer the descriptions he has given of them, only the globules of blood I could not clearly see, though I could see a cleare destinction between the red and pellucid parts, but the red seemed to me to lye like red threads confused laid in a clear liquor.

¹ On 29/10/87 Limborch gave Locke a recipe for ink almost identical with that given here.

² Cornelis Van de Voorde (1630-78) was for the last twelve years doctor at the Hospital of the East India Company and Examiner in Surgery. He earned the name of "the Chemical Doctor" from his liking for chemical remedies.

³ Trefoil was used for treating diseases of the heart because of its heart-shaped leaf.

4 Andreas Cleyer was Physician to the East India Company in Batavia and a keen botanist.

p. 5 (Latin)

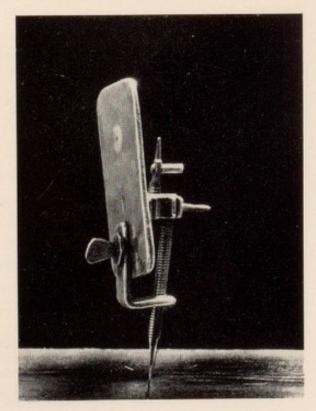
pp. 8–10 (Latin)

p. 10 (Latin)

p. 13 pp. 14-17

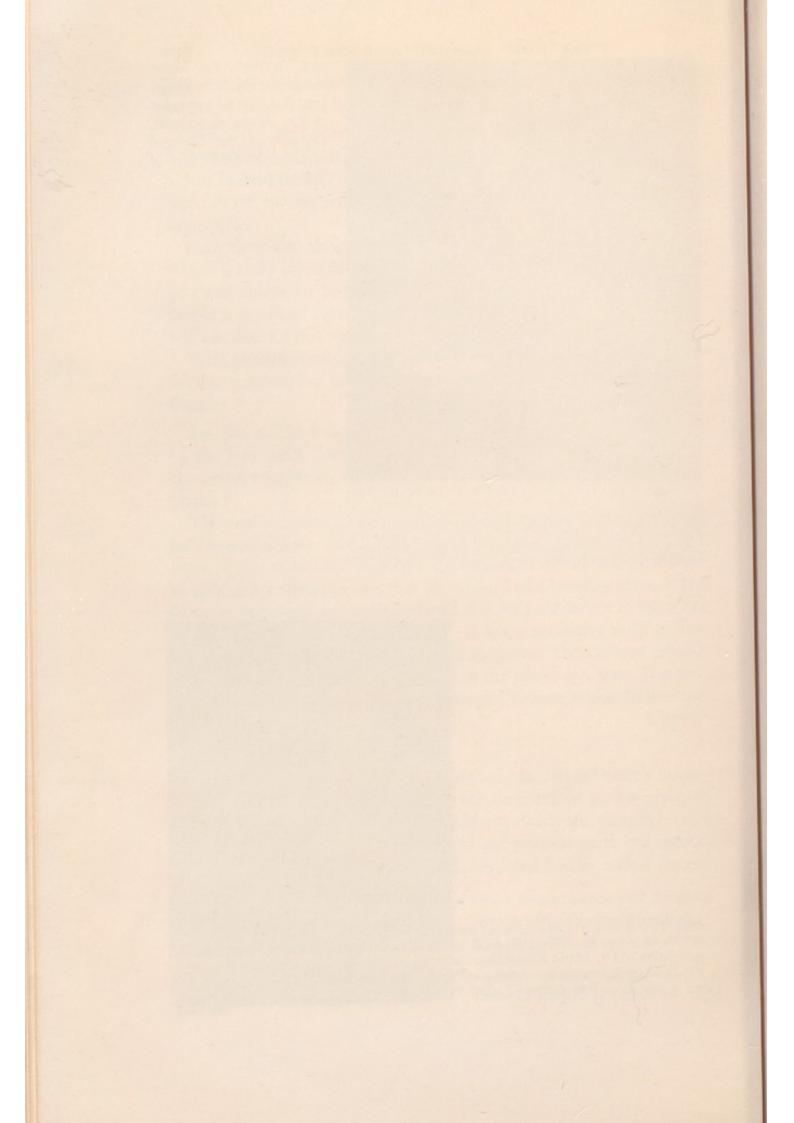


10a. Anthony van Leeuwenhoek, by J. Verkolje (1686). (By kind permission of Dr. Maria Rooseboom, Director of the National Museum for the History of Science, Leyden.)



10b. Leeuwenhoek's silver microscope, 5 cm. in size. (By kind permission of Dr. Maria Rooseboom, Director of the National Museum for the History of Science, Leyden.)

· conserver to fi



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Whether it would have succeeded any better if the bloud had been diluted with water or some other very cleare liquor wherein the red parts might have been more disjoynted I know not.

The exceeding small and regular fibres of the crystalline humor are wonderfull, if all the workes of nature were not soe, as the tubes also which the bony substance of a Tooth are made up of which as he says are all placed perpendicular to the hollow that goes up the root of the tooth, and were there are two roots makes an arch in the body of the tooth marked by those pricked lines in which holow is contained an artery, a veine or a nerve.¹ The small tubes that make the bony part are marked by the strait lines running from that hollow.²

Some of the small animalls which he said were taken out of the womb of a dog post coitum I saw sticking to a small plate of glasse. They were a very great number to a very small area, they being taken by only applying the glasse to an equall area of the womb. They seemed to me like very small beads and twas with much difficulty I could perceive the tailes he describes of them if at least I did perceive any at all, for these being long since taken were dead and dried on to the plate of glasse.

The glasses we saw in he said would magnifie to a million which I understood of cubicall augmentation which is but 100 in length, but the best of all his glasses and those by which he describes his spermatique animals we saw not, nor (as I heare) does he shew them to any one. We saw also at Capt. Christmans, Capt. of His Highnesse's guards, a very civill Gent., a great collection of naturall raritys.

Sund. Jun. 23. To Amsterdam.

Wed. Sept. 18. Mr. Tyrrell in his dated Palme Sundy tells me that his eldest son, daughter and foot boy had all the small pox; that the daughter was let bloud after this appeard that they were all up and about the room in 10 or 11 days and without marks thanks (says he) to Dr. Sydenham's cooling method.³

Mond. 9 Dec. Sam Larkeing of Yukel, a Schiper⁴ now 75 years old and very lusty of that age haveing been troubled with the gout above 20 years of which he was wont to have severe fits. With spring and fall which were wont to hold him 3 months togeather and both in hands and feet that he could not stir nor feed himself, did about 3 years since in the heighth of a fit whip the parts then seized by the gout with nettles till they were all inflamed and blisterd upon which he found ease p. 17

¹ There is a diagram in the journal to which this passage refers.

² First described in the Philosophical Trans. Roy. Soc. (1678), 12, 1002-3 as "Microscopical observations of the structure of teeth and other bones."

³ This account also appears in Locke's notebook B.L., MS. Locke, f. 24, f. 175.

⁴ The "of" and "a" in the first sentence are transposed in the MS.

within half an hower after this he repeated again a day or two after when he found any pain remaining and soe continued to whip the part with green stinging netles where he found any pain till it all went away. Since that he has had noe fit of the gout but is very well and lusty with out any other physique but barely abstinence from wine unlesse it be new and then a draught of Sack, and applying his netles to any part where in he findes the beginnings of any pain. The man I saw and heard him averre this. By a way not much unlike this did Van Helmont cure a maid in Rotterdam who by a palsy had lost the use of all her parts from the hips downwards by ordering her Mother to whip her soundly with rods. B. Furly. Perhaps netles would in the like case be yet better. J.L. After the whiping which fetched bloud he washed it with brandy.

The Vertues of the Wound Wood

(1) If any young or old one troubled with the Dysentry gripeings of the bowells or fits of the smother, let them with this wood stroak the parts downwards and it will still the pains.

(2) If any be pricked, cut or scratched with a thorne, wood, sword, knife, etc. stroak the wound with this wood immediately and if it can be got stroak the instrument with which the wound was made or with it cut or prick the wound and it will heale the wound without any other medicament or plaister. But this must carefully be observed that it be stroaked immediately, before it begins to putrifie or come to matter else it will stop the healing of it. This must also be well minded, viz. to pull out the thorne, splinter or whatever sticks in the flesh else it will when healed fester and cause great pain, and the place must be again opend ere the patient will be at ease. The wound must also be carefully bound up from the air and if a good plaister be put upon it that will not hinder the effect of the wood though it will heale also as well without a plaister.

(3) If any bleeds and stroaks himself with it and holds it in that hand on which side he bleeds till it be warme it will staunch the bloud.

(4) For children that are about Teeth stroak their gums with it gently and let them bite upon it and 'twill help their grouth, stop the rheum and ease the pain occasioned by the breeding the teeth.

(5) When the rheum falls upon the teeth make tooth peckers of the wood and pick the teeth with them till they bleed and let the bloud dry to it and it will help under God.

(6) For the head ach or flowing of the Rheum stroak the rheum backwards to the shoulder probatum.

(7) For the gout or Anthonys fire stroak it with the wood and it mitigates the pain.

(8) If any one bruise himself stroak the part bruised there with immediately and it prevents all swelling and growing black and blew. All these 8 particulars I have found true in my owne body and particularly in a very dangerous fall I had such experience of its efficacy that I thinke noe applications could have cured me better.

(9) If a member swelling begins to wither and decay stroak it with this wood and it will recover.

(10) If a hunch or crookback etc. begins to grow stroak the place often with this wood. And give of the water of it 2 or 3 spoonfulls to drinke.

(11) For a Wen, kernells, or the Kings Evil stroak it therewith and lay a chip of it to it and it will repell it.

(12) For members wearied with rideing, or walking, stroak them with it and it will refresh and fortifye them.

(13) For frozen limbs stroak them and it abates the frost.

(14) For burning stroak it gently and it heals.

(15) A Trenchar or cup made of it is good against poison.

(16) For a woman in Travell if she be placed on a chair made of this wood she will bring forth easier and speedier.

(17) If after one be let bloud the instrument be stroaked there with the wound will not fester.

(18) Half an $[...^1]$ of the powder of the middle rinde taken inwards helps one that hath an impostume or swelling within.

(19) The powder of the bark strewd into a wound of man or beast heales it.

(20) For the Anthonies fire in horses or cattle or any other accident stroak it from the fore foot to the hind foot [in the morning] the oftener the better and twill help.

(21) When an horse has been much pinched that it festers inwardly it must be opened from beneath upwards that the curruption may run out, then stroak it with this wood every where in the wound that the wound become very bloudy and let the bloud dry on to the wood and lay it soe a side till the wound be healed.

(22) If an horse being wrung with rideing hard that it swells take the sadle off immediately and stroak it often with this wood and the swelling will cease.

(23) If an horse be pricked to the quick with a naile pull the naile out and stroak it with the wood or thrust it into the place and it will help immediately.

(24) If an horse faile upon the way and cant be got forwards being beaten with a switch of this wood will run to purpose.

¹ Blank in MS.

(25) If any man be galled stroak the place with it and it will cure him.

(26) My brother haveing found great vertue in the use of this wood applyd it also to other uses, viz, infuscing the saw dust of it in oyle he there with cured soar niples in a woman on which physitians and surgeons had tried their skill in vain. B. Furly.

Split a standing young oak, passe child between the divided parts. Binde the tree togeather agen and as the tree closes and heales up again soe will the burstnesse close in the child if only the guts be kept up and the part kept warme.

Take coagulated mercury. Pour into an iron baking pan about I pint of pure water. Place on the fire and throw in $1\frac{1}{2}$ ozs. of common salt crumbled up, so that it melts. Then throw in 2 ozs. of powdered and sieved green copper. As soon as the water boils add I oz. of mercury, stirring always with a wooden spoon until half the water is dissolved, or a material begins to go thick like porridge at the bottom. Cook slowly on not too fierce a fire. Then gradually decant the water that is left; wash the mercury which is in the pot with cold water, take it out and make it into little cakes and place in a box or paper. Expose to the air for [a day] or longer for it to harden. [Marginal note by Locke: "Thus far sent D.T. 22 Aug. '87."] If you want to fix it in some way take 12 ozs. of Tutia. Pulverize and sieve. Then take 11 drachms of Turmeric. Place in a covered pot and roast till all the moisture disperses and it goes black. Take care while roasting the Turmeric that it does not take fire -the flame must be extinguished at once, otherwise you lose your work and the herb. Mix the Turmeric thus dried with powder of Tutia and place this mixture and the aforementioned cakes of mercury in alternate layers in a crucible. Cover the crucible with a lid, daub it well with clay and place on a slow fire. Roast gradually, bringing it up in 3 hours to the fiercest heat. Then cool and you will find grains which when fused together will prove a malleable metal rivalling gold in colour. A ring of this metal worn on the finger changes colour according to changes in the wearer's health, as I've found from experience. ib. I read its aforementioned virtues in Blankard.1

p. 50 (English) To plane paper. Take ordinary joyner's glue, dissolve it and strain it through a linen cloth and boil it with alum in so much water as when the paper is dipped in it will not clear together. Press out all the water out of the paper and hang the sheets singly up adrying. ib.

Make a horses nail without a head of the best tough iron, drive it into

p. 49 (Latin) 276

¹ Stephen Blankaart was a follower of Sylvius who recommended large quantities of the newly imported tea for acidity and purification of the blood. He compiled one of the earliest medical dictionaries with an English edition in 1684; and between 1680 and 1688 edited *Collectanea Medico-physica* at Amsterdam.

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the hinde hoof of a guelding and draw it through, of this without fire make a ring that may be tight on upon the finger. Helm:1

Frid. 20 Dec. Take 1 lb. of rice, 3 pint of water, boil it till thicke, then put milke to it and let it stand on a soft fire. Then take it off and put to it 8 or 10 eggs, a little cinnamon and rose water and some grated bread or bisquit. Sweeten it with sugar and then fry it as Flap Jacks.

Mrs. Furly.

277

To fetch off the rust from iron rub it with vinegar and quick lime togeather.

In Holland they give their iron backs and such other things a handsome colour by painting them with a mixture of the powder of blacklead, vinegar and the whites of eggs mixed togeather. ib.

Sat. 21 Dec. Michaelis, Ludovici two very skilful chimists and fair men, but Kundit is noe chimist at all. Colehaus.

Sunday Dec. 29. The Goan stone, or stone of Goa is described in Zacutus² Lusitanus, Bk. 2., observation 6, under the name of Cachundè.

Powder of Union is [sulphur] and Crude [mercury] powdered up in marble mortar, black in colour, very effective for worms, festering ulcers and spitting of blood. Dose I drachm with rose or similar conserve. I gave more than 1/2 ounce in a week to a boy of 3, thus curing his malignant and crusty ulcers without any perceptible operation. I gave to this boy a dose of I scruple. After at most the third dose it always stops spitting of blood, as I've several times experienced. Dr. Quinae.³

[Notes on the Acta Eruditorum, 4°, Lipsiae, '82, p. 402.] e.g. p. 84 [Latin]. Red part of blood only 1/10th (or less) of the quantity of the serum and gelatine.

p. 86 Soporific properties of Poppy and Opium.

p. 90 Epilepsy often ends in Apoplexy because the internal jugulars are obstructed and so the blood is hindered from flowing back from the brain.

p. 90 Specimen Medicinae Sinicae by A. Cleyer 4° Francfort '82 in which see their doctrine of pulses and some few other things of their medicine.

16874

Wed. Jan. 22. An ulcered cancer on the face of a girl of 12 of the Tulse family near Christchurch was cured within 20 days by salivation by

4 B.L., MS. Locke, f. 9.

pp. 81-95

p. 97 (Latin)

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p. 52

p. 53 (Latin)

¹ Baron F. M. van Helmont son of the famous physician and chemist.

² Abraham Zacutus (1575-1642) emigrated from Portugal to Holland because of his Jewish parentage. He published his Praxis Medica Admiranda in 1637. ³ Dr. Quina was for some years a member of the "collegium" or medical club, in

Amsterdam to which Drs. Bernagie and Veen also belonged.

means of sweet [mercury sublimate]. Lossius1 l.i, obs. 30. p. 84/384. Lossii Observations, 8°, London, '72, pp. 384.

Sat. Feb. 15. To liquor boots dissolve red lead in linseed oyle and too keep it from being too hard and breaking mix a sufficient quantity of Helmont. hogs grease.

Tuesd. 25 March. Chrystal laid in water will grow heavier and laid to F.M.H.² dry grow lighter again.

Pebbles grow and nourish. Nature often cracks them and in those cracks will grow a strong substance of another colour which increases and thrusts the parts of the pebble asunder, and in that cement grows crystalls. Pebbles have their life and age and after a time certainly lose their clearness, solidity, weight and firmness and moulde into earth again, there first growing litle holes in them and they becoming more friable where there are metals in the earth under them the pebbles have various colours.

16883

Thursd. 1 Jan.

Mond. 1 March. Take a kids skin dressed to wash leather. Stretch it straight in a frame and then paint it over with Cerusse finely ground with linseed oyle, lay on the colour 2 or 3 times and smooth it with a knife before it be dry that it may be very even and polished. To make it yellow mix a little oker with the last laying on. On this you may write with ink and wipe it out again.

Take cerusse or chalk or white burnt boans finely ground, mix it with a little glue dissolved in water, and put it on paper or parchment or wash leather and on this you may write with a silver or brass pen.

Van Helmont.

Dissolve minium in Linseed oyle first boyle till all the watery parts are consumed to a fit thickness, put in a sufficient quantity of hogs grease and lay this on linen cloth-the hogs grease is to keep it from cracking. The linen cloth must be first laid over as it is stretched in a frame with a very thin glue else the oyle will make the threads swell ib. and the cloth will be thick and gummy.

Sat. 3 April. To Leyden with Adrian.4

First, bleed.

Take 1 oz. of Cassia extract; 3 drachms of senna leaves; 1 drachm of rhubarb; 1/2 scruple of aniseed; cook in some barley water. Take 5 ozs.

¹ Friedrich Lossius was born in Heidelberg but practised in the second half of the seventeenth century in Dorchester, England. His book was Observationum Medecinalium libri ² F. M. van Helmont. quattuor.

⁸ Continued in same journal (MS. Locke, f. 9).

4 Dr. David Thomas.

p. 317

Palimpsestes p. 317

Table books

Oyled Cloth p. 317

p. 318 (Latin)

p. 99

of the strainings; 6 drachms each of syrup of rose solution and manna. Make a potion; take it the morning after the venesection.

Take 3 or 4 ozs. of pectoral decoction and 1 oz. of syrup of meconium. Take this draught at bedtime after purging.

Take 3 drachms of very finely powdered aniseed and some balsam of Lucutelli. Make 8 pills from each drachm. Take 4 in the morning and in the 4th hour of the afternoon on days free from purging, always drinking 4 drachms of a bitter decoction without any cathartics.

N.B. If this decoction purges take only 3 drachms. Repeat the purging after 2 or 3 days break, according to the patient's strength. The whole process can be repeated twice if circumstances and the patient's state allow. Æs for phthysis. It cures hectica.

[Locke and Thomas returned to Rotterdam on 14 April.]

Wed. 21 April. Adrian went away.

Take some Cacao. Dry in an oven after the bread is taken out; placing some litter beneath so that it does not feel the full heat. Take off the skin and stalks which will not powder. Reduce to a powder through a hair sieve. Take $\frac{1}{2}$ drachm of Cinnamon coarsely powdered and with it one Vonella. Reduce to a very fine powder. Take this powder with $\frac{1}{2}$ pint of Cacao. Pound for 3 or 4 hours and reduce to a paste.

Dr. Thomas.

Saturday Aug. 14. Universal solvent for extracting all [quintessence] out of vegetables and animals.

Take some [spirit of tartar] made out of the twigs of the vine. Dissolve in some simple [spirits of wine]. Filter. Then gently distill out of a Bain Marie till it is dry. The [sublimate] thence distilled put back over the residue and distill again till it is dry. Keep on putting back the spirit you have distilled on to the caput mortuum and distilling it again till dry, until at last a [sublimate] plainly insipid drips out, which will happen after 8 or 10 repetitions, and you will then have a prepared solvent.

Oil of white amber and volatile oil of the same

Take equal parts of amber, burnt [hartshorn], burnt chalk. Beat all up well and mix together. Place on a stone cup on an open [fire] and distill with an alembic with good-sized receiver. Thus you will acquire volatile oil and oil of very white amber. Note that out of 6 pints of amber I had $3\frac{1}{2}$ pints of oil and I pint of volatile [oil].

[Regulus] of spirit of [tartar].

Take 10 ozs. of [spirits of tartar], $\frac{1}{2}$ pint of crude [tartar] powdered. Mix all well together. Then put in 2 pints of fermenting good white p. 322 (Latin)

p. 320 (Latin)

wine, one spoonfull at a time. After fermentation has taken place put in $\frac{1}{2}$ pint of crude calcined [tartar]. Then filter and keep for use. N.B. Filter first through a Hippocratic sleeve¹ and then through a paper.

Spirit of sweet [oil of mercury].

Take some quick [mercury] purified by [sand]. Put to digest in horse manure for 15 [days] in a well-closed vessel. Then take out of the manure, and shake it with two parts of very fine powder of [antimony] in a marble mortar till the [mercury] is killed. Then put in a cellar in the same mortar for 15 [days]. Then again distill it out of a retort through sand on a very gentle fire; and provided the mouth of the receptacle be kept closed, then you will receive sweet [oil of mercury]. Dose from 6 to 20 grains of this in a glass of ordinary water.

Volatile [spirits of tartar].

Take some powder of crude [tartar], impregnate with some alcoholised spirits of wine to form globules, put them in an earthenware retort and distill on an open fire. At first a phlegm will drip out, then a spirit, and thirdly a foetid oil. Then take 2 parts of the residue after the spirit has been distilled, and I part of foetid oil. Stand all together to digest for 3 months on a constant moderate fire, then from the earthen [alembic] distill through sand on a very gentle fire. Then you will acquire very choice volatile [oil] of tartar, which will be sticking in large quantities to all sides of the receptacle. Dr. Veen had this from [\dots^2].

Funerals at Amsterdam 11 Aug. 169, 17 Aug. 157.

Frid. Oct. 15. A decoction of leaves and shoots of the Dulcamara and an infusion like Tea of the flowers of St. John's wort completely cured a girl of Amsterdam from an consumptive ulcer of the lungs, and she afterwards became quite fat. She took this at the advice of Doctors Quina and Bernagie.

Wed. Dec. 15. Cowdung distild in May yields a water of an admirable smel and use: smooths the skin inwardly taken cools and is good for the spleen. L.M.

Frid. Dec. 17. Boil leaves of Dwarf Elder either dry or green, in common [water] and apply hot. Repeat this. It cures gangrene. Helmontius saw this used on an arm destined for amputation while the instruments were being prepared.

Take 3 parts of the root of butter-bur and 1 part of the roots of swallow-wort. Fill a suitable vessel with these and pour on as much

p. 338 (Latin)

p. 347

p. 347 (Latin)

¹ A long linen bag used to filter pharmaceutical preparations.

² Blank in MS.

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vinegar as the vessel can hold. Let the patient take 5 or 6 spoonfulls of this vinegar and sweat for 5 hours, taking nothing else in the meantime, and then refresh himself with some suitable food. This cures the plague with one dose if taken on the first day of the disease, but if put off for 2 or more days the dose must be repeated on 3 or 4 successive days, as need be. In an urgent case instead of an infusion a decoction of those roots in vinegar may be used.

Horehound used in place of hops makes beer keep well, and beer thus flavoured cures hydropsy. ib.

The oil distilled from the thin bark of silver birch cures scabies. ib.

CHAPTER IX

Last Years

LOCKE stayed with Dr. Charles Goodall at the College of Physicians until he found rooms in Westminster. During the next fifteen years his main activities fell into three five-year phases. The first was one of authorship, then he was primarily a civil servant, and after retiring, he returned to the study of theology and philosophy. After declining several diplomatic posts on the grounds of ill-health, he accepted the modest office of Commissioner of Appeals which gave him plenty of time for literary work. Two anonymously published books soon appeared: Letters concerning Toleration (1689), Two Treatises of Civil Government (1689), and a year later, his Essay concerning Human Understanding came out. These were closely followed by a treatise on economics (1692), a third letter on toleration, and a work on education (1693), wherein he outlines his system of educating children with emphasis on both the physical and mental aspects of their well-being.

Whilst the obscure exile was rapidly becoming a famous author with considerable political influence, he lost three of his old friends. Sydenham died in December 1689. Locke informed Guenellon who inquired whether Sydenham had left any unpublished writings. Locke sent him a treatise on children's diseases and a small book on phthisis¹ which "try to follow the plan of Dr. Sydenham".² Dr. Veen then asked for Sydenham's works on chronic diseases, as he had found his methods beneficial in treating gout and dropsy. He regretted not having read these books earlier as, "what Sydenham has written about epidemic diseases, except the smallpox, is only for men of exact investigation and intellect".³ It was mainly through Locke's constant advocacy that Sydenham's works came to be more highly regarded in Holland than in England; and the furrows which he had ploughed in the wastelands of clinical medicine were later extended by Hermann Boerhaave (1668–1738) of Leyden.

The London winter brought on a recurrence of Locke's bronchitis

¹ This may have been Richard Morton's Phthisiologia (1689), London.

² B.L., MS. Locke, c. 11, ff. 28-29, 11/21 March, 1690.

³ Ibid., c. 23, ff. 7-8, 22 Jan.-Feb., 1692.

and he consulted Dr. William Cole¹ of Worcester, to whom Sydenham had addressed his Epistolary Dissertations (1681/2). Cole then had a minor reputation, and Locke advised him to exchange his arduous country practice for a more remunerative one in the capital, but he was reluctant to challenge "the fixed Interest of so many very great men of the Faculty; amongst whom I am conscious I can scarce be visible".2 Neither Cole's medicine nor the summer months relieved Locke's cough, and he began to despair of ever getting well. He asked his doctor whether he had ever known of anyone recover from a similar illness; and when reassuring him Cole mentioned Locke's own medical studies which "have been such as to make you as great a Judge in it as any man".3 As his cough did not improve, he consulted Goodall, who likewise paid homage to his medical ability. "I know that you are so much Master of our profession," wrote Goodall,4 "that I can offer little which may be more serviceable to you than what you already know." He mentioned some pills favoured by Dr. Morton⁵ in his newly published Phthisiologia,6 and invited Locke to suggest "any day when you will dine with me about 2 of the clock you may have an opportunity to discourse the Doctor after dinner". As these remedies brought him no relief Locke then tried Drs. Veen7 and Thomas:8 the former invited him to Amsterdam, and the latter promised benefits from the Wiltshire air. He visited neither place, and again got in touch with Cole who hinted at his hypochondriacal preoccupation.

I am much inclined to believe your apprehensions of your condition in relation to your present distemper [wrote Cole],9 are but the same which most of thinking men (Physitians not excepted) have of themselves when indisposed: viz, they make too close reflection on their own diseases eyther magnifying them, or not so distinctly perceiving them through their immediate and great concernes which generally makes men forme dreadfull Ideas of things; as the Eye does an object brought too neare it.

Robert Boyle was seriously ill in the autumn of 1691 when he asked Locke to prepare for the press his manuscript of A General History of the Air. Locke corrected the manuscript, and when suggesting alterations

¹ His letters are published in Kenneth Dewhurst, "Dr. William Cole's (1635-1716) Letters to Locke", Centaurus (1963), 8, 147-73. ² B.L., MS. Locke, c. 6, ff. 195-6, 30 April, 1690.

³ Ibid., ff. 197-200, 18 May, 1690.

4 Ibid., c. 10, ff. 27-8, 21 May, 1690.

⁵ Richard Morton was an Anglican clergyman who began to practise medicine when he became a Nonconformist. He was created M.D. (Oxon) in 1670 on the nomination of the Prince of Orange.

⁶ Phthisiologia etc. (1689), London, p. 166 (English trans. 1694), pp. 151-2.

7 B.L., MS. Locke, c. 23, f. 3, 2/12 April, 1689.

⁸ Ibid., c. 20, ff. 99-100; 101-2; 106.

⁹ Ibid., c. 6, ff. 201-4, 11 June, 1690.

for Boyle's¹ approval, he mentioned that it was still "not in a condition to be sent to the printer".2 Boyle died before the work was completed, but Locke kept his promise, and the book came out one year later. He also helped Dr. Edmund Dickinson3 to prepare a posthumously published collection of Boyle's medical recipes. On his deathbed Boyle had communicated to each of his literary executors (Locke, Newton, Drs. Dickinson, and Coxe) a method of multiplying gold. It consisted of combining some red coloured earth with mercury, which Locke now began to investigate. But Newton who had lost his instructions and had "no inclination to prosecute the process",4 asked Locke to send him the details, together with a sample of the earth.⁵ When Locke complied, Newton wrote again advising him not to waste his time trying to multiply gold, as Boyle himself had never succeeded, nor had "a company of chemists".6 Newton was likely to know. He had spent more time than Locke on chemical experiments; and a recently discovered notebook shows that most of his work was with metallic alloys of low melting-points.7 Newton, like Locke and Boyle, was a chemical and physical corpuscularian, although he did not share their interest in medical chemistry; instead he tried to formulate some general law of chemical attraction corresponding to his law of gravitation.8 Newton and Locke had other common interests in theology, philosophy, and politics: they remained friendly until the autumn of 1693, when Newton's illness temporarily ruffled their relations. The first indication of his breakdown was when he informed Pepys that he "neither ate nor slept well this twelve month, nor have my former consistency of mind. I am now sensible that I must withdraw from your acquaintance," he continued, "and see neither you nor the rest of my friends any more, if I may but leave them quietly."9 These symptoms of insomnia, and depression, with feelings of unworthiness, suggest the depressive phase of a manic-depressive illness: then came delusions of persecution expressed in this10 letter to Locke:

¹ There are several notes on Locke's proposed "titles" in his notebook (B.L., MS. Locke, c. 42, f. 16); and Boyle's original manuscript in the hand of an amanuensis, revised and corrected by Locke, is also in the Bodleian Library (MS. Locke, c. 37).

2 The Works of the Hon. Robert Boyle, ed. T. Birch, vol. v, p. 571, 21 Oct., 1691.

³ B.L., MS. Locke, c. 7, f. 206, 20 June, 1693.
⁴ Ibid., c. 16, f. 146, 26 Jan., 1691/2.
⁵ Cambridge University Library (Portsmouth Collection), 6 July, 1692.

⁶ B.L., MS. Locke, c. 16, f. 151, 2 Aug., 1692. ⁷ Marie Boas and A. R. Hall, "Newton's Chemical Experiments", Archives Internationales d'Histoire des Sciences (1958), 43, 148.

⁸ D. McKie, Philosophical Magazine (1942), 7th Series, 33, 866. ⁹ David Brewster, Memoirs of the Life, Writings and Discoveries of Sir Isaac Newton, vol. II, p. 142, 13 Sept., 1693.

10 B.L., MS. Locke, c. 16, f. 153, 16 Sept., 1693.

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Sir, Being of the opinion that you endeavoured to embroil me with women and by other means, I was so much affected with it as that when one told me you were sickly and would not live, I answered 'twere better you were dead. I desire you to forgive me this uncharitableness. For I am now satisfied that what you have done is just and I beg your pardon for my having hard thoughts of you for it, and for representing that you struck at the root of morality in a principle you laid down in your book of ideas, and designed to pursue in another book and that I took you for a Hobbist. I beg your pardon also for saying or thinking that there was a design to sell me an office, or to embroil me.

Realizing that Newton was mentally ill, Locke wrote a friendly and understanding reply,1 and a few weeks later he received this explanation² of Newton's aberrations. "The last winter by sleeping too often by my fire," wrote Newton, "I got an ill habit of sleeping and a distemper which this summer has been epidemical put me further out of order, so that when I wrote you I had not slept an hour a night for a fortnight together, and for five nights together not a wink." These symptoms make up a typical picture of a depressive illness.

The examination of Boyle's papers may have revived Locke's interest in medical chemistry, as a commonplace book,3 dated 1693, written by an amanuensis, is full of chemical remedies, many of which were collected much earlier; and others were probably copied from Boyle's papers. It is unlikely that Locke actually carried out many chemical experiments. There are notes on preparing antimony compounds for the King's Evil, volatile salts of tartar to promote sweating, tincture of silver, blood red oil of Saturn, several methods of preparing laudanum, and the correct way "to joyn glass heads and retorts to the receiver". Several fanciful legacies of Locke's youth also appear such as van Helmont's secret of "transposing metals", his method of turning silver into gold; a way to "make a person return by natural Magick", and this bizarre entry for "making a toad or serpent": "Allow a goose or duck to putrify between two plates. In 14 days to 3 weeks, find serpents I foot long and toads. Tried 6 times before the Duke of Hanover. Never tried with other birds."4

Locke also kept two other medical commonplace books which he used more than his journals. One was his weather register,5 and the other, begun in 1676,6 gives various methods of preparing such

¹ B.L., MS. Locke, c. 24, f. 203, Sept. 1693.

² Ibid., c. 16, f. 154, 15 Oct., 1693.

³ Ibid., c. 44, 454 pages. The first twenty-four pages were used for copying petitions for livings when Locke was Secretary of Presentations, and below one application he wrote: "The former incumbent was not dead and so this grant was voide."

4 Ibid., c. 44, f. 183.

5 Ibid., d. 9.

6 Ibid., c. 42. There are 310 pages of medical and scientific notes. Other entries deal with philosophy, theology, ethics, travel, and economies.

medicines as opium, balsam of tolu, spirits of wine, and the less palatable spirits of urine. "To make good spirit of urine you must keepe the urin stopd well in large stone bottle 40 days. It will not be the worse if you keepe it two years. Mr. Boyle."1 The last entry2 in 1696 from the Countess of Monmouth, is for treating painful swellings of the breast in a nursing mother: "Take unsalted butter or the salt well washed out, fry peices of Flanel in it, and apply them succesively as they coole."

Locke lost another old friend, David Thomas, who developed a chronic cough, and began to lose weight. He tried the country air of Wiltshire; Sydenham's remedy of horse riding, and finally Locke's treatment of bed rest with daily doses of treacle. They were all ineffective, and he died, probably from pulmonary tuberculosis, in the spring of 1694.3

The smoky London winters now made Locke realize, that for health reasons, he must find a permanent residence outside the capital. He, therefore, petitioned the King for the restitution of his Christ Church studentship, but withdrew when he realized that an innocent incumbent would have to be expelled: instead he took up permanent winter quarters with Lady Masham's family (formerly Damaris Cudworth) at Oates, near High Laver in Essex. Here the years passed pleasantly with visits to London during the summer, and winters spent reading and writing in his study. During the winter of 1694/5 Locke wrote The Reasonableness of Christianity, which subsequently involved him in theological controversy; and he also defended his suggestions for reforming the coinage with another tract on economics. In 1696 Locke was appointed one of the Commissioners for Trade and Plantations. He had a liking for these duties since his earlier association with Shaftesbury, and for the next four years he worked hard fostering foreign trade, and dealing with a host of problems concerned with colonial development.

Occasionally, Locke received news of the Court from Martha Lockhart, a Woman of the Bedchamber, who sent him an account of Queen Mary's death from smallpox which Dr. Radcliffe⁴ had, at first, mistaken for measles.

I cant forbear saying [she wrote],5 that the poor Queen's small pox was I veryly belive of the worst sort that Could be seen and what severall of the

¹ B.L., MS. Locke, c. 42, f. 300.

² Ibid., f. 102.

³ Ibid., c. 20, ff. 117–18; ff. 119–20; ff. 121–2, 20 Nov., 1693–11 Dec., 1693.

⁴ Bishop Burnet also blamed Radcliffe's negligence for Queen Mary's death, but Munk states that he was called too late to be of any service. (Op. cit., vol. 1, p. 456.) There are more details in Kenneth Dewhurst's, "The Death of Queen Mary II", Oxf. Med. Sch. Gaz. (1962), 14, 104-6.

⁵ B.L., MS. Locke, c. 15, ff. 41-4, 5 Jan., 1695.

phisitians say's in all ther practice they never Meett with but on the other Side. I could hartyly have wishet that Doctor Rattlif had not made that fatall misstake of Calling it the Measles from Monday night till Tusday night. That was saying ther was noe danger it Came to the sad discovery of black spott's apearing in her face when the same Docttor Rattlife did asure uss she would be all over mortified by Morning. So that by this misstake some thirty hours was lost which tho the Case seemd desperate ther was so much strength that I Cant tell if the Course was afterward's taken had been try'd in time, what Effect's it might have produced....

Locke remained fairly well, apart from recurrences of asthma and bronchitis during the winter months. In 1697 he consulted Dr. John Woodward¹ who sent him a tincture of asafoetida;² and in the following winter Dr. Philippe Guide, a French graduate of Montpellier then practising in London, recommended the inhalation of camphor.3 The preoccupations of a busy civil servant were interrupted by another religious controversy, with the Bishop of Worcester, which caused him to write three pamphlets in defence of his opinion. He resigned from his official appointments in 1700 when he became seriously ill. It began with a chill which brought on a severe bout of asthma and bronchitis. He took the waters of Tunbridge Wells, but his recovery was retarded by a painful swelling of his back, and later, swollen and ulcerated legs. He consulted several London doctors including Robert Pitt⁴ a physician at Bart's who suggested⁵ mild purgatives. Locke then sent an account of his illness to his Dutch friends, who recommended herb drinks, and a laxative once weekly.6 But a few weeks later, when he suffered a violent earache, Dr. Alexander Geekie treated him with the application of a large roast onion wrapped in Colewort leaf, and made into a poultice with the addition of herbs.7 James Tyrrell also advised an onion poultice, and the application of "woman's milk warmed" with juice of rue;8 whilst Dr. Guide suggested bread hot from the oven soaked in Eau de Vie, and should this fail to cause suppuration, then "oil of worms in which you have boiled snails and woodlice distilled and then dropped

² B.L., MS. Locke, c. 23, ff. 107-8, Feb. 1697.

³ Ibid., c. 11, ff. 124-5, 11 Jan., 1698.

⁴ Robert Pitt graduated M.D. (Oxon) in 1681, and, in the following year became Reader in Anatomy and a Fellow of the Royal Society. He became Physician at Bart's in 1697.

⁵ B.L., MS. Locke, c. 17, ff. 162-5, 29 Sept.-22 Oct., 1701.

6 Ibid., c. 11, ff. 101-2, 17-28 July, 1701.

7 Ibid., c. 9, f. 213, 8 Jan. 1701/2.

⁸ Ibid., c. 22, ff. 146-7, 15 Jan., 1701/2.

¹ John Woodward (1665–1728) was then Professor of Physic at Gresham College. He was a distinguished geologist, and was created M.D. by the Archbishop of Canterbury. Munk describes him as "an indifferent practitioner, and is only remembered, in his professional capacity, by his controversy with Mead and Friend, on the utility of purging in the secondary fever of smallpox". (Munk, op. cit. vol. II, p. 6.)

in the car with a slice of onion or garlic".1 It is not clear which of these remedies relieved his pain, but something made him deaf. Geekie then tried various preparations to soften the wax,2 and when these failed, asked Locke to let him know whether he could hear the ticking of a watch placed near the left ear from which he concluded "that the Auditory Nerve is no ways obstructed by it acting so vigorously in the extremest Branches of its expansion". James Tyrrell suggested wool rubbed with civet, and his mother mentioned the gravy from one pound of lean beef, sliced, and pickled in salt for twenty-four hours.3 After trying several more of Geekie's remedies, including spirit of camphor, guaicum water, 4 the application of 5,6 blisters which were all ineffective, Locke's pain was relieved when an internal abscess burst spontaneously. His doctor was "well pleased . . . to hear of the eruption of Matter", and he asked whether it came from "the outward or inward cavity of the ear". He advised cleaning the ear with rose water, tincture of myrrh, and aloes made with brandy.⁷ He also sent a silver ear trumpet.⁸ When Locke returned this instrument one month later their roles were reversed: he now advised his doctor to give up drinking beer and wine, and thereby caused him to worry about his water supply as "my cistern stands very low; mine is now River water. How is it to be settled, pray Sir, without a stone strainer. Will chalk or oat meal doe?"9 He had fully recovered at the beginning of 1703 when he rewarded Geekie with his portrait by Sir Godfrey Kneller.

When his asthma troubled him, six months later, he consulted Cole. At one time or another Locke had sought the opinion of most of the leading physicians in England, France, and Holland, a fact which Cole politely pointed out.

Though I make no doubt, you, who understand Physick so well [wrote Cole],¹⁰ and cannot but have much conversed with the most eminent Physitians that have been these 30 years (For, as I remember, you have heretofore told me, Sir that you have beene subject to this distemper for so long a time, that it must now amount to that number of yeares) in relation to your case, must know as effectually what is proper in it as any man, and your Judgement is indisputable, since you have preserved your life so long under it, which I question whether any man else could...

¹ B.L., MS. Locke, c. 11, ff. 126-7, 22 Jan., 1701/2.

² Ibid., c. 9, ff. 214-15, 22 Jan., 1701/2.

³ Ibid., c. 22, f. 148, 23 Jan., 1702.

4 Ibid., c. 9, ff. 218-19, 28 Feb., 1702.

⁶ Ibid., c. 9, ff. 224; ff. 220-1, 20 March, 1701/29 April, 1702.

- ⁶ Ibid., ff. 228-9; ff. 230-1; ff. 232-3, 10 July-29 Sept., 1702.
- ⁷ Ibid., ff. 228–9; ff. 230–1; ff. 232–3, 10 July–29 Sept., 1702.
- 8 Ibid., ff. 234-5, 9 Oct., 1702.
- 9 Ibid., ff. 238-9, 23 Dec., 1702.

10 Ibid., c. 6, ff. 209–10, 8 Jan., 1703.

He concluded this long letter by suggesting sugar candy in balsam of sulphur, infusions of camphor, syrup of tolu, and several sorts of pills to induce "insensible perspiration" in the morning. Chronic illness did not lead to inactivity during his retirement, when Locke worked hard paraphrasing and preparing a commentary on the Epistles of St. Paul, and arranging a fourth edition of his Essay. He also kept up a large correspondence, and regularly read the Philosophical Transactions supplied by Dr. Hans Sloane. But when the summer months failed to alleviate his breathlessness, and his legs began to swell again, Locke realized that his end was near, in spite of Cole's reassurances.¹ He probably had developed congestive heart failure secondary to chronic bronchitis and emphysema. He made his will, wrote to James Tyrrell about the disposal of some of his books and was just well enough to attend the wedding festivities of his cousin and heir Peter King. But soon afterwards his breathlessness increased. "In the race of human life where breath is wanting for the least motion, one cannot be far from one's journey's end." He died on 28 October, 1704.

¹ B.L., MS. Locke, c. 6, ff. 211-12, 6 July, 1704.

CHAPTER X

Journals¹ (1689–1698)

[DURING these last fifteen years, Locke's journals contain only financial accounts, and the few medical notes which follow. But his continued interest is apparent from his other notebooks, and his large medical correspondence, which will be surveyed in the last chapter.]

[Locke returned to England on 12 February and lodged with Dr. Goodall.]

Tues. Feb. 26. Take $\frac{1}{2}$ pint of distilled [water] of Fumitory; dissolve in it 1 drachm of common English [vitriol]. Take 4 spoonfulls 3 times a day. In a second $\frac{1}{2}$ pint of [water] dissolve $1\frac{1}{2}$ drachms and similarly to each $\frac{1}{2}$ pint add another $1\frac{1}{2}$ drachms until you get up to $\frac{1}{2}$ oz. per $\frac{1}{2}$ pint; it will then induce nausea and the infusion should not be made stronger.

Take $\frac{1}{2}$ pint of any sort of [water] distilled, and 3 ozs. of [vitriol]. Sharpen any drink with a few drops of this infusion; by using this for 40 [days] a most complete leprosy was cured. Dr. Goodall.

Take 1 oz. of Flowers of [Sulphur]; 3 ozs. of white sugar with some gum tragacanth and water of red rose extract. Make small tablets of I drachm weight. Take 2 or 3 a day so that the bowels are moved once or twice. This is a certain remedy for hidden and painful haemorrhoids. *ib.*

For all convulsive diseases and epilepsy iron is most useful.

Mond. Mar. 18. Removed to Mrs. Smithsbys.²

Wed. March 20. Take 3 drachms of powdered oyster shells. Take $\frac{1}{2}$ scruple four times, then every 4 hours until the 3 drachms have been taken. Then purge. This cures Epilepsy and Convulsions. D.T.

First [Bleed]; then purge. Repeat the [bleeding] and purging 3 times every other day. This removes pains and other effects of falls and bruisings. D.T.

Dr. Goodall highly recommends Zypaeus'³ "Foundations of Reformed Medicine" (octavo, Brussels, '87).

Take 2 ozs. of opium extract, 11 pints of Canary wine. Dissolve on

³ Franciscus van de Zype. The second edition of his book appeared in 1687.

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p. 7 (Latin)

> p. 10 (Latin)

¹ B.L., MS. Locke, f. 10.

^{*} Locke's landlady in Dorset Court, Westminster.

a gentle heat, then cook on a slow fire to I pint. Strain. While hot put into a closed vessel for 2 hours and pour on $\frac{1}{2}$ oz. of English saffron, 2 drachms each of nutmeg and sharp cinnamon and I drachm of cloves. Strain and keep for use. One pound of good opium will make 11 or 12 ounces of good extract.

Thursd. July 25. Take 8 pints of water and 1 oz. of [saltpetre]. Water trees with this and the fruit will be much better tasted. E. Pembroke

Thursd. Sept. 12. Make a paste of the juice of elder berries and dry flour. Cook in moderate sized cakes in an oven till hard enough to powder. Mix this powder again with the same juice into a paste and cook again. Repeat a third time. Take 1 scruple or 1 drachm 2 or 3 times a day for 3 days, and then once a day, for acidity and pain in the stomach and diarrhoea or lientery. v: Pharmac. Lond. Mr. Freke¹

Sat. Jan. 17. [1691]² To Oates. [Locke now settles with the Cudworths at Oates in Essex, but spends several weeks each year in London, usually at Mr. Pawlings'.]3

Thursd. April 2. [at Mr. Pawlings'.] Take 1 drachm of English [sulphur], dissolve in 1/2 pint of [water] of fumitory. Filter. Take 4 spoonfulls 3 times a day. Memo: the dose of [sulphur] was increased 1 drachm in every pint until the patient came to take the quantity of $\frac{1}{2}$ oz. in $\frac{1}{2}$ pint, which quantity was not exceeded because the patient complaind of a nauseousness.

Take 2 drachms of the same [sulphur], dissolve in 4 ozs. of [water] of fumitory. Filter. Take in every drink enough to cause a moderate acidity. By this simple [Method] Dr. Goodall cured a woman of a very bad leprosy.

Friday Sept. 25. [at Mr. Pawlings'.] Dissolve in [aqua fortis] some precipitated [mercury sublimate] and chalk [water]. Decant or filter the liquid. Very useful for ulcers. Mr. Boyle.

I scruple or 1/2 drachm of grated chalk twice a day; or 15 grains or I scruple of Rhubarb; or Sweet [mercury sublimate]. For diarrhoea.

Dr. Sloud.

ib.

[Iron] is most effective for sight obscured by vapours.

Wednesday Nov. 10. [at Mr. Pawlings'.] Take some crumbled [saltpetre]. While it is still warm pour on oil of Terebinth to the height of 3 or 4 fingers in a quite tall vase. Distill in a suitable alembic with well

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p. 31 (Latin)

p. 82

p. 85 (Latin)

p. 108 (Latin)

p. 106 (Latin)

¹ John Freke became a barrister of the Middle Temple in 1676. He was a member of "the College", a small private club formed by Locke which met in London.

² There are no medical entries for 1690.

³ William Pawlings was formerly an Oxford merchant, who became Locke's London landlord. The latter moved from Dorset Court to Lincoln's Inn Fields in 1694.

caulked joints over a very gentle fire. Over the distilled oil pour alcohol of wine 2/3 or $\frac{3}{4}$ of the oil will be incorporated. Thus you will have a medicament most useful for gangrene and other uses, and a notable menstruum for dissolving gums. Ho.^{ble1}

Tuesd. 17 Nov. [at Mr. Pawlings']. Take opium. Boile it in faire [water]. Decant. Add more [water] and soe till you have all the tincture; philtre the tinctures whereby the narcotik sulphur will be separated and then evaporate to the consistency of opium whereby you will have a more correct opium than by more operose processes. 50 pp.

Take really dry [spirits of tartar]. Mix as much oil of terebinth as it can absorb; keep at the heat of digestion, often stirring with an oak spoon until it dries. When dry pour on more oil of Terebinth and repeat until it turns into a soap. This soap with the preceding opium was found more effective than the Matthews pills. 50 pp.

Sat. Nov. 28. [at Mr. Pawlings']. I saw a child 9 months old whose head was 2 foot 7 inches about which was just the length of the body. The skull was hard but the sutures open and the parts widely separate.

Monday 30 Nov. Delirium in fevers is cured by up to 3 or 5 grains of camphire in conserve of roses or the like conserve. Mr. Boyle.

1692

Tuesd. May 10. To Cambridge.

Take some butter of [antimony]. Melt, and digest in a bolthead. Let it putrify and then clear itself by letting the dregs settle. Separate the clear liquor from the dregs and you will have a most effective solvent. Mr. Boyle.

Wed. May 11. 2d Period. Take 12 ozs. of prepared [mercury]. Divide it into three parts whereof put $\frac{1}{3}$, i.e. 4 ozs., upon 1 oz. of pure filed [copper]. Eight days standing brings it to a hard mass. This doe the 2d time and so dissolve all the [copper].

Divide the last 4 ozs. of [mercury] into 7 parts set the [amalgama] in digestion and imbibe it first with one part of the [mercury] which in about 24 hours time will be dryd in the warmth of a [bain marie]. N.B. Doe thus 7 times. Ho^{ble}: per Van Notwen.

3d Period. S. Van Notwen.

Take equal parts of prepared [mercury] and the [amalgama]; divide it into 7 parts. Imbibe first one which will be done in a week and so in 7 weeks imbibe all the 7 parts. And last of all take equal parts of the [amalgama] and prepared [mercury] and imbibe it all at once.

Frid. 13 May. To Oates.

¹ The Honourable Robert Boyle.

p. 110

p. III (Latin)

p. 112

p. 113

p. 138 (Latin)

p. 138

Thursd. Sept. 15. [List of medical books "lent to Mr. Wm. Thomas by the hands of Mr. James Tyrrell."]

[The exact time of the earthquake of September 8 by Locke's watch, the Queen's pendulum, and Mr. Tompion's clock. This refers to the following entry in his notebook:¹ "Terra Motus. The 8 September 1692 siting with my Lord Cutts's sister in Whitehall she of a suddain in a fright asked me what was the matter whether the house was falling down. It was a plain and very sensible motion not like trembling up and downe, but as it seemd to me a vibrating or swinging motion North and South. How many such swings there were and how long the whole motion lasted I could not tell. For the ladys fright, talkeing and goeing out of the roome which obleiged me to follow with her, hindered me from observing exactly. It was in the afternoon [...2] minutes past 2, and soe considerable that there was scarce an house in the town where it was not perceived. J.L."]

[The entries for the following years are almost entirely accounts of money spent and received.]

1695

Thursd. Aug. 1. [At Mr. Pawlings']. Take 4 pints of olive oil. Boyle in this in the spring soe much adders tongue as will make it green. Infuse in this oyle about midsomer soe many flowers of St. John's wort as you can put into the oil in a body either in the sun 144 days or in a [bain marie] 24 hours. Presse the oyle from the flowers again and after the like infusion presse out the oyle. Then adde to it $\frac{1}{8}$ pint each of Gum Elemi, liquid Storax, Venice Turpentine and oyl of Turpentine. Dissolve these in the oyle with a gentle heat. Strain it through a linen cloth and keep it for use. This cures fresh wounds without suppurating.

Mrs. Popple.³

¹/₈th pint each of the gums and Turpentine⁴ etc. Wash the wound with a little warm wine and sugar, or wine and oyle and then apply this balsam with lint, and binde it up close, if it cures as it should, there will be noe pain or inflammation and one dressing does it.

Wed. Sept. 22 [1697]. Take 1 oz. each of the Roots of Comfrey and Solomon's Seal. To be boiled in milk like bread and eaten in the morning.

³ The wife of William Popple, Unitarian merchant, and translator of Locke's Letter on Toleration who was appointed Secretary to the Commissioners of Trade in 1696. pp. 154-60

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p. 285

p. 359 (Latin)

¹ B.L., MS. Locke, c. 42, f. 290.

² Blank in MS.

⁴ Locke had forgotten to put in the quantity of gum, turpentine, etc. He inserted the quantity between the lines, but rather illegibly, so he repeated the quantity again at the end of the recipe.

Take 1 oz. each of Conserve of red rose and Comfrey; 1 drachm of astringent Crocus of Iron; I scruple of Dragon's blood; some syrup of plantain juice. Make an electuary. Take at bedtime as much as a largish nut.

Take a mass of Caesar's plaster and some Mastic. Make a plaster. For Mr. Freke. hernia. Through Dr. Guidot.1

1698

Frid. Jul. 1, Jul. 8. Infusion of walnut leaves as an ordinary drink 6 months togeather cures schrofulae. Lady Yonge.²

Wed. Sept. 21. First, vomiting by means of the root of Epicacoana, dose I drachm or more. Secondly, frequent use of sweet [mercury sublimate] until the gums swell. Thirdly, common [water] as the ordinary drink. Dr. Woodward asserts he has cured scrofulas by this method.

At first stop the flux of urine by using opium. Then use [iron] prepared by Sydenham's method: i.e., [iron] filings in an extract of gentian solution; of this make pills. By using these daily and in quantity Dr Harry³ claims to have cured two patients of a really long standing diabetes, after first using opium (namely Styraean Pills).

Mond. Oct. 17. Rectified oyle of Danzick [vitriolum] and also oil of wine, equal amounts, mixd togeather make Rabels drops. [The last entry is "Tuesd. 24 Oct. 1704".]

¹ Dr. Thomas Guidot graduated in medicine at Oxford, and practised in Bath and

London. He wrote on the mineral waters of England (1681). ² The second wife of Sir Walter Yonge of Colyton, Devon, whom he married in 1691. Yonge was also a member of Locke's political club, "the College".

³ Dr. Walter Harris (1651-1725) was persuaded by Sydenham to publish a book on diseases of infants. He also wrote on mercury, and the Plague.

p. 385

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p. 394 (Latin)

p. 398

CHAPTER XI

Medicine

LOCKE was too busy with other matters during these last fifteen years of his life to spare much time for medicine, which he probably wanted to give up completely. But his fame in other spheres, allied to his longevity in spite of a lifetime of chronic illness, enhanced his medical reputation to such an extent that all his friends called on his services whenever they were ill. Locke had many friends, and they were frequently sick. He advised most of them by letter; and hence his correspondence gives us a better insight into his actual methods of practice, and his general views on medicine, than the entries in his journals and commonplace books. He continued to enlarge his observations in epidemiology and social medicine; he helped many young doctors; he constantly proclaimed Sydenham's robust empiricism and, through his many foreign friends, his correspondence became an important channel for the exchange of medical information.

He was, of course, physician to the Mashams, and after his retirement, also treated the sick poor of the village. The evidence for Locke's small country practice is to be found in his letters to Dr. Hans Sloane¹ whose advice he occasionally sought.² "I have a patient here sick of the fever of this season", wrote Locke;³ "it seems not violent but I am told 'tis a sort that is not easily got off. I desire to know of you what the fevers in Town are, and what method you find most successfull in them." But he spent more time writing to the Clarkes on their illnesses, and this correspondence would fill a small volume. There is no doubt that they greatly imposed their woes on Locke's friendship. Mrs. Clarke was the worst offender. She constantly plagued him with her hypochondrical ruminations, and disregarded his advice whenever it was not to her liking. Unfortunately, she was loath to consult anyone else; and whenever Locke *did* succeed in persuading her to visit her local doctor, she still called for his therapeutic blessing. But she had a lot to put up with.

¹ Sloane was then Secretary of the Royal Society, and a leading physician. His relations with Locke have been fully reviewed by Kenneth Dewhurst, "The Correspondence between John Locke and Sir Hans Sloane", Irish J. Med. Sci. (1960), 413, 201–12.

² B.M., Sloane MS. 4038, ff. 113-14, 27 Dec., 1700.

^a Ibid., ff. 221-2, 22 Aug., 1701.

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No sooner had she unburdened herself of one pregnancy, than her politician husband would ensure that she was again in that interesting condition designed to satisfy his insatiable desire for male heirs.

She first imagined she had renal colic which cleared up without treatment. "I am always best pleased", wrote Locke,1 "when my friends recover from any inconvenience in their health without the use of my prescriptions." Then she complained of weakness and poor vision, for which he sent her dietary directions, and advised exercise in the open air, hoping to "make an end to that inconvenience without any use of physic".2 This was the essence of Locke's simple treatment, which was quite contrary to the current practice of prescribing large doses of complicated, and often dangerous drugs. He realized that most of them were ineffective, and some positively harmful, although he was well versed in the administration of the few effective medicines, such as quinine, opium, and mercury. Mrs. Clarke was pregnant in the summer of 1693 when she developed swollen ankles with a right sided abdominal pain, probably indicative of slight toxaemia. Her husband complained that she was "full of vapours as usual when with child, and so the more difficult to be pleased or satisfied".3 Two months later, when she went down with an ague, and refused to take Jesuits' bark,4 Locke frankly told her that there was no comparable medicine.5

He realized the psychological aspect of her illness a year later, when she complained of feeling faint and low-spirited for which he suggested "more exercise and less thoughtfulness",6 and the Bath waters.7 He stuck to this advice when she was ill again in the spring:8 later in the same year he treated her for a sore mouth.9 When the ocdema of her legs returned, he suggested a simple diet with reduced fluids, and rubbing the legs with a hot flannel soaked in brandy.¹⁰ These measures were evidently too simple for his patient's liking, but Locke warned her not to "multiply the rules of health" which "are but few and easy".11 She then began to listen to the neighbour's gossip and imagined she had "hypochondrical wind".12 When she again became despondent Locke firmly advised the Bath waters. "If you enjoy a perfect health," he wrote,13 "I do not advise the waters or any other kind of physic. But if you are out of order you know your remedy: Bath is in the same County and frost and snow are now gone." Locke disliked treating patients by postal advice: it was forced upon him by the insistence of

- 1 Rand, op. cit., p. 329, 22 Jan., 1692.
- ³ Ibid., p. 379, 2 Aug., 1693.
- ⁶ Ibid., pp. 381-2, 30 Oct., 1693.
- 7 Ibid., pp. 400-2, 13 Oct. and 9 Nov., 1694.
- 9 Ibid., p. 415, 3 May, 1695.
- 11 Ibid., p. 428, 13 Dec., 1695.
- 13 Ibid., p. 447, 22 March, 1696.

- ² Ibid., p. 365, Dec. 1692.
- 4 Ibid., p. 381, 29 Oct., 1693.
- 6 Ibid., p. 399, 3 Sept., 1694.
- ⁸ Ibid., p. 412, 26 April, 1695.
- 10 Ibid., pp. 425-6, 22 Nov., 1695.
- ¹² Ibid., p. 431, 6 Jan., 1695/6.

MEDICINE

his friends. He constantly¹ urged them so see their local doctor, "who may adopt his method and medicines to all the whole collections of symptoms he shall observe".

He realized that Mrs. Clarke's health was governed by her temperament which he likened to

the quicksilver in the weatherglass [which] rises and falls as your temper of mind is. Half your cure depends on the Doctor's prescriptions and the other half is in your own mind. Cheerfulness will have a great efficacy towards your recovery than anything the apothecaries' shop can afford.²

Although Locke was an unorthodox practitioner he disapproved of irregular practice, and was quite indignant when his patient thought of taking a neighbour's nostrum.

As to your Sherborne apothecary's medicine recommended by Mrs. Phillips [he wrote],³ I can say nothing to it unless I know it. I think people not used to the practice of physic so apt to mistake and confound cases, and I think so little of the art of medicine lies in secret remedies, and receipts that I should no more use an unknown medicine upon unskilful people's recommendation than venture to let anyone bleed in the dark.

He finally, and probably rightly, diagnosed Mrs. Clarke's illness as anaemia for which he prescribed a steel cordial; but she was such a difficult patient that she finally exhausted his patience, and he firmly told her to see her own doctor. In spite of such rebuffs she still wrote for his medicines, and he sent her two bottles of stomach cordial,4 and later, saw her in London. Shortly afterwards her husband thanked him for her complete recovery.5

Locke also treated the Clarke children for measles,⁶ deformity of the feet,⁷ coughs,⁸ skin rashes,⁹ rickets,¹⁰ depression;¹¹ and also their gardener's son who was thought to be consumptive.12 He was clearly opposed to the then common, and dangerous practice, of heroic purges. "Purgings are a sort of violence of nature", he wrote, "and should be used no more than necessity required and by intervals. If kitchen physic will do I would never use any other".13 Edward Clarke was prone to attacks of the ague, probably owing to his constant travels, and frequently asked Locke to treat him. He was also a difficult patient. When afflicted with an ague Locke advised him to take Jesuits' powder, steel pills

- ¹ Rand, op. cit., p. 506, 8 March, 1696/7. ³ Ibid., p. 504, 8 March, 1696/7.
- ⁶ Ibid., p. 523, 6 Sept., 1697. ⁷ Ibid., p. 498, Sept. 1696.
- ⁸ Ibid., p. 428, 13 Dec., 1695; p. 432, 6 Jan., 1695/6.
- ⁹ Ibid., pp. 403-4, 27 Nov., 1694; and p. 416, 17 May, 1695.
- 10 Ibid., p. 442, 18 Feb., 1696.
- 12 Ibid., pp. 340-1, 7 March, 1691/2.

- ² Ibid., p. 488, 19 Sept., 1696.
- 4 Ibid., pp. 517-18, 3 Aug., 1696/7.
- ⁶ Ibid., p. 306, 9 March, 1690/1.
- 11 Ibid., p. 547, 3 May, 1699.
- 18 Ibid., pp. 487-8, 19 Sept., 1696.

(made according to Sydenham's prescription), and after the acute phase had passed, suggested plenty of riding.1 But Clarke's reluctance to take exercise brought forth this rebuke:2

Your excuse about not having a horse (which at best I thought no very good one) I concluded would be at an end. Sir, if it were in my power, I would make drinking a dish of coffee or chocolate every day a perfect cure for you. But all that I can do for you being to tell you what I think will or will not restore you to your former health.

Locke was asked to treat Lord Somers, the Chief Justice, and in a first letter, wherein he tried to refuse, he revealed the divergence of his methods from those of his more conservative colleagues.

You know I wish him very well [he wrote],3 but my notions in physic are so different from the method which now obtains, that I am like to do little good and, not being of the College;4 can make no other figure there but of an unskilful empiric; and no doubt anything I should offer would seem as strange to his physicians as the way you tell me they take with him seems strange to me. But as everyone's hypothesis is, so is his reason disposed to judge both disease and medicines.

When his services were persistently requested Locke recommended Sir Thomas Millington as the best local doctor: meanwhile he advised his Lordship to take water instead of wine, and free himself from legal matters, in order to enjoy the company of people who "laugh and chat and be merry".5 With this simple regimen Somers soon recovered.

Sir Walter Yonge's family frequently called on Locke's services, especially his sister Isabella Duke, and his sister-in-law Elizabeth Yonge, who were constantly bringing their complaints, real and imaginary, to his notice. Mrs. Duke was another middle-aged neurotic woman. She asked Locke's advice for bleeding gums, low spirits, lassitude, and "a trembling of my heart and all my nerves" so that she despaired of a cure in England.⁶ Then she wrote about her husband who had

a sleepy disease or rather some obstruction in the brain, which seems often clouded and opprest to that degree that once he lost his sences for a minute. I cannot prevayle with him to apply himself to any Phisitian in this Country, and Sydenham being dead, he has no opinion of any in London but yourself, whose assistance he earnestly begs, and would have done it with his own hand, but that the present disorder of his head makes him afraid to write.7

- 1 Rand, op. cit., pp. 562-3, 2 Sept., 1700.
- ³ Ibid., p. 347, 13 May, 1692.
- ⁸ Rand, op. cit., pp. 373-4, 4 May, 1693. ⁶ B.L., MS. Locke, c. 8, ff. 38-9, 3 July, 1689.
- 7 Ibid., ff. 43-4, 2 March, 1690.

- ² Ibid., p. 568, 17 Oct., 1700.
- College of Physicians.

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Locke treated Richard Duke for what seems to have been a slight stroke; and then advised Elizabeth Yonge who had a glandular swelling in the neck, about the size of a nutmeg, which was thought to be the King's Evil.1 When Mrs. Duke and her daughter both had coughs they implored Locke to treat them adding: "Bidgood is dead and Sydenham too, and 'tis too late for me to begin with a new man, that is an absolute stranger to my constitution, therefore if you can, forgive my importunity and pitty and help me."2 It was difficult to resist such pleading letters; and he shortly reaped the ladies' gratitude for their recovery.3

Locke was also doctor to the Fletchers. He had known Andrew Fletcher of Saltoun, when they were both political exiles. The latter now consulted him when his sister-in-law suffered a threatened miscarriage for which Locke prescribed a bitter tincture, steel wine, and coconuts.4 "My sister-in-law did luckily incline rather to follow your advice," wrote Fletcher,5 "than that of two other phisitians that were sent her at the same time. Besides that I had told her that humaine understanding was the best ingredient of a phisitian." Fletcher then wrote about his brother Henry who had several attacks of abdominal colic for which his wife desired to know whether "any phisical diet or woman's milk will be good for him".6 He also treated Fletcher's mother and sister-in-law, who became breathless following a fright during her pregnancy. The drafts of his replies show that Locke proceeded by first asking a series of pertinent questions designed to differentiate between cardiac failure, toxaemia of pregnancy, or simple hysterical overbreathing.7 Mrs. Fletcher was seriously ill for a time,8 but by following Locke's simple and sound advice she eventually recovered, and bore her husband "a lusty child".9

Paul D'Aranda, a Dutch friend of Pieter Guenellon was another patient, who came to England in February 1696/7 bringing news of the "miraculous" cures of a German quack, who placed a "sympathetic powder" in the patient's urine. D'Aranda10 urged Locke to communicate the method to the Royal Society, but he cautiously inquired from Guenellon,11 who confirmed his suspicions that the man was a charlatan.

¹ B.L., MS. Locke, c. 23, ff. 136-7, 3 March, 1690; c. 8, ff. 47-8, 21 Nov., 1690.

² Ibid., c. 8, ff. 49-50, 1 May, 1691. ³ Ibid., c. 23, ff. 138-9, 12 Nov., 1690; c. 23, ff. 140-1, 14 Feb., 1691.

4 Ibid., c. 29, f. 92, 9 July, 1695.

⁵ Ibid., c. 8, ff. 131-2, 22 Feb., 1695/6.

⁶ Ibid., ff. 155-6, 25 Jan., 1698. ⁷ Ibid., c. 29, f. 93, 22 Feb., 1701; c. 29, f. 94, 1 March, 1701. ⁸ Ibid., c. 8, ff. 125-8, 10 April, 1701.

⁹ Ibid., ff. 139-40, 14 Oct., 1701, and c. 29, ff. 95-8 published by Kenneth Dewhurst, "Locke's Midwifery Notes", Lancet (1954), ii, 450-1. ¹⁰ B.L., MS. Locke, c. 3, ff. 38-9, 6 Feb., 1697.

11 Ibid., c. 11, ff. 76-7, 3-13 May, 1697.

D'Aranda had,¹ meanwhile, been restoring his own health with the more orthodox measures of drinking Bath water, and taking plenty of open-air exercise under Locke's direction. Sir James Oxenden,2 who described his illness as "hypochrondrical and rheumatick pains" for which he had been taking forty drops of laudanum daily, also sought Locke's opinion. Others he treated were Lady Francis St. John;3 Jos Offley,4 for abdominal colic; Lord St. John⁵ who consulted him in his son's illness, and Philip van Limborch⁶ who recovered from apoplexy with Locke's treatment.

Doctors also valued Locke's opinion, particularly in treating respiratory ailments. Amongst them were David Thomas, Thomas Rose,7 and Philip Guide⁸, who asked for his help when treating Lord Anglesey. At the third Lord Shaftesbury's suggestion, Dr. Paul9 sought his opinion when treating Dr. Denoune for a tertian ague as "being a physitian lessens his faith for remedyes". The Dutch doctors, likewise, valued his clinical judgement: Veen10 recovered from a haemoptysis after following Locke's directions; and Guenellon¹¹ thanked him for curing his wife of a chronic cough with an infusion of daisies, treacle, and bed rest. These patients represent only a fraction of those Locke advised after his return from Holland when it has been commonly supposed that he had given up the practice of medicine. His simple common-sense regimen was somewhat similar to the expensive nature cures of the present day; but in the seventeenth century, only a wellexperienced physician with considerable judgement would be able to resist the temptation to prescribe large doses of drugs more apt to kill than cure. This healthy therapeutic scepticism is characteristic of both Locke and Sydenham.

The study of the weather in relation to epidemics had been one of Locke's earliest interests: it was also one of his last. After publishing his earlier work in Boyle's General History of the Air, he kept another weather register from 1699 until 1703. At Oates he took daily readings "from the windows of my study which are east and south", and also noted when the first and last swallows were seen. They were late in 1699, as he wrote on 12 April:12 "Swallows now first seen though they have been carefully looked for by severall above this last fortnight."

¹ B.L., MS. Locke, c. 3, ff. 40-1, 12 Feb., 1697; ff. 42-3, 24 Feb., 1697.

⁶ Amsterdam Remonstrant's MS., Ba 2589, 20 April, 1702.

12 Ibid., d. 9.

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³ Ibid., c. 18, f. 59, 29 May, 1702. ⁵ Ibid., c. 18, ff. 60-1, 28 April, 1693.

² Ibid., c. 16, ff. 184–5, 19 March, 1701. ⁴ Ibid., c. 16, f. 168, 28 June, 1698.

⁶ Amsterdam Remonstrant 3 100, 25 Sept., 1694. ⁷ B.L., MS. Locke, c. 18, ff. 36-7, 25 Sept., 1694. ⁹ Ibid., c. 16, ff. 206-7, 15 Jan., 1692.

¹º Ibid., c. 23, ff. 7-8, 22 Jan.-I Feb., 1692.

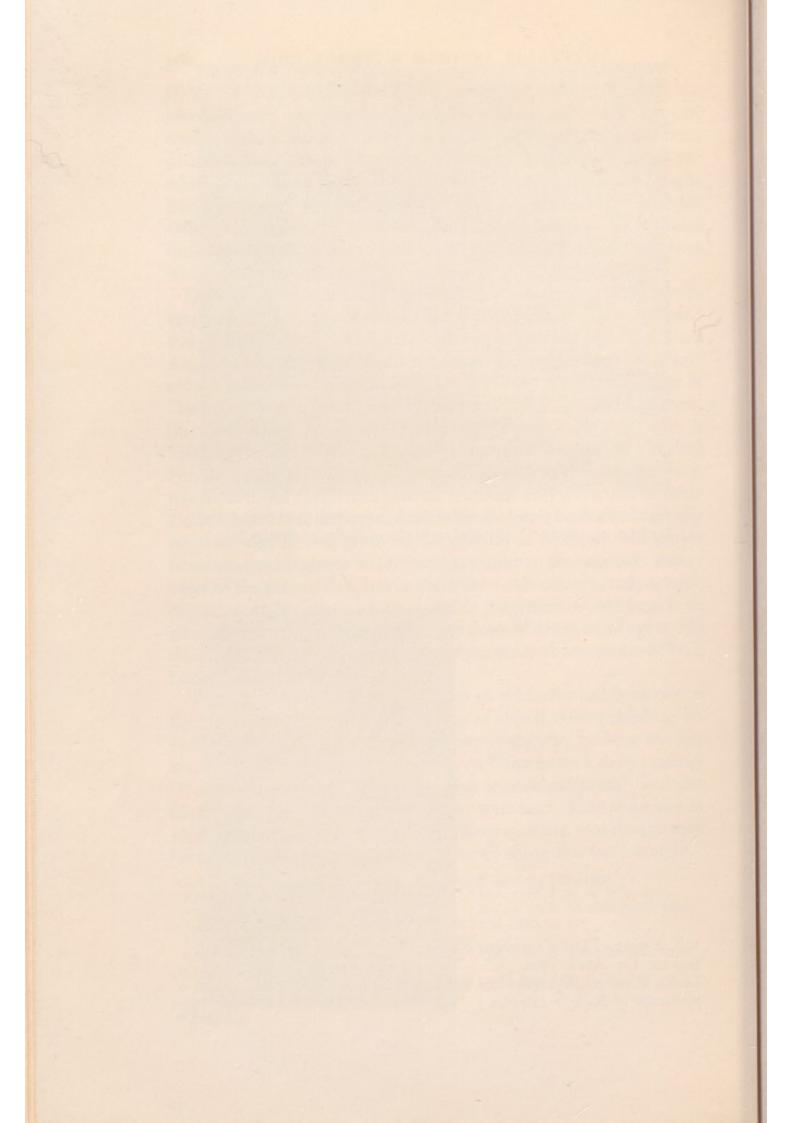
¹¹ Ibid., c. 11, ff. 112-13, 2-13 July, 1703; ff. 114-15, 28 Sept.-9 Oct., 1703; ff. 116-17, I-10 Nov., 1703.

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11a. A shorthand passage in one of Locke's medical notebooks (MS. Locke, f. 23, pp. 62–3). (By kind permission of Bodley's Librarian.)

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11b. A page of Locke's weather register for April 1700 (MS. Locke, d. 9, p. 486). (By kind permission of Bodley's Librarian.)



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This register was eventually published in response to Sloane's frequent requests for material for the *Philosophical Transactions*,¹ which he had recently resuscitated.

I have a register of the weather for 10 years past [wrote Locke],² of the same kinde with those you may remember of mine published in Mr. Boyle's History of the air p. 104 etc: I know not whether it will be fit to clog your transactions with such things as these. Be you judg of that. This I know that I did not keep this register for my own sake alone, and that I had any thing of more value than this I would not refuse it you.

Locke encouraged others to take weather recordings from distant places. One of them was James Pound, a young ship's surgeon about to leave on a voyage to China, who wrote from "on board the Eaton Friggot in the Downs".

I have received the Oat beards, and hartily thank you for your remembrance of them; I am now very well fitted for making Observations of the Weather. I had before provided as good Barometers and Thermometers as could be made, and now design to fitt one of the Oat-Beards in a Box for a Hygrometer; I have also a very good provision of Mathematical instruments; If by my Observations I may satisfy your curiosity, or any other ways serve you I shall be very glad.³

These meteorological observations were to be correlated with information gleaned from a wide survey in social medicine which Locke was helping Goodall to carry out. Through his foreign friends Locke gathered many facts, but Goodall never found time to complete their survey. Here is a questionnaire which they sent out:

Enquiries to be made about Bills of Mortality, Airs, Diseases etc:

(1) What Bills of Mortality are kept in foreign Countreys either as to the diseases of which persons dye or the Number who dye weekly, monthly or yearly in most Capitall Citties or Towns of Europe, or in other parts of the World: as Paris, Madrid, Amsterdam, Venice, Hamburgh, Rome, Constantinople, Smyrna, Dublin, Edinburgh, etc. As also in New England, Barbadoes, Jamaica and other Plantations.

(2) The Aire of different Countreys with the temper and alteration of the same at the severall seasons of the year and the diseases these countreys are subject to, and the time when?

(3) The opinion Phisitians have of Jesuits bark and the best Account they can give of it.

(4) The Esteeme which Phisitians have had of Doctor Sydenham and his works.

¹ Philosophical Transactions (1705-7), 25, 1917-37.

² B.M., Sloane MS. 4048, ff. 113-14, 27 Dec., 1700.

³ B.L., MS. Locke, c. 18, ff. 1-2, 1 Dec., 1699.

(5) The order observed in foreign countreys as to Phisitians, Surgeons, Apothcarys and Hospitals for the Improvement of Travellers and young students.¹

Copies were sent to Sir Patrick Dun, and Dr. Willoughby, President and Registrar respectively, of the Dublin College of Physicians, whose detailed studies of the Dublin mortality bills after the manner of William Petty's earlier survey, provides the most authentic account of seventeenth-century Irish medicine.² From Guenellon³ Locke received only this brief note:

The enquiry of your friend is very wide and it would be easier to learn most of what he requires in London than here, that is if he is counting those dying in Madrid, Paris, Venice, Rome, Constantinople, Smyrna, Dublin, Edinburgh, Barbadoes and Jamaica. For Amsterdam a public account of deaths is made weekly, without saying as I remember they do in London, what was the cause of death.

Your friend must know, as regards his second article, that we have De Bartola Medicina Danorum and De Bartius Medicina Indorum and that in the description of different voyages he can gather what he requires.

As for his third article, if I understand aright, he asks what is our opinion of quinine. We believe it to be a very good remedy, but one which it is improvident to use in a fresh intermittent fever where the regular action of nature expels the morbid matter, as well as in fevers accompanied by large obstructions. But it is of great help in long-standing fevers, and those in which the symptoms give cause for fear. In any case it is certainly now used here more than ever.

As regards the works of Mr. Sydenham we value them highly; his plan and method are certainly admirable. However, he has not had equal success in every direction, and his remarks on gonorrhoea are very feeble, and one would often go wrong following his method.

Finally our regulations for the rank of doctor, surgeon and apothecary are the same here as formerly, and at Leyden there is always a professor who gives practical demonstrations on certain patients in the hospital to teach the students. We intend to do the same here. Mr. Bernagie, by the influence of his friends, was allowed the chair of Professor of Medicine in this famous school.

After copying them in his notebook, Locke sent these particulars to Goodall with this additional information from Holland:⁴

The yeare 1691 when they had a great Epidemick in the Autumn, the Number of the dead that yeare was 9002. In the year 1692, 6977 were the usuall pro-

¹ A copy of these notes is to be found in B.L., MS. Rawlinson, c. 406, f. 68. This commonplace book was thought to be Sydenham's by W. G. Greenhill, who published extracts from it entitled Anecdota Sydenhamiana or Extracts of Sydenham's Physic Books and Some Good Letters on Various Subjects. Later it was thought to be Wagstaff's or Locke's, but the above extract was written by Charles Goodall.

² Published by Kenneth Dewhurst, "The Genesis of State Medicine in Ireland", Irish J. Med. Sci. (1956), 409, 365-84.

⁸ B.L., MS. Locke, c. 11, ff. 49-52, 3-13 Aug., 1692.

⁴ B.L., MS. Rawlinson, c. 406, f. 83.

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portion of other yeares. This is remarkeable that though the Town be of a low situation and in a Marsh, yett the people live more healthy there than in higher situations in higher places of these provinces. And it hath been observed more then once, that when the Plague or any other Epidemick hath reigned in this Countrey as in the yeare 1691, this Town has suffered least. They died then at Harlem 4 to one in proportion to this Town and double every where else.

Guenellon¹ later enlarged his observations on the Dutch medical services, and their teaching methods, where it seems an unpractised hand was allowed to operate on the payment of a fee.

I've already mentioned that we have Mr. Bernagie Professor of Medicine in our famous school, and that Mr. Ruysh lectures in Botany in the Gardens in Flemish two days a week during the summer, one day to master surgeons and apothecaries, and the other to scholars. He teaches surgery two other days of the week to the College of Surgeons, principally in the autumn and winter. We have a hospital where Mr. Bernagie visits daily; 6 sick women and 6 men to give his pupils practical experience. The surgeons of the hospital only admit strangers rarely to see their operations; but will grant the privilege for 50 or 60 florins, and even allow one to try one's hand for 100 or 150 florins. I must tell you that recently, as Doctor to the Admiralty, I've made an improvement for the Naval Surgeons. We oblige them to follow a fixed list, and fill up their chests with medicines prepared in the hospital, where the prescriptions are made up with the utmost care; and on returning from a cruise they empty out their chests in the same hospital and only pay for what they have used: the Admiralty paying a quarter of the price of what the hospital takes back; the naval surgeons then replenish their chests with fresh medicines. My previous letter also mentioned what general esteem there is here for the works of Mr. Sydenham; yet the Peruvian bark has not quite the vogue it has acquired in England and France.

Goodall occasionally reminded Locke to collect further information.

I shall likewise be glad to heare [he wrote],² that you have made any further observations about the influence of the aire in reference to acute or chronical diseases, as also Endemicall or Epidemical; what you meet with in travels or other books relating to that subject be pleased to communicate.

Locke was then reading Bartholin's De Medicina Danorum domestica dissertationes, from which he passed on this note.³

In him you may see the Endemical diseases of Danemark the chiefe whereof is the scurvy of whose cure and the other diseases and symptoms accompanying it you have an account. Where also he gives a catalogue of most diseases known in

¹ B.L., MS. Locke, c. 11, ff. 51-2, 12/23 Feb., 1693. ² Ibid., c. 10, f. 29, April 1696. ³ Ibid., c. 42, f. 6.

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Denmark and the Euporista that are there to be found for their use. The laws also in Denmarke for regulating Apothecarys, and the practise of physic are there to be seen.

Locke helped several other young doctors, including Hans Sloane who requested contributions for the Philosophical Transactions. Locke sent a case report of onychogryphosis1 which was his first medical publication, and the original description of the condition. He also arranged for Sloane to publish Thomas Molyneux's² paper on chafers, and Furley's account of a Dutch cypher.³ Sloane regularly supplied him with the Philosophical Transactions, and they corresponded on theories of generation, submarine plants, the diagnosis and treatment of diabetes, and abdominal tumours.⁴ Locke was quick to praise William Cowper's (1666-1709) Myotomia Reformata (1694), although the author was later accused of plagiarizing his illustrations from Godfried Bidloo.5

Here was, the last year, a Book in Physick published by a young lad not twenty [wrote Locke to Molyneux],6 who had never seen the University. It was about the Motion of the Muscles, with as good an Explication of it as any I have yet seen. I believe I might have spoken to Mr. Churchill to send your Brother one of them, for the sake of the Author (for, as to the Subject it self, I fear I shall never see it explained to my satisfaction).

The plagiarism was first noticed by Locke's friend Dr. John Hutton after Cowper published an anatomical atlas based on Bidloo's illustrations. Locke also sent Cowper's book to Guenellon who was less enthusiastic.

The little treatise on the movement of the muscles [he replied],7 is very ingenious and well thought out for a young man of only 20. He has, I think, however represented others more successfully than established his own system, and has failed in many places to explain all the phenomena of this surprising machine. He does not know that in the contraction, the total dimension of the muscle diminishes as was recognized by Messrs. Swammerdam and Lower. He has also not paid sufficient regard to the pale muscle in its contraction, and does not mention the well known fact that the muscle of any animal taken from the living body contracts by pinching, and that even a fishes heart, especially a carp's, beats long after it is freed from the body.

¹ B.L., MS. Locke, c. 18, 120-1, 18 April, 1696; published in Philosophical Transactions (1695-7), 19, 594/6.

² B.M., Sloane MS. 4036, ff. 294-5, 2 Mar., 1696/7.

³ Ibid., MS. 4038, ff. 187-8, 4 July, 1701.

* Reviewed in Kenneth Dewhurst's "The Correspondence between John Locke and Sir Hans Sloane", Irish J. Med. Sci. (1960), 413, 201-12. ⁵ Fenwick Beekman, "Bidloo and Cowper Anatomists", Ann. Med. Hist. (1937), 7,

113-24.

* Familiar Letters between Mr. John Locke and Several of his Friends (1742), 4th edition, p. 183, 11 Sept., 1697.

⁷ B.L., MS. Locke, c. 11, ff. 74-5, 5/15 Feb., 1697.

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Two other young physicians, John Woodward and Andrew Browne, sent their books to Locke, and soon began corresponding with him. Woodward's Essay Towards a Natural History of the Earth (1695), received high praise;1 but Locke's inquiries about Browne's treatise on fevers, wherein he claimed to cure "all continual fevers more certainly and evidently than the Cortex does Intermittent",2 brought an unfavourable reply from Hutton. He described Browne as a "rough contrie bred man", self-opinionated, and too keen on purging.3

A bitter controversy was then raging between the apothecaries and the physicians in which Locke unobtrusively advised Dr. Robert Pitt, a physician at Bart's, and a Fellow of the College. The dispute was really a mercenary one. Traditionally apothecaries were supposed to limit themselves to making up medicines from the physicians' prescriptions, but during the seventeenth century they began to practice on their own, as they quickly acquired sufficient diagnostic skill by treating the sick poor. The physicians' livelihood was threatened in 1687 when their College recommended members to give free advice to the sick poor of London. But the unfortunate patients, armed with their free prescriptions, soon found that the apothecaries' charges for dispensing them were beyond their means. The physicians then set up their own dispensary, where the needy could buy cheap remedies at cost price, and thereby they provoked a pamphlet war involving the poets and wits. Pitt wrote two pamphlets4 in support of the dispensary which he sent to Locke, and in a series of letters⁵ gave him the details of this controversy, and his reasons for upholding his College. He shared Locke's view that many expensive medicines were dangerous, whereas cheap remedies, and even no medicines, usually proved quite effective. Locke wholeheartedly supported Pitt's plea for a simplification in prescribing medicines, and the latter published his views on general medical reforms in The Antidote (1704).

Locke helped several Dutch colleagues to settle in England. Dr. Cyprianus was the first to arrive, and Locke introduced him to Sir Thomas Millington, then Treasurer, and later President of the College of Physicians, through whose influence he soon had a flourishing practice. Dr. Slade was less fortunate. He borrowed money from Locke,6

¹ B.L., MS. Locke, c. 23, ff. 105-6, 6 Jan., 1695.

^a Ibid., c. 4, ff. 167-8 (undated). ^a Ibid., c. 4, ff. 167-8 (undated). ^a Ibid., c. 4, f. 171 (undated); and c. 4, ff. 253-4, 27 April, 1695. ^d Crafts & Frauds of Physick Exposed (1702), London; The Antidote etc. (1704). He published a third book after Locke's death: The Frauds & Villanies of the Common Practice of Physics (1705), London.

⁵ B.L., MS. Locke, c. 17, ff. 162–97 (eighteen letters from 23 August, 1701 to 8 July, 1704). Published in Kenneth Dewhurst's "Dr. Robert Pitt's letters to John Locke", St. Bart's Hosp. J. (1962), 11, 258-67. ⁶ B.L., MS. Locke, c. 18, ff. 112-17, 11-18 Dec., 1689.

and when about to return to London from Oxford died suddenly, leaving Locke and Tyrrell to share his funeral expenses. When Dr. Sibelius arrived on his way to Ireland, Locke advised him to anglicize his name to Sibley, and asked Molyneux to help him "as a favour to me".1

Locke frequently met the leading London physicians, and he carried on a large correspondence with foreign doctors. For many years Le Fevre² and Thoynard had supplied him with medical news, books, and natural curiosities from France; and over three hundred letters from his Dutch friends have been traced, a third of them dealing with medicine. His main informants were Guenellon and Veen, but unfortunately, Locke's replies cannot be found. At various times he corresponded with Guenellon on the treatment of rheumatism,³ asthma,⁴ fevers,⁵ pustulous herpes,6 bronchitis,7 and gangrene.8 Guenellon also sent a detailed account of the treatment of dysentery which struck young people more fatally than old;9 the advantages of quinine,10 and his preference for herbal remedies rather than chemical ones, in the treatment of scurvy.11 The correspondence shows that Guenellon¹² profited from Locke's friendship in his method of teaching. "You ask me what course of lectures I am giving at present; 'tis a course of practice on the plan of my economy-although trying to profit by the light that you have given me. I always take care to subordinate true reasonings to the facts of practice."

Two of Guenellon's letters deal with important aspects of operative surgery which Locke passed on to the London doctors. One gives a description of a lateral lithotomy performed by Jacques Beaulieu, an unqualified French surgeon. This method had been practised in Provence by Pierre Franco, nearly a hundred years earlier. Beaulieu¹³ was taught the rudiments of the operation by an Italian, and during his army service had ready access to post-mortem material on which to perfect his art. He then became a wandering monk, and after performing a number of successful operations in Paris, moved on to Amsterdam, where Guenellon¹⁴ sent this description of his technique.

¹ B.L., MS. Locke, c. 18, ff. 110-11, 5 April, 1692.

² Ibid., c. 13, f. 154, 27 May, 1701. ³ Ibid., c. 11, ff. 78–9, 3–13 Aug., 1697.

4 Ibid., ff. 122-23, 29 Aug.-9 Sept., 1704.

⁵ Ibid., ff. 10-17, 11-16 Sept., 1689; f. 45, 28 Oct-7 Nov., 1691.

⁶ Ibid., f. 103, 21 Dec., 1701–1 Jan., 1702; ff. 104–5, 23 Jan.–4 Feb., 1702.

⁷ Ibid., ff. 99–100, 19–30 April, 1701.

⁸ Ibid., ff. 59-60, 31 Aug.-10 Sept., 1694.

⁹ Ibid., ff. 67-8, 10-28 Aug., 1695.

1º Ibid., ff. 46-7, 22 Jan.-I Feb., 1692.

11 Ibid., ff. 196-7, 1-10 Nov., 1703.

12 Ibid., ff. 20-7, 11-21 April, 1690. 13 Sir D'Arcy Power, "Frère Jacques, Rupture Curer & Lateral Lithotomist", Brit. Med. J. (1897), ii, 1349.

14 B.L., MS. Locke, c. 11, ff. 89-90, 22 Sept.-2 Oct., 1699.

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We have had a number of operations at the hospital and in the town, done by the famous Brother Beaulieu, a Burgundian aged 48, a native of Besançon, once master surgeon in a little town on the Seaune in France. Fifteen years ago he left his job, took a vow of poverty and chastity, and devoted himself to cutting for the stone, and operating on hernia in cases incurable by binding. . . . He once used to cut with a little operator on the finger, but has since followed the general method of cutting on an incision made in the perineum on a hollow probe. But he was dissatisfied because both these methods involved leaving catheters and a voluntary flowing of urine through the wound, and so he followed armies and frequented hospitals, and set himself to open a great number of corpses, which gave him the idea of cutting in a completely different manner. He commences his incision in the left buttock between the anus and the tuberosity of the ischium bone, his probes were very bent, like this, _____O making a right angle with the handle. By this means he so raises up the anterior part of the vessel that he easily uncovers the probe through this thickness. He cuts on the catheter at the posterior and lateral part of the sphincter of the vessel, or properly in the roughness which forms the entrance between the insertion of the ureters and the sphincter. He then dilates it with his finger and introduces his forceps, which are of a superior shape and usage to the ordinary ones, very smooth, greased inside and outside, hiding the stone better so that it does not chafe the passage. It lodges better, having only a few teeth on the front of the inside of the forceps. He cuts very skilfully and successfully. We've never seen a single catheter left after his operations; the wounds always heal. He also cuts women, as you can easily conceive after what I've told you.

The credit for introducing the operation of lateral lithotomy has gone to William Cheselden (1688–1752) a surgeon at St. Thomas's who in 1723 published his *Treatise on a High Operation for Stone*, and was immediately accused of plagiarism by John Douglas author of *Lithotomia Douglassiana* (1720). Cheselden¹ then modified Jacques Beaulieu's lateral operation which has not subsequently been improved upon. D'Arcy Power² has suggested that Cheselden's colleagues gave him an account of Beaulieu's operation during their visit to Paris, but it is likely that the London surgeons knew much earlier about this operation through Locke's mediation.

Surgery lagged well behind medicine in gaining academic recognition, and operations were then often done by itinerant lithotomists, barbers, and unqualified quacks with only a meagre anatomical knowledge. Paris was the leading surgical centre in the seventeenth century, and here Pierre Dionis was the first to begin a course of operative surgery on the cadaver in 1673. Systematic training in operative surgery was later given in the Dutch medical schools; but at both these

> ¹ Fielding H. Garrison, op. cit., p. 343-² Sir D'Arcy Power, op. cit., 1349-

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centres the amputation of a limb was still a highly hazardous procedure. Wilhelm Fabry (1560–1624) was the first to amputate above the diseased part after controlling haemorrhage with the application of a crude type of tourniquet. Paré then introduced the ligature to control bleeding; and the first recorded amputation by the flap method appears in James Yonge's (1646–1721) *Triumphal Chariot Of Turpentine* (1679).¹ Hence Locke was particularly interested in Guenellon's account of the amputation of a boy's leg, as he had arranged the apprenticeship of Thomas Davis to Mr. P. A. Verduin who successfully performed the operation.

Mr. Pieter Adriaensche² learned by a letter from his old servant Thomas³ whom you settled with him [wrote Guenellon],4 that his wife's grandfather, a London surgeon, had amputated a leg and successfully kept the muscles of the fat of the leg, and made them reunite, without festering of the part from which the amputation was made. He at once liked this experiment, and wanted to imitate it at the first opportunity. So about two months ago, having to amputate the leg of a little boy of seven whose tarsus and metatarsus were very decayed, he took his chance. He marked the normal place, the width of the patient's hand below the knee, and after making the usual ligatures, he passed a knife past the joint and below the tibia, piercing to the opposite side of the leg near and under the perineus. He then slipped the knife downwards, all the time joining the tibia and the perineus, as far as the tendons of the serratus and gastrocnemius, at which place he cut the tendon, and let the flap of fat of the leg hang down. Next he sawed the two bones at the usual place, felt the bones to make sure that there was no splinter or roughness, then bent back the flap of fat of the leg against the end of the sawn bones and the adjoining flesh, and finally applied his astringents to the edges. There was no haemorrhage, and by the third day the flap was firm and adhering to the upper part, exactly covering the bone and leaving only a fresh scar on the upper part of the stump, the end being covered with the fat of the leg which had been bent back. In less than a month it was completely healed. They made him a hollow leg in which he enclosed his stump. He walked without any difficulty and bent his knee. His stocking covered it all so exactly that you could scarcely see his defect, when sitting, being able to bend one knee just like the other it was impossible to detect.

Realizing the importance of this technique, Locke immediately wrote to Verduin, urging him to publish the particulars in the *Philosophical Transactions*, but an Amsterdam senator, having also been impressed, insisted that it be published in Holland, where Verduin would be better

³ Thomas Davis.

¹ Fielding H. Garrison, op. cit., p. 276.

² His full name was Pieter Andriaensz Verduin.

⁴ B.L., MS. Locke, c. 11, ff. 69-70, 3-13 Dec., 1695.

able to supervise the many diagrams illustrating the instruments,¹ including the handle of a scalpel invented by Davis.

Locke's correspondence with the Molyneux brothers of Dublin gives the essence of his views on medicine. Their letters began in 1692 when William Molyneux expressed his admiration for Locke's *Essay*. A Trinity College man, Molyneux was a barrister and politician with ample means and sufficient leisure to indulge in such unprofitable pursuits as optics and astronomy. With Sir William Petty he had founded the Dublin Philosophical Society in 1683, and a year later, was appointed Surveyor-General and Chief Engineer to the Government. Locke soon realized that William was the brother of Thomas Molyneux whom he had met at Leyden.

I reckon it amongst the most fortunate Accidents of my Life [wrote Thomas² Molyneux], my so luckily falling into your Conversation, which was so candid, diverting and instructive, that I still reap the Benefit and Satisfaction of it. Some Years after I left you in Holland, upon my Return for England, I contracted no small Intimacy with Dr. Sydenham, on Account of having been known to you, his much esteemed Friend; and I found him so accurate an Observer of Diseases, so thoroughly skill'd in all useful Knowledge of his Profession, and withal so communicative, that his Acquaintance was a very great Advantage to me: And all this I chiefly owe to you, Sir, besides the Information of many useful Truths, and a great deal of pleasing Entertainment I have met with, in the perusal of your lately publish'd Writing.

Locke³ then urged Molyneux to extend Sydenham's methods in his own writing.

That which I always thought of Dr. Sydenham living, I find the World allows him now he is dead, and that he deserved all that you say of him. I hope the Age has many who will follow his Example, and, by the way of accurate practical Observation, as he has so happily begun, enlarge the History of Diseases, and improve the Art of Physick; and not, by speculative Hypotheses, fill the World with useless, though pleasing Visions. Something of this kind permit me to promise my self one Day from your judicious Pen.

Molyneux had just read Richard Morton's book on fevers, and asked Locke "what other candid Men say concerning him and his Methods of cure, or any other useful Tract".⁴ Locke's⁵ reply shows his complete disregard for the confining trappings of current hypotheses.

¹ B.L., MS. Locke, c. 23, ff. 13-14, 6-16 Aug., 1696.

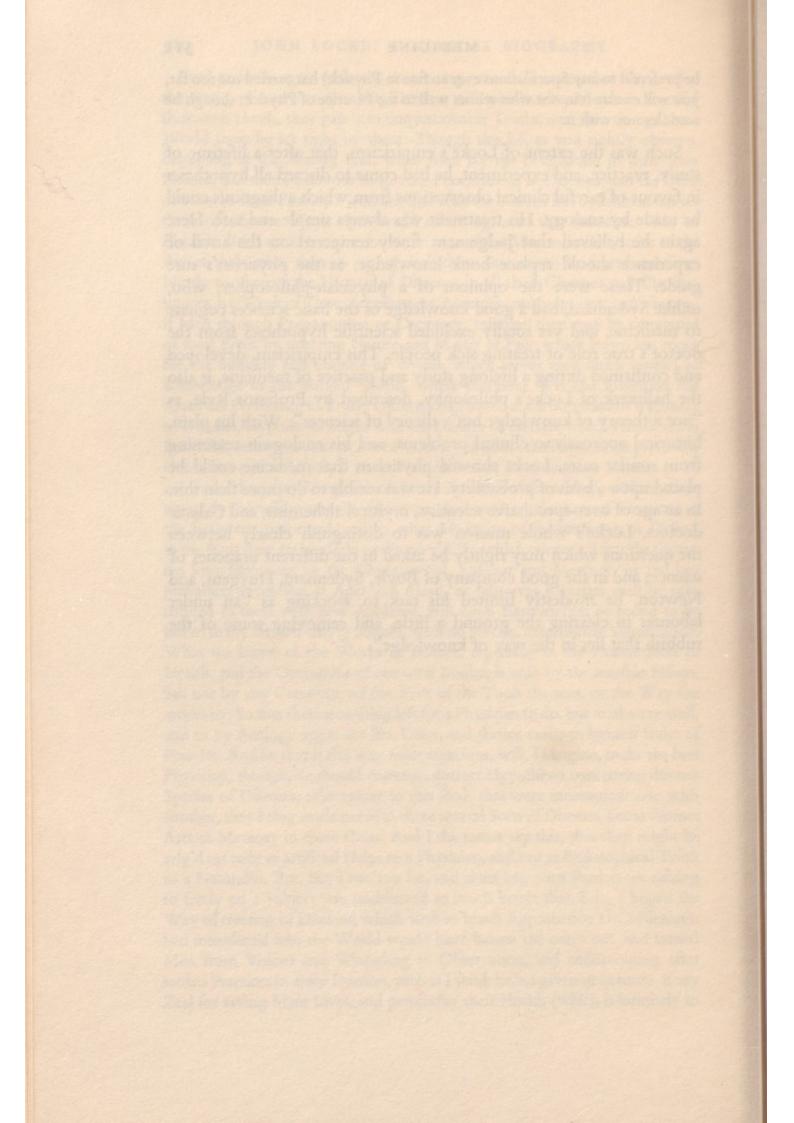
- ² Familiar Letters, p. 218, 27 Aug., 1692.
- ⁹ Ibid., pp. 219–20, p. 278, I Nov., 1692.
- 4 Ibid., p. 222, 20 Dec., 1692.
- ⁵ Ibid., pp. 223-4, 20 Jan., 1692/3.

But I perfectly agree with you concerning general Theories, that they are for the most part but a sort of waking Dreams, with which, when Men have warm'd their own Heads, they pass into unquestionable Truths, and then the ignorant World must be set right by them: Though this be, as you rightly observe, beginning at the Wrong End, when Men lay the Foundation in their own Fancies, and then endeavour to suit the Phoenomena of Diseases, and the Cure of them to those Fancies. I wonder, that after the Pattern Dr. Sydenham has set them of a better Way, Men should return again to that Romance Way of Physick. But I see it is easier and more natural for Men to build Castles in the Air of their own, than to survey well those that are to be found standing. Nicely to observe the History of Diseases, in all their Changes and Circumstances, is a Work of Time, Accurateness, Attention and Judgment; and wherein, if Men through Prepossession or Oscitancy, mistake, they may be convinced of their Error by unerring Nature and Matter of Fact, which leaves less room for the Subtlety and Dispute of Words, which serves very much instead of Knowledge in the learned World, where methinks Wit and Invention has much the Preference to Truth. Upon such grounds as are the establish'd History of Diseases, Hypotheses might with less Danger be erected, which I think are so far useful, as they serve as an Art of Memory to direct the Physician in particular Cases, but not to be rely'd on as Foundations of Reasoning, or Verities to be contended for; they being, I think I may say of all of them, Suppositions taken up gratis and will so remain, till we can discover how the natural Functions of the Body are performed, and by what Alteration of the Humours or Defects in the Parts they are hinder'd or disorder'd. To which purpose, I fear the Galenists four Humours, or the Chymists Sal, Sulphur and Mercury, or the late prevailing Invention of Acid and Alcali, or whatever hereafter shall be substituted to these with new Applause, will upon Examination be found to be but so many learned empty Sounds, with no precise, determinate Signification. What we know of the Works of Nature, especially in the Constitution of Health, and the Operations of our own Bodies, is only by the sensible Effects, but not by any Certainty we can have of the Tools she uses, or the Way she works by. So that there is nothing left for a Physician to do, but to observe well, and so by Analogy argue the like Cases, and thence make to himself Rules of Practice: And he that is this way most sagacious, will, I imagine, make the best Physician, though, he should entertain distinct Hypotheses concerning distinct Species of Diseases, subservient to this End, that were inconsistent one with another, they being made use of in those several Sorts of Diseases, but as distinct Arts of Memory in those Cases. And I the rather say this, that they might be rely'd on only as artificial Helps to a Physician, and not as Philosophical Truth to a Naturalist. But, Sir, I run too far, and must beg your Pardon for talking so freely on a Subject you understand so much better than I do. I hoped the Way of treating of Diseases, which with so much Approbation Dr. Sydenham had introduced into the World would have beaten the other out, and turned Men from Visions and Wrangling to Observation, and endeavouring after settled Practices in more Diseases, such as I think he has given us in some. If my Zeal for saving Mens Lives, and preserving their Health (which is infinitely to

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be preferr'd to any Speculations ever so fine in Physick) has carried me too far, you will excuse it in one who wishes well to the Practice of Physick, though he meddles not with it.

Such was the extent of Locke's empiricism, that after a lifetime of study, practice, and experiment, he had come to discard all hypotheses in favour of careful clinical observations from which a diagnosis could be made by analogy. His treatment was always simple and safe. Here again he believed that judgement finely tempered on the anvil of experience should replace book knowledge, as the physician's sure guide. These were the opinions of a physician-philosopher, who, unlike Sydenham, had a good knowledge of the basic sciences cognate to medicine, and yet totally excluded scientific hypotheses from the doctor's true role of treating sick people. This empiricism, developed and confirmed during a lifelong study and practice of medicine, is also the hallmark of Locke's philosophy, described by Professor Ryle, as "not a theory of knowledge but a theory of sciences". With his plain, historical approach to clinical problems, and his analogous reasoning from similar cases, Locke showed physicians that medicine could be placed upon a basis of probability. He was unable to do more than this. In an age of over-speculative scientists, mystical alchemists, and Galenic doctors, Locke's whole mission was to distinguish clearly between the questions which may rightly be asked in the different branches of science; and in the good company of Boyle, Sydenham, Huygens, and Newton, he modestly limited his task to working as "an under labourer in clearing the ground a little, and removing some of the rubbish that lies in the way of knowledge".



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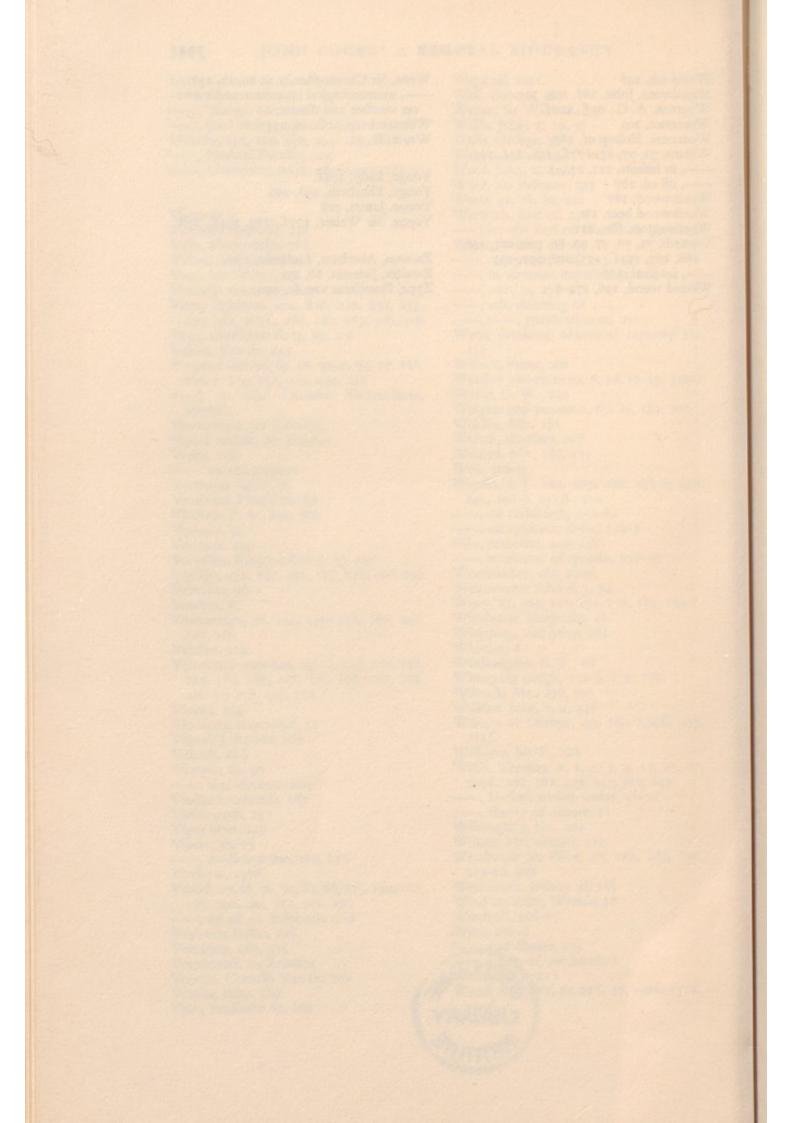
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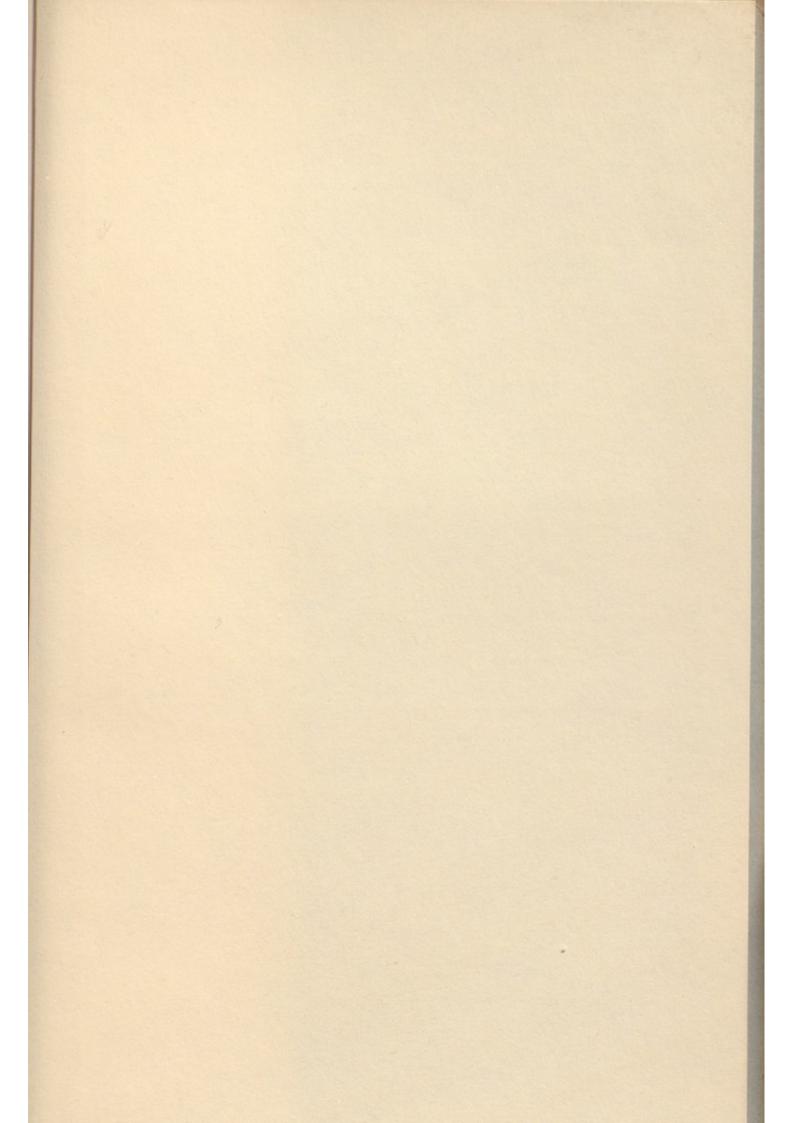
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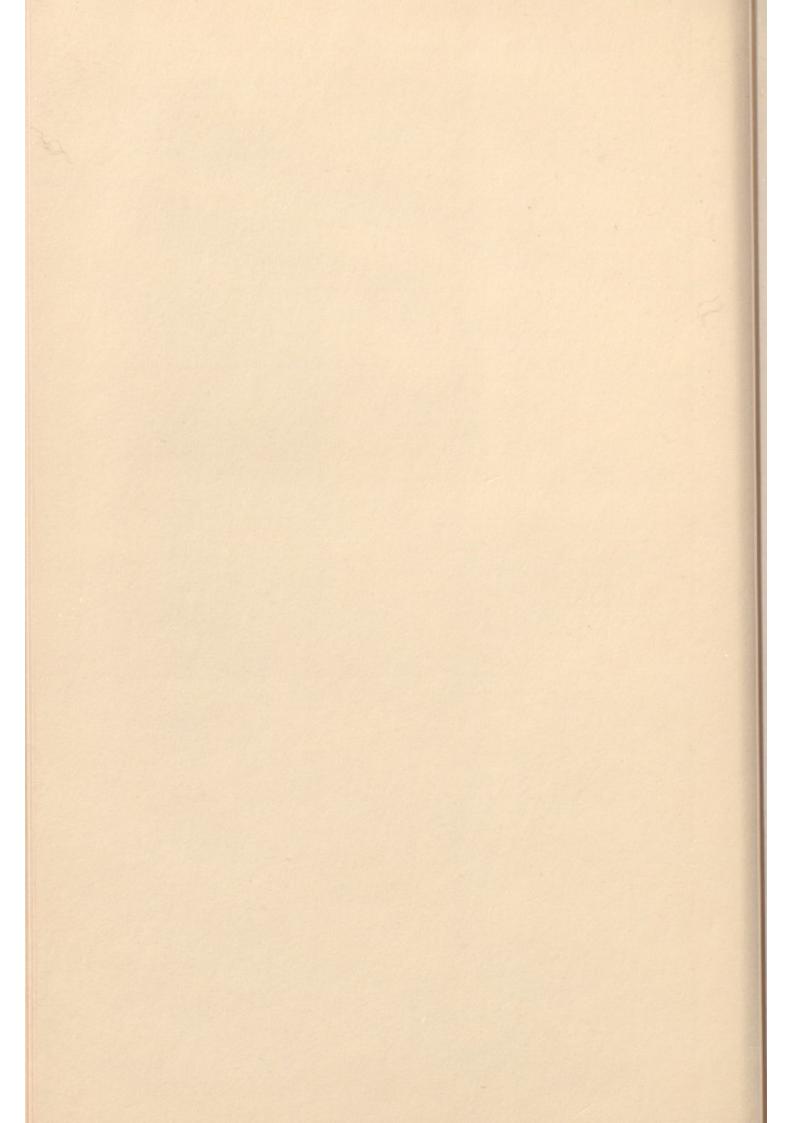
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