The medical assistant, or Jamaica practice of physic : designed chiefly for the use of families and plantations / by Thomas Dancer, M.D.

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Publication/Creation

St. Jago de la Vega [Jamaica] : Printed by John Lunan, printer to the Honourable Council, 1809.

Persistent URL

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Account given of the First Edition of the

MEDICAL ASSISTANT,

OR

JAMAICA PRACTICE OF PHYSIC,

IN THE SEVERAL ENGLISH AND AMERICAN REVIEWS.

"THIS, though a popular work, is greatly superior to every similar collection that it has been our fortune to peruse; and contains a sufficiently ample, as well as a very judicious, account of the diseases most prevalent within the Tropics, with the remedies adapted for their relief. The Author's knowledge is very extensive, and his opinions usually correct. We have perused the whole with great pleasure, &c. &c.

CRITICAL REVIEW.

"FROM the diligent and learned research which Dr. Dancer exhibits in this work, we doubt not but it will be considered by the Physicians, and by the Community in Jamaica, as a judicious and useful publication."

MED. REPOS. VOL. V. *p.* 43—5.

"As the opinions of Physicians concerning the nature and treatment of the Yellow Fever are various and contradictory, we shall avail ourselves of the clear and satisfactory view of this malignant disorder lately given by Dr. Dancer, in his excellent work, entitled, the Medical Assistant."

DOMESTIC ENCYCLOPÆDIA—*under Yellow Fever.*

"FROM the ample extracts we have given, the reader will be able to judge for himself of the merits of the Medical Assistant. The principal aim of the Author has been the communication of practical knowledge, and in pursuit of this object he has almost totally disregarded the speculations and theories which compose so large a part of almost all medical writings. A spirit of candour and impartiality forms a distinguishing characteristic of the work: The Author appears always more desirous to discover the truth than to establish his opinions. With respect to style it may fairly claim the merit of perspicuity, though, it must be acknowledged, it never rises to elegance. It can scarcely be expected that a work embracing so great a variety of objects, should in every particular be free from inaccuracy, and a difference in opinion upon many points which fall under consideration must necessarily arise. Upon the whole, however, we think it a performance highly deserving of commendation; it contains a body of useful information, and must be regarded as a particularly valuable acquisition to the West-Indian practitioner."

LONDON REVIEW—JANUARY, 1802.

"IN this work, not only the diseases to which negroes in common with white people are liable, are fully explained, and the best mode of treatment pointed out, but the complaints which are peculiar to the African race are also particularly noticed; and the Author anticipating, from the utility of his book, it would not be confined to the libraries of professional men only, has, as much as possible, avoided all technical and scientific terms, and thereby rendered it intelligible to persons of every description. In families, and on plantations, which are often too remote from the residence of physicians to admit of the attainment of medical advice sufficiently early, particularly in acute diseases, generally so rapid in their progress as to render the delay of assistance for a few hours fatal, access to such a work must be highly desirable. But, although under such circumstances its utility is sufficiently evident, it is by no means confined exclusively to those persons who have not made physic their profession. On the contrary, there is no doubt, the Jamaica Medical Assistant will afford to the young practitioner much valuable information."

FROM ADVERTISEMENT OF THE AMERICAN EDITION.

For a further account of this work, see *Annals of Medicine*, 1800.—*Medical Repository*, (of New York) *vol. V.*—*Monthly Review*, August, 1802.—*British Critic*, 1801.—*Domestic Encyclop.* &c.; in all which publications this work is mentioned in terms of approbation.

Thomas Dancer. M.D.

Late Physician at the Bath of S.t Thomas the Apostle. Island

Botanist & Honar.y Member of Several Learned Societies.

For Dr Coyle from his much obliged
Hble Servant — T. Shilad. 4 July 1810

THE

MEDICAL ASSISTANT,

OR

JAMAICA PRACTICE OF PHYSIC.

DESIGNED CHIEFLY FOR THE USE OF

FAMILIES AND PLANTATIONS.

BY THOMAS DANCER, M. D.

LATE PHYSICIAN TO THE BATH, AND ISLAND BOTANIST.

THE SECOND EDITION.

J. R. Coxe. M. D.

MAM MULTUM EGERUNT QUI ANTE NOS FUERINT, SED NON PEREGERUNT; MULTUM ADHUC RESTAT OPERÆ; MULTUM RESTABIT; NEQUE ULLI NATO POST MILLE SECULA PRÆCIDETUR OCCASIO ALIQUID ADHUC ADJICIENDI.

SENECA.

21540

ST. JAGO DE LA VEGA:

PRINTED BY JOHN LUNAN,

PRINTER TO THE HONOURABLE THE COUNCIL.

1809.

TO THE HONOURABLE

SIMON TAYLOR, Esq. &c. &c. &c.

SIR,

THE MEDICAL ASSISTANT having already met with a favourable reception from the Public, I hope I shall not be deemed guilty of presumption in dedicating to you—the patriotic promoter of every thing conducive to the good of your country, and the general interests of humanity—this new and improved edition, which is still not without defects; but, through your sanction, I hope to obtain for it that indulgence which it may require.

I have the honour to be,

with the greatest respect and devotion,

SIR,

your most obedient and faithful humble servant,

THE AUTHOR.

The Reader is requested to make the following Corrections, previous to the perusal of Dancer's Medical Assistant, Second Edition.

Page 22, line 8, for "miasmati" read "miasmata"
33, line 15, read "or any other," &c.
56, note, read "hæmorrhagiæ"
74, note †, instead of "levamen" read "levamen"
87, last line but one, for "76" read "70"
89, third line from bottom, instead of "this" read "these"
96, for "86" read "78"—Note, for "129," &c. read "117, 118"
97, note *, instead of "were" read "are"
101, line 4, for "No. 87" read "29, 30, 31"
106, line 3, read "No. 52, c"
106, line 8, read "No. 52, B"
107, bottom, for "82" read "74"
119, near the bottom, for "94" read "86"
124, line 3, for "59" read "70"
127, third line from bottom, read "præeunte angustiæ"—for "prectoris" read "pectoris"
128, line 4, for "cardiognus" read "cardiogmus"—for "Lanclghi" read "Lancisi"
129, at the bottom, for "34" read "21"
169, line 4, for "109" read "96"
173, under antispasmodics—after "tincture of castor" read "and also formula 18, 19"
173, for "No. 58" read "53"
181, in the middle, for "58," &c. read "53, 82, 84, 85"
188, for "63" read "57"—for "81" read "73"
189, line 8, for "82" read "74"
203, middle, for "electary, No. 54" read "46"
208, line 11, for "No. 71" read "65, 67"
216, last line but one, dele No. 114
217, line 13, for "No. 114" read "101"
223, line 8, for "No. 110, 111" read "97, 98, 99"
226, line 9, for "No. 98" read "90"
231, line 22, read "to be kept up by the use of"
232, line 12, for "No. 121" read "108"
243, line 8, for "No. 138" read "125"
243, line 9, read "arsenical solution, No. 117"
244, line 13, for "No. 145, 146" read "126, 132, 133"
246, line 7, for "No. 99" read "60"
250, line 7, for "No. 126" read "113, D"
252, line 7, for "No. 141" read "114"
252, for "leucoma" read "leucoma"
259, note *, for "testudinus" read "testudinis"—for "cuteo" read "luteo-viridis"
263, after "No. 37, 40" dele 58
265, line 11, for "No. 132" read "58"
265, line 16, for "No. 101" read "133, B"
284, for "and the child appears" read "appear"
285, line 7, dele "and promoting the discharge"
289, line 6, for "No. 72" read "66"
292, for "aponeurosis" read "aponeuroses"
299, note *, for "grounds" read "ground"
304, for "poultices, No. 113, 114" read "100, 101"
305, for "No. 121" read "No. 129"
319, note, for "corum" read "eorum"
325, note *, for "scombi" read "scomber"
325, for "pisca" read "pesca"
326, note *, after "silver spoon" read "*but by*"
330, note †, for "Macassau" read "Macassar"
332, last line, read "*or* in a saturated," &c.

PREFACE

TO THE FIRST EDITION.

A PROSPECTUS of this work having been already given to the public, there can be little occasion for a preface. The plan and design of the undertaking are sufficiently obvious, and its utility undisputed; but, how far the author has succeeded, it now lies with candid and competent judges to determine. The task must be confessed a comprehensive one; and, if the author might be supposed possessed of any advantages for engaging in it, he is forced to acknowledge that he has met with difficulties: Difficulties which were not indeed unforeseen, but which he flattered himself would, in a great measure, have been obviated by his advertisement, soliciting communications from gentlemen of experience in the profession, and others who have had opportunity of making observations, on the diseases of the country and remedies in general use: With such assistance, the work might have been much better entitled to the public esteem; but, whatever may be its imperfections and defects, the author is persuaded to believe, from the approbation it has met with from those whom he thinks qualified to decide on its merits, that it will be found an useful one, not only in the hands of those for whom it was primarily

primarily intended; *viz.* those who have families, or who are entrusted with the charge of negroes, and are frequently at a loss for medical assistance; but, in some measure so, to medical men; at least to such as are newly arrived in the island, and to those engaged in country practice; who have, in some situations, but little access to books, and less opportunities for reading.

The author is well aware of the objections it is liable to, from those who think that all attempts to render medicine a popular study, nugatory and futile; but he dissents from this opinion. They may not, indeed, be calculated to answer fully the purposes intended, but they are, nevertheless, useful in a great degree, and might perhaps be made much more so, were they not decried; and if they were undertaken not by empirics, but by men of science and ability.* Not to mention the necessity of such works, for people who *will meddle in physic*, who will take upon themselves the cure of diseases, however ignorant and unqualified; they are certainly requisite for others, who are reluctantly compelled to this office, from circumstances of necessity. Where medical assistance is not at hand, or cannot be afforded, which is not unfrequently the case, something must be done for the relief of pain,

* The elegant work of Dr. Thornton, entitled, "Medical Extracts," Dr. Willich's "Lectures on Diet and Regimen," and Mr. Townshend's "Guide to Health," are exemplary proofs of the truth of this observation.

"That prejudice and selfish interest will, as long as they are able, endeavour to stem the tide of popular instruction in medicine, is sufficiently evident; but the necessity and utility thereof are not the less obvious." See Beddoes's Introductory Lecture to a Course of Popular Instruction, in the *Analyt. Review, January*, 1798.

pain, and the prevention of danger. A suffering mortal is not to be abandoned, or consigned to misery and death, without any attempts being made by those about him, for affording him relief, because they happen not to be medical men, or have not had opportunities of studying physic regularly.—Such a knowledge of diseases, and their treatment, as will enable a man to be, on many occasions, useful to himself and others, may certainly be acquired without a regular and scientific course of study. A book, therefore, like the present one, that may serve as a guide to persons in this situation; that, besides giving general notices concerning health and disease, teaches, in a plain and familiar manner, how to distinguish and treat the prevalent diseases of the climate, it is presumed, cannot put prove useful and acceptable; particularly considering that there is no preceding work of the kind. As to works of a similar nature in Europe, the author has to observe, that whatever may be their respective merits, or however useful they may be found in that part of the world, they are not so well suited to this and other tropical climates, where diseases put on a different aspect and character; where they commonly run a shorter course, and have a more fatal tendency; consequently requiring a treatment very different from that made use of in the same diseases elsewhere.

The work being intended chiefly as a popular one, the author has endeavoured to adapt himself, as much as possible, to the capacity of common readers; but, in treating of scien-

tific subjects, it is impossible to lay aside the use of scientific, or as they are called, technical, terms. These, however, wherever employed, are explained.*

For the same reason, he has avoided medical theory and discussion; but not to degrade the work wholly beneath the attention of the professional, and better informed, reader, he has pointed out and referred to most of the new doctrines, discoveries, and practical improvements:

"*Noluit scribere quæ nec indocti intelligere possunt, nec docti legere curarent.*"—*Cic.*

The Introductory part, which to some persons may appear less necessary, in the opinion of the author could not have been omitted; but it is very concise; more so than it ought to have been; for a knowledge of the animal structure and economy is indispensable to the right understanding of the different states of health and disease; and general doctrines concerning these must, of necessity, precede what more particularly relates to practice, or the cure of diseases.

The arrangement of diseases is open to many objections, not being properly nosological: Regardless of this, the author has

* To write to the absolutely ignorant and illiterate, would be an idle task: Some share of education must be pre-supposed requisite to the study of any subject connected with science, as medicine is. To attempt the explanation of any art, without appropriate terms, would be like teaching to read without an alphabet; and, therefore, the employment of technical expressions, although it may to some appear to savour of pedantry, is unavoidable, as appears from those being guilty themselves of the practice, who affect to exclaim against it.

has treated them, chiefly according to their importance, their connexion with each other, and the frequency of their occurrence.

In constructing the formulæ, or in directing the medicines, advised under the various complaints treated of, he has studied the utmost simplicity, ordering only such things as are possessed of real efficacy, such as are generally at hand or readily procured, and in such a way that they can be easily made up, and administered, without the assistance of any professional man. To prevent accidents, the doses prescribed are rather too small, than too large.

The virtues of the *officinal*, or shop medicines, and the manner of administering them being, in general, better understood, they are, in most cases, preferred; but many of the *simples* of the country are endued with considerable efficacy, and may be substituted for the officinal ones; on many occasions advantageously, and on all occasions where the ordinary medicines are not at hand. A short account, therefore, is given of all the indigenous medicinal plants, whose virtues have been attested by experience; and the authorities on which they are recommended are subjoined, the author not being willing to pledge his own, except where he has had experience to warrant him.

Having said all that appears necessary in explanation of the work, the author has nothing further to add, but to express his

hope, that the favourable expectations which have been entertained of it, may not be disappointed: If any one of superior talents, and of greater experience, will undertake to favour the public with a more perfect work of the kind, the author, so far from envying him, will concur in the general thanks; in the mean time, he hopes, this will not be found useless. *Si quid novisti rectius istis, candidus imperti; si non, his utere mecum.*

The author has to lament that he could not, at the time this work went to the press, procure paper of a better quality. It is nevertheless, hoped, that the real and intrinsic value of the publication, will not be depreciated by the want of elegance.

ADVERTISEMENT.

ADVERTISEMENT TO THE SECOND EDITION.

THE numerous testimonies borne to the usefulness of this work, and the universal acceptance it has met with, notwithstanding many blemishes and defects, make any apology for offering to the public a new and improved edition unnecessary.

The chief objection made to the former edition, *viz. the bad paper and type*, is, in the present one, completely obviated; many alterations and additions are besides made; scarcely any thing new or important in medicine (particularly in the practical part), being entirely overlooked, if not fully detailed.—The author therefore hopes, that this edition will not only be better approved, on account of its more elegant dress, but especially on account of the great quantity of additional and interesting matter it contains, rendering it still further subservient to its original uses.

One object of this work is to prevent people from resorting to quack medicines, to which, in country situations, they are frequently compelled, from the difficulty of obtaining advice, and from not knowing how to employ safer and more efficient remedies. The danger of administering empirical nostrums,

and

and the folly of giving credit to the puffs and pretensions of the unprincipled fabricators, and venders, of these deceptious compositions, have been lately well exposed, in a very excellent and popular publication, which, if continued, bids fair in a short time to check at least, if not to put an entire end to an evil of the greatest magnitude in society.

A brief account of some of the articles chiefly in vogue here, and which are most likely to produce mischief, extracted from the above-mentioned work *(The Medical Observer)*, will be subjoined, as a caution to those misguided persons, who have been heretofore addicted to the use of them.

Eheu! quid refert, morbo an furtis peream Venenis.

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CONTENTS.

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II. OF THE WORK.

Concise Description of the several Diseases incident to the Inhabitants of Jamaica, and other Inter-Tropical Climates, with the mode of treating them, either by Officinal Remedies, or the Simples of the Country.

III. OF THE APPENDIX.

PART 1. *Collection of Forms or Receipts for making up the sundry Medicines recommended in the Work.*

A Catalogue of such Medicines, in their requisite quantities, as are more especially necessary to be kept in Families, and on Plantations.

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General Index to the Work.

INTRODUCTION.

CHAPTER I.

SECTION I

NOSCE Teipsum,—Know thyself—is an ancient and sage precept, admitting of various significations, as it relates either to the mind or body of man; it is in the latter sense to be understood here.* A man, uninformed and incurious about himself and his own conformation, betrays a stupidity that degrades him to the level of inferior animals.—The animal machine is a complex and wonderful fabric, the contemplation of which cannot but excite the greatest admiration. We are, according to a Scripture expression, "fearfully and wonderfully made;" and the consideration of ourselves, will not only impress upon us sentiments of the highest veneration and gratitude towards the Great Architect of our being, but will prove a source of much rational pleasure.—

SECT I.

A A knowledge

* This was the famed precept of Solon, which, written in letters of gold, was hung up in the Temple of Diana. The celebrated Linnæus has very ingeniously commented upon it—Man, says he, should know himself:

1, *Physiologice*—or anatomically, *viz.* how he is constructed, and with what faculties he is endowed.

2, *Dietetice*—what regimen is best suited to the preservation of his health, and the prolongation of life.

3, *Pathologice*—what infirmities and diseases he is liable to, how to guard against them, and how to remove them.

4, *Politice*—his rank and station in the community, subordinate or superior—*Esto antiqua Virtute et Fide.*

5, *Moraliter*—his duty to others in society—*Benefac et lætare*—Do unto others, &c.

6, *Theologice*—his duty to God his Creator—*Innocue vivito. Numen adest. Memento mori.* SYST. NAT.

——*Nihil enim homine imbecillius terra alit—Nulli vita fragilior: nulli tot morbi, tot curæ, tot pericula—Nec reputantur infantiæ anni qui sensu carent; nec senectæ in pœnam vivaces; hebescunt sensus, torpent membra, præmoriuntur visus, auditus, dentes, &c. &c.*

CHAP. I. A knowledge of the structure and functions of the human body is indispensably necessary to all those who make medicine their study, Anatomy being the corner-stone both to Physic and Surgery; but this is only to be taught by dissection, or less perfectly by engravings, accompanying description, which must be wanting to this work. It would, therefore, be in vain to attempt an explanation of the subject at large; but it may, nevertheless, be useful to give a short description of some of the parts of the human body, and their uses.

SECTION II.

SECT. II. THE solid parts of the human body are the bones, cartilages, ligaments, tendons, muscles, nerves, and blood vessels, *&c.*; which are variously organised to serve their several purposes.*

The bones *(the prop and support of all the other parts)* are composed of an earthy matter, and are sufficiently compact for strength; but for lightness are hollow, containing the marrow, to prevent fragility; they are large at their extremities, for broader and more convenient junction; and for easy motion have their ends covered with smooth cartilages, which are lubricated by the synovia, a liquor poured out from glands placed in the joints. The articulation among the bones is of several kinds and curious, but unnecessary to be explained here.

The muscles *(the motory organs)* are bundles of parallel fibres, (constituting

* Matter of the human body.—All matter is composed of the same elements, only differently combined and in different proportions. Vegetables growing in pure water afford the same principles as those growing in earth, *viz.* lime, carbon, *&c.* and animals fed on vegetables thus raised, yield, on combustion, mineral alkali, phosphorus, and every other substance belonging to animals in general. Eggs reduced to ashes afford the same product as chickens. *See Abernethy's Phys. Facts.* For the particular composition of the several solids and fluids of animal bodies, *see Supplement to the Encylop. Britan.*

(constituting what is called flesh) endued with a principle of irri- SECT. II.
tability,* by which, on the application of external stimuli, or by the energy of the nerves, they contract, and thereby move the several parts to which, by their tendons, or otherwise, they are attached.—The muscles are of various conformation, long, broad, circular, &c. according to their use, and are covered with membranes, interposed by fat, &c.

The nerves *(the sensory organs)* are a system of white cords, arising from the brain and spinal marrow, and going thence in fine branches to every part of the body, to give occasion to sense and motion.†

The vessels *(or containing parts)* are, 1st, Such as convey the blood to and from the most distant parts of the body; *viz.* the arteries and veins. The arteries are muscular, and assist in propelling forward the blood: The veins have valves to prevent the blood from returning. 2d. The lacteals are vessels which convey the food, when digested into chyle, from the intestines to be mixed with the blood. 3d. The lymphatics (or absorbents) are fine pellucid vessels, constructed with valves, which arise from every surface and cavity of the body, and carry the liquor there absorbed to the mass of blood.

The *investing* or *covering* and *connecting* parts, are the skin and different membranes. The pleura lining the thorax, the

* The heart and muscles of animals retain this property of contracting, from being irritated either by mechanical or chemical stimuli, for some time after death; and it is a question, whether this depends on a principle inherent in and proper to the muscular fibres themselves, similar to that power in vegetables, by which they contract in like manner; or, whether this faculty be derived from the nerves which go to the muscles. *See Whytt, Haller, Girtanner &c.*

† The nerves are the instruments of sense and motion, but in what manner is perfectly unknown. Whether they are tubes, and contain a subtile fluid; or, whether they are cords, conductors, &c. are questions unfit for discussion in this work.

CHAP. I. peritoneum lining the abdomen, the cellular membrane interposed every where between other parts.

These are the principal component solids of the body. The fluids are the chyle and the blood, from which all the others, whether of the watery, gelatinous, oily, &c. kind, are formed. Of these there may be occasion to take notice, in treating of the functions.*

SECTION III.

I. *Of the* HEART *and circulation of the* BLOOD.†

SECT. III. THE blood, which as Scripture says, is the life, *i. e.* a fluid absolutely necessary to life, or for nutrition, and the various secretions, is formed from the chyle that enters the subclavian vein, to be carried to the heart.

The

* The primary fluids of the Animal Body, into which all the compound fluids are capable of being resolved are *albumen*, *gelatine*, and *mucus*—the most distinguishing property of *albumen* is, its being coaguble by heat. *Gelatine* or jelly is particularly characterised by the effect which *tannin* has on it, in precipitating it and rendering it afterwards insoluble in water. Mucus does not coagulate by heat, nor is it convertible into jelly, &c. *See Dr. Bostock's Analysis of Animals;* also *Supplement to Encyclop. Britan. under animal Substances.*

† The several functions are divided into, 1st, The *vital* and *involuntary*—as the action of the heart, on which the circulation depends, which is constant while life remains, and independent of the will. 2d, *Natural*, which are also involuntary, but not so immediately necessary to life; these are the functions of the stomach, and of the secretory and excretory organs. Lastly, The *voluntary* or *animal*, which consist in the exercise of all the muscles which are subservient to the will, or over which the mind has a controul. Some of the functions are mixed, or partly under the command of the will, as respiration; which can be quickened, or for a short time suspended. The involuntary motions are occasionally attended with consciousness; and it is a question, whether they have not become inconscious from habit only. The Hon. Mr. Townshend had the power of stopping the beating of his heart; in one of these experiments, made for the satisfaction of his friends, he lost the power of renewing it, and actually died: Have people pretending to trances, a limited faculty of this kind? *See Cheyne on Health.*

SECT. III.

The heart (enveloped in a bag called the pericardium) is a large strong muscle, with two cavities, called right and left ventricles, to each of which there is an appendage, or another smaller hollow muscle, called auricle; and the circulation is carried on in this manner: The blood, returning from all parts of the body, is collected in the great vein called the cava, in the thorax, and from thence flows into the right auricle, which, contracting, forces it into the right ventricle;* from hence it is propelled into a large vessel, called the pulmonary artery, which, dividing into two branches, carries the blood to each lobe of the lungs; whence returning, by veins, it arrives at the left auricle; which, in the same way as on the right side, opens into the adjoining ventricle; from whence it is propelled into the aorta, or great artery, to be distributed through the numerous smaller arteries going to all the organs of secretion, and, by still smaller and smaller ones, to every the most extreme part: There it is taken up by the inosculating or uniting mouths of the veins, and conveyed back to the heart, to be circulated over again, as before described.

The uses of the circulation are, obviously, to furnish the system with fresh matter for the various secretions, and to check the progress of putrefaction, to which the animal fluids have a constant tendency. There is a certain force and velocity in the circulation, that accords with health—but this is very different in different individuals. It is generally slower and stronger in large men; and, in all cases of debility, quicker and weaker. The sanguiferous or circulatory system is that most affected in fevers; in which there is generally, first an increased action, and, afterwards, a diminished one, that succeeds sooner or later, according to the preceding violence of the symptoms.

SECTION

* There are valves so placed as to prevent the blood returning from the ventricle to the auricle.

CHAP. I.

SECTION IV.

Of the LUNGS, *and of* RESPIRATION.

WE have seen that the circulation is a two fold one: 1*st*, Between the two sides of the heart, or from the right side, through the lungs, to the left side: 2*dly*, From the left side, over the whole system, to return to the right side. The use of the latter has been explained;—we must consider now, for what purpose the chyle and returning blood are first circulated through the lungs: These are two large lobes, one on each side of the thorax, of a membranous cellular structure, to admit of inflation or distention by the air, in breathing, or respiration. The air, in inspiration, passes from the *trachea*, or windpipe, through all its numerous divisions, or branches, called *bronchiæ*, to the cells, or vesicles, which are thereby distended. By expiration it is, in a few seconds, expelled from thence.

This alternate action of breathing, called respiration, we know is essential to life, no animal being able to exist many minutes without air; but the real use of this was never understood till of late, since the composition of the atmosphere has been made known by chemistry. The common air, or atmosphere, is found to consist of two kinds; one, pure or vital air, called oxygene, which is necessary to the life of animals; the other, by far the greatest part, noxious, named azote, because destructive. It was always conjectured that something was taken in from the air in breathing;*—what that

* The air was considered, by the most ancient physicians, as the *pabulum vitæ*.—There are two opinions entertained concerning the changes on the blood in respiration: one, that no oxygene enters the blood in the lungs, but that the change of venous into arterial blood is owing to the extrication of a certain quantity of hydrogene and carbon, which, combining with a part of the oxygene of the atmosphere, forms with it water and carbonic acid; the other opinion is that oxygene actually enters the blood. The two opinions are not incompatible, and experiments seem to demonstrate both. A new view of this subject has been lately given by Mr.

that something is, is now fully demonstrated—it is oxygene, SECT. IV.
or pure air, which, mixing with the blood in its circulation through the lungs, changes its colour from a dark purple to a bright red. No air, that does not contain a due portion of this oxygene, is suited to life. Mephitic air, inflammable air, and the several other kinds of air called gases, though they might serve for the expansion of the lungs, are all mortal to animals breathing them.

The oxygene thus taken in, in respiration, has some intimate relation to the principle of life, for the degree of irritability appears to be always in proportion to the quantity of oxygene.* It is on this likewise that animal heat depends—which is principally generated in the lungs.† Respiration is subservient to several other uses of an inferior nature, which it is of little consequence here to take notice of.

SECTION V.

Of the STOMACH, LIVER, *&c. and* DIGESTION.

THE body, subject to perpetual waste, requires to be re- SECT. V.
cruited by food; which, to suit it for the purposes of nutrition, must undergo a previous preparation, or digestion, in the stomach.

The

Ellis, in his Examination of the Changes induced on Atmospheric Air, by Animals and Vegetables.

* See Medical Extracts, a very elegant work, in which the new discoveries in chemistry are explained, and applied to the solution of the several phenomena in the animal economy. Some medical philosophers conceive that the oxygene, imbibed by the blood in the lungs, is imparted to the muscular fibres, and constitutes the principle of irritability. The fibres of animals breathing highly oxygenated air, are rendered remarkably tough. *See Beddoes, Thornton, Girtanner, &c.*

† On this subject there is much difference of opinion. *See Crawford, Girtanner, Goodwin, Saumarez, Bell's Anatomy, &c.*

CHAP. I.

The *stomach* is not, as some are apt to imagine, a loose floating membranous bag, but a muscular organ; which adapts itself to its contents, so as never to be, strictly speaking, empty; but always more or less distended. From the internal surface is secreted a liquor called the gastric juice, which is of great importance in digestion, being a chemical solvent for our food.* The food, divided, masticated, and mixed with saliva in our mouths, descends, in the act of deglutition, by the oesophagus into the stomach, at the cardia or superior orifice. Here mixing with the former contents of the stomach, and subject to the action of the gastric liquor, it undergoes what is called digestion—*i. e.* it is changed into a pulpy mass, which gradually passes over the pylorus, the lower orifice of the stomach, into the duodenum, or first intestine, where it receives the bile from the liver, and the pancreatic juice, which are requisite for the further changes it has to undergo, before it is taken up by the lacteals, and conveyed to the receptacle of the chyle, and finally to the left subclavian vein, to be mixed with the circulating blood.

The *liver*, the organ destined for the secretion of the bile, does not receive the blood in the usual way of other secretory organs, from the arteries, but from a large vein called the vena portarum, which is distributed through the liver by an infinity of small branches. The bile then is formed from the returning and recrementitious part of the blood, and, after secretion, is deposited in the gall-bladder; where its qualities seem to be further exalted.† The great flow of it in some diseases,

* Spallanzani first proved, by experiment, that the gastric juice was a true chemical solvent, and that digestion is a process not carried on by the action of the stomach, its heat, &c. as formerly believed.—Dr. Fordyce will not allow of the word menstruum to be applied to the gastric juice, but explains the process of digestion as going on, by decomposition and recombination, in consequence of elective attraction. Digestion is a *living* not a purely chemical process, as appears from this, viz. the chyle is always the same from whatever aliments it is formed. *Fordyce on Digestion.*

† Bile is, by experiment, proved to be soda, combined with an inflammable resin;

diseases, and the effect of it changing the colour of the skin, when absorbed into the mass of blood, has made it the subject of peculiar attention. It has been the imaginary cause of a multitude of complaints. That it is never vitiated, is not asserted; but, in its natural state, it is a very necessary liquor for producing, in conjunction with the pancreatic juice, further changes on the digested matter from the stomach. It seems also to be a stimulus for exciting the action of the whole intestinal canal, and may be called a natural cathartic; for, where there is a deficiency of it, costiveness always prevails. The food now being first digested in the stomach, and then mixed with the bile and other fluids in the intestinal canal, undergoes a further assimilation, and becomes chyle;* which being absorbed by the numerous mouths of the lacteals, opening on the internal surface of the intestines, is conveyed to the glands of the mesentery; where it is diluted by the lymph brought by the lymphatic vessels; and then, after being collected in a general receptacle, goes by the thoracic duct, in an ascending direction, to be poured into the subclavian vein, and mixed with the blood, as was before described. *See p. 5.*

SECT. V.

resin. Muriatic acid, poured on bile, forms muriate of soda, that is to say, common salt. The præternatural flow of bile, which often occurs, is, probably, for the purpose of correcting something generated in the alimentary canal, in the same way as the lachrymal gland is made to pour out tears for washing off any offending substance from the eyes. *(See Dr. Mitchil N. Y. Repos. Saunders on the Liver.)* Dr. Rush has lately advanced some novel and very singular opinions concerning the function of the liver, spleen, and thyroid gland.X The spleen, he supposes, to be a reservoir to receive the blood, and relieve the heart in all cases of quickened circulation, from exercise, the passions, &c. The thyroid gland, he thinks, performs the same office to the brain that the spleen does to the heart. The liver, he considers as an auxiliary organ to the stomach in digestion, not in the way it is generally thought, by the secretion of bile, but in pouring out chyle when digestion in the stomach is imperfect. These opinions are controverted, particularly by Saumarez: *Med. & Ph. Jou. vol.* 16.

* From an analysis or examination of the chyle, it appears to have an intimate resemblance to milk.

X Any Difference of Opinion ~~of Opinion~~ between Dr. Rush & Author on this or any other Subject can not lead to lessen the Reputation he has long since acquired by his many learned Publications — D. —

CHAP. I. The *intestines* are a membranous and muscular canal, of considerable length,* variously convoluted, and having partial or half valves *(valvulæ conniventes)* for the purpose of giving an extent of surface, and for retarding the progress of their contents for the necessary time, or till the nutritious part of the chyle is absorbed; after which, the excrementitious residue is propelled forward, by the particular kind of motion which the whole canal is endued with, called peristaltic, to be ejected or thrown out from the body.

Having considered the stomach as the organ of digestion, it is proper to point out its sympathetic connexion with every other part of the system. It is not the *sensorium commune*, but has, through the intervention of the sensorium commune, the brain, an universal consent. Any derangement of stomach disorders the whole frame; and, *vice versa*, there are few diseases, in which the stomach does not participate.† The stomach, too, is the seat of pleasurable sensation, and a certain degree of distention in it, is requisite to strength. Hunger is supposed to originate, either from the stimulating quality of the gastric juice, or else in a sense of the want of distention.‡

SECTION VI.

On the SECRETIONS *and* EXCRETIONS.

SECT. VI. THE last change our food undergoes, after being converted into chyle, and conveyed into the circulation, is sanguification, or its conversion into blood; from which the nourishment is immediately derived, and from which proceeds all the

* The human intestines are six times the length of the body.

† See Webster on the connexion of the stomach with the rest of the system.

‡ Girtanner considers hunger as arising from increased or accumulated irritability of

the other fluids of the body. The manner in which nutrition and secretion are performed is not well understood, and any enquiry on the subject is of no great consequence in this place. SECT. VI.

The secretions have all appropriate organs. The *Urine* is secreted by the kidnies, which, collecting in the bladder, and distending it, is discharged thence by the contraction of its muscular coats.

The *Perspiration*.—The matter of insensible perspiration, and of sweat, proceed from the minute extreme vessels, opening over the whole surface of the body. This function has always been considered of great importance to health, as serving to carry off the redundant heat, and certain matters, which, if retained in the system, would prove noxious;* so that perspiration is the converse of respiration, in which animal heat is generated. —*Currie.*

The further consideration of the secretions and excretions, must be omitted in this concise physiological sketch, which may conclude with a few remarks on the brain and nervous system.

of the stomach; and that the use of food is not merely that of nourishment, but to exhaust irritability. In proof of this doctrine, it is observed, that hunger is suspended by the passions of the mind, by the taking of opium, &c. The Asiatics, in case of famine, which they are subject to, have recourse to opium.

* Some physicians are disposed to consider the perspirable matter as an exhalation only of the fluid matter of the body, and that no danger is to be apprehended from its suppression *(see Darwin)*; but the contrary of this is demonstrated, both by experiment and fact. The quantity of perspiration in one hour, according to Abernethy, is seventy-seven drachms of carbonic acid gas, and half that quantity of nitrogene, *i. e.* azote; so that nearly three gallons are thrown out in the course of twenty-four hours. The loss of water is computed at two and a half pounds in the day. The absorption of air is sometimes equal to the perspiration, if the air be salubrious—the skin not imbibing readily air that is noxious. *See Abernethy on the Functions of the Skin.*

CHAP. I.

SECTION VII.

Of the BRAIN *and* NERVOUS SYSTEM.

THE brain, spinal marrow, and nerves, compose what is called the nervous system; in which the principle of sense and motion reside. Although the brain has been considered as the *sole* seat of feeling, and the origin of all motion, yet there are instances where the brain, in animals, has been found wanting, or where it was in such a diseased state, as to render it unfit for any such function, which must, therefore, have been performed by the spinal marrow, or some other part of the nervous system. The brain has been found ossified, or converted into bone, without the health being impaired—*(see Sue sur la Vitalitè.)* The brain is the origin from whence all the other parts of the nervous system proceed;—it is here that the mind is made conscious of impressions on the nerves; it is from hence the mind directs its energy, through the nerves to the muscles, to excite motion; whenever the connexion between the brain and any part of the body is interrupted, by compressing, or dividing, the nerves, the parts to which they lead become paralytic. All the motions, voluntary and involuntary, depend on the nervous influence; but of what nature that is, or how the soul and body reciprocally act on each other, is inconceivable, and must for ever remain so. It is the privilege of the Deity only to know himself, or his own essence. The several senses require distinct organs; but are all ultimately owing to impressions on the nerves. In vision, the optic nerve, expanded at the bottom of the eye, is affected by the impulse of the rays of light—in hearing, the auditory nerve is struck by the vibrations of sound, *&c. &c.;* when either the nerves of these sensual organs are destroyed, or the organs themselves deranged, the particular sense is lost, as happens in blindness, deafness, *&c.*

The

The *nervous power* is, at different times, in different states; it either exists in greater quantity, or is possessed of more or less activity*. It seems (I say *seems)* to be expended by exertion, whilst we are awake, and recruited during sleep and rest. In disease, it is impaired and diminished, and in death totally lost. All our ideas, thoughts, passions, *&c.* originate primarily in the senses. Whatever may be the nature of the human soul, or how it may act after death, it is evident, that in the present state, it depends totally on the corporeal organs.† SECT. VII.

It will be proper to conclude here this faint outline of the animal economy, and to proceed to a subject which may be deemed of more importance, but which, nevertheless, could not be well understood without the previous explanation of the human body, and its functions.

CHAP.

* There has been much dispute amongst medical philosophers, whether the excitability, or irritability, or power of contraction, in the muscular fibres, depends on the nerves, or whether it is inherent and distinct—*see page* 7. By some it is supposed that the nervous power is secreted by the brain, that it is expended and accumulated —but this is not a place for the discussion of such intricate and obscure points. If the author of this work was a Brunonian, he might here take an opportunity of explaining the system of Dr. Brown, which was at first so fascinating, and so generally embraced by the Tyros in medicine; but which, from its defects and inconsistency, is no longer considered worthy attention. *See Med. & Chir. Journ. Edin.* 1805. *Darwin, Brown's Elements, Haller, Whytt, Girtanner, Med. Comm.* 1791.

† The author has no intention here, of alluding to the question of the soul's immateriality: He means nothing more than what is expressed, which must be allowed an incontrovertible fact; *viz.* that the operations of the mind depend on the corporeal organs.

CHAP. II.

CHAPTER II.

SECTION I.

Of the different CONSTITUTIONS *of* MEN, *and their aptitude to produce disease.*

NOTWITHSTANDING men have a common nature, yet among individuals there exists great diversity: No two persons have a constitution in all respects similar—yet amidst much variety (as in the case of the human features), there is to be found a resemblance, and the constitutions have been characterized and classed from the *temperaments;* which, according to the ancients, are only four; *viz.* the sanguineous, choleric, phlegmatic, and melancholic; these temperaments, as they have been described by the ancients, are, in the judgment of the best physicians, consonant to nature and sound observation: They are thus designated:

1*st.* The *sanguineous temperament* is denoted by light coloured or red hair, soft warm skin, blue eyes, large superficial blue veins, quick pulse, great sensibility, *&c. &c.* Persons of this temperament are subject to plethora or fulness, which, together with great excitability, gives occasion to inflammatory disorders, blood spitting, consumption, *&c.* In this temperament, says Willich, all is voluptuous.

2*d.* The *choleric* by black or dark coloured hair, dusky complexion, great bodily strength, hot skin, irritability of temper, *&c. &c.* This temperament also produces inflammatory diseases. Persons of this temperament, says the same author, have great magnanimity, and are capable of grand undertakings.

3*d.* The signs of the *phlegmatic* are a smooth shining skin, pale complexion, coldness to the feeling, weak pulse, slow digestion

gestion and excretions, indolence of temper, inactivity and insusceptibility to all the lively and tender emotions. Phlegmatic people are more particularly liable to asthmatic and dropsical complaints. Persons of this description are not easily provoked, and, when irritated, soon forgive. As some are born to command, others are formed to obey; men of the foregoing description are destined to subjection.—*See Willich.*

4th, The *melancholic temperament* is distinguished by a coarse skin, black hair (as in the cholerie), slow full pulse, languid digestion, timidity, great thoughtfulness and attention, with obstinacy of purpose. Persons of this temperament are liable to low spirits, or the hypochondriacal disease, mental derangement, *&c.*

These temperaments are constitutional and hereditary, but seldom pure; they are frequently so intermingled and blended together, as to make it difficult to determine which prevails; and the constitutions have therefore been, by the moderns, discriminated in a way perhaps more suitable to ordinary comprehension. The most obvious and striking are the following: 1*st*. Strong and robust: 2*d*. The weak and relaxed: 3*d*. The nervous and irritable: 4*th*. The torpid and languid: 5*th*. The bilious: To which are added, the gouty, the scrophulous, the consumptive, and scorbutic; but the latter, though unquestionably sometimes original and hereditary, are perhaps oftener acquired, or depending on habit and accidental circumstances.

The constitutions are distinguished still further, by age, sex, the influence of climate, habit, idiosyncrasy*, *&c.*

SECTION

* Many instances of idiosyncrasy, (or that peculiarility of constitution which makes individuals liable to be acted on or affected in an uncommon manner by particular odours, sounds, certain foods, *&c.*) are extremely curious, and the relation of them would be very entertaining; but, as it would answer no material purpose, it would, in this work, be incongruous.

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SECTION II.

Sex, Age, Habit, Climate.

SEX.—The difference of constitution, arising from sex, is original and permanent, not the effect of education or habit: Men of all countries, and in every age, have been more robust, and endued with greater strength, the result of higher tone, or more rigid fibres; by which they are rendered more subject to acute and inflammatory disorders, particularly the gout, which rarely attacks women. Women, besides being of a more lax and weakly habit, are subject to a particular economy, for the purpose of bearing offspring, which lays the foundation for a number of complaints, altogether peculiar to themselves, besides what they undergo from the delicacy of their frame and mobile constitution, as hysterics, *&c. &c.*

AGE.—Great changes take place in the progress of life, from infancy to old age: Children in their tender infancy are extremely irritable, which accounts for all the symptoms which attend their teething, and for most of the complaints they are subject to*; in advancing years they are liable to inflammatory distempers, and such others as arise from the sanguineous temperament, with plethora; *viz.* fevers, pleurisies, hæmorrhagies, particularly from the lungs, which lays the foundation for phthsis or consumption; this last disease and scrophula mostly come on about puberty, hardly ever in advanced life. It is needless to particularize the diseases of middle life, they are such as arise from constitution, accident, and the manner of living; but old age has its peculiar infirmities, a numerous train—*Multa senem circumveniunt incommoda*—rheums—asthma—gout—palsy—apoplexy, *&c. &c.*†

*CLIMATE.**

* In infancy the fat is accumulated chiefly about the external and extreme parts, for aiding the circulation; and in the advance of life the fat becomes much firmer.

† Few people die absolutely of old age, or without some sickness; it is difficult to say to what

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*CLIMATE.**—The influence of climate upon the human body is very considerable, notwithstanding the extraordinary power it has of adapting itself to great alterations of temperature, or heat and cold; cold has the uniform effect of condensing all bodies, and it thereby gives tone and strength; heat occasions relaxation and debility. This is obvious on viewing the inhabitants of different quarters of the globe, and the effects which a change of climate quickly produces. Persons passing from a northern latitude to the tropics, soon experience the enervating effects of heat, and *vice versa*, the feeble and inert natives of the torrid zone, in going to a temperate one, attain a vigour and activity not inherent or natural to them. The diseases of cold climates are commonly such as arise from an excess of strength; those of warm climates are generally occasioned by relaxation and debility; inflammatory fevers, pleurisies, rheumatisms, *&c.* stand in the list of European complaints. Amongst those of warm climates the principal are, bilious fevers—fluxes—tetanus, *&c.* A warm climate is propitious to tender infancy and extreme old age; children in the West-Indies are, for the most part, very lusty and healthy till they

what term human life might be prolonged, under certain circumstances; the oldest person we have heard of in modern times was Henry Jenkins, of Yorkshire, who was 169; a few others have reached 150 and 140, but the far greater part of men die young; out of 1400 not above one attaining to a hundred years of age. A late writer *(Hufeland)* on the subject of longevity, sums up his remarks by the following one: "*Omnia Mediocria Optima.* To enumerate all the methods, proposed in different ages and countries, for the renovation of youth, and prolongation of life, would be to give a long catalogue of absurdities; amongst these some of the principal are, by sleeping with young people, as was recommended to King David; by processes in alchemy, and astrology, or by tinctures of life, potable gold, *&c.* a delusion that prevailed for a time among all the higher ranks of people in Europe; by transfusion of the blood of young animals into the vessels of the aged." Let those who wish to see how a subject may be spun out, how much it is possible for an author to write *about* and *about* a thing, without saying much to the purpose upon it, read, if he have leisure or patience, the elaborate prolix compilation of Sir John Sinclair's Code of Health. The great Lord Bacon had some ridiculous fancies on this subject.

* The healthiness of a climate appears to depend more on the altitude of any situation than its latitude.—*See Tong's Account of the State of the Ohio.*

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they are two or three years of age, when they grow thin and weakly: The complaints of old people are much mitigated by a warm climate, which compensates, in some degree, for its baneful influence on health in earlier years, if not by protracting life, yet by rendering old age comfortable. The inhabitants of warm climates are seldom subject to the hypochondriacal disease, or to depression of spirits; consumptions sometimes occur, but comparatively seldom, in warm climates, and those labouring under consumption, by changing to a hot climate, obtain, if not a cure, a longer truce, or live for a greater length of time. The scrophula, likewise, which is supposed to be often the cause of consumptions, is hardly ever seen in warm climates, at least not in the West-Indies.

HABIT.—This too, when long continued, effects considerable alteration in the constitution, and gives a disposition to particular diseases; every class of mankind has a distinct set of maladies, originating in their modes of life, and the occupations they follow: The studious and sedentary are particularly liable to indigestion—flatulency—costiveness—low spirits, called hypochondriasis: The laborious are in general the most healthy part of mankind; that which is the duty of man constitutes his health, and thereby his happiness; exercise is indispensable to the due performance of every function of the body, and cannot therefore be deemed the occasion of any disease, except when carried beyond the proper limits; but fatigue and hard labour will undoubtedly lay the foundation for many maladies. It must also be confessed, that men engaged in the active laborious pursuits of life, though enjoying the highest degrees of health, are nevertheless subject to the most acute and violent diseases: Longevity* is not necessarily connected

* The oldest persons, who have lived in modern times, are Henry Jenkins (1670) aged 169; Thomas Parr (1635) aged 152; Countess of Desmond, aged 140; Catherine Lopes, in Jamaica, aged 134. One half of all the human race die before they are

connected with health: Many valetudinary people arrive at a good old age, and live to see numbers of their healthy acquaintances go off the stage before them. SECT. II.

CHAPTER III.

SECTION I.

On AIR, EXERCISE, FOOD, *and other things relating to* HEALTH, *and its preservation.*

SUCH things as are necessary to the body, and to the maintenance of the health, but which do not strictly constitute it, have been absurdly called *non-naturals*. These are air, exercise, food, sleep, &c. which from the relation they have to health, and to the prevention of diseases, are an object of consideration prior to that of curing them. CHAP. III.

AIR.—The necessity of air to animal life has been spoken of before, under respiration. The atmosphere, by the many and frequent variations it is liable to, produces sundry effects on the human body. To what has been already said, of the influence of climate, something may be here added. There is what may be called a latitude in the constitution, in consequence of which a certain share of health may be enjoyed, under a great variety of situations. The human body is possessed of the power of accommodating itself readily, or without much inconvenience, to great variations of temperature, or changes from heat to cold, and from cold to heat, provided they are not very sudden. The high degree of either, with which life can consist, is surprising, but there are ex-

are seventeen years of age—more people live to be old in elevated situations—more women live to be old than men—more old people die in winter than in summer. For the description of a person, having the prospect of long life—*See Hufeland.*

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tremes of both, which prove fatal. There are instances of persons dying suddenly, from what is called a *coup de soleil*, or stroke of the sun; but this is probably not purely the effect of the heat, but from a previous disordered state of the brain; because the degree of heat the human body is capable of sustaining, without injury, greatly exceeds that which is produced in the atmosphere by the sun's rays.* The stimulus of heat is essential to life, and, when withdrawn to a certain point, a mortal lethargy ensues. It seems to be agreed, that though the heat of a warm climate is in some degree debilitating, from the relaxation and the excessive perspiration it gives occasion to, yet it is not, of itself, the cause of any complaint;† but when combined with moisture, it is the fertile source of many. To air, either hot and moist, or cold and moist, are attributed fevers, fluxes, rheumatisms, &c. yet not to these perhaps singly or conjunctly, without the concurrence of some other causes. The variations in gravity, or the weight of the air, are likewise supposed to have considerable effects on the human body, but this is not so apparent. If any of the diseases of the human body are connected with the phases of the moon,‡ it is probably in consequence of the augmented or diminished weight of the air, from the different forces of the moons attraction at its periodical changes. The effects of the air on the human body are perhaps less owing to

* In the experiments made by Dr. Dobson and Dr. Fordyce, the human body was found capable of sustaining, for a short time, without injury, a heat equal to 347 deg. of Fahrenheit's thermometer, or 135 deg. beyond the boiling point. *See Phil. Trans.*

† Contagion is dissipated by the air of hot climates, and hence the typhus, or malignant ship fever, is found to prevail mostly in the higher and colder latitudes. —*Trotter.*

‡ There is much difference of opinion concerning the moon's influence on the human body, in causing the returns of fever and other complaints: That there is a frequent coincidence between the changes of the moon, and the occurrence or recurrence of diseases, is beyond a doubt; but whether this be not accidental, is matter of great uncertainty. If the moon does exert such an influence, we should expect to see its effects more constant and uniform. *See Mead de Solis ac Lunæ imperio. Balfour on Fevers of Bengal. Lind de Febre orientali.*

to its sensible qualities, than to its purity or impurity—to the state of electricity in it, and other circumstances. SECT. I.

Purity of the Air.—The air has always been thought to admit of various degrees of purity, and to contain many foreign admixtures. Though seldom found too pure, yet a certain degree of purity in it, is supposed not salutary to people labouring under particular complaints, as consumption, asthma, *&c.* The air of high mountains is not, as it is generally thought to be, always the most pure; but the most unhealthful is that of marshes and swamps*. In dry gravelly (not sandy) soils we find a better air than in rich clay grounds, which retain moisture. New opened lands are always found unhealthful, in consequence of the admission of the sun's rays causing putrid exhalations to arise from the surface. The air of towns is unhealthful, in proportion to the population or number of inhabitants, or depending on situation, customs, *&c.* Every one knows what malignant diseases are generated in ships, prisons, hospitals, and elsewhere, whenever a great number of persons are crowded together, and where a due ventilation is

* The source of infection can often be traced, but the nature of it remains unknown. At the mouth of a river, in the Valteline, the air is so unwholesome, that hardly any one sleeping there escapes its deleterious effects; yet, on comparing this air with that of a high mountain in the neighbourhood, it was found equally pure.—Mr. Lusac, in his late Aerostatic voyage, when at the height of 21,478 feet above the surface of the earth, filled a glass with the air of that elevation, and another with the air of an elevation 305 feet higher. These two different quantities of air, being afterwards examined at Paris, were found to be precisely the same as the air in the court yard of the Polytechnic School with which they were compared. Mr. Davy, of the R. I. has also ascertained, by new endiometrical experiments, that the atmosphere in all places exposed to the winds contains very nearly the same proportion of oxygene and azote, and that the different degrees of salubrity do not depend so much on the quantity of its component principles as on foreign admixtures. Another philosophical chemist asserts, that the purity of the air cannot be ascertained by endiometrical experiments: 1st, Because nitric acid is not always to be obtained of the same standard: 2d, The absorption of oxygene will be greater or less, according to the time the air remains over the water, or is agitated in it.—Out of seven trials made with the same air, the result was every time different—varying from 60 to 100.

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is wanting. This is owing to a depravation of air, or a consumption of the oxygene part of it, and its being loaded with human effluvia: This leads us to take notice of the nature of

Infection and Contagion, and to point out the means of preventing their effects. Infection and contagion are sometimes confounded, or signify one and the same thing*; at other times they have a distinct signification; by the former is understood the miasmati, or effluvia of marshes, swamps, and other unwholesome places; to which are attributed intermittents, bilious fevers, dysenteries, &c; by contagion (understood strictly) is meant that kind of infection which is communicated from sick people, or which is generated in the body; and to this is referred the malignant ship, hospital, or gaol, fever. Marsh effluvia, or infectious miasmata, act only on the spot, or at a small distance, but animal contagion attaches itself to clothes and other matters, which become *fomites*, or means of propagating it more powerfully, than the body from which it proceeded. It is of the greatest importance to know by what means the progress of infection and contagion may be prevented. Draining and perflation are the only means for amending the air of swamps and woods. For purifying the air of ships, hospitals, gaols, &c. the principal means are, 1*st*, Cleanliness; all the clothes, &c. of the infected person, should be destroyed, or purified. 2*d*, Ventilation, or a free circulation of air; fumigation, or the burning of tobacco, oakum, sulphur, aromatic wood,*

* The nature of contagion is inscrutable. Marsh miasma is supposed to consist of hydrogene gas, which is generated by the decomposition of water in swampy places. The smell of patients labouring under bad fever, in the opinion of some, comes near to that of sulphurated hydrogene gas. *Trotter.*—The air found in sick apartments, according to Van Morn, is in part carbonic acid gas, azote, oxygene—sometimes also ammoniacal gas, and a particular emanation, which is the source of contagion. This seems to be a combination of hydrogene and carbonic acid gas, holding in solution some part of the animal fluids. *Van Morn, Brussels.*—Dr. Mitchil is of opinion, that the perspirable fluids, mixing with oxygene, produce the septon or septic acid: *Quere*, If this be true, should not oxygene or pure air, by combining more freely with those fluids, increase instead of preventing contagion? *Med. Comm.* 1799.

wood,* &c. 3*d*. Vapours of vinegar, camphor, nitric acid, oxygenated muriatic acid. The air, in every climate and situation, is healthful or otherwise, according to the prevalence of particular winds. Every Englishman knows the effect of the north-east, every Neapolitan that of the sirocco. The samiel and harmattan winds are likewise too well known to require description here, as are the monsoons of India, and the trade-winds or sea-breezes, in the Caribbean ocean. It is by the steadiness and force with which those last mentioned blow, that the climate is tempered, and putrefaction dissipated. In Jamaïca, no wind is deemed salutary, but that which is called the

* On the use of fumigation in purifying bad air, as also of the employment of the gases, there is much difference of opinion.—Dr. Trotter, reasoning on sound principles, shews that the fumes of sulphur, nitric acid, &c. can have no effect in purifying the air; but, on the contrary, in vitiating it, and generating an air similar to that which was to be purified. *See Medicina Nautica.*—Vaporised water, according to Van Mons, is better than the steams of the acetous or muriatic acid. When the air is surcharged with ammonia, the carbonic acid gas should be employed. *Van Mons.* Dr. Carmichael Smyth's process, made use of by order in the navy, for generating the nitrous acid vapour, is this: Take sulphur three parts, nitre one part, mix them and put them into an iron pot, placed in the middle of the room, on a heap of wet sand; then set the mixture on fire, by placing on the top a live or burning coal. The doors and windows are to be shut. The vapours of the oxygenated muriatic acid are considered, by Dr. Rollo and Dr. Cruickshank, as much more efficacious than those produced by Dr. Smyth's process. The vapours of oxygenated muriatic acid are produced, by mixing together four ounces of common salt, and two ounces of powdered manganese; then adding, by little and little, three ounces of strong vitriolic acid, or oil of vitriol. (*See Philosophical Magazine, for* 1799, *Vol.* III.) Guyton Morveau has laid claim to this discovery of correcting bad air, by acid fumigations. With the fumes of muriatic acid he purified the air of an infected church at Dijon, in the year 1773. Dr. Johnson is said to have employed nitrous acid fumigations long before, *viz.* in 1756, and Vic d'Azyr, used them in 1774. Dr. Carmichael Smyth has obtained a premium from Parliament, for his mode of employing them in 1800; but, after all, the efficacy of these vapours, in destroying contagion, is very much questioned. Dr. Ferriar recommends, in preference, the placing in the infected apartments small vessels containing quicklime—this is in conformity to the theory and practice of Dr. Mitchil, who also orders pot ash to be sprinkled about the floors of hospitals. Marshal Saxe found that dirt floors were more healthy for soldiery than boarded ones. Countries that abound in chalk and lime-stone are generally healthful.

CHAP. III. the sea-breeze, or that setting in from the south-east and north-east sides of the island.*

The several circumstances which are deemed infallible signs of a bad air, are quick putrefaction of butcher's meat; mouldiness of walls; falling to pieces of veneered furniture; spoiling of paper and books; presence of a great number of mosquitoes, &c†. For the particular healthy and unhealthy situations in the island of Jamaica, consult Long, Edwards, Lempriere, &c. Persons who have it in their power to shift their habitation according to the change of seasons, going from the lowlands to the mountains, or from the mountains to the lowlands, or from the south-side to the north or east, may always have the benefit of enjoying in Jamaica a temperate and healthful climate.

SECTION II.

Of EXERCISE *and* REST.

SECT. II. THESE, by a law of our constitution, are alternately requisite: The importance of the former was before taken notice of, but it remains to speak of its particular uses, &c. Exercise is

* Every one knows that the air of the night is less salubrious than the air of the day; it is in some situations extremely noxious, the cause of which has been made apparent by Dr. Ingenhouse and others, in their experiments on vegetables, the leaves of which when exposed to light, or the action of the sun's rays, give out oxygene or pure air, but at night, when the sun's rays are withdrawn, instead of oxygene, they pour out azote or noxious air. This has been the general opinion since the time of Dr. Priestley's experiments; but Mr. Ellis has lately demonstrated that the air given out by the germination of seeds, and by the vegetation of plants, is the same as that given out in the respiration of animals, and that vegetation has no effect in purifying the atmosphere by the extrication of oxygene. *See Ellis's Enquiry into the Changes induced on Atmospheric Air, by Plants, Edin.* 1808, &c.

† The rusting of iron has also been considered as a sign of a moist and bad air; but perhaps without any just reason. There are countries where polished steel in the air, are never known to rust; but is it known that these are more healthful?

is a salutary stimulus to the whole system, exciting, directly or indirectly, the actions of every part of it, and occasioning an increase of all the secretions and excretions: Nothing can be more necessary to the *mens sana in corpore sano*: It contributes no less to the health of the mind, than of the body.—The necessity of exercise, or action, is not only demonstrable from the fabric of the body, but evident from the universal practice of mankind, who pursue it from choice: Labour is its own reward, being always accompanied by chearfulness and health—whilst an inactive and sedentary life destroys not only health, but enjoyment. Walking, to those in perfect health, is perhaps the most useful species of exercise, as producing the most general effect; but it is not alike suited to all persons: It tends to accelerate the circulation too much, to be advisable to consumptive people, and is too fatiguing to such as are weakly; but may be recommended to those who are corpulent and phlegmatic. Riding on horseback is more generally suited to the cases of people in warm climates. This gives motion without too much exertion, and can be longer continued without fatigue; it is of chief importance to the weakly and consumptive, and to those labouring under visceral obstructions. The *vectio*, or riding in a carriage on an easy road, can hardly be of any other use than for air and amusement; the motion of an uneasy carriage, on a rough road, I need not say, is very unpleasant, but it may also, in many cases, be not unattended with danger.

Navigation. Swinging, &c. cannot, with propriety, be called exercise, but may be, nevertheless, considered in that light, as having effects somewhat similar, particularly in causing a free circulation through the extreme vessels; by which means, a less quantity of blood is determined to any particular part: It is in this way it proves so beneficial to those who have diseased lungs, *i. e.* consumptive persons—who should consider this as

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the cure, above all others, to be depended on, and it would be found a pretty certain one, in many cases, if had recourse to at an early period, or during the inflammatory state of the lungs, and if persevered in: As it is not in the power of every consumptive person to undertake a long voyage, swinging has been recommended as a substitute to navigation, and is said to have had the same good effects.

Exercise is improper immediately after repletion; the best times for it are the morning and evening, or before meals, to excite appetite. The benefits arising from it are, in a great measure, proportioned to the pleasure with which it is attended, from whatever source this arises; whether from the country scenery, discourse of companions, *&c.* An invalid taking a solitary ride or walk, and occupied with the thoughts of the good he is to experience from it, will receive none, or very little. Business or amusement, of some kind or other, should always, therefore, form a part in the plan or scheme of exercise.

The *exercise of the mind,* is equally requisite to health and enjoyment, as that of the body;* and, when too long continued, is productive of the same fatigue. Nothing is so irksome as a state of vacuity. Mental and corporeal exercises, when alternating with each other, afford mutual relief.

SECTION III.

On ALIMENT, *or* FOOD *and* DRINK.

This subject is one of the most important that comes under our consideration: It is in the errors and excesses, we are guilty of in our manner of living, that a great part of our diseases

* *Arcum tensio frangit animum remissio. Bacon.*

eases originates: It is, also, by a proper regimen and diet only SECT. III.
that we can get the better of many of the most obstinate complaints. Other animals, who, guided by instinct, live according to nature, are exempt from most of those evils that mankind, notwithstanding the superior faculty of reason with which they are endued, bring upon themselves by the indulgence of their appetites. It is, perhaps, difficult to say, in which circumstance they most offend; whether in the quantity of food taken, or in the variety made use of; but it commonly happens that he who commits excess in one way, does it in both:—Variety forces appetite; persons making use of simple food, rarely going beyond the bounds of moderation. To treat at length on the different kinds of aliment, and prescribe all the necessary rules in their preparation and use, would lead too far beyond the compass of this work; but a few such observations as are particularly useful may be here offered.

It was before noticed, that man is, by his make and constitution, destined to live on a mixed food, not like the carnivorous animals wholly on flesh, nor like the granivorous, &c. tribes, entirely on vegetables, but, partly, on both. In cold climates, men are more addicted to animal food; in warm climates, they are led to prefer the use of succulent, farinaceous, and saccharine food; and this, it is presumed, in consequence of natural appetite, which is, however, often depraved by custom; and, therefore, we see people following nearly the same modes of living, indiscriminately, in all climates, in the same way as they do the fashions of dress, without any regard either to health or convenience—it is not the office of a physician to be a satirist or *censor morum*—any allusion to local manners would therefore be improper, but a few such remarks may be made as may serve to direct those who wish to be under the guidance of reason.—It is very difficult to lay down any general rules on this subject: Every man, in respect of diet,

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ought to be his own physician, or should know, from observation and experience, what best agrees with him; this, however, is not always the case, as people either do not pay a due attention, or else allow themselves to be deceived by inclination and appetite. Hardly any disease is more difficult to cure than what is called *dyspepsia*, a stomach complaint, attended with acidity, flatulence, &c. and the reason of it is, that patients of this description are never sufficiently attentive to regimen.

Animal Food is the most nutritious,* particularly young and gelatinous meats, fish, eggs, &c.; the flesh of old animals, and of such as live in a state of nature, is more easy of digestion in the stomach, but more heating in the system. It must, therefore, be apparent that a plentiful diet of animal food must be ill suited to children and young people; to all who are of a plethoric sanguineous temperament; as also to the inhabitants of hot climates. It is principally suited to the laborious, to persons who have weak digestive organs, and to those of a phlegmatic cold constitution.

Vegetable Food is of a various nature; some kinds of it, as the farinaceous and oily, approach nearly to animal food: The pulses succeed to these: Pot herbs, salads, &c. contain but little nourishment, and, by the air which they and the different pulses afford, they create great disturbance in the stomach and bowels of some people: This happens, in particular, to such who have resided long in a warm climate: The watery,

* Foods are said to be nourishing in proportion to the affinity they have for oxygene; living animal substances, therefore, as oysters, are not nourishing.—Animal jellies, vegetables, and fruits, are of quick and easy digestion: Young meats not quick in digesting, but they give no uneasiness—some things that digest quickly cause great disturbance.—A certain degree of putrefaction, in some particular foods, do not render them disagreeable or unwholesome, *i. e.* game, the fish called John Dorey, &c.—*Girtanner, Willich.*

watery, saccharine, and subacid, fruits, are used more for gratification than nourishment, but they are necessary as antiseptics, or for correcting the putrescency of animal food. The West Indies afford several examples of fruits, that come more strictly under the denomination of foods, as the bread-fruit, plantain, avocado pear, chocolate, cocoa-nut; the respective qualities and uses of which are sufficiently well known. SECT. III.

Milk is considered as an intermediate food, or one partly animal and partly vegetable—it is the food under the last degree of assimilation, before it is converted into red blood: This is what nature has destined for the first nourishment of all animals of the quadruped kind. To all such as resemble young children in their condition, it must, therefore, be a suitable food; *viz.* to extreme delicate persons; to the consumptive; to some kinds of convalescents, *&c. &c.* but it is not a food affording sufficient nourishment to the laborious; and there are few stomachs with which pure or unmixed, it agrees, unless it makes a principal article of food: People who live upon milk should, therefore, confine themselves chiefly, if not wholly, to it. It particularly disagrees with bilious people. *Cheese*, when rich must, from its oil or butter, be nutritious—when poor it consists wholly of gluten, and must be likewise nutritious, though hard of digestion.—Hard boiled eggs agree best with some stomachs, because, in that state, they are slow of digestion.

Soups and Broths have an approximation to milk; they do not run into putrefaction, on standing, as animal food does, but turn sour: They are suited to weakly people, who require the nourishment of animal food, but who cannot bear the stimulus of solids.

A diet principally of the *vegetable kind* is best suited to children and women, and to both young and old people—that is,

to

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to all those who are of a sanguine temperament, and liable to plethora; as also to those of the choleric and melancholic temperaments, who are liable to costiveness, bilious complaints, &c. It is not suited to weakly phlegmatic people, or to people labouring under gouty and dyspeptic complaints.

*Cookery** is made subservient more to the purposes of luxury than of health and utility, but there is no doubt that it is not only a means of rendering our foods more palatable and wholesome, but, when rightly managed, tends to economy.† The preparation of animal food is particularly requisite, sometimes by boiling, sometimes by roasting—the former mode is for the most part preferable: Few even of the vegetable articles of food are capable of being subdued by the stomach, without being previously subjected to some culinary process; in their crude state they would excite disorder, without answering the purposes of nourishment. Cookery then, has its uses; but, who can ascertain the extent of its abuses; or describe all the mischiefs that follow from the indulgence to which it gives occasion? As this is not a place for moral descant, the subject may be dropped; observing only, that a discreet use of the *condimenta*, or spices and seasoning, is not to be objected to: The practice is universal, and from thence must be considered natural. It is more particularly necessary to debilitated stomachs, and it is surprising the quantity of pepper that is made use of by some individuals.‡ Salt (according to Dr. Mitchil) is useful only from

* The whole art of cookery, according to Girtanner, consists in depriving aliments of their oxygene. Meat, says Dr. Beddoes, becomes tender in consequence of a secondary combination with oxygene, in whatever way this is effected, whether by cookery or putrefaction.—Oils, fat, sugar, &c. which have a great attraction for oxygene, are all very nutritious.

† Count Rumford, the great philosophical economist, to whom a statue is due for his benevolent exertions and numerous improvements, has shewn what a saving there may be from cookery.

‡ Sir Charles Price (father of the late Sir Charles), never eat, at dinner, less than two or three saucer fulls of the bird pepper, or the species of capsicum from which the strongest Cayenne is made.

from the natron it contains, which unites with the septic acid and forms cubic nitre. SECT. III.

Quantity of Aliment proper.—The quantity of aliment required, must be relative to the constitution of the individual, and his manner of life; to the quantity of the food used, &c. Any quantity, however small, that exceeds the power of digestion, or that creates uneasiness and oppression, must be considered too much. The quantity absolutely necessary for the purpose of subsistence, is extremely small, as is evidenced in the narratives of persons shipwrecked, and others abandoned at sea; as well as in cases of siege, famine, &c.; but, from habit and usage, people may consume great quantities, not only with impunity, but apparently with advantage; and a reduced quantity would be not sufficient for them.* The custom of taking food at stated meals has prevailed amongst all civilized nations, from time immemorial; and these meals have been pretty generally three; but the principal one, amongst some nations, has been taken at noon, amongst others, at night. There is no rule to be laid down as to this, unless that food is better taken after exercise than before it. An easy and quiet state of the body and mind facilitates digestion. The precipitate cannibal-like ingurgitation of food, or hasty manner of eating

* Much of what has been said on the subject of temperance is extremely vague and ill-founded. There are no rules but what are entirely relative to constitution, age, and habit; particularly the latter, which makes even the most pernicious things not only innocent, but salutary. This holds, in a great variety of instances, in the use of particular foods, in the number of meals, in the time of taking them, in the use of tobacco, tea, coffee, opium, ardent spirits, &c. It is not affirmed that no injury will arise in particular cases from the above mentioned causes, but their effects will always be more or less determined by habit. The severe denunciations against tea, coffee, tobacco, &c. both by physicians and moralists, however well intended, are not strictly well founded, for experience does not prove that they are so pernicious as is pretended, and the bad effects they do produce may stand in the place of others much worse. The remark of the great Hufeland may be again quoted, *omnia mediocra optima.*

CHAP. III. ing of some people, is not only indecent, but hurtful, by creating too sudden a distention of the stomach.

Drink.—On this subject it must be observed that water is undoubtedly the natural beverage of man, as of all other animals, and nothing else can be requisite for the relief of thirst, and for the purposes of dilution;* but the use of wine, and of fermented and spirituous liquors, is not therefore incompatible with health, or unneccessary to it: The abundant provision which nature has made, evidently shews that man was not destined to live within the limits of his absolute wants; and, however much luxury, and the use of the bottle, have been decried, both by physicians and moralists, no conclusion is to be drawn against the use of a thing from its abuse. The question is not what is absolutely necessary for man, but what is best for him—although the simple element may, with the generality of people, or such as have never been in the use of any other liquor, conduce sufficiently well for all the ordinary purposes of health, yet there are few that might not be benefited by the occasional and limited use of vinous drink; and to many it is not only allowable, but in a manner indispensable. Health and longevity may consist equally well with various modes of life. They are not the exclusive privileges of water drinkers, but equally of those who drink wine, if they do not drink to excess. It is remarked of those who drink nothing but water, that they have very inordinate appetites; whence an inference, and a just one, has been drawn, as to its salutariness; but at the same time it shews that, where a stimulus of one kind is wanting, another is required. Those with

* Thirst, according to Girtanner, is exactly the reverse of hunger—the latter depends on an increase of irritability, and a want of food to exhaust it—the former, *viz.* thirst, on the want of oxygene, to supply which water is necessary. Mons. Dumas has made many experiments to shew that hunger and thirst depend neither on chemical nor mechanical causes, but on a certain state or modification of the nervous power.

with whom water agree, should make it their principal drink, but a total abstinence from other liquors is not advisable, on any sound principle. Persons who use wine, &c. are much less liable to epidemic infection; and, upon the whole, enjoy that sort of health which is most desirable, or which consists in an adequate share of strength, united with agility of body and hilarity of mind. It is not denied that the same advantages may follow the sole use of water; they certainly do, but not universally; there are many persons who cannot drink water pure and unmixed, without experiencing sudden and great uneasiness; to prevent which, some admixture is required, either of wine, ardent spirits, &c.; but whilst the use of wine is recommended, within limits, as beneficial and salutary, let me not be considered as the advocate for debauch; let me caution against the undue and excessive use of that or any inebriating liquor. Daily large potations of wine and spirituous liquors, of any kind, inevitably and quickly destroy the stomach, occasion obstructions of the liver, and bring on dropsy. Of the truth of this there are constantly before our eyes numerous and melancholy proofs, but much fewer than formerly. The pernicious liquor called grog, the appetite for which so insensibly steals upon people, till they are lost to all hope of reform, is almost out of use. Few persons contracting this destructive habit, after a certain time of life, ever can be induced to leave it off, and they fall, sooner or later, martyrs to it, though not always such early ones as might be desired; some lingering out many years, under a most miserable existence.

Particular Liquors.—Wine is certainly to be generally preferred to ardent spirits of any kind, however pure, or how much soever diluted. Madeira wine is preferable to any other, because less acescent and not astringent; astringent wines seldom agreeing with the stomach in hot climates.

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Ardent Spirits—Not unsalutary when pure and duly diluted—agree better with some weak stomachs than wine, which is always more or less acescent. Ardent spirits by retarding digestion may render it more perfect.

Malt Liquors—When strong and unmixed, are too heavy and indigestible for ordinary stomachs, in warm climates; whence they are accused of creating bile; when small, or mixed with water, they are apt to cause flatulence;—best suited to laborious people;—to those travelling, *&c.* give great relief after fatigue, and cause sound sleep;—may be allowed (porter in particular) to convalescents after fever, where there is a strong desire for it.

Cyder—Perry—Are grateful and salutary where they agree, but there are many on whom they produce disagreeable effects: Of the utility of wine as a medicine, there will be occasion to speak elsewhere.

SECTION IV.

SLEEP is no less required for repairing the waste, and recruiting the strength, of the body, than aliment. It is during sleep that nutrition principally goes on; all animals that sleep much are disposed to fatness and corpulency; but they are less robust or vigorous; which shews, that though a certain portion of sleep is necessary for repletion, yet too much of it is weakening: It is more necessary to the young than the old: Infants sleep almost perpetually, which is necessary to their growth; old people, (unless it be the gross, short-necked, and corpulent) sleep but little; but this, like every thing else, is much under the influence of habit, as we see from the watchfulness of nurses, soldiers on their posts, persons keeping spell on plantations,

plantations, &c. Sleep seems in general to be less required in hot than in cold climates; at least the disposition to it prevails less in the former than in the latter. Negroes can bear the want of sleep surprisingly well; they will pursue their diversions, or travel the whole night, and return to their usual labour at the appointed time, without suffering much apparent inconvenience; but it is not to be supposed that a habit of this kind can be kept up long with impunity. The alterations of night and day mark the periods for sleeping and waking; and to sit up all night, and to sleep half the day, is surely a violation of nature and common sense. Almost all long-lived people have been in the custom of going to bed by times, and rising early. Occasional sleeping in the day, particularly after dinner, according to the custom of some nations, is not pernicious; but to some persons, particularly to invalids and dyspeptic people, it is recommended as salutary. SECT. IV.

SECTION V.

Repletion *and* Evacuation.

A CERTAIN balance is necessary to be preserved between the *ingesta*, or things taken into the body, and the *egesta* or what is thrown from it by the various excretions of perspiration, urine, fæces, &c. A suppression or diminution of the ordinary evacuations must give occasion to complaints in various ways. An excess of any of them, whether of perspiration, urine, or stool, must be equally hurtful, by debilitating the body; but the constitutions of men differ greatly, as to the quantity of matter thrown off by any particular emunctory; some people are little subject to sweat, but have an easy belly; others are costive and perspire greatly. The inhabitants of cold climates are more subject to a costive habit, and have SECT. V.

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greater strength.* Those of warm climates, being more bilious, have generally liquid or soft stools. An open belly is of particular importance to the latter, but the custom of procuring it, by the frequent use of medicines of any kind, is highly injurious + It should rather be promoted by the use of suitable food, drinking cold water, and using due exercise.

A free but not excessive perspiration, is supposed to be of more particular importance to health; and the sudden suppression of it, especially when profuse, is well known to be frequently followed with dangerous consequences. The inhabitants of hot climates are, in a particular manner, liable to suffer from this cause. People, when heated from exercise, should never cool themselves suddenly, either by opening their dress, or sitting in a current of air. Tetanus and palsy, in many instances, have been brought on by such imprudence. This leads to some remarks on the dress best suited to warm climates, as also to the best modes of constructing houses for coolness. Too thin a dress, particularly of linen, as that formerly in use, subjected people to the powerful action of the sun's rays on the one hand, and on the other rendered them more liable to sudden refrigeration, or cooling, on entering houses through which a strong current of air generally blows. The greater prevalence of belly-ache in former times, has not unreasonably been attributed to this cause. The customs of the present day are in the other extreme:

* Some persons are of a remarkable costive habit, whilst others have a lax one. Mr. —— was accustomed to go a fortnight without an evacuation. Mr. L. crossed the Atlantic three times, without having either time a passage through him. Dr. H. speaks of a person who, during thirty years of his life, had twelve operations daily, and afterwards, for seven years, only seven operations each day. He was at no time subject to emaciation or want of strength.

+ Many people fall martyrs to the custom of taking frequently, or as often as they think they have bile, either a vomit or purge. The remedy is worse than the disease: By this practice the formation of bile is promoted. The liver takes on an increased action which becomes habitual.

extreme: The thick cloth coats, and pantaloons, with boots, thick neckcloths, &c. are a dress better suited to the latitude of Russia than Jamaica; but the empire of fashion* will not be subverted by medical advice; so it will be in vain to recommend any other mode, than that which the *ton* prescribes. It may, however, be observed that woollen, that is to say, fine flannel or calico, is a better clothing to be worn next the skin than linen. It defends the skin better against the heat and cold of the external air; and, by absorbing the perspirable matter, carries it off insensibly, without occasioning the disagreeable sensations that arise from cold and wet linen.

What respects the other evacuations may be here omitted, except that of *Venery*, which is of too much importance to be overlooked: Excesses in this are attended with the worst consequences; *Nemo veneri crebro potest unquam litare*; or, whatever impunity may attend a too free indulgence in sexual intercourse in colder climates, the same is not to be expected here. The appetite may, indeed, be more predominant in warm climates, but the powers of the constitution are not always correspondent to the desires of men, which are frequently forced, or recur only in consequence of a habit of vitious indulgence. The instances of premature old age, in both sexes, which are so frequently to be observed in this and other warm climates, are to be considered as the effects of precocity, or a too early initiation into the mysteries of Venus. —*Quid cito fit, cito perit.*

Libidinosa enim et intemperans adolescentia, effætum corpus tradit senectuti. Cic.

SECTION

* In one instance reason has obtained the ascendancy over fashion; the use of stays, which served equally to conceal and destroy the shapes of women, is at last laid aside; but a late writer complains, that the abolition of one bad custom has given rise to another, viz. the wearing the cincture across the bosom instead of the waist.

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SECTION VI.

BATHING.—In treating of the several things which have a relation to health, and the prevention of disease, bathing, or lavation of the body, which is conducive not only to cleanliness, but to health and pleasure, must not be omitted.—A dirty skin, says Dr. M. is as disgusting as a dirty shirt. The custom of bathing is to be particularly recommended to inhabitants of warm climates, as a salutary and agreeable one, under certain limitations: These are, *1st*, That the person does not expose himself to an ardent sun, or cold wind. *2d*, That the temperature of the water be nearly the same as that of the atmosphere. *3d*, Not to use it after meals. *4th*, Not to remain in too long, nor to repeat it too often. *5th*, To dry the body afterwards. With these precautions, the practice can hardly ever be hazardous to persons in ordinary health; but such as are liable to consumptive complaints, disorders of the liver and bowels, *&c.* should be more reserved in the use of bathing. The prickly heat has been generally considered as a prohibition to bathing, but on no good or sufficient grounds; but what a certain writer* has affirmed, *viz.* that it can in no case be attended with bad consequences, can hardly be assented to. Where the efflorescence, or eruption, is very copious and fiery, shewing a tendency to inflammation, it may be prudent to abstain from bathing, particularly if the bowels are not in a very open state.

Hot

* Dr. M'Lean. *See Diseases of St. Domingo.*—Bontius, speaking of the prickly heat in the East Indies, cautions against the use of purgatives; which, he says, are the means of throwing the matter on the bowels, and causing dysentery.—*Hoc denique medicos et chirurgos obiter monitos volo, ne in his papulis purgationes, quantumvis leves instituant, ne materia acris ac biliosa ad intestina delata Dysenteriam creat; nam ego per incuriam et imprudentiam quorundam, hæc infortunia evenire non semel vidi. Bontii Hist. et Medic. Lib.* ii. 33. The prickly heat, according to Dr. Schott, is not an eruption, but actually an excoriation.

Hot and cold bathing are to be considered rather as remedies against disease, than a means of preserving health, and will, therefore, come under consideration in another place. SECT. VI.

Thus the subject of non-naturals may be concluded, and it is hoped that, from the observations made, it will be easy for every one to form for himself such rules as are necessary for maintaining individual health, and guarding against disease, in all circumstances and situations.

CHAPTER IV.

SECTION I.

On DISEASES, *their* DISTINCTIONS, SYMPTOMS, *&c.*

THE common notions of mankind, respecting health and disease, are sufficiently distinct to render any definition of either necessary in this place. There is, perhaps, no such thing as perfect health,* but such a state as admits of the free and easy exercise of all the functions, we agree to consider as such; and any interruption of these, attended with pain or uneasiness, is allowed to be disease. Diseases are variously distinguished, according to their nature, seat, causes, duration, termination, *&c.* CHAP. IV.

Diseases are, 1*st.* Local or general, internal or external.—2*d.* Of the fluids, or of the solids.—3*d.* Of the simple solids, or the vital solids; *viz.* the moving powers. They are either sporadic, affecting individuals only; endemic, affecting numbers at the same time; or epidemic, infectious and contagious, and general: Further, they are hereditary, proceeding from parents,

* The observation in morals holds with regard to health:—*Nemo sine vitiis nascitur; optimus ille qui minimis urgetur.*

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parents, or arising out of some particular conformation or constitutional temperament, as gout, scrophula, consumption, &c. Again they are, acute or chronic, inflammatory, nervous, putrid, convulsive, spasmodic, &c.*

One of the most important distinctions in diseases is, that of their being *idiopathic*, that is, primary or original; or *sympathic*, *viz.* symptomatic. It is well known that there is an universal consent between the several parts of the body, so that no one part can suffer alone; but this consent is more observable in some organs than in others; the stomach, in particular, sympathizes with almost every other part, so that sickness and vomiting may be symptomatic, or arise from a great number of different causes, affecting different organs; *e. g.* from affections of the brain, as in vertigo; fractured skull; from affection of the kidnies, in the case of stone; from the repulsion of gout, &c. &c. Diseases are also frequently converted into each other, either by what is called *Epigenesis*, or by *Metaptosis*, that is, a disease may either supervene to another, or it may be transferred from one part to another.—*See Ferriar.*

The same sympathy is observed between the uterine and genital organs, with other parts of the system; and, in an infinity of other cases, to trace which would require a separate publication.

NOSOLOGISTS† have endeavoured to class diseases according to

* Men derive a particular disposition to certain diseases from their trades, occupations, profession, and manner of life: The studious and sedentary are liable to one class of disorders—the labourer and mechanic to another. In this island, the persons most subject to be cut off by fevers and other acute complaints, are the mechanics, and medical men, who are more than any other description of people exposed to the inclemency of the weather, night air, and fatigue.

† An attempt has been made to class diseases on chemical principles, that is to say, as they depend on an excess or defect of oxygene, azote, &c. in the system; but this

to their nature, or *proximate cause*, but the task is difficult, and it still remains a matter of great nicety to discriminate complaints with accuracy: This can only be done by strict attention to the several symptoms, by comparing these together, and considering at the same time the age and constitution of the patient, the state of the weather, the endemic or prevailing complaints of the season: *e. g.* Supposing a patient has symptoms of sore-throat, the questions to be asked are; is the patient a child or an adult; a man or a woman; robust or weakly; is there much or little difficulty of swallowing; any external redness or swelling;—is the weather cold or hot; wet or dry;—is sore-throat a prevailing disease; is it attended with ulcers, and has it proved mortal? From a due attention to these several circumstances, a proper judgment may be formed of the nature of the disease, and a right mode of treatment fixed on;—for the means proper for curing inflammatory sore-throat, would be highly improper in the putrid kind; which is known and characterised from the inflammatory, by its being a disease that principally attacks children, women, and weakly people; by its not being usually attended with any great difficulty of swallowing, but with external swelling, scarlet eruption, and ulcers internally, *&c.*

It is in every case requisite to compare one disease with another, to which it may have any resemblance, that the real complaint may be understood; otherwise the cure prescribed must be at best precarious and uncertain, and may be dangerous. The symptoms which force themselves upon our

this is ridiculed by Fourcroy himself, the strenuous advocate for the admission of chemical principles into physiology and pathology.

Certain diseases are on the decline, whilst others are becoming more prevalent. According to Dr. Heberden, dysentery is less frequent. The deaths from apoplexy, palsy, and nervous complaints, are double what they were in 1700. Ricketts, scrophula, and leprosy, are much less frequent than formerly; whilst, on the other hand, consumption, gout, and lunacy, are more so. The mortality among women and children greatly diminished since 1749.

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attention, do not always constitute the worst of the disease. It is here the medical man of experience shews his superiority: Whilst a common observer is puzzled and confounded by the number of seemingly contradictory symptoms, a skilful practitioner sees, at a single glance, the disease, and directs the cure on safe and certain principles: This is an art not to be acquired without much observation, and shews the impossibility of rendering medical knowledge general, unless within narrow limits.

The consideration of diseases cannot be entered into here at large, according to their numerous divisions, causes, *&c.*; but it will be particularly useful, to assist the judgment of the unskilful, in shewing how the nature and the danger of diseases are to be ascertained and estimated, from the prevailing symptoms.

Death.—The causes of death are of three kinds: 1*st*, Such as affect the elementary composition of the solids and fluids, *viz.* scurvy, *&c.* 2*dly*, Such as destroy the organization or texture of parts, as tumours, *&c.* 3*dly*, Such as affect the vital principle, contagion, poisons, *&c.* *&c.*—*See Bichat's Researches on Life and Death.*

SECTION II.

SECT. II.

THE symptoms, or the signs, by which diseases are known, are such as regard chiefly the circulation, the respiration, the senses, the secretions and excretions, the heat of the body, *&c.*

HEAT.—The mean heat of the human body, in Europe, is ninety-seven degrees of Fahrenheit, and it undergoes little variation

variation from change of season and climate—it differs little in children and adults.—In health there is little relation between the heat and the pulse—the latter may be quickened without the other being increased. Under disease it rises and sinks below the natural standard—during the hot stage of fever it varies from one hundred and two to one hundred and twelve: Before death it sometimes sinks very low, and, in some cases, a considerable degree of heat remains for some time after death.* SECT. II.

A *cold skin* shews diminished arterial action, as in the beginning of intermittents, or general debility, as in persons worn down by chronical fluxes, &c. Cold sweats are the effect of weakness, and, in fevers of continuance, dangerous. Sometimes, however, they attend a favourable crisis in remittent fever. Heat and redness are the marks of local inflammations The heat of particular parts is an indication of certain diseases—as of the palms of the hands and cheeks, in consumption and hectic fever.

PULSE.—It is by the force and frequency, &c. of this, that we judge of the action of the heart, and estimate the violence of the disease; but there is much difficulty in doing this.† The pulse is so very different in different people, that to be able to make any proper judgment from it in illness, it is necessary to be acquainted, in some degree, with the natural standard of it. In a state of health, in adults, it is generally from sixty to seventy in a minute.—In some cases it may sink to fifty or forty, whilst in others it sometimes arises to one

* From experiments made by Dr. Chisholm, at Demerara, it appears that the European, in a tropical climate, has one and a half degree less heat than in his native climate, and nearly two degrees less than the negroes.—*See Chisholm on the Malignant Pestilential Yellow Fever, vol.* II.

† The observations of Solano, Bellini, &c. are, according to Dr. Heberden and Dr. Cullen, fanciful.

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hundred and one hundred and thirty. This may, in many cases, be guessed at from the make and constitution of patients. Tall and large men have commonly a slow but strong pulse: Short people, one that is quicker: The pulse of women, children, and delicate persons, is either quick and weak, or slow and weak. The pulse differs, in the same persons, at different periods of life; in juvenile life it is stronger and quicker, in old age slower and weaker. The pulse varies at different times in the day; being slow in the morning, fuller at noon, and quicker in the evening. In some persons, the slightest indisposition affects the pulse considerably. The pulse likewise varies sometimes in different sides of the body.*

From these circumstances, independent of many others which might be mentioned, the difficulty of judging from the pulse must be sufficiently apparent: It is, however, necessary to attend to it, as useful conclusions are to be sometimes drawn. The pulse, when stronger, harder, fuller, and quicker, than in health, shews increased action in the arterial system, and that the disease is of the inflammatory kind. A pulse, more or less of this sort, is observed in the beginning of most fevers, in all local inflammatory affections, *&c.* and is considered as a proper indication for blood-letting; but there are, however, certain exceptions.

A pulse, the contrary of the former; *viz.* a soft, slow, weak pulse, shews debility, or the want of due strength and excitement;—this is occasioned by great discharges of any kind, or by long illness.

A quick

* A person labouring under rheumatism, had a pulse in one arm only fifty, whilst in the other it was eighty.—(*See Zimmerman on Experience, vol.* I. *pa.* 285.) Notwithstanding this is mentioned on such a great authority, is there not a question as to the possibility of the fact? A late writer says, that in a phthisical patient the pulse had totally failed in one arm, whilst it continued strong in the other.

A quick and weak pulse, of all others the most dangerous, shews great irritation, along with great debility.—A soft pulse, though in general a mark of debility, attends some inflammations; *viz.* of the bowels, putrid sore-throat, &c. An intermitting pulse shews irregular excitement, and is, in general, considered as an alarming symptom, but it is not always so. Some persons are subject to it, and it is frequently observed in hysterical affections, in dropsy of the thorax, &c. SECT. II.

There are many other kinds of pulse* that might be pointed out; but, as it is not from the pulse merely that our indications are to be taken, other circumstances must be at the same time considered; *viz.* Respiration, &c.

The *respiration* is variously affected by disease—in health it is slow, equal, and easy, but its being not much altered is no proof that the patient is not in danger. A great respiration denotes nothing dangerous, but a small respiration is highly alarming, particularly when quick at the same time. A slow respiration sometimes precedes hysteric fits, &c. A great and quick respiration attends fever and inflammation, delirium, &c. Laborious breathing, with elevation of the shoulders and rattling, shews suffocation from serous or mucous effusion, &c. into the lungs, as in peripneumony, asthma, croup, &c.—Interrupted respiration during sleep, causing the patient to awake suddenly, with fright, is a sign of hydrothorax. In apoplexy, and after large doses of opium, the breathing is slow and large, with loud snoring.

The *state of the brain and external senses* is an object of great attention under disease. Febrile disorders generally commence with some affection of the head, as vertigo, or pain accompanied

* The variations of the pulse respect its—1*st*, frequency; 2*d*, strength; 3*d*, hardness; 4*th*, fulness; 5*th*, regularity.

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panied by weariness and sickness at the stomach. Delirium is of two kinds; either violent, from too great determination to the head, and consequent excitement; or else low wandering delirium, from deficient or irregular excitement; the former attends inflammatory diseases, madness, &c; the latter, as likewise coma, or sleepiness, nervous fever, &c. The latter species of delirium is in general the most dangerous, though the former frequently terminates in the latter. Too great acuteness, and on the contrary torpor, in the external senses, are opposite states corresponding with the two species of delirium. Watchfulness, great sensibility to light, sound, &c. are marks of great excitement and irritation; *vice versa*, dimness of sight, dullness of hearing, torpor and sleepiness, shew a deficiency of nervous energy, and are dangerous symptoms.

The temper of mind, and the *state of the passions*, have a great connexion with certain diseases. Under some complaints, as hysteria, epilepsy, gout, &c. the mind is extremely irritable;—in melancholy, the mind is susceptible of hardly any impression but from fear;—consumptive patients have seldom any apprehension of their own danger, whilst dyspeptic and hypochondriac persons, in the language of St. Paul, used in a very different sense, die daily, or live in constant fear and apprehension of death, whilst enjoying apparent good health.* This is the curse of the opulent and indolent, and an infinitely greater one than any that results from poverty and misfortune.

The perspiration in disease is sometimes in the excess, and sometimes defective; in all febrile complaints the skin is, for the most part, dry and parched; a sweat breaking out is often a crisis. Excessive sweats, called colliquative, such as happen in consumption, soon wear down the patient. A particular smell

* This is strongly depicted in Mr. Hayley's character of Ennui, which I am sorry I cannot with propriety quote.

smell attends the perspiration in certain diseases, particularly at the crisis; which is well known to experienced nurses and practitioners. SECT. II.

*The Urine** undergoes several alterations in disease. In the commencement of fevers, it is commonly high coloured and turbid, but in slow nervous fevers, pale: Towards the conclusion of fever it becomes cloudy, and deposits a sediment, which is often a sign of crisis. In hysterical paroxysms it is copious and limpid: In dropsies, in small quantity and high coloured: In diabetes it exceeds in quantity the liquor drank, and is sweet to the taste, containing real sugar: In jaundice it is yellow, from the bile admixed with it: Sometimes it contains a great quantity of mucus, secreted from the coats of the bladder, in what is called the *catarrhus vesicæ*, or *cystirhœa;* and, in cases of internal suppuration, the purulent matter absorbed is frequently thrown off with the urine: In the gravel and stone, the sediment is gritty. These are perhaps the only appearances in the urine, from which any judgment can be made, respecting the nature and danger of any complaint. The skill of urine doctors, in whom the ignorant have so much faith, is all pretence and imposition.†

The stools are sometimes, as in cholic, indurated; or liquid and bilious, as in *cholera morbus, diarrhœa, &c.*; mucous, slimy, and

* The urine contains the largest proportion of azote of any of the animal fluids. The lungs are the emunctory for carbone—the liver for hydrogene—and the kidnies for azote. Of two hundred and seven parts of urine, two hundred are converted into carbonate of ammonia—*(See Ann. Chem.)* In the healthy state, the urine of young persons is gelatinous, but in old persons it is surcharged with the earth of bones, *viz.* calcarious phosphate. The phosphoric acid, either in a separate or combined state, exists in proportion to the destruction of the solids by age.—The solids of children, labouring under ricketts, appear to be absorped.

† If it was consistent with the nature of this work to indulge in pleasantry, a number of ludicrous anecdotes might be here related, of the artifices and detection of these impostors.

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and bloody, as in dysentery, and the piles; white or chalk coloured, as in jaundice, from having no admixture of bile; or offensive, black, and putrid, from internal hæmorhagy; green, from too much bile and acidity in the stomach, as in children. The crisis of fevers is often attended with a looseness, as well as flow of urine and sweat.

The matter thrown up in vomiting, is also of a various nature; it is sometimes watery, consisting only of mucus or gastric juice; at other times, this is mixed with acid or bile, or tough phlegmatic bile; it is either yellow or green, and sometimes black. Pure blood is also sometimes thrown up from the stomach. Physicians are not agreed in their opinions concerning the nature of the black vomit in yellow fever, but it seems most probably to be blood effused, or oozed, into the stomach, and which has undergone a partial decomposition.

The matter of expectoration, or that which is thrown up from the lungs, is mucus; sometimes very acrimonious, as in catarrh and whooping cough; tinged with blood, as in inflammations of the lungs; or pure blood, as in hæmoptoe; lastly, purulent, as in consumption. A free expectoration is of great service in pleurisy, asthma, croup, *&c.*

It is usual to examine the state of the tongue, in all febrile diseases, which is generally dry, and furred or covered with a crust; this is, in inflammatory complaints, white; in putrid ones black. When the tongue grows clean and moist, it is a favourable sign; on the other hand, when, from being white, it grows blacker, and the gums and teeth put on the same foul appearance, it is a mark of a bad disease. The tongue, in yellow fever, is sometimes morbidly clean, or of a bright red colour.—*See Dr. Ferguson on the Diseases of the Tongue.*

There

There are numerous other circumstances to be attended to, in forming a judgment of a patient's complaint; as his physiognomy or look; which, in some cases, as consumption, fever, &c. is strongly characteristic; his appetites and inclinations; his posture, or manner of lying in bed; the state of the eye, &c. but, to dwell on these, would be to digress too widely. This introductory part will be concluded by a few observations on medicines, and their operation. SECT. II.

CHAPTER V.

SECTION I.

On REMEDIES, *their several* KINDS *and* OPERATION.

WHATEVER operates on the body in a diseased state, so as to produce a change of any kind favourable to health, is medicinal: Exercise, regimen, &c. &c. may be therefore included in the list of remedies, though not making a part of the *materia medica*. CHAP. V.

The substances employed in medicine are taken from each of the three kingdoms, fossile, vegetable, and animal, and act variously, according to their appropriate qualities, either chemically, or mechanically, but much more generally by their specific power, with respect to the living principle.

Medicines are considered as acting on the solids or fluids, but principally on the former, as the state of the fluids depends on the action of the solids, though not entirely; for the nature of the aliment constantly used, will certainly occasion a particular state of the fluids or humours, rendering them either bland or acrimonious. 'Some medicines, as astringents, are thought to act on the simple solids, in condensing and hardening them,

CHAP. V. in the same way they tan leather: On the contrary, emollients relax and soften; others act as stimulants, exciting motion in the whole system, or in particular parts only: Tonics are such as increase the force and vigour of the system: Sedatives and antispasmodics, such as allay excessive and inordinate motions. To one or other of these heads may be referred the action of almost every remedy.

Evacuants, as vomits, purges, &c. produce their effects by a local action, which may be either stimulant or sedative, or of a peculiar kind; for the *modus operandi* of medicines is not well understood.

The few short remarks which it may be useful to make on the use of several classes of medicines, may be premised by saying a word or two on blood-letting; which, though not a *pharmaceutical* subject, is a *therapeutical* one of great importance, that may here come not improperly under consideration.

SECTION II.

On BLOOD-LETTING.

SECT. II. THE primary effects of blood-letting are to diminish plethora, *i. e.* to lessen the quantity of blood, and take off the fullness and tension of the system; its secondary effects are, to moderate the action of the heart, lower the pulse, and weaken the moving powers: Hence the uses of bleeding are to be understood. It can only be indicated where these ends are to be obtained; and, if employed improperly, will always have bad effects.* It is a question whether it should ever be used

* The effect of blood-letting, according to some pathologists, is the abstraction of oxygene.

used in general fever, or in fever not attended with local affection, even in cold climates; but more especially in warm ones —in all cases, however, of local inflammation, it is more or less requisite, and sometimes indispensable, as, for instance, in pleurisy, rheumatism, inflammatory sore-throat, inflammation of the bowels and kidnies, first stages of consumption, &c. It is sometimes useful in spasmodic complaints, as asthma, hysteria, and epileptic fits, which are more apt to occur in persons predisposed by plethora, or a full habit. It is also necessary, in some cases, for restoring suppressed eruptions (exanthemata); and evacuations, as the catamenia in robust females. Blood-letting cannot be considered so generally useful in hot as in cold climates—it agrees better with middle aged people, than with the very young or old, though old people often suffer from plethora. It produces the greatest effects when from a large orifice. Such persons as are liable to faint should be bled in a recumbent posture, and from a small orifice. SECT. II.

The quantity of blood should be in proportion to the violence of the symptoms,* the age, constitution, &c. It is better, in most cases, to repeat the operation, than to take too much at once; the propriety of the bleeding already performed, or of further bleeding, can be, in some measure, determined

* There is a very important observation to be made here respecting the quantity of blood necessary to be drawn; *viz.* that the good or bad effects of bleeding are not in a ratio with the quantity taken, *e. g.* supposing a patient had experienced great relief in any complaint, from the loss of a large quantity of blood, as sixteen or twenty ounces, we are not thence to conclude, that he would have experienced a proportionate relief from a smaller quantity. Dr. Gordon says, that in the puerperal fever the taking away only eight ounces of blood always proved fatal, but bleeding to twenty or thirty ounces never failed to save the patient. Dr. Sydenham makes the same remark on bleeding in the plague. On the same principle, Dr. Jackson bled in the fever at St. Domingo, to thirty ounces. And Dr. Rush has strenuously defended this practice of bleeding copiously, in the malignant or yellow fever of America. In the plague imported into England, in 1664, bleeding, in the beginning, was the only effectual remedy. But no satisfactory conclusion can be drawn from hence as to its utility or danger, in other epidemics, or in other climates.

CHAP. V. from the appearance of the blood drawn; which, in cases of inflammation, is *sizey*, *i. e.* is covered with a firm coagulum, or buff-coloured coat, swimming in a great proportion of serum.

Blood is best drawn, as nearly as possible, from the part affected; hence the use of scarification, with cupping, in a variety of cases, as ophthalmia, pleurisy, &c. Bleeding frequently, in small quantities, causes obesity or corpulence; too large bleedings cause dropsy. When people have been in the habit of it, it is dangerous to omit it; or else it is necessary to insert an issue, &c.

SECTION III.

SECT. III. *EMETICS.*—The effects of these are to empty the stomach, promote the secretion of the gastric liquor, to cause a flow of bile into the stomach, to stimulate the whole system, and increase the circulation at first, and render it afterwards more equable,—to invert or check the peristaltic motion of the bowels.

Emetics are useful in the beginning of fevers, to clear the stomach of indigestible and irritating matters: In jaundice, for agitating the viscera, and opening the obstructions in the gall ducts: In all cases of langour and torpor, for exciting the system, as in obstructed menses, &c. In coughs, asthma, blood-spitting, for promoting expectoration, and taking off the determination of blood to the lungs.* In madness, in palsy, as

* Some years ago Dr. Marryat, an heteroclite kind of physician, made a great noise with his dry vomit of blue vitriol, as others have done since with their vitriolic solution, their salt and lime juice, pepper medicine, and other infallible things; which, though useful in particular cases, do not appear to deserve the unqualified character given of them.

as also in apoplexy, &c. for relieving congestion of the head; SECT. III.
but, in the last case, bleeding is generally to be premised.

These are some of the many useful purposes answered by emetics, but there are cases where they are prohibited, as where there is great fulness, short neck,* with signs of determination to the head, (unless after bleeding;) in cases of great debility, or extreme mobility; in inflammation of the stomach and obstinate costiveness of the bowels. They are also to be abstained from by women with child, as they are apt to bring on abortion; sometimes, however, the operation of a gentle emetic is less dangerous than the natural retching of women in this situation, which it will put an end to.

Emetics operate very differently on different people: Mad persons, and such as have their stomachs loaded with mucus, require large doses. Those subject to acidity are easily affected by antimonials. The frequent use of emetics tends to debilitate the system. The practice, therefore, of dry vomits, and washing the stomach, in the manner they have been recommended, is very exceptionable, particularly in old age, the fibres being then rigid; and also in cases of mal-conformation and hernia or rupture.

SECTION IV.

CATHARTICS, or purgatives, are either mild, for evacuating the intestinal canal of its ordinary contents, such as manna, castor-oil, magnesia, sulphur, &c. or of a more active nature, for causing a copious secretion into the intestines, and for evacuating and weakening the system, which they do equally SECT. IV.

* Particularly in the cases of persons of long necks. See case of a soldier in this island, who ruptured the gullet, with the operation of a vomit. *Henderson, Med. Com.*

CHAP. V.

equally with blood-letting. The different purgatives, operating sooner or later in their progress through the canal, occasion some, a greater flow of bile; others, more watery discharges. Hence an election is to be made, according to the purpose to be answered. In fevers, inflammations, &c. the purgatives employed should be such as evacuate copiously, without stimulating, as glauber's salts, jalap, cream of tartar, infusion of senna, &c. Where the bowels are to be excited and strengthened at the same time they are evacuated, as in hypochondria, dyspepsia, chlorosis, the warm purgatives, (*viz.* rhubarb, aloes, &c.) are to be preferred.

In dropsy, and in congestion or fulness of the brain, where it is necessary to cause copious watery discharges, and to excite the action of the absorbents, drastics, or purges of the strongest kind, are required; *viz.* scammony, elaterium, calomel, &c.

The habitual use of purgatives, except in particular cases, is very pernicious: they destroy the tone of the bowels, and confirm the complaints they are intended to remove.* Purgatives lose their effect by repetition, unless taken at first in a very large dose; in that case, a small dose afterwards is sufficient to produce a considerable effect.†

CLYSTERS are often substituted in the place of cathartics, and in particular cases advantageously. as, 1*st*. Where costiveness prevails, or exoneration of the lower belly only is required. 2*d*. In cases of colic, inflammation of the bowels, bladder, kidnies, womb, &c. where they act as a fomentation. 3*d*. In cases of

* Many healthy young men fall victims to the practice of taking frequently salts, and other purgatives, for carrying off bile. But, in many diseases, the practice of frequent and gentle purging is found to be of the greatest service, and in some cases where they were formerly prohibited, *viz.* in Saint Vitus's dance, and other nervous complaints, in typhus fever, &c. &c. *See Hamilton on the use of Purgative Medicines.*

† Dr. Darwin has explained this curious circumstance. *Zoonomia.*

of apoplexy and resuscitation of drowned people,* &c. where a stimulus is wanted. *4th.* In nervous diseases, as hysteria, asthma, &c. where fœtid clysters administered have considerable antispasmodic virtues. The inordinate use of clysters, or *lavemens*, among the females of a certain nation, is the cause of their pale complexion, and the weaknesses many of them labour under. SECT. IV.

SECTION V.

On DIURETICS, DIAPHORETICS, &c.

DIURETICS, or such medicines as act on the kidnies, exciting a greater flow of urine, are principally used for carrying off the water in dropsical complaints, or for removing cutaneous defædations; but some of them, as neutral salts, are also to be considered as having a weakening effect, and are proper in all febrile and inflammatory disorders; the stimulating diuretics, as the turpentines, balsams, &c. are useful for exciting the action of the weakened vessels of the urethra, &c. SECT. V.

DIAPHORETICS, or sweating medicines, are also of two kinds; either such as stimulate and increase the action of the extreme vessels, or else such as take off spasm and constriction on these vessels. The former, consisting of the gums, volatile spirits, wine, snake root, opium, &c. are useful in low fevers requiring excitement, in chronic rheumatism, &c. Acids, or acids and alkalies combined, called neutrals, antimonials, and other emetics and narcotics, and the warm bath, are used in hot fever, inflammation, &c.†

SUDORIFICS

* Their use here is questionable. *See method of recovering persons apparently drowned.*

† See an excellent paper on the use of sweating medicines, by Dr. Millar. *Med. Repos. vol.* II.

CHAP. V. *SUDORIFICS* are supposed to act by producing a transfer of excitement to the skin.

EXPECTORANTS are such things as promote a discharge from the lungs, or the bronchiæ.

What remains to be said of the other classes of medicines, *viz.* stimulants, tonics, sedatives, antispasmodics, &c. will be more properly mentioned under the complaints where they are indicated. This chapter on remedies will therefore conclude with a few general observations respecting blisters, and the cold and hot bath.

SECTION VI.

On BLISTERS, ISSUES, *and* SETONS.

SECT. VI. BLISTERS appear to act in three different ways, and are therefore variously useful: 1*st*, By producing vesication, and a consequent discharge of serum, by which the fulness of the vessels in the part is diminished: 2*d*. By stimulating the extreme vessels, the action of the neighbouring vessels, in an inflamed state, is lessened: 3*d*. By producing local pain, they relieve general irritation, and prove antispasmodics.*

Whether

* The application of blisters is so general, that the principle on which they are applied ought to be well understood: In addition, therefore, to what is above observed as to the effects and uses of blisters, I shall, for the benefit of young practitioners, quote what Dr. Bradley has said on the subject, in his Thesis published at Edinburgh, 1791:

"*Nobis persuasum est, cantharidum vim virtutemq. salutiferum a vi stimulatrice duplice modo, rationeq. exserta, pendere, viz. 1mo locali 2do. generali—Epispasticis fere lætant omnes febres nisi hecticæ—phlegmasiæ nisi nephritide, cystitide,—exanthemata dempto erysipelate—hæmonhagiæ—comata—spasmi. Epispastica fugiunt vesaniæ nisi hypochondriasis et mania,*" &c. &c.

Whether they should be considered as general stimulants is doubtful, though they are often applied with this view. It is by their discharge and local irritation, that they prove so useful in all topical inflammations; by their antispasmodic power, they change the determination of the blood and nervous power, and relieve the affections of distant parts, as the brain, lungs, liver, &c. They are more generally useful with phlegmatic people; in some persons, possessed of great mobility, they produce disagreeable effects; but they are of great service in certain spasmodic complaints, as asthma;—in the colic, by relieving the constriction of the bowels, they produce stools, where purges have failed. SECT. VI.

ISSUES and *SETONS* have similar effects, as they also exhaust the coagulable lymph, and thereby remove phlogistic diathesis, or an inflammatory disposition: But the good effects of these may be perhaps accounted for differently, *viz.* from local excitement occasioning a transfer of morbid action.

SECTION VII.

On HOT *and* COLD BATHING.

BATHING as conducive to health, or of the use of lavation, has already been spoken of; but it is necessary here to consider it in the light of a remedy. SECT. VII.

Effects of the Cold Bath.	*Effects of the Hot Bath.*
1. Abstersion of the skin.	1. Abstersion of the skin.
2. Abstraction of heat, therefore sedative.	2. Increase of heat, therefore stimulant.
3. Condensation, therefore tonic: Also, sending the blood	3. Rarefaction, therefore relaxant: Also, occasioning a

CHAP. V.

Effects of the Cold Bath.	*Effects of the Hot Bath.*
from the surface to the internal parts, and so exciting the circulation.	freer circulation in the small extreme vessels; hence deobstruent.
4. Horror, exciting contraction of the skin; which, by sympathy, is propagated over the whole system; hence tonic.	4. Soothing sensation, communicated by sympathy to the whole system; hence antispasmodic.

From this comparative view of the effects of hot and cold bathing, the use of either may be understood. The cold bath is necessary, wherever there is a general loss of tone and vigour in the system; hence, it is proper to be used with weakly children, relaxed females, in some spasmodic complaints, in cases of general or local debility, after chronic rheumatisms, &c. It is improper in cases of a very full habit; in cases of diseased lungs, liver, &c.; and where there is great debility and emaciation, a certain degree of strength being required for the sake of re-action. It should be sudden and general, or else the head should be first immersed, otherwise it will occasion head-ache and perhaps rupture of blood vessels and apoplexy.*

The *Shower Bath* therefore is, in most cases, to be preferred, as not being attended with this danger, and as giving at the same time a greater shock. The body is to be quickly dried, and chafed afterwards, and some exercise used. If the bath excites no subsequent glow or warmth, it is a sign it is of no use, and should therefore be discontinued. It is highly dangerous

* Every bath below ninety-six degrees of Fahrenheit diminishes the quickness of the pulse—and more or less, in proportion, as the pulse is above the natural standard —*(Marcard in Ann. of Med.)* Warm baths, not above ninety-six, are not debilitating—at Pfeffer, in Switzerland, at Baden, and some other places, invalids are accustomed to spend several hours in the day in the tepid baths—*(See Beddoes.)* The affusion of warm water on the body refrigerates more than cold water—this happens on account of the quicker evaporation it produces.

gerous to go into a cold bath when the body is in a heated perspirable state, but a little exercise is sometimes previously necessary, to increase the circulation; which, if too languid at the time of going into the bath, the proper excitement cannot take place. Too frequently repeated, it causes leanness and emaciation, hence appears its use in repressing corpulency.

The *Air Bath* (as it has been called), or exposure of the naked body for a certain time to the atmosphere, can have but little effect in a tropical climate, unless in particular seasons or situations.*

The uses of the *Hot Bath* may be inferred from what has been said of its opposite, the cold bath. Its effects are various, according to the different degrees of temperature. A bath from 96 degrees, (blood heat) down to 86, is very refreshing, and and does not appear to relax or weaken. It lowers the pulse indeed, and is therefore recommended in phthisis, as well as in other cases where the force of the circulation requires to be mitigated. It is proper in cutaneous foulnesses, especially when medicated with sulphur, &c. It is necessary for opening the surface, and relaxing the rigid and contracted parts, after rheumatism, gout, &c. It affords great relief in cases of internal inflammation, as of the bowels; in cases of colic; in cases of stone in the bladder, stone in the gall ducts; strangury; ischury; stricture of the urethra, &c. In various spasmodic affections, as tetanus, &c. it is also serviceable.† The *pediluvium* and *fomentations*, which are to be considered as partial hot bathing, are in some cases to be preferred.

* Lord Monboddo, who passed his 90th year, was accustomed to this kind of bath. Every day he stript himself, and took exercise naked in the open air, rubbing himself afterwards with aromatic oils.

† The operation of the cold bath in convulsion and insanity, may be accounted for in two ways: 1st, It may act, according to Darwin, as a powerful stimulant, by increasing sensation and destroying volition; or, 2dly, according to Hunter, it may produce an action in the system incompatible with the previous diseased action.

CHAP. IV.

There is danger in using the bath too hot, or continuing in it too long, and in drying and cooling the body too precipitately.* In some cases it may be employed to give the cold bath greater effect: Dashing cold water on the body, immediately after coming out of the hot bath, though in some cases it might prove highly dangerous, in others has been found salutary and beneficial.

MEDICAL.

* Dr. Currie denies this: Dr. Fordyce, Sir Charles Blagden, and the other gentlemen who made the experiment, to ascertain what degree of external heat the human body could bear, went out naked from the room, heated to 240 degrees, into the cold air. It is the practice of the Russians to plunge into snow, or the cold bath, immediately after they come out of the vapour bath of a very high temperature.

MEDICAL ASSISTANT;

OR,

JAMAICA PRACTICE OF PHYSIC.

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APPENDIX.

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CHAPTER I.

ON FEVERS.

IN treating of the several maladies incident to the human body, there is a propriety in beginning with such as are most general and most fatal. Fevers are the disorders that carry off the greater part of mankind in all climates, more especially in hot ones; and fever is the attendant on most other complaints.

In what fever consists, or what constitutes it, it is not easy to define;* in some or most cases of fever, there are marks of increased action in the sanguiferous or circulatory system; *viz.* heat of the body, quick and strong pulse, *&c.* but in others there are marks of the contrary—the heat and pulse being below the natural standard. Commonly fevers begin with the first mentioned set of symptoms, and end with the latter.

* What is new and rational on this intricate subject may be seen in Wilson, Currie, Clutterbuck, and Beddoes. Dr. Clutterbuck contends that *fever is an inflammation of the brain*; but, if the term inflammation be allowed, it must be understood in a new sense; for how can inflammation of the brain be supposed to exist in the intermission of fever. There are many other objections to this theory—(*See Edin. Med. Jou. Jan.* 1808.) Of the other theory of fever, *viz* that the proximate cause is *debility*, it must be observed, that this debility must be of a peculiar kind; for fever does not attend every species of debility. It is of much more importance to attend to the phenomena of disease, than to seek after the proximate cause. What does it signify to know which is the primary seat of fever, the brain or the stomach, since they simultaneously suffer.

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Fevers, in which great symptoms of ardency (*viz.* heat, flushing, frequent and strong pulse), with but little debility, prevail, are called *inflammatory*. Those attended with great weakness, low pulse, derangement of the senses, &c. are named *nervous*;—if the latter are accompanied with petechiæ, or red pimples, and other assigned marks of putrefaction, they are called *malignant, putrid, &c.**

There are no fevers, strictly speaking, of a continued form; but those in which the remissions are less observable are so called. Where there are obvious paroxysms or renewals of the fever, it is either remittent or intermittent, according to the degree of abatement in the interval. Most fevers are preceded by weariness, head-ache, pains in the head and loins, sickness at the stomach, coldness or shivering, &c. but they do not, all or any of them, attack uniformly in the same manner.

Fevers have a more or less dangerous tendency, according to their original nature, or according to the violence of their symptoms, and the right or wrong treatment in the beginning. Bad symptoms in fever are delirium, and particularly of the low kind; or coma, that is stupor and sleepiness, which are worse than raving delirium. Black tongue, fœtid breath, and augmented respiration, incessant vomiting, hiccup, involuntary stools, restlessness, anxiety, picking the bed clothes, starting of the tendons, convulsions.—The crisis of fevers is generally preceded by a sweat, diarrhœa, moist tongue, a sound refreshing sleep, with a desire for some particular food or drink; which, it is in general safe to indulge, within discretionary limits.

Not

* Dr. Rush, and some others following him, have rejected the nosological arrangement of fevers generally received. According to these authors, there is but *one* fever; but of fever there are *several grades* or states. These different states of fever, as they are described, correspond, however, so well with the genera and species of nosologists, that there can be no good reason for the innovation proposed; and in this work, which is intended as a popular one, the old and generally understood distinctions are retained.

Not to dwell longer on general observations, I shall proceed to treat, in the most succinct and intelligible manner, of such fevers as are found principally to prevail in Jamaica, and other hot climates. CHAP. I.

INFLAMMATORY FEVER.

It is reasonably doubted whether there be, strictly speaking, any such thing as inflammatory fever, or fever with the symptoms before-mentioned, unaccompanied by local affection. In rheumatism, in pleurisy, &c. the fever is of the inflammatory kind, and prevails in hot as well as cold climates: The symptoms, too, of most fevers, in the commencement, appear to be, more or less, of the inflammatory kind; but a fever purely inflammatory, beginning and ending as such, without any local complaint, or not terminating in symptoms of a different nature, if it be any where to be met with, is rarely found in Jamaica: It may, nevertheless, be useful to suppose such a fever; because, if it does not exist as a distinct disease, it is found in the beginning, or is an accompaniment, of others. Inflammatory fever, then, is known by a quick, full, strong pulse, great heat, and redness of the face, violent thirst, dry tongue, high-coloured urine, &c. &c. It attacks persons of the sanguine constitution in juvenile and middle life. It is generally brought on by exposure to cold and heat—wet—fatigue—by great exertion—violent passions, &c.

The proper mode of treatment in this fever is, by what is called the *antiphlogistic* regimen, which consists in the use of all those means adapted to lower the circulation, and cool the body; *viz. bleeding,** *purging*, the *drinking of acid and diluting liquors*, &c.

In

* In the case of inflammatory fever, where there is an increase of arterial action, with an augmentation of heat and sensorial power, blood-letting has been universally employed; but a late author, Dr. Huggan, of the Brunonian sect, objects to the practice of bleeding,

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In such cases as are attended with signs of local inflammation, *viz.* in rheumatism, pleurisy, &c. bleeding is indispensable, but, in others, caution is requisite; for, although the fevers of hot climates frequently commence with symptoms of great ardency, they do not long preserve their character: Whatever momentary relief the patient may experience from the loss of blood, a sad reverse is apt quickly to follow, the patient's strength irrecoverably sinking.

Vomits are seldom requisite in fevers of the inflammatory kind, but *purges* are universally so—these should be of the cooling kind, such as Glauber's salts, tamarinds, cream of tartar, &c. *See page 52.* *Forms, No. 2, 3, 4, 5, 12.*

Clysters of the same nature are sometimes adviseable, previous to the administration of purges, or serve on occasion as substitutes. *See Clysters, page 54. Forms, No. 57, a, b, c.*

Refrigerants, or cooling medicines, such as nitre, and the other neutral salts, saline mixture, &c. are next to be recommended. *Forms, No. 7, 8.*

Antimonials are given in small and repeated doses, to open the skin; *viz.* three grains of James's powder, or five grains of the antimonial powder; or, from ten to thirty drops of antimonial wine, in a little barley-water, every two, three, or four, hours, according to the urgency of the symptoms. *Forms, No. 9, 10, 13.*

Diluents, or cooling acid drinks—such as lemonade, barley-water, acidulated with lime-juice; sorrel drink; vinegar and water sweetened with honey, and flavoured with a little lemon peel;

bleeding *in toto*. "It is," says he, "seldom necessary, or rarely does good, and is frequently hurtful. In the place of bleeding he prescribes opium, which, according to him, more speedily and effectually exhausts the sensorial power!!!"

peel; cinnamon water; cream of tartar drink, &c. These liquors are not only highly grateful in allaying thirst, but prove cooling, opening the skin, and promoting urine. CHAP. I.

Washing or sponging the patient's forehead, temples, neck, and breast,* with camphorated vinegar and water; putting his feet in warm water, with vinegar; are means of allaying head-ache, and diminishing the heat of the body.

Cool Air, and sprinkling the chamber frequently with vinegar, are refreshing and conducive to the same end. Too much light, noise, company, exertion in sitting up, and whatever can irritate and stimulate, are, in all cases of fever, to be carefully prevented and avoided; for the same reason, none but light and watery aliments should be made use of in such fevers, or under inflammatory complaints; such as panada, water gruel, barley-water, rice-gruel, &c.

Some of the fruits are allowable, as granadillo, sour-sop, pine-apple, oranges.

In

* Dr. Currie recommends the aspersion of cold water over the whole body; as also the drinking of cold liquors in the hot stage of fever—a practice now general, but which must by no means be employed in the cold fit; nor after perspiration comes on. After ample experience, however, of the affusion of cold water in fever, as recommended by Dr. Jackson, Dr. Wright, Dr. Currie, and others; it is not found here so generally useful as was expected; and the frequent aspersion or ablution with vinegar and water, appears to have a better effect than the dash, in reducing the temperature. Whatever power the latter may have in changing particular actions, and breaking certain associations, its effect, with respect to temperature, is more transitory; and the frequent repetition of it is harassing both to the patient and the attendants. Dr. Jackson, upon further experience of the use of cold water in fever, says, "that in general it refreshes for a time, but does not change the disease, nor arrest its progress. Morbid heat," says he, "may be abated, while the disease continues; cold bathing may sometimes be of use, where there is no increase of heat, *e. g.* in fainting, convulsion, &c. On the other hand, an excess of heat may exist, where the application of cold would not be proper; *viz.* where there is a deficiency of cutaneous sensibility. Heat indicates the use of the cold bath; but not every condition of heat." This is an intricate subject, that requires further elucidation.

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In the decline of fever, the patient may have a little wine and cinnamon added to his panada, sago, &c. or chicken water, beef tea, &c. may be given.

Inflammatory fever is generally of short duration, and declines without any evident marks of crisis, or leaving any effect, except a general debility, which necessarily succeeds every kind of illness; nothing, therefore, is requisite in the convalescent state, but care; changing the bed chamber as soon as the patient can bear removal, serves greatly to revive his spirits, and thereby conduces, in all cases of fever, much towards recovery; but change of air or place contributes still more so. I think it, however, requisite to impress on the minds of persons, the danger that attends moving convalescents prematurely. I have seen numbers fall martyrs to this imprudence. Patients, after having been free of fever, and in a favourable state of recovery, by undergoing too much exertion and exposure in a debilitated state, have had a sudden relapse, and sunk immediately. There are some cases, however, where removal, even under circumstances of great debility, may tend to recovery.

Nothing is here said of *Blisters* in inflammatory fever, because where there is no local affection, it is thought there can be no indication for them;* but, wherever delirium occurs, or any sign of topical determination, they are to be immediately applied, and as near as possible to the part affected; to the head or temples (these being first shaved) in cases of delirium, or to the nape of the neck—to the side in pleurisy, &c.

LOW

* This, however, may be questioned. There are, perhaps, certain cases in which blisters are serviceable, where no mark of local affection exists, *e. g.* applied previously to the paroxysm of an intermittent, they prevent it, and in the long protracted hot stage they succeed sometimes in accelerating a remission. In the remittents of negroes, the application of blisters will frequently preclude the necessity of giving the bark.

LOW NERVOUS FEVER.

This fever, called by physicians *typhus*, is one directly opposite to the inflammatory fever just treated of—though not frequent in Jamaica, in its pure form, or as it commonly occurs in colder climes, it nevertheless shews itself in different shapes.

Persons most liable to this fever are the weakly, and such as have been reduced by other disorders, or exposed to fatigue, damp air, grief of mind, &c. It does not attack suddenly, but creeps on insensibly, with dejection of spirits, lassitude, disturbed sleep, loathing of food—the pulse and heat being not much increased. After some days vomiting, delirium of the low kind, or raving, &c. come on, with great restlessness and prostration of strength. Ultimately, after a longer or shorter duration of the foregoing symptoms, all the powers of life sink, the patient becomes comatose and insensible,—passes his excrements involuntarily—has cold sweats, subsultus, or convulsive twitchings or startings of the tendons, hiccup, &c. The pulse in this fever is never strong and full, but, on the contrary, always quick and weak, sometimes intermitting. There is but little heat or thirst; the tongue is moist, and covered with a white slimy crust; the urine is pale, &c. *Typhus* is sometimes combined with inflammation of the peritoneum; and attends other complaints, as influenza, peripneumony, measles, &c.

The symptoms in this fever all shew excitement, concurring with great debility:* The cure, consequently, must consist in removing both: *Bleeding*, *purging*, and all weakening

 evacuations,

* This is the inirritative fever of Dr. Darwin; which, according to him, is owing to a deficiency of sensorial power, from inaction of the brain. *See Zoonomia.*

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evacuations, must be evidently improper.* Vomits, administered in the beginning, are of great importance, sometimes cutting the disease short. Give, therefore, ipecacuanha powder, *No.* 1, and work it off with draughts of camomile tea.

Though strong purging is improper, it is requisite to open the bowels, by rhubarb, *No.* 12, and by clysters occasionally repeated, *No.* 57.

The medicines next to be recommended, after cleaning the stomach and bowels, are the following *sudorifics; viz.* camphorated mixture, *No.* 15; infusion of snake-root, *No.* 16; but opium and wine,† are of still greater efficacy, especially the latter, by which the delirium is relieved, and the powers of life supported. The opium may be properly joined sometimes with an antimonial—*see No.* 17. The warm bath, of 104 degrees, is found highly beneficial; but, in the commencement of the disease, Dr. Currie recommends the affusion or throwing of *cold water* over the whole body. In a register of fifty-three cases, where this practice was adopted, the patients all recovered, with scarcely any aid from medicine.

Blisters are deemed useful in every stage of this fever, and may be applied, in succession, to different parts—better between the thighs, arms, and legs, than to the back.

The

* It would seem that this caution has heretofore been carried by many practitioners too far. Keeping the intestinal canal duly open by lenient medicines, must be admitted to be highly necessary; but Dr. Hamilton goes further than this: without incurring any of the consequences that have been ordinarily apprehended from purging in low fevers. *See Hamilton on the use of Purgatives.*

† The quantity of wine proper is to be determined by its effects: *Neque pondus hic quidquam aut mensura determinat, sed morbi levamen*, says De Haen. If it raises the pulse, without increasing the delirium and restlessness, it is to be persisted in.—I knew a young man who recovered, by drinking three bottles of Madeira in the course of one day, which quantity was required to keep off the delirium, and to prevent his sinking from cold sweats.—The authorities for the free use of wine and opium, in this state of fever, are numerous and respectable. *See Gilchrist, Campbell, Wall, Trotter, Ferriar, Crump, &c. &c.*

The *Diet* in this fever constitutes a part of the medical treatment—it should consist of sago, with wine and spice, &c. CHAP. I.

The nervous fever runs on sometimes to a great length,* terminating without any sensible crisis—and the only indication is, to keep up the powers of life, by the medicines before recommended, and by the bark with snake-root, *No.* 15, 16, 18, 19, 21.

Where alarming symptoms appear, as sunk pulse, cold sweats, hiccup, &c. strong cordials are required: Spiced wine—brandy toddy, with ginger—musk and æther, *No.* 19.—Musk and salt of hartshorn, *No.* 73.—Sinapisms to the feet. In cases of diarrhœa, or looseness, the mixtures, *No.* 29, 30.—Red wine, with pomegranate bark—opium pills,† *No.* 28.

This form of fever attends the putrid or malignant sore-throat, and many other diseases, and is always to be treated in the same way, allowance being made for circumstances.‡

MALIGNANT FEVER.

This fever, called likewise putrid, gaol, hospital, ship, &c. fever, is supposed seldom to exist in warm latitudes. Sometimes, however, it unquestionably does occur§—whether the yellow

* This fever in Europe runs on sometimes to a great length. The most remarkable case of nervous fever, known in this country, was that of Sir Basil Keith, Governor, who lay between twenty and thirty days.

† Dr. Ferriar orders cold astringent clysters, along with opium.

‡ Several new remedies have been lately made use of in this fever; *viz* nitre by Dr. Johnson.—Oxygene air, yeast, by Cartwright and Lewen.—Oxygenated muriate of pot-ash; viz from ten to twenty grains, three times in the day—*Currie.* Acetum nitratum, or nitre dissolved in vinegar, by Thornton.

§ Hunter avers that, during the whole time he attended the military hospitals in Jamaica, he never saw any case of the malignant fever. Lempriere, on the other hand, says, that this was the fever that proved so fatal in St. Domingo, and to which the Irish brigade, in Jamaica, fell a sacrifice. The typhus, or fever of ships, however, prevails

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yellow fever is one of this kind, is not agreed on, but it probably is so in some instances.

The malignant fever is undeniably the effect of contagion, generated by the human body in ships, hospitals, &c. or wherever a number of persons are crowded together, in foul unventilated places. Unwholesome provisions, bad water, and tainted air, from large putrifying masses, are also the means of occasioning fevers of this sort.*

This fever comes on with shivering, and subsequent flushing, a sudden prostration of strength, and great dejection of spirits; the

prevails most in cold latitudes—*Trotter.* The term *putrid* has been objected to, it being conceived impossible for life to subsist with putrefaction: With a certain degree it certainly cannot, but it may with approximations to it, as is proved in a number of instances.

" *Sanguis qui per febres putridas detrahitur, sæpe animadvertitur, non solum fœtidum et graveolentem sed et putridum esse, adeo ut nec sibi cohærere nec consistere queat —deniq. notatu dignissimum est quod mihi nuperrime contigit videre.—Sanguis fœminæ cujusd. febre maligna laborantis, per phlebotomiam detractus adeo fœtebat ut ex ejus tetro odore, tam chirurgus, quam adstantes, in animi plane deliquio inciderent. See Dr. Moreton's Pyretolog.*

* Dead carcases, especially in hot seasons, are very apt to occasion putrid diseases: Hence this fever prevails in countries which are the scenes of war and bloodshed. This shews the propriety of removing burying-grounds, slaughter-houses, &c. to a proper distance from great towns—*Buchan*, 196. Of the dangerous consequences arising from the above-mentioned causes, a number of cases might be brought in proof, selected not only from medical authors but historians. The opinion that malignant, epidemic, and contagious diseases, never exist in hot climates, is refuted by a number of incontrovertible facts—*See Bontius's Hist. Natural and Med.* Long, in his History of Jamaica, mentions several epidemics, both here and in Barbadoes.

The foregoing facts, however, have been questioned by Ferriar; who asserts, that infection can never be traced to the dissecting room. Most of the physicians of the American school, and Dr. Moseley, go so far as to deny the existence of contagion altogether; even in the plague: But this is to confront the testimony of all historians and travellers, ancient and modern.—*See Russel, Bruce, Brown, Sonini, &c.* Several, who, on vague grounds, had been led to give into this opinion, have relinquished it; and some have fallen victims to their temerity. For the proofs of the existence of contagion —*See Medical Extracts, vol.* IV. *Paper of Dr. Patterson Med. and Ph. Jo. no.* 48, *Dr. Haighton, Dr. Currie, Philad. Dr. Hamilton on the use of Purgatives.* A very interesting disquisition on this subject, by Dr. Adams, in his late 4to edit. of his Essay on Morbid Poison.

the pulse is small and frequent, but sometimes tense or cord-like; there is a visible pulsation or throbbing of the carotid and temporal arteries; the eyes are red, and the patient complains of pain at the bottom of the orbits, as also of the temples; singing of the ears, &c. The vomitings which come on are bilious, the tongue and teeth are in a short time covered with sordid black crust, the breath is offensive, and the stools putrid; the urine at first pale, then red or dark coloured; the skin covered with eruptions, either petechiæ, purple spots, or broad black blotches, to which haemorrhagies ensue. These are some of the principal, in a long train of direful symptoms, belonging to this fever; all marking a diminution in the powers of life, and a tendency to putrefaction.

One remarkable and distinguishing circumstance in the malignant fever is, the kind of heat with which it is attended (*calor mordax*); which, though not sensibly great on feeling the skin, yet, if the fingers be pressed on the wrist, in measuring the pulse, they are affected with a pungent sensation, that remains for some time after their removal.* Another characteristic sign in this fever is, a lurid, bloated, and unnatural physiognomy.

The catastrophe in this disease is the same as in nervous fever; from which it has been thought to differ only by a putrescent state of the fluids: The treatment, therefore, must be nearly the same. If bleeding was considered improper in the nervous fever, it must be much more so here. It has, however, been employed in cold climates, in the commencement of the disease, and deemed salutary;† whether admissible in the malignant

* This is mentioned by Galen, and particularly noted by Pringle.

† Pringle, Monro, and others, who bled, did it with caution; upon the whole it appears, that many recovered without bleeding, but few recovered who had lost much blood. See further observations on this subject under Yellow Fever.

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lignant fevers of tropical and hot countries has been matter of much violent contention.

Vomits are to be given in the beginning of this, in the same manner as in nervous fever, as likewise gentle purgatives, such as *No.* 3, 4, 5; and afterwards the bowels must be daily relieved by clysters. Putting the feet in warm vinegar and water, sponging the body frequently with cold vinegar and water, conduce greatly to the relief of the patient.*

If *antimonials* are exhibited, care must be taken to prevent their action on the stomach. See Form, *No.* 9, with opium.

The *Diaphoretics* recommended in nervous fever, are all here useful, as *No.* 13, 14, 15, 16, 17. To check and correct putrescency, *antiseptics*, *astringents*, and *tonics; viz.* the vegetable and mineral acids,† fixed air, and vinegar, given in the way of clyster, camphor, bark, &c. bark decoction, with yeast or leaven, one drachm of finely powdered charcoal every four hours, but *wine* is the principal remedy here, as in nervous fever.‡ See note, *page* 74.

Blisters in this fever are apt to occasion gangrene, and must be applied only, or chiefly, in cases of delirium; they should be applied to the head, inside of the arms or thighs, not to the back.

Sinapisms, or poultices of mustard and Cayenne pepper, &c. to the feet, are for the most part, preferable to blisters.

Opium

* Gregory, Currie, Jackson. Dr. Trotter advises a flannel shirt, dipped in vinegar.

† The muriatic acid now preferred to the vitriolic. *See Sir William Fordyce's letter to Sir John Sinclair, Med. Extr. vol.* V.

‡ The wines preferred here are hock, rhenish; the tokay d'Espagne has of late been recommended as particularly suitable.

Opium is useful in the convalescent state, to procure rest at night. Moderate diarrhœa, or looseness coming on, is sometimes of use, but when it is not of a critical and salutary nature, it must be restrained by the mixtures *No.* 29, 30.

The *diet* here, as in nervous fever, must consist of sago, panado, &c. with wine, and cinnamon; jelly acidulated with orange-juice, &c.

Drinks Proper:—Claret and water, with Seville-orange-juice, or tincture of roses; sorrel drink, or preserved sorrel in water; water sweetened with guava jelly, and acidulated with lime-juice; small beer and water, acidulated with spirits of vitriol; cyder, &c. Spruce was thought a very suitable antiseptic drink in this fever, but it was not found to answer at St. Domingo;* it may, however, in other cases and situations.

The subacid fruits of the West-Indies, when coveted, are highly proper, within limits; *viz.* granadilloes, pine-apple, oranges; but not water-melon, musk-melon, or star-apples.

This fever being chiefly met with in hospitals, prisons, ships, &c. and being unquestionably contagious, the strictest attention is requisite in keeping the apartment clean and aired, as also to destroy the infection.—See method, *page* 22.—See also Dr. Trotter.

The nurses and medical attendants should fortify themselves against the influence of contagion, by smelling at camphorated vinegar, or the aromatic vinegar called the *vinegar of thieves*, by chewing bark, taking a glass of bitters, &c. If they should be affected with nausea, head-ache, dizziness, &c. symptoms of infection,

* M'Lean on diseases of St. Domingo.—See note, *page* 75, about leaven used by Mr. Cartwright.—See account of this in Smart's magazine.

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infection, they should take a vomit instantly, and afterwards some cordial sudorific.

Fevers not malignant in the beginning, sometimes turn out so; in short, most fevers, in warm climates, whatever character they had in their commencement, terminate with such symptoms, as have been described as belonging to this fever: Hence the great confusion and misunderstanding about the nature of fevers: Some persons denominating them malignant, from their termination; others inflammatory, from their first symptoms.*

YELLOW FEVER.

Concerning the nature and treatment of the disease called the yellow fever, the opinions of physicians have been so various and contradictory, as scarcely to admit of any reconciliation;† but the misunderstanding on the subject has probably been

* It sometimes happens that inflammatory, nervous, and putrid, symptoms, are so blended, as to render it very difficult to determine which class the fever belongs to. *Erraticæ plerumq. febres sine certo ordine, ita ut singulis; si nomina dare velis, œdipo conjectore, opus erit.*

† The different names by which this fever is known, shews the variety of opinion respecting it: *La maladie de Siam, le fievre matelot, il vomito prcto.*—Dr. Warren says it was a pestilential fever brought from Marseilles.—Dr. Chisholm says also it was a pestilential fever brought from Bulam.—Hilary thinks it a putrid bilious fever, but not infectious, except accidentally, by being combined with some other malignant fever.—According to Dr. Moseley, it is the *causus* of the ancients, or a fever of the most ardent and inflammatory kind.—Rush also considers it as an inflammatory fever.—Hunter sees no essential difference between this fever and the bilious remittent.—Lempriere says, the tropical continued, or yellow fever, is often blended with the remittent.—Jackson calls the yellow fever the concentrated endemic, or marsh remittent.

The question is, whether the fever mentioned by the afore-mentioned writers, was essentially and uniformly one and the same? Admitting that it was, it must certainly have been very differently modified, to give occasion to such a diversity of opinion respecting it.

The yellow fever, as described by Mr, Hughes, who was not a medical man, appears to be exactly the same as the fever so called in this island. *See History of Barbadoes.*

I shall here subjoin a list of the authors that have come to my hand on this subject: Lining on Yellow Fever, *(Literary Medical Essays.)*—Hilary, on Diseases of Barbadoes.—Lind on Diseases of Hot Climates.—Lind de Febre Flava.—M'Kittrick de Febre Benghal.

been, in a great measure, owing to an improper use of terms, or to the disease varying its character very much, according to circumstances of season, the quantity and force of contagion, and other causes. From comparing what the several authors on this subject have written, with observations actually made in attending numbers of patients labouring under this fever, it is very apparent that the fever, called *yellow* fever, is not uniformly one and the same disease,* but is often a compound one, partaking, at one time, of the nature of the malignant fever, at another, resembling the bilious remittent. It may commence under either form, sometimes as an ordinary remittent, afterwards becoming malignant, or it may attack with symptoms of malignancy, but in its progress become mild, and change into a common fever. Hence it may be contagious or otherwise.†

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L Hence

ghal.—Roupe de Morb. Navigant.—Blane on Diseases of Seamen.—Hunter's Diseases of Jamaica.—Moseley on Tropical Diseases.—Chisholm on Pestilential Fever of Grenada.—Rush on Fever at Philadelphia.—Clark on Diseases of Dominica.—Jackson on Fever of Jamaica.—*Idem* on Fever of St. Domingo.—M'Lean on ditto.—Bean on ditto at Surinam.—Andersen, Observations on Bilious Fevers.—Lastly, the ingenious Thesis of Dr. Charles Mac Larty, de Typho-Regionum Calidarum. Many other works on this subject have since made their appearance; but the several Tracts of Dr. Currie, of Philadelphia, and the Essay of Dr. Millar, of New York, are more particularly entitled to attention. Various papers and theses, inserted in the New York Med. Repos. are not undeserving notice.

* That the yellow fever is sometimes, or under certain circumstances, contagious, is unequivocally ascertained by numerous facts. See two papers on this subject, by the author of this work, in the New York Med. Repos.—See also a paper by Dr. Patterson, Med. and Phys. Journal.—Dr. Currie's Tracts, Philadel.—See also letter of Dr. Blane to the American minister.

The yellow fever has been considered as analagous to *plague*, and, in the parallel drawn by Dr. M'Gregor, who had great opportunities of seeing both diseases, there are some strong points of resemblance; but, on the whole, the difference is too great to allow us to think them only species of the same disease. The plague seems to vary its character very much in different seasons and situations, and so does the yellow fever. On some occasions there is no hæmorrhagy, on others no black vomit—on others no yellow suffusion; whilst in some few instances there is an inflammation and gangrene of the scrotum, as also malignant phlegmons terminating like carbuncles.—*See Medical Sketches of the Expedition from India to Egypt by James M'Gregor, Esq. Surgeon General to the Indian Army.*

† In the interval of several years, since the first publication of this work, it might be

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Hence the fever of new-comers* may not always be malignant. There are many instances of such having, on their first arrival, a fever of the common kind, and afterwards the yellow fever—though the reverse of this ordinarily happens.

As the limits of this work will not allow room for discussion on this very important subject, I must refer to the authors who have treated at length upon it. I shall here state what is the most ordinary and undisputed case of yellow fever, and describe the treatment which experience, in this island, has proved the most efficacious and successful.

This fever then, peculiar to new-comers, attacks suddenly, with alternate fits of heat and cold, violent pain in the head and back: The face is prodigiously flushed, the eyes are red and watery; the whole physiognomy of the patient is very peculiar, denoting anxiety and dejection of mind; and this unnatural appearance continues, till recovery begins to take place. The pulse, in the beginning, is frequent, full, and hard—sometimes irregular—the heat of the body very great, and the patient labours under great inquietude. This state of the fever continues for a longer or shorter period; sometimes only

be supposed that the author has had the opportunity of gaining more experience, and of discovering a more successful mode of treatment, in this fatal malady: It is with great regret, that he is obliged by candour, and a regard to truth, to declare the contrary. Nothing that has fallen under his observation—nothing that he has been able to collect from reading, or from communications with others, has made any material change in his former opinion on the subject, or qualified him to add any thing very important to what he has already said. It is a melancholy conjecture to make, but it cannot be avoided, *viz* that, after the experience and researches of so many able men, in all parts of the West Indies and America, it is not likely, in the present state of medical knowledge, any new discovery will be made concerning the nature of this fever. No consideration of this sort should, however, operate to damp enquiry.

* The yellow fever in Jamaica, and the other West India islands, rarely attacks any but persons newly arrived from a cold climate; it is asserted positively, that it never attacks any others; but this may be disputed. At Barbadoes, in 1696, it carried off a number of native inhabitants. It is also said, that it never attacks negroes, but Blane has given one instance of a negro woman, who was a nurse, having it, and dying of it.

only for a few hours, at others for several days; and, when the ardent symptoms begin to decline, if not sooner, an irritation at the stomach commences, which is hardly, by any means, to be subdued or even allayed. The patient now feels himself in other respects well, his pulse and heat being nearly natural, and he has seldom any return of fever; but the irritation and anguish at the stomach continuing, he at length vomits blackish matter, his eyes and neck first become yellow, and then the whole body.* Blood flows from the mouth and nose, &c.: Delirium, preceded by a hurried perturbed state of mind and great restlessness, at length comes on; ending in total insensibility, or convulsions, and ultimately in death.—*See Linmg, Hughes, Chisholm.*

This fever is particularly distinguished by its sudden attack, being seldom preceded, like other fevers, with any symptoms of langour, weariness, &c.—by its having very seldom or not commonly any sensible abatement or remission, till it totally subsides—by the extraordinary anguish about the precordia, and, at the same time, a torpor of the bowels, which renders them incapable of being acted on by purgatives, though of the most active kind, and in large doses, &c.

The foregoing account of yellow fever, that is to say, the fever generally attacking new-comers to this island, is drawn from actual observation; and, although incomplete, it is presumed is sufficiently full and accurate, to enable any one to

 distinguish

* This yellowness is not a constant symptom—sometimes it does not appear, or not till after death; and it not unfrequently occurs in the ordinary endemic. The black vomit and tar-like stools are not, as has been supposed, vitiated bile, but are owing to a secretion taking place from the villous coats of the stomach and intestines, or to an oozing of blood.—*See Med. Repos. vol.* IV. V. *Phil. Mus. vol.* III. The matter of black vomit not acrimonious: It may be taken into the stomach without its producing any bad effect—*Cathrall.* Dr. *Physick* considers the black vomit as a *secretion*; which, says he, is the mode in which inflammation of the stomach is disposed to terminate.—*Med. Repos. vol.* V.

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distinguish it, in its ordinary form, from any other, except the malignant, to which it has an obvious affinity.*—*See Blane.*

Appearances on dissection are various, according as the disease acts locally or generally. In most cases there are signs of inflammation of the stomach and brain, *&c.*; in many, marks of beginning mortification; in some, no material deviation, from the natural state of the parts, are observed.—*See Jackson.*

What will be said, upon the *Treatment* of the yellow fever, must be considered as applying to that form of it above described.—Where it attacks in the manner of a common remittent, and shews no symptoms of malignancy, till after some continuance, the method of treatment here recommended, may not be thought necessary or suitable, though, upon the whole, it is safest, in these times, to consider every fever, with which a new-comer may be attacked, of this kind; for, if the mode of cure suited to it be not adopted in the beginning, it cannot be employed afterwards, with any probability of success.

Supposing then an European, or American, more especially one newly arrived in this island, or any other tropical country, should be suddenly seized in the manner before described; *viz.* with violent pain of the head and back, with heat and flushing of the face, *&c.* the question is, how he is to be treated, so as to prevent the future danger, so much to be apprehended?

It is the duty of the author to recommend the practice which experience has confirmed as the safest, and the most efficacious; but the several other modes of treatment that have been employed,

* Yellow fever occurs more frequently on the sea coast, and in a heated sandy soil. On the contrary, the endemic remittent makes its appearance chiefly in low and swampy situations.—*Winterbottom.* Yellow fever exists in America only within a certain range of atmospheric temperature, *viz.* from sixty-five to seventy-five, which is another proof of its specific nature—bilious remittents and typhus occurring at every season—*Currie.*

ployed, and, it is to be presumed, frequently with success, (for methods, seemingly opposite, may sometimes prove equally efficacious) will not be omitted. Dr. M'Lean explains this by saying, that a *change only requires to be induced.* Dr. Darwin argues similarly, by observing that the *motions of the system are all catenated,* so that by breaking one link in the chain, you break the whole, and, in many cases, it signifies little which link of the chain is broken, or in what part the continuity of it is interrupted.—*Zoonomia.*

In the first place, then, let the patient, as soon as he is taken ill, be put to bed—let an opening clyster be administered—and, as soon as possible, give him a dose of calomel and jalap,* either in powder, mixed with tamarind syrup, or else made into pills; some time afterwards he may take a tea cup full of tamarind water, or decoction of tamarinds, with cream of tartar, *No. 3;* and, if stools are not freely produced, in the course of five or six hours, let the pills of jalap and calomel be repeated in the same or a less dose. Supposing plentiful evacuations to have taken place, but without any abatement of symptoms, the head-ache, flushing of the face, &c. continuing, shave the head, and apply blisters to the temples—then give small doses of calomel and antimonial powder, *No.* 10, every three hours, interposing the use of the saline julep, *No.* 11. At the same time, let the mercurial frictions be commenced; *viz.* two drachms or half an ounce of the strong mercurial ointment, rubbed into the inside of the knees and thighs, every three hours, or every six hours. If, in twelve or fifteen hours from the first attack, there be not any obvious remission, in consequence of the foregoing treatment,—continue the frictions every three hours, giving at the same time ten

* The dose must be less or greater, according to the constitution of the patient, and violence of symptoms; say, jalap, gr. fifteen, and calomel, gr. five; or, jalap, gr. thirty, and calomel, gr. ten.

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ten grains of calomel, combined with jalap, if the bowels have not yet been opened, or else with one quarter of a grain of opium,* to prevent the calomel acting on the bowels, if too loose. Thin gruel, barley-water, &c. to be frequently given, and the above method persisted in, till the breath becomes affected, and the mouth sore, provided no clear and distinct remission of fever intervene. If the stomach become irritable, and retchings commence, apply a capsicum plaster or blister immediately to the stomach itself, or else between the shoulders, and give æther, either in a little barley water, or in the saline julep, *No.* 11, or camphorated mixture, *No.* 14, magnesia or kali ppt. in columbo infusion. The quantity of mercury required to be rubbed in, and calomel taken, is sometimes very considerable,† before either the glands of the mouth are affected, or before any remission of the symptoms takes place; but, for the most part, when the mouth grows sore, the fever and irritation

* Dr. Lempriere proposes, for the purpose of more quickly affecting the salivary glands, to give the hydrargyr. muriat. or corrosive sublimate; which, in a few trials, appears to have succeeded.

† More than one thousand grains of calomel have in some cases been given, and several ounces of mercurial ointment rubbed in—not only with impunity, but with success, the patient having recovered. Dr. M'Larty, himself, took two hundred and seventy grains of calomel in five days, and rubbed in two and a half ounces of ointment. "*Hydrargyri muriati mitis grana* 270 *quinque diebus labentibus, grana quinque qualibet horâ devorari, perque illud temporis spatium, viginti unguenti ex hydrargyro fortioris drachmæ femoribus, &c. mihi affricatæ sunt*" *De Typho Regionum. Calidar.* In the case of *William Gow*, mentioned by Dr. Chisholm, five thousand seven hundred and four grains of mercury were given, and the patient recovered. Dr. B says, that he has seen calomel, when given in large quantities, pass by stools unaltered.

From the affinity between yellow fever and plague, Mr. M'Gregor was led to the use of calomel in the latter, which was found equally successful. None of those whose salivary glands were affected, died. The case of Dr. Thomas deserves to be particularly noticed: "Dr. Thomas after being three weeks in the pest-house at Rosetta, attending the first plague cases of the 88th regiment, whilst walking in the garden, accidentally laid his hand on his groin, and was greatly alarmed to find a large swelling. He soon after felt some giddiness, and fell down; as soon as he recovered, he rubbed in mercurial ointment in great quantity, and every hour took as much calomel, with opium, as his stomach could bear; his gums were quickly affected, the bubo came to suppuration, and in three weeks he was quite well.—*See Medical Sketches of the Expedition to Egypt, by James M'Gregor.*

tation at the stomach subside; notwithstanding which, it is deemed necessary to continue the frictions, in a more moderate way, to promote or keep up the spitting. CHAP. I.

During the foregoing process the head, face, neck, arms, &c. of the patients, should be frequently sponged, sprinkled, or washed, with cold vinegar and water, whilst the skin continues hot and dry; but, if a moisture appear, the use of cold applications should be desisted from.*

It is not pretended by any who follow the above practice, in the treatment of yellow fever, that it is uniformly successful; but it is found greatly preferable to any other hitherto tried;† and it has this advantage, that it gives the patient a double chance, for it does not hinder the employment of any other means that could be made use of, were mercury not exhibited.—The sore mouth, which results from the use of mercury, is often very distressing, but is seldom attended with any danger or inconvenience of long continuance—it is not easily removed, but is greatly alleviated by the frequent use of proper gargles or mouth waters, such as the following, *No.* 76. The bark, in decoction, also may now be given, but it is seldom found to agree,

* Dr. Cumming, of the naval hospital at Antigua, has lately, in place of water, or vinegar and water, recommended the use of ardent spirits; which, he says, is more effectual in reducing the temperature, as it occasions a more speedy evaporation—notwithstanding this, there seems a great objection to this practice. The quantity of spirits required to be made use of, *viz.* from a pint to a quart every now and then, must endanger the intoxication both of the patient and nurse; to say nothing of the expence which might be advantageously saved by the use of water, or vinegar and water.

† Dr. Blane rightly observes, that there are some cases where the disease is *determinedly* fatal, or where the animal functions are, from the beginning, so deranged, that there are no possible means of restraining the morbid motions, and dissolution necessarily takes place. (*Page* 411. *Diseases of Seamen.*) Dr. Adams observes, that besides the two opposite and equally dangerous states of fever, one in which strong action prevails, and the other when great debility is present, there is another in which, from the particular state of the body at the time the cause is applied, or else from the force and concentration of the cause itself, all the actions of life are arrested, and dissolution comes on suddenly, or without the usual efforts on the part of nature for relieving herself.

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agree, and even when the stomach does not reject it, it appears to have rarely any good effect—often a bad one. Food and wine are, therefore, the only things further required.

The other modes of treatment, in this fever, are by large and repeated bleedings,* copious purging, and giving the bark.

Dr. Hilary bled in the beginning of the disease—afterwards purged—then gave sudorifics and cordials.

Dr. Moseley recommends repeated and copious bleeding in the first stage, and continued purging with vitriolated tartar—afterwards warm bath—forbids cold water—advises bark in the second stage *if* the stomach will bear it.

Dr. Rush bleeds plentifully and repeatedly—gives purges with jalap and calomel—then continues the calomel alone till it affects the mouth.

Dr. Jackson directs twenty or more ounces of blood to be taken, but acknowledges, in his later publications, that unless this is done in the very formation of the disease it is of no use. After bleeding he recommends dashing cold water on the patients whole body, *&c.* See what has been before said on the use of cold water, in fever, in the note to *page* 71.

The several other writers on this disease, advise a practice more or less approaching to one or other of those above described;

* On the propriety of bleeding in yellow fever, there was formerly great difference of opinion; but the matter seems to be now in a great measure compromised: Its admissibility, in the very *moment of attack*, is not generally denied; and its repetition afterwards is contended for by few. Authors, says Dr. Clutterbuck, are almost unanimous in asserting that although bleeding may be useful and effectual in the first attack of fever, it is afterwards hurtful—bleeding, if performed at all, must be done *before the chain of febrile actions is fully established, and before there has been any change in the organization.*

cribed; and it would be superfluous to go into the detail, or to enumerate all the trifling things proposed, either for the cure of yellow fever generally, or the alleviation of symptoms, *e. g.* Cayenne pepper, tincture of cantharides, &c.*

As prevention is always better than cure, it may be expected that some directions should be here given, for guarding against the attack of this fatal fever: It is therefore proper to observe, that although bleeding is precarious and hazardous after the fever comes on, it may, nevertheless, in particular cases, or where the habit is very full, &c. be considered as a means of prevention—it will not be amiss for young and athletic persons, on their first arrival, to lose a quantity of blood in proportion to their age, constitution, &c. On the same principle, they ought to keep an open belly, and avoid every species of intemperance, as also exposure to the sun and evening air:—But what is of greater consequence, is that of flying, as soon as possible, from the shipping and sea-shore, the seats of infection, to a pure airy cool situation in the country, there to remain for some months. Many young men, by this means, have avoided any dangerous fever; and some, by returning too quickly to the towns or sea-ports, have met their fate.†

* A Danish physician, of the name of Keutsch, has adopted, in the Danish West India islands, the practice of friction with oil, for the cure of fever incidental to that climate, in the same manner as pointed out by Mr. Baldwin, with respect to the plague in Egypt. Letters from Copenhagen state, that Dr. Keutsch had adopted this practice in the case of eight soldiers afflicted with the fever, six of whom were completely cured by friction with oil, in the course of twenty-four hours. The way in which it operates is by producing profuse perspiration, and generally vomiting. Dr. Keutsch, in some cases, rendered the operation of the oil still more efficacious, by adding to it camphor.

† Although people who have resided long in the climate are not subject to the fever called yellow fever, it is, nevertheless, a melancholy truth, that numbers of persons from the country have caught fevers in town, apparently of a malignant kind, and which have proved suddenly fatal: a number of such instances occurring, within a short space of time, might be recounted.

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The prevailing mortality among new-comers is a good deal to be attributed to their own misconduct: Coming out in convoys, they arrive in numbers—they meet at taverns; and, allured by scenes of novelty, they walk the streets, indulge to excess in the use of the country fruits, and enter too readily into the customs of the acclimated inhabitants, which are not at all suited to persons in their situation.

Quere:—Has mercury any specific power in changing the contagion? or, in rendering the system less liable to be acted on by it? or, would it be useful to new-comers to take mercury before hand, to prevent yellow fever?* Would issues or setons be in any way useful, either by lessening phlogistic diathesis, or by giving an outlet to contagion imbibed?

BILIOUS REMITTENT FEVER.

This is the prevailing fever in all hot climates—how far it is distinguished from the yellow fever, or whether that fever be not the remittent in a more concentrated form, practitioners are not agreed. The common remittent, however, does not in general attack so suddenly, or so severely—it is preceded with symptoms of lassitude, and comes on, ordinarily, with a slight cold fit or shivering, which is quickly succeeded with all the ordinary symptoms of fever; *viz.* pain in the head and limbs—hot skin—quick pulse—thirst—but more particularly with sickness at the stomach, and vomiting of bilious matter.

These

* Poterius affirms that those who are employed in quicksilver mines are scarcely ever affected with fever. At the taking of Omoa the sailors, who were occupied in shifting the quicksilver out of the hold of a ship, escaped a fever that prevailed among the rest of the crew: Experience has, however, evinced the inutility of mercury as a prophylactic. Persons under a course of mercury for hepatitis have caught the fever. Some artillery recruits were, on their voyage out to Jamaica, made to take mercury—but it did not prevent several of them from having afterwards yellow fever, nor did it mitigate the disease. This, however, is no argument against employing mercury under the disease—mercury, it is well known, will not prevent the infection of lues, but it will extinguish it.

These symptoms continue, without any abatement, for six, twelve, or twenty-four hours; when a remission, more or less distinct, may be observed; but which is perhaps of no long continuance.—A fresh accession of fever taking place, with return of head-ache, sickness at the stomach, &c. but without shivering, as at first. There are often two exacerbations and remissions in the course of twenty-four hours; one paroxysm coming on about noon, another in the evening—or else a morning paroxysm happens one day, and an evening paroxysm another; but what is called the type of the fever, is not always to be distinctly marked—*(see note, page 80)*—the paroxysms, after the use of vomits, purges, &c. in the course of a few days become less severe, the remissions more sensible, and the patient gets a crisis; or, on the other hand, the fits become worse on every return, the vomiting being more severe, delirium coming on, with great prostration or loss of strength, hiccup, black vomit, universal yellowness, &c. as in yellow fever.*

To a fever of this kind, all the inhabitants of tropical countries are indiscriminately and repeatedly liable, but principally young people, and such as are plethoric. It is brought on by intemperance and over exertion; but particularly by exposure to the air of marshes and damp situations, and is therefore reasonably supposed to be caused by noxious effluvia generated in these places. See Introduction, *page 22.*

Treatment of the Bilious Remittent Fever.—The observations already made on the subject of blood-letting might be repeated here,

* It was before observed, that different fevers are sometimes blended, or change into one another. Unless the characters of fevers are strongly marked, says Dr. Blane, it is difficult and impossible to refer them to any particular species. Dr. Hamilton, in his account of the marsh remittent, at Lynn, in Norfolk, says, that it is sometimes attended with hæmorrhagy, and all the symptoms of yellow fever.

CHAP. I.

here, but it is only necessary to remark, that there are few cases occurring, where bleeding is required.

There was formerly a very general practice of giving, indiscriminately, in the commencement of all fevers, the tartar emetic in solution, so as to cause both vomiting and purging as soon as possible. The practice, though abused, by carrying it to an undue length, was a good one, and should not have been totally given up, as it is at present, except on board of ship. There is a necessity for clearing the first passages; and the vomiting, in the commencement of the fever, may therefore be encouraged, by taking a single grain, or perhaps two, of tartar emetic, in a draught of camomile tea; or else two table spoonfuls of the tartar emetic solution, *No.* 22, as directed: After this, for procuring evacuations downwards, a clyster may be first given—then the ptisan of tamarinds and salts, *No.* 3—or tamarinds and cream of tartar, *No.* 4.—Should these not sit upon the stomach, give jalap and calomel, *No.* 6, either in powder or pills, and repeat every three or four hours, till they operate. Afterwards treat the patient by the cooling regimen, as directed under inflammatory fever. See *page* 69.

For bringing on remission, the following medicines are proper, *viz.* Powders of nitre and camphor, *No.* 7.—Antimonial powders, *No.* 9.—Antimonial powder, with calomel, *No.* 10.—Saline julep, *No.* 11.

To allay irritation of stomach, the saline julep, given in effervescing draughts, as directed *No.* 11.—Camphorated mixtures, *No.* 14, 15.

In violent head-ache, and delirium (after evacuations have been employed), the antimonial opiate, *No.* 17.

When

When the powers of life begin to sink; that is, if the pulse is small—if there be cold sweats and delirium, apply blisters and give wine. See note, *page* 74—or snake-root infusion, *No.* 16, with camphorated mixture, *No.* 14.—Also the decoction of the bark, if the stomach will retain it.

In case of coma,* or constant drowsiness, blisters and mustard cataplasms to the feet.

In hiccup, give musk julep, with æther, *No.* 19. Camphorated mixture, with ammonia, *No.*

An affection of the liver, known by pain and hardness in the right side, is a frequent attendant of this and every fever in the West-Indies. Where this occurs there will be no bringing on requisite remissions for giving the bark, without the previous use of calomel, or rubbing in a little mercurial ointment, as directed in yellow fever. See *page* 85.

When sensible remissions take place, begin with the simple decoction of bark—or the same with snake-root, *No.* 21. Bark clysters may be also given, *No.* 23, for it rarely happens that you can get a sufficient quantity of bark administered any other way.

As soon as the patient's stomach will retain the bark† in substance, give half a drachm or two scruples of the powder in a glassful

* This fever is, in some cases, attended with real mania, particularly in the decline, but it is very transitory.

† Dr. Jackson affirms that the bark has no effect in *cutting short a fever;* but, in contradiction to himself, he acknowledges it assists in *favouring a crisis.* Dr. Brown also, of the Edinburgh infirmary, was led (from some cases he had registered) to doubt if medicine of any kind were of use in shortening the termination of fever; but subsequent experience of the effects of a quack medicine (supposed to be James's powder, or a similar preparation of antimony,) forced him to retract his opinion. *See Ann. Med.* 1802.—*Clutterbuck, vol.* I. *page* 409.

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glassful of the decoction, every hour. A tea spoonful of brandy, or a little mixed hock, is sometimes necessary to make the bark sit easy—or a little camphorated mixture—or a few drops of volatile fœtid tincture. Some people can take it best in milk, or coffee, or porter.

Where the bark is evidently required, but the remission not favourable for giving it, the decoction may be given with mindererus' spirit * If the bark acts on the bowels and runs off by stool, a few drops of laudanum must be given—if, on the contrary, it binds the patient, a few grains of rhubarb, or a tea spoonful of the tincture of rhubarb, should be given with every other dose, till the bowels are open.

Regimen, nearly the same as in inflammatory fever. In the convalescent state, the caution mentioned in *page* 67, to be attended to.

INTERMITTENT FEVER.

Intermittent fevers are much less prevalent in hot than in temperate climates. In certain situations and seasons, they are, however, not infrequent and sometimes obstinate, leaving behind them (as well as remittents) obstructions of the liver and spleen. They are here, as in Europe, of different types or forms; *viz.* quotidian, tertian, or quartan; but the tertian, or rather what is called the double tertian, is the most common. The quotidian is a fever that returns every day, about the same hour, some times a little sooner, at others a little later. The tertian returns, in the same manner, every other day. The double tertian returns every day, but at different hours on different days;

* In very bad cases, where there is apparently no time to be lost, but when evacuations are at the same time requisite, the neutral salts may be joined with the bark.—This was the practice with some French physicians at St. Domingo. A practitioner of this city gives small doses of tartar emetic with the bark.

days; one day in the morning perhaps, and the next in the afternoon; but in this fever the intermissions are not so distinct. The quartan, the most obstinate of cure (as in Europe) returns every third day; that is to say, there is an intermission of two days.* CHAP. I.

There are, besides these, other types of intermittent; but they are too intricate for common observers, and therefore it is not necessary to characterise them here.

In the cure *vomits* and *purges* are to be given, as directed under the remittent fever; and, in the intermission, the bark, in decoction or powder, or both, according to circumstances. In some cases, *viz.* where the intermission is not sufficiently distinct and complete, it may be better to postpone the bark for one or two intervals, giving cooling powders (*No.* 8)—antimonial ditto (*No.* 10)—saline julep (*No.* 11)—spirits of mindererus (*No.* 13)—or else joining these with the bark. If there be any symptoms indicating an affection of the liver or spleen; *viz.* pain and hardness either in the right or left side—small doses of calomel should be given every night, or two drachms of mercurial ointment rubbed in every night, or every other night, till the gums are a little swelled. A blister may be also applied to the side affected.

In quotidians, the bark is to be commenced immediately on the going off of the paroxysm; the same thing may be done in tertians, or a few hours after; but in quartans the bark is not to be given till the day before the expected return. The bark should be taken in the greatest quantity, a few hours before the approach of the fit. To keep this off, the patient may go to bed an hour before the period of its return, and get into a perspiration

* Upon the subject of different types of fever, in Jamaica, as also the crisis, &c.—see *Dr. Jackson's Outline of Fever.*

CHAP. I.

spiration by drinking some warm sangree—brandy toddy—ginger tea—lemon grass tea—or he may at the same time take twenty or thirty drops of laudanum. An emetic at that period will sometimes have the same effect in keeping off the fit.* A blister may be applied to the stomach, or Cayenne pepper plasters to the feet, an hour before the time the fever is expected. If one fit be prevented, a succeeding one will be kept off still more easily.

The bark, the most efficacious remedy of any known, is not always successful—one kind of it will succeed when another fails; but which species is most to be depended on, *viz.* the pale red, or yellow, is not determined. The country bark (see Country Remedies, *Appendix*,) has sometimes succeeded, after the Peruvian bark had failed. There are many substitutes for the bark.† (See Country Remedies, *Appendix*,) and a number of specifics; one of the most common is, sulphur in Madeira wine, *No.* 86. During a scarcity of bark in a military hospital, Dr. Mead's powder, consisting of alum and powdered cammomile flowers (*No.* 24) was given with the desired success. Whenever the patient has escaped one or two fits, he should change the air, particularly if he resides in town, or in any marshy situation.

The

* Various other methods have been tried, and sometimes successfully, for keeping off the cold fit. Any thing that excites the circulation is calculated to have that effect. Plunging into a cold bath, and taking afterwards violent exercise—applying the tourniquet to the thigh on one side, and to the arm on the other, has been lately recommended by Mr. Kelly, for shortening the circulation, and causing a quicker return of blood to the heart. The arsenical solution, which has proved so successful in other parts of the world, has lately had a very extensive trial, in this island, where strong prejudices existed against it, and its efficacy fully proved. No such bad effects, as were apprehended, have followed the use of it in any case. It is given with the greatest safety to young children. For the manner of administering it—*see Fowler's solution, No.* 129, *and Vaughan's pill, No.* 130.—Nothing need be here said of the use of gelatine, recommended by Cit. Sequin.—*See Ann. of Med.* 1804.

† Mahogany bark—portlandia ditto—hoop-tree bark—bitter-wood.

The intermittents of children are difficult of cure, because they cannot be made to take a sufficiency of bark, and they are also frequently troubled with worms: After vomiting and purging them, therefore, as may be requisite, the bark should be administered to them by clysters, (see Forms, *No.* 23,) or poultices of bark may be applied to their arms and thighs, and confined by the tail bandage—or they may be placed several times in the day in a bark bath (*No.* 26) or they may wear a bark jacket. A tea spoonful of laudanum may be mixed in an ounce of volatile camphorated liniment (*No.* 25), and a little of this rubbed on the back-bone before the fit; or warm plasters applied to the stomach, wrists, and the soles of their feet. The mineral solution (as mentioned in the note, *p.* 96), is particularly appropriate with children. *See Formul.* 117.

Intermittents and remittents are very apt to return, unless the patient continue to take, from time to time, a little bark. After omitting the bark for two or three days, take a few doses, then intermit it for a longer period, and a longer one, still taking now and then half an ounce, particularly about the changes of the moon.*

Epileptic fits sometimes accompany the paroxysms of intermittents, in which case the calx of zinc, combined with the bark;† or white vitriol, which will answer as well;‡ five grains of the latter may be given every four hours.

Intermittents are very apt to alternate with dysentery—to produce obstructions of the liver, and consequent dropsy. The consideration of these complaints will therefore follow.

* There seems to be a sort of septenary period in the relapses of fevers, but whether these were correspondent to any changes of the moon, it is difficult to say.—Dr. Jackson says, the moon has an influence on fevers in the West Indies.—Dr. Balfour says the same of the moon's influence in the East Indies—as also Dr. Lind; but the latter thinks the relapse, at these periods, is more owing to the tides rising higher or lower, and leaving the banks covered with slime.

† See *Hendy—Blane.*

‡ See Cases by *Hendy and Telford, in Blane's Diseases of Seamen,* 426.

CHAPTER II.

ON BOWEL COMPLAINTS FREQUENT IN THE WEST-INDIES.

DYSENTERY, OR BLOODY FLUX.

CHAP. II.

NEXT to fevers, this is one of the most prevailing and most dangerous maladies of hot climates. It is frequently epidemic on board of ships, in hospitals, camps, and among the negroes on plantations, carrying off great numbers. It is either preceded, or accompanied, by some degree of fever.* The stools are at first generally copious and bilious, afterwards small, slimy, and bloody, with violent tormina, or gripings of the bowels, and straining, which sometimes occasions cold sweats and faintings. It is brought on by obstructed perspiration, from cold and wet; and by the eating of crude food; particularly amongst negroes, who are chiefly liable to diarrhœa and dysentery in the pear season,† and when the yams come in; which they dig prematurely, if they happen to be in want of other food. It is contagious,‡ spreading from two or three, to a whole family or plantation.

The

* Dr. Bay considers dysentery as an effect of the oxyde of azote (the septon of Dr. Mitchil); but it may be observed, that in remittent and intermittent fevers, which are acknowledged to depend on the same causes as dysentery, the bile is poured out in great quantities, which ought, according to the theory, to neutralize the septic gas.—On the other hand, in jaundice, where the bile is prevented from flowing into the intestines, to answer this purpose, dysentery and fever do not follow.

† Several persons cut down the pear-trees on their plantations, to prevent the evils arising from negroes using the fruit in a crude state, or in too great quantity; but surely so valuable an article of food, called the *vegetable marrow*, is not to be totally lost, or given up, because of accidental consequences that may be easily prevented. If the negroes are allowed plenty of salt and herrings, they seldom suffer from using pears.

‡ A late writer affirms that dysentery is never of *itself* contagious, nor when combined either with remittent or intermittent fever, but when attended with typhus it is decidedly

The disease, if rightly treated in the beginning, is, for the most part, easily cured, but otherwise it becomes chronical, and very difficult to get rid of. CHAP. II.

Treatment.—A vomit of ipecacuan, *No.* 1, is generally proper in the beginning of this complaint, which may be given at night, and the next morning a purge;* *viz.* either the purging salts, *No.* 2, or the ptisan of tamarinds, *No.* 3; the patient drinking plentifully of barley-water or any demulcent liquor, to promote the evacuations, which seldom fail to relieve the pains, and change the nature of the stools; but, if the gripings still continue, and the skin is dry, as is commonly the case, give Dover's powders, *viz.* 10 or 12 gr. order the warm bath, or fomentations of the belly, as also emollient clysters, *No.* 33, which are of great service. Strangury is a frequent and distressing symptom in this disease, which is relieved by the above means *(viz.* bath, *&c.)* as also the gripings; but, when these are severe, a blister should be applied to the abdomen, or a large Burgundy pitch plaster, or flannel roller, as lately recommended by *Dr. Whyte.*† And in this stage of the complaint the patient may take small doses of ipecacuan‡ and rhu-

 barb,

decidedly so; and so, says he, is erysipelas, puerperal fever, and hospital ulcer. Dr. Jackson is of opinion that the tainted air of hospitals can produce either fever or dysentery, or both.

* The following purge is mentioned by Dr. Wright, as having been found a specific in the cure of epidemic and contagious dysentery; *viz.* two table spoonfuls of common salt, with as much lime-juice as is necessary to dissolve it; two or three doses of this medicine, given at intervals of a day or two, seldom failed of effecting a cure. Dr. Grainger's prescription is—lime-juice three ounces, as much salt as this will dissolve, adding a pint of water, and two ounces of sugar. Dose—a glassful every two or three hours—*See Essay on Sugar Cane.*

In *No.* 14, of the Medical and Physical Journal, there are some cases of dysentery related, where the nitrous acid and opium proved successful.

† *Medical and Physical Journal*, 1799.

‡ Some practitioners give ipecacuan alone, either in powder or infusion Blane thinks a grain or two enough in the West Indies, but Ontyd, in Germany, gives it with opium, to the extent of a drachm; and Bailman goes the length of two drachms.—Clark.

CHAP. II.

barb, *No.* 27, with a glassfull of the quassia infusion, three or four times in the day; and, at night, one grain of opium in a pill, *No.* 28, or from twenty to thirty drops of laudanum in a draught. By this mode of treatment, the fever, in the course of two or three days, goes off, the skin becomes open, the gripes abate, and the stools assume a natural appearance. The patient may then safely have recourse to the moderate use of astringents, such as are directed in *No.* 29, 30, 31, 32; which, by restoring the bowels to their proper tone, complete the cure. But it is not in all cases we can expect this happy issue: In spite of these, or any remedies, the disease will sometimes become highly putrid, and prove fatal in the course of a few days; but more commonly it becomes chronical, the feverish symptoms and gripings in part subsiding, but the slimy and bloody stools (with hardened lumps of excrement, called scybals) and tenesmus still remaining. In this stage of the disease, when either the liver is affected, or the coats of the intestines become thickened and ulcerated,* mercury is considered as the best remedy :† mercurial frictions may be employed, and from five to ten grains of calomel be given every night, or every other night, alone or combined with rhubarb —at the same time an opium pill.—In the day time the quassia infusion, columbo root infusion, *&c.* may be given, with any of the astringents or demulcents above referred to. When tenesmus only remains, with slimy stools, mucilaginous and astringent

Clark prefers the infusion.—It was originally given in decoction—*(See Clark on the Diseases of Dominica.)*—*(See Piso de re Naturali.)* It has been lately recommended in the way of clyster. *See Form, No.* 115.

* Dr. Crawley, a gentleman on the hospital staff in this island, examined the bodies of a number of soldiers who died of chronical dysentery—in all which he found the coats of the intestines in a tuberculous state. In the more severe and protracted cases of dysentery, no remedy is so much to be relied on as calomel combined with opium—*Clark.* White vitriol, with opium, is also recommended by Impry. Dr. Moseley insists much on the efficacy of his vitriolic solution, *No.* 34; but his confident manner of speaking does not seem to have induced many to make trial of it.

† *See Boag—Clark—Ontyd.*

astringent clysters may be administered, two or three times in the day.* *See Forms, No.* 33, 34.—The bark, infused in lime water, may be given in the end of the disease. For remedies against old dysenteries—*see No* 87. CHAP. II.

To conclude, the cure of this disease consists in cleaning well the bowels in the beginning, and keeping them open; by restoring the perspiration and easing the pains or gripes, by warm bath—fomentations—emollient and anodyne clysters —by a blister to the abdomen—and by the antimonial opiate, or Dover's powder, *No.* 17, after due evacuations—lastly, by strengthening the bowels by tonics and astringents.

The disease being an extremely offensive and contagious one, the utmost attention to cleanliness is required. The stools are to be immediately removed, and the utensil washed† —the patient's clothing and bed linen daily changed—and the room duly ventilated; but care should be taken, that no current of air blows on the patient, to check the perspiration.— A flannel shirt will accelerate the cure, and prevent relapse.

The *diet,* in this disease, constitutes a principal part of the treatment: Drinking plentifully of demulcent liquors will serve greatly to ease the bowels. The zizigary or vanglo has been considered as more particularly useful.—*See country remedies.* The food should consist, at first, of nothing but sago, Indian arrow-root, *&c.;* afterwards wine and spice may be added, and weak broths allowed—calve's foot jelly, *&c.*

In epidemic and putrid cases, the use of antiseptic fruits may be allowed; *viz.* oranges, guavas, pomegranates—but they are

* Dr. Jackson recommends clysters of sugar of lead and white vitriol, which I have found of use. The saturnine pill, *No.* 116, may also be given in obstinate cases.

† The putrid effluvia, from dysenteric stools, are not only apt to propagate the common bloody flux, but likewise to breed the malignant fever.

CHAP. II.

are sometimes apt to increase the gripings, and when that happens must be desisted from.

Milk, and butter and milk, are greatly desired by some patients in chronic dysentery, and have proved beneficial.

See *country remedies in Appendix*:—Zizigary, guava, cashew, birch, pomegranate, logwood, hogmeat, &c.

DISEASED LIVER AND SPLEEN.

Dysentery accompanies fevers or reciprocates with them: Diseases of the liver are either a cause or the consequence of them; and are, therefore, in this place, properly the subject of consideration.

A disease of the liver is known from pain and enlargement in the right hypochondre, *i. e.* under the cartilages of the ribs on the right side, as also by a pain in the shoulder. Of the spleen, from the same symptoms on the left side, or towards the left hypochondre. Both the one and the other is occasioned by long continued intermittents; but they also come on from other causes, as cold, &c. and particularly from the intemperate use of ardent spirits.*

Obstructions in the liver are sometimes attended with symptoms of inflammation, fever, and violent pain; at other times, with jaundice, and occasion dropsy.

In

* It is the opinion of some that the obstruction of the liver is occasioned by a deposition of the resin of the bile, which may be rendered soluble by oxygene air: Hence the use of turning out horses to pasturage, jaundiced by being long kept in the stable—*See Schott of Benghal.*

It is singular that at Madras there are hardly any complaints but those of the liver, whilst at Bengal these are more rare.—*(See Jou. of a Voyage to India, by an Officer on board the Caroline.)* Europeans are most subject to liver complaints on their first arrival—*Christie.* There is in India a singular disease, *viz.* an inflammation of the colon, where purgatives afford no relief, but which yields to opium.—*See letter from Mr. Davison to Sir Walter Farquhar.*

In some cases, or where the disease is seated in the concave, or under part of the liver, there is no swelling or hardness to be perceived. CHAP. II.

Sometimes the disease gives little uneasiness, people labouring under it for many years of their life, without any acute symptoms; but, when attended with pain and fever, the earliest and strictest attention is required, to prevent inflammation terminating in abscess. Copious bleeding then, is, in the first place, to be had recourse to. Then laxatives, *No.* 3 *and* 4; fomentations and blister to the part. If the symptoms do not quickly give way to these means, mercurial frictions* are to be employed—two drachms, or more, of mercurial ointment must be rubbed every day into the right leg and thigh, and five grains of calomel given every night, till the mouth is affected, or the symptoms are mitigated.† A Burgundy pitch plaster may be of great service in preventing relapse, and bitters with chalybeates will be afterwards proper for restoring the tone. A mineral water, such as that in Liguanea, containing the metal in a diluted state, is preferable—the artificial pyrmont, prepared with Nooth's machine, may be substituted for any natural chalybeate—or ten or fifteen grains of salt of steel may be dissolved in a quart of water, with the addition of a tea spoonful of elixir of vitriol, to be used in the course of the day.

Affections

* See a valuable paper on this subject, by Dr. Chisholm of Grenada, in the Med. Com. 1787.—Dr. C. gave from three to seven grains of calomel, with one third of a grain of opium, three times in the day, till salivation came on.

† More or less mercury may be required, according to circumstances.—Dr. Saunders has an opinion, that acute inflammation of the liver is seated in the extremities of the hepatic artery, and that chronic affections of the liver are owing to obstructions in the branches of the *vena portarum:* Perhaps the membranes of the liver also are concerned in true hepatitis, and the *parenchymetous* substance in the chronic disease.—Dr. Saunders thinks calomel and mercurials are not to be employed in the active inflammation; they may not, perhaps, be proper in genuine hepatitis, or an inflammation of the membraneous covering of the liver, brought on by cold air, like pleurisy; but experience shews the necessity of them, in every other case.—*See Saunders on Affections of the Liver.* Calomel, combined with opium, has, however, been since found beneficial in pneumonic inflammation; and may therefore, by parity of reason, be thought so in true hepatitis.

CHAP. II.

Affections of the spleen are to be considered and treated in the same manner as those of the liver. The nitric acid, which has been employed as a substitute for mercury in the *lues venerea*, has been likewise used instead of mercury in obstructions of the liver* and spleen. *See Form, No.* 45.

Persons having frequent returns of the liver disease should go to a cold climate—the best remedies on their arrival there, are the chalybeate and purging waters, particularly the *Cheltenham* waters, in England.

Obstructions of the liver, and inflammation, sometimes terminate in abscess, which may break internally into the duodenum, and the matter be discharged by stool. When the abscess points externally, it must be opened by the lancet, or a seton may be put through the teguments, which may be done with safety and success.†

Diseases of the liver are also followed by a looseness, or bloody watery stools, like the washings of flesh; which shew an incurable disease. There is also a liver cough and consumption; *viz.* where an adhesion takes place between the liver, diaphragm, and lungs, and the abscess of the liver breaks into the lungs.‡

JAUNDICE.

Jaundice sometimes attends the foregoing disease, but it is also occasioned by stones, or biliary concretions, in the gall ducts, or by spasmodic constriction, and pressure from schirrous tumours in neighbouring parts, *&c.*

In

* See Schott on the use of nitric acid in the Complaints of India.

† See cases related by Dr. Clark of Dominica.—*Med. Com.* 1790.

‡ Aneurism has been mistaken for abscessed liver. The operation for empyema was once performed by mistake for abscessed liver—an enlargement of the liver was mistaken for hydrothorax.

In jaundice, the bile, which should be poured into the intestines, is re-absorbed and returned into the blood, communicating a yellow colour to the skin and whites of the eyes, and at the same time rendering to the urine a deep saffron colour; whilst the excrements, being deprived of bile, are of a white or ash colour: The patient is short-breathd, costive, labours under acidity and indigestion, is low spirited and sluggish, having no propensity either for occupation or amusement.

In cases of stone in the gall ducts, there is sometimes excruciating pain.—For the relief of this, bleeding, fomentations, warm bath, electricity, flexion of the body over a cask, anodyne liniment, *No.* 44—internally, laudanum, three or four table spoonfuls of olive oil, æther—clysters of asafœtida, *No.* 72.

For dissolving biliary concretions, the patient should eat raw acrid vegetables, take the powder of madder-root, and drink half a pint of the artificial Seltzer water, *No.* 63, two or three times in the day; or pills of natron, *No.* 86. The nitric acid found useful in icterical affections and biliary calculi, *No.* 45.

For dissolving gall stones,* take a raw egg every morning;† or æther, in the yolk of an egg, as lately recommended;‡ but mercurial salivation is the most certain cure.

In ordinary cases of jaundice, the chief remedies are, 1*st*, *vomit* of ipecacuan, to be occasionally repeated:—*Purgatives*, *viz.* pills of rhubarb and soap, taken daily, *No.* 75—soluble

* Biliary calculi are of three kinds; 1*st*, chrystallized, lamellated, and shining; 2*d*, inspissated bile; 3*d*, uninflammable.—*See Encyclopæd. Sub-Animal Substances.*

† Dr. White.

‡ Gibbons, Med. Com. 1799.

CHAP. II. tartar and rhubarb, *No.* 76, every night—at the same time, through the day, bitter infusion, with rhubarb. *No.* 40—bitter infusion, with salt of worm-wood, *No.* 52—afterwards, when the obstruction is removed, chalybeates may be added to the bitter infusion—or the mineral waters, *No.* 63, 64, may be drank.

Diuretics are also of use, *viz.* squill pills—decoction of grass roots, with oxymel of squills—*(see dropsy.)* In obstinate cases, give squill pills, with calomel, *No.* 52. ℬ

Regimen is of great consequence in this disease—the patient must make use of no crude, flatulent, or indigestible, aliments. Caleloe is an excellent vegetable. Acid drinks and malt liquors are improper: The best drink is mixed rhenish, or gin and water—or ginger tea—or spruce, with ginger.

Lastly, *Exercise:* Without this, hardly any good effect can be expected from other means. Every kind of it is proper, but riding is preferable; sailing, swinging, battledore and shuttlecock, *&c.* are suitable exercises.

A number of nostrums and charms are employed for curing this disease, and no doubt prove sometimes efficacious, by exciting the mind, which is commonly in a torpid languid state. It is *hope* that produces the change, not the medicine. A very learned and reverend divine, who laboured under jaundice, having found no relief from the medicines ordered him, was prevailed on to consult an old woman who had great reputation for curing jaundice—he did so—that is, he sent his urine to her two or three times in the week; and *his faith saved him!!*

DIARRHŒA—CHOLERA MORBUS.

These, in some cases, may be considered as only different degrees of the same disease, occasioned by the overflowing of bile;*

bile;* which, when secreted in an undue quantity, is at the same time changed in its nature, becoming highly acrimonious, irritating the bowels, and causing profuse evacuations, either by stool alone, as in diarrhœa, or both by stool and vomiting, as in what is called cholera morbus. CHAP. II.

These complaints are most prevalent in the autumnal season, and are brought on by drinking too copiously of cooling liquors, such as lemonade, *&c.* or eating excessively of the watery and crude fruits, such as melons, cucumbers, *&c.* †

The cholera morbus is a dangerous disease, bringing on cramps and death in the course of a few hours, if the evacuations are not restrained. This is to be done, both in diarrhœa and cholera, by giving at first large and repeated draughts of warm water, chamomile tea, thin gruel, barley-water, chicken water, and other demulcent liquors; then by opium and astringents; but care is to be taken not to stop the discharges downwards too suddenly. First of all then, after the patient has drank plentifully of the above liquors, to facilitate the discharge of acrid matter, give one or two opium pills, *No.* 28, and repeat the dose, if necessary, two or three times, at the distance of two or three hours (in cholera it may be required much oftener); then give the chalk mixture, *No.* 29, or any of the other astringents prescribed, *No.* 30, 31, 32. Care is to be taken to support the patient's strength by due nourishment, such as sago with spice and wine, *&c.*; and, when the symp-

* Fourcroy and Mitchil assert that the principle use of the bile is to prevent the putrefaction of matters in the intestinal canal. That an augmented secretion of bile, which happens in fever, is not the cause, but the effect, of fever, is very obvious; but the effusion of bile certainly does not operate in removing fever: On the contrary it aggravates it, by its irritating effects in the canal, and seems to be frequently the cause of relapse.

† It has, in many instances, been occasioned by persons drinking a great quantity of sour beverage, after taking magnesia.—Dr. Charles Richardson, an eminent practitioner of physic in Kingston, fell a sacrifice to this indiscretion.

CHAP. II.

toms are abated, the tone of the bowels is to be restored, and relapse prevented, by the use of the bitter-wood or columbo infusion; to which may be added, occasionally, a few grains of the powder of rhubarb, to open the bowels when necessary. *See Form, No.* 40. Obstinate chronic diarrhœa is very quickly stopped by the saturnine pill, *No.* 116.

Diarrhœa and cholera may be brought on by other causes, by over-eating, or by eating crabs, oysters, *&c.*; in these cases, it may sometimes be necessary to take first a gentle vomit of ipecacuan or rhubarb, to carry off the offending matters, and then ginger tea, with brandy.—*See Poisons.*

DRY BELLY-ACHE.

This torturing disease is much less frequent than formerly, which circumstance is not improperly imputed to several changes in the mode of living, and to a different manner of clothing;* which, in the present day, renders people less liable to be affected by the alterations in the air from heat to cold. The *colica pictonum*, and Devonshire colic, (the colic caused by lead) has so close a resemblance to the dry belly-ache, that they have been thought the same disease, and the dry belly-ache has been supposed owing to the same cause, *viz.* the poison of lead contained in rum; but the disease frequently attacks persons who never use rum, nor any liquors that can be supposed to contain lead, and is brought on manifestly by other causes, *viz.* by suppressed perspiration from cold, after being in a heated or fatigued state; particularly if, at the same time, there be a redundancy of bile in the first passages, and the bowels are constipated. That the lead contained in new rum, may be sometimes the cause of it amongst the

* It is known that several persons who were liable to returns of this complaint, get the better of the disposition towards it, by wearing warm clothes. Belly-ache people should always wear flannel next their skin.

the soldiery, as is contended for by a respectable writer,* is not to be disputed; but it is much more frequently to be attributed to the causes above-mentioned; to which soldiers, in their barracks, are particularly exposed.

Cold, or a current of cool air, directed upon the body in a debilitated state, and when perspiring, produces sometimes, in place of belly-ache, a total loss of power in the limbs, or a species of palsy, that may not, perhaps, be improperly termed the *rheumatic;* though it is not always attended with severe pain:—At other times, cold so applied is the cause of tetanus, or opisthotonus, in which the symptoms are exactly the same, as when brought on by wounds of the tendons and other injuries, though not so severe, nor so certainly fatal.

Although the dry belly-ache, and colic from lead, arise from different causes, the symptoms are so much the same, that the cure cannot greatly vary.†

The disease, if neglected or ill treated in the beginning, is extremely obstinate, and leaves dire effects—The patient suffers the most excruciating torments for days, and sometimes weeks, without any evacuations by stool, and afterwards loses all power in his arms and hands, and sometimes also of his legs. The

* Dr. Hunter, Med. Comment. 1788.

Dr. Hunter detected lead in the rum used by the soldiers, by the most unequivocal proof; yet, Dr. Moseley, the author of Observations on Tropical Diseases, does not scruple to assert, that such "*Chimeras, (viz.* as that of lead in rum) *shew little chemical, and much less medical, knowledge.*" Lead, according to this chemist, is perfectly innocent whilst its *phlogiston is bound down to its earth.* Cerusse is also innocent until its *phlogiston is revived!* Does not this author shew here that he himself has little chemical knowledge, whatever medical knowledge he may vaunt of?

† Mr. Alibert, however, has observed, that the Madrid colic, though resembling exactly the colic of Poictou, did not admit of relief by the drastic method practised at Paris in that disease.—*See Med. and Phy. Journal, No.* 12.

CHAP. II.

The first object in the treatment of this malady, is to relieve the pain of the bowels, and stop the retchings, if there be any—for this purpose, after giving a few cups full of camomile tea, to bring off the contents of the stomach, try to quiet it by strong mint tea—essence of peppermint*—and by forty or fifty drops of laudanum, or rather by two or three of the opium pills, *No.* 28; at the same time, administer the anodyne clyster, *No.* 33; or fœtid clyster, *No.* 66.† As soon as ever the pains are by these means (or by putting the patient into a warm bath) mitigated, and he can be made to retain any thing on his stomach, give three of the pills (*No.* 36) every three hours, till they begin to operate,‡ or shew signs of operating; then administer clysters of castor-oil, and give a glassful of the emulsion (*No.* 38) of castor oil every hour, till plentiful stools are produced;§ after which, the patient is to be supported with nourishment and wine; and care taken, by the daily repetition of clysters and the castor-oil, to prevent any return of costiveness; or three or four of the pills, *No.* 37, may be given morning and evening, as occasion requires, to keep the bowels perfectly open. A tea-cup full of the infusion of columbo, or bitter quassia, should also be drank three or four times in the day, or, thirty or forty drops of the balsam of Peru, put into a little muscovado sugar, swallowed two or three times in the day.

The

* If the essence or oil of mint be not at hand, take some of the leaves of mint, and put them into a tea saucer with brandy or rum, to which set fire, and let it burn for a few seconds; when the remainder, after blowing out the fire, will be strongly impregnated with the oil. A tea spoonful or two of this burnt brandy may be given in a little sugar or water, in place of any other mint cordial.

† The giving of opium by clyster, as recommended by Percival, is an excellent practice. Hufeland says that nothing alleviates colic pains so certainly and so quickly as a few spoonfuls of almond oil—good salad oil may have the same effect.

‡ Calomel has been substituted to these pills formerly employed, and has been given, in very large doses, very successfully; but, in many cases of dry belly-ache, even small doses will affect the mouth, and bring on excessive salivation.—*See Clark.*

§ Clysters of cold water have been recommended here, as well as in hysteria, &c. where the peristaltic motion is invested.

The above is the most certain and safe method of giving relief in ordinary cases; but, in more desperate ones, other medicines may be tried; amongst the most powerful of which are, the vitriols and alum. *See Moseley's solution, No. 34. Chalmers' solution, No. 35.*—Dr. Percival orders ten or fifteen grains of alum, every four or six hours.

The country remedies appear to be entitled to a just preeminence over any others, in desperate cases, particularly the wild cassadà, *(jatropha gossypifolia)* the efficacy of which has been proved by ample experience.—*See country remedies, Appendix.*

The palsy of the limbs, which remains after this colic, is the reproach of the medical art.* Young people recover from it perfectly in time, by the powers of the constitution, but those in advanced life seldom or ever regain the entire use of their limbs, with the assistance of any remedies. The warm bath and *Bath waters* have been long celebrated in these cases, and they are frequently useful, within certain limits; but they seldom effect a complete cure. To obtain this, a voyage to a cold climate is indispensably necessary. Such persons as cannot avail themselves of change of climate, must rely on the use of tonics. Electuary of gum guaiacum, with bark, *No.* 46—chalybeates, *No.* 47, 53—frictions, and exercise; *viz.* walking, riding, swinging the dumb bells, electricity.—The vitriolic solution, *No.* 34, is one of the best tonics.

The balsam of Peru, forty drops—balsam capivi and Barbadoes tar, sixty drops—oil of amber, four or five drops—taken in sugar—are esteemed useful remedies.

The

* This species of palsy is attended with great emaciation of the limbs: The muscles are partly absorbed, and partly converted into a white fatty or gelatinous substance—not unsimilar to that produced by the immersion of dead bodies, in a current of water, and by other processes.

CHAP. II. The several liniments, *No.* 39, may be also made use of, for rubbing the paralytic limbs.

CHAPTER III.

ON INFLAMMATORY DISEASES.

RHEUMATISM.

CHAP. III. THIS, though considered as a disease of cold climates, is not an unfrequent one within the tropics, and proves in many cases, very intractable; continuing for months, nay, for years, in defiance of every remedy. It is principally of the chronical kind, affecting either the muscles of the neck, occasioning what is called cricked neck—the larger joints, as the shoulders, knees, and ankles—or the parts about the loins and hip joint, constituting what are called the lumbago and sciatica.

These rheumatic complaints are, in their commencement, attended with more or less fever, which, occasionally recurring, aggravates the symptoms: The cause of rheumatism is well known to be cold, partially applied, more particularly when the body is in a heated and perspiring condition; and this is what persons in the West Indies are much exposed to—from their houses being so constructed as to be favourable to a draft of air—from the sudden changes of weather, in certain months during which the north winds prevail—and from the occupations

tions followed by the majority of the inhabitants, who either pass a sedentary and confined life, rendering them susceptible to the slightest impressions from cold, as that of clerks; or, on the contrary, are much exposed to the inclemency of the open air, in all seasons, and at night hours, *viz.* book-keepers, doctors, and others. It is therefore matter of surprise, considering the foregoing circumstances, that there should be so few instances of rheumatism. The most effectual way of guarding against it is, by hardening the constitution, *i. e.* by inuring the body, by degrees, to every change of atmosphere. To this the daily use of the cold bath eminently contributes—the next most important preventive, is the wearing of flannel next the skin.

Treatment.—If rheumatic pains are accompanied with symptoms of general fever, bleeding may be sometimes adviseable, particularly in the young and plethoric.—After opening the body, give the nitrous powders, *No.* 7, 8—saline julep, *No.* 11—or the antimonial powders, *No.* 10—with warm diluent drinks, to promote perspiration.—The antimonial opiate, *No.* 17, may be sometimes proper, to occasion rest.—The pained and affected part should be frequently rubbed with the volatile camphorated liniment, *No.* 25, and blisters occasionally applied—afterwards the bark, which supersedes the use of all other remedies.—*See Dr. Haygarth's excellent work, entitled, Clinical History of Rheumatism.*

When the complaint is more purely chronical, besides the external applications before recommended, the following ones may be used: Opodeldoc, or soap liniment, *No.* 44*—hot salt brine—bags of heated salt—vapour baths—liniments, *No.* 39.—In the rheumatic white swelling of the knee: Mercurial

 frictions

* The soap-berries, so much celebrated as a cure for chronical rheumatism, can only be supposed to act in the same manner as any other saponaceous liniment.

CHAP. III.

frictions and blisters—liniments, *No* 39.—In the sciatica and lumbago: Burgundy pitch plaster—an issue made with caustic in the outer part of the thigh, near the great trochanter. The ancients applied the actual cautery.*—Internally, the volatile tincture of guaiacum—bolus of guaiacum, *No.* 74—spirits of turpentine, with honey, *No.* 62. In obstinate cases, small doses of calomel should be daily administered, or Plummer's pills, with a decoction of the woods or mezereon; and at the same time the warm bath, will be found the most efficacious mode of treatment.

Acute rheumatism, when in the decline, is sometimes prevented from degenerating into the chronical, by giving the bark combined, as in *No.* 46—or the decoction of bark, with elixir of guaiacum.

Great attention should be paid to distinguish rightly between rheumatic and venereal pains; but pains considered as venereal, are often only rheumatic, brought on by indiscreet exposure, whilst under a mercurial course.—An alterative mercurial course, is, however, the best cure in such cases, or perhaps the nitric acid,† *No.* 45.

To remove debility, after the pains abate, and to obviate a return of the complaint, friction and the cold bath may be used, alternately with the hot bath ‡

When the pains are superficial, the greatest advantage is found from turpentine and mustard frictions—or liniments, *No.* 39.§

GOUT.

* *Celsus pro ultimo remedio suadet tribus aut quatuor locis super coxam, cutem candentibus ferramentis exulcerare.*

† The nitric acid has been also recommended in cases of this doubtful kind.—*See Ferriar.*

‡ In chronic rheumatism there is a torpor which the hot bath is calculated to remove on the one hand, whilst the cold bath proves tonic on the other.

§ The other remedies advised in this refractory disorder are electricity and galvanism, digitalis,

GOUT.

The gout and rheumatism are so nearly allied, as to be, in many cases, difficultly distinguished. Gouty people are not exempt from rheumatic affections, and the two diseases may therefore be complicated; but, in general, they are known from each other by their manner of coming on, and by the constitutions they attack. Rheumatism is occasioned by external cold; gout is preceded by indigestion, flatulence, and acidity of stomach. The rheumatism is seated in the larger joints, as the knees, ankles, shoulders, elbows, wrists; gout in the smaller joints, or those of the toes and fingers. The great toe is generally its throne, which it seizes suddenly, causing extreme pain and inflammation: Along with the swelling there is a shining redness of the skin, and the most exquisite sensibility. The gout, says Dr. Rush, is a disease of the whole system, primarily of the solids; affecting chiefly the sanguineous temperament—both men and women, but the latter under a more feeble form. It attacks every part of the body;—the viscera, producing symptoms of inflammation;—the lymphatic glands, producing ptyalism, bubo, and dropsy;—the skin, producing erysipelas, itching of the anus, *&c.*—the bones, *producing dislocation, &c.*—in one case the thigh-bone was dislocated.*—*(Dr. Rush.)*

This disease is the inheritance of many, but the title to it

digitalis, Fowler's mineral solution, fish oil externally. Some women at Otaheite cured Capt. Cook of rheumatic pains by pinching him all over, till he was sore. A man that had laboured under a tedious and severe rheumatism, was completely cured by a game of fisty-cuffs with another whom he had quarrelled with. Whether pugilistic exercises will be equally successful without the incentive of passion, remains to be determined.

* The gout, according to the theory of the present day, is owing to a superabundance of the phosphate of lime; and the rickets to a deficiency thereof. The phosphate of lime is frequently directed to improper parts, causing tophi, nodes, &c.; sometimes it is carried off by the urine. In all diseases of the bones the urine deposits a calcareous sediment.

CHAP. III.

is often an acquired one. Premature venery, intemperance in the use of wine, late hours, and an indolent manner of living, are the causes of bringing it on at an early period, and rendering many young men victims to it. The means of preventing the disease are well known, but the cure for it is not yet discovered, and those subject to it must therefore compound, either to suffer in patience, or rigidly to adhere to the rules of living necessary for warding it off. What these are hardly need to be pointed out, but the most essential one, is a total abstinence from wine and spirituous liquors, particularly wine.* The same injunction had been enforced with respect to the use of animal food, but perhaps without the same substantial reasons. On this important subject, consult Dr. Darwin, who has given, in the history of himself and some of his friends, examples of the good effect of the regimen he recommends, which does not prohibit animal food.

What will be here offered on the treatment of gout, will relate chiefly to the conduct proper during the fit, and in particular cases, as when it is repelled, and attacks the head, stomach, &c.; for, as to the efficacy of guaiacum, bitters, and other remedies, recommended for eradicating the complaint from the habit, whatever efficacy they may have under particular circumstances, they are incompetent to this end, and the too liberal or long continued use of them, frequently does much mischief, by destroying the tone,† and laying the foundation for dropsy.

Bleeding

* There are many arthritics who never can indulge in a few glasses of wine without bringing on symptoms; but who, by a rigid and persevering abstinence from wine can keep off any fit. The late Dr. Brodbelt, of Spanish-Town, was an eminent instance of this. Celsus relates that,

"*Quidam cum toto anno a vino, mulso, venere sibi temperassent, securitatem totius vitæ consecuti sunt.*" (*De Man. et Ped. Vitiis.*)

The advice of Horace also is, "*Venere et vino abstimere.*"

"Nor taste the joys of wine nor sweets of love."

† Dr. Barton supposes that the danger accruing from the long use of bitters, may arise

CHAP. III.

Bleeding is recommended in the first attack, if the patient be young and athletic; more particularly if the fit has been brought on by any sprain or accident, which is not unfrequently the case;* but, in subsequent paroxysms, bleeding should be used with great caution, as it has a tendency to prevent the proper inflammation taking place in the joints, and thereby to occasion great danger.

If there be any stomach affection, as nausea, sickness, &c. *vomiting* may be excited by chamomile tea—a few grains of ipecacuanha—or a tea spoonful of mustard, in a cup full of warm water—but the custom of some persons, of taking frequent vomits, is not to be recommended.

In cases of considerable costiveness, a laxative may be necessary, such as castor-oil, magnesia, tincture of rhubarb, or the pills, *No.* 37; but the principal relief, during the painful paroxysm, is obtained from such things as keep the part, and the whole body, in a perspirable state.

Where there is fever, the antimonial powder, *No.* 9, will be the best diaphoretic: In other cases, the guaiacum with mindererus spirit, *No.* 13—the volatile tincture of guaiacum—bolus of guaiac, *No.* 82.—Frequent draughts of warm diluents should be taken, to promote the action of the above medicines †. No relief of the pain will be found from opium or laudanum; but,

arise not from the bitter quality they possess, but from something foreign, in combination with it. Porter is a bitter which, by long use, shews no bad effects. Mr. Freake has, on very ample experience, recommended the use of the *humilus lupulus*, the hop. *See Essay on the Humilus Lupulus.*

* A gentleman who, without any previous symptoms of gout, had a most violent attack brought on by a sprained ankle: After this he had frequent returns, and fell ultimately a martyr to the disease, at the age of about forty-five.

† Dr. Gardiner relates the case of a person who, in a fit of the gout, eat three salt herrings out of the pickle, and refrained twelve hours afterwards from drinking. This was on the principle, I suppose, that *Ignis igne extinguitur.*

CHAP. III.

but, when the patient has been long harassed by the want of sleep, the antimonial opiate, *No.* 17, may be sometimes given at night, particularly in the decline of the fit.*

Externally nothing is to be made use of but flannel or wool, for defending the inflamed and irritable surface from the action of the air, and for promoting the perspiration. The use of liniments, or embrocations, are not only useless but dangerous, as they repel the inflammation from the part, and throw it elsewhere, to cause greater† injury. The warm coverings should not be continued unnecessarily, as they relax and weaken the parts.‡

To remove the subsequent rigidity, and to restore the action of the parts, warm bathing and dry frictions. In the convalescent state, warm bathing, chalybeate mineral waters,§ and exercise, are the means most conducive to perfect recovery.

When the constitution has suffered much by gout, or when it attacks weakly and elderly people, the disease, instead of shewing

* The celebrated John Brown, whose opinions form an æra in medicine, considers gout, in all cases, as a disease arising from indirect debility, and places the whole cure in the administration of opium and stimulants. He afforded the world a proof, if not of the success of his practice, at least of his determination to follow it; for it is said he killed himself by it. Concerning the use of opium in gout see some valuable observations, in Crump, on opium.

† Dr. Rush, however, recommends frictions with warm melasses. And Mr. Baldwin, who recommends oily frictions in the plague, says he found great use from them in inflammatory gout. *See Polit. Reflex. on Egypt.*

‡ It is here requisite to take notice of the novel practice of Dr. Kinglake; *viz.* the affusion of cold water on the inflamed parts, and wrapping them up in cloths dipped in a solution of muriate of ammonia; *i. e.* crude sal armoniac. However repugnant this practice may be to any theory formerly entertained, the success, which is said to have attended it, in a number of cases, would warrant it, were there not others in which it appears to have proved highly dangerous and mortal. The practice would not seem to be adviseable in debilitated worn-out arthritics.

§ The Bath waters were formerly much resorted to by arthritics, or gouty persons: They are thought to be useful in accelerating or bringing on a fit when required, and also to promote the recovery of convalescents. –*See Essay on the Bath Waters, by the author of this work, published* 1784.

shewing itself by inflammation of the joints, appears in affections of the stomach, bowels, and other parts. This is called *atonic* gout. It is in this state of the disease, that the guaiacum, bitters, &c. chiefly prove useful; but chalybeates are still more beneficial. See *Formul. No.* 46, 47, 48.

The inflammation of the joints, if repelled, may fall on other parts; *viz.* the stomach, the lungs, the head, and occasion great danger: In this case, or whenever the gout attacks these parts, every thing must be done to repel it from thence, and solicit it back to the extremities.

In gout of the stomach give brandy, or ginger tea, with laudanum—æther—volatile spirits—tincture of asafœtida—musk, See *Formul. No.* 19, 65, 67, 73.*

Gout of the head—put the feet in warm water, at the same time applying towels soaked with cold water to the head—blisters to the thighs and ankles.

Gouty people are subject to the gravel and inflammation of the kidnies or bladder: In this case, the patient should drink plentifully of demulcent liquors, linseed or ockrow tea. An anodyne clyster, *No.* 33, may be administered; and then warm fomentations of the loins. In gravelly complaints, the natron pills, *No.* 94.

PLEURISY—PERIPNEUMONY.

Pleurisy is a pain in the side, with difficulty of breathing, cough, quick strong pulse, and other symptoms of fever: It consists in an inflammation of the pleura, or membrane that lines the inside of the thorax or chest.

Peripneumony

* The dose, or quantity of these, necessary to give relief, cannot be prescribed; it is sometimes considerable; a pint of brandy has been taken without effect.

CHAP. III.

Peripneumony is a similar disease, affecting the same membrane that covers the lungs, or is an inflammation of the lungs themselves: The pain here is not confined to the side, as in pleurisy, and the pulse is softer, but there is no essential difference in the two complaints; They are both occasioned by cold, and chiefly attack robust people. They prove very fatal to negroes, and are at all times dangerous diseases, when they are not taken in time.

The first and most important step in the treatment is bleeding. The patient should lose from eight to twelve ounces of blood from the arm, as soon as possible; and, if not relieved thereby, or from the subsequent means recommended, he should lose eight ounces more, in the course of six or nine hours.

After bleeding, a blister may be immediately applied to one or both sides. In slight cases, after warm fomentations with flannels, wrung out of chamomile decotion, let the side affected be rubbed with volatile camphorated liniment, *No.* 25.—Give tamarind ptisan, *No.* 3, to open the bowels. Let the patient inhale the steams of warm water, as in sore throat. See *page* 124.

As soon as the bowels are open, give small doses of antimonial powder, *No.* 9—or the saline julep, with antimonial wine, *No.* 11—or mindererus mixture, *No.* 13—for promoting perspiration; which is to be kept up by taking frequently small draughts of warm diluents, such as barley-water with vinegar and honey, lemon-grass tea, wild liquorice tea, *&c.*

By these means the cough will be also appeased; otherwise, after what has been premised, the antimonial opiate, *No.* 17, may be given at night, or the paregoric draught, *No.* 41.

These

These complaints generally terminate by expectoration, or a discharge of frothy phlegm (sometimes streaked with blood) from the lungs: It is of great consequence to promote this expectoration; because, if stopped, the patient is apt to have a fatal relapse. For the purpose above-mentioned, give milk of gum ammoniac with squills, *No.* 42—or oily emulsion, *No.* 81. If the digitalis, which has been brought much into use in this disease, (as in other cases where the lungs are affected,) is admissible, it must be in this stage, not in the commencement. *(See what is afterwards said on the subject of digitalis under consumption.)*

When all symptoms of inflammation are gone off, and the expectoration is free, the patient's recovery may be promoted, by giving the decoction of bark with honey of squills, *No.* 43.*

Peripneumony is sometimes epidemic, and of a putrid malignant nature. The inflammatory symptoms are less acute, but the patient suffers great prostration of strength, and dies very suddenly, with all the symptoms of general putrefaction. In these cases, bleeding, if not wholly to be omited, is not to be repeated.†

Blisters—camphorated mixture, *No.* 15—infusion of snake root, *No.* 16—decoction of bark, with honey of squills, as above, are the principal remedies.‡

* A new treatment of these diseases, by calomel and opium, is recommended by Dr. Hamilton, of Lynn Regis. *See Med. Comment. Vol. IX.*—This practice, we learn from Dr. Wright, has been long in use with Dr. Drummond, in Westmorland.

† In all inflammatory diseases the blood drawn is, after standing some time at rest, covered with a buff-coat, or whitish coriaceous crust, particularly in pleurisy; if, therefore, blood drawn has not this appearance, it is a sure sign that further bleeding would be improper. There being such a crust is not, *vice versa*, always, or by itself, an indication of the necessity of bleeding.

‡ See Cappel, on putrid peripneumony.

CHAP. III.

It sometimes happens, that the inflammation in these complaints occasions an adhesion between the pleura, or membrane lining the ribs internally, and the lungs, or else terminates in suppuration, and either an empyema, or vomica, takes place: The former is an effusion of purulent matter into the thorax, which requires an operation for the discharge—this consists in an opening made between the ribs.* A vomica is an abscess in the lungs, which breaking, the matter is discharged by the mouth.

The disease called *spurious pleurisy* is nothing but a rheumatic affection of the muscles of the side, and is cured, as rheumatism, by fomentations, liniments, blisters, sweating medicines, such as *No.* 10, 15, 17.

QUINSEY—INFLAMMATORY AND MALIGNANT SORE-THROAT—CROUP, *&c.*

Inflammatory sore-throat is brought on by exposure to cold winds, sitting in a current of air when in a heated and perspirable state, by getting wet in the feet, and similar causes: It begins with slight uneasiness in swallowing; which increases, from the tonsils or the glands of the throat becoming very much swelled and inflamed, as also the whole fauces. It is accompanied by heat and thirst—quick strong pulse—and other symptoms of an inflammatory nature.

As it is of great consequence to distinguish the inflammatory from the malignant putrid sore-throat,† the latter shall now be described. The putrid sore-throat mostly attacks children, women, and weakly people; is commonly epidemic, occasioned

* See an extraordinary case of a man who, being frightened at the operation, ran away; and by the effect of terror, or violent exertion in running, got rid of the disease: What an idea this suggests of the power of the absorbents?

† See Introduction, *page* 41

occasioned by contagion, not by external cold. The pain of swallowing is less considerable, there being not so much swelling or internal inflammation of the throat, but white spots are observed in the tonsils and different parts of the fauces, which conceal ulcers beneath; there is some swelling about the neck externally, and frequently about the second or third day, scarlet eruptions on the neck and breast. CHAP. III.

The fever here is not of the inflammatory but malignant kind, as appears from the low pulse, great prostration of strength, vomiting, diarrhœa, *&c.*

So different are the two kinds of sore-throat, that in common it is hardly possible to mistake the one for the other; sometimes, however, there are, in the inflammatory sore-throat, white mucous crusts, or slight ulcerations of a benign nature, that may cause mistake, and give unnecessary alarm.* It is, therefore, from the state of the fever and the symptoms taken altogether, that we are to form our judgment respecting the real nature of the complaint, and take our indication of cure; which, in the two diseases, are so opposite, that what is necessary in the one case, would prove fatal in the other.

Cure of the inflammatory sore-throat.—If the proper means are not made use of, for moderating the inflammation, an abscess of the tonsils, and suffocation, may ensue—the patient should therefore be bled, and purged freely, by means of *No.*

* A species of sore throat has occurred in this city (Kingston), that does not appear to be, strictly speaking, either of the inflammatory or putrid kind; but somewhat, though not entirely, resembling the apthous affection described in Hilary's Dis. of Barbad. 278. Small pustules appear about the tonsils, velum palati, and tongue, which run into a general crust, that after some days, by the use of detergent and stimulating gargles, peel off, leaving the parts of a bright red colour, as though inflamed. The complaint is neither preceded by, nor attended with, any considerable degree of fever or indisposition, but the bark was nevertheless administered.

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2, 3, 4, or any other medicine of that kind: His throat is to be frequently gargled with sage-tea and vinegar, sweetened with honey, or with any of the gargles, *No.* 59.—At the same time he may inhale steams of hot vinegar and water, through an inverted funnel:* Putting the feet in warm water is also of great use.—A piece of doubled flannel, well soaked with the volatile liniment, *No.* 25, should be kept constantly applied to the throat externally. If the symptoms do not give way to this treatment, a blister is to be applied on each side the throat, under the jaw-bone. 70

If abscess should form, chirugical assistance should be timeously called in, to prevent suffocation; or vomiting may be excited, either by a poultice of tobacco applied to the stomach, or else by a clyster of tobacco.

Some people are liable to a return of sore-throat on every slight occasion—to obviate this disposition, the face, neck, and breast, should be washed every morning with cold water, and the mouth gargled with decoction of bark and allum.

Relaxation of the uvula.—People sometimes feel a degree of pain in the throat, with some difficulty of swallowing, from a relaxation of the uvula, and tonsils,† where there is no inflammation. A mustard or Cayenne pepper gargle may be used, or a gargle with decoction of bark and allum. See *No.* 70, *b* and *c*.

Cure of malignant sore-throat.—All evacuations, and whatever can weaken and debilitate, are in this disease to be avoided, unless in the beginning a gentle vomit, and a few grains of rhubarb, if necessary, to open the belly.

If

* There is a machine for this purpose, called *Mudge's Inhaler.*

† This, in England, is called the falling down of the almonds of the ears, and the cure is effected by external frictions.

If there be spontaneous vomiting, it may be encouraged by a few draughts of chamomile tea.

The gargles to be employed in this sore-throat must be all of the stimulating kind; *viz.* mustard, volatile alkali, Cayenne pepper, &c. See gargles, *No.* 70, *d*, *e*, *h*. Dr. Wright insists much on the use of a saturated solution of sea-salt in lime juice.—It is seldom that children, who are principally subject to this disorder, can be taught or prevailed on to gargle; it is therefore better to use the gargle with a syringe—the patient opening his mouth, whilst the liquor is thrown from the syringe on the ulcerated parts.—Bags of chamomile flowers, boiled in a decotion of bark and vinegar, should be kept to the throat, and moistened with the liquor they have been boiled in.

Blisters, though made use of in other climates, are here apt to mortify, and should be employed with great caution.

The most essential part of the treatment in this disease, is keeping up the patient's strength, and obviating putrefaction, by nourishment, wine, cordials, stimulants, and antiseptics. See *No.* 15, 16—pepper infusion, *No.* 70, *h*—decoction of bark, with muriatic acid, *No.* 21. For ordinary drink, water may be sweetened with syrup of capillaire, or syrup of ginger, and acidulated with spirits of salts.

The sloughs, or ulcers, in the throat, require strict attention; they are not to be forced away, but frequently touched with any of the preparations, *No.* 70. Dr. Darwin recommends dropping diluted vitriolic acid on the slough, through a glass tube.

In the *scarlatina anginosa*, or scarlet fever with sore-throat, a disease now considered as only incidentally different from the malignant

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malignant sore-throat, calomel has been given to a great extent with the most happy event. To a child of only one year old, Dr. Ogden gave three gr. two or three times in the day. (*See Med. Repos. Vol V.*) Dr. M'Farquhar, of Clarendon, used it with the same success. *See his Account of the Cases on Killitt's estate.—Philad. Museum, Vol. I.*

CROUP.

The disease so called is not common in the West-Indies, but it is not unknown, and is not a little dangerous. It is the disease of children, and attacks suddenly, with difficulty of breathing; which is accompanied with a particular croaking or stridulous noise, and wheezing—a dry cough—and symptoms of fever.—There is sometimes a degree of inflammation about the fauces, but more commonly a swelling of the larynx externally. The matter coughed up is dry hardened mucus, sometimes having the appearance of the wind pipe; for which it has, by ignorant persons, been mistaken. There has been a considerable difference of opinion among physicians, as to the nature of this complaint; but it seems pretty generally agreed, that the disease consists in an inflammation of the larynx, and parts about the wind-pipe:* It is, however, attended with spasmodic symptoms, and is therefore thought by some to be a complaint altogether of a spasmodic nature.† In the cure, bleeding is the first thing recommended; then a vomit and an asafœtida clyster: Blisters, if used, must not be applied directly to the part; more advantage is obtained from fomentations, or from embrocations of the throat with spirits of mindererus, æther, &c.—or the application of cataplasms, composed of

* Cullen, Home.

† Luson and Field assert that there are two species of croup; *viz.* the inflammatory and spasmodic. Dr. Ferriar thinks likewise there is a spurious croup—(*see Mem. Med. Soc.* 1799. *Med. Hist. and Cases.*) Dr. Cheyne says there are two stages of the disease, the inflammatory and purulent. See a late treatise on bronchitis, an affection of the mucous membrane of the trachea, &c. by Dr. Badham.

of garlic, &c. which may, at the same time, be applied to the soles of the feet. Warm bathing is also to be used, and the asafœtida clysters frequently repeated; but a more important remedy than any mentioned, has been lately discovered; *viz.* calomel, of which from three to six grains may be given daily to young children, for several days. The practice of Dr. Baird, at New-York, has been lately confirmed in Scotland;* where the seneka-root has also been successfully used. (See *Form, No.* 119.) Bronchotomy may be necessary to prevent suffocation, but it cannot serve the purpose of enabling the surgeon to extract the artificial membrane from the trachea.

In the convalescent state, the patient may use tonics, *viz.* the Peruvian bark—calx of zinc.†

ANGINA PECTORIS.

There is a disease, first described by Dr. Heberden, so called, or quinsey of the breast, consisting in a great difficulty of breathing, with pain and tightness under the breast-bone, palpitation at the heart, &c. It attacks suddenly, when the person is in motion, and threatens immediate death. I have never seen but one case of this disease, but think it necessary to refer to the authors who have written on it, and to mention what has been found the only source of relief in this unaccountable malady; which is an issue in each thigh.‡ See a case cured by white vitriol *Mem. Med. Soc.* 1799.—Dr. Parry, of Bath, has lately (1800) published an ingenious work on this subject: He calls it *syncope anginosa*, and describes it thus: "*Syncope a corporis motu ambulandum, præcunte angustiæ vel dolore precoris per mammam sinistram porrecto, sine palpitatione cordis.*" The case of this kind which lately came under my observation, had been of some years

* See *Med. Comment.* 1799. † Rush's Med. Obs. and Inq.

‡ *See Heberden, Med. Tr.—Fothergill's Works.—Dr. Butter's Treatise.—Encyclop. Britan.*

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years standing, but, by the use of tonics, has been suspended: æther gave great relief in the paroxysm. See what Dr. Ferriar has said on the dilatation of the heart, *Vol. I. p.* 144.—The cardiogmus præcordiorum of Sauvages, Senac, and Lancigi.

MUMPS—SWELLING OF THE CHOPS.

This disease is so unusual, and is made so light of, that it might have been omitted, were it not for the danger with which it is now and then accidentally attended.

The disease is considered to be a contagious one;* it begins with a swelling at the corner of one or both lower jaw-bones, which increases for two or three days, and becomes very painful: When the swelling of the face subsides, the testicles in men, or the breasts in women, are affected by similar swelling.

Nothing is required in the treatment, but to avoid external cold, at the same time fomenting or poulticing the tumour—keeping the bowels open—and drinking warm liquors, to keep up perspiration: But, should any symptoms of delirium come on, or marks of the disease being translated to the brain, blood should be drawn, calomel given, and the head fomented with warm water. Blisters also ought to be applied to the neck, or between the shoulders.

INFLAMMATIONS OF THE STOMACH, BOWELS, &c.

An inflammation of the stomach causes great pain, burning heat, incessant vomiting and hiccup, &c. It is occasioned, commonly, by poisons, or acrid substances swallowed; by a blow on the part; by drinking excessive cold water when heated; by repelled eruptions, &c.

The

* Darwin speaks of cats being liable to it, and of great numbers having been carried off by it.—*Zoonomia, Vol. II.—Hamilton, on Angina Maxillaris.*

The remedies are, bleeding, which may be repeated as occasion requires—opening and emollient clysters, often repeated —fomentations—and blisters to the region of the stomach.— Internally, demulcent drinks in small quantity, and frequently; such as barley-water, ocrow and linseed tea—thin mucilage of gum Arabic, Indian arrow-root starch.

It is seldom that medicines of any kind will remain on the stomach in an inflamed state; but those proper to be tried are, the saline julep in the effervescent state, *No.* 11—the nitrous powders, *No.* 7, with camphor—the mindererus spirit, with camphor.—When opiates are judged requisite, as they may be after an abatement of symptoms, they should be given by clyster. See *No.* 33.

Inflammations of the bowels are distinguishable by nearly the same symptoms; *viz.* great pain, increased by the least pressure, by tension of the abdomen, costiveness, vomiting, *&c.*

The remedies here are the same as above; only, that if the stomach is capable of retaining medicines, laxatives should be administered; *viz.* purging salts, *No.* 3—castor-oil, *&c.*

Erysipelatous inflammation.—There is another kind of inflammation of the stomach and bowels, different from that described, called *erysipelatous*, being attended with less pain and disposition to vomiting: It is discoverable by examination of the fauces, which are affected with the same disease, and by great sensibility to any acrid matter swallowed. Demulcent drinks —absorbents—and bark, are the remedies. See *No.* 29, 34.

The inflammations of any of the other viscera, *viz.* of the liver, spleen, kidnies, bladder, *&c.* are to be treated by the same general means; *viz.* by bleeding, clysters, fomentations,

CHAP. III. blisters, laxatives, and cooling diluents; but it must be remembered that in the two last-mentioned cases, the application of blisters is forbidden, on account of the strangury they are apt to occasion.

CHAPTER IV.

ON HÆMORRHAGIES, OR BLEEDINGS FROM DIFFERENT PARTS.

CHAP. IV. HÆMORRHAGIES are of two kinds; *viz.* such as are accidental, from wounds, blows, violent efforts, vomiting, &c.; or else, such as arise from internal causes; these latter are again to be distinguished as they proceed from increased action of the blood vessels, or as they happen from relaxation of their orifices. Hæmorrhagies from internal causes may also be occasioned by accidental circumstances, or they may depend on original conformation, and a particular disposition, either natural or acquired.

Accidental hæmorrhagies, from wounds, will be spoken of under casualties; those to be now mentioned, are such as are dependant on the constitution.

BLEEDING AT THE NOSE.

This happens most frequently to young people about puberty, more commonly to boys than girls. When it occurs but seldom, and is not profuse, it merits but little attention; in many cases it is salutary and critical, as in cases of vertigo, head-ache, epilepsy, &c.; but when it is profuse, and threatens danger, as is sometimes the case, it is to be restrained or stopped,

ped, by keeping the patient erect, by putting his feet in warm water, and applying to the head and neck cloths dipped in vinegar and cold water, in which some nitre or sal-ammoniac has been dissolved; by applying the same between the thighs; by snuffing up, or by injecting, into the nostrils, vinegar and water, or a solution of alum; or dossils of lint dipped in this solution, or in a solution of blue vitriol, or spirits of wine, spirits of turpentine, &c. may be put up the nostrils: dossils of lint, filled with fine flour and bole armenic, may be also put up the nostrils. It is sometimes necessary to draw in dossils from behind, by passing a cat-gut through the nostrils; the maner of doing which may be easily learned.

Internally may be taken small doses of nitre in vinegar and water, or a table spoonful of common salt in a glass of cold water, which is almost an unfailing remedy. No cordials are to be administered, except in very extraordinary cases.

To prevent the recurrence of the disease, the patient should live abstemiously, avoiding all heating stimulating foods and spirituous liquors—as also violent exercise, the use of snuff, or whatever can irritate the nostrils. He should sleep in a cool chamber, with his head laid high, and wash his head and face with cold water in the morning when he rises. The shower bath is not improper; and, in cases where the patient is debilitated from the loss of blood, the decoction of bark, with elixir of vitriol, should be given.

Bleedings at the nose attacking people in advanced life, are frequently the consequence of schirrous liver. In a case of this nature which had nearly proved fatal, the nitric acid was given with great success, whilst mercurial frictions were at the same time employed.

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BLEEDING FROM THE GUMS AND SALIVARY DUCTS.

These may be stopped by compresses of lint dipped in a solution of alum or white vitriol. A paste may be made with flour and a strong solution of alum, which may be spread on the gums.

HEMOPTOE—SPITTING OR THROWING UP OF BLOOD FROM THE LUNGS.

Spitting or bringing up blood from the lungs is of several kinds; in some cases affording little occasion for alarm, as when it is only the effect of some slight accident, of a blow, or fall, &c ;* or when it happens from the menses or piles being suppressed; but the *phthisical* blood-spitting is a disease which demands more serious attention, as it too frequently ends in fatal consumption.

This is a disease that principally attacks persons in juvenile life, or under thirty-five years of age, more particularly such as have marks of the sanguine, but at the same time a delicate constitution; *viz.* persons of fair hair, large blue eyes, rosy cheeks and lips, with pearl white teeth.

It is also occasioned by an ill conformation, or a diminished capacity of the thorax or chest, and by a scrophulous taint, causing tubercles in the lungs. Spitting of blood is likewise brought on sometimes by a diseased liver.

An effusion of blood from the lungs is attended with a flushing in the cheeks, uneasiness about the chest, tickling in the throat, &c. The blood is either hawked or coughed up in small quantities, except when a large vessel bursts, in which case the patient may suddenly expire.

Treatment.

* Blood-spitting sometimes happens to gouty people, and relieves them from the fit.—*Darwin.*

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Treatment.—In cases of external violence, and where there is a plethoric habit, bleeding is necessary: Where the disease is brought on by suppressed catamenia, &c. these are to be restored by suitable means:* Lastly, when the disease is a constitutional one, the strictest care is to be taken, in the first place, to avoid every thing which may have a tendency to excite and bring it on, as violent exertion in running, dancing, singing, &c. getting cold, intemperance, or drinking large draughts of any liquor;† giving way to passion.

When the disease threatens to come on, bleeding may be proper; then cooling laxatives, *No.* 4—cooling powders, *No.* 8—but the principal medicine is nitre given in vinegar and sweetened water, or the electuary of nitre with conserve of roses, *No.* 54.—A table spoonful of common salt, as recommended in bleeding of the nose, *page* 131.

In cases of profuse and dangerous hæmorrhagy, it is usual to give tincture of roses, or elixir of vitriol, styptic powder, &c.; but nauseating medicines will prove much more efficacious; *viz.* solution of white vitriol, *No.* 34—two or three grains of ipecacuanha. Sitting in a warm bath of 80°, has also a great effect in lowering the pulse, and abating the force of the circulation in the lungs. The acetate or sugar of lead, combined with opium, (see Form, *No.* 116) may be given with almost certain and immediate effect both here and in menorrhagia.—*Ryan, Medical and Ph. Jour. vol. VII.*

To prevent returns of this dangerous complaint, all the cautions before-mentioned are to be attended to. The patient should

* *See Diseases of Women.*

† Particular stress is laid on this by a late writer, who reprobates the copious ingurgitation of liquids, as increasing the volume of the blood, &c.—*Davideon on the Pulmonary System.*

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should live chiefly, if not wholly, on a milk diet, and ride every day for several hours, on an easy horse. The motion of a carriage, or of a rough going horse, may give uneasiness, and do hurt.—*See Consumption.*

HÆMORRHOIDS OR PILES.

These are small tumours about the anus or fundament, external or internal, which sometimes bleed and sometimes not: Hence the piles are said to be either open, or blind.

Very erroneous notions have been entertained on the subject of hæmorrhoids; they have been supposed a disease of the system, and considered as necessary and salutary. Supposing them to be so in some instances, they are much more commonly a local complaint, brought on by habits of costiveness, indolence, and free living; or by the frequent use of aloetic purges. They may be also occasioned by a diseased liver, and by a pregnant state of the womb, hindering the return of blood: Hence women with child are often troubled with them. If the discharge of blood in this disease is ever to be considered as beneficial, it must be after it is become habitual, or in cases of visceral congestion, *viz.* in obstruction of the liver, spleen, or mesenteric glands. When the discharge is periodical, the suppression of it may occasion great disorder in the whole system, *viz.* violent head-ache, spitting or vomiting of blood, fever, *&c.*

From what has been said, it is obvious that all possible means should be employed for preventing the disease, when it is expected, or where there is a tendency to it. The patient should live abstemiously, take much exercise, and carefully avoid costiveness: For this purpose, the sulphur electuary, *No.* 79, is commonly preferred. The balsam of capivi is considered a very useful medicine for keeping the bowels open in

in the piles, as likewise tincture of rhubarb, with castor oil, *No.* 80. And this is all that is ordinarily necessary during the flux; but, if the discharge be so profuse, as greatly to debilitate the patient, astringents may become necessary; such as the styptic powder, the tincture of catechu (or kino), tincture of roses, saturnine pill, *No.* 116. An emetic has a very powerful effect in stopping the hæmorrhagy:—Give fifteen grains of white vitriol.—Cloths dipped in cold astringent liquors may be also applied to the fundament and loins. In some instances, the astringent injections, and suppositories, *No.* 58, 59, may be requisite; but these are sometimes difficult to give, on account of the tumour and pain.* If, after the discharge is become regularly periodical, it should be suppressed, and violent pains of the head take place, bleeding may be requisite, to prevent apoplexy, vomiting of blood, &c. In this case too, the patient should be made to sit over warm water, and take an aloetic purge, to provoke the usual determination and flow of blood from the anus. CHAP. IV.

Should the patient be much reduced in his strength, after repeated and copious discharges, or shew any symptoms of beginning dropsy, *viz.* swelled ankles, pallid countenance, &c. bitters and chalybeates should be given, *viz.* bitter infusion, with chalybeate wine, *No.* 53. A nourishing diet is also proper.

Blind piles, or tumours externally:—To relieve the pain, cloths dipped in spirits of wine, or in cold saturnine solution, *No.* 100, 101, may be applied to the parts. When the tumours are

* Mr. Bell, in his Surgery, proposes a very ingenious and simple method of stopping hæmorrhagies from the rectum, when the bleeding vessel is not accessible, so as to be taken up by the needle: It is this—introduce into the anus, and up the rectum, the blind gut of a sheep, or any gut closed at one end: After this has been pushed in with a probe, or bougie, then inject it full with water from without, and fasten. The distended gut, pressing on the bleeding vessel, will stop the hæmorrhagy.

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are very hard and inflamed, emollient fomentations, emollient ointment, and poultices, should be applied; but the greatest relief will be found in scarification, *i. e.* in making an incision into them with a lancet; or snipping them off with a pair of scissars, as recommended by Mr. Ware. This may be terrifying to the patient, but it affords instantaneous relief.*—The astringent gall ointment is also advised, as more useful than any emollients, *No.* 56.

The piles, when neglected and ill treated, may occasion fistula in ano, *i. e.* an ulcer, with a callous opening into the gut: The earliest recourse should, in this case, be had to the knife, to prevent the disease from becoming an intolerable grievance through life.

VOMITING OF BLOOD.

This is seldom an original disease, but is occasioned either by wounds, by substances swallowed, or else happens from diseases of other parts, as schirrous liver, suppressed catamenia, and hæmorrhoids.

Blood coming from the stomach is distinguished from that of the lungs, by its being not of a bright red colour and frothy, but black and grumous, and by the subsequent black stools, caused by the blood passing into the intestines. Vomiting of blood is not attended with any coughing.

Treatment.—When caused by any substances swallowed, these should, if possible, be brought up by an emetic of white vitriol, or their irritating qualities guarded against, by oily and mucilaginous draughts, and opium.—*See Casualties.*

If

† Sonini, a late traveller in Egypt, says there are few men in that country, who do not labour under the piles; and that, when they swell and become painful, it is usual to have them opened by the barbers, with their razors.

If the disease is owing to obstructed menses, or hæmorrhoids, these are to be brought on by the means directed.* If it proceeds from diseased liver, spleen, &c. the remedies proper in those complaints are to be had recourse to—*see page* 97; but, in all cases for stopping the present discharge when dangerous, astringents are to be given; which are here almost of unfailing efficacy, as they have the advantage of acting directly on the bleeding vessels. The astringents proper are, the styptic powder, powdered alum, tincture of roses, or elixir of vitriol, in water as cold as possible; but the saturnine pill, *No* 116, is the most speedy and effectual remedy. In certain cases, where astringents and other remedies have failed, the hæmorrhagy has been stopped by the continued use of gentle laxatives, and by giving small doses of nitre.

The undischarged blood, or that which passes downwards by the intestines, is to be, as soon as possible, evacuated by gentle laxatives; otherwise it may undergo putrefaction, and give rise to dysentery, fever, &c.

No food that is in the least stimulating should be allowed, and even such as is most suitable should be taken in small quantities, that the stomach may not be too much distended.

HÆMORRHAGY FROM THE INTESTINES.

The acetate or sugar of lead pill, *No.* 116, may be given, or ten drops of the spirits of turpentine every six hours, in barley water.

OF BLEEDING FROM THE URINARY PASSAGES.

The discharge of blood from the urethra, or bloody urine, is not a constitutional, but an accidental complaint; it may, nevertheless,

* *See Diseases of Women.—See Hæmorrhoids, page* 134.

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nevertheless, be here taken notice of. It is the consequence of falls, strains, or blows, by which the vessels of the kidnies have been ruptured, or of stones lodged either in the kidnies or bladder. It may be also occasioned by inflammation and ulceration of the parts, brought on by hard riding, intemperance, the use of cantharides, or other acrid diuretic and purgative medicines. In confluent small-pox and malignant fevers, it happens from acrimony or dissolution of the blood.

If the blood comes away pure, and in considerable quantity, without much pain, it is a sign it proceeds from the kidnies; when it comes from the bladder, it is in small quantities, of a dark colour, and voided with great pain.

Treatment.—When from accidents, as a fall, strain, &c. the patient should be bled, and put into the easiest position, in which he is to remain quiet, avoiding not only motion, but every thing that can heat and irritate. Styptic powder, tincture of catechu, or tincture of roses, may be given at first, or during the hæmorrhagy, if extreme;—afterwards demulcents, as barley water, &c. as when from other causes—*see below*—with sweet spirits of nitre. If the symptom proceeds from stone in the kidney,* ureters, or bladder—opiates, warm bath, and fomentations, diluting and demulcent liquors, *viz.* barley-water, linseed tea, ockrow tea, &c.—Anodyne clyster, *No.* 33.

The same medicines are proper when the complaint has been brought on by cantharides, or any other acrid matters; but in small-pox or putrid fever, antiseptics, *viz.* the bark and elixir of vitriol, are to be given, *No.* 21.—*See Small-Pox.*

CHAP.

* In a case of hæmaturia or discharge of blood, occasioned by the passage of stones along the ureters, a decoction of peach leaves was given with good effect, after many other medicines had failed.—*Medical Facts.*

CHAPTER V.

ON CATARRHAL DISORDERS, CONSUMPTION, &c.

CATARRH, OR COLD WITH COUGH.

A CATARRH, or cold as it is called, or the well known affection of the lungs, throat, nose, and head, caused by exposure to cold and damp air, is, of all others, the most frequent complaint of men in civilized life:—Savages, from their habit of going naked, and living *(sub dio)* in the open air, are not liable to suffer from the ordinary vicissitudes or changes of the atmosphere:—For the same reason, negroes here are not much subject to catarrhal complaints, but white people, notwithstanding the prevailing uniformity of climate, are not exempt from them:—They are generally brought on by travelling in the night; by continuing long in wet clothes; or by sitting, when in a perspirable state, in a current of air, particularly when the wind is from the north: It is, therefore, in the season when the north wind blows, that colds, inflammations of the lungs, and rheumatisms, most prevail.

Colds are in general much aggravated by the customary means made use of for preventing or removing them; *viz.* keeping in a close warm apartment, drinking hot liquors, and using other stimulating means, to force a sweat.* If a person has

* *Catarrhum igitur e frigore esse calore solvendum, gravissimus est error; contra, frigus nunquam nocet, nisi ubi ejus actionem calor excipiet.*—(Brown's Elements.)—The theory and practice of the celebrated John Brown have been too implicitly adopted: Though partially just, in their utmost latitude they are very erroneous; *e. g.* to continue in the cold to prevent its bad effects, is not consonant with common sense or experience.

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been exposed to wet and cold for any length of time, so as to have cause to apprehend any consequence from it, he should not be in haste to change his temperature, but warm himself by degrees: Too sudden a transition from cold to heat, will certainly bring on what it is the object of the person to avoid; *viz.* feverish heat, difficulty of breathing, and all the other symptoms of catarrh or cold; which might be avoided, by attending to the precaution above recommended.

Catarrh, when it comes on, is attended with great sensibility to cold air; in this case, the patient must keep himself carefully out of any current, but should not however confine himself too closely. The perspiration is to be promoted, but not forced by heating medicines: Clothing a little warmer than ordinary, or a flannel waistcoat next the skin, may be advisable; drinking of sage tea, and other diluting drinks—putting the feet in warm water—taking gentle laxatives, *&c.* are also proper means for alleviating the symptoms, and preventing cough, which is the worst part of the complaint: If this be severe, and without expectoration, bleeding will be proper, as also a blister, or a Burgundy pitch plaster, between the shoulders.

Further, for the mitigation of cough, warm demulcent liquors, and what are called pectorals and expectorants; *viz.* barley-water, sweetened with Spanish liquorice, to which may be added a little nitre—barley-water and vinegar, sweetened with honey. The most useful expectorants are the oily emulsion, *No.* 81—milk of ammoniac, with squills, *No.* 42.—To allay the cough at night, and to procure sleep, the paregoric elixir, *No.* 41, or the antimonial opiate, *No.* 17.

Cough is not always the effect of catarrh, or cold; it sometimes depends on the state of the stomach, and in that case is removed by a vomit, and the subsequent use of chamomile tea, bitter-wood infusion, *&c.*

Cough

Cough is in a great number of complaints symptomatic; gout, asthma, hysterics, worms, teething, &c. It very often precedes the accession of fever in intermittents.—The cure of cough in these cases depends on the removal of the original disease.

Country Remedies for Cough: Liquorice-tea—calabash syrup, &c.—*See Appendix.*

INFLUENZA.

An *epidemic* catarrh is called *influenza*; which is a disease depending on contagion, diffusing itself very suddenly and widely.* It attacks like an ordinary cold, but with greater violence, with fever, with peripneumony, pleurisy, and other inflammatory symptoms: Sometimes, however, the fever is of the malignant kind, and proves very fatal.

The treatment in *influenza* is similar to that in peripneumony (*see page* 120).

When the symptoms are of the inflammatory kind, bleeding is necessary; which, if they do not soon abate, should be repeated: After this, a gentle emetic may be given, *No.* 1, or the tartar emetic solution, *No.* 22—laxatives, *No.* 3—then cooling powders, *No.* 7, 8—diaphoretics, *No.* 11, 13, 15.

If the pains of the chest continue severe, with hard cough, blisters to the side, or between the shoulders.

To ease the cough, and promote expectoration, demulcent drinks,

* There is no contagious disease whose influence is so wide spreading as this: It has, at different periods, extended itself over all Europe, nearly at the same time; and, in 1789, it prevailed through the New as well as the Old World; *viz.* through North and South America, and the West-India islands: It is, therefore, properly considered by some physicians, as a disease *sui generis*, distinct from catarrh, &c.

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drinks, as recommended in cough—*see page* 140—and pectorals, as in peripneumony—*see page* 120.

Where the liver appears to be affected, give five grains of calomel, with a grain of opium, two, three, or four, times in the day.

If, instead of inflammatory symptoms, there should be signs of debility, as cold skin, weak pulse, *&c.* the patient should be put into a warm bath, have blisters applied, and take cordial diaphoretics, as the camphorated mixture—mindererus mixture, with camphor, *&c.*—*See No.* 13, 15, 16: At the same time, warm diluents, with a little wine.*

OF THE WHOOPING OR CHIN COUGH.

The whooping cough begins like a common dry cough from cold, but becomes afterwards convulsive, returning by fits; during which the patient is sometimes nearly strangulated. The long inspiration he makes, in recovering himself from a state of suffocation, is attended with a whooping sound—whence the name of the disease.

The whooping cough, like the influenza, measles, *&c.* is a contagious disease, but it rarely attacks any but children, and never more than once. It is not in general dangerous, unless to young children and women with child.

The

* On the subject of influenza, as occurring in the West Indies, there are two excellent papers (one written by Dr. Chisholm, of Grenada, the other by Dr. Lindsay, of the parish of Westmorland, in this island), which it will be incumbent on practitioners to consult, whenever this epidemic shall recur. It will be satisfactory information to say, that, when it last prevailed in this island, only fourteen persons died of it in Westmorland, a parish containing near 6000 inhabitants. The influenza again made its appearance in this island in the year 1807, and was more prevalent than in 1802; but it proved fatal in very few instances among the whites—among the negroes it terminated in pleurisy, and carried off a great number. In the decline the digitalis was given with good effect.

The disease occurs but seldom in this island, and is never very epidemic.

Treatment.—When the symptoms are very violent, threatening inflammation or suffocation, bleeding is requisite; particularly in those patients of a more advanced age and full habit.—The patient being always relieved from the fit by spontaneous vomiting, it has been the prevailing practice to give nauseating doses of emetics, at the beginning of the fit of coughing, to encourage this; but this is objected to by some physicians, who consider the disease as dependant on debility, and trust the cure wholly to antispasmodics and tonics.—However advisable emetics may be in the beginning, the frequent or continued use of them must have weakening effects.—Where a difficulty of breathing remains after the coughing, it shews an affection of the lungs; in which case blisters should be applied between the shoulders.

When the disease continues for any length of time, and the paroxysms return from habit, many other remedies, deemed specific, are proposed; but the most important remedy is change of air, or rather of place and external circumstances, which is useful in all spasmodic complaints.

The antispasmodic and tonic remedies recommended are:

1. Extract of hemlock, *viz.* one grain for a child from six months to two years old: Half a grain to be added for every year after that age.

2. Tincture of cantharides: If cantharides are useful, it is from the strangury they excite, which may be considered as bad as the disease.

3. The

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3. The bark and tincture of castor: Perhaps the most useful of any, *No.* 21.

4. Arsenical solution—of Dr. Fowler, *see No.* 117.—Dr. Ferriar directs two drops to be given to children under seven years of age—every day, or every other day, as occasion requires.

5. Flowers or calx of zinc. Sea bathing, shower bath, *&c.*

6. Artificial musk: This has been employed by some Jamaica practitioners with almost unfailing success.*—*See Form, No.* 120.

To promote expectoration, the milk of ammoniac may be given, as in common coughs, and in some cases the paregoric elixir, to quiet the cough at night.

A Burgundy pitch plaster, between the shoulders, is of great use.—Garlic ointment or garlic cataplasms to the soles of the feet, as also rubbing the back-bone with oil of amber, in spirits of wine, *No.* 31, are recommended as giving relief.

ASTHMA.

The disease called *asthma* consists in a difficult respiration or breathing, with a sense of stricture across the breast, wheezing, and cough, which is at first dry, but afterwards attended with a discharge of mucus, by which the patient obtains relief.

The paroxysms (for the disease returns at intervals or by fits) are commonly preceded by some affection of the stomach, as sickness, flatulency, *&c.* When the patient is attacked, he is obliged to keep an erect posture, and to breath with his mouth

* See the manner of preparing this medicine *Med. and Phys. Jou.*

mouth open, for the sake of inspiring more air, and to prevent threatening suffocation, which sometimes happens.

The disease is frequently hereditary or constitutional, but does not usually come on before the decline of life; it may, however, be occasioned, or brought on at any time, by a great variety of causes, *viz.* by sudden cooling of the body when overheated; by hæmorrhagy, or throwing up of blood from the lungs; by suppressed evacuations of the menses and piles; by checking or drying up of cutaneous eruptions, and old ulcers; by the inhalation of noxious vapours, fumes of metals, irritating powders, *&c. &c.*

Notwithstanding the apparent danger, the patient rarely dies in the fit, or not till after the disease has continued for a length of time;* it more commonly proves fatal, by terminating in other complaints, as dropsy, palsy, *&c.* Though not very prevalent in tropical climates, it is too frequent; less so among negroes than white persons, as are all complaints of the thorax, except peripneumony.

Asthma is divided by authors into a great number of species, according to the circumstances giving rise to it; but the principal distinction is, into the humid and dry; the former attacking principally phlegmatic persons, the latter persons of a lean habit, and is considered as a purely spasmodic or convulsive disease.†

A late writer (Mr. Bree) divides asthma into three kinds: *1st*, Where it arises from serous effusion. *2d*, Where it arises

* Asthmatics sometimes arrive at a pretty old age: Sir John Floyer had laboured under the disease for above thirty years, when he wrote on it.

† It is remarkable that asthmatic persons do not vitiate the air they respire—no oxygene being absorbed no heat is generated; hence it is that asthmatics have such a cold skin.—*Chaptal.*

CHAP. V. from atmospheric irritation. *3d*, Where it is symptomatic, from the state of the stomach and bowels.

To prevent the coming on of asthma, where there is a known disposition towards it, or to prevent its recurrence where it has once attacked, it is necessary the patient should carefully shun all the occasional causes, *viz.* all sudden changes of air—wet—cold—intemperance of any kind, &c. It is not one kind of air that universally agrees with asthmatics; with some, the air of towns and unhealthy places suit better than the pure air of the country. To guard against the alternations of heat and cold, asthmatic people should always wear flannel. Going from a cold to a warm climate is sometimes advisable.

In the article of food, asthmatics are liable to many peculiarities, and they ought to know and avoid what disagrees with them, as indigestion is frequently the cause of the fit.—It is of principal importance, *1st*, to prevent, by a milk or vegetable diet, a plethoric state, which increases the irritability, and occasions more frequent returns of the paroxysms; *2d*, to strengthen or brace the body by riding, and by the use of the cold bath.

If symptoms of flatulency, and nausea at the stomach, give warning of the fit coming on, it may be prevented by an emetic; but vomits are not to be taken during the fit, for fear of strangulation.*

In the beginning of the fit,† the patient may take a considerable dose of spirits of hartshorn, with laudanum—æther, with laudanum or paregoric elixir—compound tincture of castor—strong coffee has the effect of stopping the fit with some persons

* An asthmatic of this town is, however, in the habit of taking them in the paroxysm, and with impunity if not with advantage.

† Bleeding may in some cases be advisable, though rarely.

persons—with others a draught of vinegar has the same good effect.—The inspiration of some of the factitious airs has answered exceedingly well in some asthmatic cases; as also of æther and spirits of hartshorn, mixed with warm water, in the way recommended by Withering. CHAP. V

Clysters of asafœtida, *No.* 66—putting the feet in warm water—applying to the soles of the feet cataplasms of garlic—are also useful in the coming on of the fit.

Blisters are sometimes applied, but are seldom useful, except in hydropic cases.

To appease the cough, and procure rest, the paregoric elixir may be given at night, with an addition of laudanum.

To promote expectoration after the spasmodic symptoms subside, or remit, the ammoniac milk, *No.* 42, may be given—emetics also answer this purpose.

If the disease appears to proceed from the state of the stomach and bowels, the vomits, *No.* 1, 72—the purges, *No.* 37—and bitters, *&c.*

When arising from repelled erysipelas, drying up of scald head, or any old ulcer, blisters may be applied to the ankles—issues put into the arms, or a seton in the neck.

These are in almost all cases of service; but the drying of them up, after they have been some time open, may produce bad effects.

In the intervals, the regimen before recommended—*page* 146—for preventing the disease, should be followed, and at

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the same time tonics, *viz.* decoction of bark with squills, *No.* 21—bitter infusion, with steel, *No.* 53—zinc pills, *No.* 68, may be made use of.*

All spasmodic diseases, of which this is to be reckoned one, are apt to recur from habit only, independant of any occasional cause: To break the force of habit, it is necessary for the person to make a total change in his mode of life.†

PHTHISIS PULMONALIS, OR CONSUMPTION OF THE LUNGS.

Consumption of the lungs is generally thought to proceed from catarrh or cold. In some instances it probably may, but it much more generally arises from the same causes as blood-spitting,—*see page* 132—*viz.* a particular make and constitution; and it is therefore hereditary in many families, of which we have too many melancholy proofs.

A scrophulus taint, causing tubercles in the lungs,‡ is the constitutional peculiarity which is thought to give most frequent rise to this complaint; that sweeps off, in northern climes, so many

* A man was relieved from a dangerous suffocative asthma, by an abscess at the anus, occasioned by riding on horseback—this abscess degenerating into fistula, he underwent the necessary operation, and obtained a cure of that disease, but his asthma returned and proved fatal.

† Mr. Bree, who has written on this disease, which he was subject to, quitted the medical profession, and went into the army; by which change of life, he got the better of his complaint.

‡ Consumption is referred to several other causes, constitutional and accidental; but this seems to be the most general cause of genuine phthisis.—Dr. Ryan denies that it is ever produced by blood-spitting.—Dr. White considers consumption as of two kinds; one, from inflammation only—the other, when there is purulent matter. Abernethy is of opinion that consumption originates in a defective respiration, occasioning plethora of the lungs, and consequent inflammation. Plethora is also occasioned by diminished capacity of the thorax. In the dissection of those who die of pulmonary consumption, the lungs are sometimes found impermeable and bestudded with large tubercles. Sometimes they are, in consequence of indolent inflammation, thickened—in cases of active inflammation, they are abscessed and ulcerated. The children of phthisical women seldom live long—they die of marasmus, from obstruction of the mesenteric glands.

many of the young of both sexes,* but more particularly females, and those too of the most beautiful form, at the age when they are designed to charm and delight.† It is the privilege of the inhabitants of the tropics, to be in a great measure free from phthisical or consumptive complaints; but the exemption is not absolute, for there are not wanting examples of genuine phthisis among even natives, who never were off the island.‡ Some practitioners are of opinion that consumption is more prevalent in Jamaica than formerly. It is said to be very general in some of the windward islands, and more quickly fatal than in Europe.

The disease is to be considered in its several different stages: 1*st*, That stage in which only the predisposition exists. 2*dly*, That where the tubercles, or some part of the lungs, are in an inflamed state. 3*dly*, Where they are suppurated: And, lastly, the hectic stage, which finally proves mortal.

The *Treatment* must, then, be varied and adapted to the several stages of the complaint above-mentioned:

1*st*. When it is known that any predisposition towards this disease exists, whether hereditary, or from whatever cause it arises, it is incumbent on the patient to counteract it, by the means mentioned under blood-spitting—*see page* 133;—the most

* Of the number of deaths in London, nearly one third are by consumption:

In 1796,	out of 18,238	5910
1797,	16,714	5439
1799,	17,285	6210

† To the other general characters of consumptive people, given under blood-spitting —*page* 132—may be added one taken particular notice of by professor Camper and Dr. Simmons, *viz.* sound, beautiful, pearl white teeth.

‡ Dr. Beddoes, who has been laudably devoted to the investigation of the nature and cure of this malady, hitherto the *opprobrium medicorum*, mentions, that butchers, soap-boilers, catgut-makers, fish women, and others concerned in putrid processes, are not subject to consumption.

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most important of which is constant riding or voyaging.* If consumption is ever to be prevented or arrested in its progress, it is by one or other of these things long persisted in. Their effect in preventing the disease is much more considerable than in removing it; though they are, under certain circumstances, useful in every stage of the complaint, as they take off the determination of the blood to the lungs; but voyaging is to be preferred to riding, in the inflamed state of the lungs, as these are liable to receive injury from the motion or stumbling of a horse, however sure, or however easy, his gaits may be. The exercise of a spring carriage may be sometimes the most suitable.

2dly. In the inflamed state of the lungs, when the patient is sensible of fixed pain in any part of the chest or side, with dry

* Dr. Currie, who was (for alas he is now no more!) such an ornament to his profession, and to the age he lived in, was preserved from the hasty advances of this disease, which had proved fatal to several of his relations, by taking a long tour, and riding every day, to the point of fatigue.

Mr. Reeder, a gentleman well known in this island, mentioned by Dr. Moseley, was very far advanced in consumption, having had frequent discharges of blood from the lungs, and afterwards cough, with purulent spitting, recovered by riding and voyaging, and lived for many years afterwards, free of pulmonary complaint. In what manner consumptive people are benefited by a sea voyage; whether from the air, or from the ship's motion, is not determined; but most probably the latter, as the air of the sea is not always the purest, nor does living by the sea side answer the purpose of a sea voyage. The *vitæ in mari traductio:* The *navigatio longa*, has been recommended in this case, from the earliest ages. Sydenham asserts that riding on horseback is as certain a remedy in consumption, as the bark is in intermittents.—"*Neque mercurius in lue venerea neq. Cort. Peruvian. efficacius extant quam in phthisi curanda, exercitium jam laudatum.*"—Fuller's prescription in consumption was

R. *caballum quo sæpissime utatur.*

Dr. Davidson having, by experiments with the eudiometer, proved (as he thinks) that the atmosphere within the tropics contains more oxygene than in Europe, has drawn conclusions that would invalidate the opinion that has hitherto ever been entertained, of the use of sending consumptive people to a warm climate. He further says, that consumption is very general in some of the West India islands, and more quickly fatal than in Europe. The good effects of voyaging he thinks wholly owing to sea sickness, which prevents the lungs decompounding, and absorbing oxygene in the usual quantity. The fallacy of Dr. Davidson's experiments, on the composition of the atmosphere, has been since shewn in the *N. Y. Med. Repos.*

dry tickling cough, or spitting of blood, dry feverish skin, quickness of pulse, &c. the means to be employed are all such as serve to diminish the force of circulation in the lungs, as in blood-spitting,—*see page* 133—*viz.* blood-letting,* laxatives, cooling nitrous powders, *see No.* 9, nitre with conserve of roses, *No.* 54—blisters, issues, and setons, are of great use in this stage of the disease.† The digitalis, on account of its supposed action or power over the heart, in lowering the circulation, has been very extensively used in this stage; but, according to Dr. Sanders, erroneously, for the digitalis has, notwithstanding the general opinion to the contrary, been proved to be invariably *stimulant*, even in small doses, augmenting the pulse both as to its frequency and strength.—*See Sanders on Consumption*, 1808.

The balsamic pectorals, advertised by empirics, and so much in use, instead of affording relief to the cough, in general render it worse, by increasing inflammation, and accelerate the disease: On the same principle, opiates are to be in most cases prohibited: Some of the expectorants,‡ which are not heating, as milk of gum ammoniac, with squills, *No.* 42, may be sometimes necessary, to promote the discharge of viscid phlegm.

Physicians are much divided respecting the use of bark, for preventing the progress of this disease; but the prevalent opinion seems to be against it,§ unless in particular situations, where

* It was formerly the practice of some physicians to bleed repeatedly, even to the hundredth time; but it is rightly observed, by Mr. Townshend, that, if the disease has destroyed its thousands, this practice has destroyed its tens of thousands.—The hemlock has also been advised, where tubercles are suspected, but no good effect has been seen from it.

† Emetics, given in small nauseating doses, as in hæmoptoe,—*see page* 133—are of great use in relieving the lungs from congestion or fulness.

‡ See remarks on Dr. Fothergill, in *Critical Review, Oct.* 1799.

§ Dr. May considers the inflammation of the atonic kind, and after emetics gives the bark

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where the disease is brought on by *fluor albus*, or by other weakening causes, as suckling children too long, &c.

3dly. Purulent and hectic state of consumption.—Inflammation and cough continuing, the expectoration or discharge from the lungs becomes purulent, and the patient is subject to a fever called hectic,* which comes on commonly at night; terminating towards the morning, in profuse sweats, which debilitate the patient, and brings him sooner or later to his end. The marks by which purulent matter from the lungs is distinguished from mucus, are not infallible, but should be attended to: Mucus floats on water, pus falls to the bottom—purulent matter thrown on a hot iron, has an offensive smell.†

In this stage of the disease nothing until lately was recommended, but as a palliative; and the sanguine hopes that were formed from some new remedies have been disappointed,‡ except from the foxglove, formerly thought to have great effect in lessening the force of the circulation, and warding off immediate

bark—*(Essay on Pulmonary Consumption*, 1792.—*See Ryan on Consumption.)* Two very interesting publications on the pulmonary consumption have lately appeared, one by Dr. J. Ried, 1807, the other by Dr. Sanders last year, 1808.

* The hectic fever, according to some, is from oxygene *(ab pure aërato)*—pus being mild till it is aërated, or oxygenated, when it is turned into ichor.—*Darwin's Zoonomia, vol.* II. John Hunter accounts for hectic fever, not by the absorption of pus, but from the irritation kept up from an ineffectual attempt at healing. Another idea of the cause of hectic is, that it is occasioned by the accumulation of what should have been thrown off in respiration, the lungs being incompetent to the performance of this function when in an ulcerated state.

† There are sundry other criteria for distinguishing between pus and mucus, *viz.* pus dissolved in the vitriolic acid, or in alkaline lixivia, is precipitated on the addition of water. Corrosive sublimate coagulates mucus but not pus, &c. &c.—*(See Darwin, Home.)* Pus may be formed without exulceration.

‡ These are the different gases, *viz.* carbonic acid gas—hydrogenous gas—hydrocarbonate, &c.—which at first promised to be productive of great effects in this malady, but Dr. Beddoes himself, to whose ingenuity the world is so much indebted, is at length obliged to avow, that facts have not turned out to his expectations, and he seems to have lost all hopes of further success.—*See Beddoes and Watts, on the use of Air.—Pearson on ditto.—Beddoes on Consumption.*

diate danger, but which appears to act in an opposite way, *viz.* by a stimulant power, exciting the action of the absorbents, and thereby promoting the healing of ulcers. Its success in this stage of the disease, before hectic fever has made any great advances, appears to have been very great.—*See Currie, Ferriar, Drake, Sanders, &c. &c.*

Mercurial salivation has of late been successfully employed in consumption of the lungs.—*Rush, Rifler, &c.* Dr. Currie and Dr. Dobson tried calomel and digitalis in consumption, but without the desired effect. Dr. Reid says they answer well in cases of sympathetic consumption, from diseased liver, *&c.*

To restrain the exhausting night sweats, the elixir of vitriol —or conserve of roses, acidulated therewith.—The decoction of bark, with oxymel of squills, may be also administered; if it be not found to heat the body, and quicken the pulse. The Roman vitriol, given either as an emetic or a tonic, according to direction in *No.* 72, has produced good in some cases.*—In cases of diarrhœa or looseness, conserve of roses in milk, or any of the astringents directed in dysentery, used cautiously. *See No.* 30, 31, 32.

An abscess, or iposthume of the lungs, called *vomica*, is sometimes the consequence of phthisical inflammation; which, bursting into the cavity of the thorax, is then called *empyema.*† It is more fortunate when it bursts into the trachea or wind-pipe, and the matter is discharged by the mouth.‡ If the patient

* *See Dr. Adair, Med. Comm. vol.* VII.

† Empyema may be distinguished from consumption by many circumstances, but particularly by this; that, in pneumonic ulceration, the discharge of matter is greatest in the beginning—in phthisis, *v. v.* it is at first small in quantity, but continually increasing.

‡ The famous Dr. Franklin had a vomica of the lungs, that burst three several times at distant intervals, and which he long survived.

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patient survives, the utmost care must be taken to avoid whatever might excite fresh inflammation.

Although regimen, in this disease, is of the utmost importance, it is unnecessary to say any thing on it here, as it is so generally known: A milk diet, or a diet consisting wholly of vegetables and fruits, by obviating inflammation, has enabled many persons to recover where the disease has not proceeded too far.

Hectic fever, emaciation, cough, and other symptoms of pulmonary consumption, are often produced independantly of any affection of the lungs, or of purulent matter in any other viscus. Atrophy or emaciation may be occasioned by obstruction in the mesenteric glands.—*(Tabes Mesenterica.)* Cough is symptomatic in a great variety of cases. Phthisical symptoms appear likewise along with chlorosis. In these spurious or symptomatic cases, a very different mode of treatment is required. The warm stimulant gums, as myrrh, &c. with bark and chalybeates, which would be very improper in true phthisis, are here of great benefit.—See Form of Dr. Griffiths, *No.* 121.—*See Ried on Consumption.*

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CHAPTER VI.

ON CONTAGIOUS ERUPTIVE DISORDERS.

ON THE SMALL-POX.

AS the small-pox rarely makes its appearance in this island, but from inoculation, and as the practice of that is so general, and so well understood, little needs here to be said on the subject.

It is remarkable that the disease, when arising from contagion, makes it appearance in not less than fourteen days, but when produced by inoculation, it shews itself in seven or eight. Persons also being seized with the measles, have the eruption of small-pox suspended till the measles are over.

From the discovery lately made, that persons having had what is called the cow-pox, a disease caught from cattle, were not afterwards susceptible of the small-pox, a new practice has been introduced, of inoculating for the former, that being a much milder disease, and said to be never attended with any danger.* The advantages of inoculation were formerly sup-

 posed

* The practice of vaccination in Jamaica, in consequence of some early failures, has not been generally adopted. Notwithstanding the success it has been attended with in a few hands, an almost universal and insuperable prejudice still subsists against it.—This would be matter of serious regret, were it not that variolous, or small-pox inoculation, under proper regulations, is nearly, if not wholly, as safe as vaccination; and, in the latter, there is seldom any failure or uncertainty. From what cause it arises that genuine vaccine matter, imported both from England and America, should so often produce a spurious and ineffective disease, is not explained; but such is the fact—great numbers

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posed to be derived from the choice of matter, choice of the patient, from the use of certain medicines in the way of preparation, &c.; but experience has proved, that very little, if any thing, is to be attributed to any of these circumstances: The chief, if not the whole business, lies in counteracting or preventing inflammation, by what is called the antiphlogistic regimen.—Dr. Quier, an eminent and experienced practitioner in this island, attending to this only, has carried the practice of inoculation to a much greater length, than has been done by any of the boldest empirics in Europe. He has shewn that little preparation is necessary, or even much remission of labour; that hardly any age is an exception; that it is safe in pregnancy; that it may be performed without danger in intermittents, dropsy, yaws, and many other complaints: But, however admissible inoculation may be, under these different situations, yet, where it is not absolutely necessary, for preventing the infection being otherwise received, it will be better in many cases to postpone it; as, in the case of very young children,

numbers of negroes and whites having been seized with small-pox, after having undergone vaccination, and having had what was thought a genuine infection.

It is not however intended here to insinuate any thing to the prejudice of vaccination, which is now practised in every quarter of the globe, and no doubt whatever is entertained of its efficacy in preventing small-pox any where, except in England, where the discovery originated; but all that the secret or professed enemies of vaccination have, from invidious, illiberal, and sinister motives, been able to do to obscure truth, and falsify facts, they have not hitherto succeeded. The sophistry, the sarcastic raillery, the buffoonery, scurrility, and base artifices, employed by Dr. Rowley and his associates, to deceive and mislead, have failed in their object.—*See Report of the London College of Physicians.—See also Edin. Review, No.* XVII—*and Willan on Vaccination.*

An attempt has been lately made to invalidate the report of the college, made by order of his Majesty, and a great number of cases, that would seem to prove the insecurity of vaccination, and its being attended with dangerous consequences. It is a question of the greatest concern to the human race. In a matter of such magnitude, the public ought to be cautious in deciding—their confidence may be staggered by a few anomolies; but, determining by the general rules of evidence, surely the testimony of whole bodies of men of science and probity—of the legislature of nations—of all Europe, and all the World, from east to west, and from pole to pole, must weigh against the objections and assertions of a few individuals, some of whom are entitled to no credit, and others whose motives may be justly suspected.

children, children that are under teething, women who are liable to miscarry, or who are near their time, &c. CHAP. VI.

Could we have the command of season, which would be the case, were inoculation periodically or yearly performed throughout the island,* the cooler months would be fixed on as the most suitable; but patients, under proper management, get through with safety during the hottest seasons.

The mode of inoculation, and the matter employed, were till lately thought matters of little moment.† It is, however, the opinion of some gentlemen, who have been lately employed in making their observations on the subject, that the use of an improper matter, *viz.* from dried pustules, a spurious disease may be introduced, which does not hinder the patient from having the true *variola* afterwards.‡ The ichorous or watery matter taken from the pustules, previous to the suppuration, is thought the fittest for producing the real small-pox.§ It is likewise

* This would be a judicious practice, as it would render inoculation not only more safe, but much more convenient. Was inoculation performed annually, there would be but few to inoculate at a time, and their labour on the plantation would not be missed.—Whether matter could be kept or procured for the purpose, has not been ascertained; but it is said the Gentoos carry the matter in their girdles, for months. The most valid objection against inoculation is, that by keeping the infection constantly alive, more persons die of the disease on an average, than would die from the contagion left to itself.

No less than forty millions of people die with the small-pox every century. The Europeans have carried the small-pox over the globe. The Danes carried it to Greenland, and the Spaniards to South America, where one hundred thousand perished with it in the single province of Quito. When the annual number of births in London was sixteen thousand two hundred and ninety-one, the number who died with the small-pox, was two thousand five hundred and fifty-four, and still greater in some other large cities in Europe. A greater number have died of the small-pox since the introduction of its inoculation than before it, that practice being the means of keeping it always in large cities.

† *Pus nihil potest in morbi naturam statuendo*, according to Richardson.—Dr. Quier tried the matter in every stage, and found the ichor of the pustules, in their early state, equally successful with the pus.

‡ See two very remarkable cases of this, related by Dr. Capper, *Med. and Phys. Jou.* No. 23.

§ Dr. Beddoes dilutes the matter with water.

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likewise judged better to introduce it in the smallest quantity, and by the slightest wound, scratch, or puncture.

Having pointed out these circumstances relative to inoculation, I shall now mention the common procedure.

The operation being performed, the patient may take at night, the preparative powder, *No.* 10, and the morning following a dose of salts, *No.* 2, or jalap, *No.* 5.—The powder and purge may be repeated the third day, and again about the seventh, or as soon as any symptoms of the eruptive fever appear. Animal food of every kind, with salt, spice, and whatever is stimulating, are to be totally abstained from: Warm clothing, the air of confined apartments, and much exercise, are to be likewise avoided:* In short the body must be kept perfectly cool, and the bowels open, on the days when no physic is taken, by tamarind-water, cream of tartar drink, or beverage. There is a discretion in every thing. This cooling, or as it is called antiphlogistic regimen, may, in particular instances, be pushed too far: It should therefore be varied according to the circumstances of the patient's habit: In some cases, the preparation required may be of an opposite kind; it may be necessary to give a better nourishment, to raise the patient's strength. It is likewise to be observed, that although the air can hardly be supposed too cool, yet inoculated persons should not be exposed to bad weather, or strong currents, which will aggravate the disease, by bringing on catarrh. Of this there are numerous instances, and some fatal ones.

The sign of a favourable disease is, early inflammation, or redness and swelling about the inoculated part.

Fits

* The custom of making the boiling-house on estates an hospital, on occasions when there are great numbers to be inoculated, is a very good one, under certain regulations —which are necessary to hinder patients being either too much confined, or too much exposed.

Fits occurring in children, if they are not violent or frequent, are not alarming. Cold water may be thrown on the patient as in other cases of convulsion; a suitable dose of laudanum may be given by itself, or with spirits of hartshorn, and a blister may be applied to the part inoculated.

During the fever nothing is requisite, more than what has been recommended; *viz.* the purge and keeping in cool air.

After the eruption, if the fever subsides, there is little more attention required, except that the cooling and abstemious regimen is still to be persisted in, though with somewhat less rigour. It is usual to give negroes corn-water to drink, *ad libitum*, which is supposed serviceable in promoting maturation.

At the close of the disease, or when the pustules begin to dry, it is the practice to give another purge, but this may be often omitted.—The patients should not be allowed to return too suddenly to a full diet.

The treatment of small-pox is at all times the same, whether from infection or inoculation. In bad cases, where the fever continues after the eruption,* in natural small-pox, there may be a necessity for bleeding, for the giving of antimonials, *No.* 10, saline mixture, *No.* 11, and afterwards for applying blisters: These are particularly necessary, where there is any considerable affection of the fauces, or difficulty of swallowing.

In the secondary fever, that comes on sometimes after the height of the disease, or when the pustules are full, there is a necessity

* Dr. Currie found the same good effect from the affusion of cold water in the eruptive fever of small-pox, as in other fevers. Sutton, the original inoculator, was wont, in cases where he apprehended danger, to plunge the patient in a cold bath.

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necessity for purging;* but in cases of looseness, an opium pill should be given, or chalk decoction, *No.* 29.

In the confluent kind, which is always dangerous, calomel has of late been considered as a specific, or a medicine of great efficacy; from five to ten grains may be given, twice in the day, with the eighth of a grain of opium, should it affect the bowels.—The bark decoction, with the elixir of vitriol, may be afterwards given.

To relieve particular symptoms, as strangury, &c.

1. *Strangury*—Put the feet first in warm water—then dash cold water on them, or let the patient walk on the cold floor—he may also drink barley-water, with sweet spirits of nitre.

2. *Sore throat and swelling of the face*—frequent use of the gargles, *No.* 70—and the borax gargle, 104.—A vomit, a blister.

3. *To prevent injury to the eyes,* keep them constantly moistened with rose-water.

4. *To prevent pitting of the face*—Opening the pustules, and letting out the matter repeatedly, as often as they fill,† or covering

* Dr. Walker considers the secondary fever as depending on the same contagion taken in, in the primary fever, not on purulent matter absorbed, and directs purging as the only proper remedy.—Dr. Lettsom affirms, that calomel is as certain a specific in the confluent small-pox, as bark is in intermittents.—Fowler has shewn the effects of mercury in procuring a mild disease, independent of its having any purgative operation.—*(See also Walker, on Small-Pox.)*—Alkaline medicines have been also strongly recommended in confluent small-pox.—*See Med. Repos. vol. VIII.*

† This practice, recommended by a number of physicians, as conducive not only to this purpose but to the prevention of the secondary fever, is objected to by a certain writer; who, considering secondary fever as the effect not of purulent matter absorbed, but of the first contagion received, thinks that the pricking the skin may excite inflammation, and prevent the contagious matter being thrown out. Most persons will consider the practice here recommended, on the contrary, as rather favourable to the taking

vering the whole face with a cerate plaster, to prevent any contact of the air. CHAP. VI.

OF MEASLES, SCARLET FEVER, AND CHICKEN-POX.

On these, which, like small-pox, are exanthematous or eruptive diseases, depending on specific contagion, as they occur but rarely in this climate, and are seldom dangerous, it is not necessary to treat at any great length.

Whenever *measles* occur, the disease is more or less epidemic, affecting numbers at the same time, and more particularly young people. A fever, with cough, sneezing, and running of water from the eyes, precede the eruption three or four days, and generally continue during the whole complaint. The eruption consists of numerous small red points, like mosquito bites, or pimples scarcely rising above the skin; which in the course of a few days disappear, the skin or cuticle scaling off. Among negroes, the eruption is hardly discernable, except by the touch.*

The principal danger to be appreheuded in this disease is, from an inflammation of the lungs, similar to that in peripneumony *(see page 120)*, and the same method of treatment is to be pursued here as is recommended under that complaint, and in catarrh or cough; *viz.* bleeding, repeatedly, according to the violence of the fever and dyspnœa, or difficulty of breathing.

X 1. Demulcent

off inflammation of the skin, and to promote the discharge of contagion, than in the point of view he considers it.—*See Wallis on Diseases.*

* The late celebrated John Hunter laid it down as an invariable law in the animal œconomy, that no two contagions could operate on the system at the same time; *e. g.* that a patient cannot labour under measles and small-pox together. However generally true this doctrine may hold, it is contradicted in a number of instances. See (in the New-York Med Repository, vol. III.) two cases, which exhibited unequivocal evidence of the possibility of two diseases, *viz.* measles and small-pox, arising at the same time, and each pursuing its own particular course, as when singly occurring. Dr. Adams, too, who so strongly abets the doctrine of John Hunter, is forced to acknowledge that the same thing happens in small-pox and cow-pox.

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1. Demulcent pectorals, such as linseed tea with liquorice; barley-water with honey, &c. *See Country Remedies, Appendix.*

2. Diaphoretics and opiates---mindererus mixture—antimonial opiate—paregoric elixir.

3. When the cough and fever are considerable, blisters should be applied between the shoulders.

If, from exposure to cold, or from any other cause, the eruption prematurely disappears, and bad symptoms come on, *viz.* great difficulty of breathing, delirium, &c. here bleeding, blistering, pediluvium, and sudorifics, such as *No.* 9, 10, 11, 13, are to be immediately employed. The decoction of seneka found very beneficial in a malignant species of measles. *See Form,* 111.

4. A diarrhœa frequently comes on at the end of the disease, which it may be necessary to restrain, by the chalk mixture, *No.* 29—or by the catechu, *No.* 30.

The fever attending measles is sometimes of the typhoid or putrid kind, the same as in peripneumony *(see page* 120*)*: Here bleeding is to be avoided, and the same practice followed as recommended in the above-mentioned complaint.*—*See page* 120.

Cold air,† which has so salutary an effect in the small-pox, is

* *Watson, Med. Essays—Sydenham—Morton.*

† In the island of Java, according to Kæmpfer, it is the practice to throw cold water on patients in the measles. *Sane in Javâ, qui laborant morbillis, nisi strenue perfundantur aquâ frigidâ, vix evadunt. Novi Bataviæ chirurgum qui tres natos suos, quos Europeâ methodo pertinaciter tractabat, omnes uno mense amitteret; cum vicinus nigrita sine medicamentis liberos servabat omnes, solo hoc baptismo sub dio mane et vespere iterato.*" *Amœnit. Exot. Fascic.* III. *Ob.* IV.

is not so proper here, on account of the cough; but the air of a close hot room may do as much hurt, by disposing the lungs to inflammation, as cold air. Should a fixed cough remain after the measles, or other symptoms threatening consumption, a milk diet, riding on horse-back, a voyage to sea, and all the other means proposed in the beginning of phthisis, should be had recourse to.—*See page* 149.

In the cough left by the measles, a number of pectorals have been celebrated, as balsam capivi, *&c.* a small tea spoonful of which may be taken twice in the day in sugar, and washed down with barley-water. Some of the country remedies, particularly calabash syrup *(see Appendix)*, may be here especially useful.

A chronical ophthalmia, or inflammation and weakness of the eyes, sometimes succeeds to measles; for which, besides the ordinary remedies *(see ophthalmia)*, a seton in the neck may, in some bad cases, be advisable.

It is needless to say what the regimen, in a feverish inflammatory complaint, like the measles, ought to be.

Scarlet fever.—This is so named, from the scarlet eruption, or redness of the skin, which takes place about the fourth day of the fever, along with a swelling of the face. The eruption begins with large blotches about the neck and breast, which quickly spreading, unite, and the whole skin becomes of a bright red colour, like the shell of a boiled lobster. When it subsides, the cuticle scales off, as in measles.

The same kind of scarlet eruption attends the malignant sore-throat; and, on the other hand, sore-throat sometimes attends the scarlet fever, so that they have been thought one

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and the same disease. There must certainly be an intimate alliance between them; but as they occur separately, they require a distinct treatment.* Malignant sore-throat and scarlet fever, like small-pox and measles, never occur but once.

The simple or mild scarlet fever of Europe, is an inflammatory one, requiring the antiphlogistic or cooling regimen,† *(see page 69)*; the same will be proper here, when the disease is of this kind,‡ but when it is epidemic, and attended with symptoms of malignancy, *viz.* nausea and sickness at the stomach, low pulse, and great debility, difficult breathing, delirium, ulcerations of the tonsils, *&c.* the treatment must be very different;—the practice in this case must be similar to that in malignant sore-throat *(see page 124)*, *viz.* blood-letting is to be avoided, as likewise purging, except by clysters and other gentle means, which afford present relief, and prevent a spontaneous and dangerous diarrhœa.—Emetics in the beginning are of the utmost importance, and their repetition is sometimes necessary.—Diaphoretics, such as *No.* 11, 13, 14, 15, are also proper.§

Blisters applied early to the neck, are, in the opinion of some practitioners, of great importance in diminishing the inflammation.

* Dr. Withering has taken great pains to discriminate between scarlet fever, and putrid sore-throat; but the epidemic that prevailed at Edinburgh, in several different years, 1782, 1783, 1789, and 1790, afforded proof that there was no essential difference between the two diseases.—*See Encyclopædia Brit. article Medicine.*

† Currie advises the affusion of cold water, and Mosman the sponging of the body with vinegar and water, whilst the patient lies exposed to a current of air; by which means the incipient specific efflorescence, and subsequent sore-throat, are prevented.—This practice has been successfully followed in this town (Kingston).

‡ The scarlet fever is a disease possessed of various degrees of malignity, from a flea bite to a plague.—*Sydenham.*

§ Dr. Withering is of opinion, that alexipharmical cordial diaphoretics have a bad effect, increasing restlessness and delirium: He preferred diuretics, *viz.* salt of wormwood, in common drink.

flammation about the fauces;* by Currie and others, they are objected to.

The bark in decoction, with other antiseptics, are also to be given in the advanced stage of the disease, and where putrefaction is apprehended.†

Diarrhœa is apt to occur in the decline of this fever, as in putrid sore-throat, and is to be checked in the same way.—*See page* 123.

Patients recovering from scarlet fever sometimes fall into dropsy; for which the patient must be directed to the use of diuretics, tonics, &c. as recommended in other dropsies;‡ particularly the digitalis and cream of tartar.—*See Form, No.* 51, 52.

Dr. Darwin proposes the inoculation of this disease.—*See Zoonomia, vol.* II. 264.

Chicken-pox.—The chicken or swine pox is a disease of so little consequence, as hardly to deserve mentioning, were it not that it is sometimes mistaken for the small-pox; but it is distinguished from small-pox, by its being attended with little or no illness; by the pustules being full on the second or third day, not of purulent but serous watery matter; by the pustules being on the fifth day dry; a time when the small-pox is not come to the height.

The

* Dr. Withering says, that blisters hasten delirium; but they are generally recommended for the purposes above-mentioned.

† Dr. Withering found the bark of no use, but it has been deemed requisite by most other practitioners.

‡ See a valuable paper on the *Febris Scarlatina*, in the Memoirs of the London Medical Society, 1786, by Dr. Sims.—His practice consists in giving, first emetics, then rhubarb, with sal polychrest—tincture of roses, with syrup of lemon-juice—wine and decoction of bark—also aromatic confection, with spirits of vitriol.—See also another paper on the same subject, by Dr. Johnson.—*Memoirs of the London Med. Soc.* 1792.

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The want of proper discrimination between the small-pox and chicken-pox, has given rise to many stories of persons having the small-pox twice. As the disease is attended with no symptoms requiring much attention, nothing further needs to be said on it, but Dr. Heberden, who is the only author that has given a proper account of it, may be referred to.

The other exanthemata, or eruptive fevers, called miliary, purple, or petechial, urticaria, *&c.** not being frequent in this climate, or only symptomatic, may be omitted, as also the *pemphigus*, a rare disease in Europe. Bontius speaks of such a disease, consisting of large vesicles, filled with yellow serum (like those caused by cantharides) attending sometimes a dysenteric fever in the Brasils, occasioned also by the handling of serpents.

CHAPTER VII.

ON DROPSICAL COMPLAINTS, *and* CACHEXIA, DIRT EATING, *&c.*

ON DROPSY IN GENERAL.

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THE several kinds of dropsy, anasarca, ascites, *&c.* depend on one and the same cause, *viz.* either too great effusion from the exhalant arteries, or else a diminished or impeded absorption, by the lymphatics. The effusion from the exhalants is generally supposed to be owing to laxity, but in some cases

* There is a difference between *urticaria*, or the nettle rash fever, and the *urticata*, a similar rash without fever, that is chronical, returning at intervals for many years.

cases may be attributed to increased action, and it is of much importance, in the cure, to ascertain how far this is the case; for the remedies suitable in one case, are not so in another.* CHAP. VII.

Dropsy is generally a disease of the phlegmatic temperament; it is brought on by cold and damp air, by poor living, great loss of blood, hard drinking, and frequent returns of intermittent fever, causing obstructions in the liver. When it comes on suddenly in young persons of a sanguine constitution, and who are subject to hæmorrhagy, or labour under any suppressed evacuation, as of the menses, piles, &c. it may be supposed not of the atonic kind, but owing to increased action.

Dropsy is not a very frequent disease in the West Indies, but when it does occur, it is as uncertain of cure as elsewhere: The most common case is hydrothorax, or dropsy of the chest, a disease much less seldom in cold climates. The remedies for dropsy are numerous, but very precarious; they all succeed in turn, but hardly any of them twice together; which accounts for the contradictory accounts of their efficacy. The general cure of dropsy is first to be considered, and afterwards the treatment proper, under the several kinds of it.

In cases where any phlogistic diathesis, or inflammatory disposition, can be supposed to exist, *bleeding*, however it may be made the subject of ridicule, is undoubtedly, in some instances, not improper.† Such cases however, are not likely to occur often in this climate. The other remedies in tonic dropsy,

* This discrimination in dropsical diseases, made by Dr. Rush, is well founded, and of considerable consequence to attend to. See Gapengeizer on hydrops plethoricus.—See an account of hydrops vagus, from a spasmodic affection of the lymphatics.—*Med. Jou. No. 7.—See also Oedema Fugax, Med. and Phys. Jou. No. 29.*

† Besides Dr. Rush, there are many other most respectable authorities, for this practice, *viz.* Home, Munro, Fordyce, Hoffman, Stoll.

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dropsy, or dropsy with too much action, are all (except bitters and chalybeates) the same as in other cases, *viz.* vomits, purges, diuretics, *&c.*

Dropsy has often gone off suddenly by spontaneous vomiting, and emetics are frequently given with great advantage. They should be of the stronger kind, and often repeated.—*See vomits, No. 49, 72.*

Purges.—Those principally employed in dropsy, are jalap, gamboge, scammony, elaterium, hellebore, *&c.* but the cream of tartar, given in a particular manner, has succeeded better than any of the above drastics. For *Forms* of the above medicine—*see No. 50, 51.*

The *diuretics* given in dropsical complaints are, the neutral and alkaline salts, squills, foxglove, tobacco, *&c.* cantharides. See *Forms, No. 52, 53.**

Sudorifics.—In anasarcous cases, sweating has been recommended, either by the apparatus of a chair,† *&c.* or else by giving large doses of Dover's powder, every other night, and covering the patient with blankets.

Mercurials.—Where there is a diseased liver and spleen, or suppressed

* Efficacy of several medicines compared:

1. Cream of tartar cured thirty-three out of forty three; *Ferriar.*—Thirteen out of twenty; *Home.*

2. Foxglove cured eleven out of twenty-nine.

3. Bacher's pills of hellebore, six out of twelve.

See Ferriar's Med. Histories and Cases—Home's Clin. Obs.

† It is the custom in the east, to bury the patient to the neck in a hot sand-bath; a practice that might be advantageously adopted here.—Van Swieten quotes an author who advises the hydropic patient to be put into a hot oven; and Heraclitus, the misanthoprist, who got a dropsy by flying to the woods for the sake of shunning society, was cured by burying himself in horse-dung.

suppressed obstructions of the mesenteric glands, mercurial frictions of the lower extremities should be employed, at the same time that diuretics, *&c.* are given. The mercurial blue pill, with squills, is here a suitable form.—*See No.* 109—*see Girdleston.* CHAP. VII.

Tonics.—What remains of the cure of dropsy, is to be obtained from tonics, exercise, and regimen, or all such things as tend to brace up and invigorate the body, after the extravasated water is drawn off, and the action of the kidnies excited, so that the flow of the urine is free and natural. The tonics made use of are bitters, bark;* chalybeates, *viz.* steel filings, mineral water, *&c.*—steel pills and powder, *No.* 47, 48—decoction of bark, with squills, *No.* 43—bitter-wood infusion, with chalybeate wine, *No.* 53, *a*—electuary of gum guaiacum, bark, and steel, *No.* 46—steel drink, 53, *b.*—Exercise is of great importance: Dropsy has sometimes been cured by hard labour. A nutritious diet is required, with wine,† *&c.*

The thirst of dropsical patients is sometimes insatiable: It was formerly thought necessary to keep them from the use of drink, but no advantage is to be gained from the observance of this painful injunction; on the contrary, large potations have sometimes brought on copious discharges by urine, which have carried off the disease.‡

It is necessary now to say something concerning particular dropsies, *viz.*§

 Anasarca,

* In the memoirs of the medical society there are some cases of dropsy cured by gum guaiacum.

† Wine and spirits are often the only remaining medicines. Several instances of cure have occurred from an indulgence in spirits, when medicines had totally failed.

‡ Milman.

§ For an account of oedema fugax—*see Med. Jou. No.* 29.—Hydrops vagus—*Med. Jou. No.* 7.

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Anasarca, or watery swelling of the whole body: This generally shews itself first in the ankles, mounting upwards, and at length becoming universal. Besides what has been recommended in the general cure of dropsy, some other means may be employed, as frictions of the extremities; sweating them in a box into which the vapours of spirit of wine, &c. is conveyed; bandaging them with a flannel roller, beginning at the toes, and going upwards to the knees; scarification of the ankles, or blistering them; but this practice is not without danger; inflammation and gangrene sometimes succeeding; to prevent which, warm and spirituous fomentations are requisite.

Ascites.—In ascites, or dropsy of the abdomen, the paracentesis or tapping is necessary: This should be performed as soon as any fluctuation is perceived, and before the bowels are become flaccid from long immersion in the effused water.—There is nothing in the operation* to excite terror, and it may be often repeated, for palliating the disease, where it does not ensure a cure, which it sometimes does ultimately, after having proved only a palliative.† In this species, frequent frictions of the abdomen, with a mixture of oil and spirits of turpentine, are sometimes employed, with great effect. Dropsy of the abdomen is sometimes encysted, that is, the water, instead of being diffused in the cavity, is contained within a cyst or sac. Tapping here is of no use.

Hydrothorax, or dropsy of the chest.—This, as observed, is not an infrequent disease in this island, but it is seldom discovered

* See a new mode of performing the paracentesis, in which the danger of wounding any branch of the epigastric artery is avoided.—Dr. Sims advises a perforation of the navel, and leaving in the trocar for several days.—*Mem. Med. Soc. Lond.*—*Ferriar, vol.* I.

† Patients frequently recover after fifteen or twenty tappings, and there are instances where the operation has been performed much oftener.—Dr. Mead tapped a lady sixty-six times.—Dr. Ferriar, however, is of opinion, that tapping accelerates the accumulation of the waters.

vered or ascertained till it is so far advanced, as to render the cure very uncertain. It is not always preceded by other complaints, but attacks persons apparently healthy, and labouring under no mal-conformation. The most certain signs of it are waking suddenly out of sleep, with affright; difficulty of respiration; palpitation of the heart; and irregular, intermitting pulse. If, at the same time that the patient is troubled with frequent returns of these symptoms, he has also dropsical swelling of the ankles, and passes little urine; there is too much reason to conclude that he has water in the cavity of the thorax. A numbness of the arms is also said to attend this disease. As the disorder increases, the difficulty of breathing becomes very great, and the patient is forced to keep constantly in an erect position. A fluctuation of water may sometimes be perceived, by turning suddenly from one side to the other. In this case, the operation of paracentesis, for drawing off water, is recommended, but seldom practised. Besides the means already recommended in the cure of dropsy, blisters here are considered as useful. Calomel, with digitalis, is the medicine chiefly depended on.

There is some difference between hydrothorax, and an anasarca of the lungs; though the one is not easily distinguished from the other, and the remedies are the same.—*Darwin's Zoonomia.*

Hydrocephalus.—Dropsy of the head.—This is a disease principally affecting children, and is of two kinds: 1. Where the water is collected externally, between the bones of the head and the teguments or scalp. 2. Where the water is seated within the head, either between the cranium or skull, and the brain; or else in the ventricles or cavities of the brain. The latter disease especially is a dangerous, and generally incurable, one.

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Its symptoms in the beginning are very obscure and uncertain, but they are commonly such as are observed in worm cases; afterwards by acute deep-seated pain in the head; striking from one side to the other; sickness at stomach, and vomiting; sleepiness; sighing and exclamation; great sensibility to light in the beginning, afterwards an insensibility, thereto, with dilatation of the pupils, distortion of the eyes, *&c. &c.* These symptoms are known to arise from an effusion, or accumulation of water within the brain, but the disease, though considered as dropsy, proceeds from congestion and inflammation, which is frequently occasioned by concussion from blows or falls.*

The proper method of treatment then consists in copious bleeding, purging, and blistering, and in afterwards giving calomel, with digitalis, employing at same time, mercurial frictions to bring on salivation. Dr. Darwin has recommended errhines, or such things as excite violent sneezing; and there is a remarkable instance of cure from the taking only of Macauba snuff *(Med. Repos. vol.* V. *page* 133*)*; but where sternutatories are made use of, they should be of a stronger kind, *viz.* turbith mineral, or flowers of zinc, Cayenne pepper, or the fresh herb of the croton humilis, a plant almost every where to be found in this island.

It is hardly necessary to mention, that any aperture or opening, made for the discharge of water in the head, is always fatal.

Country remedies in dropsy :—See Ap. :—Purging senna, bindweed,

* Physicians are very much divided in their opinions concerning the true nature of this disease. It was formerly, as its name imports, considered as a species of dropsy. Dr. Cullen deemed it apoplexy. Dr. Rush, a less degree of phrenitis. Whilst a late writer represents it as depending totally on plethora and increased action of the vessels, not on compression or effusion: According to this author it is often a symptomatic disease, or one transferred from other organs, *viz.* the liver, &c.—*See Cheyne on Hydroceph. acut.* 1808.

weed, green wythe, infusion of oil nuts, dumb cane, trumpet-tree, spikenard, contrayerva, quassia, cashew, physic nut, sandbox. CHAP. VII.

Tympany, or flatulent dropsy.—This is a distension of the abdomen, from air contained either in the bowels or else in the cavity; the former depending chiefly on a weakened relaxed state of the intestines, by which they are rendered incapable of acting on their contents; the latter on blood, purulent matter, or water, effused and undergoing corruption: For this the only cure is, the paracentesis, or perforating the abdomen with a trocar,* as in ascites. The remedies against the first species of tympany, where the air is contained within the intestines, are, *carminatives*, or such things as have the effect of expelling it, *viz.* ardent spirits, particularly gin—oil of aniseed—essence of peppermint—tincture of cardamoms.

Antispasmodics, viz. opium—laudanum—æther—tincture of asafœtida—tincture of castor, *No.* 18, 19.

Fomentations and *frictions* of the abdomen, with oil of turpentine (*see page* 171) or volatile camphorated liniment, *No.* 25.

Purgatives and *clysters*—calomel and jalap, *No.* 7—or pills, *No.* 36, at night.—The following morning, oily emulsion, *No.* 38—clyster of asafœtida, *No.* 66.

Tonics, to restore the tone of the bowels, after the expulsion of the wind—quassia infusion, with steel, *No.* 58—steel pills, *No.* 47, 48—electuary of bark, gum guaiacum, and steel, *No.* 46.—Van Swieten extols the spirits of vitriol in tympany, and relates a remarkable case of its efficacy.†

Persons

* Ambrose Paré is said to have successfully punctured the intestines themselves.—*See Van Swieten.*

† *Petiit æger remedium quo sitim intolerabilem lenire posset; habebat Medicus præ manibus*

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Persons subject to flatulent distensions of the stomach and bowels should carefully abstain from vegetable food, particularly cabbage and all the pulses; as also from large potations of weak and fermented liquors: They should take plenty of exercise on horseback, and wear a belt with buckles, or a waistcoat that laces, so as that the abdomen may be kept lightly braced.

A disease of this kind frequently affects cattle, from the use of succulent young grass, &c. and horses who eat the pods of the acacia.—laudanum and gin should be first given them, then castor-oil.—Cattle are relieved by perforating the belly with a knife, or other pointed sharp instrument.

MALACIA AFRICANORUM VEL PICA NIGRITUM—THE DISEASE OF DIRT-EATING AMONG NEGROES.

The disease of dirt-eating* among negroes is precisely the chlorosis or green sickness of women, which Dr. Cullen, our best nosologist, thus defines:† "Indigestion, or an appetite for substances not eatable; pale colour; œdematous or dropsical swelling; general weakness; palpitation of the heart; obstruction of the menses." The afore-mentioned writer considers chlorosis as peculiar to women, and depending wholly on a retardation or obstruction of the menses; but other authors describe

manibus tunc temporis, spirit. sulph. per campan, cujus portionem dedit instilland. aquæ fontanæ. Sitis non tantum inde sedata fuit, sed flatus copiosissimi erupuerunt, venter detumuit, et integræ sanitati fuit restitutus—Tom. IV. 277.

* There is no calculation of the general mortality by this disease, but it sometimes sweeps off one half or more of the negroes on a plantation. It has become much more prevalent since the large importation of Angola negroes, who are more particularly addicted to dirt-eating than any others.—Dirt-eating prevails more in wet than in dry parishes: In Port Royal mountains it is almost unknown, though it is frequent in St. Andrew's; which is, perhaps, owing to there being none of the earth they are fond of in the former situation.

† *Indigestio, vel rei non esculentæ desiderium; cutis pallor vel decoloratio; corporis tumor mollis; asthenia; palpitatio; menstruorum retentio.*—*Cullenii Nosolog.*

describe a disease called *pica* or *malacia*, in all respects similar, occurring in the male sex, but more particularly among boys.* A late observant traveller affirms, that dirt eating is peculiar to Africa, and that it affects persons from other countries going to reside there.† CHAP. VII.

The negroes who eat dirt complain, first of pain in the stomach (whence the French call it the *mal d' estomac)*, then breathlessness on the least motion, attended with visible pulsation of the carotids, or the arteries of the neck; they next become bloated; their nails and the palms of their hands become white, and their lips, gums, *&c.* quite pallid, shewing the want of red globules in the blood: These symptoms continuing and increasing, the patient sooner or later dies, sometimes in a very short space of time; at others, through the aid of medicine and nourishment, his fate may be protracted, but he rarely recovers.

This complaint may, I think, be a threefold one: 1*st*, As it affects children or young people. 2*d*. As it affects obstructed and pregnant women. 3*d*. As it affects the sexes indiscriminately, in great numbers, at the same time.

It

* Sauvages says of green sickness, "*licet mulieribus familiaris sit, non minus sexui virili et ætas tenera potissimum, hac pluries afficiuntur.*"—*Sauvagesii Nosolog.*

† "During my journey, I observed that my Turk stopped from time to time, and gave orders to a servant to pick up some pieces of dirt, which he immediately devoured: I inquired what relish he could have for such a singular repast: He informed me, that an invincible appetite made it necessary to him, and that nothing in the world could prevent him from gratifying it. This man was about sixty years of age, his colour was yellow, he was feeble and languid, and complained of violent pains in his stomach.—Born in Constantinople, and having passed a considerable part of his life in Turkey, he had only felt this inclination to eat dirt, after a long residence in Egypt. I have been since informed, that several persons in the same country were attacked with the same malady, which seems peculiar to Africa. It is well known among the negroes in the West Indies."—*Sonini's Travels through Lower Egypt, vol.* III, *page* 284; *published* 1799.

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It is well known that white children, both here and in Europe, as well as negroes, are, at a certain age, prone to the eating of dirt: Whether they are led to it by an instinct, similar to that which directs other animals to the use of extraneous and indigestible substances, is not easy to determine; but we see dogs physicking themselves with grass; and poultry, when denied the use of gravel, picking their own feathers: Before we attempt to account for such propensities as we deem vitious, let us, if we can, account for such as are natural. If we can satisfactorily shew the causes of our ordinary appetites, and the various sympathies we are subject to, it may not be difficult to account for such as are uncommon, and that are considered depraved; though the indulgence of them is not always attended with any bad consequences: Children, green sick girls, and pregnant women, devouring with impunity a great many different substances.* They have frequently a predilection for chalk, or the absorbent clays; whence the disease has been attributed to an acid.† That there may be sometimes an acid on the stomach, is not to be questioned; but this is rather to be deemed an effect than a cause. Chalk is not always the kind of earth preferred, coals, cinders, salt, and I know not what besides, are sometimes coveted.‡ It is obvious, therefore, that the depraved appetite does not depend on an acid, but on a state of debility in the stomach, which renders

* It is proverbial, "*nihil gravidæ denegandam esse;*" that a pregnant woman ought not to be refused any thing. A woman of this place, after an easy delivery, and doing very well for a day or two, was attacked with violent convulsions: Her stools were observed to be white, and upon examination, were found to consist actually of chalk, which she had been in the habit of devouring in great quantities, during her pregnancy.

† *Maxima pars auctorum tribuit picam vitio humorum ventriculi, vel salivæ; ast non dubium est quinetiam error judicii, et voluntatis primarii incusandus sit.*

‡ *Zacutus noverat puellam, quæ per incitiam cum oleti pauxillum degustasset, sensim magnæ copiæ assuevcrat, ut jam tota vita esset suavissimum, quo non poterat ine ægritudine carere.—Altera, se delectatam crusta latrinarum muris adhærente, fassa est.*

renders it insensible to the ordinary stimuli, and lays the foundation for these unnatural propensities.* CHAP. VII.

According to the old proverb, "*de gustibus non disputandum.*" How much do the tastes of men, in different ages and countries, vary in the choice of food and modes of cookery! Should Heliogabalus, or any other Roman epicure, appear among us, we might be apt to think his appetite fully as depraved as that of a dirt-eater:† In short, the appetites and tastes of men are often the result of imitation, and are also greatly under the influence of habit. "*Appetitum* (says an old writer), *vel ciborum, electionem ab imaginatione pendet; sic quoq. in pica, appetitus depravatus judicii errore.*"

Dirt-eating among negroes may possibly be sometimes a social custom, like snuffing or smoking tobacco, and the *Geophagi* (if they may be so named) display as much curiosity and nicety in their choice of the earth they *yam*, as snuff-takers or smokers in the kind of tobacco they make use of: As people who use snuff or tobacco are apt, when labouring under disappointment and misfortune, to be guilty of excess, (snuffing incessantly, chewing immoderately, and seemingly without

* The symptoms in this disease have been always considered as marks of a weak stomach: Celsus says, "*Stomachum autem infirmum indicant pallor, macies, præcordiorum dolor, nausea,*" &c.—Dr. Cullen has shewn how an atony in the uterus may be transferred to other parts of the system, particularly the stomach, and so cause all the symptoms of chlorosis. In what manner a similar state of the stomach can be occasioned, by the depressing passions, and such causes as will be presently mentioned as conducing to dirt-eating among negroes, may perhaps be conceived by those versant in pathological inquiries, but is difficult of explanation:

"*Qui stomachum regem totius corporis esse*
Contendunt, verâ niti ratione videntur:
Hujus enim validus tenor firmat omnia membra,
At contra, ejusdem franguntur cuncta dolore."

† Dr. Smollett, in his feast after the manner of the ancients, has given us a humorous account of Roman dishes; the very description of which is almost sufficient to cause sensations such as poor Pallet felt.—*See Peregrine Pickle.*

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any consciousness,) so may negroes, who have contracted the habit from caprice or imitation, find the same sort of solace in an indulgence which, when within limits, was innocent, but which from excess may become pernicious and destructive.

What analogy there is between chlorosis* and the pica, is not ascertained; but diseases which so strongly resemble each other in their symptoms, must, it is presumed, have a common cause. The remote causes may be indeed various and dissimilar, but the proximate one must be the same; and, as in chlorosis, it is evidently debility in the stomach, so it must in pica and dirt-eating; which must be looked on either as a sporadic disease affecting individuals, or endemical, affecting great numbers at the same time. When the major part, or a great number of negroes on a plantation, or new negroes on landing, take to dirt-eating, it would be ridiculous to consider the disease as the effect of any constitutional circumstance.—We must search for the cause elsewhere, and we shall find it no where but in the passions.† A deficiency of food, and hard labour, though it may contribute to bring on the disease, will not occasion it, where there is not a dissatisfaction or discontent of mind—on the contrary, these are alone, or of themselves sufficient to cause it, without any scarcity or hardship: It signifies nothing from what source the dissatisfaction arises, or whether there be any grounds for it; but the ordinary motives for it, are a change of master, attorney, overseer, or driver—the dispossessing them of their grounds or habitations —shifting their residence, particularly from the lowlands to the mountains

* Some late writers have supposed the chlorosis in females, to arise from ungratified appetite, but on no good ground, for there are very few obstacles to hinder negroes in the indulgence of their natural desires.

† The negroes on an estate, from dissatisfaction, took to eating dirt, and great numbers of them died. The overseer being discharged, the complaint ceased, but the survivors declared that, if the overseer had remained, they would all have given themselves up to the same fate.

mountains—but, perhaps, *obeah*, or the terror of witchcraft, is a much more frequent cause than any: This at least must be suspected, where there is no apparent ground of complaint;* but whatever motives actuate them to eat dirt, they always do it secretly and clandestinely. There is scarce a possibility of detecting them, and they will never acknowledge it.† Nothing can extort from them the confession, which shews they are either under the influence of some horrible superstition, or bent on some fell purpose. This disease, then, is sometimes a *voluntary* one, proceeding from hopeless, though perhaps causeless grief, and a determination either to shun or revenge certain evils, by self-destruction. This purpose is at first formed among a few *grandee* people, or those who have a great ascendancy over the minds of others, and the rest follow their example, by a kind of fascination. When this once seizes them, they daily devour, with the most voracious avidity, large quantities of earth, at first of one kind only, afterwards of every kind indiscriminately, and quickly fall into that deplorable state of cachexy before described, from which they are not, by any means yet known, to be recovered. Such is the nature or force of this insanity, that an alteration in the system of management on the property, or a compliance with their own demands and wishes, will not in all cases put a stop to it.—Threatenings and punishments of different kinds, such as humanity revolts at, have no effect. Of all these circumstances, histories might be adduced in proof, did they require authentication.

* Upon one estate seventy negroes died of this complaint in a very short space of time, till at last it was discovered, through the information of one who was christened, that there was an *obeah* woman on the property; the terror of whom had occasioned this melancholy catastrophe: When a negro conceives himself to be under *obeah*, every accident he meets with, and every indisposition he feels, he attributes to the effect of magic, and his existence becomes a misery.

† It may be discovered by examination of their fæces which, in cases where they eat it in a large quantity, are composed of the earth they swallow; or else, by giving an emetic, and washing the contents thrown up, &c.

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Not to lose time, by any further disquisition concerning the nature of this disease,* or by an inquiry how the passions give rise to this propensity, which would be fruitless, it will be better to speak of the treatment of it.

Treatment.—The symptoms arising from dirt-eating being exactly the same as in chlorosis, or green sickness, the same remedies have been usually employed, *viz.* emetics, purgatives, bitters, chalybeates, &c. with a suitable regimen of animal food, &c. which are now and then successful; but, when a great number of negroes take to this practice, at the same time, the disease is not to be overcome by any remedies yet known.—The depriving them of dirt will not obviate the danger, for they appear to suffer as much from the prohibition as from the indulgence.

What then is to be done for the recovery of these poor mortals? In the first place, the strictest inquiry is to be set on foot, to discover the motive that has impelled them to this practice: If they have any reasonable pretext of complaint, their wrongs should be redressed, and their minds conciliated; but neither reparation for supposed injuries, nor any indulgence that can be shewn them, will always have the effect of making them desist.†

2. If

* Dr. Chisholm thinks that the disease is analogous to scurvy, and that it originates in a want of oxygene, and perhaps also of carbon; and yet he says that negroes, labouring under it, are benefited by breathing the *hydrocarbonate* of marshes.

† Persons unacquainted with the manner in which negroes are provided for, are apt to imagine that all their maladies, and this in particular, are owing to bad treatment, and scarcity of food; but the contrary of this can be demonstrated, in a number of instances. In the year 1783, John M'Gillivray, Esquire, a provincial Colonel, well known for his brave character, brought here from Georgia, between three and four hundred negroes; who were, for some time, employed on the public fortifications, at that time carrying on, and were in the highest state of health during the hard labour they were employed in; but, when he afterwards settled in St. Thomas in the East, they took to dirt-eating. No cause could be assigned for this, but their having lost the hope of

2. If they appear to be under the influence of magic or superstition, the *obeah* people should be searched for, and brought to punishment, and the bewitched negroes should be christened. This is the best, and perhaps the only way of completely exorcising them. CHAP. VII.

3. Every thing should be done to render the practice infamous: An odium should be attached to it, or rather those who can prove themselves descended from families uncontaminated by this abhorred vice, should be held in honour.

In respect of medical treatment, it has been already observed, that this consists in giving vomits, aloetic and other warm purgatives, chalybeates, bitters, &c. *(see No. 58, 59, 90, 91, 92)*; which, with nutritious food and wine, will, in some cases, succeed, if the disease has been brought on by any other complaint;* and must, in all cases, be resorted to, as the best means, till we are fortunate enough to discover some more effectual plan of cure, which has hitherto been in vain sought after; but it may not be unimportant to mention a practice made use of by an eminent professor at Edinburgh: Conceiving

of returning to America. Their owner, being as humane and kind-hearted a man as ever lived, did every thing to please and satisfy them; he exacted little or no labour from them; he furnished them with the greatest plenty of pork, beef, rice, flour, &c. notwithstanding they were in possession of hogs, poultry, &c. of their own: To contribute to their amusement, he built a dancing room, and furnished them with fiddlers; but the malady was incurable, he lost above one hundred negroes; when at last the old gentleman dying himself, those who remained, and came into the possession of a very rigorous master, ceased to eat dirt, and very few afterwards died. This history furnishes subject to the metaphysician and moralist, for curious and interesting enquiry.

* This is not unfrequently the case; a very respectable and intelligent planter says, that on a certain estate in St. Mary's, there was a great annual loss of negroes, by this malady of dirt-eating; but on removing the negro houses, which had a bleak exposure, the negroes grew healthy, and were no longer subject to this complaint. It is therefore evidently of the utmost importance, to ascertain whether dirt-eating is a primary or secondary disease; that is whether this inclination is the effect of some preceding complaint, or whether the symptoms are not brought on subsequent to the practice.

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ing that chlorosis is derived from a torpor in the absorbent system, he gives the digitalis, *viz.* ten drops every two hours, till a copious flow of urine takes place.

The disease is characterized by a great degree of torpor: There is the same want of excitement as in jaundice, dropsy, &c. where the liver is affected, and where the stimulus of bile in the first passages is deficient. The dissections* in the complaint have been few, and what grounds there may be, for supposing the liver concerned, either in occasioning the disease—or in hindering recovery, is not ascertained; but, reasoning from analogy (a loose one perhaps), mercurial frictions may be tried, for the purpose of exciting the action of the absorbent system, as in the afore-mentioned complaints, or as a stimulus to the sanguiferous system: Experience, falsifying the notions formerly entertained of the effects of mercury, has shewn, that it is a most efficacious remedy in many diseases, where the administration of it some time ago would have been thought highly pernicious, if not fatal. The experiment then would be a justifiable one.†

Satius est enim anceps auxilium experire quam nullum.

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* Dr. Clark, island botanist, deceased, found in some bodies of negroes, who died of dirt-eating, large concretions of earth; in one, a mass that filled the whole colon, weighing 12*lbs.* Polypous concretions were also found in the large arteries about the heart; occasioned, as it may be supposed, by the languid circulation previous to death. Chisholm says the stomach is enlarged—the liver white and schirrous—the bile watery—the mesenteric glands indurated; yet, he says, mercury had terrible effects, but of what nature he does not mention; nor is it easy to conceive how mercury, under those circumstances, discovered by dissection, should be inappropriate.

† Some trials have been since made with mercury in dirt-eating, but it did not succeed better than any other mode of treatment.

CHAPTER VIII.

ON NERVOUS DISEASES.

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THE word *nervous* is strangely perverted,—in these refined times, almost every complaint is nervous;—it would be unfashionable and vulgar (for a lady in particular) to have any other than a nervous complaint—but what are these elegant disorders called nervous? They are not *all* included in that forcing hot-bed, *sensibility*, which so many people calling themselves nervous complain of, occasioned by a false education, and a manner of living totally out of nature: This is an evil of sufficient magnitude; but it is sometimes more an object of ridicule than sympathy. In the class of diseases properly called nervous, there are several that are altogether beyond the reach of the medical art, or in which medicine can do but little. This must continue to be the case, till we are better acquainted with the nature of the nervous power, and of the causes interrupting it.

Nervous diseases are of four kinds: 1. Such as are attended with sleep, and the total or partial loss of voluntary power, *viz.* apoplexy, palsy, *&c.*—2. Such as are attended with, or depend on, a diminished or weakened action in the natural functions, *viz.* indigestion, *&c.*—3. Such as are attended with morbid, irregular, and violent motions of the muscular fibres, called spasmodic diseases, *viz.* convulsion, epilepsy, tetanus, *&c.*—4. Such as affect the faculties of the mind, occasioning idiotism, insanity, or madness.

APOPLEXY.

A person seized with apoplexy, or taken with an apoplectic fit, falls down for the most part suddenly, with little or no warning

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warning or previous symptoms,* being deprived of all sense and voluntary motion, and appearing to be in a profound sleep, from which no ordinary stimulus can arouse him.

It seldom attacks people in early life, unless in consequence of accidents; those most liable to it are corpulent short-necked people, after sixty years of age; a period of life when the venous plethora chiefly prevails.† The fit may be brought on by various causes; where there is a disposition to it, *viz.* by warm bathing—excessive drinking—sudden cooling of the body, when heated—exposure to violent heat—indulgence in venery—repelled eruptions—suppressed evacuations—wounds—poisons, *&c.*—lastly, by the passions, whether of the elevating or depressing kind.

From contemplating the occasional causes of apoplexy, it is obvious that the immediate and direct cause is either a compression of the brain, or an extinction of the nervous power‡—compression is either from a fulness of the blood vessels, or an effusion, either of blood or water—nervous apoplexy, or that which proceeds from a destruction of the nervous power, is caused by terror or affright, by poisons, or some internal unknown cause, acting on the brain, producing excessive excitement. Hence the cure must be directed according to the different nature of the disease, which is either sanguineous, serous, or nervous.

The

* Sometimes it is preceded by vertigo, or dizziness, head-ache, ringing of the ears, dulness of the senses, *&c.* where these symptoms are observed, therefore, in short-necked people, blood should be drawn, by which the apprehended fit may be prevented.

† The plethora of young people is arterial; that is, there is a greater fulness of the arteries, until such time as the system is fully evolved, or the body comes to its complete growth; the blood is then thrown on the veins; and people in advanced life are subject to venous plethora.

‡ It has been asserted, that compression of the brain cannot possibly take place, either from fulness of the vessels, nor from effusion. Sleep is not the effect of compression—then why should apoplexy?—*Med. and Phys. Jou. No.* 38.

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The *sanguineous* apoplexy attacks principally plethoric, corpulent, and short-necked, people: This, though the most immediately dangerous, admits more readily of relief: The means for which are immediate and large blood-letting, either from the arm, the jugular veins, or temporal artery: Cupping and scarification of the neck, provoking blood to flow from the nostrils: Morgagni recommends opening the occipital vein.—Dr. Heberden, Dr. Fothergill, and Dr. Darwin, three great authorities, are of opinion that *large* bleedings in apoplexy are hurtful—they do not, they observe, relieve the brain from compression, and they weaken the powers of life;—but may not apoplexy be caused by a plethoric turgescent state of the vessels in the brain, without rupture or effusion?—in this case, bleeding must surely be of the utmost importance.—Clysters—blisters to the temples and neck—actual cautery to the occiput, are recommended.—All stimulants, in this species of apoplexy, are to be avoided.

In the *serous* or *hydropic* apoplexy, which occurs in phlegmatic temperaments, and in such persons where there is no suspicion of sanguineous plethora,* blood-letting is to be avoided:—The remedies are strong emetics,† *viz.* white vitriol—antimonial wine—clysters—blisters to the spine—errhines or sternutatories, *viz.* such things as excite sneezing—powdered hellebore—Cayenne pepper, *&c.* blown into the nostrils.—*See errhines in Appendix.*

* This species of apoplexy does not attack so suddenly as the plethoric or sanguineous—the blood vessels are not so turgid—the pulse is not so full.

† Upon the use of vomits in apoplexy, there is great difference of opinion.—See the subject discussed by Dr. Crowfoot and others, in the *Med. and Phys. Jou.* If apoplexy has come on in consequence of over-eating, or immediately after a full meal, or debauch in drinking, there are (it is to be presumed) few who would question the propriety of exhibiting an emetic.—See some good observations of D. M'Ghennis on this subject, and on bleeding, in the above-mentioned Journal.

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The remedies in *nervous apoplexy*, or in that species where there is no suspicion of plethora or effusion, as in the preceding cases, and which has been brought on by the passions, by noxious vapours, *&c.** are stimulants of every kind—oxygene or pure air—sternutatories—volatiles—frictions—acrid clysters—sinapisms to the feet—slight electric shocks through the head—Galvanism.

Blood-letting and evacuations are here improper, as also in drunken apoplexy.—Men who have drunk to this dangerous excess, or who are *(dead drunk)* in a state of apoplexy, should be undressed, placed half erect, and exposed to cool air—a sharp clyster should be administered, and, as soon as they are able to swallow, an emetic to evacuate the stomach; then some brisk purge, as tincture of jalap, or aloetic elixir.

The *coup de soleil*, or stroke of the sun, is also an apoplectic affection, or *carus*.—The patient, if plethoric, should be bled:† Towels dipped in cold salt and water, or vinegar and water, wrapt round his head, whilst his feet are immersed in hot water:‡ As soon as he is able to swallow, give the cooling powders, or ptisan, *No.* 3.§ Where other methods fail, electric shocks through the head.—There are instances of nervous affections having been removed by the very same causes that brought them on: An hemiplegia, caused by a stroke of lightning, was removed by another, after some length of time.—Persons having once suffered a stroke of the sun, should be very cautious of exposure to the meridian heat—should wear a white

* This species of apoplexy is more properly named *asphyxia*.

† Lewis XIV. having been affected in this manner, was bled nine times.—*Tissot*.

‡ A man who, from being exposed to a scorching hot sun, was delirious, but without fever, was recovered by throwing him into a cold bath.

§ This method of practice is dictated on the principle of there being a determination to the brain, and too great excitement; but dissection does not shew any organical lesion, or marks of turgescence and inflammation.—*Sauvages*.

a white hat, with large crown: Green spectacles are likewise extremely beneficial in counteracting the influence of the sun's rays, an extreme glare of light having sometimes as bad an effect as intense heat.—A gutta serena is said to have succeeded a stroke of the sun. CHAP. VIII.

When apoplexy comes on from fracture or blows on the head, the treatment is chirurgical, *viz.* by the trepan:—In all cases, the patient should be kept in an erect posture.—To prevent relapse, which the patient is liable to, the occasional causes, either plethora on the one hand, or inanition and debilitating causes on the other, are to be avoided.

Apoplexy, as occasioned by opium, mephitic air, *&c.* will be considered under *poisons*.

ON PALSY, HEMIPLEGIA, *&c.*

Palsy, in which there is a diminution or total loss of sense, or of the power of motion, or of both, in any part of the body, is divided into *hemiplegia* and *paraplegia*.—In the former, one side of the body only is affected; in the latter, the lower extremities. Sometimes there is a loss of feeling on one side, and a loss of the power of motion on the other. Hemiplegia generally succeeds to apoplexy; paraplegia is brought on by accidents happening to the spinal marrow.* The other causes of palsy are, cold applied to the body when heated, suppressed evacuations, metallic fumes, noxious gases, *&c.*

A late writer (Kirkland) has very properly discriminated between the spurious and true palsy, *i. e.* between palsy arising

* Dr. Willan has related a very remarkable case of paraplegia, which occured in a young girl of thirteen or fourteen years of age, without any obvious cause: It took place in the night, during sleep; at the expiration of a fortnight, on awaking from sleep, she was agreeably surprised, at finding that she had recovered the use of her limbs.

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from compression, or an interrupted influx of the nervous energy, and that which proceeds from a deficiency or loss of vital power.—The treatment, in these two different states of the complaint, must be very different, corresponding with the different modes of practice in apoplexy, which see, *page* 181. Palsy that happens to young and plethoric people, and to such as are liable to the sanguineous apoplexy, or that comes on from cold, suppressed evacuations, repelled eruptions, as scald head, *&c.* may be supposed owing to compression. Here the remedies are, bleeding, emetics, purges, blisters, external stimulants.—*Bleeding* is not so necessary here, as in apoplexy, and should not be employed except in young and athletic patients. *Setons* and *issues* are also here proper.

To such paralytics as are of a phlegmatic or hydropic temperament, give, from time to time, *emetics* of the white or blue vitriol, *No.* 34, 35—or antimonial wine; as also brisk purges, *viz. No.* 6, 37—and clysters, *No.* 63. 57

Where the disease has been brought on by cold and wet, *sudorifics* are advisable, such as Dover's powders—salt of hartshorn bolus, *No.* 81—guaiacum bolus, *No.* 82. 74 73

Blisters may be promiscuously used in all cases.

Frictions, and external stimulants, though so generally employed, are of very doubtful efficacy, except in local or partial cases; but it is not likely they can do any injury, except in plethoric full habits.—*See external applications, No.* 39.—Galvanic electricity is the most powerful of any of the external stimulants; the most successful method of employing it is, by drawing sparks from the paralytic parts, wrapped up in flannel.

Internal stimulants, in cases supposed to arise from compression,

sion, are to be used with caution, as they may, by augmenting the force of the circulation, tend either to relieve or aggravate the cause of the disease.—*Opium*, with *aromatics* and *wine*, are here the only remedies.—*See Kirkland.*

The stimulants and cordials best suited to paralytics are, æther—succinated spirits of ammonia or *eau de luce*—compound tincture of castor—tincture of cantharides—volatile or ammoniated tincture of guaiacum—bolus of guaiac. *No.* 82—electuary of bark and guaiac. *No.* 46—mustard seed; a table spoonful, whole, in a glass of wine or water, several times in the day—mustard wine and electuary, *No.* 69—paralytic infusion, *No.* 71—bitter infusion—chalybeate wine—ammoniated iron. The *rhus toxicodendron* has been successfully administered by Dr. Alderson, and the *rhus radicans* by Dr. Fresnoy.—*See Ann. Med.* 1799.

The warm baths and mineral waters have been long resorted to by paralytics;* but under what circumstances, or in what manner they are useful, has not, perhaps, been ever rightly explained. They certainly cannot be proper in plethoric cases; nor would they seem calculated to answer in phlegmatic serous temperaments. Where they are beneficial, it must, in my opinion, be principally either in consequence of soothing sensation, or of causing an equable and free circulation through the system of capillaries. [*Vide* effects of hot and cold bathing in the Introduction.] The *thermæ*, or warm baths, should be therefore recommended, particularly in those palsies that have been occasioned by cold, repelled eruptions, dry belly-ache, *&c.*

In

* Out of three hundred and ten paralytics who used the bath waters, fifty-seven were cured, one hundred and fifty-one were relieved, forty-five remained as they were, forty-two were worse, and twelve died. Of these three hundred and ten, forty-two were affected with hemiplegia, out of which only four recovered.

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In palsy from suppressed evacuation, sudden stoppage of salivation, from drying up of eruptions, as itch, herpes, &c. and from a diseased liver, *mercurial frictions* should be had recourse to, along with warm bath and sudorifics, *viz.* decoction of the woods, &c.

LOCAL PALSY, OR PALSY OF PARTICULAR PARTS.

Palsy of the arms.—This is too often the sequel of dry belly-ache, and is sometimes not curable, or but partially: Going to a cold climate is the most effectual remedy—electricity—shower bath—and frictions—lifting and swinging of weights, beginning with such as can be moved with ease, and every day trying heavier ones.—The effort of rowing in a boat may also prove serviceable.

Palsy of the lower extremities—Either comes on from the same causes as hemiplegia, or from accidents and injuries of the spinal marrow.—Ricketty enlargements of the vertebræ, of the spine or backbone, are frequently the cause of palsy in children, in cold climates, and sometimes occur here. The cure is effected by issues put in with caustic on each side of the tumour, or by setons.*

A paralytic weakness of the *sphincter*, or neck of the bladder, occasions an incontinence of urine; for which the remedies are, electricity, cold bath, and blisters, applied to the os sacrum and coccygis.†

Palsy of the tongue, and muscles of deglutition.—Electricity—stimulant gargles, *No.* 70, *c*, *d*, *e*.—When the patient cannot swallow food, nourishment may be conveyed by a flexible catheter,

* Pott, on the Palsy of the Lower Limbs.

† See Dickson, London Medical Observations.

catheter, passed into the œsophagus, or by an eel-skin, having lateral slits, pushed into the stomach by a bougie or probang of whalebone. CHAP. VIII.

EPILEPSY.

Epilepsy is a disease in which the patient suddenly loses his senses, and is affected with terrible convulsions of the whole body. The disease is so perfectly well known, as not possibly to be mistaken; and therefore, according to the plan of this work, a few such remarks only will be made as are more particularly useful.

Epilepsy depends sometimes on constitutional causes, and is hereditary; but it is most apt to attack weakly young people, and women.* It is occasioned in others, by injuries or morbid affections of the head; by oppletion of the stomach, or surfeit and ebriety; by worms; by poisons; by repelled eruptions, as of the scald head;† by sudden affright or terror; violent gusts of passion; and, lastly, by excessive venery.

Children who have been subject to it, frequently surmount it at puberty; but when it comes on later in life, it is more difficult of cure.—By frequent returns, the faculties of the mind are impaired, and the patient sometimes sinks into idiotism: At other times he becomes paralytic, or is carried off by apoplexy.

The

* It however attacks men, even the strongest and most robust; no vigour of mind or body can always resist the *insultus epilepticus*.—Julius Cæsar had some attacks of it.—The celebrated French mathematician Du Cas, who lived to near eighty years of age, had been subject to epileptic fits, through the greater part of his life. An Austrian prince, and great general, is also said to be subject to this disease, which, though humiliating, has in many cases, no effect in impairing the faculties, either of the mind or the body.

† Epileptic fits sometimes precede the eruption of small-pox, and other infectious diseases; as also the paroxysms of ordinary fevers.

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The complaint is not very common in the West Indies, at least not in Jamaica; but it is very prevalent in a particular district, affecting a great number of young females. It is in some persons periodical, but not regularly so; and whether the returns are owing to any influence of the heavenly bodies, or to causes within the system, is by no means clearly ascertained, though the former is commonly believed.—Habit has, in most cases, a great effect;* which it is of the utmost importance to break, by altering the whole mode of life, and by deceiving the patient as to the time of day, &c.

When the disease depends on *organical causes*† acting within the cranium, an exostosis, or protrusion of bone; tumours, &c. of the brain; it must be incurable, as these circumstances cannot be explored, till after the death of the patient.—When caused by *læsion*, or injuries of the head, *viz.* by wounds, fractures, or concussion, the cure must depend on the treatment proper in such cases. The trepan was tried in three cases, in two of which it proved fatal, and in the third, it produced no alleviation of the disease—*Bell.* If brought on by *voracity*, or over-eating, or any cause affecting the stomach, emetics and purgatives are the proper remedies:—Give a vomit of white vitriol, or tartar emetic, as soon as the patient can swallow:—Administer a sharp purging clyster, and afterwards give a dose of

* Nothing can illustrate more forcibly the effects of habit, than what is related by Dr. Plott, in his History of Staffordshire, of an idiot, who was in the custom of always numbering the hour of the day after the town clock; which happening to be out of order, ceased to strike; but the idiot continued, nevertheless, to repeat the hour with the greatest punctuality. Many other facts, illustrative of the force of habit, not only on man but other animals, might be related: One remarkable one is quoted from Herodotus, of cattle employed in a mill for drawing water, stopping after they had performed their usual number of rotations. This fact, which might have been doubted by some incredulous people, is confirmed by observation in this country; the mules in the cane mills know well when their spell is out.

† *Van Swieten inquit, mencini me innosocomio, ubi epileptici et fatui servabantur; vidisse plures, in quibus vitiosa cranii figura manifeste observabantur.*

of jalap and calomel; or an infusion of senna, with tincture of jalap.—Emetics and laxatives are occasionally useful in all cases.—If *worms* are suspected, anthelminthics, or vermifuges, must be given.—*See worm medicines.* CHAP. VIII.

If epileptic fits have succeeded the drying up of eruptions or sores, these must be recalled, or an issue inserted.

But when the disease is *idiopathic*, or original, depending not on any of the foregoing or other accidental causes, but on a particular state of the brain and moving powers, the cure must turn on obviating that state; which appears to consist in a too great susceptibility to irritation, from slight impressions; or in a too great propensity in the muscles to contraction; which are thrown into action by an impulse independent of the will.*

The medicines, therefore, here suitable are, sedatives, antispasmodics, and tonics—that is, such as will allay irritation, relieve the spasms, and strengthen the system, so as to obviate that state which gives rise to the disease. Of the great number of medicines of this kind, highly celebrated, there are but few that are possessed of real efficacy; and to these I shall confine my attention.

If the person in an epileptic fit, or who falls down suddenly in violent convulsions, and with a loss of his senses, foaming at

 the

* The convulsions of epilepsy and tetanus have been always considered as involuntary, but Darwin thinks they are excited by the will, for removing or counteracting uneasy sensation.—If they do in reality depend on the will, the mind is not conscious of any such effort: That these convulsions may, after a long habit, be in some degree voluntary, there can be no doubt. There are persons who can, by giving way to certain impressions, bring them on at pleasure, and even where the fits are not feigned, the patient may sometimes, from the operation of shame, fear, and other motives, acquire some power over them, or be able to resist them. That the higher degrees of volition and sensation are incompatible with each other, is a truth, says Currie, of very great importance in every part of the science of life, whether moral or physical.

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the mouth, *&c.* should happen to be of a strong athletic habit, and very plethoric, blood-letting, if not rendered impracticable by the convulsions, is proper.

The other means and precautions, during an epileptic fit, are, to prevent the patient from wounding his tongue, by inserting a piece of wood, or metal, such as a dollar, between the teeth; to keep open the hands; to counteract, by extension and compression of the limbs, the convulsions, and prevent the accidents that might happen from their violence; to suppress them, by throwing on cold water; by the application of cold wet cloths to the pudenda; by strong frictions of the soles of the feet; by fætid clysters, with opium, *see No.* 66; by applying volatiles and sternutatories to the nose, and administering cordials, volatiles, *viz.* brandy, spirits of hartshorn, laudanum, æther, *&c.* as soon as the patient can take them.—When the convulsions subside, and the patient falls into easy sleep, he should not in that state be disturbed.

In cases where the patient has any presage or forewarning of the fit, it may be frequently prevented by a strong cordial, a glassful of brandy, *viz.* a tea spoonful of hartshorn, or *eau de luce*, in a glass of water or wine.—Twenty drops of laudanum, in a little strong brandy and water.—A tea spoonful of æther, or compound tincture of castor, in water. In cases where the patient is sensible of what is called the *aura epileptica*, the tourniquet, or tight ligature, may be applied to the affected limb, or a blister put on.—*Ferriar.*

Where the fits recur daily about the same time, some of the above medicines should be given a little before the period, or a large dose of musk and hartshorn, *No.* 65.—Nauseating doses of tartar emetic may be given, or a tobacco cataplasm applied to the pit of the stomach.—Electricity is also of great use,

use, in hindering the return of the fit, if employed in gentle shocks, for some time before it is expected.—The strictest attention to regimen is required in this disease: Every thing that disagrees with the stomach, or that causes acidity and flatulency, and every kind of excess, is to be avoided: Exercise, and occupation of mind, are requisite, within limits; but fatigue of either body or mind is pernicious; as also too great exaltation of spirits, from company. Whatever has a tendency to excite vertigo, *viz.* ascending heights; looking down precipices; crossing rivers; turning round in dancing,* *&c.* should also be carefully avoided.—Early going to bed is recommended, but not late sleeping; too much indulgence in sleeping weakens the brain.

It remains only now to speak of the antispasmodic and tonic remedies, recommended for stopping the return of epileptic paroxysms. These are principally, musk, *No.* 67, 65—asafœtida, *No.* 66—castor—bark and chalybeates, *No.* 48—vitriol of copper—and calx of zinc, *No.* 68—to these some new medicines have been lately added, seemingly of great efficacy, but which I believe have not been found uniformly or generally successful.†—Electricity, and the cold bath, are likewise employed with the above remedies.

All these have proved occasionally useful, but more frequently

* A return of epilepsy may be caused likewise by the sight of others in the fit, or even by a forcible recollection of past fits; from the sight of objects that were then present. Sauvages relates the case of a poor woman who, having been taken with an epileptic fit whilst at church, could never enter the church afterwards, without incurring a return; in consequence of which, she was obliged to attend and take the sacrament without side the church door.—A young lady, who had been thrown into convulsions by the tickling of the soles of her feet, could not see others treated in this manner, without a return of fits.

† Dr. Kinglake tried the *zincum vitriolat. cuprum ammon. opium belladonna. digitalis, cicuta,* and the *argent. nitrat,* successively in large doses, without any good effect ultimately.

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quently inert:* If any preference be due to any of them, it is to the calx of zinc, and vitriol of copper† *(pilulæ è cupro of the Edinburgh dispensatory)*; which, in large doses, continued for a proper length of time, frequently produce a mitigation of the symptoms, and in many instances a cure. Dr. Currie made trial of the digitalis which, in some cases, appeared serviceable, in others the contrary. The *nitrate of silver* or lunar caustic, has been recommended by Dr. Cappel.—*Ambergris* in large doses, has been found beneficial; and so perhaps would *artificial musk.—(See hooping cough)*. Rush found some partial good effects from the *acetate of lead*, or *saccharum saturni*; but Dr. Spence, who laboured under an hereditary epilepsy, was completely cured by taking large doses.—*(See his own account of his case, Med. and Ph. Jou. vol.* XVIII.) He began by taking a quarter of a grain twice in the day, and gradually increasing it to seven grains. The misletoe, an old superstitious remedy, lately revived by Dr. Anderson, appears to be totally inert.

Nervous diseases, depending on increased irritability, as hysteria, asthma, and epilepsy, are much aggravated by a plethoric or full habit: At the same time, therefore, that means are made use of, for increasing the tone, care should be taken to prevent fulness; and, for this purpose, issues and setons are advised; which, when introduced, are not to be dried up till the disorder is removed, unless debility coming on should require it.

The antispasmodics and tonics may be taken advantageously together, *e. g.* an electuary of the bark and valerian, *No.* 60, or an infusion of ditto, may be used, whilst the patient is taking the zinc pills, *No.* 68, or the copper pills above-mentioned; and

* See account of Dr. Home's Clinical Cases.

† See Hufeland, *Med. and Phys. Jou. No.* I.

and these do not hinder the use of the shower bath. The juice of the roots of the zanthoxylon, or prickly yellow wood, has been found useful in convulsive complaints.*—*See account of indigenous remedies in the Appendix.* CHAP. VIII.

LOCKED JAW, TETANUS, OPISTHOTONOS, *&c.*

Of all the diseases, in the long catalogue to which man is liable, this is perhaps one of the most horrible, though proceeding from the most trifling causes. The slightest wound, or puncture, in a tendinous part, is sufficient to give occasion to the dreadful spasms and convulsions which constitute this disorder, called *tetanus*, so well known as to require no description.—It is sometimes brought on by an exposure to cold, or to the sudden stoppage of perspiration; and, in that case, the complaint is not so irremediable.—Warm bathing, sudorifics, and opium,† if timeously administered, will afford relief; but when proceeding from the causes before mentioned, *viz.* punctures and wounds, particularly gun-shot wounds; wounds from glass, nails, thorns, or other substances penetrating the feet and hands, (accidents to which negroes in particular are much exposed),‡ the disease is, in most cases, fatal; as likewise when it follows the amputation of limbs.§ I will not say absolutely, that there are no instances of recovery, but they are, indeed, very few.

The modes of treatment in tetanus and locked jaw are principally four: The first is by opium and the warm bath; which, in spontaneous cases, arising from cold or suppressed perspiration,

* See account of this in the *London Medical Journal.*

† Tetanus from *cold*, is more frequent in Carolina than in the West Indies.—*See Dr. Lion. Chalmers, Medical Essays.*

‡ Tetanus has been also occasioned by worms eroding the intestines.—*Sauvages.*

§ The locked jaw of children comes on within nine days after birth; when caused by accidents or operations, the symptoms take place at every period, from the second or third day till the fourth week.—*Blane* 480.

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spiration, will, as before mentioned, frequently succeed, though not so certainly, where the symptoms are occasioned by wounds or other injuries.—The opium is to be given either in pills, or in a liquid form; *viz.* laudanum, in large and repeated doses, according to the effects it produces: Not less than from three to five grains of the former, or from fifty to to one hundred drops of the latter, every hour or two: Some practitioners go to a much greater extent, giving to the quantity of ten grains of opium, or a table spoonful or two of laudanum, for a dose.* At the same time put the patient into a warm bath, of one hundred degrees, twice in the day or oftener, in which he should remain for some time: After coming out of the bath, let his spine, or back-bone, be rubbed with volatile liniment, camphor, and laudanum—or with oil of amber and olive oil—or with oil of turpentine. From five to ten drops of the oil of amber may likewise be given, several times in the day, in barley-water.

A tea spoonful of æther, in barley-water, mucilage or thin syrup, may also be given, just at the coming on of the spasms. The other antispasmodics may be also employed, but they are of little use, except musk, and that not much, unless of a good quality, and given in large doses, *viz.* half a drachm frequently.†

The second method (recommended by Hippocrates) is cold bathing, or dashing and pumping cold water on the patient. The success of this method seems to depend much on the point

* In the Medical Commentaries, there is a case mentioned, where the patient took, in the space of seventeen days, 1500 grains; but Dr. Moseley says, he has seen a drachm of opium given every three or four hours, without sleep being produced, or any mitigation of symptoms taking place.—*Moseley on Tropical Diseases.*

† In the London Medical Observations is a case where musk proved efficacious, after opium had failed. Another case by Ferriar.

point to which it is carried,* though some practitioners think it has been been brought into discredit, from the indiscreet manner in which it has been employed.

The next practice is that of mercurial frictions, or rubbing in mercurial ointment in considerable quantities, so as hastily to induce a slight affection of the salivary glands:† Lastly, the bark and wine, in considerable quantities,‡ have been recommended. Several of the above means may be combined: Mercury may be employed along with opium and the warm bath—and wine and bark along with mercurial frictions. Bark and laudanum may be also given, when the cold bath is used. Several other modes of treatment have been proposed, as giving the sugar of lead *(Clutterbuck)*; tincture of cantharides *(Mease)*; electricity§ *(Perry)*.

As to the subsidiary means for keeping open the bowels, &c. it is unnecessary to say any thing. Common sense will teach

* See Dr. Cochrane, in the Edinburgh Medical Commentaries.—Also Dr. Wright, in the London Medical Transactions, vol. IV.—Dr. Currie's Med. Reports. Dr. Currie thinks the affusion of the cold water should be used during the spasms.

† As it is of the greatest consequence, that the salivation should be induced as soon as possible, might not cinnabarine fumigations be employed?

‡ This practice, first recommended by Dr. Rush. Dr. Currie relates the case of a man who, in the space of a few weeks, drank upwards of one hundred bottles of port wine, and thereby recovered.—*Mem. London Med. Soc.*

§ "Dr. Samuel Perry, of New Bedford, State of New York, has communicated to the public, the successful result of two experiments in curing the locked jaw by means of electricity. Previous to the application of the electrical fluid, recourse was had to bleeding, cathartics, antispasmodics, the warm bath, and opium, applied internally and externally, without the least effect on either side. But a small receiver being filled and discharged through the jaws of the person affected, they flew open instantaneously. In one case the complaint was entirely removed by three shocks; in the other, by an occasional shock for a few days. Both the patients were strong and healthy persons; the one a man, and the other a woman; and the mode of treating them had been similar."

See also Lane, Cavallo, and Latta;—but the effects of electricity are so uncertain, that although it should always be tried, we must not be sanguine in our expectations from it. Since Dr. Perry's account appeared in the news-paper, it has been tried, in some cases here, but not with success.

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teach in all cases the propriety of these. I shall therefore go on to shew, in what manner these dreadful symptoms, so difficult to remove, may be best prevented.

Where locked jaw and tetanus are apprehended from wounds, pricks, &c. the first thing necessary is, the free dilation of the wound, and the removal of all extraneous and irritating substances, whether broken glass, nails, splinters of wood, shot, &c.; after which, dress with lint and laudanum,* or spirits of turpentine, then apply a soft poultice, or keep the part, if possible, in warm oil, for an hour at a time. Afterwards, if a good digestion does not come on, the wound should be dressed with lint, warm spirits of turpentine, tincture of myrrh, the balsams,† &c.; next, from twenty-five to fifty or more drops of laudanum are to be given, every night, or twice in the day, according to the effects, which will be very different in different patients. The bark with wine may be at the same time taken, and two drachms of strong mercurial ointment rubbed in, once or twice in the day, for four or five days, if the mouth is not previously affected.—By these means, locked jaw and tetanus may be frequently prevented from coming on, where they might be apprehended, from the causes above-mentioned, and from amputation and other chirurgical operations, to which it frequently succeeds.

As the patient continues sometimes many days in a state that renders him incapable of taking in food, nourishing broths and

* Some practitioners will not admit that laudanum, externally, has any good effect, but it certainly has. A singular instance is mentioned by Mr. Docker, of the good effects resulting from the external use of opium.—*See Medical and Physical Journal, January* 1800. Lind found that opium and camphor, applied to the soles of the feet, had the effect of mitigating the spasms.

† Wounds, giving rise to tetanus, are rarely attended with the degree of inflammation necessary to produce a good digestion. Caustic may be applied to the wound.—*See Mem. Med. Soc. vol.* VI.

and cordials should be given by clysters; but should this be impracticable, from spasmodic stricture of the anus, and if there be no vacuity for introducing liquids into the mouth, a tooth should be punched out.* CHAP. VIII.

Where the bones of the fingers, toes, or joints, happen to be shattered, amputation is advisable, but if it be not performed immediately, or before the symptoms of locked jaw come on, it will be useless.

The locked jaw, and jaw fall of children, will be spoken of further on.

HYSTERIA—HYSTERIC FITS.

This, though peculiarly, is not exclusively, a disease of the female sex—men are sometimes liable to it, or at least to a disease very similar, attended with strangulation, from a ball seeming to stick in the throat, or a nail being driven into the head—borborygmi, or noise in the bowels—from pent up flatus†—sudden and violent movements of the mind—laughing and crying alternately—and irregular convulsion of the limbs.

These are the principal or characteristic symptoms of the

* John Kearney, a young mulatto man, a carpenter, employed in felling timbers, by a false stroke of the axe, cleft his left foot entirely through, which being tied up firmly with a handkerchief, the hæmorrhagy stopped. It was afterwards dressed with laudanum and Turlington's balsam. Laudanum was administered in considerable and frequent doses. The bark was also given, with wine, occasionally, and mercurial ointment was rubbed in. Notwithstanding which, about the fifth day, he was threatened with symptoms of locked jaw, *viz.* stiffness about the muscles of the neck, and difficulty of opening his mouth. Pails of cold water were several times thrown on him; after which he was put between blankets to sweat, and the alarming symptoms wore off in the course of a day or two, and he got well.

† Does hysterical flatulence proceed from the food taken into the stomach? from a vitiated state of the gastric juice, or can we suppose that *air is secreted* into the intestinal canal?—*Christie.*

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disease in women; but it is so proteiform* a complaint, that to describe it, in all its shapes, would require a volume.

As it is one that does not much prevail among the negroes, or even the white inhabitants of this island, less attention need to be paid to it.

In its causes, symptoms, and cure, it has an obvious relation to epilepsy; but it differs from that disease, in belonging more peculiarly to women, and proceeding from sexual circumstances, either menstrual obstruction on the one hand, or on the other, excessive menstrual discharges,† the fluor albus, &c.—besides, in hysterical fits, there is seldom an entire abolition of the internal or external senses; the person sees, hears, talks, raves, laughs, cries, and behaves extravagantly, falling at last into a slight swoon and convulsions.

For the removal of the fit, the same means and remedies as were directed, *page* 194, for preventing the epileptic attack, are proper.—Immediately on the coming on of the fit, or afterwards as soon as possible, give either twenty or thirty drops of laudanum—or a tea spoonful of æther—or a tea spoonful of fœtid tincture—compound tincture of castor, &c. in water—apply volatiles, burnt feathers, &c. to the nostrils—put the patient's feet in warm water—exhibit a clyster of asafœtida, *No.* 66—or a clyster of cold water.—If the patient should be pregnant, let a roller or broad bandage be put round her abdomen, and drawn pretty tight.

For

* *Pauca sunt genera morborum, quos hic proteiformis affectus non mentiatur—hunc tot morbi hysterici.—Sauvages.*

† Besides these, there are several other causes, natural or induced. Women are disposed to this disease, by their constitutional temperament; *varium et mutabile semper femina. Principium proximum hysteriæ est summa philautia, seu amor effrænis vitæ et voluptatum, unde minimorum incommodorum intolerantia, exaggeratio, propositi instabilitas, summa sensibilitas, irritabilitas, medici mutatio, &c. &c.*

For the prevention of future returns, nearly the same remedies are to be employed as in epilepsy, *see page* 193. CHAP. VIII.

If the patient be young, very plethoric, and obstructed, bleeding is proper, and afterwards a cathartic, before using any of the antispasmodic or tonic remedies prescribed.—Emetics are occasionally useful.

If the catamenia are either retarded or obstructed, they must be solicited by the means recommended under obstructed menses, which see hereafter.

If the menstrual flux is too copious and debilitating.—*See menorrhagia*, or overflowing of the menses.

For the antispasmodic and tonic remedies in this complaint, *see Forms*:—Aperient pills, *No.* 37—electuary of bark and steel, *No.* 46—antihysteric pills, *No.* 61—electuary, *No.* 54 —zinc pills, *No.* 68—steel pills, *No.* 47—steel powder, *No.* 43 —quassia infusion, with steel wine, *No.* 53.—The cold shower bath is, in most cases, to be considered as the best tonic in this complaint.

The state of the patient's mind is to be attended to, and every means employed to break through the force of habit; hence a change of situation, a long journey, new acquaintance, new amusements, *&c.* are of consequence.

DYSPEPSIA—DEBILITY OF STOMACH, WITH INDIGESTION, &c.

There is not any English word of adequate signification for this disease, although so common a one; the reason of which perhaps is, that the symptoms are all such as occur very frequently in other complaints, and it has been seldom, therefore, looked on as an original or distinct disorder; but it is evident

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that the symptoms, which are, principally, want of appetite,* indigestion, pain at the stomach, heart-burn, acidity, flatulency, and costiveness, are, with some persons, constitutional, and depending on an hereditary temperament, like the gout.

The causes of this disease, besides an original temperament, are, a voluptuous, sedentary, or indolent life; whence it prevails principally amongst the opulent; but a poor and crude diet will give rise to it among the lower classes. It is also the disease of the studious, particularly if, whilst they are devoted to reading and thought, they indulge at the table, and neglect exercise. The intemperate use of wine and ardent spirits, drinking largely of tea, and other warm liquids, and smoking tobacco, are charged with being more particularly the causes of bringing on that debility of stomach, which gives rise to the several symptoms in this complaint.

Digestion, as has been explained, is a process depending on the gastric liquor *(see page 7)*; but the nature of this, or its fitness to answer the purpose it is destined for, *viz.* that of assimilating the alimentary matters taken into the stomach, must depend on the state of the organ.† Where the muscular tone of the stomach is impaired, the function of digestion must be so likewise; the food taken in, instead of undergoing its usual change, for the purpose of nutrition, &c. will be subject to a fermentative one—from which acidity, flatulency, pain at the stomach,

* The appetite is not always impaired—sometimes there is an increased, or false appetite.

† Wilson has endeavoured to demonstrate, that dyspepsia or indigestion depends on a *deficiency* of gastric juice, not on a *vitiation* of it.—*See Thesis*, 1802. Kinglake has found that the worst cases of dyspepsia, arose from a default of stomachic excitability, and recommends frictions *(Med. Repos. v. I. VI.)* externally, in the region of the stomach. On the same principle, rubefacients or a warm plaster of Cayenne pepper, ought to be applied, and, I believe, often will be found highly serviceable.

stomach, &c. may be easily accounted for.* This complaint of the stomach is not, of itself, a fatal one; but it is, nevertheless, one of which people seldom or ever obtain a perfect cure; because it is, in many instances, founded in constitutional causes, and because it requires so rigid an adherence to rules, as few people have resolution for. CHAP. VIII.

Dyspeptic people are sometimes low spirited and hypochondriacal, but still there is a difference between this, and the hypochondriacal disease, properly so called; the latter belonging to a different temperament, *viz.* the melancholic *(see page 15)*; whilst dyspepsia is more frequently the complaint of sanguineous people.

Of the disease, as a symptomatic one, depending on other diseases, or as occasioned by tumours, ulcers, &c. I shall say nothing here. The cure, in all such cases, must depend on the cure of the original complaint.

As dyspepsia unquestionably depends on a debility, or on an imbecility, of the stomach, considered as a muscular organ, the method of cure is obvious: The cause being removed, the effect will of course cease: Whatever then has contributed, by weakening the stomach, to bring on the complaint, must be avoided; and whatever is calculated to restore and augment the tone of the stomach, is to be had recourse to. On these principles, temperance, air, exercise,† gentle and continued, particularly

* A contrary state of the stomach to that which exists in this disease, takes place in what is called *bulimia* or *canine appetite*.—Here the process of digestion goes on so rapidly, that the hunger is insatiable: Such is the increased activity, or solvent power of the gastric liquor, that all kinds of food, even raw flesh, &c. are quickly reduced.—A most extraordinary case of this kind, or of a raw flesh eater, has been inserted in the Medical and Physical Journal.

† Mr. Townshend, in his Guide to Health, relates a very singular history of a sedentary

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particularly on horseback, cold bath, and tonics, are to be recommended, as the chief things for affording effectual relief under this complaint. It is in vain for the patient to expect any benefit from medicines, whilst he indulges in habits of voracity, ebriety, and inactivity; more particularly if he is, at the same time, a votary of Venus.

Whilst the plan above recommended is pursued, for strengthening the stomach and general habit, the particular symptoms of cardialgia, flatulency, costiveness, &c. are to be alleviated by suitable medicines.

Vomits are occasionally necessary, for evacuating the stomach of its crude and acid contents; but the frequent repetition of these, is a practice that will be found more hurtful than beneficial: A white vitriol vomit, *No.* 34, or the blue vitriol vomit, *No.* 72, are preferable to any other.

Purgatives—The same remark applies here as under vomits.—For suitable purgatives and carminatives, or expellers of wind, *see No.* 37, 75, 76—castor-oil—tincture of rhubarb—sacred elixir.—Charcoal powder particularly useful in eructations of wind, *see No.* 123.

Absorbents—Magnesia in veal broth—prepared chalk in quassia infusion—infusion of bark in lime water—natron pills, *No.* 86—magnesia with ammonia, *No.* 122—mephitic alkaline water, *No.* 87.

The *bitters, tonics, &c.* are quassia infusion, with rhubarb, *No.* 40—ditto, with chalybeate wine, *No.* 53—steel pills and powder,

tary studious young gentleman, who, together with his favourite dog, constantly shut up with him, laboured under the same disease. The master and dog were both cured by the same means, *viz.* by field exercise or sporting.

powder, *No.* 47, 48—electuary of bark, *No.* 46—electuary, *No.* 82—pills, *No.* 85—angustura bark, or columbo-root, with rhubarb and magnesia, *No.* 83—chalk, rhubarb, and rust of steel, *No.* 84—magnesia and rhubarb—elixir of vitriol in bitter infusion—tar water. CHAP. VIII.

PAIN IN THE STOMACH, HEART-BURN, &c.

Pain in the stomach, arising from indigestion, acidity, flatulency, &c. is to be relieved by the means recommended under dyspepsia, *(page* 206*)*, but a chronical and distressing pain at the pit of the stomach, may arise from other causes than those above-mentioned, which are sometimes very obscure or difficult to be ascertained. These are tumours, excoriation or ulceration of the stomach, inversion of the cartilago enfiformis, *i. e.* the turning inwards of the lower part of the breast-bone on the stomach; but a more frequent cause than any, perhaps, is some obstruction or disease of the gall-ducts.* The existence of one or other of these causes must be guessed at, from the effect of hot or acrid liquors swallowed,—from local inspection and examination with the fingers, pressing in different directions. The nature of the disease being known, the cure of it may be still difficult. Where exulceration is suspected, none but the most bland aliments and liquids ought to be or can be taken. A milk regimen, with the occasional use of gentle tonics, as chamomile tea, columbo or quassia infusion, must be the means principally advisable.

There is a disease of this kind, called *pyrosis*, or heart-burn; but it differs from cardialgia, or the common heart burn. It is known in Scotland, and some parts of England, by the name of *water-brash*. The disease prevails amongst the poorer sort

* A person who had long laboured under a constant fixed pain at the pit of the stomach, was found, after death, to have the gall bladder full of stones. In another instance of this kind, the obstruction was not attended with any jaundice.

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sort of people, and is therefore thought to be occasioned by crude diet.* It consists in a painful burning sensation, at the upper orifice of the stomach, and extending along the œsophagus, or gullet, accompanied with a copious efflux of limpid, tasteless, or sometimes acid, liquor, without the action of vomiting. It recurs sometimes by fits† coming on periodically, at a certain time of the day. The cure consists in the use of such remedies as are recommended under dyspepsia, *(page* 206). When periodical, it may be prevented, or mitigated, by laudanum—spirits of hartshorn—æther—musk bolus, *No.* 71—a dram of gin or brandy.—The nux vomica is also recommended, a tea spoonful of the tincture, or ten grains of the powder—*Linnæus—Nisbet.*

65, 67

HYPOCHONDRIASIS, OR THE HYPOCHONDRIAC DISEASE.

This disease is frequently confounded either with the foregoing one, dyspepsia, or with melancholy, to both of which it has an intimate resemblance. It is attended with indigestion, flatulency, &c. as likewise with dejection of spirits and despondence; but it differs from the former disease in this circumstance, that it belongs, as was before observed, not to the sanguine but to the melancholic temperament, *(see page* 15) and rises not from debility, but torpor or insensibility. The shades, between the hypochondriacal affection and melancholy, are sometimes very slight; but melancholy is more purely a mental

* This disease is supposed to arise from an excess of alkali in the gastric juice *(Philadelphia Museum, No.* 2). If so, the cure ought to consist in remedies directly opposite to those given in the common heart-burn.

† In a case of this kind the fit came on every day about two hours after dinner, and was evidently spasmodic: The patient had consulted Dr. Fothergill, and two or three other physicians, but without getting any relief: Laudanum and spirits of hartshorn mitigated the symptoms: The disease continued for two or three years; after which it ceased spontaneously, and the patient enjoyed good health to the end of his life.

mental affection, unattended with dyspeptic symptoms, or only in a slighter degree, except costiveness.* CHAP. VIII.

As it is the happiness of the inhabitants of tropical climates, to be seldom liable to hypochondriacism and melancholy, this subject may be dismissed with one or two remarks only, respecting the cure of the former. The hypochondriac affection depending more on torpor of the system than debility, vomits and purges are of more importance, for exciting the action of the stomach and intestines, and clearing them of a redundancy, of viscid mucus.—These may be more frequently repeated than in dyspepsia: Blue vitriol vomit, *No.* 72—purging pills, *No.* 37—rhubarb pills, *No.* 75—rhubarb and soluble tartar, *No.* 76—aloetic pills, *No.* 36.

All the other remedies, recommended in dyspepsia, are usually administered for the relief of the symptoms in hypochondriasis, *viz.* the stomachics, *viz.* bitter infusion, with rhubarb, *No.* 40—angustura bark, *No.* 83—electuary, *No.* 82—tonics, *viz.* steel pills and powder, *No.* 47, 48—electuary of bark, *No.* 46—bitter infusion and steel, *No.* 53.—But exercise, amusement, and the warm bath, are of more importance than any thing besides: The patient should be engaged in some active occupation, requiring perseverance and attention—clearing and settling a property, &c.—Planting, gardening, and building, being the general pursuits of people in the country, is perhaps one principal reason why they are less liable to the hypochondriacal malady, than the more luxurious and indolent inhabitants of the town.—Hypochondriacs should cultivate music,

* Hypochondriasis is not to be confounded with melancholy, though it may sometimes degenerate into it. The former is always attended with indigestion, the latter not: Hypochondriacs always exaggerate their complaints, melancholics deny they have any; hypochondriacs have a perfect recollection of past events, but in melancholy the memory is totally vitiated. When hypochondriacs lose their memory they become melancholic or maniacal.—See *Sims, Mem. Med. Soc. vol.* V.

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and the game of chess, &c.—pursue the sports of the field, where they are to be had.—They should live much in the society of women, and make themselves husbands and fathers. The hypochondriacal disease is often the natural and just punishment of a sordid and selfish passion, that leads men to seek only their own individual gratification.

MADNESS, MELANCHOLY, &c.

Insanity is of three kinds: 1. *Fatuity*, or a want of the power of reasoning. 2. *Delirium*, a depravation of the external senses. 3. *Madness*, a vitiated memory. Mania, or madness, is of two kinds, *viz.* mania properly so called, or *furibund* madness, and melancholy. Mania consists in false perception, melancholy in an intensity of idea. Maniacs reason conclusively from false principles, melancholics, *v. v.* reason falsely from just premises. One species of madness may be casually changed into another.

It has been affirmed that the brain of maniacs is preternaturally dry; but the contrary has been demonstrated. In dissecting the head of one hundred persons who had died mad, there was not the least difference to be found between the skull of a wise man and a fool. Out of two hundred and sixty maniacs, two hundred and five had black hair—the rest had fair hair.—*Haslam.*

The causes of melancholy and madness (in addition to a constitutional and hereditary temperament) are, intemperance—intense study and application—the passions, particularly love and anger—religious superstition—preceding diseases and suppressed evacuations. But, acquainted as we are with the occasional and exciting causes, we know so little how they operate in producing a deranged state of the faculties, that it is difficult to establish any principle of cure. It will be sufficient

cient, in this place, to state briefly the general plan of treatment, which, in mania or raging madness, is, 1st. To bleed copiously in young, robust, and plethoric, patients. 2dly. To vomit and purge plentifully, by administering large doses of tartar emetic, scammony, calomel, &c. 3dly. To put a seton into the neck. 4thly. To restore obstructed evacuations.—5thly. To use the sea and the shower bath; and in some cases, to give opium in large doses.

Most of the narcotic plants, as the cicuta, hyoscyamus, belladonna, stramonium, &c. have been employed, each in turn, by different practitioners. Camphorated vinegar has been greatly celebrated—blisters are generally applied to the head, but authors are not agreed as to the use of them.—The snow cap need not be proposed here, (in Jamaica.)

Melancholy is to be treated in a similar way with hypochondriasis.—Emetics and the warm bath are here more especially useful. A voyage, long journey, change of profession, may in some instances contribute to recovery.

The best authors to consult on these mysterious affections of the mind are, Sims on Mental Alienation.—Crichton on Mental Derangement, Haslam, Pargeter, Pinel sur les Maladies Mentales.—Dr. Fothergill on the Hyosciamus, *(Mem. of the Med. Society).*—Dr. Storck on the Stramonium.—Dr. Barton on the same, *(Med. Repository).*—Dr. Ferriar Medical Histories.—Townshend's Guide to Health, vol. II. where the subject is treated of in an interesting and intelligible manner.

CHAPTER IX.

ON CUTANEOUS AND ULCEROUS COMPLAINTS.

ON THE LUES VENEREA.

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WHETHER the lues venerea be a native of this quarter of the globe—whether this and the gonorrhœa be only species of the same—or whether they be distinct diseases, are inquiries not suited to this place. There are so many works on this subject, that the observations made here will relate to what is peculiar to the disease, or to the practice, in tropical climates.

The disease being generally milder than in Europe, it is more liable to be mistaken; and, being more easily cured, a perfect cure, however paradoxical it may seem, is less frequently obtained. The symptoms are often so slight or equivocal, and coming on without any previous local complaint,* the disease is not suspected till it has made considerable progress. Ulcers of the tonsils, the principal distinguishing symptom in Europe, are less common in warm climates; whilst the bones, the pains of which are deemed rheumatic, are particularly affected. Among negroes, who are principally the subjects of it, the disease is sometimes latent for a long time before it is discovered; and, when inveterate, is frequently incurable. The disease being mild, they linger under it sometimes to old age, having families of children, to whom they communicate

* This will be disputed by some persons, but it is certain that lues is sometimes contracted, without previous chancre or gonorrhœa.

communicate the taint. What is peculiar in the *hereditary lues*,* thus derived by negro children from their parents, is, that it does not always shew itself in infancy; or, if it does, it disappears and returns again about puberty. Both girls and boys, about the age of ten or twelve, before they can be possibly suspected of having got the disease by sexual intercourse, are affected with pains and swellings of their bones, the bridge of their nose falls in, the tonsils are affected, palate lost, &c. The disease, in spite of all remedies, continues, but makes slow advances; proving, however, at length mortal. Whole families, on some estates, are carried off in this manner, in succession, on their arrival at a certain time of life. CHAP. IX.

What renders the cure of the lues more difficult among negroes is, the impossibility (without absolute confinement) of preventing them from irregularities, and exposing themselves to cold.

After these few remarks, the most approved and best method of treatment, comes to be considered; beginning with gonorrhœa, which is here supposed, according to the generally received opinion, a species of the venereal disease,† where the peculiar symptoms are owing to the structure of the part affected, *viz.* the membranous secreting surface of the urethra.

Gonorrhœa—or a discharge of puriform matter‡ from the urethra, with heat of urine, is the effect of inflammation, caused by

* There being other diseases that simulate or resemble lues venerea, it may be conjectured that the symptoms here may not be truly syphilitic; but how they are to be distinguished, it is difficult to say.

† This opinion, however, of gonorrhœa and lues arising from the same cause, is made very doubtful.—*See Bell on Lues Ven.*

‡ Though the discharge is of a puriform or purulent nature, we are not thence to conclude, that it proceeds from ulceration. Dissection shews that this is not the case; the matter is secreted, as in other cases.

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by an infection received in impure coition. A similar discharge may, indeed, be brought on by other causes,* but that need not be taken notice of here.

The complaint, though in common less severe than in a colder climate, is not more easy of cure; the discharge, or gleet, remaining a length of time after the inflammation; frequently bringing the surgeon's abilities into discredit—particularly in the cases of negroes, with whom the symptoms, in general, run much higher, and are of a peculiar nature:—In them, the disease is not confined to its ordinary seat, within an inch or two of the glans; but, in very many cases, almost from the beginning, extends along the whole course of the urethra to the prostate, producing bloody discharges, instead of the usual puriform one. This has been attributed to some misconduct and mal-practices among negroes, but, from its frequency, there is reason to think that it is owing to some constitutional circumstance.

By cleanliness, rest, and abstinence, the disease may be cured without much assistance from medicine†; but the situation of people will seldom allow them to undergo the confinement necessary for this:—Medicine, therefore, is requisite, and will surely, in all cases, accelerate the cure, if it be not absolutely necessary to it. As it is not advisable for people to be their own doctors in cases when they can conveniently have the advice of experienced and skilful men of the profession, the directions for the cure‡ need not be many or particular.

The

* It is of great importance to advert to this, in order to obviate unfounded suspicion, and to prevent family uneasiness. A man may unquestionably have every symptom of gonorrhœa, without infection *See Swiedaum, page* 41; who gives some singular histories in proof; and many other cases of the kind might be related.

† John Hunter.

‡ A new mode of cure, which to many may appear extraordinary, has been lately recommended

The first thing is cleanliness; for which purpose, the parts are to be frequently washed, either with milk and water, or weak Goulard's water—plenty of lint, tow, &c. should be applied, for absorption of the discharged matter.—A suspensory truss is to be worn, to prevent inflammation of the testicles.—Exercise of every kind should be, as much as possible, avoided; particularly riding on horseback. The living to be spare—consisting of little or no animal food, no salt nor spice, no wine, malt liquor, nor spirits, unless in the most diluted state. These rules are more especially necessary to the young and plethoric; in weakly people, they may be carried too far. In the commencement, and when the heat of urine is considerable, mild laxatives should be taken, such as *No.* 2, 3, 6.—Demulcent liquors, such as barley-water, linseed and ochro tea, &c. should be drank in large quantities; and, in cases of feverishness, the cooling powders, *No.* 7, 8, 9.*

Injections are of great use, or do great mischief, according as they are timed or managed—if such as are gently astringent are given in the first stage, or before much inflammation is come on, they moderate the disease and shorten it.—*See injections, No.* 93, *a, b, c.* A spirituous injection, in the proportion of one part of alkohol, or spirits of wine, to eight parts of water, if used within the two or three first days, will, in nine cases out of ten, make a cure.†—Previous to their use, the matter ought always to be pressed out of the urethra; and, to prevent their being thrown up too high, the penis should be grasped

recommended by Mr. Addington. Dissolve three grains of corrosive sublimate in an ounce of ardent spirits. One half of this is to be taken at bed-time, for two nights, and then the following morning a dose of salts. This practice repeated once or twice, at short intervals, completely removes the symptoms.—*See Medic. Commen.* 1799.

* The neutral salts, *viz.* nitre, &c. usually given, have a tendency to increase the heat of urine, and are therefore proper only in cases of fever.

† See Med. Comm. 1788.

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grasped in the middle, whilst the injection is thrown from the syringe.

When there are symptoms of violent inflammation, injections of every kind are improper, except the oily and mucilaginous ones.—*See No. 93, c.*

When the ardent symptoms are abated, injections of greater strength may be used, to prevent the disease from degenerating into gleet;—and they should be used frequently (not less than six times in the day), to derive any good from them.—*See No. 93, d, e, f.*

At the same time tonics and astringents are to be used internally, *viz.* the infusion of bark, quassia, *&c.* with chalybeates, *&c.*—*See No.* 46, 47, 53, 61—tincture of kino—bark—bitters—also the balsams, *viz.* balsam capivi, balsam of Canada, Venice turpentine, *&c.*—*See No.* 94, 95.—*See country remedies, in Appendix.*

The consequence of gonorrhœa is a diseased state of the urethra, causing strictures, *&c.* which will be afterwards treated of.—Gonorrhœa, in certain constitutions, is likewise followed by symptoms of great irritability, and deranged sensation:—Remedy, cold bath.—Hufeland recommends oily frictions.

Inflammation of the testicles.—Should the running suddenly cease, and chordee and inflammation of the testicles come on, two very painful symptoms, recourse is to be immediately had either to warm fomentations and cataplasms, or to cold astringent ones, *No.* 100, 101, 114—æther*—sometimes the former, sometimes the latter, succeeds best; but the most effectual relief

* A wet bladder may be put over the part; which may be, from time to time, moistened with æther.

relief is to be expected from bleeding, and the exhibition of a brisk vomit, and afterwards an opiate, either in a pill or by clyster:* Under these circumstances, it is of great consequence for the patient to keep himself constantly on his back. CHAP. IX.

Buboes—or swellings of the glands in the groin, are occasioned commonly by the venereal poison absorbed from a chancre, or little ulcer; but they come on sometimes in gonorrhœa, without any sore, and are merely symptomatic;—but, from whatever cause they arise, they are, by every possible means, to be repelled: Buboes, when only symptomatic, disappear with the complaints that occasion them; but, to assist in putting them back, either cold or warm poultices, *No.* ~~114~~, may be applied, or else an adhesive plaster: Gentle electric shocks are very serviceable for this purpose.—When the patient has chancres, as well as gonorrhœa, the buboes may be justly suspected to arise from the venereal matter absorbed; and in this case, in addition to the afore-mentioned remedies, there is a necessity for mercury: A drachm or two of mercurial ointment should be daily rubbed into the inside of the leg and thigh of the affected side, or on both sides, if there are buboes in both groins. This is to be continued till the mouth is sore, and occasionally repeated afterwards, not only till the swellings disappear, but till the chancres are healed. It will be prudent even to keep up the soreness of the mouth, by slight frictions, for a few days, or a week, after all the symptoms are gone off, to prevent their recurrence, or to obviate future disease, from the virus being left in the habit. During this course, an opiate at night is of great service. If, notwithstanding the use of the foregoing means, the inflammation should be very considerable, and suppuration unavoid-

* It has been recommended, for the purpose of renewing the discharge, to communicate fresh infection; but the practice, however sanctioned, must appear both absurd and hazardous.

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able, this should be accelerated by emollient poultices, and the tumour opened by the lancet, as soon as arrived at the proper point of maturation. The subsequent treatment of the exulcerated bubo must vary according to its appearance, or to the state it puts on; which is sometimes, and particularly in this climate, truly formidable;* becoming phagedenic, and spreading over the whole abdomen, forming sinuses, &c. In this case, mercury generally aggravates the symptoms, and should be discontinued. Opium with bark and Port wine, are here of the greatest moment.

Chancres.—Many persons are liable to pimples and excoriations, that may be mistaken for chancres; but they are not only distinguishable by their not having a callous and inflamed edge, but they are curable in a very short time, by only washing them with milk and water, and dressing with a little Goulard's cerate. But people, however, should be very cautious of mistaking a chancre for a common pimple, for whenever real chancre occurs, the patient is to consider himself in the situation of one actually p****d, and ought not to trust to any thing for an effectual cure, but such a course of mercury as is recommended under venereal bubo, *(page* 217) or under confirmed lues.—It is, in the opinion of some practitioners, of advantage to cure the chancres as soon as possible; or to destroy them with lunar caustic; oxymuriate of potash; or oxymuriate of antimony, *i. e.* butter of antimony: But this should not be attempted by the patient himself; the milder escharotics are safer, and will prove sufficient, with the use of mercury internally, or by frictions.—Let the chancres then, after washing them clean, be touched, twice in the day, with the corrosive sublimate solution, *No.* 102; and then dressed with the precipitate ointment, *No.* 103; or red precipitate, powdered

* The many dreadful cases of exulcerated bubo that occur in this climate, should induce practitioners to effect the repulsion whenever it is possible.

dered very finely, may be sprinkled on the chancre. In proportion as the chancre heals, the quantity of precipitate may be lessened, by mixing common cerate with the above ointment, or the common mercurial ointment may be used. CHAP. IX.

When this treatment does not succeed in cleansing the ulcers, and disposing them to heal, fumigations of cinnabar should be employed.*

If there be great inflammation, threatening mortification and gangrene, all the above applications must be omitted; instead of which, warm fomentations and saturnine poultices, *No.* 101.—If the patient be plethoric, he should be bled, purged, &c. and then take opiates in considerable doses.

If mortification takes place, as sometimes happens, there is danger from hæmorrhagy; to prevent which, a leaden probe is to be introduced into the urethra, and a fillet put round the penis, should be drawn sufficiently tight upon it.—In the last mentioned case, mercurials are to be desisted from; the only relief being found in bark and opium.

Phymosis and paraphymosis.—Phymosis and paraphymosis are 1*st*, Where the præpuce cannot be drawn back from the glans. 2*d* Where it cannot be drawn forward over the glans. They are occasioned by inflammation and swellings from chancres, and when they cannot be relieved by cold saturnine lotions and poultices, such as *No.* 100, 101, by injection in phymosis—or, by mercurial fumigations—there is a necessity for the knife, to prevent the glans being either eroded through

* The mode of doing this is, by throwing some of the powder of cinnabar on some half-live coals, and directing the vapours, by an inverted funnel, to the part affected; or placing a hot brick at the bottom of the vessel in a night chair, and throwing on the cinnabar, to sit over the steams with the diseased parts exposed to them.

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in phymosis, or mortified in paraphymosis. As the mortification threatened is the effect of extreme irritability, not of the action of the venereal virus, the use of mercury, in this case, is unnecessary, and, perhaps, hurtful.—*Geoghan, Med. and Phys. Jou.*

Chordee, priapism, &c.—These are to be treated nearly in the same manner as phymosis, *&c. viz.* with cold saturnine lotions and poultices, *No.* 100, 101—pledgets of camphorated laudanum may be wrapped round the penis, or camphorated oil may be rubbed frequently on the part.—Laudanum, at the same time, should be given internally, and clyster, *No.* 33.—In severe cases, blood-letting may be necessary.

Warts and excrescences.—These are no signs of infection in the habit, and are of little consequence, unless by neglect they increase in size. They may be removed by excision with the knife or scissars, by caustic, by a ligature of silk or hair, or by inflammation excited by any acrid lotion or powder; they may be touched with crude sal ammoniac, or sprinkled with savin powder, cantharides, Cayenne pepper, *&c.**—*See form in the note below.*

Confirmed Lues, or Pox.—The consequence of the foregoing complaints being neglected, or ill-treated, is a confirmed lues. The matter being carried by the lymphatics into the mass of the blood, the whole habit becomes tainted. The first symptoms by which the dissease generally discovers itself, are sore-throat, or ulcers of the tonsils, and blotches of the skin; to these succeed pains of the limbs, ulcers, with caries of the bones, particularly of the nose.

The

* No. 1. Take powder of savin, and calomel, equal parts, mix them.—2. Take murate of ammonia, that is, crude sal ammoniac, 1 oz.; distilled vinegar, 2 oz.; common water, 4 oz.; dissolve, and use as a lotion for warts, &c.—3. Take corrosive sublimate; muriate of ammon. (*viz.* crude sal ammon.) each ½ dr.; dissolve in 4 oz. common water, for a lotion for warts, &c.

The limits prescribed to this work will not allow of a detail of the endless train of symptoms in this proteiform disease, which lies masked under the appearance of many other complaints: Nor can the several modes of cure be considered at length; but the *alterative plan*, which consists in giving Keyser's pills, or any other mild mercurial preparation, so as not to affect the mouth, and allowing the patient to go about his affairs, without any confinement, must be protested against.—In this way, an effectual cure is seldom obtained, and the disease frequently becomes afterwards incurable by any other. It is in vain to expect a real and permanent cure, from any thing but from such a course of mercury, as that where the habit is kept fully charged with it for a greater or less length of time, according to the nature of the symptoms, and the previous duration of the disease. It should be slowly introduced at first, so as not to affect the glands of the mouth too hastily; afterwards urged to the point of salivation, and persisted in for the due length of time, *viz.* from three weeks to two months, or longer in some inveterate cases:—Various preparations of mercury are employed, which are severally to be preferred, according to circumstances.—One preparation will succeed better in one case and constitution—another in another;—but the mercurial ointment rubbed in, as directed in *page* 217, is, in general, preferable to any of the preparations for internal use.

Before commencing the frictions, the patient should be put into a hot bath;—which may be occasionally used afterwards. His diet should be nourishing, but light; and he should put on a flannel waistcoat and drawers, and worsted or thick cotton stockings, which he is not to change during the cure.—One or two drachms of mercurial ointment may be rubbed, alternately, into each leg and thigh, for three or four nights; if there are no symptoms of the mouth being affected, the quantity may be increased; and, when salivation commences,

again

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again diminished, or occasionally omitted; then repeated, and persisted in, according to circumstances, till the symptoms disappear, and the cure is effected.

It is better for the patient to rub in the mercury with his own hands, if he is able; but as a considerable degree of friction is required to promote the absorption of mercury, an assistant is commonly requisite; who, to prevent the effects of the mercury on himself, is to guard his hand with a bladder or glove.—The place of friction should be changed; and, when incrusted with the matter of former rubbings, cleaned with soap and warm water.

The cure by friction is dirty and troublesome, but it has many advantages, where it can be employed; particularly in not being liable to derange the stomach and bowels; but there are many persons whose skins are so tender and irritable, as not to bear frictions, particularly if the ointment is prepared with the aid of spirits of turpentine, which is commonly the case.—Where, therefore, this is the case, or the patient has an aversion to the ointment, the blue pills of the Edinburgh dispensatory, *No.* 96, may be given: One of these may be taken three times in the day, for some days; when, if the mouth be not affected, increase the dose, taking two at night. Persist, with the same cautions given *page* 217, in the use of the ointment, *i. e.* increasing or diminishing the dose, so as always to keep up a beginning salivation,* and then stop.—Should the bowels be griped, or a looseness come on, a pill of

* To restrain this, the patient should keep his jaws in flannel; and, when it is excessive, should use, frequently, a gargle of alum, sage-tea, and honey, or the borax gargle, *No.* 104.—Give the kali sulphuratum, which will effectually stop it in twenty-four or forty-eight hours. That sulphurated hydrogen gas is conveyed into the blood, is evident, from its being given out in the urine of those drinking Harrowgate water, which will render the writing done with sympathetic ink, (*i. e.* a solution of sugar of lead) visible.

of opium, or a few drops of laudanum, may be requisite at night, along with the mercury pill.—To prevent these symptoms, the patient should also drink plentifully of demulcent liquor, as barley-water, ochro-tea, &c.—It is usual to give sarsaparilla, or decoction of lignumvitæ, during a mercurial course:—How far they may contribute to the cure (which, in certain cases, they are thought to do), it is difficult to say; but they can never be improper.* *See Forms, No.* ~~110, 111.~~ 97, 98, 99—*See country remedies in Appendix.*

Dr. Adams, in the late quarto edition of his learned work, on Morbid Poisons, has entered into a most elaborate disquisition on the subject of lues venerea, solving a number of problematical questions relating both to the theory and practice in that disease. It may not be improper to detail here a few of his more important observations, by way of appendix, to the brief account in the foregoing chapter.

Dr. Adams maintains that the contagion of gonorrhœa and chancre are the same; but that gonorrhœa is not the effect of chancre in the urethra: No possibility of distinguishing between virulent and non-virulent gonorrhœa, for the virulence may continue after the inflammation has subsided, or the inflammation may be protracted or continue after the virulence is extinguished.—Gleets may be virulent, though not venereal.—Gonorrhœa is cured by a counter and stronger irritation, which may be produced either by local means, *viz.* injections, or by giving mercury, internally.—Buboes, with gonorrhœa, may be from sympathy only, not from virus absorbed.—Venereal bubo can never happen without previous gonorrhœa or chancre.—Buboes, that follow ulcers on the glans

* The reputation they have acquired is probably owing not to any intrinsic efficacy they have in curing lues venerea, but in removing the bad effects of mercury, or, perhaps, solely to the discontinuance of mercury.

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glans penis, that have healed spontaneously, not venereal.—If the mouth become affected with mercury, and the chancre heal, the bubo is no longer venereal.—If new chancres appear afterwards they are not venereal.—The ulcer, in bubo, is only in part venereal; mercury should therefore not be given immediately after incision, or whilst the edges are in a crude state, which would produce phagadena; suppuration should be therefore waited for.—When the edges of ulcerated bubo are fiery, or are callous, mercury not to be given; mercury cures venereal ulcers by exciting phagadena.—The sloughs, in the primary ulcers, are coagulable lymph; these heal without granulations.—In the secondary ulcers there is no slough, but fungus and granulations.—The matter of secondary ulcers in lues venerea, not capable of infecting as in small-pox.

There are remedies that will cure diseased actions, that will not remove the dispositions to those actions.* Mercury, given for the cure of primary symptoms, will not always prevent secondary ones, but will cure them when they take place; but, if action has not already began, mercury will remove the disposition. In whatever way mercury is administered it must be persisted in till the constitution is roused by the mercurial irritation. A mercurial fever sometimes comes on without any affection of the mouth, or salivation, which is not necessary to the cure. The cure of chancres not to be attempted by local means; but by the use of mercury internally. When they lose their venereal character (*viz.* hard callous edge, and become spongy), they may be treated with caustic. Continuing the use of the mercury, after the cure of the primary symptoms, is useless.

Of

* A gentleman had, soon after his arrival, a connexion with a negro girl, and, in a day or two afterwards, was attacked with yellow fever, under which he was profusely salivated. On his recovery he discovered symptoms of lues, for the cure of which he was afterwards obliged to undergo another salivation.

Of the saline preparations of mercury, calomel, corrosive sublimate, &c. I shall not say any thing, though they are severally entitled to preference, under particular circumstances. CHAP. IX.

Many other remedies have been recommended for the cure of the venereal disease, besides mercury;* but, as none of them have stood the test of experience, it is not worth while to mention any of them, except the *nitric acid*, which appears to have been, in many cases, efficacious, and may be beneficially employed, in cases where mercury appears either to have lost its effect, or cannot be administered.†

For the country remedies, in different cases of lues venerea, see Appendix.

Of the lues venerea, as affecting women and children.—The gonorrhœa in women is, for the most part, attended with less heat of urine, and is difficult to distinguish from weakness called fluor albus.—A woman may have all the symptoms of gonorrhœa, without being really affected; whilst it sometimes happens that, without any apparent symptoms of distemper, she may be capable of giving infection to those connected with her. Of this, however extraordinary it may seem, there are, among negro women, many and indubitable instances.—

* My opportunities, says Pearson, of administering mercury, have extended to not less than 20,000 cases; and, I can affirm, that it is a remedy always to be confided in under every form of lues venerea.

† The most satisfactory account of the use of the nitric acid is by Mr. Blair, who says, that, 1. Dyspeptic and consumptive people get strength by it, if they are not hectic:—2. It is useful in chronic, phagedænic, irritable, ulcers, where there is no lues:—3. In chronic pains, and tumours in the bones, ligaments, &c. arising from the mal-administration of mercury:—4. The oxygenated lard is useful in herpes, and some cutaneous affections:—5. Most of the local inconveniencies arising from the use of mercury, as salivation, ulcers of the mouth, &c. are removed by the acids:—6. The nitric and nitrous acids are both equally efficacious.—The above report of the effects of the nitric acid, &c. is confirmed by a still later writer (Mr. Pearson); but he affirms that the nitric acid will not cure the secondary symptoms.

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The same treatment is required in the gonorrhœa of women as in men: *See page* 215.

Mercury must be cautiously given to women under menstruation and pregnancy. In the latter case, the cure must be altogether postponed, till after delivery; or only small doses of the milder preparations given.

The preparations of mercury best suited to the constitutions of delicate women, consumptive persons, and children, are Plenck's solution, *No.* 98, and Keyser's pills, Belet's syrup of quicksilver.* Children, born with symptoms of the disease, should be nursed by the mother, and they should undergo a course of mercury together.—The opinion that a child may be effectually cured, by sucking the milk of a woman taking mercury, is erroneous.†

Of the regimen, after cure.—Persons having undergone a mercurial course, should return with caution to their ordinary habits of living: Should take great care not to catch cold:—The most obstinate rheumatisms are occasioned by cold caught after using mercury, and which nothing but a mercurial course over again will remove:—The use of the warm bath first,—afterwards cold bath, and other tonics, are requisite to the restoration of perfect health.

ON THE YAWS.

A description of this disease must be quite superfluous; but, as the safety of families may be much endangered by its being concealed,

* See method of preparing this *Med. and Phys. Jou.*

† It is not only doubtful, whether children can be cured this way, but it is not certain that either the lues venerea or yaws can be communicated *merely by the milk, independent of inoculation, from ulcers.* At least, white children have been suckled for some time by yawy negroes, who never had the disease.

concealed, or breaking out among their domestic negroes, it is of great consequence to know how to distinguish it in its first commencement.* CHAP. IX.

The yaws seldom make their appearance without some previous indisposition, though not of a feverish kind:—The person feels pains in his bones—is languid and listless—his skin, which is generally dry, changes its colour, and has various spots, for some time previous to the eruption of the pustules, which are of so peculiar an appearance as hardly to be mistaken: When, therefore, a negro, after having laboured for some time under the preceding symptoms, has one or more white lardaceous pustules,† or sloughs, particularly if about the anus or genitals, he may be justly suspected; and according to the Jewish law, respecting lepers, should be put apart by himself, till further appearances either confirm or remove the suspicion.

The yaws is a disease endemial to Africa; and negroes, independent of the circumstance of their being more exposed to it from contact with others, seem to have a disposition to receive it more readily than white people,‡ who though they are susceptible of it, have generally a much milder disease.

The disease depends on a morbific matter; which, to pro-

* Wet nurses, to prevent their being discharged, will sometimes endeavour to hide the complaint as long as they can: I have known several instances of this, and where the parents have been in a state of distraction, on account of their children; but there is no instance of a child being infected from the milk—*see page* 226. There is certainly, however, the most imminent danger of the child being infected, when once pustules break out on the nurse.

† Sometimes the yaws begin, not in this manner, but with a common ulcer, which has probably been inoculated by a fly.

‡ Hilary seems to be of this opinion; the truth of which is confirmed by white people getting well, in a short time, from drinking and bathing in the *Bath waters*.

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duce its effects, must be some way or other *inoculated*;* but an abrasion of the cuticle or wound does not seem absolutely necessary; the matter applied to the surface is sufficient. It has been compared to the small-pox, and the other exanthematous diseases,† the contagion of which is communicated, like the yaws, by a purulent matter; but there seems to be little analogy between them; for, 1*st*. The small-pox, and the exanthemata, are communicated through the medium of the air, as well as by inoculation. 2*dly*. Small-pox, &c. are preceded by fever, which is not the case in yaws. 3*dly*. The small-pox, &c. have a determined course, of only a few days; while the term of yaws may, by different modes of treatment, be protracted or cut short. Lastly, the exanthemata, when over, do not return; but, in the yaws, when no means of prevention are made use of, there are generally three successive crops. The resemblance, then, will not hold, and the hypothesis may lead to a neglect in practice.

The disease exists in several different shapes, or puts on different appearances, and is therefore distinguished into three or four kinds,‡ besides the ordinary one, *viz.* the *confluent* yaws, the *ringworm* yaws, the *guinea corn* yaws; but, as the cure in the several species does not vary, it is of no use to pay particular attention to them. There is generally one pustule larger than the rest, called the *master* or *mamma* yaw, and the soles of the feet are affected with what is called the *crab-yaws*, which need not be described. When the disease is neglected or ill-treated, it is the occasion of bone-ache, dropsy, &c.

Cure.

* *Contagiosus est hic morbus, quippe si eodem lecto utatur sanus et pianista, maxime si coitus fiat, serpit hæc virulentia ad sanum. Tamen accidit, ut aliquando saltus vel intactus evadit.*

† *See Thesis de Frambæsia; Auctore, J. A. Ludford, Edinburgh*, 1799.

‡ The *Frambæsia Guineensis*, and the *Frambæsia Americana* of *Virgile*, as well as the *Frambæsia of Labat*, are only varieties of the same disease, similar to the above.

Cure.—There is frequently much neglect and mal-practice in this disease; the method most conducive to a safe and speedy cure, consists, 1*st*, in supporting the powers of the constitution; and, 2*dly*, in favouring the elimination or exit of the morbid matter by the skin.

The patient is, therefore, to be allowed a nourishing, but at the same time bland, diet; not salted or putrid animal food, but plenty of wholesome farinaceous and other vegetable food, with good soups of fresh meat, daily.—Exercise, contrary to the opinion of some,* or moderate labour, will also be found highly conducive, as it is a means of supporting general health. The bark has lately been brought into use, and with great advantage.

The next most important thing in the cure of yaws is, the daily use of the *warm bath*. Nothing so much accelerates the cure as this;† and, where this is duly attended to, it is doubted by some whether medicines, internally given, are of much importance. On the same principle that the warm bath is requisite, warm clothing, and a warm dwelling, as also cleanliness, are indispensable. By these means, either alone, or with the assistance of proper medicines, the disease, which, if left to itself, or treated in the ordinary way, *viz.* by washing in the cold water of rivers or the sea, would continue for one, two, or more years, and leave behind relics as bad as the disease itself, may be completely cured in the space of a few weeks only.

Previous to saying any thing of the use of medicines in yaws,

* See Hunter on Diseases in Jamaica.

† A negro at Grenada is said to have been very successful in curing the yaws, by placing the patient in a cask, with a pan of burning coals, and thus sweating him, twice in the day.

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yaws, a circumstance may be mentioned, which, if true, is of very great importance, as it promises an easy method of curtailing the disease, and preventing the usual bad consequences which follow it :—" During the universal prevalence of the small-pox in this island, in the year 1784, (says Dr. Nembhard) it was remarked, that several negroes afflicted with the yaws, who had the yawy pustules upon the surface of the body, and had been a considerable time under all the afflicting circumstances of the disease, were inoculated promiscuously among many other negroes; the result was, that upon the decline of the small-pox, and drying away of the pustules, the yaws also gradually disappeared, as if both might be considered in the light of one congenial disease. The negroes were radically cured of both disorders, not one of them having been, from that time to this, subject to a return of either, or any relics of the yaws."*

It is unnecessary to comment on this, or to point out to planters, or the faculty, the advantages to be made of such a fact,

* Dr. Adams, an author whose celebrity commands the greatest deference and respect, has, in consequence of his having had the opportunity of observing the yaws in one very anomalous case, ventured to suggest his sentiments at large on the disease.—He insists that the disease is an exanthematous one, analogous to small-pox—thinks that it may be communicated through the medium of the atmosphere—that it has a fixed course, which however may be in some cases irregular; and that no remedy can have any effect, until the virus ceases, in consequence of every part of the system having been acted on.

Upon the foregoing positions it is needless to make any remark; because they are every one of them known to be utterly unfounded—but, further, Dr. Adams is convinced that the variolous inoculation in yaws can only take place in those cases where the action of the yawey virus has ceased, and that the small-pox infection could have no effect in modifying the yaws, but only to supersede some symptoms remaining after the yaws was over. This opinion, deduced from a law laid down by the celebrated John Hunter, could only be refuted or confirmed by experiment. The experiment, then, has been made; and it is incontrovertibly ascertained, by upwards of fifty trials, that the *variolous infection can be introduced at any period in the yaws*, even on the very first appearance, and, what is remarkable is, that, in the worst cases of small-pox, the yaws underwent the greatest change. Those, who were very full of small-pox, got afterwards soonest well of the yaws.

fact, when fully ascertained as a general one. It would be a discovery of some consequence, though not equal to that of preventing the small-pox by the cow-pox. CHAP. IX.

A doubt has been before insinuated, whether any benefit is to be derived from medical treatment, unless locally. That mercury is productive of more mischief than good, when given early in the disease, seems generally acknowledged, and if it be ever necessary, it is only when the disease has subsisted for a certain period, and when the virus has affected the constitution generally. This idea, however, may be founded in prejudice, or from want of due attention to circumstances.—Thirty negroes on board a Guineaman who broke out with the yaws, in consequence of one yawey negro girl amongst them, were radically or permanently cured by gentle mercurial salivation, commenced on the first appearance of the disease. Hilary, at Barbadoes, used to salivate by giving five or six grains of calomel once or twice in the day. Virgile, at St. Domingo, used frictions; and it has been the general practice to give mercury under some form or other—*see the prescriptions, No.* 107, *&c.** It may be proper to remark that, whatever form is adopted or preferred, the action of the mercury on the skin should be kept up, the warm bath, and the sudorific decoctions, *No.* 97, 98, 99—or the cool diet drink, *No.* 120.

The course is to be persisted in as in lues venerea, till all the symptoms disappear, and even for some time longer, even till the master yaw is healed.

No topical applications are to be made use of, till the disease appears to be at its height; that is, till after the yaws cease

* What Dr. Adams has quoted from Mr. Home, formerly surgeon to the naval hospital, Port Royal, merits attention, but is not conclusive.

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cease to come out. The yaws, when in a fungous state, which Dr. Adams observes is the forerunner of granulations, are to be daily dressed with milder or stronger escharotics, *No.* 108, *a*, *b*, *c*, *d*, till they are reduced to an even surface with the skin, and then cicatrized with the precipitate cerate, *No.* 103.

For the bone-ache—warm bath—decoction of mezereon, *No.* 99—nitric acid, *No.* 45.

Mamma yaw.—This sometimes remains after all the others are healed.—See the use of corrosive sublimate, under cancer.

Crab-yaws.—Soak the feet or hands for a length of time, to soften the callous; which pare off to the quick, then dress with escharotics, *No.* 121.—The fissures may be filled with gunpowder, which, being fired, produces a sore of a new kind.—Fumigations of cinnabar.

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SCROPHULA, SCHIRRUS, RICKETTS, AND CANCER.

Scrophula, properly so called, that is to say, a swelling of the lymphatic glands of the neck, &c. is seldom, if ever, seen in the West Indies; but it is, nevertheless, common to talk of a *scrophulous* habit, of *scrophulous* ulcers, &c.—The hereditary constitution of Europeans may probably give a character and complexion to some complaints, justifying the use of such language, in speaking of the diseases of white people; but the *evil*, or *king's evil*, among negroes, is the *leprosy*, or coco-bay; a disease of a very different kind, and which is hereafter spoken of, *page* 236. Such complaints as are commonly considered of a scrophulous nature, there will be occasion to speak of under tumours and ulcers.

Ricketts.—This, with every species of deformity which it gives occasion to, is rarely to be seen in this climate; but there

there are not wanting some cases of that affection of the spine, which produces a palsy of the lower extremities. Some instances have occurred in this town (Kingston), where the treatment, recommended by Mr. Pott, proved successful.—This consists in putting into each side of the protuberance of the back bone, either an issue or a seton.—Tonics are at the same time to be given, and the cold bath made use of*—*See palsy, page* 187. CHAP. IX.

Cancer commonly succeeds to small indolent *schirrous* tumours, situated, for the most part, in the face and glandular parts, as the breasts of women, *&c.;* but sores of a common kind sometimes put on the cancerous habit. There is sometimes considerable difficulty in discriminating between tumours, that are, in a proper sense, schirrous, and which are disposed to terminate in cancer; and other sarcomatous tumours, that have not this disposition, and which are not attended with the same danger. The most characteristic marks of cancerous tumour are, 1st. Its beginning in a small spot, and extending from thence in all directions, like rays from a centre. 2dly. Its being particularly hard and irregular. 3dly. Its being attended first with itching; afterwards with pricking, burning, shooting pain, and the skin being discoloured. These are the most distinguishing signs of true schirrus, which degenerates into open cancer—*See Abernethy on Tumours—Pearson's Practical Observations—Nisbitt, Med. and Phys. Jou. No.* 44.

This, fortunately, like scrophula and some other diseases, is rare in this island: The instances of it which occur are mostly among natives advanced in life, and who have commonly been

* The bones of animals are composed of the phosphate of lime, which in this disease appears to be deficient. Mons. Bonhome therefore recommends the use of calcareous phosphate.

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temperate people; water-drinkers: The disease always attacks the face, and chiefly in men.

The cases of cancerous breast in women are very rare, there being scarcely an instance to be met with among negroes; though abscesses, from repelled milk and other causes, occur not unfrequently.—Among women of mixed colour there are some examples; but cancerous uterus is much more common, and seems to happen most frequently to those who have borne numerous children at an early period.

The shooting pains, and burning sensation, which patients complain of in Europe, are not usually felt here in the same degree, unless in cancerous uterus: Persons in the worst imaginable stage of the disease, seldom complain of much pain.

The cures that have been held out for this deplorable malady, have been either totally fallacious, or at best only palliative.—The only remedy is *extirpation*, and this is equally unsuccessful, if not performed in the earliest stage of the disease, *viz.* that of schirrus, or before the tumour ulcerates.*—When this happens, or when there are several tumours of this nature at the same time, the habit is, in all likelihood, affected, and extirpation will be of no use.

That *arsenic*, so long employed by empirics,† and so strenuously

* A late writer considers cancer in three different stages: 1*st*, That of simple obstruction; in which he thinks narcotics, as hemlock and saline medicines, have frequently effected a cure: 2*d*. That of induration or schirrus; where caustics and extirpation only can succeed: 3*d*. That of ulceration; where there are few instances of cure; excepting where the ulcers did not begin in a glandular part, or was not in the beginning of a phagedænic kind.—*Nisbitt on Scrophula and Cancer.*

† All the cancer remedies advertised, contain either caustic or arsenic. Martin's powder, said to have performed such wonders in America, was, on trial, found by Rush to have arsenic in it, notwithstanding his constant assertion to the contrary. See account

ously recommended by Peyrillie, professor of surgery at Paris, and some others, has ever effected a permanent cure, is much doubted; but it is, nevertheless, perhaps, the best remedy, under proper management. Fowler's *solution* may be given internally, in milk, as recommended by Ferber.—Externally it may be employed under various forms, *viz. No.* 1—arsenic, one grain—powder of calamine *(lapis calaminaris)* half a drachm—mix—a little of this to be sprinkled on the part to be corroded.—*No.* 2, arsenic, one grain to four grains—the yolk of one egg—mix—a little to be put on the part with a feather or pencil.

The *ammoniacal iron* is recommended by Mr. Cline—dose from two to five grains.

The account of the success of *carbonic acid gas*, in two cases, by Dr. Ewart, from which such great expectation was formed, was unfortunately premature; both the patients, it is said, relapsed, and died.

Dr. Moseley considers the *corrosive sublimate* a much better application in cancer than arsenic. He directs a proper quantity to be sprinkled on a diachylon plaster, of the size of the part, which is to be applied to the cancer, and left on for forty-eight hours; when, he says, the core, by the action of the living parts, stimulated by the corrosive sublimate, is turned out.* The sore is afterwards to be treated by the ordinary

 digestive

count of two cases of cancer by Mr. Simmons, of Manchester, in which Fowler's arsenical solution was successfully given, viz. twelve drops, three times in the day—*(Med. and Phys. Jou. No.* 25). Mr. Simmons affirms that the administration of arsenic in cancer, diminishes pain, and promotes healing, and that it may be given for a considerable length of time without any danger.

Home employs arsenic, both internally and externally, in many other kinds of ulcers, besides cancerous ones.

* A similar or better method of applying the corrosive sublimate in cancer, was recommended by Dr. Wilson.—*See Med. Comm.* 1789.

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digestive ointments. He even proposes extracting schirrus tumours before ulceration, by this method—first blistering the skin, or applying caustic to it.

The *phytolacca*, or pork-weed, has been used in America. A species of it here, *jacatoo caleloe*, is also used.—It is very detersive, externally applied.—A small species of sunflower, found wild in America, has been lately extolled also for its virtues in the cure of cancer—*(See country remedies)*; a poultice of cassada bread, Indian-arrow root, or carrots, may be used for keeping the parts clean, and void of fœtor, which, in cancerous ulcers, is so extremely offensive—this purpose is most effectually answered by powdered charcoal.

ELEPHANTIASIS—LEPROSY—COCO-BAY, OR JOINT EVIL.

How far these are to be considered distinct diseases is not clear from authors.—Hilary makes the elephantiasis different from the leprosy—Heberden describes both them and the coco-bay, as being all one disease.—The elephantiasis, according to Hilary, is a defluxion on the part, generally on the inguinal glands and legs, consequent upon fever.—Heberden says, that it is sometimes the consequence of defluxion, and sometimes of congestion.—Of the elephantiasis, or Arabian leprosy, Sauvages describes, from Prosper Alpinus, Gilbert, and others, nine different species. The obscurity on this subject has been lately dispelled by Dr. Adams, who has clearly pointed out the distinction between, 1st, Elephantiasis, the Barbadoes leg, or glandular disease:* 2dly, The leprosy of the Arabians, or the coco-bais of the West Indians; and, 3dly, The Greek leprosy, or the leprosy of Europeans.

Elephantiasis is commonly brought on by long continued or frequent

* *Vid. Thesis inaug. de morbo glandulari auctore—Dr. Caddel.*

frequent returning fever—by surfeits, either from over-eating, or from being over-heated, &c *—It begins with signs of general cachexia and emaciation; the veins of the legs are varicose in their whole course; and one or both legs swell, by degrees, to a most enormous size, the skin being thickened, rough, scaly, and chapped, resembling strongly the leg of an elephant, from which circumstance the disease derives its name.

Notwithstanding this thickened, hard, and insensible state of the skin, blood, or a bloody ichor, exudes copiously on the slightest scratch or puncture, shewing increase and enlargement of the blood vessels, which is manifest from dissection of the limb, after amputation.†

With one or both legs diseased in this manner, and of such a magnitude and weight, that the person can hardly move, he enjoys a good appetite and health, and lives for many years, but without ever obtaining a cure, not even by amputation; for the remaining leg is sooner or later affected in the same manner.

In the beginning, or during the febrile symptoms, bleeding, purging, diuretics, and afterwards the bark and sea-bathing, are said sometimes to afford relief, but the symptoms are apt to return.‡ The only relief sought for the disease in the East Indies, according to Kæmpfer, is from issues.§

Sir

* Foster, in a note on Bartolomeo's Voyage to India, says, that from this cause many of the inhabitants at Otaheite had elephant legs.

† See Hilary.—Dissection shews that the seat of this disease is in the skin, its blood vessels, and adipose membrane; the muscles, tendons, and bones, are not ordinarily affected.

‡ See Heberden, Med. Tr. vol. I.—Hilary, Diseases of Barbadoes.

§ *Qui monstroso hoc gravantur nullum habent remedium, ex quo levamen sentiant, quam quod ab æviternis fonticulis petitur inurendis circa cruris affecti genua, sed mox in principio.*

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Sir W. Jones has given us an account of the remedy made use of among the Brahmins, which is arsenic, *viz.* one eighth of a grain, with a few grains of black pepper, daily.*—Should the efficacy of this be made trial of, it would be better to give Fowler's solution. Mr. Sherween has lately recommended the use of tartarized arsenic, externally rubbed in, as in cancerous and other complaints.

Fourcroy proposes the trial of oxygene ointment.

Mercurial frictions are of no use—nor mercury internally.

A speedy cure of the farcin in horses is effected by giving, internally, *cuprum vitriolatum*, or blue vitriol, in large doses. There may be no analogy between the farcin in horses, and the elephantiasis in the human subject, but in a disease like this, hitherto incurable, it would be justifiable to try what effects the vitriol, or any other powerful medicine, would have. See what is said of the effects of corrosive sublimate, in gonorrhœa, *see note, page* 214.

Leprosy and coco-bay, or joint evil.†—These seem to be only varieties of the same disease, *viz.* the *lepra arabum*, the symptoms of which are so well known, that the unpleasant task of detailing them might be spared. The first symptoms are, copper coloured spots on the skin, with an insensibility, or total want of feeling in the parts affected,‡ tuberculous swelling of the lobes of the ears,§ falling off of the hair of the eyebrows, enlargement of the nostrils and lips—then distortion of the

* Asiatic Researches.

† Red disease of Guiana.

‡ This symptom, so strongly characteristic of the disease, has escaped the notice of every writer on this subject.

§ In the joint evil, or coco-bay, the tuberculous swellings are not so common.

the fingers and toes, which ulcerate and drop off, joint by joint. Tubercles, fissures, and ulceration of the legs, which swell to a great size, as in elephantiasis before described, &c. &c. but not having the same sort of scales.

If any one wish to see this complaint painted at full length, in all its deformities, let him consult Hilary, Heberden, Prosper Alpinus, and Adams on Morbid Poisons.

The white inhabitants of this island are happily exempt from this loathsome and incurable malady; at least, the instances of their being affected with it are very rare; but in some other parts of the West Indies, and on the Spanish Main, it prevails, to a great degree, among white people as well as negroes. In some places, these lazars form a community by themselves,* the disease being infectious from contact, and hereditary. What is related by Ulloa, Sonini, and others, of the lasciviousness of these wretches, is shocking even to polluted ears; but from the account Dr. Adams gives of the lazars at Madeira, a suspicion would arise that there is some difference in the disease he describes—for persons affected there when young, never arrive at puberty, never acquire any beard, &c.; and, when the disease comes on after puberty, they become impotent, and cease to have any venereal desires. It is the same in women as in men; the genital organs, in both sexes, being either imperfect, or in part obliterated. What species of leprosy, or what disease is that, which prevails in Grenada, and some other islands (but unknown here), where the testicles acquire a monstrous sarcomatous growth, hanging pendulous, in some instances almost to the knees?

Long

* Carthagene, see Ulloa's Voyage.—Hughes complains, that at Barbadoes, where it is prevalent, the unclean are not separated. He says that it is principally hereditary in the male line; the children of leprous fathers being leprous, without the mother being infected.

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Long as this disease has been known, both in the eastern and western world,* and deplorable as it is, no mode of treatment has been yet discovered of curing, or of even mitigating it.† Many remedies have, indeed, been proposed, but their efficacy has not been sanctioned by experience, unless in a few rare instances. Some cases are said to have been cured by the inhalation of oxygene gas *(see the account of Fernandes' case by Gimbernat)*. The nitric acid, and oxygenated muriate of potash, succeeded in three or four instances *(see Chisholm on Yellow Fever, vol. II)*. Thornton advises the use of nitrated vinegar—but the arsenical solution promises to be more generally useful *(see Form, 117)*. Schwarts mentions the bark of the *theobroma guazuma*, or bastard cedar of this country, as being celebrated for its efficacy in curing this disease *(see Observationes Botanicæ)*. *See country remedies, in the Appendix to this work.*

The species of leprosy called the *Greek leprosy*, consisting of white furfuraceous scales on the skin, that fall off, or may be even blown off, never occurs in the West Indies.‡

ON THE ITCH, RING-WORM, GUINEA-WORM, &c.

The constantly perspirable state of the skin in warm climates is, perhaps, the reason why the itch is much less frequent in them, than in cold countries, even among negroes; who, working and messing together, and living in crowds, must be extremely liable to the infection, where it is present; but it seldom,

* The disease has never been known to exist any where in Europe, except in Martigues, in France; but it is known every where in Africa, and in the East and West Indies. In Egypt it is called *Lwia*.—*See Sonini's Travels through Lower Egypt*, 1799.

† Dr. Heberden says he never saw but one instance of a cure.
Omnem hic Morbus illudit Medicantis Oleum et operam; says Kæmpfer.
Invetcrascentem morbum hunc depelli remediis non possit.—Lommius in Hilary.

‡ See Falconer's account of the cases of leprosy in the Bath hospital.

dom, however, spreads very widely amongst them, as it does among the soldiery and poor people in Europe. CHAP. IX.

The itch, in this climate, does not commonly infest the space between the fingers, the wrists, and joints of the arms, or not in so great a degree as in cold countries; but is scattered more generally over the body. In negroes, it is principally seated in the buttocks, where it sometimes proceeds to the length of deep exulceration. Negroes are liable also to a particular species of itch, called craw-craws,* which is suspected to be more a disease of the habit, than properly a cutaneous one, and admits of cure better, by the use of some country remedies, than by those ordinarily employed in the common itch, *viz.* by taking vervain juice, and by rubbing with bruised leaves of the stinking weed.—*See Appendix.*

This disease, so disgraceful, because proceeding from uncleanliness, and because it is so easily cured, never fails of yielding to sulphur: Mercury is not only unnecessary, but ineffectual, if not dangerous.

Let the patient take, every night, a small tea spoonful of the flowers of sulphur in milk, or syrup, or molasses, whilst he rubs in ointment of sulphur and hogs-lard, *No.* 126, as directed. If taken in the beginning, it may be cured by means less offensive, *viz.* by washing the parts frequently with a strong solution of white vitriol—or by the ointment of white precipitate, *No.* 127.

Whatever remedies are employed for curing the itch, they should be persisted in for some time after the disease disappears, or it will otherwise return.

* May not the craw-craws be the same as the *ougoes* at Madeira, described by Dr. Adams; a disease perfectly distinct from the itch, and which is caused by an insect, as the itch was formerly supposed to be?

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Bad consequences have sometimes followed, from drying up very suddenly the discharges from an inveterate itch, which are to be guarded against by sulphur, internally given, and by laxatives.*

Ring-worm, herpes, impetige.—This is much more common than the itch, and more obstinate of cure. If neglected, it sometimes spreads, and becomes an intolerable complaint.—It is sometimes the consequence of fever. Several persons getting well of fever, are covered with ring-worms. On the San Juan's expedition, it was general amongst the few who survived that unfortunate campaign, and proved a great torment to them for some length of time. It is very prevalent in Brasil, and is called *cowrap.*† It is more prevalent in some parts of this island than in others, but that may be from communication, for it is certainly infectious, being very commonly caught by succeeding a diseased person in the seat of *cloacina*, for the eruption often begins about the buttocks and genitals. Several persons, who laboured under it for a great number of years, have been cured by means that had before frequently failed. The secret lies in persisting, for a due length of time, in the use of the remedies, after all appearances of the disease have vanished.‡

The

* Dr. Darwin has a notion, that these consequences proceed, not from the ceasing of any discharge, but from abstraction of an habitual stimulus. Bad symptoms have been removed, in some instances, by inoculating the itch afresh. It would appear that cutaneous eruptions have sometimes the effect of being prophylactic under epidemic diseases. Dr. Gillespie says, that, during the prevalence of a malignant fever, among the soldiers and seamen at Martinique, those who had either tenesmoidal flux, ulcers, or itch, escaped; but, if these discharges stopped, they were attacked with fever.—*Observations on Diseases of the Fleet*, 1800.

† *Ea ut plurimum alas, pectus, inguina, faciem, imo quandoq. totum corpus occupat; cum pruritu intolerabili adeo ut ægri à scalpendo, dies et noctes, manus abstinere nequeunt; hanc voluptatem acerba pœnitentia sequitur, dolor enim sequitur acer et Indusia partibus excoriatis adhærentia sine crustarum laceratione avelli nequeunt, &c. (Bont. Cap. 17). Cura pastillis ex ferrugine et sulphure cum aceto confectis.*

‡ Mr. ———, a gentleman of great consideration, not long since dead, had la-

The remedies are the same as in the itch, *viz.* the sulphur ointment, *No.* 126—white precipitate ointment, *No.* 127—sulphur bath, *No.* 124—stinking weed—ring-worm bush, *&c.* —*See Appendix.* CHAP. IX.

Tetters, or ring-worm, when local, or confined to a small spot on the face, or hands, or arms, may be frequently cured by the familiar remedies, *viz.* ink—gunpowder and lime-juice —ketchup, *&c.*—The oxygene ointment, *No.* 138, has lately come into use in herpetic affections; as also arsenical solution, *No.* 129—and solution of borax in vinegar.—*(See Home on Ulcers).* The patent snuff was made trial of by a country practitioner, and found very successful. A plaster, composed of diachylon, Venice turpentine, and sulphur, applied in an obstinate case of ring-worm, proved an effectual cure.

Guiney-worm—dracunculus.—Those who wish to be acquainted with the natural history of this worm, and all the symptoms attending its lodgment in different parts of the body, may consult *Kæmpfer's Amænit. Exoticæ. or Hilary's Diseases of Barbadoes.*

One circumstance related, hardly credible, is—that these animalcula make a quick transition among the muscles and membranes, from one part to another.

The mode of extracting this worm, by rolling it on a quill, or leaden probe, is so universally known, that it need not be

 described,

boured under a disease of this kind for twelve years. It had been mistaken, both here and in England, for leprosy. He was universally excoriated, and could bear no cloaths on him. By a sulphur bath, he got very soon relieved, and afterwards cured He was, however, subject to returns, if he did not now and then use his bath.—Herpes puts on various appearances: There was a negro child on which the disease made configurations exactly like madrepore, or the brainstone coral: It was cured by sulphur.

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described, nor is it necessary to mention the bad consequences that sometimes follow the breaking it.

The means of killing the worm, and bringing it away at once, is a desideratum. Eating large quantities of garlic, or taking asafœtida, camphor, &c. has sometimes this effect.

Scald head—tinea—but rarely occurs in Jamaica; but cases of a most shocking and fatal kind have been seen here, in persons coming from St. Domingo.

The remedies recommended in this disease are—internally, sulphur and other laxatives—externally, tar ointment, and covering the head with an oiled bladder or oil-skin cap.—The ointment, *No.* 145, is taken from the *Med. Comm.* 1797. *See other lotions and ointments, No.* ~~145, 146.~~ 126, 132, 133

CHAPTER X.

OF SUNDRY LOCAL AND ANOMALOUS COMPLAINTS.

HEAD-ACHE.

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HEAD-ACHE is not only a symptom attendant on very many complaints, but is sometimes of itself a distinct disease, arising from several different causes. It may sometimes arise from the state of the stomach, and at others from causes acting within the head, as, 1st. Congestion or fulness of the blood vessels. 2d. Effusion either of blood or serum.

3d.

3d. Bony protuberances, or ossification of the sinuses, &c. 4th. State of the sensorium itself.—Insects generated in the frontal sinuses have been sometimes the cause: A gentleman, who had laboured for some years under a most excruciating head-ache, was ultimately relieved by a discharge from the nose, in which was found a worm or maggot.

The disease is sometimes constitutional; in some cases incessant; in others periodical, affecting the head generally, or on one side only.

There are cases where the pain is confined to a small spot above the orbit of either eye, and returning every day at a certain hour. In some persons it accords with the diurnal revolution, commencing at sun-rise, increasing till the meridian, and then declining; this may be partly, or at first, owing to the temperature, but afterwards to habit.

1. Where there is reason to think the head-ache depends on a foul stomach, vomits of ipecacuanha, or mustard, may be taken, and afterwards laxatives.—Head-ache is frequently caused, or aggravated, merely by costiveness, and may be relieved by clysters.

2. When the disease is supposed to be owing to congestion, or too great fulness, as in the case of florid and short-necked persons, and where there is a visible throbbing of the arteries of the neck and temples, bleeding, blisters, setons, issues, errhines, or such things as promote a discharge from the nostrils. Immersion of the feet in warm water, whilst cold vinegard cloths are applied to the head.

In head-aches purely *nervous*, cephalics, such as volatile salts, eau de luce, and the medicines called nervous, *viz.* tincture of valerian,

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valerian, æther, internally and externally, compound tincture of castor, tincture of asafœtida; these sometimes afford relief; but, if they do not, the feet may be put in hot water; a fœtid clyster may be given; electricity may be resorted to. To prevent the return, tonics are necessary, *viz.* drinking a large draught of cold water in the morning:* The shower bath: The Peruvian bark.—*See electuary, No.* ~~90~~.

The kind of head-ache called *sick head-ache* is sometimes cured by the vegetable acids, particularly cyder.—*See Dwight, Med. Repository, vol.* II. When the disease returns like an intermittent, at a particular hour, the bark should be taken to the quantity of an ounce or two, some hours before the period of the paroxysm. Powder of valerian may be joined with it; but the most powerful tonic is arsenic, which has given relief in a number of desperate cases: Give four or five drops of Fowler's solution, *No.* 117, once or twice in the day, increasing the dose to ten or fifteen drops.—Shaving the head, and rubbing in mercurial ointment, are advised in some cases.

Face-ache—tic dolourcux—is a distressing complaint, like head-ache—the same means may be employed as in nervous head-ache; but Dr. Haighton has discovered a new and effectual cure, which consists in dividing the nerve, as it comes out of the infra-orbital hole.—*See Medical Facts and Observations.*†

Ear-ache—may be caused, 1st. By blows, falls, and other accidents: 2. By a current of cold air, and getting wet in the feet:

* A draught of vinegar, or warm water, will sometimes afford relief. Opium is seldom proper, but in violent cases, when it is thought indispensable, it should be given in large doses: One hundred drops of laudanum, or three or four grains of opium.

† Experience has since proved that this does not always prove successful. The *kali arseniatum, viz.* Fowler's solution, *No.* 117, is of equal service here, as in head-ache.

feet: 3d. By foreign substances getting into the ear, *viz.* insects, *&c.*

Some persons are particularly liable to it, upon the least exposure to cold: To guard against it, they should keep their head and feet warm.

In ordinary cases, the patient will find relief from holding the affected side of the head over the steams of warm water; afterwards putting into the ear a small piece of camphor, wrapt up in wool or negro hair,* and moistened with laudanum or æther.—Electricity may be employed.

In cases where the pain is very violent, accompanied with throbbing and other symptoms of inflammation, bleeding and blisters, either behind the ear, or to the neck, may be necessary. Should abscess threaten, apply warm poultices. When an abscess has broke, let the ear be frequently syringed with milk and water, chamomile tea, with tincture of myrrh, *&c.*

To get out insects, pour in warm oil, or direct a steam of tobacco-smoke into the ear. If vermin have generated in the ears or nostrils, inject first spirits of turpentine, then warm oil.

Deafness.—This is the proper place to speak of deafness, which may arise from a great variety of causes: The most ordinary of which are, 1. Hardened wax, or dryness of the parts.† 2. Relaxation, rupture, or abscess, *&c.* of the membrane

* There is an objection to cotton, the fibres of which, imbued with the cerumen, may become impacted, and difficult to extract.

† The cerumen, or ear wax, according to the analysis of Fourcroy and Vanquelin, consists, 1st. Of an oily matter: 2d. Of an albuminous matter: 3d. Of a colouring bitter principle, similar to bile.

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brane called the tympanum, or drum.* 3. Diseases of the bones. 4. Obstruction of the canal going from the ear to the throat (eustachian tube). 5. Palsy of the nerve.†

The remedies:—1. In the first case are, syringing the ear with milk and water, oil and water, &c. ox gall and water, &c. 2. In the second case, the cold bath, bark, and other tonics. 4. In the fourth case, electricity, galvanism, passing the shock through the ear to the throat.—5. In palsy of the nerve, the same remedies as in gutta serena—*see page 253.*

On this subject, some valuable observations may be found in *Townshend's Guide to Health, vol.* II. 371.

Tooth-ache—This, though a malady that seldom excites much pity, is yet a sufficiently severe one, as is well known to those who have ever felt it. The most ordinary cause is a decayed or hollow tooth: In this case, relief is sometimes obtained from dropping in laudanum, oil of cloves, spirits of turpentine, or filling the cavity with a pill of opium and camphor; and by various other local applications; a piece of nitre or salt petre, taken into the mouth, will sometimes give instant relief under the most excruciating pain; but where these do not succeed in a short time, the best cure is the *radical* one, *viz.* extraction, or drawing the tooth.

When the disease is occasioned by cold, sweating the face, by holding it over the steams of hot water, and afterwards rubbing in volatile liniment, applying blisters behind the ear, putting the feet in warm water, taking sweating medicines at night, such as *No.* 15, 17.

Tooth

* Mr. Young has proved, that rupture and perforation of the tympanum does not cause deafness.

† On the functions of the ear, and its diseases—see Saunders; and a late disquisition on Phonics.—*Walker.*

Tooth-ache has been known to arise, in some cases, from the state of the stomach, and to be relieved by a vomit. For the tooth-ache of pregnant women—*see diseases of women.* CHAP. X.

The best *dentrifices* for cleaning the teeth, and preserving them white, are, charcoal powder, snuff, or tobacco ashes; separating the tartar from the teeth loosens them, but, if the gums be punctured, they fasten again.

OPHTHALMIA, OR INFLAMMATION OF THE EYES.

It is unnecessary here to enumerate the great number of causes by which an inflammation of the eyes may be occasioned; but it would seem to be sometimes dependant on one not formerly noted, *viz. contagion*; it is now (since the expedition to Egypt) well known to be so, on some occasions, and in some situations, both endemic and epidemic.—*See Power, Edmonston, Vetch, &c.*

The inflammation is differently seated, either in the eye itself, or in the eye-lids, and is either *acute* or *chronic*, the latter being generally the consequence of the former. In the acute, when the disease rises to any height, there is great danger of *chemosis, viz.* a general confusion of the humours, or bursting of the eye, or else a total deprivation of sight, from subsequent opacity of the cornea, *&c.* It is of great importance to distinguish not only between the two species, but also the different stages of the acute, as the remedies and applications in one stage, are unsuitable to another.

If duly attended to in the beginning, it may be frequently stopped, or at least mitigated, so as to prevent any bad consequences.

In slight affections, brought on by dust, a glare of light, or

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in the mild degree of acute ophthalmia, the inflammation may be quickly removed, by washing the eye with weak brandy and water, or by the use of any of the eye-waters, *No.* 113;* or by the alum poultice, *No.* ~~126~~, *c*, put on at night, taking at the same time, either a dose of purging salts, or a powder of calomel and jalap, and afterwards cooling powders, if required.

The eye-waters ought also to be used with an eye-cup, or else the patient should lie on his back, and have the eye-water dropped into the eyes; for, in the ordinary way of washing the eyes, the patient derives but little benefit. The patient should carefully skreen the eyes from the light, by covering them with a blind of plantain-leaf or green silk; but it is better to sit in a dark room, without any covering. This is of great importance in every case. The collyria, or eye-waters, should be used very frequently, and as cold as possible †. If one does not suit, it should be changed for another, or made weaker or stronger, as it may be found necessary. In more violent inflammations of the eyes, bleeding is necessary, or cupping and scarification of the temples. Blisters to the nape of the neck, or behind the ears, to be kept running; small doses of calomel and opium given every night; and afterwards the bark.—Strong vomits and purges are to be also given.

Dividing the turgid blood vessels of the conjunctiva,‡ by the shoulder of a lancet, is an easy operation, that affords very certain and speedy relief. In this violent stage of the disease, warm

* A very ingenious practice has been lately recommended, for diminishing cutaneous inflammation, and inflammation of the eyes, *viz.* that of covering the inflamed part with a wet bladder, and keeping this moist with æther; which, by its evaporation, generates a great degree of cold.—Slight inflammations of the eye may be removed by electricity, or by drawing off the electric matter by wooden points.

† Warm fomentations of milk and water may be sometimes useful in affections of the eye-lids, but seldom in cases where the inflammation is in the membranes or globe of the eye.—*See Ware, Scarpa.*

‡ The membrana conjunctiva is what is vulgarly called the white of the eye.

warm fomentations and poultices are to be used, instead of the cold applications before recommended. If these means fail, and what is called a *chemosis* takes place, *viz.* swelling of the ball, depression and thickening of the *cornea*,* &c. threatening a general confusion of the humours, or suppuration, a seton, caustic, or issue, is to be immediately put into the neck, and strong errhines given, to promote a discharge from the nose; calomel, opium, and bark, being continued. After the subsidence of inflammation, or when the inflammation becomes chronic, the astringent collyria, *No.* 113, may be again resorted to; but the application of the greatest efficacy is Mr. Ware's vinous tincture of opium, *(see Form, No.* 128*)* two or three drops of which may be dropped into the eye, two or three times in the day; but this remedy, so useful in the second stage, is dangerous in the first; or till after bleeding and plentiful evacuations.†

Besides the foregoing species of ophthalmia, there is another called *psorophthalmia*, which consists in an affection of the membrana conjunctiva lining the eye-lids, and of the glands along their edges, which are actually ulcerated, and discharge purulent matter in great quantity. To this complaint newborn children are particularly liable, as well as those recovering from measles and small-pox. The same kind of ophthalmia is also occasioned by the stoppage of gonorrhœa, or else by the matter of gonorrhœa applied to the eye. The treatment recommended by Mr. Ware, the most celebrated British occulist of the present day, is to foment the eyes frequently with warm infusion of cammomile flowers; and, at night, after cleaning

* The cornea is the clear transparent part of the eye, over the pupil, or, as it is called, the sight.

† I can aver, says professor Scarpa, from my own experience, that what Mr. Ware has said of the utility of this medicine, when employed with caution, is not at all exaggerated.—*See Pract. Obs. on the Dis. of the Eyes*, 1806.

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away all the purulent matter between the eye-lids, to rub or besmear the edges with a camel's hair pencil, dipped in the citrine ointment, a little warmed.—Various other caustics and ointments *(see Form, No. 127)* have been recommended; as also vapours of the spirits of turpentine.—*Guthrie.*

For the *lippitude*, or weakness, which remains after this species of ophthalmia, the ointments, *No.* 141, are proper—lime water.

To remove the specks, films, or opacities, that remain on the cornea, the water, *No.* 129, or the powder, *No.* 123, *a*, *b*, *c*, may be used, when all symptoms of inflammation are subsided; common honey; gall of fish, *&c.*: But the most effectual application for removing every species of opacity, on the cornea *(albugo, leucoma, &c.)*, as also preternatural growth of membrane on the conjunctiva, called *unguis*, is the corrosive sublimate collyrium, *No.* 131; giving at the same time the quarter or eighth of a grain of corrosive sublimate in a pill every night.

To defend the weak eyes, after recovery, from a too strong impression of light, it is customary to keep them covered, or to wear goggles; but these serve to keep the parts hot; the best defence of the eye is from green glass, or gauze spectacles.*

To prevent a return of the inflammation, the bark may be occasionally taken; the head shaved, and washed frequently with cold water, or the shower bath used.

Severe and long continued inflammation occasions many other

* The glasses ought to be plain, not magnifiers.—Goggle frames, mounted like spectacles, may be covered with green gauze or sarsanet.

other complaints of the eyes, which must be here passed by, as well as several others arising from causes of a different nature, except the *gutta serena*. The cataract, and others, which are the objects of chirurgical attention, cannot be treated of here. CHAP. X.

Gutta serena—is a blindness, more or less complete, arising from a palsy of the optic nerve. There is here no visible fault in the eye, except that the pupil (or sight as it is called) is dilated, the stimulus of light not causing it to contract.

Gutta serena may take place in one eye, whilst the other is affected with cataract. The pupil of the eye, affected with amaurosis, will contract from sympathy—it is therefore necessary to keep one eye shut, whilst you examine the other.

This disease sometimes comes on gradually, and is preceded with head-ache, vertigo, singing in the ears, *&c.*; at others, it attacks suddenly, going off and returning irregularly, or periodically: The causes from which it arises are similar to those of apoplexy, *viz.* serous or sanguineous compression; or else a deficiency of nervous energy, from some unknown cause.

The cure must be attempted, then, by the several means adapted to the different states of apoplexy.—*See apoplexy, page* 184.

1. In young plethoric short-necked persons, bleeding, blisters, setons, *&c.* 2. In phlegmatic people, emetics, cathartics, errhines, blisters. 3. In nervous, hysterical, and epileptic patients, antispasmodics, *viz.* opium, musk, æther, electricity, *&c. &c.* Tonics, *viz.* bark, steel, flowers of zinc, cold bath, arnica montana, *&c.*—The belladonna is also given.

Arneman advises the inducing of vertigo by rotatory motion,

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tion, which, he says, causes a determination to the head, and is more beneficial than the use of narcotics. In one case, gutta serena was cured by mercurial snuff *(See Med. Facts, vol.* IV.*)* It has been recommended to place a bag of iron filings over the eyes, whilst a magnet is applied to the neck, or back of the head.

It has been sometimes caused by repelled eruptions, and by drying up sweaty feet; in which cases, the discharges are to be restored.

When the disease proceeds from poisons;* the antidote to these, if known, must be had recourse to; that of the venereal poison is mercury.—*See lues venerea.*

OF THE DISEASES OF THE KIDNIES, BLADDER, &c. *viz.* ISCHURY AND STONE, DYSURY, STRANGURY, &c.†

Ischury, or suppression of urine, is occasioned by inflammation, either in the kidnies, ureters, or bladder; and this inflammation may be either owing to a stone situated in any of these parts, or to other causes, as cold, gout, external injuries, acrids (as cantharides, &c.) swallowed.‡

The general remedies in *ischury, strangury,* and *dysury,* are bleeding, clysters, laxatives, demulcent drinks, warm bath, and opiates, particularly the anodyne clyster, *No.* 33.

Stone.

* Stramonium in particular has this effect. Emetics and oily clysters are recommended by Dr. ——— ———, *(see Medical Facts and Observations)*, but acids are the most powerful antidotes, to all the narcotics.—The exhalations of privies likewise produce blindness.—*See Rammarini de Morbis Foricariorum.*

† There are several other diseases of the kidnies and bladder, which cannot be here noticed, *viz.* dropsy of the kidney, from stone impacted in the ureter—prolapsus or protrusion of the inner coat of the bladder, through the external muscular coat, &c. —*See Professor Walker.*

‡ I have known several instances of diseased kidney end in suppuration, which seemed to be from some organical cause or obstruction.

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Stone.—The symptoms of *calculus*, or stone, besides pain in the kidnies, or about the neck of the bladder, are sickness at the stomach, a discharge of mucus or gravelly pale urine, passed in small quantities, or the urine suddenly stopping when in a full stream, &c. This torturing malady is almost unknown in tropical climates: The few who do labour under symptoms of calculus, bring the disease with them from Europe. There are various hypothesis concerning the nature and formation of calculus,* which it is unnecessary to mention, the treatment only is required here; which, in the *fit*, or when the patient is labouring under violent pain from the stone, either in the kidnies, or descending along the ureters; lodged at the neck of the bladder, or sticking in the urethra; must be, by the use of the remedies above-recommended in the preceding page, particularly by opiates, internally, and in clysters.—*See No. 33.*

To counteract the lithic or gravelly disposition, the patient should avoid the use of acids and crude vegetables; should take exercise on horseback; and wash the loins frequently, with cold water. The most efficacious remedies are lime water

* See Dr. Whytt—Dr. Austin—*cum multis aliis.*—Dr. Austin is of opinion, that the calculi are not a deposition from the urine, or not caused by any secretion from the tubuli uriniferi, but are formed of mucus poured out from the glands, and in the coats of the bladder. Mr. Gartshill, and some others, agree with Dr. Austin; but most writers, since Scheele, assert that calculi are not earthy concretions, &c. but are composed of a peculiar acid, which they agree to call the lithic or stony concreting acid, as being endued with specific properties (*See Scheele, Wilson, Forbes, &c.*) Urinary calculi differ very materially from each other.—They are generally composed of calcareous phosphate and animal gluten. The taking of alkalies renders the urine turpid, the phosphoric acid uniting with the alkali, the calcareous earth is deposited. Calculus, perhaps, is owing to a defective animalization, the acid of the calculus not being changed into an azotic compound.—*Carendorff, &c.*

A more perfect view of this subject, drawn from later analysis of the urine, may be seen in the *Supplement to the Encyclop. Brit. under Animal Substances.* According to the newest discoveries, urinary calculi are composed of, 1. Uric acid: 2. Urat of ammonia: 3. Phosphate of lime: 4. Phosphate of magnesia: 5. Oxalate of lime: 6. Silica; 7. Animal matter.

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water—the mephitic alkaline water—the natron pills, *No.* 94—or kali in the bitter infusion, *No.* 54—artificial Seltzer water, *No.* 69.

Formerly the *uva ursi*, an astringent vegetable, was much celebrated;* as also the seeds of the wild carrot, decoction of raw coffee, *&c.*; but these are now obsolete remedies. A more powerful one has been lately recommended, *viz.* the muriatic acid, of which from twenty to fifty or more drops may be taken, twice in the day.

Medicines taken *ex ore*, or by the mouth, must necessarily undergo a change before they arrive at the parts where the calculus is lodged; whatever effect, therefore, they may have, in preventing the formation of stone, they can have little or none in dissolving stony concretions, when formed: Hence it was long ago proposed, to inject the bladder with such liquors as were found solvents; but the manner in which this was at first done occasioned intolerable pain: A better method, and which is said to be successful, has been since adopted.†

Every one knows, that in certain cases there is a necessity for extracting the stone, by an operation called lithotomy, or cutting into the bladder; but that is an operation never yet performed in this island.‡

Spasmodic ischury.—If the coats of the bladder or prostate gland are in a diseased state, the urine may, from its ordinary or

* Of sixteen nephriticic cases, treated by Dr. Ferriar, twelve were cured by the uva ursi, given in small doses, *viz.* five grains three or four times in the day.

† *See Med. Comm. vol.* III.—*Encyclop. Brit. subject Medicine.*—*Also, Jesse Foote, de Lotura Vesicæ.*

‡ There is an astonishing but well authenticated history of a patient (Colonel Martin), who, by gentle and reiterated efforts, contrived to introduce a file into the bladder, by which he, in a certain space of time, completely destroyed the stone lodged there.

or from accidental acrimony, occasion a spasmodic affection of the parts: When this is supposed to be the case, the suitable remedies are, mephitic alkaline water—demulcent drinks—warm bath—opium—tincture of iron, in spirits of salt—opium in clyster, *No.* 33—tobacco clyster, *No.* 57, *d.*

Suppression of urine may also be the effect of palsy; in which case, blisters to the *os sacrum, &c.*—*See palsy.*

Dysury and strangury, or a difficult and painful discharge of urine, acknowledge most of the same causes as the preceding complaint, *viz.* inflammation from acrids swallowed; from gravel sticking at the neck of the bladder, or in the urethra; from poisonous matter absorbed in impure coition *(see gonorrhœa)*; or, lastly, from strictures in the urethra.

When the symptoms proceed from acrids, as cantharides, *&c.* taken internally, the proper remedies are, demulcent drinks, mucilage of gum arabic, *&c.*; if from gravel the same, as also oily and mucilaginous injections; but the most prevalent cause of a stoppage of urine is a stricture or strictures in the urethra.

Strictures of the urethra are occasioned either by a thickening of the membrane, in consequence of inflammation in gonorrhœa, or else by spasm, arising from a peculiar morbid irritability of the parts.—A complaint so common and so distressing, that it demands particular attention, but the palliative treatment can only be proposed here; for a radical cure by the bougie* simply, or by the common bougie, or when armed

* The best kind of bougie is that made of the elastic gum. Dreadful consequences have happened, from pieces of bougie slipping into the bladder, but the elastic gum is soluble in the urine, and is not therefore likely to be productive of the same mischief as the common bougies, in such a case. A gentleman, having met with this accident, was so singularly fortunate as to void the piece of bougie again by urine, after it had lain

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armed with caustic; the patient must apply to a skilful and experienced surgeon, or consult the best authors on the subject, particularly Home, Whateley, Andrews, Aberdour, Cartwright, Sherween, &c.

Supposing a person labouring under a partial or total retention of urine, and in great pain from a stricture in the urethra, which does not admit of the introduction of the catheter, or bougie, he should be put into a warm bath, and take a large dose of opium or æther, and an opium or a tobacco clyster, should be administered. Æther and laudanum may be applied externally to the part affected—or a blister to the perinæum.—In spasmodic cases Mr. Cline recommends ten drops of the muriated tincture of iron (*i. e.* tincture of iron, in spirits of salt) every quarter of an hour.—This owes its efficacy (according to Abernethy) to the nausea it produces.

Pyury, or cystirrhœa.—There is a disease of the bladder, which requires to be mentioned here, consisting of a mucous or puriform discharge of matter from the bladder, sometimes in considerable quantity; which has been, by different writers, variously denominated *pyuria, cystirrhœa, catarrhus vesicæ, &c.* Of this disease there are frequent instances in this island.—The discharge may sometimes be truly *purulent*, proceeding from internal ulcerations of the bladder, kidnies, mesentery, &c. but at other times it is only mucus,* and is caused by a gouty

lain in the bladder several weeks. Smyth has invented flexible metallic bougies. Sherween makes bougies of whale-bone properly prepared.

In cases of necessity Mr. Richmond proposes incision.—An extraordinary case is related by Dr. Anderson of mortification happening, and of the patient's recovering, and afterwards passing his urine naturally and freely.—*Edinburgh Med. and Chir. Jou. Jan.* 1807.

† Mucus is ropy, or draws out into threads, whilst pus is friable, or without cohesion; but the nature of the discharge, whether mucus or purulent, may be more certainly determined by the criteria proposed in *page* 152, *note*. Let the sediment be repeatedly washed in water, before subjecting it to the trials mentioned.

gouty affection of the bladder, or else by acrids used, as in our food. The effect of turtle, in making the urine of an oily nature, and greenish hue, is well known.* It is sometimes supposed to be a primary disease of the coats of the bladder, arising from preternatural sensibility, or it may be a secondary one, occasioned by stricture, producing a thickened and contracted state of the bladder. The discharge has frequently a strong ammoniacal fœtor, which it acquires by retention.

The remedies proper are, demulcent drinks, for diminishing the acrimony of the urine; opium, for lessening the sensibility of the bladder; the bark, uva ursi, zinc, &c. for increasing the tone of the system and parts. Mr. Foote has recommended the *lotura vesicæ*, or washing the bladder by injecting barley water, linseed tea, &c. a practice that certainly appears rational, and which, on trial, has proved successful.—The apparatus required consists of nothing but a flexible catheter, or hollow bougie, fitted to an elastic gum syringe.

Diabetes—is a preternatural or excessive flow of urine, the quantity sometimes (as has been said) much exceeding that of liquids swallowed.† The nature of the urine is also altered, being sweet to the taste, from the sugar it contains.‡ There is much variety of opinion§ concerning the nature and causes of this frequently incurable malady; but many physicians seem to concur with Dr. Rollo, in thinking it a disease of the

* *Ab usu testudinis marinæ urina illico luteo-viridis et quasi oleosa evadit.—Stubb. Ph. Tr.*

† This has been disproved by Dr. Lubbach.

‡ The blood is also sweet, and the serum like whey; and, along with these circumstances, another no less extraordinary one in this disease, is a *phymosis*, which is a pathognomonic symptom.

§ Diabetes has been considered as a disease of *hyper-oxygenation*, or defective animalization.—Dr. Washington (see Thesis) affirms, on the contrary, that the disease consists not in a fault of assimilation, or retrograde action of the lacteals; but in a morbid action of the kidnies.—This is also the opinion of Dr. Baillie and others.

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primæ viæ; and that the principal means of cure consist in abstaining wholly from vegetable food.* At the same time, emetics are advised, with hepatized ammonia, and narcotics. Dr. Ferriar has treated one case successfully, by the bark and vitriolic acid. A great number of astringents, as alum whey, tincture of catechu, &c. have been in vain administered.—Bitters and chalybeates will always be conducive. Scott succeeded in two cases with mercury. Washington proposes saccharum saturni.

CHAPTER XI.

ON THE TREATMENT OF THE DISEASES OF WOMEN AND CHILDREN.

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THE prohibition which the sex lie under, from delicacy, in seeking advice; particularly in the West Indies, where the major part of the faculty are young bachelors,† makes it of importance for them to study their own economy, and to learn how to manage themselves in their various situations.—Were it consistent with the plan of this work, the complaints of women and children ought to be treated of more at length; but, as it is not, it is recommended to the sex, (the matronly part in particular) to seek in other works what this is deficient in.‡

The

* Ontyd asserts, that the sole use of animal food will, indeed, change the nature of the urine, but not remove the disease.—*Ontyd on Mort. Dis.*

† There is an appropriate language to be used with female patients, which junior practitioners should study, and be careful not to give offence to delicacy, by the use of improper terms.—*See Lond. Pr. of Midwifery, chap.* I.

‡ See Dr. Hamilton's Diseases of Women—Dr. Leake—Nisbett's Clin. Guide.—The latter is better suited to medical students.

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The peculiar and irritable constitution of women has been spoken of before (see Introduction), and the diseases resulting from it, as hysteria, &c. have been already treated of: What remains to be considered here, are such irregularities and complaints as are dependant on the sexual economy.

It is well known that, in warm climates, girls arrive much sooner at the state of puberty than in Europe, though there is no where any certain or fixed period for the eruption of the menses, or the commencement of the menstrual discharge.* It occurs sooner or later, according to circumstances of general health; it may, perhaps, be anticipated or hastened by certain causes; but it is more frequently retarded.

The causes which hinder the appearance of the menses at the proper period are, a weakly constitution, previous fits of illness, an inactive sedentary life, grief, or any other of the depressing passions.

It is for these reasons that there are rarely any instances of the retardation of the menses among negro girls; but, among the poorer whites, who live in a state of domestic confinement, we see a number who are obstructed and chlorotic.—To encourage the flow of the menses at the proper period, and when there

* The common period, in cold countries, is about fourteen or fifteen; but, among the natives of warm climates, sometimes it occurs as early as eleven or twelve.—A case is related in the Memoirs of the Medical Society, where the catamenia did not come on till the forty-seventh year of the woman's age; after which it continued regular, during the remainder of her life, ten years. There are some instances of women who have never menstruated, owing to their having no uterus. Different ideas have been entertained concerning the nature of the menstrual flux. It has generally been thought excrementitious—it certainly is not coagulable blood, but a secretion; and the final purpose is not, as has been supposed, for the growth of the fœtus in utero; but to support a certain condition of the uterus necessary for impregnation—for a girl cannot conceive before once having had her menses, nor do women ever conceive at the time of life when they have ceased.—*See Lond. Pract. of Midwifery.*

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there are symptoms pointing out their approach, as swelling and shooting pains of the breasts, &c. females should take much exercise, and pursue social and chearful occupations.—They may occasionally use the warm bath, or put their feet in warm water. The first appearance of the menses, and sometimes the subsequent returns of them, are preceded by violent pains or cramps in the uterus, and neighbouring parts; to relieve which, the patient should sit over the steams of warm water; the abdomen and loins may be fomented, and afterwards rubbed with camphorated oil and laudanum; but laudanum by itself, or with æther, or volatile spirits, tincture of castor, &c. is at the same time to be administered.—Laudanum may be also given in a starch clyster.

Obstruction of the menses.—The same causes which prevent the menses from coming on, at the proper period, may cause an obstruction of them afterwards; but the most frequent cause is *cold.*—It is, therefore, incumbent on females to pay particular attention to themselves, for some days preceding the expected return of their terms, avoiding cold and sitting up late at night, relinquishing their sedentary occupations, and devoting themselves more particularly at these times to amusement and company.—At the same time drinking warm diluents, and using the pediluvium, *i. e.* washing their feet at night in warm water, as before recommended.

If the obstruction is permanent; that is to say, if a woman has no return, or but partial appearances, through many successive months, and falls into a bad state of health,* which is usually the consequence, she must be treated according to the particular circumstances of her situation.—In some few cases there

* The most common effect of obstructed menses is *chlorosis*, or green sickness, particularly in girls; in more elderly females, *physconia*, or a big and hard belly.

there may be a rigid and plethoric state, that requires bleeding;* which is generally, though with no good reason, performed in the vein called *saphæna*, in the ankle, after immersing the foot for some time in warm water: Where bleeding is deemed necessary, it will be better therefore to take blood from the arm. CHAP. XI.

Whether there are any medicines that come strictly under the denomination of *emmenagogues;* that is to say, medicines that have a direct action on the uterus or womb, and forcing the monthly discharge, may be doubted; but there are many that have this effect indirectly; as emetics—strong purges, particularly aloetics† and hellebore—tonic medicines, particularly chalybeates, and a number of others, whose operation is not well understood, as madder-root, which has been found one of the most efficacious medicines.‡ The dose is two scruples, or a drachm, four times in the day.—Some of the other most usual and best remedies, are directed in *No.* 37, 40, 58.§ —*For country remedies, see Appendix.*

Chlorosis, or green sickness.—The cure for this consists in emetics, purgatives, chalybeates, *&c.* as above directed, and as mentioned under malacia or dirt eating, *page* 174.

Enlarged abdomen (called physconia).—Where this is the effect of obstructed menses, besides the above remedies, and exercise

* This is particularly advisable where blood-spitting, or vomiting of blood, happens, or where there are very violent pains of the loins, and in cases of fits. See two curious cases of menstruation in Memoirs of the Medical Society, 1792; in one of which the eruption was from the saphæna.

† Emetics and purgatives are to be given at the time the return should take place.—Blisters may be sometimes applied on the inside of the thighs.—Burgundy pitch plaster to the loins.

‡ See Dr. Home.

§ Electricity stands highly recommended in obstinate suppression of the menses.

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exercise on horseback, calomel or mercurial frictions, with warm bath, Burgundy pitch plaster, moderate bandage, &c. may be made trial of.

As the menstrual flux takes place at an earlier age in the natives of warm climates, so does it likewise sooner cease.—This period is a critical one. From the stoppage of the customary evacuation, the patient is subject to plethora, and all the consequences of that state, as head-ache, inflammations, and ulcers, palsy, &c. &c. the means of preventing these evils is, to bleed; to live very abstemiously; and take much exercise. If this period (called by some females the dodging time) be safely passed, an healthy old age generally succeeds.

Overflowing of the menses, hæmorrhagies from the uterus, and abortion or miscarriage.—The quantity of the discharge is very different, in different subjects, and in the same subject at different times.—A woman who is in the habit of losing only four ounces, will, perhaps, suffer from losing only two ounces more; whilst another, accustomed to lose six or eight ounces, may lose a much larger quantity without feeling any bad effect.—Menstruation can be considered profuse only when it occasions debility, &c. &c.—That quantity only is to be deemed excessive, which is followed by weakness, paleness, sickness at the stomach, &c.

This hæmorrhagy is of two kinds, active or passive (*see page* 130), depending either upon an increased impetus of blood in the vessels of the uterus, or else in a relaxation of their mouths: The treatment must, therefore, be very different, according to the cause of the complaint. When it happens in viragoes, or strong masculine women—if it be brought on by violent exercise, strains, blows, or other accidents, and is attended with pain in the loins, &c. blood-letting is the first and principal remedy;

medy; next a cooling regimen, with gentle laxatives, *No.* 4, 38, and the powders, *No.* 8: Keeping in a horizontal position thinly clothed or covered, and making use of cold applications to the loins, and between the thighs, *viz.* cloths dipped in vinegar and water, in which sugar of lead has been dissolved.—These are to be renewed frequently, or before they acquire the heat of the body. CHAP. XI.

In the opposite case, or where the flooding is owing to weakness and laxity, the patient is to keep herself in a recumbent and quiet state, making use of cold applications, *viz.* cloths dipped in vinegar and water, as recommended above. In extreme cases, the astringent injections, *No.* ~~132,~~ may be requisite; but the use of these will be generally superseded by taking, internally, tincture of roses; the styptic powder, or alum whey*—tincture of catechu—infusion of pomegranate with port wine.—The opiate clyster, *No.* 33, will be frequently of service, or the clyster, *No.* 101; but the most effectual remedy is the saturnine pill, *No.* 116—or tincture of cantharides, given to the length of producing strangury. 58

In the intervals, or between the periods, the patient should make use of the cold bath and tonics, *viz.* the bark, with elixir of vitriol, the bitter wood, with chalybeate wine—chalybeate waters—the steel powder, *No.* 47, 48—and electuary, *No.* 46.

Fluor albus.—This disease, as its name imports, is a discharge of white matter; but it is not always so; it is sometimes either yellow or greenish, and sometimes very acrid, excoriating the neighbouring parts.—When it is colourless and glairy, like the white of an egg, the disease evidently arises from laxity or weakness, and the cure consists in the use of

* Alum whey is made by curdling a pint of milk with a drachm of alum. Of this a quarter of a pint may be taken at a time, three or four times in the day.

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the cold bath*—astringent injection, *No.* 93—and in the use of all the strengthening remedies, *viz.* bark and elixir of vitriol, lime-water, and other absorbents, *No* 21—bitters and chalybeates, *No.* 53—infusion of bark in lime-water, taken with milk—bark electuary, *No.* 83—steel powders, *No.* 84—turpentine pills, *No.* 95—a nourishing gelatinous diet, with red port wine, is proper to females under these circumstances.

2dly, When the discharge is either of a *yellow* or *greenish* colour, the treatment must be different from that above recommended.† The disease must not be immediately stopped by astringents; but emetics and purgatives are to be first occasionally given, with small doses of calomel: Afterwards, bitter infusion, bark, and chalybeates, as above.

The regimen of the patient, under this last species of fluor albus, ought to be abstemious and cooling: Rich and nourishing foods aggravate the disease. The artificial mineral waters, *No.* 63, 64, may be recommended.

Cancer of the uterus.—When the discharge from the vagina is

* In recommending the cold bath, it is necessary to give a caution as to its use; its good effects are not to be sought from dabbling in the water of a river, or from sitting long over a disgustful machine, called a bidet: Affusion of cold water over the loins, whilst sitting in a bathing-tub, will have a much better effect.

† It is often a matter of much difficulty to distinguish between fluor albus and gonorrhœa. Women may, therefore, be as unjustly suspected as unnecessarily alarmed. The one complaint may generally be known from the other, by attention to the following circumstances:—In gonorrhœa, the patient complains of heat of urine, which she has a frequent desire to pass:—In gonorrhœa, the discharge comes on suddenly, not from relaxation, from obstructed menses, and such causes as produce fluor albus, nor is the discharge attended with so much pain and weakness about the loins:—In gonorrhœa, there is seldom a suppression of menses, as in the fluor albus. It is necessary to mention here, that very young females are subject to fluor albus, and that sometimes of a bad kind: When this happens to girls approaching puberty, it may give rise to suspicion, and the most cautious discrimination is therefore requisite to prevent the loss of reputation to innocent virtuous girls.—*See Underwood on Diseases of Children, vol.* II. *page* 104.

is in great quantity, much discoloured, ichorous, acrid, and offensive, and is attended with lancinating or shooting pains in the uterus, &c. it indicates cancer; a most deplorable malady, that hardly admits of palliation.*

The only relief to be had, is to be sought from living on an abstemious and milk diet—from frequent blood-letting—blisters to the perinæum—issues in the thighs—and injections and clysters, with opium.—A paste made of charcoal and honey, is recommended by Garnet.

In the schirrous state of the womb, or the ovaria, or before cancerous ulceration takes place, hemlock, and other narcotics, with mercurial frictions, have been recommended.

Descent or bearing down of the womb, and protrusion of the vagina.—These are effects of fluor albus, or dependant on the same cause, *viz.* weakness or relaxation: They are, therefore, to be removed by all the same means recommended in *page* 265, *viz.* cold bath, tonics, and injections. Where the uterus itself descends, pessaries† are necessary. The patient should keep much on her back, lying with her head low, till such time as the parts have recovered some degree of tone.

Pregnancy, and the diseases attending it.—The signs of pregnancy, such as a stoppage of the menses,‡ enlargement of the breasts, and protuberance of the belly, are very equivocal or

 uncertain,

* Baillie says, that what is called cancer of the womb is not real cancer, but it is confessedly an ulcer of a most malignant nature.—*See Morbid Anat.*

† These are of various forms and materials, but the cork-ring is found preferable to any other.

‡ This is the first, but very uncertain sign of conception; as menstruation may be stopped by other causes: Sometimes also the menses continue to make their appearance for a few turns after pregnancy; but, in these cases, the discharge is probably from the vagina only, not from the uterus.

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uncertain, as they depend frequently on other causes. A woman can have no certain proof of being with child before the fourth month, when the child quickens; and even then she may be mistaken.—Women that have already borne children are sometimes mistaken; and practitioners, who feel a tenderness for the parties concerned, will not be rash in deciding contrary to their opinion and wishes: She should, therefore, be very cautious how she indulges hopes that may create disappointment to herself and others; but, whenever she has any cause to think herself pregnant, she ought to conduct herself as though that were actually and certainly the case.

Women, when with child, ought to be careful in dancing, riding, in getting out of carriages, in lifting up any heavy body, pulling out drawers, &c.; but, whilst they avoid any acts of exertion, they are not to lead a sedentary life, but take exercise, which is greatly conducive towards preventing the usual complaints attendant on the pregnant state.

Miscarriage most commonly happens in the early months of pregnancy; and those who, either through constitutional or only accidental causes, have miscarried once or oftener, are ever afterwards subject to it, at the same period of gestation. There are some women who never go their full time, but miscarry at one particular period, the cause of which may not in all persons be the same, but in many cases it may be owing to a resistance in the uterus, to further growth or extension—so that always, when the ovum attains a certain size, contractions of the uterus are brought on *(see Lond. Pr. of Midwifery)*. Women, therefore, in this predicament, must be very attentive to themselves. If the disposition to it proceeds from laxity or irritability, every means ought to be employed for bracing the solids, *viz.* gentle exercise, and the use of tonics and astringents, such as an infusion of bark, with elixir of vitriol, &c.;

&c.; but miscarriage is frequently the consequence of plethora and fulness, and may be prevented by bleeding, an abstemious regimen, and gentle laxatives, as magnesia or sulphur: The bleeding should be performed just before that period of pregnancy in which former miscarriages have happened: When symptoms of miscarriage have made their appearance, that is, when flooding comes on, the several means recommended, *page* 264, in an overflow of the menses, or hæmorrhagy of the uterus, are to be immediately had recourse to.

Miscarriages before the fifth month are seldom attended with any bad consequences; but, after that period, the presence of a midwife is always necessary. Although abortion has actually happened, the patient may still possibly be with child, as she might be pregnant with twins.*

Complaints of pregnancy.—These are most commonly acidity at stomach, or heart-burn—sickness and vomiting—costiveness and hæmorrhoids—hysteric and fainting fits.—Most, if not all these, will be, in a great measure, prevented, or much mitigated, by an abstemious and active life; by bleeding at a proper period; by keeping the bowels open; by the use of magnesia, sulphur, or castor-oil, occasionally.

Of parturition, or child-birth.—It does not come within the plan of this work, to treat of the practice of midwifery; but it is necessary to give a few cautions and directions, respecting lying-in women.

Happily for females in warm climates, they seldom stand in need of much mechanical assistance in delivery; they are more liable to suffer from the officious intermedding of uninstructed persons,

* A lady, who miscarried at the fourth month, was delivered of another child at the full time.

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persons, than from want of manual help; but, although their labours are generally easy, they are not always exempt from the dangers incident to lying-in women, in other parts of the world. The most dangerous circumstance attending delivery is the occurrence of convulsions, either in the commencement or during the labour-pains. The treatment requires great judgment—bleeding is required in some instances; in others large doses of opium.—Blisters, cataplasms to the feet, &c.

Sometimes, however, the necessity of this may be previously pointed out, by visible mal-conformation, or by circumstances attending former deliveries. In these cases, no prudent woman will trust to any accidental help, but will previously engage the attendance of those whose abilities are to be relied on.—The necessity of the cæsarean operation, so terrible and so fatal, except in a very few instances,* is superseded, by forcibly bringing on miscarriage or delivery, some time previous to the natural period of parturition, or before the child acquires its full growth. The proper period for accomplishing this must be determined by the ascertained distance between the pubes and sacrum.

It is of consequence, to distinguish between spurious and true pains, as much mischief is done by hurrying on labour prematurely; the strength of the patient may be exhausted, before the real labour comes on. Even when the pains are of the true kind, they ought not at first to be too much encouraged; the patient should have a clyster administered; after which, she should keep herself as quiet as possible. Sometimes

* There are two extraordinary histories on record, of two negro women who performed this operation on themselves, and successfully (*see Mosley on Trop. Dis.*—*Larty, Med. Comm.*) An instance occurred, not long since, in St. Thomas in the Vale, of a negro woman being delivered of a nearly full grown extra-uterine fœtus by the anus. The woman did well.

times an anodyne draught may be advisable; but all cordial drinks are to be abstained from, during ordinary labour, especially in the beginning; they may, however, in lingering and tedious cases, when the strength of the patient fails, become necessary. When labours are too long retarded, from the want of strength, from the wrong position of the child, or from deformity, &c. of the mother, the assistance of the accoucheur, or midwife, is to be timeously called in.

Midwives are frequently in too great haste to separate the child from the mother. The navel-string ought never to be cut, till the child shews signs of respiration and life, by crying.

The delivery of the after-birth is the work of nature;* and, in ordinary cases, requires but little assistance; but, in cases where, from morbid adhesion, spasms of the uterus, &c. it is too long retained, as likewise in cases of violent flooding, endangering the patient's life, manual assistance is necessary.—It is a practice, in this case, to lift up the already fainting woman, and, when in an erect position, to shake her body. It may seem an unwarrantable conduct, but it is certainly successful in many instances: Whether it may not in others prove fatal, let those of more experience say.

The diseases of child-bed women are, floodings, after-pains, obstructed lochia, inflammation of the uterus, swellings of the external parts, suppression of urine, inflammations of the breasts, fevers, &c.—To treat of these particularly would require more space than can be here allotted to them. Recourse must be had, in such cases, to the experienced accoucheur and physician.

* See the celebrated opinions of the best writers on midwifery, respecting the delivery of the placenta, in the Med. and Phys. Jou. vol. III. The prevailing opinion is, that the placenta should not be allowed to remain more than two hours.—*See Lond. Pr. of Midwifery.*

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cian. Observations on the general management of lying-in women, and the prevention of some particular accidents, will here only be offered.

After delivery, an anodyne, to compose the patient, and to procure rest, is, for the most part, advisable: The belly should be swathed moderately tight, and the patient kept quiet, and fed with the lightest aliments; except in cases of great weakness, after tedious labour and floodings, when wine and cordials will be proper.—After-pains relieved by taking every two or three hours a table spoonful of almond oil.—*Hufeland.*

In cases of *flooding*, when the patient's life may be in danger, before assistance can be called, the means recommended, *page* 265, must be resorted to.—During flooding, no cordials should be administered to prevent fainting, for, on fainting, the hæmorrhagy ceases; and, to occasion this, it is, by some, advised to put the patient into an erect position.

If violent throbbing pains in the region of the uterus, with strong pulse, and a cessation of the flow of the lochia, indicate *inflammation of the womb*, the patient should be bled; should have fomentations and poultices to the abdomen, and emollient clysters frequently repeated.

Few of the diseases and accidents to which lying-in women, in colder regions, are subject to, occur here, or occur but seldom. The milk fever, the miliary fever, the puerperal fever; the last of which, in particular, is so fatal, are almost unknown, and therefore may be passed over here.—Some observations on the suckling of children will conclude this subject.

The ordination of nature is apparent, and nothing should be insinuated in opposition to what has been so frequently, and

so

so strenuously, inculcated, *viz.* that mothers should themselves nurse and suckle their children; but, sacred as this duty is, there are oftentimes reasons for dispensing with it; in warm climates particularly; where the weakly state of white women very generally unfits them for this office, the source of such exquisite pleasure to every woman, not lost to maternal feeling. CHAP. XI.

The milk of the human breast is the only suitable nourishment for infants; there is no substitute for it; every other kind of milk, or aliment is not only insufficient to due nourishment, but is liable to cause gripes, convulsions, *&c.* Whenever, therefore, the mother is, by debility or an unhealthy state, incapable of nursing herself, she must submit to the necessity of employing a nurse, which, in the West-Indies, must generally be a negro woman, as it is seldom that any other can be procured.

In choosing a nurse, it is needless to say, that she ought to be young and healthy, and that her child likewise (if she has one) should appear healthy; but these are points sometimes difficult to ascertain, and will require the exercise of professional skill: Infinite distress may be occasioned by the want of due attention in this matter.

A negro woman, employed as a wet nurse, is to use nearly the same kind of food as she had been formerly accustomed to; or at least she is not to be fed with much animal food, which will occasion complaints, both to herself and to the child. The breakings out on children, are frequently owing to this cause: that is to their grossness, from an excess of rich nourishment.

If a woman, previous to her lying-in, has, from unavoidable motives, determined on not suckling her child, means should be taken to prevent, as much as possible, a flow of milk to the

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breasts: For this purpose, they are to be frequently, before and subsequent to delivery, washed with spirits, or strong lavender water; and the patient is to abstain, as much as possible, from liquids. If, notwithstanding, the breasts should be very much distended and painful, they must be drawn either by glasses, or by suction.* They should be suspended by an handkerchief, or an appropriate bandage.

Where suppuration threatens, saturnine poultices, *No.* 101; or emollient poultices, of bread and milk, are to be applied.

In case of abscess forming, the lancet is as necessary here as in other cases; though it has, by some, been prohibited. A timely discharge of matter, from a depending orifice, will prevent much subsequent evil.

Sore Nipples.—To prevent these, the nipples should, for some time previous to delivery, be washed with brandy, or a solution of alum. To ease them, they may be sprinkled with starch, or powdered gum arabic—or washed with a solution of sugar of lead, and with laudanum. When they are so bad, as to prevent the application of the child to the breast, they may be dressed with spermaceti or simple ointment, which are made by melting together white wax, with spermaceti or olive oil.

On the diseases and management of children.—It is melancholy to reflect what a great proportion of the human species are carried off in early infancy, almost as soon as they come into existence: This mortality not happening to the young of other animals, shews that it is not owing to natural causes, and may therefore, by proper attention, be at least in a certain degree prevented. The constitutions of children are to be hardened, but

* The suction of young puppies, which are frequently destined to this office, is, for the most part, found easier than any other.

but not beyond a certain extent. Too great a degree of strength, or robustness, lessens the susceptibility to excitement: Between the one and the other there is required a certain balance to constitute the utmost perfection of health. CHAP. XI.

A warm climate is favourable to infant life, except in its tendency to occasion locked-jaw; and there are, therefore, few deaths among young children, but from this disease, which rarely attacks any but those of negroes.

Still-born children.—A caution was before given, not to divide the navel-string before the child shewed signs of life; but if these do not appear in proper time, and especially if the after-birth is come away, means ought to be employed for exciting the action of the heart; the child should be placed in warm water, whilst the lungs are frequently expanded, by blowing into them: These means, with frictions and warm applications to the *bregma*, or crown of the head, are to be continued for some time, where they do not immediately succeed. Many children die immediately after birth, from the trachæa being filled with a liquor, (*viz.* the liquor of the amnios) to expel which nothing more is necessary than placing the child in a favourable situation for its discharge.

The officiousness of old midwives is every where the same: Here, as in Europe, the child is no sooner born, than it is crammed with some unnecessary and pernicious matters, for *carrying off the meconium.* The thing most proper for this is, either manna, or castor-oil, in a little thin gruel, with which the child may be occasionally fed, till the mother's milk comes down, which is the purgative of nature.

The mode of *dressing the navel* has been considered as of very great importance in preventing locked-jaw: How far foment-

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ing the navel daily, with a decoction of bark and laudanum, and dressing afterwards with spirits of turpentine, may conduce to this purpose is not ascertained; the practice is certainly not always successful, but is doubtless proper.

The negro usage, of tying up the cut navel-string with burnt rag, and never examining it for nine days, is attended sometimes with bad consequences. In sundry instances a sphacelus of the ring happens from this neglect.

Washing the child.—The pains that are ordinarily taken in washing the child, and clearing the skin from the mucous incrustations, is not only superfluous, but is sometimes hurtful; and the rubbing it with spirits still more so. Gentle washing, in warm water, with a little soap, is at first sufficient, and the skin should be afterwards quickly defended against the stimulus of either cold or hot air, or any other irritation: Although unnecessary scrubbing of the new-born infant is improper, daily washing is advised, for the purpose of cleanliness.

Most of the ridiculous customs which obtain in Europe, of swathing and bandaging up infants, *&c.* are happily laid aside here, and call for no animadversion.

The *red gum*, an eruption of pimples like measles, which sometimes appear a few days after birth, is hardly to be considered as a disease, being attended with no uneasiness, nor followed by any bad consequence, except from repulsion, or where the eruption suddenly goes in; in this case the child is to be put into the warm bath.

The *yellow gum* is a jaundice to which young infants are liable, from retention of the meconium, or when the bowels are not properly opened after birth.

The

The cure is effected by giving the child, now and then, a tea-spoonful or two of a weak solution of tartar emetic* (half a grain to four ounces of water), sweetened with manna, till it operates by stool or vomiting, and, afterwards, giving castor-oil in gruel. If convulsions happen, put the child in warm water, and give half a drop of laudanum.†

The *sore eyes* of young children are occasioned by exposing them prematurely to the light. They should not be allowed to look at a window or a candle; this, therefore, is easily prevented or removed; but there is another species of ophthalmia, affecting more particularly the edges of the eye-lids, from which there is a purulent discharge. In this case, the eyes are to be frequently bathed with milk and water, and ointments made use of. *See Psorophthalmia, page* 251, 252.

Of the trismus, or locked-jaw and jaw-fall of infants.—The locked-jaw and jaw-fall,‡ though contradictory terms, signify, in general, one and the same complaint; *viz.* a fixed spasm of the muscles of the jaws, as in tetanus, *see page* 197.

It is a disease that carries off great numbers of negro children, within the ninth day from their birth,§ and has been attributed to

* In the place of tartar emetic, which should be cautiously used with children, an infusion of ipecacuanha, or a grain or two of the powder, may be given, as directed further on.

† The best way is, to put one or two full drops into a little water, and then to give a fourth part, or half part, of this quantity.—The dose of laudanum for children under six weeks of age, should not be more than a single drop.

‡ Though the terms jaw-fall and locked-jaw are used synonimously, the jaw-fall proper signifies that state of the disease, where the mouth either remains open and spasmodically fixed, or else where the chin falls down on the sternum, from a supervening paralysis.

§ This disease is not wholly unknown in Europe. In Spain, Minorca, and some other countries on the Mediterranean, it is frequent. *Hic morbus dudum obstetricibus fere cognitus, ut in Occitaniâ, Helvetiâ, Minoreâ, &c. et Medicis hactenus fere ignotus apud*

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to various causes; to the meconium not being purged off; to the improper treatment of the navel-string; to cold; to smoke, &c. &c.; but no attention that can be paid to any of these circumstances has been found sufficient to prevent the disease. It appears, therefore, from the inefficiency of any of the usual precautions, and from the disease occuring only within the ninth day,* that how much soever any of the supposed causes may conduce to the bringing on of the disease, that it more immediately depends on a certain state and condition peculiar to infants, within that period. What that state arises from, physicians are not agreed; but, as tetanus in adults is more frequently occasioned by wounds in tendinous parts, than by any other causes, and as the tendinous ring of the abdomen, is, by the cutting of the navel-string, put into the state of any other tendinous wound or inflammation, it seems most probable to me, that the locked-jaw of infants is more immediately the consequence of this, than of any other circumstance. This opinion is confirmed by the superior good effects of laudanum, and turpentine dressings.

Tetanus is known to be the effect of other causes, besides wounds; it is particularly occasioned by obstructed perspiration; and it is, therefore, not at all improbable, that the alternations of heat and cold to which negro children are liable, in confined smoky huts, with broken walls, and in damp situations, may frequently conspire in bringing on the complaint, which

apud recens natos à die ortus ad duodecimun est frequentissimus, et ita funestus atq. incurabilis censetur à mulieribus, ut ne medicos unquam accersant.—Sauvages, Nos. —Clegh. Dis. of Min.—Heisteri Medic. Compend.

Dr. *Moseley*, however, is of opinion, that the trismus of these countries is more a convulsive disorder than a truly tetanic one.

The disease prevalent among children in the Paris hospitals, called skin-bound, *l'endurcissment du tissu cellulaire des enfans nouveaux nès*, seems to be a tetanic affection. —*See Underwood, Vol. I.*

* In Europe it is said to occur till the twelfth day is passed; but it never happens here after the ninth.

which is much more prevalent on some estates, and in some neighbourhoods, than others.* It has happened that, on one estate, they have lost almost all their children, whilst on another, contiguous to it, they lost hardly any. No reason can be assigned for this, but the bleak and damp situation of the negro-houses; for the treatment of children was the same.

The conclusion to be drawn from the foregoing remarks, is this: That as the disease may be variously brought on, it will not be prevented by attention to the navel alone, or to any single circumstance; but by a strict attention to several circumstances collectively, it may be rendered much less frequent. This is confirmed by fact and experience. The delivering women, in a lying-in hospital, as it is now customary on most large estates, where cleanliness is observed, where fires are prevented, where the navel is duly attended to, &c. has proved the means, if not of wholly preventing the mortality, which formerly prevailed among negro children by this disease, yet of greatly curtailing it:† Upon some estates they never lose any.

The practice in several of the lying-in houses for negro women, and which is the most effectual for the prevention of locked-jaw, is to apply to the end of the cut navel-string soft lint dipped in spirits of turpentine; to foment daily with decoction of bark, to which may be added a few drops of laudanum, or tincture of myrrh; and then to apply lint, moistened with oil and spirits of turpentine.—At the same time, one small drop of laudanum is to be given to the child every night till the ninth

* The disease of this kind, before mentioned in the note, *page* 278, is only known in hospitals, and is therefore considered as arising from foul air. The seven-day's affection of the infants of South-America is probably also a disease of this kind.

† If the authority of M. Dazille, quoted by Dr. Moseley, is to be relied on, the mortality caused by the locked-jaw, in the French colonies, must have been great indeed; much greater than ever known among us.—*See Trop. Dis. page* 517.

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ninth day, and the bowels kept duly open by castor-oil, if necessary, as directed in *page* 277.

When the symptoms of locked-jaw are come on, there is little hope of recovery, in infants, from any mode of treatment we are as yet acquainted with; but there are now and then instances of it; two or three children were recovered by the application of blisters to the under jaw.

Few of the means recommended in tetanus can be employed with the same chance of success here, as in adults.—Laudanum, in doses of two or three drops, frequently repeated by the mouth, as soon as the symptoms first shew themselves, and whilst any liquid can be got into the mouth; afterwards, in large doses, by clysters. Nourishment must also be administered by clyster, and by putting the child into a warm milk bath. Rubbing laudanum and oil of amber on the spine, and on the jaw; applying a blister to the neck or under the throat, from jaw to jaw; taking electric sparks, *&c.* are the several means more particularly suited to the case of children.

The affusion of cold water may be also tried,* but how far mercurial frictions are advisable, is not agreed on.

The *thrush*—(aphthæ) consists of small whitish pustules, or ulcerous specks, about the tongue, the inside of the lips and cheeks, of infants. These are, for the most part, easily cured, by touching them with borax and honey, or with a solution of white vitriol;† but when the disease is of a malignant kind, that

* *Les Indiens ne perdent jamais aucun enfant du mal de machoire, parcequ' ils leur oignent le corps pendant les neuf premiers jours de leur naissance, avec un substance grasse et huileuse, qui les met à l'abris des impressions de l'air. Dans le meme vues, des qu' ils ont fait la section de l'ombilic, ils appliquent sur les vaisseaux coupès, un emplâtre agglutinatif.—Observations par M. Dazille.*

† The proportion of borax, or alum, to the honey, should be about one eighth or tenth

is, when the pustules are of a bad colour, and cover the whole mouth and fauces,* and if the child has, at the same time, fever, gripes, and looseness, it is very dangerous. In this case, the treatment must be nearly the same as in putrid sore-throat. Some chronical species of aphthæ are cured by tobacco ashes.

Gripes and other bowel complaints.—The gripings and cholic pains of young infants arise, generally, from acidity, as is evident from the smell and green appearance of the stools.† Magnesia, and the testaceous powders, called crab's eyes, in suitable doses, are the proper remedies; but they should be generally mixed with rhubarb, to prevent costiveness, and given in aniseed or carraway seed tea, or beef tea. Sometimes a drop of laudanum‡ may be necessary. When the stomach and bowels of children are loaded with slime, a little infusion of ipecacuanha, as below,§ will be proper to vomit, and then a purgative of rhubarb and magnesia.‖

The *vomitings* of children are caused, either by the bad quality of the nurse's milk, or by a weakness of stomach in the child;

tenth part. The parts are to be frequently touched, not forcibly rubbed, with this mixture, by means of a soft piece of rag, mounted on the end of the finger, or on a stick.

* The disease is sometimes propagated along the œsophagus to the stomach, and through the whole intestinal canal. Though several of the order of exanthemata are contagious, this disease is not mentioned as being so. It is generally a local affection, caused by an ichorous matter poured out in suction from the glands or papillæ, or the nipple of the mother. For that species of the disease called *water canker*, see Dr. Hamilton, of Lynn.

† Dr. Clark considers the diseases of children as arising more frequently from bile than from acidity; and, instead of giving absorbents, he prescribes calomel, of which children will take considerable doses. He particularly orders it in the diarrhœa of children; which practice is confirmed by Dr. Millar.—*See Med. Repos. vol. I.*

‡ The dose of laudanum, for infants under six weeks, is only half a drop, from a small phial, and not more than one drop afterwards, till the child is six months old. I have known three drops prove nearly fatal to a child a month old.

§ Take ipecacuanha half a drachm; infuse in two ounces of boiling water: Dose of the clear liquor, a tea spoonful or two, every quarter of an hour, till it operates.

‖ Magnesia two parts; rhubarb one part; mix: Dose, from five to ten grains.

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child; in the latter case, the child may be made to take, occasionally, a tea-spoonful or two of the infusion of columbo-root or bitter quassia.

Looseness.—The loose stools of children, especially if they are slimy, green, and curdled, are not to be suddenly stopped. In this case, small doses of rhubarb and magnesia are to be first given, and afterwards the chalk mixture, *No.* 29. If the looseness puts on a dysenteric appearance; that is, if the stools are frequent, white, slimy, and offensive, the infusion of ipecacuanha, as above, may be given, to vomit; afterwards continued in smaller doses; and a drop of laudanum occasionally added; or two or three or more drops of antimonial wine may be given, from time to time. When the stools become natural, the astringents, *No.* 30, 31, 32, may be given, in doses suited to the age of the child. The starch and astringent clysters, *No.* 33, are also to be used.

Costiveness.—The costiveness of children at the breast, may depend on the diet of the nurse, and is to be removed by a suitable alteration in it. The proper remedy for it, in the child, is castor-oil, not magnesia and rhubarb, which are commonly given.

Eruptions, discharges, and excoriations.—These are most frequently caused by a want of due cleanliness, or by grossness from too high living, on the part of the nurse.

In speaking of cleanliness, it is requisite to make some remarks on the subject of washing young children. The cold bath being considered as a means of strengthening, the use of cold water with children has been recommended for this purpose. How far it may be prōper, under some circumstances, is not the question, but the practice of washing young infants, indiscriminately, in cold water, is highly reprehensible. Daily

lavation

lavation is essential to the purposes of cleanliness, and highly conducive to the pleasure and the health of children, but the water used ought to be, more especially in the first weeks, nearly of the temperature or warmth of the human body; rather colder than hotter. Where there are reasons for using the cold bath, the water can be made colder each time; but, when water is employed in this way, the child, after being once or twice dipped, should be immediately dried and rubbed. CHAP. XI.

The *eruptions* of children, of whatever kind they may be, rashes, milk blotches, &c. &c. are never to be dried up or cured, except by means of sulphur applications, *viz.* baths made by dissolving sulphurated kali in warm water, whilst the nurse likewise takes sulphur internally. In the crusta lactea or scabbed head, the dry scabs may be softened with cream or almond oil, or expressed oil of mace. A small blister may be applied and kept running. To prevent the scabs, when moist and running, from sticking to the cap, a little flower of sulphur may be sprinkled on the part, but plantain-sucker, interposed, is, perhaps, still safer.

If any rash, or eruption, going suddenly in, has brought on other symptoms, put the child in a warm bath, and give a few drops of antimonial wine, or else an emetic of ipecacuanha infusion, *(page* 281.*)*

A *running behind the ears* is not to be dried up, or checked, except when excessive, and when the sores extend themselves, and put on a bad appearance: In this case, the child is to be first purged, and a blister is to be applied to the neck; then the sores are to be daily dressed with white precipitate ointment. A little sulphur should be likewise given to the nurse, or child. Where any bad consequences have followed the drying up the discharge behind the ears, a little of the powder

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of cantharides may be sprinkled on the part, or some threads besmeared with blistering ointment applied.

Convulsive fits are brought on, sometimes by acidity of the stomach, flatulency, and gripings of the bowels; they may be occasioned by pins running into some part of the body,* and are sometimes the consequence of repelled eruptions, or drying up of the discharge from behind the ears; but the most frequent causes are, worms and teething, when that period is arrived. Previous to this, however, children are liable to fits, not only from the causes above stated, but from others not easily ascertained. What are called *inward fits*, are nothing more than symptoms of uneasiness or oppression, from over-feeding, wind, or costiveness.

In cases of real convulsion, the child should be stripped. If costive, give, as soon as possible, a clyster of castor-oil and asafœtida milk; if too loose, give a clyster of thin starch, with two or three drops of laudanum: Put the child up to the neck in milk warm water: After this, if it does not come to, the breast, abdomen, and back-bone, may be rubbed with warm spirits—mustard plasters put to the feet—blisters to the inside of the thighs. The child may be provoked to cry, by slapping it on the buttocks, or to sneeze, by stimulating things applied to the nostrils. Should all these means fail, and the child appears to be dead, it may yet perhaps be recovered, by blowing strongly through any tube, as a quill (if a catheter be not at hand) into one nostril, the other nostril and mouth being closed. This must be repeated, at intervals, several times. Instead of the warm bath, the cold bath, or the repeated affusion of cold water over the naked body, is now more generally used, and

* A young infant, that died of convulsions, was found, after death, to have a pin sticking in the opening of the head (the bregma). Pins should, therefore, never be used in any part of the dress of children, particularly in the head dress.

and found much more successful in stopping the convulsions and restoring the patient. The same practice is to be followed in convulsions, from whatever cause they proceed. CHAP. XI.

Teething.—The period for cutting teeth commences about the fifth month, and is distinguished by irritability, and a disposition to inflammation. The latter is to be obviated by keeping the bowels constantly in an open state, and promoting the discharge. When, from irritation, the child is thrown into fits, or convulsions, the gums should be lanced or scarified, to give way to the protruding tooth. This should be done by a sharp instrument, not by a piece of coin, as has been recommended. Laudanum and hartshorn, in a dose suited to the age, affords, in the last case, great relief.

To the foregoing observations on the several diseases to which children in early infancy are chiefly liable, some directions respecting the weaning and feeding of children will be here added.

The only proper aliment for young infants is, as was before noticed, the milk of the female breast; and this should constitute, for some time, its sole nourishment; but, as the mother or nurse may not have a sufficiency of milk, and as the child, at a certain period, is to be weaned, it should be previously used to other food. Besides, there is, on some occasions, an absolute necessity for rearing children without the breast. It is therefore a question of much importance—What kind of nourishment is best to substitute for the human milk, or to mix with it?—The extreme mortality of the children in the foundling hospital, was found to be owing to their diet, or the bread pap with which they were fed:—Where the milk of the breast is wanting, that of other animals should be used; cow's milk in particular; that of goats is generally too rich and griping, unless diluted; to milk, by itself or diluted, may be added Indian

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dian arrow root starch, tapioca, cassada, rice flour, or pounded white biscuit—or bread, when new and well baked; but any of the foregoing articles are to be preferred to bread; which is frequently sour from age, or an excess of leaven.

Where acidity prevails, it is advisable to mingle a little broth, or animal jelly. Children in the West-Indies, who have healthy nurses, thrive, for the most part, wonderfully well at the breast; but, notwithstanding this, if we follow nature, they should be weaned by degrees, as soon as dentition or teething commences: There is no necessity for fixing any strict limits to the period of nursing, or suckling; it may be protracted longer, in cases where children are sickly or weakly, unless it should appear that they are so from the want of due nourishment. The method of feeding children from a vessel with a spout is preferable to that by the spoon or pap-boat.*

Worms constitute one of the chief evils to which children are incident; they are the cause of complicated and dangerous symptoms; *viz.* cholic pains, fevers, convulsions, *&c.*†

The signs by which their existence in the bowels is most certainly known (when they are not passed by stool‡) are itching and rubbing of the nose, swelling of the upper lip, grinding of the teeth, starting in sleep, voracious appetite, particularly

* Dr. H. Smith contrived a vessel, something like a tea-pot, with a round nob on the end of the spout, perforated with several holes, to resemble the nipple.

† The worms found in the human intestines are of several kinds: 1. *Ascaris*, of which there are two species, the lumbricoid and vermicular:—2. *Trichuris*, thread-like worm, *vera quene*:—3. *Tænia*; which is of two kinds; *viz.* 1. the *solium* or *cucurbitina*, or gourd worm:—4. The lata or tape-worm:—The last is sometimes of a most extraordinary length, not less than twenty feet:—One patient has discharged fifteen thousand joints; but if the head comes away, no more joints are formed;—The tænia is not immediately killed by boiling water.—*See Amœnit. Academ. Mem. Med Soc. vol. V.* 1799.

‡ They are not only passed by stool, but frequently make their way through the mouth and nostrils: They have been also known to perforate the intestines, and escape by the navel.

larly if at the same time the child falls off, and has a swelled belly, with a constant though slight fever. CHAP. XI.

Those children are most liable to worms who live on crude viscid aliments: A suitable mixture of light animal food, along with vegetables, is therefore proper for children of every age, after they leave the breast. Wine and spirits may also prevent that state of the bowels favourable to the generation of worms; but ought seldom or never to be given, at least not habitually, as they may cause symptoms fully as dangerous as those from worms. The practice on some estates, of giving all the young children, every month, a dose or two of some worm medicine (as cowitch* or cabbage bark), and then a dose of physic, is a very proper one, and the example should be followed in families. By these means, the consequences that so often follow from this cause, would be almost certainly prevented.† All that need be added here, is a list of such vermifuges as are generally to be preferred, with directions for the best mode of administering them. The country remedies, *viz.* cowitch, cabbage bark, contrayerva, worm-grass, *&c.* are by far the most efficacious

* "Cowitch acts mechanically by its spiculæ penetrating the worms. Chopped hair will answer the same purpose. Even brick-dust, it is said, will succeed. Happening at this time to be reading the excellent and popular work of Collingwood and Woolams, which, in my opinion, is far superior to Buchan's Domestic Medicine, it occurred to me, that I would make trial of brick-dust, which is a remedy strongly recommended by them, upon several occasions. I accordingly exhibited half a drachm, in a spoonful of pap, made sufficiently thick to keep it suspended. In two hours afterwards the child had a copious evacuation, which seemed to produce considerable relief. Another dose was then given, and, in four hours, ten worms were discharged. Upon repeating the remedy, ten more came away after the same period; and in the course of twenty-four hours every unpleasant symptom had vanished, and there was a complete *solution* of the disease. What confirms my faith in the virtues of this remedy, as an anthelminthic is, that the child had taken a dose of calomel the preceding night without effect; and a similar dose had been repeated early in the morning. During the exhibition of the brick-dust, I was careful to keep the bowels open by a spoonful of castor-oil occasionally."—*Med. Repos.*

† Children who are subject to worms may take, now and then, a spoonful of the infusion of rhubarb and bark, in Port-wine.

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efficacious and safe for general use, being suited to patients of every age *(see Appendix, country remedies)*; but there are others that may be advantageously employed along with them, or better suited to particular cases; such as calomel; powder of tin; chalybeates: The rust of steel, in particular, which is easily administered to children, in syrup of ginger or thick sago, is one of the best anthelminthics. *See other anthelminthics in Appendix.*

There are certain remedies more appropriate for one kind of worms than another: For bringing away *ascarides*, the small white thread-like worms, that exist principally in the rectum, exciting violent itching about the anus,—clysters of salt and water, of lime water, of the smoke of tobacco, of asafœtida, of aloes, or Harrowgate water, are all very effectual: The patient should, at the same time, take the Harrowgate water, *No.* 64, internally, or chalybeate water, *No.* 53—or flowers of sulphur —he may also eat garlic.

The tœnia, or tape-worm, is, of all others, the most difficult to destroy or bring away. The tœnia of a dog lived for some time after immersion in boiling water. This worm has also been found alive in fish after they have been cooked and brought to table.

The powder of *mad. noufer*, prepared of the fern root, appears to owe its efficacy to the drastic purgatives that are subsequently given. The forms suited to the expulsion of the tape-worm are, the amalgam of quicksilver and tin; of which the patient may take one ounce every two hours, till he has swallowed one pound.—*Darwin.*—A decoction of the inner bark of the root of the hoop-tree *(the melia azaderach)* has been employed in the East-Indies and America.—*See country remedies.*

dies.—Hufeland says that a few sweet and bitter almonds, eat together, daily, is an effectual cure for tœnia.* CHAP. XI.

In case of convulsion being brought on, or threatened, it may be proper to give a vomit, or a large dose of calomel or castor-oil, to dislodge the worms from the stomach or bowels. Aloetic or asafœtida clysters, *No.* 72, may at the same time be administered; and the abdomen rubbed with the juice of sempervive,† *(aloes perfol.)* or powdered aloes may be sprinkled on a Burgundy pitch plaster, and applied to the abdomen. Tobacco leaves bruised, and moistened with vinegar, may be applied as a cataplasm to the stomach and abdomen.

CHAPTER XII.

ON THE COMPLAINTS REQUIRING CHIRURGICAL ASSISTANCE.

THE title of this chapter will not, it is hoped, lead any one to expect here a treatise on surgery. If it was judged necessary to be concise on subjects falling more immediately within the province of medicine, it must be much more so on those belonging to surgery; because a more particular knowledge of anatomy is required to the understanding of them, than CHAP. XII.

* A tœnia, twenty yards long, was expelled by a shock of electricity sent through the bowels during the operation of a cathartic.—*See Med. and Phys. Jour. vol. I. page* 277.—A pint of the decoction of American fern leaves being drank for some days, and then a dose of castor-oil, produced the expulsion of four hundred and eighty-six joints, measuring forty-five feet.—*See Med. Repos. vol. VI.*—Two drachms of the powder of fern root given, produced the expulsion of a tape-worm in the space of twenty minutes. Fowler's arsenical solution is also a cure for tœnia.

† Powdered aloes, and bullock's gall, may be used in the same way.

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than what it can be supposed the greater part of those, for whose use these pages are intended, are possessed of. There are, however, certain parts of surgery, not very difficult either to comprehend or perform, and which it is of great importance for every one, whether of the profession or not, to know. A requisite degree of skill in these particulars will qualify a person to be useful on many emergencies. On some occasions his own life, or that of his friend, may depend on it.—Amongst other things more particularly necessary to be understood, are the operation of bleeding, which even women might learn—the manner of reducing certain dislocations, attended with the danger of palsy or immediate death—the way of stopping hæmorrhagies from wounds, where any of the larger arteries are divided, &c. It is, therefore, recommended to persons, in every situation of life, to get themselves early and practically instructed in these, and a few other particulars; which they may be, very easily and fully, (without the necessity of attending a course of anatomical lectures,) in the space of a few hours.*

These remarks, on the necessity there is for people paying some attention to surgery, being premised, a few such observations as are of more particular moment, may be made on the several maladies of the human body, requiring chirurgical treatment.

OF INFLAMMATION, ABSCESS, GANGRENE, &c.

Phlegmons, and inflammations,† arise from different causes, in

* Popular lectures in anatomy, chemistry, &c. on the plan recommended by the bold, ingenious, and useful innovator, Dr. Beddoes, would be highly useful in every large community.

† Inflammation is of two kinds, *viz.* 1st, Phlegmonic; which is accompanied with tumour and effusion, terminating frequently in suppuration.—2dly. Erysipelatous; of the skin only, attended with great redness, blisters, &c.—*See Erysipelas.*

Inflammation

in every part of the body, in warm climates as well as in cold ones, and are subject to the same terminations; but they are less frequent, and more easy of discussion, excepting the *carbuncle*, which requires the most speedy means for preventing gangrene. The general means for preventing the progress of inflammation, wherever seated, are blood-letting, purgatives, cooling powders, *No.* 8, cooling diluents, abstinence, *&c.* In external tumours, boils, *&c.* cooling embrocations may be also made use of, as crude sal. armoniac, in vinegar and water, *No.* 112.—Warm fomentations, with chamomile flowers, or milk and water; cold poultices with the saturnine solution, *No.* 100, 101.

When, from the increase of the pain, heat, and throbbing of the part, it appears that suppuration is likely to take place, warm fomentations are to be frequently used, and then emollient poultices applied, such as cassada-bread, milk, and oil.

If the maturation comes on slowly, acrid applications, as roasted lily root, *&c.* may be applied, to forward it. When the tumour grows soft, and a fluctuation of matter is felt, it should be, as soon as possible, opened by the lancet, not allowed to break; because it is seldom that a sufficient opening is formed in this way, or one the most favourable for the discharge of matter.

Inflammation produces different effects, according to the seat of it: 1st. In the skin. 2dly. Cellular membrane. 3dly. Diaphan. membranes, as the pleura, peritoneum, *&c.* 4thly. Mucous membranes, as of the nose, *&c.* 5thly. Muscular fibres. 6thly. Tendons and aponeurosis.—*(See Carmich. Smith on Inflammation.)* Of the theory of inflammation and suppuration, it is not necessary to enter into here. It is sufficient to observe, that inflammation cannot be owing to lentor, or on the state of the blood, *&c.* as formerly supposed; but consists in an increased action of the vessels in the part affected. Neither is pus the effect of fermentation in the effused fluids, but a secretion from the mouths of the inflamed vessels, which take on the action of glands. It varies in its nature according to the state of the system, and from blood and coagulable lymph being often mixed with it.—*See Cooper's First Lines.—Ch. Bell's Operations.*

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When the abscess is deep seated under the muscles,* and a fluctuation is evident, it must be either opened by a lancet, or else a seton introduced.—If the patient waits for a discharge superficially, or for its bursting through the skin, he runs great risk of carious bone, hectic fever, &c.

In the *paronychia* or *whitlow*, complete suppuration must not be waited for, as it seldom takes place; and, if the knife is not used in time, not only the nail comes off, but the last joint of the finger is endangered. A whitlow is to be opened, not directly in the middle or side of the finger, but in a line between, by which means both the tendon and vessels are avoided. Whitlows, if the inflammation be not too far advanced, may be discussed, by immersing the finger several times in hot water, or by holding the finger under the stream of the still, whilst rum is drawing off, or by covering it with a wet bladder, kept constantly wetted with alkohol, or æther.

Abscesses, when opened, are to be treated and dressed in the same manner as wounds, which see *page* 296. It may be requisite to give the patient wine, opium, bark, &c. or to confine him to a cooling regimen, according to the state of the discharge, and other circumstances.

The *carbuncle* (anthrax) is a phlegmon or boil, (generally happening in the back and neck, or where the skin is placed over fasciæ or aponeurosis,) that from excess of inflammation† or irritation, never suppurates, at least does not come to an abscess, the matter being confined in the cells of the cellular membrane never points; but a discharge takes place from a number

* As in what is called psoas, or lumbar abscess. See some new remarks on this subject in Abernethy's Surgical Tracts.

† It is called carbuncle from its resemblance to the precious stone, which again is so named, from *carbe, ligno cumbusto*: Fire coal.

number of holes in the livid skin, and mortification follows. This is a species of inflammation attended with the highest danger to the patient's life. After bleeding, calomel and opium are to be given, in considerable doses: Cold water made to drip incessantly on the part is said to succeed.*

If, by these or other means,† that may be employed, the inflammation does not immediately begin to abate, the knife or caustic must be resorted to without delay, or a fatal mortification will ensue.‡

CHRONICAL, &c.

Gangrene or mortification, rarely happens in warm climates, except from wounds or contusions.—Bark, wine, and opium, are requisite for keeping up the powers of life.§—Antiseptic baths and poultices, externally, for checking putrefaction; warm spirits of turpentine, and other stimulating dressings, for promoting the separation of the sphacelated from the sound parts.—If incisions are made, or the knife employed, for removing any of the gangrened mass, caution must be used, not to wound the sound living flesh. Blisters applied to the surrounding parts, have the effect of stopping the progress of the mortification.—*See Dr. Physick Phil. Med. Mus.* Powdered nitre, sprinkled on the sphacelated part, answers the same intention.—*See Canning Med. and Phys. Jou.*

Of erysipelas, the rose, or St. Anthony's fire.—This disease is so universally well known, that it hardly need be described. It is a spreading inflammation, with a deep red or rose colour, which

* See Young, in the Med. Com.

† The digitalis or foxglove, internally and externally, has been lately recommended.

‡ Mortification comes on from carbuncle, sometimes within the space of twenty-four hours.

§ Musk and salt of hartshorn, as recommended by Dr. White.—*See Forms, No.* 71.

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which disappears wherever the part is pressed on by the finger: This circumstance distinguishes it from the former kind of inflammation, called phlegmonic.

In the erysipelatous inflammation, which is *cuticular*, or of the skin only, as in blistering, there is seldom any formation of pus, or purulent matter; but there is a strong tendency to gangrene, as in carbuncle. When it is, by any means, repelled from the face and neck, it is liable to attack the membranes of the brain, and becomes very dangerous. The treatment of this kind of inflammation is, in common, the same as that of the phlegmonic, except in the application of externals.

The patient is to be blooded,* purged, and kept on a cool regimen; he may take the powders, *No.* 7, 8, and drink cream of tartar, or tamarind beverage. If the disease is in the face, or elsewhere in the superior part of the body, the feet may be immersed in warm water, or mustard frictions, or blisters, applied to the legs.

Externally, no warm or liquid applications are to be used; but the part affected may be sprinkled lightly with flour, powdered chalk, or calamine, and thinly covered with wool, flannel, or cotton. This was the old practice, but the affusion of cold water, and the application of cloths, dipped in cold water, as recommended in gout and scarlet fever, is found to succeed better. Repellent applications in erysipelas are not found dangerous, as they were formerly thought to be. A solution of kali

* Bleeding is more especially necessary, when the inflammation is in the face. Some difference of opinion has prevailed, respecting the use of the lancet in this disease; which being sometimes an exanthematous one, and the accompanying fever of the typhoid kind, bleeding will be improper; but, in ordinary cases, venesection cannot be improper, though not always necessary, except in cases where it is seated about the head and neck. The famous Haller, labouring under an erysipelas, lost no less than 8lbs. of blood.—*See Zimmerman on Experience.*

kali in water, and saturnine lotions, have been employed with safety and success.—*See Med. Repos. vol. V.; Med. and Phys. Jou. No.* 69, 70. CHAP. XII.

Where the eruption disappears, and delirium comes on, with other symptoms of the disease being translated to the brain, immediate and copious bleeding is necessary; afterwards blisters to the neck, and sharp purging clysters, are also to be administered.

Should the patient labour under symptoms that mark debility; as a low pulse, dejection of spirits, sighing, *&c.* the treatment in nervous fever, *page* 73, will be requisite;* *viz.* cordials and sudorifics. If the appearance of the parts affected shew a tendency to ulceration and gangrene, warm fomentations, emollient poultices, *&c.* are to be used, and the bark given plentifully. In case of actual mortification, warm dressings, *&c.* as before recommended under that head, *page* 293.

The disease is very liable to return, and should be guarded against by an abstemious regimen, *&c.*

It is seldom dangerous in the legs; but is apt, particularly in old men, to degenerate into chronical ulcers. A particular species of it, called the *shingles (erysip. phlyctinoides)* attacks the middle of the body, in the form of a zone or belt, occasioning numerous small vesications or blisters, which, on breaking, or being opened, form crusts or scabs, that in a few days fall off. No washes or ointments should be used, for repelling this eruption, but the same method pursued as above recommended, in other cases of erysipelas.

Of contusions and sprains.—The inflammation, and other consequences

* See opium, recommended in erysipelas.—*Med. Comm.* 1788.

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sequences from these, may be prevented by the timely application of spirituous or cooling embrocations; such as camphor and strong rum; opodeldoch, or camphor and rum with soap, a little laudanum being added; afterwards, if the symptoms are not removed, by the use of the saturnine lotion, *No.* 100, or by sal. armoniac and vinegar, *No.* 112.

The debility remaining after sprains in the joints, may be removed by the frequent affusion of cold water—by stimulating frictions, and by electricity.

Of wounds.—Wounds are more or less dangerous, not only from their seat, or the parts of the body divided, but from the manner in which they are inflicted, or as they are accompanied with laceration and contusion.

An *incised* wound, or one made in any fleshy part, by a sharp cutting instrument, easily heals, by what is called the first intention, or by the process of nature, if the lips of the wound be properly put together, and confined by bandage, or sticking plaster. Little more is necessary in the treatment of simple wounds, than this adaptation of parts; but where they are large and deep, the needle is sometimes necessary.

Care should be taken to clear the wound, previously, of any extraneous matters, and afterwards to prevent inflammation.

When suppuration takes place in wounded parts, the dressings and treatment must be suited to the nature of the discharge, as in ulcers, which see hereafter.

If wounds are accompanied by profuse and dangerous hæmorrhagy, the bleeding mouths of the vessels must be searched for, and tied; or styptics, as blue vitriol, Turlington's balsam, spirits

spirits of turpentine, &c. made use of. When the wound happens to be in any of the extremities; *i. e.* in the arms, legs, and thighs, the bleeding can be stopped by compressing the artery above the part, by means of the *tourniquet;* in the application of which, every person should be instructed.* A garter or fillet put round the limb loosely, so that a stick may be put under, for twisting it tight, will serve the place of any other tourniquet; but a thick hard compress should be laid over the part where the artery runs, and a piece of paste-board (the cover of an octavo book) placed between the skin and the ligature where it is to be twisted, to prevent injury.

The direction of the artery, both in the arm and in the thigh, is nearly that of the seams in our clothes. In the arm the tourniquet may be applied about the middle. In the thigh high up, or else immediately above the knee, placing the compress in the ham or hollow beneath.

The compression made, must be sufficient to stop the effusion of blood, but not greater, and must be continued no longer than a surgeon can be got to take up the bleeding vessels.

The hæmorrhagy may be sometimes stopped by completely dividing the artery, where it is only partially wounded.—Where the artery lies over a bone, as in the temples, or back of the head, &c. the bleeding may be stopped by simple pressure with the fingers.—When profuse hæmorrhagy follows the drawing of a tooth, the socket is to be plugged with lint, dipped in a strong solution of blue vitriol, or spirits of turpentine.

* Sir Wm. Blizard, surgeon of the London hospital, many years since published a Lecture which he gave to the pupils at the naval academy, instructing them on this subject. It is an useful little work, which ought to be on every plantation in this country.

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Wounds of the head may be accompanied with a concussion of the brain, fracture and depression of the bone,* the symptoms of which are a loss of sense, vomiting, *&c.* or else they are followed by an inflammation of the dura mater (the membrane covering the brain), and a formation of matter which, by pressing on the brain, produce, some time after the accident, the same symptoms as fractures in the beginning. In this case, there is a separation of the scalp from the cranium, over the part where the matter is lodged within, which shews the place for trepanning, by which alone the patient can be saved.

The inflammation, *&c.* of the brain, from wounds and blows, may be prevented by bleeding, purging, and giving afterwards, every night, a large dose of antimonial wine and laudanum; (see draught, *No.* 17,) for some length of time.

Wounds of the thorax are highly dangerous, not only on account of the heart and large blood vessels there situated, but from emphysema, or the escape of air, which sometimes inflates the whole body, in the manner in which butchers blow up veal.† When this happens, incisions must be made with a lancet, for the discharge of air, in the same manner as for the discharge of water in dropsy.

Wounds of the lungs are difficult of healing, from their continual action, in being alternately dilated and compressed, in respiration; if one lung only is wounded, it is recommended to enlarge the orifice of the wound, so as that air may be admitted into the thorax, to make the lung collapse; by which means,

* Mr. Abernethy has shewn, that a slight depression of the bone may happen, without any bad symptoms; where these do not shew themselves, the operation of trepanning is not absolutely necessary.—*See Chirurgical Tracts.*

† Impostors sometimes practice this, for exciting charity.

means, it more readily heals, while the circulation goes on sufficiently well, by means of the other lung.* CHAP. XII.

Wounds of the abdomen are also extremely dangerous, from the internal hæmorrhagy and inflammation that generally follow; which, like those of the lungs, can only be prevented by daily bleedings, to reduce the circulation almost to the lowest ebb, consistent with life. If the wound happens to be large, and the viscera protrude, these must be returned, if not wounded themselves; but, if the protruded intestine is wounded, it must be sewn; that is, one or two, or more, simple stitches, according to the length of the wound, put in, for bringing the sides into contact, and the threads left hanging out of the wound, after the gut is returned. Such accidents, though in the extremest degree dangerous, have not always proved fatal.

In *gun-shot wounds*, the first and principal thing necessary is a free dilatation of the wound, when not in the joints, not merely for the purpose of extracting the ball, or othe extraneous matters, but to allow of a subsequent discharge of matter.† Although the eschar formed by the ball, prevents any hæmorrhagy from immediately taking place, there is great danger of its happening afterwards, when the eschar falls off: This must be guarded against by bleeding, as above recommended, and keeping the patient in the most quiet state possible.

* Great danger has been apprehended from the admission of air into cavities, but on no good grounds, except in cases where the joints are opened.—*(See Abernethy and Bell on Wounds.)* Experiments made on animals have proved, that all wounds penetrating the thorax, so as to admit air, are not certainly or immediately fatal. If the area of the aperture made into the thorax, is less than that of the glottis, respiration will still, in some degree, go on, and life will continue.—*See Hamilton on Emphysema.*

† Later surgeons, however, object to the dilatation of gun-shot wounds, except for the purpose of extracting the ball, fragments of bone, *&c. (see Dr. Jackson)*; or except when the pain is extreme, with strong binding of the inflamed limb, by the inflamed fascia.—*Ch. Bell.*

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The dressings and applications in these wounds ought to be of the emollient kind, till suppuration comes on: Afterwards, stimulants; and, internally, the bark, opium, and wine, may be necessary, as in cases of abscess, ulcers, &c. The regimen, and many other things, proper in any of the foregoing situations, are so obviously dictated by common sense, there can be no occasion to say any thing of them.

Of burns and scalds.—The practice in burns, &c. must be different, according to the degree of the injury.—The effects that are likely to follow burns or scalds, when only slight, may be prevented by the immediate application of strong spirits (alcohol or æther), immersing the parts in hot water (*viz.* about one hundred and fifty degrees). Very cold applications to the part will serve the same end, of preventing vesication. When this has taken place, that is, when the cuticle is separated, the same applications may be employed for taking off the pain and inflammation, if the parts are previously covered with a wet bladder.

The parts affected may be wrapped up in cloths dipped in vinegar and water,* with which they are to be kept constantly wet for some days, till the symptoms are abated, or the danger of inflammation is past. In burns of the worst kind, the best application is linseed-oil and lime-water, mixed together in equal parts, with which the parts are to be frequently besmeared, and then covered.

The dressings proper for burns are, Goulard's water and cerate; the simple ointment made of wax and oil, or spermaceti and oil;† Turner's cerate, &c.

If

* This practice was first recommended, on great experience of its good effects, by a gentleman, (Mr. Cleghorn) at Edinburgh, concerned in a large brewery.—*See Med. Facts and Obs.*

† This is the application which has been long employed at the carron foundery in Scotland, where such accidents must inevitably and frequently happen.

If the ulceration be considerable, or if there be sloughs and mortification, the warm digestives, with spirits of turpentine, tincture of myrrh, &c. as in other ulcers and mortification.

The greatest care is to be taken, by bleeding, purgatives, and a cool regimen, to prevent inflammation and fever coming on, after burns: Antimonial opiates may be given to allay the torture, and bark should be given, wherever there is danger of mortification coming on, as must always be the case, where the injury is of much extent.

A late writer (Dr. Kentish) on the subject of burns, recommends, in the place of cooling and sedative applications, stimulant ones, *viz.* alcohol, spirits of turpentine, as, in all cases, preferable; whilst Dr. Kinglake insists on the superior efficacy of cold water. The same success may attend either practice, under some varying circumstances—as the degree of injury inflicted, &c. where the burn or scald is superficial, affecting the cuticle only; the cold applications will succeed best; but when the skin and subjacent parts are destroyed, the spirits of turpentine ought, perhaps, to be preferred.—*See Med. and Phys. Jou. vol.* 18, *page* 238.

Ulcers.—The treatment of ulcers is a subject of too much importance to be here omitted, but it requires much more room than can consistently be alloted to it in this work. Some gentlemen, of more experience in this branch of practice, will, it is hoped, do it justice, and merit the thanks of the public, and planters in particular, whose interests are so deeply concerned. The number of negroes that are frequently laid up (more especially on certain estates), with ulcers of various descriptions, occasions a great defalcation of labour—the means of preventing these, and a successful method of treatment, are therefore great desiderata. The tendency of every scratch or bruise

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bruise in negroes, to run into a sordid and ill conditioned ulcer, must be the effect of a particular habit of body, and this habit of body must be the effect of diet, which ordinarily consists too much of crude vegetables, without a due mixture of animal food, or in the use of animal food of a bad quality, *viz.* salted herrings and salt-fish, which are not unfrequently in a semi-putrid state: Their taste and inclination lead them to prefer such food, and they therefore sell their own fresh pork and poultry, to buy these execrable articles, *viz.* shads, salt-fish, half rotten salt-pork, *&c.*

Another cause of the frequency of ulcers among negroes is, an inattention in the beginning to any slight wounds, scratches, neglect in taking out chigoes,* *&c.* and their continuing at their usual labour; by which means, inflammation is brought on, ending in a bad sore. There would, in any given time, be a great saving of labour on an estate, if no negro who had got a cut or bruise, *&c.* was allowed to go to his work, or to perform any labour erect, or standing on his legs, till the same was perfectly cured.

The soldiery,† as well as negroes, are very subject to ulcers, and partly from the same causes; *viz.* a diet of too much salted food, but more so from the inordinate use of rum:‡ Independent of these causes, however, *climate* may have a considerable influence, by the relaxation it induces, which is unfavourable to healthy action in the vessels, or to that process which nature

* Amongst young negroes there are more ulcers from neglected chigoes than from any other causes: which, wherever it happens, should be considered as a mark of disgrace to those concerned in the management.

† According to Dr. Hunter, the ulcers in the military hospitals in Jamaica, are in the proportion of one-third at Spanish Town, one-half at Fort Augusta, and two-thirds at Stoney Hill.—No method of treatment has been found successful, and they are therefore invalided, and sent home.—*Hunter on the Diseases of the Army in Jamaica.*

‡ Dr. Jackson on the Fevers of Jamaica.

ture employs for curing wounds, either by the first intention, or by means of purulent matter: It is not improperly supposed, by a very judicious writer, that febrile miasmata may frequently be the cause of ulcers. CHAP. XII.

Ulcers are of several kinds, and require a very various management, according to the state of the discharge, the constitution and habit of the patient, &c.; and it is from a want of due attention to these, which it is seldom in the power of plantation surgeons to pay, that ulcers are of such long duration, and frequently become incurable. The usual unguents, and dressings, which surgeons lately from Europe are in the habit of directing are, moreover, not at all suited to sores in this climate. It is impossible here to describe all the different states and circumstances of ulcers, or the management suited to each; but a few general remarks may be necessary.

If the patient be of a healthy habit, and the discharge purulent, the simplest dressings are to be employed, as a slice of bread or cassada cake, soaked in Goulard's water, or weak solution of white vitriol; with which the dressing first applied may be moistened occasionally. Nothing answers better than the dressings made use of by negroes, prepared of the leaves of certain succulent and mucilaginous plants,* as some of the arums, (*viz.* the five-finger) and all the malvaceous plants, which are numerous, beat into a pulpy mass. No greasy unguents are to be ever, or rarely, used, unless saturnine ointment, and Turner's cerate, for cicatrizing or skinnig over the ulcer, when perfectly filled.

If the patient be of a gross full habit, if there be a great deal of

* In the public hospital of this city (Kingston), where there are more cases of bad ulcers than in any other hospital perhaps in the West Indies, these dressings, composed of bruised vegetables, are found preferable to any others.

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of tumour, hardness, and surrounding inflammation, bleeding may be sometimes, though rarely perhaps, necessary; but strong purges of calomel and jalap are highly so, and afterwards cooling powders, (*No.* 8; cream of tartar drink, *No.* 9; the cold saturnine lotion and poultice, *Nc.* 113, 114;) or warm fomentations, and emollient poultices being applied to the part. The next state of ulcer, by far the most common, is that where there is a flaccidity of the edges, pallidness of the sore, and a thin sanious, ichorous, and offensive discharge. These circumstances shew the want of due and healthy inflammation, for producing laudable pus; and no local applications will be productive of much benefit, if the patient be not put on a good regimen, with bark, elixir of vitriol, opium, wine, *&c.**

The dressings most serviceable are, such as are antiseptic and stimulating, *viz.* verdigrease, the guts of roasted limes, or sour oranges, *&c.* In large ulcers of this kind, called *phagædenic*, and where there is much putridity, the bark and lime-juice, or cassada poultice with melasses, or with charcoal powder, honey, and flour, *&c. (see country remedies)*; but the patient must, at the same time, be kept upon an antiseptic and alterant regimen.—*See the diet drinks under remedies for the yaws, No.* 120. The nitrous acid,† and oxygene air, have been of late advantageously employed in old phagædenic ulcers.

* Sundry external applications are recommended in this state of sore, aqua phagædenic, *No.* 121—red precipitate—powder of columbo root—rhubarb—tartar emetic, *&c.*—The internal use of cantharides has been lately recommended, on considerable experience, as highly beneficial in the cure of chronic ulcers.—*Robertson.*

† Dr. Crawford has shewn, that in cancerous and other malignant ulcers, the animal fibres undergo nearly the same changes as are produced in them by putrefaction, and destructive distillation: The purulent matter, formed for healing, is, in such cases, mixed with animal hepatic air, and volatile alkali, or forming hepatized ammonia, which decomposes metallic salts, and accounts for the discoloration of saturnine poultices, and of the tongue, *&c.* when corrosive sublimate is used.—*See Experiments and Observations on the matter of Cancer.* Mitchil says, that cancerous matter contains an acid, which is demonstrated by its making the litmus of a red colour.

cers.—*See lues venerea.* The cold bath also will, in many cases, be productive of the best effects.* CHAP. XII.

Aother state of ulcer is that attended with exuberant granulations of soft spungy flesh, or fungous excrescence: This sort of ulcer may be dressed with a slice of bread, or a piece of cassada cake, dipped in a strong solution of blue vitriol; or in a weak solution of corrosive sublimate, or the aqua phagædenica, *No.* 121: Or such ulcers may be washed with these, and sprinkled with red precipitate powder: A piece of pasteboard, or thin sheet lead, placed over this kind of ulcer, with a tight bandage, is of use, for repressing the fungous granulations.

This last species of ulcer, as well as some others, is attended with callous or hardened edges, which prevent cicatrization, or healing; and must, therefore, be destroyed by the knife, caustic, or corrosive applications, as blue vitriol. The best way is to scarify first with a lancet, or pare off with a bistoury, and then to touch with lunar caustic, or blue vitriol.

In the *hæmorrhagies* that attend some kinds of ulcer, tartarized antimony, *i. e.* tartar emetic, has been profitably employed, *viz.* a solution of four grains in an ounce of water.

The *sinuous* fustulous ulcer, and ulcers with *caries*† of the bones, require more particularly the skill of the surgeon. The following injection is recommended in sinuous ulcers, *viz.* lime-water one and a half ounce, tincture of cantharides three drachms, laudanum one drachm.—*Med. and Ph. Jou. vol.* XIV.

* According to Dr. Mitchil, ulcers degenerate from the oxydation of the purulent matter, he therefore recommends the use of alkaline ley.

† On the subject of *caries*, the very ingenious and interesting publication of Dr. Mitchil, on the origin and prevention of the Diseases of the Bones, should be consulted.

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In old ulcers of the lower extremities, particularly when attended with varices, or swellings of the veins, the laced stocking, or flannel roller, is of great use. There are many other ulcers, *mali moris*, in the healing of which the use of an alterant regimen, the diet drinks, &c. may be of service.—*See country remedies, in the Appendix.*

For the treatment of cancerous ulcer, venereal ulcer, &c.—*see cancer, lues venerea, yaws.*

The healing of large ulcers, when in a healthy state, may be promoted by the *dry suture, i. e.* by the application of strips of sticking plaster across the sore, in several directions, so as to bring the edges nearer together, or towards the centre.—*Baynton.* This practise has been found useful in ulcers of almost every description, by a young plantation surgeon, who has paid particular attention to this part of his duty.

In large deep ulcers, where there is a great loss of substance, it is useful to apply moderate compression around the circumference, to keep the orifice open, while granulations shoot up from the bottom.

The dressings are to be renewed, more or less frequently, according to the quantity and state of the discharge. Plenty of lint and tow should be placed, for the absorption of the superfluous matter.* When the matter is purulent and healthy, too much care in wiping it off is hurtful. When it is serous and bad, the sore and neighbouring skin ought to be well absterged by proper baths or fomentations—*see herbs proper, Appendix.*

An

* It is very seldom that there is a sufficient allowance of lint and tow for plantation hot-houses. Certain invalids might be taught the manner of scraping lint, for which the old sheets, &c. would furnish plenty of materials. A substitute for tow might be procured, from the bark of the mahoe, &c. well beaten, after maceration, &c.

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An horizontal position, and rest, is, in general, necessary to the healing of ulcers of the lower extremities, and in particular where there is much inflammation present; but the practice of confining negroes in the stocks, to prevent them from walking about, is to be objected to on many accounts. The air of an hospital, or hot-house, has a very bad effect on ulcers. When the state of the sore, therefore, will admit of bandaging with a flannel roller, and the patient can walk without pain, it will conduce to his recovery, to take moderate exercise.

Old sores are to be healed cautiously; issues should be inserted, previous to their being dried up, and the patient should live abstemiously, take sulphur, &c.

To prevent sores from breaking out again after healing, the tender skin, which is frequently subject to slight erysipelas, should be daily bathed with cold water, and when dried, sprinkled with flour or finely powdered chalk; and the leg afterwards bandaged tightly, with a flannel roller, beginning from the foot or ankle. This practice of sprinkling the surrounding parts with flour, &c. is useful whilst ulcers are healing

*On herniæ, or ruptures.**—Notwithstanding the greater laxity of people in warm climates, ruptures are not very prevalent, unless the *umbilical* or navel rupture of negro children, which is almost universal, but rarely attended with any inconvenience, and therefore requiring no management.

The other kinds of herniæ, or rupture, most common, are,

* The etymology of words, or the derivation of names, has been facetiously played upon by that humourist Dean Swift, *e. g* Alexander the great; *all eggs under the grate.*—Archimedes; *hark ye maids.* The negroes, without any intention of copying after the witty Dean, have stumbled accidentally on some as *good corruptions* as he could *whimsically* invent.—The negro term for a rupture, is *boatswain*, or *bowson*, from bursten, the English name; and they call a buboe, a *blue boar*, or *blubore*.

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1. The *inguinal*, or where the gut is protruded through the ring or opening into the groin: 2. The *femoral*, where it descends under the ligament (called *poupart's*) into the upper part of the thigh.

Care must be taken to distinguish between hernia and buboe, or other inflammatory tumor or abscess, which it is very easy to do from the elastic feel of the former, and the accompanying symptoms of colic pains, costiveness, vomitings, &c. which in buboe are wanting.*

Every one knows the danger which ruptures sometimes occasion, if not timely reduced, *viz.* inflammation and mortification of the gut, requiring an hazardous operation, for what is called *bubonocele*. When ruptures therefore happen, whether they are attended with pain, &c. or not, they should be, as soon as possible, reduced and prevented from returning, by wearing an elastic steel truss, chosen of a size, &c. to fit exactly.

The way to reduce ruptures in the groin, and in the thigh, is to lay the patient on his back, with his head very low, so that the bowels may, by their own weight, draw in the protruded part of the intestine;† but to effect the return of the gut, it should be compressed by the palm of one hand, whilst it is conducted through the aperture by the motion of the fingers of the other.—The pressure of the fingers in the inguinal hernia should be obliquely upwards and outwards; in the femoral directly upwards. There is an address in this, not easy to be described, but may be readily learned, among other branches of surgery requisite to be generally known.

If

* A surgeon made this mistake, and directed fomentations and poultices to a hernia in the groin of a lady, for the space of a week or ten days, under the idea of its being a buboe.

† The method of hoisting the patient by the heels, over another's back, is very often successful, when other means fail.

If there be any difficulty in returning the gut, the patient should be largely bled, put into a warm bath, take a large dose of calomel and opium (Peart), have strong clysters administered;* then cloths dipped in the coldest vinegar and water, repeatedly applied to the rupture, or a wet bladder laid over the part, may be kept constantly moist with æther; the evaporation of which will produce a great degree of cold, and therefore condensation of air, &c. in the gut, so as to render it more easily returnable.

When every method of reduction has failed, and the symptoms of vomiting, &c. continue, there will be a necessity for the operation†, which should be performed in time, before mortification comes on; otherwise the patient, if he survives, will pass his fæces afterwards, at the place either in the groin or thigh, &c.‡

Chronical and indolent tumours.—None but professional men can be supposed capable of discriminating these: Directions, therefore, concerning the relative mode of treatment, would be

* Clysters of tobacco smoke are directed, and are proper, where there is an apparatus present for the purpose; where this is wanting, a clyster of tobacco may be given.—This may be made by infusing one drachm of shag tobacco, or two drachms of leaf tobacco, in one pint of boiling water.

† It is presumed that the surgeon, who undertakes this critical task, is well acquainted with the late writers on this subject, hitherto not well understood, on account of the intricacy of the anatomical structure of the ring, &c.—*See Astley Cooper's splendid work.—Ch. Bell's Dissections.—Ch. Bell's Operations in Surgery.—Laurence on Hernia*, 1808. See what is said on the *radical* cure of hernia, *Med. and Phys. Jou.* vol. IX.

‡ The late Dr. Brodbelt, of Spanish Town, related a most extraordinary case of a man who, in consequence of an operation for strangulated hernia, passed his excrements in this manner, by the groin; having brought on a fresh inflammation of the parts, by cold caught in going out shooting in bad weather, the upper and inferior portions of the intestine came into contact, and united, so that he afterwards passed his stools in the natural way by the anus. No person who has read the excellent critical work of John Bell on Wounds, will presume to doubt of the possibility of this, however wonderful it may seem.—Other similar instances may be referred to.

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be superfluous. To Mr. Abernethy the world is particularly indebted, for a very scientific, and, at same time, practical work, on this very intricate subject.—He will not allow the word tumour to be applied to the enlargement of any part that is natural, but only to such swellings as arise from a new production, or accretion of parts; and he classes them as follows, *viz.* :—

GEN. I. *Sarcoma.*—*Sp.* 1. Organized: 2. Adipose: 3. Pancreatic: 4. Cystic: 5. Mammary: 6. Tuberculated: 7. Carcinomatous.

GEN. II. *Encysted tumours.*—*Sp.* 1. Stratomotous: 2. Atheromatous: 3. Meliceritous: 4. Corneous.

GEN. III. *Osseous and cartilaginous tumours.*—With respect to cancerous tumours, which, of all others, demand our most serious attention, Mr. Abernethy observes, that there are tumours and ulcers, as intractable in their nature, and as destructive in their progress, as cancer. On the other hand he remarks, that there are tumours in the breast and elsewhere, liable to be deemed cancerous, that remain for a great length of time, perhaps to the end of the patient's life, without ever undergoing any change. These observations are here introduced to shew, 1st. That persons may be oftentimes needlessly alarmed: 2dly. That surgeons should be very cautious in forming their judgment.—*See Abernethy's Surgical Obs. vol.* I.

Of dislocations.—Dislocated or luxated limbs may be frequently replaced, without much knowledge of anatomy, and as they are much more easily reduced, immediately after the accident than subsequently, when inflammation and swelling come on, it is of importance that the means proper for this end should be employed as soon as possible.

In

In what is called a *dislocation of the neck*, the patient dies immediately, if he has not the requisite assistance.—This accident happens most commonly from falls in riding; the chin is turned into the breast, the head of the person is on one side, he is black in the face, and totally senseless: These symptoms are caused by a stoppage of the circulation, and by pressure of the subluxated joint of the neck on the spinal marrow.

To prevent the fatal consequences of this accident, any person who happens to be present at the time, should immediately, and without delay, place the head of the sufferer between his knees, and pull the same forcibly upwards, whilst he presses with his knees against the person's shoulder's, turning it at the same time round to its right position: When the due extension is made, the bones return into their place with a crack,* and the patient is instantly relieved.

In *dislocations of the lower jaw*, caused by yawning, bawling, &c. the mouth is wide open, and the jaw-bone turned inwards, or downwards, to the breast-bone, immovably fixed: The way to get it into its place is, for the person who acts as a surgeon, to place the patient on a low seat, fronting him, then putting his two thumbs into his mouth, while his fingers are at the same time applied to the angle of the jaw externally, to pull the jaw-bone first a little forwards, to detach it, and then, with the thumbs, to press the two heads of it forcibly down. It is usual to cover the thumbs with leather, or linen, to prevent them from slipping, and from being wounded by the teeth.

The reduction of *dislocated ribs* is effected by making the patient suspend himself by one arm (*viz.* that on the side of the fractured rib), from a beam, while some one endeavours to

* Almost every one knows this, from what he has experienced in turning his neck round too suddenly, or too far.

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to replace the dislocated head of the rib, by his fingers:—Or the patient should, in some cases, bend himself forward, over a convex body, or a cask.—This is to be done also, when any part of the back-bone is injured, and the lower limbs are paralytic.

In a *dislocation of the collar-bone*, at its junction with the sternum, the shoulders are to be forcibly drawn back by one person, whilst another presses on the dislocated part.

In attempting the reduction of *dislocated limbs*, as of the arm at the shoulder-joint, and of the thigh at the hip-joint, there are two things to be attended to: 1st. The extension necessary is to be from the part of the limb nearest the dislocation; that is to say, in a dislocation of the shoulder, you are not to pull by the hand, but from the elbow: In a dislocation of the thigh, likewise, you are not to pull from the leg or ankle, but from the knee: 2dly. At the same time that the requisite extension is made, you are gently to roll the bone about, or to humour the motions of it, so as to favour its return into the socket.

Fractures.—The skill of the surgeon here is indispensable, the circumstances attending fractures, whether simple or compound, being so various, that no directions, however multiplied or minute, can preclude the necessity of chirurgical advice and assistance; but there are some precepts universally to be attended to:

1. When a bone of the thigh, leg, arm, or other limb, is broken, it is not to be stretched out, but bent, and put into the easiest position possible, on a pillow.

2. No tight bandages are to be ever employed, but such only

only as can be opened, when necessary, for examining the state of the fracture, or the wound accompanying it. CHAP. XII.

3. The splints, whether of wood, pasteboard,* &c. must be always of the whole length of the limb, *e. g.* in the leg, they must extend from the knee to the ankle; in the fore arm, from the elbow to the wrist, and so in other cases.

These rules, which ought to be well understood by all chirurgical men, are, some how or other, very frequently violated, to the too great detriment of the patient; and, wonderful to relate, there are still some practitioners so ignorant as to employ compress and bandage for *keeping down the rising end of the bone*, as it is called.

CHAPTER XIII.

ON CASUALTIES, *viz.* STRANGULATION, SUFFOCATION, &c.

FOR the treatment of persons in swoons, or fainting and convulsive fits, see epilepsy, *page* 93—and hysterics, *page* 201. CHAP. XIII.

For the means of preventing persons from bleeding to death, see wounds, *page* 296—vomiting of blood, *page* 136—blood-spitting, *page* 132.

For the treatment proper when persons have lost their senses, from blows on the head, see chapter on surgery, *page* 297.

* The spatha of the cabbage-tree palm; that is, the sheath of the fructification, or spike, serves excellently well for the purpose of splints, when neither pasteboard or other splints can be got.

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For the recovery of intoxicated persons, see apoplexy, *page* 186.

Coup de soleil, or stroke of the sun, see apoplexy, *page* 186.

To recover persons struck with lightning.—Lightning is the same thing as electricity; notwithstanding which, electricity is the most powerful means of restoring persons to life, who are lightning struck. Small shocks are to be sent through the thorax, after inflating the lungs with air, as directed in the Introduction, for recovering drowned persons. Cold water may be also thrown on the patient, and frictions used, as in other cases of asphyxia, or sudden death.

From whatever accidental cause apparent death takes place, *viz.* from the noxious fumes of charcoal, metals, or sulphur, *&c.* or the stagnant vapours of vaults, mines, *&c.* the same general means of recovery are to be employed, *viz.* bringing the patient, as soon as possible, into pure and fresh air—throwing on cold water—blowing into the lungs with bellows, *&c.* —continued frictions and electricity, where there is an apparatus at hand.

Strangulation.—This happens, sometimes, from substances sticking in the gullet, and pressing on the wind-pipe. If these are not removed, they may prove immediately fatal, by preventing respiration; or, if that should not happen, they may bring on inflammation and other bad consequences.

Accidents of this nature are not very frequent; they happen, in this island, oftener to children, from swallowing genip stones,* than any other cause; but they may happen from bones, from the rind of cheese, *&c. &c.*

If

* Genip fruit.—*Melicoccus.*

If the substance be inoffensive, and susceptible of undergoing digestion in the stomach, it should be propelled forwards by the finger, *probang*,* or a wax taper; but if of a contrary nature, every possible means should be employed for extracting it, or causing it to return by the mouth. A smart blow between the shoulders, will sometimes have the effect. A pinch of snuff may be given; the throat tickled with a feather; or, if a flexible catheter can be made to pass by the obstacle, into the stomach, a vomit may be injected. Vomiting may be excited by a poultice of tobacco leaves applied to the region of the stomach, externally, or by a clyster of tobacco decoction —A patient was saved by injecting into the median vein, four grains of tartarized antimony, in one ounce of water.

When the substances are metallic, or pointed, &c. if they cannot be reached with the finger or forceps, a piece of prepared sponge,† affixed to a thread, may be forced down with a bougie, or piece of wax taper, beyond the obstacle; and afterwards, when dilated, or swoln by water swallowed, or by the absorption of moisture, retracted, or drawn back.

Should every method of extracting the foreign substance prove unsuccessful, and suffocation threaten, the *trachea*, or wind-pipe, is to be opened by the operation called *bronchotomy*, which is very easily learned, but not so easily explained, without a knowledge of the anatomical structure.

* The probang is a flexible piece of whale-bone, about eighteen inches long, to the end of which is affixed a round piece of sponge of the size of a nutmeg. A string is to be passed through the sponge to draw it back, in case of its slipping off the end of the whale-bone. This instrument is very easily constructed, and ought always to be at hand in a family, and on plantations.

† Prepared sponge, is sponge that has been dipped in melted wax, and pressed by a heavy weight; by which means, its dimensions are lessened, till the wax contained in its pores is again softened by heat, and the pores of the sponge are dilated, by water imbibed.

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If pins or needles are swallowed, acids should be given in considerable quantity, for several days, to corrode and dissolve them, so as to prevent the future bad consequences that might ensue.

Gold and silver are perfectly innocent; but if lead or copper be swallowed, acids must be abstained from, and oily matters given.

On the recovery of persons apparently drowned, &c.—How long a person may remain under water, or be suspended by the neck, without being actually dead, or beyond recovery, it is difficult to say; but, if the time has not exceeded an hour, the means of resuscitation ought not to be neglected.* These, as recommended by the different *humane societies*, and several writers, are various, and some of them contradictory, in consequence of the different opinions entertained, of the particular or immediate cause of death in these cases. It was formerly supposed, that persons drowned were suffocated by water entering the trachea, or wind-pipe, but that is proved not to be the case;† and the means, therefore, recommended for making the patient discharge the water, as rolling him about, suspending him, &c. are not only unnecessary, but highly detrimental. The cause of death from submersion and suspension is, by others, supposed to be an impeded transmission of blood through the lungs, or stoppage of the circulation, from the want of air to

* From the reports of the humane society of London, it appears that few persons are recoverable, who have been three quarters of an hour under water. In cases where the time the patient has been in the water is not known, steps should be always taken for recovery, unless symptoms of putrefaction have taken place, as swelling of the body, cadaverous stench, &c.

† See Coleman on Suspended Respiration.—*Med. Com. vol.* XVI.

A very small quantity of water enters the lungs, by the trachea, in drowning; and, when water is injected into the trachea of animals, in a larger quantity, it does not prove fatal, but is absorbed.

to distend them;* by others, it is referred to apoplexy,† occasioned by a stoppage of returning blood from the head; and lastly, since the discovery of the oxygenous principle in the atmosphere, death, in these cases, is supposed to be owing to the want of oxygene, to mix with the black venous blood, and render it susceptible of stimulating the left ventricle of the heart. Several of these circumstances, or causes, subsisting at the same time, death must be the effect of their united operation, though it might possibly take place from any one of them; and which of them conduces more immediately to this end, the want of oxygene air, or the collapse of the lungs,‡ and consequent stoppage of circulation, it may be difficult to determine, and is, perhaps, of little importance.

Recovery, in all cases of apparent death from accident, but particularly in cases of submersion and suspension, is to be attempted principally by two means, *viz.* by inflation of the lungs with air, and stimulating the heart into action.

The lungs are to be made to play, by blowing strongly into them by a pair of bellows, through a tube inserted into one nostril, while the other nostril and mouth are closed, and then pressing on the ribs and breast-bone, to force the air out again, so as to imitate respiration. This must be frequently repeated, and continued for a length of time.

There

* Goodwin on the Connexion of Life with Respiration.—*Med. Comm. vol.* XIV.

† Kite. Essay on the Recovery of Persons apparently Dead. Struve on Suspended Animation.

‡ Coleman.

Upon a view of all the phenomena of drowning, &c. and the experiments made on animals, it would appear, that the more immediate cause of death, in these cases, is from the want of oxygene or vital air. Suspension of a dog did not occasion apoplexy or death, when the trachea was open below the cord. Tying the wind-pipe of an animal at the end of inspiration, by which means there was a free transmission of blood through the lungs allowed, proved as fatal as if it had been tied at the end of expiration, when the lungs were collapsed.

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There is an apparatus for this purpose, which ought to be kept on every plantation near to rivers, or where the accident of drowning is liable to happen—When this apparatus, or common bellows, are wanting, a strong person should blow into the lungs of the sufferer, through a tube or rolled card, inserted into one nostril, as above directed.*

To excite the action of the heart, cordials are to be thrown into the stomach, by means of the elastic bottle, with a tube long enough to reach the œsophagus, or gullet.

It is usual, also, to apply volatiles to the nose, eyes, &c. but neither these, nor frictions with spirits, nor many other stimulants that have been advised, are proper, till the circulation is renewed, as there is already too great a congestion or accumulation of blood about the right side of the heart. Bleeding from the jugular veins (the veins of the neck) will be serviceable whenever the patient is of a plethoric or full habit, but not otherwise.†

The patient may be afterwards put into a warm bath, covered with warm ashes,‡ or warm bricks placed about the trunk, particularly on the left side; but the most important means of any is electricity, employed along with the inflation of the lungs. Gentle and repeated shocks are to be directed through the thorax or chest, whilst the lungs are distended with air blown into them, in the manner before explained.

The

* Although atmospheric air, or pure oxygene air, is more fit for the purpose than the vitiated air, proceeding from the lungs of another person; yet the latter is useful for inflating the lungs, and may be the means of restoring the circulation.—*See Fothergill—Coleman.*

† Bleeding is more particularly necessary in cases of suspension. A man who had been innocently executed, was restored; but, from neglect of bleeding, was afterwards strangulated, by the supervening inflammation and tumour.—*Sauvagesii Nosolog.*

‡ In crop time, in the West Indies, warm water can always be had from the still tank, or ashes from the stoke-hole.

The administration of acrid glysters, particularly of tobacco smoke, has been advised by some, but is strongly, and on good grounds, objected to by others.* But a clyster of tobacco smoke is thought necessary; the tube of a lighted pipe may be inserted into a clyster pipe, first introduced into the anus, and a person may blow through another pipe, the bowl of which is inverted over the lighted one.—Turpentine clysters are to be preferred, or clysters of wine, with spice.

It is to be lamented that, notwithstanding the zeal that has been of late years displayed, in the humane undertaking of recovering persons apparently drowned, there are, comparatively, few instances of success. This is accounted for, 1. From the means not being timeously employed.—2. From other accidents attending drowning, as blows, &c.—3. From the use of improper means, or from the use of proper means not being continued for a due length of time.†

Asphyxia, or falling suddenly down dead, from the drinking of cold water when the body is overheated, may be prevented by giving, immediately, brandy or laudanum, in a considerable dose.—*Rush.*

ON POISONS, AND THEIR ANTIDOTES, &c.

It is, perhaps, difficult to define, with precision, what poison is, and it is not necessary, for the term is well enough understood, without any explanation.‡ It is also well known, that poisons are

* Coleman.

† *Vegilii diatribe medico-politica de causis, &c.—Med. Com.* 1790.

‡ According to the several definitions given by ancient writers, the most useful medicines, and things perfectly innocent in their nature, may come under that description. Many things are to be considered as only relatively poisonous, or according to the dose or quantity taken; but, more strictly speaking, that only is to be reckoned poisonous, which, by its nature, is calculated to produce no effects, but such as are destructive. *Nobis sola ducenda sunt, quæ corpori admota, id quatenus eorum actio nota est, solummodo pravè efficit.—Drayton de Venenis.*

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are of many kinds, killing in very different ways, and requiring very opposite remedies. What is an antidote to one, will add to the virulence of another; nay, further, what is a poison to some animals, to others is perfectly innocent and salutary.*

Each of the three kingdoms afford substances that are poisonous. The *animal* poisons are those of the mad dog, serpents, fish, and insects. The *vegetable* poisons are of two kinds: 1. The *acrid, viz.* dumb-cane, Manchioneal apple, milk-wood, the savanna flower *(echites suberecta)*, called also the nightshade. 2. The *narcotic, viz.* tobacco, thorn apple *(datura stramon.)*, manihot or bitter cassada, cabbage bark, worm grass,† opium, hemlock. The *mineral* poisons are arsenic, cobalt, corrosive sublimate, antimony, sugar of lead, copper, &c. Although the symptoms occasioned by the several poisons are extremely various, according to the nature of the poison, or as they are either taken into the stomach, or are mixed with the blood in wounds, they seem all to act either by an acrid irritating power, exciting inflammation in the part, or else by destroying, directly, the nervous power, or principle of life.‡

Of

* *E. g.* Goats eat hellebore, hogs the hyosciamus, sheep hemlock, as also the Manchioneal apple, with impunity; whilst parsley is poisonous to parrots, pepper to flies, &c.

† Many other indigenous plants are suspected to be endued with poisonous qualities, and to be in use among negroes, for occasioning a slow or distant death: but of this I have never seen any sufficient proof. There may be many things added to the list of poisons, but, if the negroes are acquainted with them, they do not appear to employ them; as, where they are wicked enough to attempt empoisonment, it is generally by arsenic or ground glass.

‡ The suddenness with which the poison of serpents, and some other poisons, operate, and the quick putrefaction which takes place, first in the part, and then through the whole body, has induced some persons to suppose them of a *septic* quality, or that they act chemically, in decomposing both the solids and fluids; but the yellow suffusion, and hæmorrhagy, which immediately follow the bite of serpents, and which precede putrefaction, are probably owing to the same cause as the colour of the skin in yellow fever; not to bile absorbed, but to serum effused, in consequence of the relaxation of the exhalant arteries; and the subsequent putrefaction is owing to this effusion, and

other

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*Of the hydrophobia, or poison of the mad dog.**—This, so far as any information can be gained, has been never known oftener than once or twice in this island,† though it is said to have occurred more frequently in some other parts of the West Indies.‡ The only safety consists in prevention, there being no certain remedy, though many pretended ones. The prevention lies either in the destruction of the part bitten, or in excision, *i. e.* cutting it out. The adage, "*Ense recidendum immedicabile vulnus*," is no where so applicable as to this case. For the former purpose, *viz.* of destroying the wounded part, vesicatories and strong escharotics may be employed, *viz.* blisters, aqua-fortis, caustic, corrosive sublimate; or, in the absence of them, the actual cautery, or red hot iron, or gunpowder fired in the wound. Ligatures about the limb, above the wound, may likewise serve to prevent the progress of the poison into the system, by the absorbents. As the absorption does not appear to take place very suddenly, the means above recommended may be successful at some distance of time after the accident§, and should therefore not be neglected.‖

As none of the medicines recommended for the cure of

other circumstances connected with it. See account of a soldier who died putrid in a short time, from the bite of a serpent.—*History of San Juan Expedition.* Girtanner supposes, that the poisons of serpents, and narcotic vegetables, act as *positive* stimuli, by exhausting the irritability; but Beddoes rightly observes, that it is scarce credible any poison, in quantity so astonishingly minute, should do this by combining with the oxygene.—Dr. Beddoes supposes, that these poisons occasion, through the whole system, a new combination of oxygene—but is this more conceivable?

* According to some authors, there is a spontaneous hydrophobia, not arising from the bite of any mad animal; but Dr. Fernar considers this as a different disease, or one depending on inflammation of the pharynx.

† In 1783, and two or three years ago.

‡ Hilary.

§ This is confirmed by some cases related by Dr. Parry and Mr. Jesse Foote.

‖ The opinion, that the hydrophobic poison is absorbed from the wound, is the general one; but some (*viz.* Mease, M'Lean, *&c.*) contend, that the symptoms of hydrophobia, proceed from local irritation, similar to tetanus; whilst Rush considers the disease as analogous to malignant fever.

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hydrophobia, have been found successful after the symptoms have come on, it is almost needless to mention them. Those on which the greatest reliance have been placed, are the following, *viz.* cold bath, hot bath, musk, mercurial frictions, olive-oil, vinegar, alkaline salts, arsenic, oxygene air.*

Which of these is entitled to the greatest confidence, it is difficult to say. Those who wish for more satisfactory information on this melancholy subject, must consult the authors referred to.†

Poison of serpents.‡—It is the singular felicity of this and the other West India islands to have no venomous reptiles.§ I might therefore omit saying any thing of the antidotes to their poisons;

* There is a long list of specifics besides these, for the cure of the bite of the mad dog, *viz.* the *tonquin* powder, consisting of musk and cinnabar; the *pulvis antilypus*, or powder of liverwort, of mead; the Ormskirk remedy, which is an absorbent; Palmarius's powder, composed of bitter herbs, &c.—The credit these nostrums have obtained, is owing to this circumstance, *viz.* that few of the animals supposed mad, are actually so. According to the old proverb, give a dog a bad name and hang him. Dogs suspected to be mad should be confined, but not killed, without sufficient proof of their being so in reality.

† See George Cobb, Mead, Nugent, Dessault, Wolf, Hamilton, Shadwell, Ferriar, Mitchil, Mease, &c.—See, in particular, what Dr. Simmons says of arsenic and the Tanjore snake pills, which consist of oxyd of mercury and arsenic, communicated to the presidency of Madras.—See case of hydrophobia successfully treated by musk and flowers of zinc.—(*Arnold—Rowley—English Review*, 1794.)—Another case successfully treated by mercury—*Mitchil.* Hydrophobia cured by the galvanic shock. (*Med. and Ph. Jou. No.* 60.) (*Sabbatier's eleven cases.*) On the inspection of the dead bodies, Sabbatier found nothing preternatural in the parts, which were the seat of the disease.—*Med. and Ph. Jou. vol.* XVII.

‡ Most of the serpents that are poisonous, have two fangs, or moveable hollow teeth, in the upper jaw; but they are not always distinguishable. According to Dr. Gray, all the harmless snakes have four rows of teeth in the upper jaw, whilst the poisonous have only two. Out of one hundred and twenty-four species, only twenty-six are known to be venomous.—There are also other characteristics to be taken from the abdominal scales and the tail.—*See Ph. Tr. vol.* LXXIX—*Encyclop. Brit.*

§ The gally asp, a large species of lizard, is said to be so: Whether it be really so or not, may be suspected. The animal is extremely rare, which is probably the reason of its being held in horror.

poisons; but, as this work may be found useful elsewhere, *i. e.* in countries* where serpents of this description abound, I shall point out what is most proper to be done, where persons have been bitten. CHAP. XIII.

There is no certain antidote to the poison† of serpents, more than to that of rabid animals; the only security, therefore, as in the bite of the mad dog, is in the extraction of the poison, or in the destruction of the envenomed part; but here there must be no delay, for such is the virulence or activity of this species of poison, that unless it is instantaneously extracted, or decomposed by some application to the part, its lethal effects are scarcely to be prevented by any subsequent means.

Dreadful as the effects of this poison are, when mixed with the blood,‡ it is, however, perfectly innocent in the mouth and stomach;§ and may, therefore, with the utmost safety, (as is well known from the practice of eastern nations, both in ancient and modern times) be sucked out of the wound,

 either

* Most parts of North and South America.

† It is fabled of the *Marsi* and *Psylli*, two ancient nations, that they were serpent proof. The same is asserted by Savary and Bruce, of the Egyptians, at the present day; and they relate a number of marvellous stories of the familiarities they use with these hideous reptiles; but, if they had read Kæmpfer, they would not have been ignorant of the secret of these jugglers, which consists in making the serpents first discharge their poison, and in starving them.—*See Amœn. Exot.* Guthrie is of opinion, that those persons who handle serpents with impunity, make use of oil.

‡ From six thousand experiments made on animals, Fontana is led to conclude, that poisons act on the blood, not on the nerves; but these six thousand experiments are all overset by one very simple one, *viz.* frogs which live for some time after their hearts are cut out, and in which the circulation of consequence ceases, are affected by poison just the same as those whose hearts remain, or are not cut out.

§ *Non gustu, culnere nocent. Celsus.*

Morsu virus habent, et fatum minantur.

Pocula morte carent. Lucan.

Suction may be performed by cupping glasses, or by absorbent stones. Such stones, called snake stones, are used in the east, and among the Indians on the Spanish Main.

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either by the person himself who is bitten, if he can reach the part with his mouth, or by any other one standing by. In the next place, after suction, apply caustics, or red hot iron, as in case of the bite of a mad dog.

To excite the system, and counteract the lethiferous operation of the poison, when mixed with the blood, strong emetics* are to be given, and then powerful cordials, *viz.* brandy, or any other ardent spirit, volatile alkali,† *&c. &c.* The alexipharmics,‡ or such things as were formerly, or that are in the present

* Fontana recovered cats and dogs by tartar emetic.

† The *eau de luce* (succinated ammonia) has been tried with great success in India.—*See Asiatic Researches, vol.* II.

‡ Mithridate, mungo-root, *(ophiorrhiza)*, against the poison of the hooded snake.—Cobra la capello, seneka-root *(polygala)*, and horehound, against the rattle snake.—Coccoon *(fevillea)*, habilla de carthagene, against the tomagas, barber's pole, and other serpents on the Spanish Main. See Piso's account of the *caacica, (euphorbia hirta,)* as an antidote to the poison of serpents. Roots of the water lily, said also to be an antidote to the poison of serpents. Most extraordinary things have been related of the antidotal virtues of two different plants, lately found in South America, *viz.* the *vejuco du guaco* and the *oya pana*, of which we have the following account:

The *aya pana*.—This plant is said to be a native of Brazil, but cultivated with success in the Isle of France. The aya pana grows in South America, on the right bank of the river Amazons. The inhabitants of that country have regarded it for a long time as an excellent sudorific, and powerful alexipharmic, or antidote against the bites of poisonous serpents, and the wounds of poisoned arrows; its virtues are acknowledged throughout Brazil, where it is cultivated with care, and has obtained the name of "*the miraculous plant!*" This plant enjoys as much celebrity in the Isle of France, as in its native country. The Gazette of the colony presents each day proofs of its virtues; and it is used with success not only against the bites of serpents, but for the cure of dropsy, the most inveterate venereal diseases, and all sorts of wounds. The aya pana belongs to the corymbiferi, and is said to be related to the eupatorium of Linnæus.

It is well known, that in Egypt, India, and the hotter parts of America, that abound with poisonous serpents, there are certain individuals, who possess the power of entirely disarming these formidable animals, and are able to handle them with perfect impunity at the very time that any other person, approaching them incautiously, would be fatally convinced of their ability to destroy. This happy exemption is attributed by the people themselves to the preservative effects of certain vegetables, the knowledge of which has hitherto been carefully concealed. Many of the European philosophers have, however, treated the affair as a mere juggle.

This state of uncertainty is now, happily for humanity and science, relieved by the

incr-

sent day, celebrated as antidotes to poisons, can act in no other way, than as stimulants in the stomach, and in keeping up the action of the heart.—[See Mr. Williams, in Asiatic Researches, referred to above.] CHAP. XIII.

*Poison of fish.**—To what the poisonous quality of certain fish

most important communication from Don Pedro d'Orbies y Vangas, through the medium of Count Rumford, which, if entirely to be depended upon, will entitle the communicator to rank high among the benefactors of mankind. Don Pedro is a native of Santa Fe, South America, and, in the year 1781, living at Margarita, he met with a slave who possessed the power of charming the most venomous of the American serpents: after the negro had exhibited his skill, he was induced by a reward to promise to discover the secret. The next morning he returned with the leaves of a plant called *vejuco du guaco*, and, having bruised them in the presence of Don Pedro, gave him two large spoonfuls of the juice to drink; then, making three incisions between the fingers of each hand, he inoculated the Spaniard with the same juice, and performed a similar operation on each foot, and on each side of the breast, after which he informed him that he was no longer accessible to the poison of serpents. Don Pedro then, after making the negro answerable for any ill consequences, took into his hand several times one of the serpents that had been brought by the slave the day before, without receiving the smallest injury from the animal. Encouraged by this first attempt, two domestics, being in like manner prepared by the guaco juice, went into the fields, and soon returned with another kind of serpent, equally venomous with the former, without sustaining any hurt; another person, being similarly prepared, and afterwards bitten by a poisonous serpent, received no further injury than a slight local inflammation. Since this period, Don Pedro has repeatedly caught serpents with his own hands with absolute impunity, employing no further preparation than merely drinking a little of the guaco juice.—The plant, whose effects are thus attested, has not as yet been admitted into any botanical system, but is amply described in a memoir by the Spanish gentleman already mentioned, inserted in a weekly paper published at Santa Fe. It is of the compound-flowered, of syngenesious class. The stamina are five in number, united by their anthers into a cylinder, through which rises the pistil with a deeply divided summit. The corolla monopetalous, infundibuliform, with five indentations, and of a yellow colour; each calyx contains four florets, and several of these grow together, forming a corymbus; the seeds are broad and feathered; the root is fibrous, perennial; the stem straight, cylindrical when young, but, when old, becomes pentagonal; leaves are heart-shaped, opposite, of a dark green mixed with violet, velvety on the upper surface. It grows by the sides of rivulets, and in shady places, in the vice-royalty of Santa-Fe.

* The fish found poisonous in this island are, the yellow billed sprat, barracuta, some of the rays, oysters, muscles, and sometimes lobsters and crabs.—(*See Asiat. Res.* v. I. V.) The bottle nosed cavallo (*scomber* of Brown)—the rock fish of Carolina (*perca marina* of Catesby)—xiphias or king fish—smooth bottle fish (*ostracion gibbosum*).—The crabs at Malabar are poisonous only in the month of October, when the blue tithymale, a poisonous plant, grows up.

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fish is to be attributed, is very uncertain: The notion that it is owing to their feeding on copper banks, is very unphilosophical, and not supported by any facts.* It is much more probable, from the sedative nature of the poison, that it arises from their feeding on submarine narcotic plants. Crabs, when they live upon the Manchioneal apple, are, in like manner, poisonous.

The effects of fish poison are, extreme sickness at the stomach, gripings, cold sweats, cutaneous eruptions, sometimes cholera morbus, leaving behind a degree of paralysis. Where the poison does not prove fatal, the patient is, notwithstanding, long in recovering.

The effects of fish poison are frequently obviated by taking freely of brandy, or any other ardent spirit;† but, where symptoms of empoisonment have already come on, it will be proper, in the first place, to take an emetic, and to drink plentifully of warm water, to bring off the contents of the stomach; and, afterwards, to have recourse to strong cordials:—Ginger tea and brandy, with laudanum—Cayenne pepper made into pills, *&c.*—A decoction of the roots of the sour-sop, and an infusion of the flowers of the white cedar, are recommended by Dr. Grainger,‡ as antidotes to fish poison; but I have never known them tried in this island.

What

* 1. No such banks are known in these seas.—2. It is very unlikely that copper should enter into the composition of an animal; and, if it did, would be easily ascertained, not by a silver spoon, but chemical tests.—3. The poison appears, according to Virey, to lie only in the liver, entrails, and skin; that is to say, perhaps in the oil or fat.—4. The poison is destroyed by curing or salting the fish.—5. The poisonous effects exhibited, are not entirely such as would be apprehended from copper; nor are the antidotes found useful, such as are proper against the poison of copper.

† It has often happened, that of several persons eating of the same fish, some have escaped with impunity, whilst others have lost their lives; and, it appears, that those who drank most freely, suffered the least injury.

‡ See his elegant poem, entitled, The Sugar Cane.

What is above said on the subject of fish poison, will apply to that of crabs, oysters, &c.

For restoring the lost tone of the bowels, after the immediate effects of the poison are removed, the patient may take the coccoon bitters, quassia infusion, &c. The bath waters will also be found very serviceable to persons in this state.

It is probable that the *rhus toxicodendron*, or poison oak, found by Dr. Alderson so useful in other paralytic affections, would be of great service in those arising from the poison of lead, manioc, and from fish poison.

Poison of insects.—Notwithstanding the horror in which a number of these, as the scorpion, centipied, tarantula,* &c. are held, and the terrible accounts that are given of the virulence of their stings, there are so few instances of their producing any dangerous or alarming effects, that I hardly think it necessary to speak of them. When much pain and swelling take place, the part may be rubbed with warm oil; or, should the general system seem to be affected, cordial sudorifics may be exhibited.

Mineral poisons, viz. arsenic, corrosive sublimate, &c.—To obviate the fatal effects of these, they are either to be rendered inert, by decomposing them (if that can be done), or else the stomach and bowels are to be defended against their action.

If *corrosive sublimate* has been taken in a dangerous quantity, its fatal effects may be prevented, or greatly mitigated, by swallowing, immediately, an alkaline liquor,† such as a solution

* The tarantula of Jamaica is very rare. Its habitation is extremely curious, resembling the finger of a leather glove, the entrance to which is closed by an elastic valve.

† A student of physic, finding that he had, by mistake, taken several grains of corrosive

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tion of salt of tartar, or lime water, ashes and water, chalk and water, &c. The treatment afterwards proper, is the same as that recommended under the article *arsenic*.

In cases where a large quantity of tartar emetic has been taken, give large draughts of warm water; afterwards laudanum.

In cases where arsenic, cobalt, &c. have been swallowed, the liver of sulphur* is recommended as a counter-agent; but nothing here can be safely trusted to, but drinking largely of demulcent liquors, to defend the parts, and to wash away the particles adhering. Oil and water, cream and water, or warm milk, are what are usually given, and the best suited to answer the above purpose. The patient should continue to take large and frequent draughts, till he finds the symptoms relieved.—Bleeding may be necessary, to prevent subsequent inflammation, and the patient must take none but the blandest aliments, such as Indian arrow-root starch, sago, fat broths, &c. &c.—If the inflammation of the stomach prevents the patient taking any food, he must be nourished by clysters.—*See inflammation of the stomach, page* 119.

Copper and lead may be called culinary poisons, on account of the vessels employed in cookery, pickling, and confectionary, being frequently composed of them. I need not here point out the danger that accrues from this practice.

The

corrosive sublimate, in the place of tartar emetic, availing himself of his chemical knowledge, instantly drank a draught of water, in which he dissolved a quantity of salt of tartar, and felt no subsequent bad effects from the accident.

* Liver of sulphur *(kali sulphurat.)* is made by melting one ounce of sulphur with five ounces of alkaline salt *(salt of tartar)*—dose half a drachm in water, several times in the day.—The effect of this, in restraining the action of mercury, or in stopping salivation, is remarkable.—*(See Dr. Garnett, in Beddoes's Commun. vol. IV.)* Habuman recommends a solution of soap, *viz.* one pound of soap to one gallon of water—a tea cup full to be taken very frequently.—Arsenic is said to retard the putrefaction of bodies.—*See Wepler.*

The poison of *copper* causes vomitings, and blotches on the skin:—Give large draughts of warm milk and water, or warm water, with liver of sulphur, or alkaline salt, dissolved in it,* as advised in the preceding page, under corrosive sublimate. CHAP. XIII.

Lead, in whatever manner taken, whether in wine that has been adulterated by the sugar of lead, in rum contaminated by the still-worm, &c.† or whether it has been communicated by the glazing of jars, &c. produces cholic pains, and palsy of the extremities, as in dry belly-ache [*see dry belly-ache, page* 108]. Remedy—oily purgatives.—Workers in lead guard against its effects, by using fat broths.

Powdered glass is a mechanical poison, the particles of the glass pricking and tearing the bowels in their passage through them. To defend the bowels, give mucilage of gum arabic, emulsion of spermaceti, emulsion of wax, oily mixture.—If inflammation has come on, bleed, and give oily laxatives.

Vegetable poisons.—These, as was before said, differ much in their nature; some acting as acrids, exciting inflammation; others, as narcotics, exhausting or destroying the vital principle. Among the indigenous plants of the former class, or *acrids*, may be ranked the *dumb-cane*, and, perhaps, the *Manchioneal apple*. The former is so pungent and irritating in the mouth, that it is impossible to swallow it, and therefore not

* Fourcroy.

† The presence of lead in any wine, or liquor, may be ascertained by a solution of hepar sulphuris, in water. A few drops of this, added to a glass of wine containing lead, will turn it, more or less, of a dark or brown colour, according to the proportion of lead it contains. If there be no lead therein, the liquor will be of a dirty white colour. Dr. Watson directs the hepar sulphuris to be prepared thus: Take one ounce of quick lime, half an ounce of flour brimstone; boil together in a pint of water; pour off the clear yellow liquor (when cold) for use.—(*See Chem. Essays*, *vol.* III.) But more accurate methods than the above, may be seen in Fourcroy, and in the Encyclopædia Britannica, under the word wine.

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apt to occasion further danger, than from inflammation and swelling about the fauces.* The Manchioneal apple is also so disagreeable, from its acrimony†, in an unripe state‡, that few people will be tempted to eat such a quantity of it, as is likely to prove fatally noxious. The effects produced by it are vomiting, and afterwards a burning heat of the stomach: The remedies advised, are oily mixtures and emulsions, as in other cases, where acrids have been swallowed.—Dr. Grainger recommends, as an antidote, the milk or sap of the young branches of the wild fig-tree and sea water. These being frequently found in the neighbourhood where Manchioneal trees grow, may be tried, if other things, more to be relied on, are not at hand.

The poison of the *ticunas* is rendered innocent by the mineral acids, and even by vinegar.

The nightshade or savanna flower [*echites suberecta*], which is highly deleterious, is also probably an acrid plant, being milky; or it may be, at the same time, narcotic. The roots of the cane-piece sensitive plant [*cassia chamæchristæ*] are reputed an antidote. Dr. Wright directs two quarts of the decoction to be taken in the day.§

The vegetable poisons deemed narcotic are, cassada, or manioc

* Dr. Wright says, that he has known negroes attempt to poison themselves with it, but in vain.

† See Browne's History of Jamaica. The sap or milky juice with which this tree abounds, is so acrid as to inflame and blister the skin, wherever applied; but the accounts given by voyagers, of the danger arising from standing under the noxious exhalations from the leaves, &c. are fabulous, or exaggerated; they are, however, realized in some measure, in the rhus toxicodendron or poison oak in America, and in the upas or macassau poison.—*See Kalm's Travels.—Alderson's Essay on the Poison Oak.—Kæmpfer.—Encyclopædia Britannica, under Poison.*

‡ See Long's History of Jamaica.

§ The first account of this is by Dr. Milward, in the Phil. Trans. *No.* 462.

manioc [*jatropha manihot*].—The root of this plant, from which is prepared an excellent food,* is, in its recent and succulent state, a deadly poison, as is well known from the many melancholy instances of its effects, which, from time to time, occur. It brings on violent retchings, purgings, and convulsions, but dissection shews no signs of inflammation of the stomach; whence it is obvious, that it acts only on the nervous system. CHAP. XIII.

The most efficacious remedies against this poison are, first absorbent earths,† and alkalies; afterwards, cordials and stimulants.—Give two scruples of salt of wormwood, in mint water.—If salt of wormwood or tartar be not at hand, give a small quantity of ley of wood-ashes, with a little ginger-tea—or a mixture of chalk and water.—Afterwards give large doses of Cayenne pepper, or the infusion of capsicum.—*See Forms, No. 70, d.*

Where the remedies are not timeously used, the empoisoned person seldom recovers, though he may linger for some time.

Many of the vegetable poisons are employed in medicine, and are efficacious‡; but, in large doses, dangerous remedies: Such as opium, hemlock, wolf's bane, &c.—The general

* Not only the cassada bread, and the farine de manioc, are prepared from this, but starch similar to that of Indian arrow-root, and the elegant kind of sago, called tapioca.

† The antidotes to this poison were both discovered in a manner rather casual, or accidental. It was observed that hogs, though subject to be poisoned by drinking the expressed juice, or by eating the washed roots, suffered no injury from what they turned up out of the ground, and eat with the earth about them: Nay, the Indians of South America make a sauce of the poisonous juice, by the admixture of salt and Cayenne pepper, which renders it innocent.—*See Browne's History of Jamaica.—Clark in Med. Facts, vol.* VII.—*Also, Long's History of Jamaica.*

‡ The *rhus toxicodendron*, lately introduced by Dr. Alderson, promises to be a very important remedy in palsy.—*See Alderson's Essay on the Rhus Toxicodendron.*

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antidote is, the vegetable acid; that is to say, vinegar and lime-juice.

Opium.—If a person has, either intentionally, or by mistake, taken an over or dangerous dose of opium, either in a solid or liquid form, a strong emetic is to be instantly, or as quickly as possible, given, *viz.* half a drachm of white vitriol, or a wine-glass full of a strong solution of tartar emetic, every five or ten minutes, till it operates: After this, give large and repeated draughts of vinegar, or lime-juice and water.*—Every kind of stimulus, switching the shoulders, &c. must, at the same time, be employed, to prevent sleep; which, if it once takes place, will, in all probability, be eternal.

The same treatment will answer, in obviating the danger that accidentally occurs from the worm grass, and the cabbage bark, the two powerful vermifuges in common use.—The same may also serve in cases where the thorn apple (*datura stramon.*), which abounds in many places in this island, has, by any accident, been taken; but against this, emetics, and oily clysters, have, in particular, been recommended.†

The *digitalis*, or fox-glove, a medicine greatly celebrated in dropsy and consumption, is a plant of this kind; but the antidote to its deleterious effects is opium. Against the poison of laurel water, bitter almonds, &c. so frequently employed in

* Dr. Rush, in three cases, made use of blood-letting; but, he says, this should be done only in such cases where there is great morbid action, or a suffocation of action, from excess of stimulus. See case of a man who had taken two and a half drachms of solid opium, recovered by small quantities of brandy given him from time to time, in proportion as the powers of life began to sink. Humbold found that alkalies have the property of renovating excitability, after it has ceased from the effect of opium.

† A child poisoned by the seeds of stramonium, was recovered by giving oil of tartar per deliquium, in a saturated solution of prepared kali in water; and afterwards tartar emetic.

in pastry, the antidote is volatile alkali; that is, spirits of harts-horn, or spirits of sal armoniac. CHAP. XIII.

Mushrooms.—These sometimes have the same poisonous effects as cassada or fish; against which the same remedies as recommended in *page 326*, are proper.

APPENDIX.

APPENDIX:

CONTAINING

1. *A Collection of* FORMS *or* RECEIPTS *for* MAKING-UP *the* MEDICINES *recommended in the Work.*

2. *A Catalogue of such* MEDICINES, *in their requisite quantities, as are more especially necessary to be kept in* FAMILIES, *and on* PLANTATIONS.

3. *A Table of the* WEIGHTS, MEASURES, DOSES *of* MEDICINE, &c.

4. *An Account of all the* SIMPLES *of the* COUNTRY, *whose virtues and uses are known, with the manner of exhibiting them, their Doses,* &c.

5. *Index of* DISEASES, *with the* SIMPLES *suited thereto.*

6. *An Alphabetical Index of the* SIMPLES *of which an account is given.*

EXPLANATIONS TO APPENDIX.

THE WEIGHTS and MEASURES made use of in administering Medicines, are, Grains, Scruples, Drachms, Ounces, Pounds, or Pints, &c.

20 Grains	*make*	1 Scruple
3 Scruples		1 Drachm
8 Drachms*		1 Ounce
12 Ounces		1 Pound *or* Pint.

A Tea Spoonful of any Liquid is considered to be one Drachm.

Two Table Spoonfuls, one Ounce.

A Wine-Glassful, two Ounces.

THE CONTRACTIONS USED ARE:

gr.	*for*	Grains
scr.		Scruples
dr.		Drachms
oz.		Ounces
lb.		Pound *or* Pint.

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* The mineral acids, *viz.* spirit of vitriol, nitric acid, and spirit of salt, are to be measured either by drops, *viz.* sixty to one drachm, or else by a glass measure.

APPENDIX.

PART FIRST.

FORMS OF MEDICINES.

No. 1. *Ipecacuan Vomit.*

TAKE powder of ipecacuan, from 10 to 20 gr.——Mix in water or chamomile tea.—When a stronger vomit is required, a grain of tartar emetic may be added.

2. *Purging Salts.*

Glauber's salts, or bitter purging salts, from 6 to 10 dr.——Dissolve in 4 oz. of bitter-wood infusion.

3. *Ptisan of Tamarinds and Salts.*

Rich tamarind beverage, 1 pint.—Purging salts, 10 dr. or 1½ oz.——Dissolve.——Dose—4 oz. every half hour, till it operates.

4. *Tamarinds and Cream of Tartar.*

Tamarinds, 2 oz.—Manna, 1 oz.—Cream of tartar, 2 dr.—Water, 1 pint.——Boil a little; then strain.——Dose—the same as *No.* 3.——To render this more active, senna leaves, 2 dr. may be infused in the hot decoction, or 2 gr. of tartar emetic may be added.

No. 5. *Jalap*

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No. 5. *Jalap and Cream of Tartar.*

Powdered jalap, 1 scr.—Cream of tartar, 1 dr.——Mix.——Take in thin syrup of ginger, or ginger-tea.

6. *Jalap and Calomel.*

Powdered jalap, from 15 to 25 gr.—Calomel, from 3 to 6 gr.——Take in syrup of ginger, or made into pills, with the same.

7. *Nitrous Powders.*

Powdered nitre, and white sugar, each 2 dr.—Camphor, ½ dr.——Rub together in a marble mortar, and divide into 12 doses.——One to be taken every two or three hours.

8. *Cooling Powders.*

Nitre and crude sal. ammoniac, each ½ dr.—Cream of tartar, 1 dr.——Mix, and divide into six doses.——One to be taken every three or four hours, or oftener.

9. *Antimonial Powder.*

Pulvis antimonialis, 1 scr. or else James's powder, ½ dr.—White sugar, 1 dr. ——Rub together in a marble mortar, and divide into 6 doses.——One to be taken every two hours, in a little barley-water.

10. *Antimonial Powder, with Calomel.*

Pulvis antimon. or James's powder, from 3 to 5 gr.—Calomel, from 5 to 10 gr.——Mix, for 1 dose, to be taken in barley-water, or thin panada.

11. *Saline Julep.*

Salt of wormwood or tartar, 2 dr.——Dissolve in half a pint of mint-tea.—— To 2 table spoonfuls of this, in a small tumbler glass, add one table spoonful of strained lime-juice, and take it whilst effervescing, or frothing, or else

else immediately afterwards.———*N. B.* Trial should be first made of the exact quantity of lime-juice requisite to neutralize the alkaline or salt of wormwood mixture.—When the essence of peppermint is at hand, common water may be used in place of mint-tea.

No. 12. *Rhubarb and Cream of Tartar.*

Powdered rhubarb, 1 scr.—Cream of tartar, 10 to 20 gr. ; or more.—Take in ginger-tea.

13. *Mindererus's Mixture.*

Mindererus's spirit, and water sweetened, each 4 oz.——Dose—2 table spoonfuls every hour or two.

14. *Camphorated Mixture.*

Camphor, ½ dr.——Rub it in a marble mortar, with 2 dr. of white sugar, adding first, a tea spoonful of rum or brandy ; then gradually, afterwards, 8 oz. of boiling water, strained through muslin or tow.——Dose—one or two table spoonfuls every two hours.

15. *Camphorated Mixture with Spirit Mindererus.*

Add to the above mixture, an equal quantity of the spirits of mindererus.

16. *Infusion of Snake-Root.*

Virginian snake-root, 2 or 3 dr.——Infuse in a pint of boiling water, in a tea-pot or other close vessel, for one quarter of an hour.——Dose—a wine glass full by itself, or with the camphorated mixture, *No.* 14, or with two tea spoonfuls of brandy, every two or three hours.

17. *Antimonial Opiate.*

Water sweetened, or mint-tea, a small wine-glass full.—Antimonial wine, from 30 to 60 drops, or more.—Laudanum, from 25 to 40 drops.——For a draught at bed-time.———*N. B.* When there is no antimonial wine at

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hand, one or two grains of tartar emetic may be substituted in the room of it, or 12 gr. of Dover's powder, *viz.* the compound powder of ipecacuan.

No. 18. *Cordial Julep.*

Spiced wine, (that is wine in which spices, *viz.* cinnamon, nutmeg, cloves, or pimento, have been boiled) and water, each 4 oz.—Volatile spirits, (that is, spirits of hartshorn or spirits of sal. ammoniac) two or three tea spoonfuls.—Spirits of lavender, the same quantity.——Dose—a table spoonful or two frequently.

19. *Musk Julep, with Æther.*

Musk, 1 or 2 dr.——Rub in a marble mortar with ½ oz. of sugar, adding first two tea spoonfuls of brandy or spirits of lavender, then gradually afterwards 7 oz. water.——When poured into the phial add two or three tea spoonfuls of vitriolic æther.———*N. B.* Laudanum (one tea spoonful) may be also added.—The phial to be kept close corked, and shaken before use.

20. *Cordial Astringent Julep.*

Red port wine in which cinnamon and pomegranate-bark have been boiled. ——Sweeten with guava-jelly.———*N. B.* An earthen vessel must be used, not an iron one.

21. *Decoction of Bark.*

Coarse powdered bark, 1½ oz. or 2 oz.—Water, 3 pints.——Keep it over a brisk fire in a close vessel for 10 or 15 minutes, then let it settle, and pour off clear, or strain through a coarse cloth.——To 1 pint of the decoction may be added any of the following articles, as they may be required, *viz.* elixir of vitriol, 2 tea spoonfuls.—Spirit of salt, 2 tea spoonfuls.—Huxham's tincture, 1 oz.—Aromatic tincture, 1 oz.—Spirits of cinnamon, 1 oz.—Spirits of mindererus, 4 oz.—oxymel of squills, 1 oz.—Crude sal. armoniac, 2 dr.

No. 22. *Tartar*

No. 22. *Tartar Emetic Solution.*

Tartar emetic, 4 gr.—Warm water, sweetened, ½ pint.—Vinegar, 1 or 2 tea spoonfuls.——Dose—a wine-glass full every 15 minutes till it operates upwards or downwards, or both.——When intended as a sweat, add 1 tea spoonful of laudanum, and give two table spoonfuls every two or three hours.

23. *Clysters of Bark.*

Take thin gelly of starch, 4 oz.—Powder of Peruvian bark, 2 or 3 dr.——Mix for a clyster.——From 30 to 40 drops of laudanum may be added to the first clyster, as occasion may require.——The clyster to be repeated every third or fourth hour.

24. *Mead's Powder.*

Powder of chamomile flowers, ½ dr.—Alum and myrrh, each 5 gr.——Mix for a dose to be taken two or three times in the day, or four hours before the ague fit is expected.

25. *Volatile Liniment.*

Olive-oil, 2 oz.—Spirits of sal armoniac, (water of ammonia) 1 oz.——Mix, by shaking them in a phial.——Add ½ dr. of powdered camphor.——Two tea spoonfuls of laudanum may be also added.

26. *Bark Bath.*

From ½ lb. to 2 lb. grossly pounded bark.——Boil in a gallon or two of water for some time.——Put it into the bathing-tub, and add as much more warm water as is necessary to make a bath for the child to sit in, up to the neck.

27. *Powder of Ipecacuan and Rhubarb.*

Powdered ipecacuan, 1 scr.—Ditto rhubarb, ½ dr.—Cream of tartar, 1 dr. ——Rub together in a mortar, and divide into six doses.——One to be taken three times in the day, and washed down with chamomile tea, or

bitter-

APPENDIX.

bitter-wood infusion.——*N. B.* If they excite vomiting divide the doses in two, and give them oftener.

No. 28. *Opium Pills.*

Powdered opium, 1 scr.—Spanish liquorice, 2 scr.——Make into pills, by moistening the liquorice with water, or laudanum, and beating them in a metal mortar.——Divide into 20 pills, one pill (containing 1 gr. of opium) or two for a dose.——*N. B.* A greater quantity may be prepared, observing the same proportions.

29. *Chalk Mixture.*

Prepared chalk, 1 oz.—White sugar, ½ oz.—Thick mucilage of gum arabic, or cashew gum, 2 oz.——Rub them together in a marble mortar, adding by little and little a pint and a half of water.—Then tincture of cinnamon, or cinnamon water, 2 oz.——If these are not at hand, some powdered cinnamon may be mixed with the chalk, in the preparation.

30. *Catechu Decoction.*

Catechu, or japan earth, 2 or 3 dr.—Gum arabic, 2 dr.—Water, 1 pint.——Boil a little, putting in towards the end a stick of cinnamon.—To the liquor (poured off after subsidence) add white sugar, or guava-jelly, enough to sweeten it.——Dose—a small wine glass every three hours, or two table spoonfuls after every motion.

31. *Decoction of Logwood.*

Logwood chips, ½ oz. or 1 oz.—Water, 2½ lb.——Boil in an earthern vessel to 2 pints.——Sweeten with guava-jelly, or with sugar, adding either 2 oz. of tincture of cinnamon, or 4 oz. of red port wine.——Dose—the same as catechu decoction, *No.* 30.

32. *Tincture of Catechu.*

A tea spoonful either of the tincture of catechu, or tincture of kino, may be taken in a glass full of red wine sangree, two or three times in the day.

No. 33. *Emollient*

No. 33. *Emollient Anodyne Clyster* (A).

Linseed or ockro tea, 10 oz.—Olive-oil, 2 table spoonfuls.—Laudanum, from 40 drops to a tea spoonful.

Astringent Clyster (B).

Take logwood, or catechu decoction, *No.* 30 and 31, and Indian arrow-root starch.——Mix, and make a liquid starch, of which 4 oz. may serve for each clyster.——One may be given, either with or without 20 or 30 drops of laudanum, every six hours, or oftener.

34. *Vitriolic Solution.*

White vitriol, 3 dr.—Alum, 1 dr.—Boiling water, 1 pint.——Strain the solution through blotting paper.——Give in table spoonfuls.——It at first causes vomiting or nausea, sometimes purging.——If it continues to do so, the dose is to be lessened.——*See Moseley on Tropical Diseases, page* 542.

35. *Solution of Blue Vitriol.*

Blue vitriol, 15 or 20 gr.——Dissolve in a pint of hot water.——Strain through blotting paper.——Dose—a wine-glass full early in the morning, to be repeated in half an hour.——When given as a vomit, the dose is a wine-glass full every 10 or 15 minutes, till it operates.—*See Chalmers's Diseases of Carolina.*

36. *Drastic Pills.*

Cathartic extract, or compound extract of colycinth, of the shops, 2 scr.—opium, 3 gr.——Make into nine pills.——Three to be taken every third hour, till stools are procured.——*N. B.* If the above extract is not to be procured, take aloes, ½ dr.—Gamboge, 1 scr.—Opium, 1½ gr.——Make it into nine pills, with syrup of ginger.——To be given as above.

37. *Aperient Pills.*

Aloes, gum guaiacum, and Spanish soap, moistened with water, each equal parts.

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parts.—Balsam of Peru, as much as is sufficient for making pills.——If balsam of Peru is not to be had, substitute a few drops of the oil of aniseed. ——Three or four common sized pills at bed-time, or both night and morning.—If they lose their effect, a few grains of gamboge or calomel may be added.

No. 38. *Emulsion of Castor Oil.*

Castor-oil, 4 table spoonfuls.—The yolk of 1 egg.—2 table spoonfuls of Muscovado sugar.—Oil of aniseed, 10 drops.——Rub together in a marble mortar, adding by little and little half a pint of water.——Put it into a bottle with a glass of gin or brandy, and shake the bottle before use.—— Dose—a wine-glass full every half hour, for three times, then every hour, till it operates.

39. *Liniments for Paralytic Limbs.*

(A.) Barbadoes tar, dissolved in rum.——To be rubbed on the parts affected.
(B.) Oil of olives, 3 parts.—Oil of amber, 1 part.——Mix.
(C.) Volatile liniment, *No.* 25, 2 oz.—adding thereto tincture of cantharides, 2 dr.
(D.) Common turpentine, spirits of sal armoniac, equal weights.——Mix gradually together.
(E.) Oil of turpentine, 2 oz.—Camphor, 2 dr.—Ointment of cantharide, 2 oz.

40. *Bitter-Wood Infusion with Rhubarb.*

Bitter-wood infusion, ½ pint.—Tincture of rhubarb, 1 oz.——Mix, or else infuse ½ dr. of sliced rhubarb with the bitter-wood, in hot water.

41. *Paregoric Draught.*

Paregoric elixir, and honey of squills, each a tea spoonful.——To be taken at bed time, in a glass of water.———*N. B.* In want of honey of squills, use common honey.——Dose of the paregoric may be increased to two or more spoonfuls.

42. *Milk of Gum Ammoniac.*

Gum ammoniac, 2 dr.——Rub in a marble mortar, adding by little and little ½ pint

½ pint of water, to dissolve it.——*N. B.* The first portion of water must be poured off before adding a fresh quantity.——To this milk, strained, may be added any of the following articles.——Oxymel of squills, ½ oz.—Syrup of squills, 1 oz.—Common honey, or syrup, ½ oz.—Mindererus's spirit, an equal quantity.—Antimonial wine, 2 dr. or tartar emetic, 1 or 2 gr.——Dose—two table spoonfuls every three hours, or oftener.

No. 43. *Decoction of Bark with Honey of Squills.*

Decoction of bark, *No.* 21, 1 pint.—Oxymel of squills, 1 oz.——Mix.——Dose—a wine-glass full several times in the day.

44. *Opodeldoch, or Saponaceous Liniment.*

Soap, scraped, 2 oz.—Camphor, ½ oz.—Strong rum, 1 quart.—Mix, and set in the sun till the soap, &c. are dissolved.—Any quantity of laudanum may be added thereto, when used.

45. *Nitric Acid.*

To a quart bottle of pure water add one or two dr. either of the nitrous or nitric acid.——This quantity to be taken by glassfuls through the day.——It may be sweetened.——As the acid is apt to corrode the enamel of the teeth, it may be sucked through a straw, a reed, or glass tube.——*N. B.* The acid must not be measured with a tea spoon.

46. *Electuary of Guaiacum with Bark.*

Powdered bark, 1 oz.—Ditto gum guaiacum, ½ oz.—Filings, or rust of steel, 2 dr.—Syrup of ginger sufficient for making an electuary.——Dose—the bulk of a cashew nut, twice or oftener in the day.

47. *Steel Pills.*

Salt of steel, and extract of gentian, each 1½ dr.—Syrup of ginger sufficient to make 3 dozen pills.——Dose—three or four, twice or three times in the day, drinking afterwards bitter-wood infusion.

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No. 48. *Chalybeate Powder.*

Rust of steel, 1 dr.—Aromatic powder (or powdered ginger and cinnamon) 2 dr.——Take 1 scr. in syrup, twice or three times in the day.

DROPSICAL REMEDIES.

49. *Vomits in Dropsy.*

Ipecacuan, in powder, ½ dr.—Water, 1 oz.—Antimonial wine, 2 dr. or tartar emetic, 3 gr.——To be taken every two or three days; and on the intermediate days the diuretics, *No. 52, c. d.*

50. *Purges in Dropsy.*

No. I. Powdered jalap, 1 scr. or ½ dr.—Gamboge, 5 gr.—Cream of tartar, 2 scr.——Mix.——To be taken in ginger-tea or syrup, at night or early in the morning.——To be worked off either with cream of tartar drink or ginger-tea, according as it operates more or less briskly.——Repeat this purge several times, at the interval of a day or two, interposing the use of diuretics and bitters on the intermediate days.

No. II. Take elaterium, 3 gr.——Make into two pills.——One of these may be taken at night, and if it do not operate sufficiently, before the morning, take the other.———*N. B.* This medicine is too rough for weakly subjects.

51.

Cream of tartar, 1 oz.——Divide into 4 papers.——Boil one of these parts in 2 quarts of water, and sweeten it slightly with syrup of ginger, for working off the other powders; one of which is to be taken in a little of the above drink early in the morning, the second paper to be taken two or three hours afterwards, and the third at the same distance of time, unless the previous evacuations should have been excessive.——This medicine is to be repeated every other day, for a week or two, if the patient's strength will allow it, giving on the intermediate days good nourishment, wine, bitters, *&c.*———*N. B.* Should the cream of tartar be not of itself sufficiently active, add 5 gr. of gamboge to the first dose.

Diuretics in Dropsy.

No. 52.

(A.) Nitre in powder, 1 dr..—Powdered squills, 12 gr.—Powdered ginger, ½ dr.——Rub together in a mortar, and make six powders.——One every three hours, drinking the cream of tartar drink, *No.* 51.

(B.) Mercurial or blue pills, *(No.* 96*)* 10 gr.—Dried squills, 3 gr.——Mix for a dose at bed time.

(C.) Infusion of bitter-wood, 1 pint.—Salt of wormwood, ½ oz.—Gin, 2 oz. ——Mix.——A wine-glass full several times in the day.——Diuretic salt, 6 dr. may be substituted in the place of the salt of wormwood.

(D.) Saline julep, *(No.* 11*)* or spirits of mindererus, with an equal quantity of water, ½ pint.——Tincture of cantharides, 2 dr.

(E.) Infusion and tincture of digitalis, or foxglove.—*See further on.*

(F.) Infusion of tobacco.—*See further on.*

Tonics in Dropsy.

53.

(A.) A small tea-cup full of bitter-wood infusion, two or three times in the day, with a tea spoonful of chalybeate wine, or with 3 or 4 gr. of the salt of steel, *viz.* green copperas.

(B.) Strained juice of Seville oranges, 1 quart.——Put into an iron pot, with a handful of new nails.——After standing 2 or 3 days, decant the clear liquor, to which add a pint of spirituous bitters.*——Dose—from a table spoonful to a wine-glass full, two or three times in the day.

[*End of dropsical remedies.*]

54. *Electuary of Conserve of Roses and Nitre.*

Nitre in powder, ½ oz.—Conserve of roses, 3½ oz.—Syrup sufficient for an electuary.——The bulk of a cashew-nut, 3 or 4 times in the day.

* The bitters may be made of the coccoon, or bitter quassia, with canella alba infused in rum.

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No. 55. *Decoction of Bark, with Tincture of Cantharides.*

Decoction of bark, *(No. 21)* ½ pint.—Paregoric elixir, 2 dr.—Tincture of cantharides, 1 or 2 dr.——Dose—from a tea spoonful to two table spoonfuls, according to the age of the patient, 3 or 4 times in the day, in hooping-cough.

56. *Ointment of Galls.*

Powdered galls and pork lard, equal parts, or 2 parts lard and 1 part galls. ——*N. B.* The admixture of astringents with fat seems preposterous; let the powdered galls, therefore, be mixed with a cold poultice of oatmeal and vinegar.

57. *Purging Clysters.*

(A.) Common decoction, or a decoction of any of the malvaceous plants of the country, *(see Appendix, part 2d)* or of chamomile flowers, 1 pint.—Purging salts, from ½ oz. to 1½ oz.—Castor-oil, 2, 3, or 4 table spoonfuls.

(B.) Thin strained gruel, 1 pint.—Muscovado sugar, 2 table spoonfuls.—Salt butter, 1 table spoonful.——Mix.

(C.) Soap, the bulk of a small cashew-nut, scraped.——Dissolved in a pint of warm water.——Add castor-oil, 2 or 3 table spoonfuls.——Agitate so as to make an emulsion.——*N. B.* A little turpentine may be sometimes added.

(D.) Tobacco clyster:—Dried tobacco leaves, 2 dr.—Boiling water, 1 lb. ——Infuse for 10 minutes, then strain.——This clyster may be used in the place of the fumes of tobacco, in strangulated hernia, and in other cases where the injection of tobacco smoke is recommended.

58. *Astringent Injection.*

Powdered galls, pomegranate bark, and gum arabic, each 2 dr.——Boil a little while in ½ pint of water.——To the strained liquor add japonic confection, ½ oz.——One half to be injected cold, either into the anus or vagina.

59. *Astringent Suppositary.*

No. I. Gum arabic, dragon's blood, catechu, bole armenic, each 2 dr.—Su-

gar

gar of lead, ½ dr.——To these, powdered and mixed, add honey sufficient to make 4 suppositaries.——One to be put into the anus, every 6 or 12 hours, or as occasion requires.

Stimulant Gargle—See D, No. 70.

No. II. Strong infusion of the wild cinnamon, or can. alba, 7 oz.—Spirits of lavender, 1 oz.——*N. B.* Mustard or cayenne pepper may be added.

No. 60. *Electuary against Epilepsy.*

(A.) Powdered Peruvian bark, 1½ oz.—Valerian and snake-root, each 2 dr.—Castor, 1 dr.—Syrup of ginger sufficient.

(B.) Angustura bark, 2 oz.—Steel filings, ½ oz.—Syrup of ginger sufficient for an electuary.——Dose—the quantity of a cashew-nut, twice in the day; washing down with bitter-wood infusion.

61. *Antihysteric Pills.*

Gum ammoniac, assafœtida, castor, each 1 dr.—Balsam of Peru sufficient to make pills.——Dose, 4 or 5 common sized pills, 2 or 3 times in the day.

62. *Honey and Spirits of Turpentine.*

Honey, 2 parts.—Spirits of turpentine, 1 part.——Mix.——Dose—2 tea spoonfuls in a draught of barley-water.

63. *Artificial Seltzer Water.*

Dissolve ½ dr. or 1 dr. of natron (fossile alkali) in a pint of water.——Dose, ½ pint 2 or 3 times in the day.

64. *Harrowgate Water.*

Common salt, 1 oz.—Purging salts, ½ oz.—Water, 1 quart.——Dissolve.——Add a tea spoonful of a strong solution of liver of sulphur, or else take a few drops of this in a draught of 4 oz. twice in the day.

No. 65. *Musk*

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No. 65. *Musk Bolus.*

Musk, 15 or 20 gr.—Salt of hartshorn, 5 gr.—Conserve or syrup sufficient for a bolus.——To be taken every 3 or 6 hours.

66. *Assafœtida Clyster.*

Assafœtida, ½ dr. or 1 dr.——Rub in a marble mortar, adding, by little and little, 8 oz. of hot infusion of valerian root or chamomile flowers, and 1 oz. olive-oil.——20 drops of laudanum may be occasionally added.

67. *Musk, Opium, and Camphor.*

Musk, 15 gr.—Camphor, 5 gr.—Opium, 2 gr.——Rub them together in a mortar, with a few drops of laudanum, and add conserve to make a bolus or pill.

68. *Zinc Pills.*

Calx, called flowers of zinc, 2 scr.—Soft manna or crumb of bread, moistened with water, sufficient to make into 12 pills.——Begin with one, morning and evening, increasing the dose one every other day, if the stomach will bear it, till the patient takes 12 in a-day.

69. *Mustard Wine and Electuary.*

White mustard seed bruised.—Conserve of roses, equal parts.—Syrup of ginger, sufficient to make an electuary.——A little spirits of lavender may be added.——White mustard seed, 1 oz.—Madeira wine, 1 pint.——Infuse for 12 hours, and to the strained liquor add spirits of lavender, 2 oz.——A wine-glass full frequently.*

70. *Gargles.*

(A.) Sage-tea, 1 pint.—Vinegar, 4 oz.—Honey, 1 oz.

(A.) Sage-

* Cantharides are also given with the same intention in palsies, either in tincture or powder, thus.—Cantharides, 1 gr.—Salt of hartshorn and gum guaiacum, each 1 scr.—Cordial confection, a sufficient quantity for a bolus.—*See Vaughan, in Med. Com. for* 1789.

(A.) Sage-tea, 1 pint.—Honey, 1 or 2 oz.—Alum, 1 dr.

(B.) Decoction of bark, *(No. 21)* 1 pint.—Honey, 1 or 2 oz.—Tincture of Myrrh, 1 oz.—Elixir of vitriol, enough to acidulate it to a degree of sharpness.

(C.) Thin barley-water, sweetened with honey, 1 pint.—To which may be added, either a table spoonful of peppered vinegar—2 or 3 tea spoonfuls of spirits of hartshorn, or a table spoonful of made mustard.

(D.) Take either a tea spoonful of Cayenne pepper, or a few fresh bird peppers.——Rub them in a marble mortar, with a little salt, and add ½ pint of boiling water.——After it has stood for some time strain, and add an equal quantity of vinegar; or else take 4 table spoonfuls or more of peppered vinegar (such as is kept for table use), and add to this as much water as is necessary to reduce the strength of it.——Dose—2 table spoonfuls frequently.——When used as a gargle, honey should be added, or a little barley-water.

(E.) See stimulant gargle, *No.* 59.

(F.) Borax gargle, *No.* 104.

(G.) Mercurial gargle for venereal ulcers of the throat:—Corrosive sublimate, 4 gr.—Cr. sal. armon. 5 gr.——Dissolve in 3 oz. common water, then add barley-water, ½ pint.—Honey, 1 oz.

For touching the Sloughs of ulcerated Sore-Throat.

Honey of roses, or plain honey, ½ oz.—15 or 20 drops either of weak spirits of vitriol, or spirits of salt.——Some lint or fine linen, wrapt round the end of a probe or pencil, may be dipped in this mixture, and the ulcers of the throat touched therewith several times in the day.——Several other applications of this nature are recommended, as a strong solution of sugar of lead, corrosive sublimate, *&c.*; but I know not if they have any advantage.

No. 71. *Paralytic Infusion.*

Horse-radish, scraped.—Mustard seed, bruised, each 2 oz.—Wild cinnamon, ½ oz.——Infuse for 24 hours in a quart of boiling water, which keep in the sun or by the fire.——To the strained liquor add 4 oz. of brandy, or 2 oz. cinnamon water.——Dose—¼ pint three or four times in the day.

72. *Blue Vitriol Vomit.*

Blue vitriol, 4 gr.——Dissolve in ½ pint of boiling water.——Add a few

drops

APPENDIX.

drops of spirit of lavender.——Dose—a wine-glass full every quarter of an hour, till it operates, drinking nothing afterwards.

No. 73. *Salt of Hartshorn Bolus.*

Salt of hartshorn, 6 gr.—Camphor, 3 gr.—Opiate confection, 1 scr. or ½ dr. ——In place of the opiate confection, 1 gr. of opium, and make into pills with syrup.

74. *Guaiacum Bolus.*

Gum guaiacum, 1 scr.—Tartar emetic and opium, each 1 gr.—Conserve or syrup sufficient.

75. *Pills of Rhubarb and Soap.*

Rhubarb in powder, 2 dr.—Spanish soap, moistened, 1 dr.—Oil of aniseed, 12 drops.——Make into 3 dozen pills.——Dose—4 or 5 at bed-time.

76. *Rhubarb and Soluble Tartar.*

Powdered rhubarb, 1 scr.—Soluble tartar, 2 scr.——Mix.——Take in a wine-glass full of bitter-wood infusion.

77. *Ditto, with Tamarinds.*

Powdered rhubarb and soluble tartar, of each equal parts.—Pulp of tamarinds sufficient to make an electuary.——Dose—the bulk of a cashew-nut at night, to keep the bowels open.

78. *Sulphur and Wine.*

Flowers of sulphur, 1 oz.—Madeira wine, 1 quart.——Mix, and shake well together.

No. 79. *Sulphur*

No. 79. *Sulphur Electuary.*

Flowers of sulphur, 1 part.—Cream of tartar, 2 parts.—Tamarind-syrup, honey, or molasses, sufficient to make an electuary.

80. *Tincture of Rhubarb and Oil.*

Castor-oil, 6 dr.—Tincture of rhubarb, 2 dr.—Water, 1 oz.——Mix, and shake well together before use.——Useful in piles.——*See Griffiths or Blane.*

81. *Oily Emulsion.*

Olive-oil, 2 table spoonfuls.—Spirits of sal. armoniac, 2 tea spoonfuls.—— Shake them together in a half pint phial, adding a table spoonful of syrup or honey, and 6 oz. of water.——Dose—a table spoonful frequently.

82. *Stomachic Electuary.*

Orange marmalade, $2\frac{1}{2}$ oz.—Rust of steel, $\frac{1}{2}$ oz.—Powdered rhubarb and hiera picra, each $\frac{1}{2}$ oz.—Syrup of ginger sufficient.

83. *Stomachic Powder.*

Angustura bark, or columbo-root, and rhubarb, of each equal parts.——Dose —1 scr. or $\frac{1}{2}$ dr. in syrup of ginger, two or three times in the day, drinking afterwards a glass full of bitter-wood infusion.

84. *Compound Steel Powder.*

Prepared chalk, rust of iron, and powdered rhubarb, of each equal parts.—— Dose—1 scr. or $\frac{1}{2}$ dr. in syrup of ginger, twice or three times in the day.

85. *Deobstruent Pills.*

Aloes, assafœtida, and steel filings, of each 2 scr.—Spanish soap, $\frac{1}{2}$ dr.— Syrup of ginger sufficient.——Make into 3 dozen pills.——Four or five night and morning.

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No. 86. *Natron Pills.*

Fossile alkali (soda or natron), prepared and powdered, 1 dr.—Spanish soap, 4 scr.——Make into 30 pills, with syrup.—*Beddoes.*

87. *Mephitic Alkaline Water.*

See mode of preparing it by Dr. Falconer.—*Med. Comm.* 1793.

88. *Keyser's Pills.*

Acetated quicksilver, manna, and gum arabic, of each equal parts.—Rose water sufficient to make a mass for pills.——Dose—three or four common sized pills morning and evening.

89. *Pills of Corrosive Sublimate.*

Corrosive sublimate and crude sal armoniac, of each 5 gr.—Water, 30 or 40 drops.—Conserve, liquorice powder, or starch, sufficient to make a mass for pills, of which 40 pills are to be made.——Dose—one or two, twice or three times in the day.

90. *Plenck's Solution.*

Quicksilver, 1 dr.—Gum arabic, in powder, 2 dr.——Rub them together in a marble mortar (adding a little water) till the globules disappear.——Afterwards add ½ pint more of water.——Dose—two large spoonfuls night and morning.

91. *Solution of Corrosive Sublimate.*

Corrosive sublimate, 8 gr.—Rum or brandy, 1 pint.—Laudanum, 2 tea spoonfuls.——Dissolve the sublimate by rubbing it in a glass mortar, with a small quantity of the spirit, before adding it to the rest.——Dose—one table spoonful night and morning, in a draught of sarsaparilla decoction.

No. 92. *Pills of Calcined Mercury.*

Calcined mercury *(hydrargyrus calcinat.)* and opium, of each 8 gr.—Soft manna, or liquorice, sufficient to make into 12 pills.——Dose—one every night, every other night, or two nights together, then missing the third.

INJECTIONS.

93.

(A.) White vitriol and sugar of lead, of each 1 scr.——Dissolve in 8 oz. of pure water; then add a tea spoonful or two of laudanum.——Should it prove too irritating, dilute with more water, or else add a little mucilage of gum arabic.

(B.) Rose water and common water, of each 2 oz.—Goulard's extract, 16 drops.

(C.) Mucilage of gum arabic, oil of almonds, or olive-oil, of each 1 oz.—Thin barley-water, 4 oz.—Laudanum, 1 tea spoonful.

(D.) Calomel, 2 dr.—Mucilage of gum arabic, 2 oz.—Rose water, or common water, 4 oz.

(E.) Gum kino, 1 dr.—Alum, 2 dr. (or of the pulvis stypticus, ready prepared, 3 dr.)——Rub in a marble mortar, with 1 dr. of gum arabic, gradually adding ½ pint of boiling water.

(F.) Corrosive sublimate, 1 gr.——Dissolve in 7 oz. of hot water, and add 1 oz. of the mucilage of gum arabic.——This is very efficacious in inveterate gleet.

94. *Balsam of Capivi Drops.*

Balsam of capivi, 1½ oz.—Spirit of lavender, ½ oz.——Put into a 4 oz. phial, and shake well before use.——Dose—a tea spoonful several times in the day, in a small spoonful of Muscovado sugar.

95. *Turpentine Pills.*

Venice turpentine, or Canada balsam.——Make into pills, with powdered gum olibanum (or powdered white rosin), and rhubarb, of each equal parts.

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No. 96. *Mercurial or Blue Pills.*

Quicksilver and honey, of each equal parts.—Crumb of bread, double the quantity of either.——Rub the quicksilver and honey together in a marble mortar, till the globules of quicksilver totally disappear; then add the crumb of bread, and make into a mass, to be divided into pills, weighing each four grains.——Dose—one or two, morning and evening, or one three times in the day.

97. *Sarsaparilla Decoction.*

Sarsaparilla, cut in pieces and well bruised, 6 oz.——Infuse all night in 3 pints of water.——In the morning put over a slow fire till one-third is wasted, then strain for use.——Dose—½ a pint three or four times in the day.

98. *Compound Decoction of Sarsaparilla.*

Sarsaparilla-root, sliced and bruised, 3 oz.—Shavings of lignumvitæ and sassafras, of each 1 oz.—Mezereon-root, 1½ dr.——Macerate for some time in 6 pints of water, and boil gently down to 4 pints.——Add of Spanish liquorice, 2 dr. or infuse a handful of the wild liquorice vine in the hot decoction, before straining.

99. *Decoctian of Mezereon.*

Bark of the root of mezereon, 1 dr.——Boil in 3 pints of water to a quart.——Sweeten with liquorice.——Dose—4 oz. three or four times in the day.

100. *Saturnine Lotion.*

Goulard's extract, 1 or 2 tea spoonfuls, or sugar of lead, 1 or 2 dr.—Water, 8 oz.—Vinegar, 4 oz.——Two tea spoonfuls of laudanum may be added.

101. *Saturnine Poultice.*

Oatmeal or cassada bread, sufficient to make a poultice with the above lotion; to which may be added, a little olive-oil or pork lard.——It may be applied hot or cold.

No. 102. *Corrosive Sublimate Lotion.*

One or two grains to the oz. of water, for chancres, &c.

103. *Red Precipitate Ointment.*

Finely powdered red precipitate, 2 dr.—Yellow basilicon, 1 oz.——Let them be well mixed.

104. *Borax Gargle.*

Dissolve 2 dr. or ½ oz. of borax in a pint of water, and add 1 oz. of honey.

105. *Phagedenic Water* for foul Sores, &c.*

(A.) Corrosive sublimate, 1 dr.—Lime-water, 1 quart.——Dissolve and keep for use.

(B.) Corrosive sublimate, 1 dr.—Alum, 2 dr.—Boiling water, 1 quart.

106. *Styptic Water, to stop Bleedings.*

Blue vitriol and alum, of each 3 oz.—Water, 1 quart.——Dossils of lint to be dipt in this, and applied to the bleeding vessels.

107. PRESCRIPTIONS FOR THE CURE OF YAWS.

(A.) Bolus of Sulphur and Treacle.

Flowers of sulphur, ½ dr.—Camphor, 3 gr.—Opiate confection sufficient for a bolus.

(B.) Nembhard's Drops.

Antimonial wine, 5 dr.—Laudanum, 2 dr.—Tincture of cantharides, 1 dr.—Camphor,

* These old compositions, on account of their being unchemical, are now laid aside; but they are, nevertheless, very useful.

APPEN-DIX.

Camphor, ½ dr.——Dissolve the camphor in the tincture of cantharides and laudanum, or in a little brandy, then add the antimonial wine.——Dose—a tea spoonful every night, in a draught of sarsaparilla decoction.

(C.) *Nembhard's Pills.*

Quicksilver and Venice turpentine, of each ½ oz.——Rub them in a marble mortar, till the globules of mercury disappear; then add, of finely powdered gum guaiac, 1½ oz.—Camphor, moistened with rum or brandy, 1 dr.—Castile soap, 1 oz.——Make into pills with balsam of guaiac or lignumvitæ rum.——Make pills of 4 gr. each.——Dose—1, 2, or 3 daily.—*Nembhard on Yaws.*

(D.) *Van Swieten's Solution.*

To 1 pint of this, add an equal quantity of tincture of guaiac, (lignumvitæ rum) and to the quart put 4 tea spoonfuls of laudanum.——Dose—2 table spoonfuls every night, in sarsaparilla decoction.

(E.) *Dr. Wright's Tincture.*

Gum guaiac, 10 dr.—Virginian snake-root, 3 dr.—Pimento, 2 dr.—Opium, 1 dr.—Strong rum, 1 quart.——Digest.——And to the strained tincture add ½ dr. of corrosive sublimate, dissolved in an oz. of spirits.——Dose—2 table spoonfuls in sarsaparilla decoction.—*Account of Med. Plants.*

(F.) *Cool Drink.*

Sarsaparilla, 12 oz.—Muscovado sugar, 12 lb.—Water, 3 gallons.——Mix; and set them together for a fortnight to ferment, and then use it for common drink.—*Virgile in Sauvages.*

(G.) *Another Dietetic Yaw Drink.*

Lignumvitæ chips, 6 lb.—Sarsaparilla, 4 lb.—Vervain (herb and root), 2 lb.—Muscovado sugar, 3 lb.—Water, 6 gallons.——Mix; and set them to ferment, and when sour, use for common drink.——The patient, whilst using this drink, is to be made to bathe every two or three days, in a warm bath, prepared by boiling lignumvitæ chips in the water. On coming out

of

of the water he is to be rubbed with lignumvitæ rum, and the yaws dressed with lint dipped in the same.——A dose of calomel is to be now and then given at night, and worked off the following morning.*

(II.) French Remedy.

Polypodium-root, 2 lb.—Gum guaiacum, 2 oz.—Sassafras, shavings, 4 oz.—Sarsaparilla, cut, 1½ lb.—Aniseed, ½ lb.—Rhubarb-root, sliced, 2 dr.——China-root, cut, ½ lb.—Florentine orris-root, bruised, ½ lb.—Water, 3 gallons.——Boil to 1½ gallon; then strain, and add 6 lb. of brown sugar.——Divide into 6 bottles, and add to each bottle 10 grains of corrosive sublimate.——Give one table spoonful the first morning, and two table spoonfuls every morning after.

(I.) Alterant Decoction.

Take of the root of sarsaparilla, sliced and bruised, 3 oz.—Shavings of lignumvitæ, 1 oz.—Mezereon-root, 2 dr.—Water, 6 pints.——Steep the ingredients in the water over night, and in the morning following, boil the liquor with the ingredients in it down to one half the quantity.——When strained, it may be sweetened with liquorice.——The last article, *viz.* the mezereon-root, should not be added till towards the end of the boiling.

No. 108. *Local Applications for the Yaws.*

(A.) Rust of iron and lime-juice.——As this is said to be the preparation, employed for hastily drying up the yaws, on negroes going to market, it ought to be useful at an after period.
(B.) Phagedenic water.—*See No.* 105.
(C.) Dissolve ½ dr. of blue vitriol, in a pint of water.
(D.) Red precipitate ointment.—*See No.* 103.

109. *Charcoal Poultice for foul Ulcers.*

To 1 lb. of cassada, or any other common poultice, add 2 oz. fine powdered charcoal.

* For this I am indebted to Mr. Gray, an observant gentleman in the parish of St. George.

APPENDIX.

No. 110. *Antiseptic Poultice.*

To the common cassada poultice, add a quantity of leaven and honey, or melasses.

111. *Nitric Acid Lotion, for Ulcers.*

To 1 pint of water add 1 or 2 drachms of nitric acid.

112. *Lotion of Sal Armoniac, to be used in Sprains and Inflammations.*

Take vinegar and water, equal parts, or 2 parts water and 1 vinegar; and add crude sal armoniac, in the proportion of 1 or 2 dr. to a quart.——Camphorated spirits may be occasionally added.——A sufficient quantity of this should be kept always ready in every hot-house.

113. *Collyria, or Eye-Waters.*—*See page 250.*

(A.) Take white vitriol, 1 dr.——Dissolve in a quart of boiling water; then add a small quantity of camphorated spirits, and strain through paper or fine linen.—This, like the foregoing *Formula*, should be kept always prepared.——A few drops of laudanum may be occasionally added before use.*

(B.) Collyrium.

Take sugar of lead, and dissolve in rose-water, or in pure common water, in the proportion of 2 or 3 gr. to the oz.——To this a small quantity of camphorated spirits, or a few drops of laudanum, may, as directed above, *(A.)* be added.

(C.) Collyrium.

Take spirits of mindererus, (see additional *Formulæ, further on*) and rose-water,

* It was before remarked, *page* 250, that collyria are much more beneficial when used by means of an eye-cup. Eye-cups may be had of Mr. Menzies, druggist, in Kingston.

water, or pure common water, equal quantities.——To which may be added a little camphorated spirits, or laudanum, as directed above *(A.)* *(B.)*

(D.) Alum Poultice for the Eyes.

Take a piece of alum, and the whites of two or more eggs.——Shake them together till a curd is formed, which separate carefully from the alum, and spread on lint.——To be applied to the closed eye-lids at bed time.——This may be more advantageously prepared, by putting the whites of the eggs into a leaden or pewter vessel, and rubbing with alum; and, instead of applying it simply, it may be mixed with conserve of roses, or bruised rose-leaves, bruised pomegranate-flowers, *&c.*

No. 114. *Eye-Ointments.*

(A.) Take simple cerate*, 5 parts.—Finely prepared lapis calaminaris, 1 part.——Mix well together, by rubbing on a China tile or plate.

(B.) Take simple ointment†, 6 parts.—Powdered white vitriol, 1 part.——Mix well together, by rubbing as above *(A.)*——A small quantity of the above, or of any other of the common eye-ointments, is to be applied to the edges of the eye-lids, by means of a hair-pencil or feather, as directed, *page* 252.

115. *Ipecacuan Glyster.*

Take of the bruised root of ipecacuan, 2 dr.——Boil for a short time in a pint and a half of water.——Then strain for a glyster.

116. *Saturnine Pill.*

Take of acetated ceruss, *i. e.* sugar of lead, 2 gr.—Of solid opium, 1 gr.——Syrup sufficient to make a pill.——To be taken every three or six hours, in profuse hæmorrhagies and in diarrhœa.

 No. 117. *Fowler's*

* Simple cerate is made by melting olive-oil, 6 parts.—White wax, 3 parts.—Spermaceti, 1 part.

† Simple ointment is made by melting together olive-oil, 5 parts.—White-wax, 2 parts.

APPENDIX.

No. 117. *Fowler's Arsenical Solution.*

Take of white arsenic in fine powder, and salt of tartar, each 64 gr.—Of distilled (or pure rain water) half a pint.——Put these into a Florence oil flask, which place in a vessel filled with sand. Put this vessel over a fire, and make the liquor boil till the arsenic is dissolved. Lastly, filter the liquor through blotting paper, and add an equal quantity of water.——The dose to adults is from 10 to 20 drops, two or three times in the day.

118. *Vaughan's Arsenical Pill.*

Take of crude sal armoniac *(muriate of ammonia)*, 1 dr.—White arsenic, in very fine powder, 5 gr.—Opium, 15 gr.——With the necessary quantity of crumb of bread and syrup, make a mass, to be divided into 60 pills.——Dose—2 pills morning and evening.

119. *Seneka Decoction.*

Take seneka-root, coarsely powdered, ½ oz.——Boil in half a pint of water to a quarter of a pint.——Dose—2 table spoonfuls every half hour in croup, &c.—*See Archer in Annals of Medicine*, 1799.—*See Med. Repos. vol. II. where it is recommended in measles.*

120. *Artificial Musk.*

Take 3½ dr. of concentrated nitric acid, which drop gradually on 1 dr. rectified oil of amber in a wine-glass.——Let the mixture stand 24 hours, when there will be found floating on the surface a fragrant yellow resin, resembling musk. This matter is to be frequently washed, first in cold, then in hot water, until it no longer retains any acidity. To administer this, let 10 or 12 gr. be rubbed in a mortar, with 2 or 3 blanched almonds, adding gradually 6 oz. of water duly sweetened.——Dose—to a child 1 or 2 years old, 2 tea spoonfuls every 2 or 3 hours.—*See Med. and Phys. Jou. vol. I.*

121. *Dr. Griffith's Prescription in Hectic Fever and Chlorosis.*

Take myrrh, 1 dr.—Grind it in a mortar with salt of wormwood, ½ dr.——Pour on by degrees 6 oz. water, then dissolve therein 12 gr. of salt of steel *(ferrum vitriolat)*, and add a sufficient quantity of syrup.——This to be taken

taken in 3 or 4 doses during the day.——This Formula, though not very conformable to chemistry, has been highly celebrated in practice.—*See Reid on Consumption.—Townshend's Guide to Health, &c.*

No. 122. *Magnesia Mixture, for cure of Heartburn, &c.*

Take calcined magnesia, 1 dr.—Common water, 6 oz.—Water of ammonia, (spirits sal. armon.) 2 dr.—Compound spirits of lavender, 1 dr.——Dose—a table spoonful occasionally.

123. *Charcoal Electary.*

Take of finely powdered charcoal, 2 dr.—Sal soda, 2 dr.—Electary of senna, 4 oz.——Dose—the bulk of a walnut.———*N. B.* Charcoal powder may be taken in doses of ½ dr. in any vehicle, as syrup of ginger, &c.

124. *Sulphur Bath.*

Take of common brimstone, and of quick-lime, each, any quantity; and boil together, for some time, in a due quantity of water.——Allow it to cool and settle, then pour off the clear golden coloured liquor, and bottle it.—Half a gallon of this to be added to the water of a tepid bath. The daily or frequent use of this bath, will cure the most inveterate herpes, spreading over the whole body.

125. *Oxygene Ointment.*

Take pork lard, 1 lb.—Add thereto gradually, whilst melting in an earthern pipkin, 6 dr. of nitric acid.——Keep stirring, with a wooden spatula, until the lard begins to boil.———Or, take pork lard, 1 lb.—Black oxyde of manganese, ½ lb.——Mix by rubbing them well together, for some time, in a marble mortar.

126. *Sulphur Ointment.*

Take hogs lard, 2 parts.—Flowers of sulphur, 1 part.——Mix by rubbing them together.———*N. B.* A small quantity of crude sal armonia, *(muriate of ammon.)* or of alkaline salt, (kali prepared) may be occasionally added, to render the ointment more efficacious, in obstinate cases of itch, &c.

APPENDIX.

No. 127. *White Precipitate Ointment.*

Take white precipitate of mercury, *(calx hydrargyr alb)* 1 dr.—Hogs lard, 1½ oz.——Mix by rubbing them well together.

128. *Ware's vinous Tincture of Opium.*

This is prepared after the Formula, in an old London pharmac. in 1745, *viz.* by digesting, for some days, 1 oz. of pure opium, in 8 oz. of white wine. The spices in the original receipt can be of no use in a collyrium.

129. *Aqua Sapphirina.*

Take fresh made lime, 3 oz.—Crude sal armonia, *(muriate of ammon.)* 2 scr. —Finely powdered verdigrease, 4 gr.——Mix, and let them stand for 24 hours, then filtrate the liquor.

130. *Escharotic Powders, for destroying Specks, &c. on the Eye.*

(A.) Take refined sugar, 2 dr.—Powdered filings of tin, 1 dr.—White vitriol, 5 gr.——A little of this to be blown into the eye through a quill.

(B.) Take white sugar candy, 1 dr.—Alum and white vitriol, each 10 gr. ——Make a very fine powder to be blown into the eye.

(C.) Take of very finely levigated glass and sugar candy, each equal parts. Make a very subtile powder to be used as above.

131. *Corrosive Sublimate Collyrium.*

Take of distilled water, ½ lb. or else common water, in which 2 or 3 gr. of crude sal armoniac have been previously dissolved.—Corrosive sublimate, 1 gr. ——Rub it in a glass mortar, and add the water.——When dissolved filter through blotting paper.

132. *Ointments for Scald Head.*

(A.) Take common tar, ½ lb.—Yellow wax, ½ oz.——Melt them together, stirring in 2 oz. of flowers of sulphur.

(B.) Take

(B.) Take pork lard, 2 oz.——Rub in a glass mortar, gradually adding 1 or 2 dr. of oil of vitriol.

No. 133. *Lotions for Scald Head, &c.*

Take sulphurated kali, 3 dr.—White soap, 1½ dr.—Lime water, ½ lb.——Mix.——Or, take sulphurated kali, 1 oz.—Lime water, 1 lb.——Mix.

DIRECTIONS

DIRECTIONS

FOR THE

PREPARATION OF SOME OTHER FORMULÆ,

Which are necessary to be kept ready in Families, or on Estates.

APPENDIX.

Laudanum.

Opium, dried and powdered, or else sliced and bruised, 10 dr.—Strong rum, 1 pint.——Digest, by placing them in the hot sunshine for 3 or 4 days, or longer; then strain off.

Antimonial Wine.

Tartar emetic, 2 scr.—Boiling water, 2 oz.—Madeira wine, 8 oz.——Dissolve the tartar emetic in the water, then add the wine.——Dose—from 20 or 30 drops to a tea spoonful, in mint tea.

Tincture of Bark.

Peruvian bark, in powder, 2 oz.—Dried peeling of Seville orange, 1 oz.—Snake-root, 2 dr.——Digest in 1½ pint of rum, or rather brandy.——Decant it, and keep in a closed bottle for use.

Tincture of Myrrh.

Myrrh, 3 oz.—Rum, 1 quart.——Digest, placing the bottle in a hot sun.

Tincture of Guaiacum, or Lignumvitæ Gum.

Lignumvitæ gum, 2 oz.—Strong rum, 1 quart.——Digest.——Dose—2 tea spoonfuls, or a table spoonful, in a wine-glass of water.——One tea spoonful of spirits of hartshorn may be added, for a sweating draught in rheumatism.

Tincture

Tincture of Catechu.

Catechu, or japan earth, in powder, 1½ oz.—Cinnamon, bruised, 1 oz.—Rum, 1 pint.——Digest.

Bitter Tincture, or Bitters.

Gentian root, 2 oz.—Dried peeling af Seville orange, 1 oz.—Canella alba, or wild cinnamon, ½ oz.—Rum or brandy, 3 pints.——Digest.

Tincture of Aloes.

Aloes, in powder, ½ oz.—Extract of liquorice, 1½ oz.—Weak rum, 1 pint. ——Digest, placing the bottle in the hot sun.——Dose—from a tea spoonful to a table spoonful, by itself.——In water, or with bitters, or with steel medicines, in cases of dirt-eating, obstructed menses, &c.

Rhubarb Wine.

Rhubarb root, sliced, 2 oz.—Cardamon seeds (the greater now common in Jamaica), ½ oz. or else wild cinnamon *(canella alba)*, 2 dr.—Strong rum, 2 pints.——Digest for a week.——Dose—from 1 to 3 spoonfuls.

Mindererus's Spirit.

Volatile sal armoniac, any quantity, pour on gradually distilled vinegar, until the ebullition, or frothing, ceases.

Dover's Sweating Powder.

Vitriolated tartar, 3 dr.—Opium and ipecacuanha-root, each 1 scr.——Grind them in a mortar to a fine powder.——Dose—from 5 to 12 gr.

Lime-Water.

Fresh burnt unslacked lime, 1 pint, or more.——Put it into any wooden vessel, and pour on gradually two gallons of water, either cold or hot, stirring the lime about whilst the water is poured on; then let it stand till the

lime

APPENDIX.

lime subsides, and afterwards decant the clear water, which is to be kept in bottles, closely corked.

Infusion of Digitalis, or Foxglove.—Withering.

Dried leaves of digitalis, 1 or 2 dr.—Boiling water, ½ pint.——Infuse for 4 hours, and strain off the liquor clear, to which add brandy, or gin, or cinnamon-water, 1 oz.——Dose—2 spoonfuls twice in the day, in dropsy.

Tincture of Digitalis.—Darwin.

Dried leaves of digitalis, 2 oz.—Brandy, ½ pint.——Infuse and digest for several days.——Dose—from 15 to 30, or 60 drops.

Drake's Tincture of Digitalis.

Dried leaves of digitalis, 1 oz.—Spirits of wine and pure water, each 2 oz. or of common brandy, 4 oz.——Digest with a gentle heat, (that is, by placing it in the sun) for 24 hours, and strain.——Dose—from 15 to 30, or more drops, in 2 spoonfuls of saline julep, or any other liquor.

Infusion of Tobacco.—Fowler.

Virginian tobacco leaves, 1 oz.——Infuse for 1 hour in a pint of boiling water.——Strain off, and add 2 oz. of brandy.——Dose—from 40 to 60 drops, or more, twice in the day.

Tincture of Tobacco.—Fowler.

Virginian tobacco leaves, 1 oz.—Strong spirits, 1 pint.——Digest, and strain off.——Dose—from 30 to 60 drops, twice in the day.

Chalybeate or Steel Wine.

Iron filings, 4 oz.—Canella alba, or wild cinnamon, 2 dr.—Rhenish wine, or Madeira wine, with the addition of a tea-spoonful of cream tartar.——Digest for a week, and strain.——Dose—a tea-spoonful in bitter-wood infusion.

POSOLOGICAL

POSOLOGICAL TABLE.

THE DOSES OF MEDICINES IN THE FOLLOWING CATALOGUE ARE FOR ADULTS, OR PATIENTS NOT UNDER FIFTEEN YEARS OF AGE; TO THOSE WHO ARE YOUNGER, THEY MUST BE LESSENED, VIZ.

TO young persons, under fifteen years of age, give $\frac{2}{3}$ of the prescribed dose. APPENDIX.
To children, of seven years, $\frac{1}{2}$ ditto.
——— of three years, $\frac{1}{4}$ ditto.
——— of one year, $\frac{1}{6}$ ditto.
——— at the breast, $\frac{1}{10}$ or $\frac{1}{12}$ ditto.

It is recommended that the medicines, marked in the following catalogue with an asterism (*), be taken or given with greater caution, or not taken but by the advice and prescription of some practitioner.

A

Aloes in powder, or in a pill, from 5 gr. to 1 scr.
Alum in powder, from 5 to 15 gr.
*Arsenic, from $\frac{1}{16}$ to $\frac{1}{2}$ gr.
Antimony, *crude*, in powder, from 5 gr. to 1 dr.
Assafœtida in pills, from 10 gr. to $\frac{1}{2}$ dr.

B

Barbadoes tar.
Balsam *capivi*, from 30 to 60 drops, in sugar.
——— *Canada*, ditto ditto
——— *of Peru*, from 20 to 40 drops, in ditto.
Borax in powder, from 5 gr. to $\frac{1}{2}$ dr. in syrup or honey.
Bark, *Peruvian*, in powder, from 15 gr. to 1 dr.
—— *angustura*, from 10 to 20 gr.

C

Calomel, in powder, or pill, from 3 to 10 gr.
Camphor, from 3 to 15 gr.
Columbo-root in powder, from 10 gr. to 3 scr.

APPENDIX.

Confection, *aromatic*, from 1 scr. to 2 scr.
———— *opiate*, from 10 gr. to ½ dr.
———— *japonic*, from 10 gr. to 1 scr.

E

Elixir *of vitriol*, from 15 to 30 drops, in a glass of water.
—— *of guaiacum*, from 30 drops to 2 tea spoonfuls, in barley water.
—— *paregoric*, from 30 to 100 drops, in water.
—— *sacred*, from 2 dr. to ½ oz.

F

*Foxglove in powder, from 1 to 3 gr.
———— in tincture, 18 drops to 200.

G

Gum *guaiacum* in powder, 1 scr. in syrup.
—— *ammoniac* in pills, 1 scr. or ½ dr.
—— *kino* in powder, from 10 to 20 gr. in syrup, or port wine.
Gamboge, from 2 gr. to 12 gr.

I

Ipecacuan in powder, from 10 gr. to ½ dr. as a vomit; from 1 to 5 gr. several times in the day, in fluxes.
Japan-earth, or *catechu*, from 1 scr. to ¼ dr. in port wine.

L

Laudanum, from 15 to 100 drops. The dose of laudanum, or of opium, is entirely relative to the constitution of the patient. Some persons will be more affected with 25 or 30 drops, the ordinary dose, than others by 50 or 100.

M

Magnesia, from ½ dr. to 2 dr.
Madder in powder, from ½ dr. to 1 dr.
Manna, 1 or 2 oz. dissolved in warm water.
Mercury, *viz. calomel.—See calomel.*
*——— *corrosive sublimate*, dissolved in spirits of water, from ⅛ to ¼ gr.
———— *calcined*, from 1 to 3 gr. in pills.
*——— *turpeth-mineral*, from ½ gr. to 1 gr. in a pill.
*Muriatic acid, or *spirits of salt*, 2 dr. in a quart of water, or from 5 to 10 drops in 2 oz. water, to be taken several times in the day.
Musk, from 10 to 30 gr. in a bolus.
Mustard seed, *white*, 2 table spoonfuls in a glass of cold water, twice in the day.
Myrrh, from 10 gr. to ½ dr. in powder, or pills.

Natron

N

Natron *(soda, or fossile alkali)*, from 5 gr. to 1 scr. in water, or bitter infusion.

Nitre in powder, from 3 to 15 gr.

*Nitric acid, 2 dr. to 1 quart of water; a glass full frequently.——*N. B.* The nitric acid must not be measured by a tea spoon. The best way is to measure two tea spoonfuls of water in a glass, and to mark the glass for a measure of the nitric acid. But there are gauged glass measures to be bought.

O

Oil *of amber*, from 5 to 20 drops, in barley-water.

——- *aniseed*, from 3 to 10 drops, in a mixture.

——- *mint*, from 1 to 3 ditto, ditto.

——- *cinnamon*, from 1 to 3 drops, in a mixture.

Opium in a pill, from ½ gr. to 2 or 3 gr.—*See laudanum.*

Oxymel *of squills*, a small tea spoonful.

P

Pills, *aloetic pills*, with *myrrh*, from 1 scr. to ½ dr.

*—— *coloquintida*, with *aloes*, from 1 to 2 scr.

——- *fætid*, or *gum pills*, 1 scr.

*—— *mercurial*, or *blue pills*, from 10 to 15 gr. in the day.

——- *squill pills*, 15 gr. to 25 gr.

Powder, *aloetic*, with *canella alba*, from 10 gr. to 1 scr.

——- *ditto*, with *iron*, 10 gr. to 1 scr.

——- *ditto*, with *guaiacum*, ditto.

——- *Dover's powder*, from 10 to 20 gr. at night.

*—— *James's*, or *antimonial powder*, from 3 to 5 or 7 gr. every 3 hours]

*—— *of senna, compound*, from 1 scr. to ½ dr.

*—— *of scammony*, with *aloes*, from 10 gr. to 1 scr.

*—— *of ditto*, with *calomel*, ditto.

R

Rust *of iron*, prepared, from 5 gr. to ½ dr. in syrup of ginger.

Rhubarb in powder, from 10 gr. to ½ dr.

*Rhus toxicodendron, *poison oak*. This new medicine, in paralytic disorders before mentioned, must be used with great caution. The dose at first should not exceed ¼ of a grain, but it may be increased gradually to the quantity of a great many grains.—*See Alderson's Essay on the Rhus Toxicodendron.*

APPENDIX.

S

Salt, *purging salts*, of *Glauber*, or *vitriolated magnesia*, from ½ oz. to 1½ oz.
—— *of tartar*, or *wormwood*, from 5 gr. to ½ dr. in water.
—— *of hartshorn*, from 5 to 15 gr. in a bolus.
—— *of steel*, from 2 to 5 gr. in water, or bitter infusion.
Serpentary, or *snake-root*, from ½ scr. to ½ dr. in powder, with syrup of ginger.
Scammony, from 3 to 12 gr. in pills, or barley-water, or almond emulsion.
Spermaceti, from 1 scr. to 1 dr. with sugar, or in emulsion.
Sulphur, *flowers of*, from ½ dr. to 2 dr. in milk, or molasses.
Spirits *of hartshorn*, 1 or 2 tea spoonfuls in water.
———— *sal armoniac*, from 15 drops to 1 tea spoonful.
———— *volatile, fœtid*, from 10 to 30 drops in water.
———— *lavender, compound*, from 1 to 2 tea spoonfuls in sugar.
———— *sweet nitre*, from 1 to 2 tea spoonfuls in barley-water.
———— *mindererus*, from 1 to 2 table spoonfuls, with water.
Squill, dried*, in powder, from 2 to 4 gr. in ginger syrup.
——— *vinegar of squills*, 1 tea spoonful in ginger-tea.
——— *oxymel of squills*, ditto, ditto.

T

Tartar emetic, from 2 to 5 gr. in water, as a vomit.
—— *soluble tartar*, from ½ oz. to 1 oz. in ½ pint of water.—Dose—a wine-glass full frequently.
—— *vitriolated tartar*, from 1 dr. to ½ oz. in water.
Tincture *of aloes*, or *elixir proprietat.* from 15 to 60 drops in water.
———— *aromatic*, from 1 to 2 tea spoonfuls in water.
———— *assafœtida*, from 20 drops to 1 tea spoonful.
———— *bark*, 1 or 2 tea spoonfuls in water or wine.
———— *catechu*, or *japan-earth*, from 1 to 2 tea spoonfuls in red wine and water.
*———— *cantharides*, from 5 to 30 drops, gradually.
———— *castor, compound*, a tea spoonful.
———— *cardamom*, dittto.
*———— *muriated of iron*, or *tincture of steel* in *spirits of salt*, from 10 to 30 drops in water.
———— *jalap*, from 2 tea spoonfuls to a table spoonful.
———— *gum kino*, the same as *catechu*.
———— *guaiacum, ammoniate*, 1 or 2 tea spoonfuls.
———— *opium.—See laudanum.*
———— *rhubarb*, 1, or 2, or 3 table spoonfuls.
———— *snake-root*, a tea spoonful or two.
———— *valerian, volatile*, from 20 to 60 drops in water.

Vitriol

* Dried squills do not keep well; it is better, therefore, to keep the oxymel or vinegar.

V

Vitriol, *white*, from 10 gr. to 1 scr. in 4 oz. of water, for a vomit.
*——— *blue*, from $\frac{1}{2}$ gr. to $1\frac{1}{2}$ gr. in 2 oz. water, for a vomit.
——— *green*, from 2 to 5 gr.—*See salt of steel.*

W

Wine, *antimonial*, from 10 to 50 drops in mint-tea.
——— *ipecacuan*, from $\frac{1}{2}$ oz. to 1 oz. for a vomit.
——— *steel*, 1 or 2 tea spoonfuls in water, or bitter infusion.

Z

*Zinc, *calcined*, or *flowers of*, begin with 2 gr.—From this dose to 1 scr.

LIST

APPENDIX.

LIST OF MEDICINES REQUISITE FOR A FAMILY, OR FOR A PLANTATION CONTAINING ONE HUNDRED NEGROES.

	For a Family.	*For a Plantation.*
A		
ALOES, soccotrine	2 oz.	8 oz.
Alum	4 oz.	8 oz.
B		
Bark, Peruvian, in powder	4 lb.	6 lb.
Balsam capivi		1 lb.
C		
Cantharides	4 oz.	16 oz.
Calomel	1 oz.	2 oz.
Camphor	6 oz.	½ lb.
Catechu or japan earth	4 oz.	1 lb.
Chamomile flowers	6 oz.	2 lb.
Cinnamon, cloves, *&c.*		
E		
Elixir of vitriol	4 oz.	16 oz.
Elixir, paregoric	6 oz.	16 oz.
Extract of coloquintida	2 dr.	½ oz.
F		
Flowers of sulphur	8 oz.	1 lb.
Flowers of zinc	½ oz.	1 oz.
G		
Gamboge	½ oz.	1 oz.
Gum ammoniac	2 oz.	6 oz.
Gum arabic	4 oz.	½ lb.
Gum kino	2 oz.	
H		
Honey of squills	1 lb.	
I		
Ipecacuan root		2 oz.
Ipecacuan powder	1 oz.	4 oz.
Iron filings, prepared		2 lb.
Isinglass	6 oz.	
Jalap in powder	2 oz.	8 oz.

Linseed

L	*For a Family.*	*For a Plantation.*
Linseed	1 lb.	4 lb.
Liquorice	4 oz.	½ lb.
M		
Magnesia	8 oz.	8 oz.
Manna	4 oz.	
Mezereon		4 oz.
Muriatic acid	2 oz.	
Mustard seed	1 lb.	
Myrrh	3 oz.	6 oz.
N		
Nitre	2 oz.	1 lb.
Nitrous acid	6 oz.	6 oz.
O		
Opium	3 oz.	6 oz.
Oil of amber	1 oz.	
Oil of olives	2 lb.	6 lb.
Oil of anniseed	1 oz.	2 oz.
Oil of peppermint	½ oz.	
or essence of peppermint	4 bottles	6 bottles.
Oil rectified, of turpentine	6 oz.	2 lb.
Ointment, basilicon	6 oz.	4 lb.
Ointment, cerate	6 oz.	4 lb.
Ointment, mercurial		1 lb.
P		
Plaster of litharge, with gum	4 oz.	1 lb.
Plaster, mercurial	4 oz.	
R		
Rhubarb, in powder	2 oz.	4 oz.
Rhus toxicodendron	1 oz.	2 oz.
S		
Sago		1 lb.
Sal armoniac		6 lb.
Salts, purging	6 lb.	25 lb.
Salt of wormwood or tartar	4 oz.	½ lb.
Salt of steel	1 oz.	2 oz.
Salt of hartshorn	1 oz.	

Senna

APPENDIX.

	For a Family.	*For a Plantation.*
Senna	4 oz.	6 oz.
Snake-root, Virginian	4 oz.	6 oz.
Spirits of sal armoniac	6 oz.	1 lb.
Spirits of mindererus	1 lb.	2 lb.
Spirits of lavender	6 oz.	
Vitriolic æther	6 oz.	
Sweet spirits of nitre	8 oz.	8 oz.
T		
Tartar emetic	2 dr.	½ oz.
Turpentine, Strasburg or Venice	2 oz.	4 oz.
V.		
Vinegar		6 galls.
Vinegar of litharge, or Goulard's extract of lead	2 oz.	½ lb.
Vitriol, white	1 oz.	6 oz.
Vitriol, blue	1 oz.	6 oz.
Verdigrease	4 oz.	8 oz.
Red precipitate	1 oz.	6 oz.
Corrosive sublimate		½ oz.

At the same time the undermentioned articles should be ordered, which are equally necessary in families and on plantations :

One large clyster syringe—one small ditto—six small ditto for injections—six lancets—one instrument for extracting teeth—three or four eye cups—one dozen bougies, in sorts—three dozen phials, in sorts, with corks—one nest pill-boxes—plenty of lint and tow—scales and weights, two sets, one small one larger—one small glass mortar, one larger, of Wedgwood ware—one iron mortar.——☞ No marble or brass mortar should be used in preparing medicines.

A small room should be set apart as a dispensary, for containing and administering the above necessary medicines, &c. or else a large press, with shelves and drawers, should be provided to deposit them in, so as they may be promptly got at when wanted, and that there may be no waste.

To prevent pilferage or accidents, they should be kept locked up, and the key deposited with some domestic who is seldom out of the way, or who should never absent himself without delivering the key to another confidential person.

APPENDIX.

PART SECOND.

SCIRE POTESTATES HERBARUM, USUMQUE MEDEUDI.

IN every soil, unnumber'd weeds will spring;
Nor fewest in the best:———

———And yet some weeds arise,
Of aspect mean, with wondrous virtues fraught;

Such, planter, be not thou asham'd to save
From foul pollution, and unseemly rot;
Much will they benefit thy house and thee.
But chief the YELLOW THISTLE* thou select,
Whose seed the stomach frees from nauseous loads;
And, if the music of the mountain dove
Delight thy pensive ear, sweet friend to thought!
This prompts their cooing, and inflames their love.
Nor let rude hands the KNOTTED GRASS† profane,
Whose juice worms fly: Ah, dire endemial ill!
How many fathers, fathers now no more,
How many orphans, now lament thy rage?
The COW-ITCH also save; but let thick gloves
Thine hands defend, or thou wilt sadly rue
Thy rash imprudence, when ten thousand darts,
Sharp as the bee-sting, fasten in thy flesh,

 And

* Gamboge thistle, or poppy. (*Argemone*).
† Worm grass. (*Anthelmia*).

And give thee up to torture. But, unhurt,
Planter, thou may'st the humble CHICKWEED* cull;
And THAT,† which coyly flies the astonish'd grasp.
Not the confection nam'd from Pontus' king;
Not the bless'd apple Median climes produce,
Tho' lofty Maro (whose immortal muse
Distant I follow, and, submiss, adore)
Hath sung its properties, to counteract
Dire spells, slow-mutter'd o'er the baneful bowl,
Where cruel stepdames poisonous drugs have brew'd,
Can vie with these low tenants of the vale,
In driving poisons from the infected frame:
For here, alas! (ye sons of luxury mark!)
The sea, tho' on its bosom halcyons sleep,
Abounds with poison'd fish; whose crimson fins,
Whose eyes, whose scales, bedropt with azure, gold,
Purple, and green, in all gay summer's pride,
Amuse the sight; whose taste the palate charms;
Yet death, in ambush, on the banquet waits,
Unless these antidotes be timely given.
But, say what strains, what numbers, can recite
Thy praises VERVAIN; or, WILD LIQUORICE,‡ thine,
For not the costly root, the GIFT OF GOD,§
Gather'd by those, who drink the Volga's wave,
(Prince of Europa's streams, itself a sea)
Equals your potency! Did planters know
But half your virtues; not the cane itself,
Would they with greater, fonder, pains preserve!

See Grainger's Poem on the Sugar Cane.

JAMAICA

* Holosteum.
† Sensitive plant. *(Mimosa).*
‡ Abrus Precatoriœ
§ Rhubarb.

JAMAICA SIMPLES.

Such as have an Emetic Quality, or that Vomit.

RED-HEAD, or bastard ipecacuanha *(Asclepias curassavica).*——Expressed juice of the plant. Dose—from a tea spoonful to 1 or 2 table spoonfuls.—Powdered root, also emetic; but, according to Dr. Wright, is not safe. The dose is from 1 to 2 scr.; and, to obviate any danger from it, Mr. Long proposes that it should be infused in warm water, and then dried before use.—Expressed juice, to be injected as a clyster in bleeding piles.

Pork weed.—Jucato *(Phytolacca dodecand.)*——One oz. of the dried root, infused in 1 pint of wine, and given to the quantity of 2 spoonfuls, operates kindly as an emetic.—Juice of the root, a family purge in North America.—*Cutler.*—*Martyn's Botanical Dictionary.*

Musk Ochra *(Hibiscus abelmoschus.)*——The seeds are emetic.

Musk, or alligator wood *(Trichillia guara.)*——Powder of the bark.

Cob-nut, *(Omphalea triand.)*—Cotyledons of the nuts, emetic and purgative.

Yellow, or gamboge thistle *(Argemone mexicana.)*——The seeds are emetic, and, according to Dr. Grainger, are as useful as the ipecacuanha in curing dysentery. They are also purgative, and given in the belly-ache, in the dose of a thimble-full.—*Barham.*—*Browne.*—*Long.* Dr. M'Vicar Affleck has used the following remedy in belly-ache, with great success, *viz.* seeds of the poppy (or thistle), 2 dr. boiled in ½ pint water, and sweetened. Dose—a table spoonful every half hour.—Smoked with tobacco, they are narcotic.—*See Barham.*

Such Plants as are Purgative—Cathartics.

Vervain *(Verbena Jamaicensis).*——Expressed juice of the plant. Dose—

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1 or 2 table spoonfuls. A cooling purge for children in fevers and worms.—The vervain is likewise a remedy of particular note in sundry negro maladies, that defy ordinary medicines. Sloane says, that a decoction of it, with spikenard *(Ballota suaveolens)* cures dropsies. Hughes says, that vervain is a powerful deobstruent; that a table spoonful of the juice, for four successive mornings, is more effectual in bringing on the catamenia, than any other medicine. According to Barham it is likewise an excellent vermifuge.

Calabash *(Crescentia cujette.)*——Expressed juice of the pulp. Dose—$\frac{1}{4}$ pint.

Gourd *(Cucurbita lagenaria.)*——Decoction of the leaves for clysters.—*Martyn's Botanical Dictionary.*

Cerasee *(Momordica balsamina.)*——Decoction of the leaves, and of the whole plant.—Powder of the root. Dose—2 scr.—*Barham.*—*Wright.*

Barbadoes pride *(Poinciana, vel cæsalpinia, pulch.)*——Tea of the leaves and flowers.—Syrup of the flowers.—Powder of the seeds. Dose, 1 dr. A cure for the belly-ache.—*A. Robinson.*

Senna *(Cassia.)*——All the species of cassia are purgative. Labat says, that the French imported senna from their West India islands. Dr. Wright found one species on the pallisadoes, strongly resembling the true Alexandrian senna.

Cassia *(Cassia-fistularis.)*——Pulp of the pod strained through a coarse sieve, may be kept as an electuary.———*N. B.* The pulp does not keep long, out of the pod, without turning rancid. Dose—the bulk of a small nutmeg.

Oranges.——Juice of either the sour or sweet orange, with common salt.—This is the common purge among the lower people* in the French islands —*Labat.*

Tamarinds.——The use of these is too well known to require mention.

Hog gum *(Hermannia)*——The juice running from the wounded bark.—Two table spoonfuls, with sugar and water, good in belly-ache.—*Barham.*

Four

* Flibustiers—Buccaneers.

Four o'clock *(Mirabilis jalappa.)*——Powdered root. Dose—2 scr. or more. A pound of this root, according to Barham, yields only 1 oz. of resin.

Wild cassada *(Jatropha gossypifol.)*——Six or more of the young leaves boiled, and eaten as callilue, a powerful purge in the dry belly-ache.—15 or 20 of the leaves in decoction, for a clyster, with castor oil, in the same complaint.—A. Robinson advises the decoction internally.—*Long.*

Sand-box *(Hura crepitans.)*——A single seed, or one seed and a half, in dry belly-ache. It causes vomiting, but produces stools without gripings*.—*Med. Comm.* 1787.—*Browne.*—*Martyn.*

Lignumvitæ.——Syrup of the flower, like syrup of violets.—Fruit very purgative.—*Barham.*

Creeping hairy spurge† *(Euphorbia hirta.)*——The dried plant powdered. Dose—1 dr. in dry belly-ache.—*Trapham.*—*Barham.*

Quamoclit, or Barbadoes sweet William.——The root in decoction.

Gamboge thistle.——*See page* 379.

Sea-side potatoe slip *(Convolvulus brasiliens.)*——Decoction of the root in dropsy.—*See Piso*, 259. Dr. Wright says, that scammony may be prepared from it.

Green wythe *(Epidendrum claviculat.)*——Expressed juice. Dose—a table spoonful. Diuretic, cathartic, and vermifuge.—*Drummond.*

Cabbage bark *(Geoffræa inermis.)*——Powdered bark, 15 gr. with as much jalap, a good purgative.—*See vermifuges.*

Castor-oil nut *(Ricinus annuas.)*——The use of castor-oil is so well known that it need not be directed here; but A. R. advises a particular mode of giving it in dry belly-ache, *viz.* take 2 tea spoonfuls of the oil, and 3 ditto of rum; mix them together, and set the rum on fire. After burning for half a minute, blow out the fire. The remaining mixture is to be taken every two hours, till stools are procured.

Infusion of castor-oil nuts.——Take 8 oz. of the nuts with the green stem, bruise them, and infuse them in a pint and a half of water for the space of one

* Hernandez directs them to be roasted.

† Caiacica of Piso, who gives a wonderful account of it as an antidote to poison.

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one night, and then add ½ pint of rum. The dose is 4 spoonfuls in the morning, in yaws, ulcers, dropsy, &c. If the operation be too violent, it may be checked by drinking a little salt brine.—*A. Robinson.* Dr. M'Vicar Affleck made trial of this medicine, and found it very efficacious, but too rough in the above dose. Piso recommends a tincture of oil-nuts in spirits. *Semen illius catharticum est, et multo validius quam oleum; convenit in spiritu vini optime macerare semina multa, et inde unciam e cochliari exhibere.* Pere Labat says, that in the French islands, the oil is used with great success externally in swellings, pains, &c.—*Tom.* III. *page* 282.

Common physic nut *(Jatropha curcas.)*——The oil prepared in the same manner as castor-oil. Dose—1 table spoonful in dropsy. The nuts eaten, which are very agreeable, are strongly purgative.*—*Hughes.*

French physic nut *(Jatropha multifida.)*

Spanish arbor vine *(Ipomæa tuberos.)*——The milk of the plant strongly purgative. Dried, may be used for scammony.—*Barham.*

Such as promote Urine—Diuretics.

Contrayerva *(Aristolochia odorat.)*——Infusion or decoction of the root.—Infusion in wine, with orange peel.—It is not only diuretic and purgative, but a good stomachic.—*Long.*

Cow-itch *(Dolichos pruriens.)*——Root in decoction, diuretic.—*Barham.*

Curatoe *(Agave.)*——Expressed juice of the leaf.—*Barham.*

Grasses.——Decoction of the roots.

Nephritic wood, cats-claw *(Mimosa unguis cati.)*——Decoction.—*Barham.*

Penguin *(Bromelia.)*——The pulp mixed in rhenish wine.

Winter cherry *(Physalis angulosa.)*——Juice of the plant, with Cayenne pepper, promotes urine and eases cholic.—*Barham.*

Prickly pear or Indian fig *(Cactus opuntia.)*——Ripe fruit.

Oil-

* It is a common notion that the purgative quality of these nuts lies in the membranous septum of the lobes; but this, says Hughes, is an error.

Oil-nut *(Ricinus.)*——The root in decoction.—*Browne.*

Spikenard *(Ballota suaveolens.)*——Infusion or decoction of the plant, aromatic. Has great reputation in dropsy and in gravel.—*Barham.*

Trumpet-tree *(Cecropia peltata.)*——The ashes are strongly alkaline. A ley may be made with them and mixed with bitter-wood infusion—4 oz. to be taken 3 or 4 times in the day, in dropsy. The ley of these or any wood-ashes may be substituted for the salt of wormwood, when that cannot be had.———*N. B.* The elastic gum is obtained from this tree, and from some other plants of this island.

Red sorrel *(Hibiscus sabdariffa.)*——A cooling diuretic drink is made of the pods boiled and sweetened.*—The same may be made of the preserved sorrel or sorrel jam, to which may be added nitre.

Sour sop.——The ripe fruit, or jam made of it.—Labat speaks also of a wine or drink made of it.†

Arsemart *(Polygonum persicaria.)*——The fresh plant in decoction. Dose —a wine-glass full.—Infusion of the dried plant likewise powerfully diuretic, and very useful in gravelly complaints.—*Mr. Felsted.*

Water lily *(Nymphæa nelumbo.)*——Root and seeds, cooling, good in thirst, vomiting, diarrhœa, &c. This is the famous lotus of the Egyptians.

Wood sorrel *(Oxalis stricta.)*——The plant may be eaten as salad, or made a decoction of.

Purslane *(Portulacca pilosa.(*——Salad, boiled, expressed juice.

Turnsole *(Heliotropium jam.)*——Decoction of the plant.

Neeseberry *(Achras sapota.)*——From 6 to 12 seeds, pounded in a mortar and made into a pint of emulsion, to be taken at several times.—*Jacq. see Strip. American.*

Dumb-cane *(Arum seguinum.)*——Expressed juice of the stem and root, 3 parts.—Rum, 1 part. Recommended by A. R.; but Dr. Wright says he never could find a patient capable of swallowing it. Negroes have sometimes

* *Succus expressus, fermentatus saccharoq. saporatus, vinum haud ingratum rubrum prabet, at vix mensem duraturum.—Jacq. Obi. part* ii. *p.* 10.

† It is called by the French corossal.—*See Labat, tom.* iii. *p.* 291.

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times tried to poison themselves with it, but always fail in the attempt.—Barham advises an ointment, made with the plant and lard, to be rubbed on dropsical limbs; and Piso says the roots, boiled in urine, are a proper fomentation in the gout.—*Piso*, ii. 59. Expressed juice used for curing crab-yaws.

Stinking weed or piss-a-bed *(Cassia occidentalis.)*——The root in decoction, diuretic. Expressed juice, a cure for the negro itch, craw-craws, &c.

Lily root *(Pancratium.)*——Bulbs in decoction, a diuretic drink for horses.

For promoting perspiration and sweat—Diaphoretics.

Wild sage *(Lantana camera.)*——Infusion of the leaves.

Lemon grass.——This plant (genus unknown, as I have never seen it in flower) was introduced about twelve years ago, and is now common in the gardens. It makes a grateful infusion like baum.

Ginger tea.

Rose wood *(Amyris balsamifera.)*——Infusion of the leaves.—*Long.*

Yellow or gamboge thistle.——Infusion of the plant.—*Browne.*

Such as are good in Coughs and Complaints of the Lungs—Demulcents and Pectorals.

Ochro *(Hibiscus esculentus.)*——Decoction of the leaves and pods serves in place of linseed tea.

Velvet leaf *(Cissampelos pareira.)*——Decoction of the plant may be made into syrup.

Wild liquorice *(Abrus precator.)*——Infusion or slight decoction of the vine or plant.

Maiden-hair *(Adianthum trapeziforme.)*——Syrup of the same, like the syrup of maiden-hair in Europe.

Santa Maria leaf *(Piper umbellat.)*——Syrup made of the decoction good in colds, and an antidote to poison.—*Piso—Browne.*

Calabash

Calabash *(Crescentia cujette.)*——Pulp of the fruit made into a syrup. Dr. M'Vicar Affleck relates some singular instances of its efficacy, in pulmonary complaints that were attended with hectic fever.*——————Calabash syrup.——Take young calabashes about the size of an orange.—Roast them, then squeeze the juice from the guts through a coarse cloth.—To a pint of the juice add a pound of sugar and boil into a syrup. A table spoonful or two to be taken two or three times in the day, by itself, or in barley-water.

Balsam *(Justicia pectoralis.)*——Decoction made into syrup.—*Jacquin.*

Sweet broom weed *(Scoparia dulcis.)*——Infusion of the plant. Expressed juice, three spoonfuls.—*Barham.*

Cotton tree *(Bombax.)*——The young buds very mucilaginous, like ochro.

Burr bark (*Triumfetta 3-lob.*)—*Bro.* 233.)——The leaves and tender buds afford a fine mucilage.—*Chisholm.*

Vangloe† *(Sesamum.)*——Emulsion of the seeds. The sesamum, or oily grain, has been in use among the Oriental nations from the earliest ages. A valuable oil was obtained from it formerly. At present it serves the Egyptians for food and physic, and they likewise use it as a cosmetic.—*Sonini's Travels.*

* Jacquin says, *E pulpa fructuum syrupum conficiunt incolæ, summi medicaminis celebritate, potissimum in variis pectoris morbis, inq. contusionibus internis.—Jacquin's Strip. American.*

† I do not mean to depreciate an useful discovery, but I cannot help thinking that a very undue importance has been given to the boasted one, of the specific virtues of *vangloe* (or the *zizigary* as it has been called), in *dysentery*. That the *mucilage* afforded by this plant may be useful in the above mentioned complaint, and in many others, in the same way as linseed infusion, barley-water, Indian arrow-root, starch, *&c.* no one can entertain a doubt, and no reasonable person would be led to ascribe any virtues to the former that do not belong to the latter—but if mucilage, obtained in the manner prescribed for procuring that of the *zizigary*, be preferable to that obtained in the ordinary way by infusion in hot water, it can be got from almost any other plant, but more especially from those of the *malvacious* tribe. The *hibiscuses* give it out most plentifully, in the same way as the *vangloe*, *viz.* by rubbing the leaves in cold water.—The *ochro*, the *wild ochro*, *&c* yield it, I believe, in still greater abundance than the *zizigary*—so that there is but little room for extolling the superior virtues of this pretended newly imported exotic, which has been in the island from time immemorial, and is almost every where to be met with in gardens and negro grounds.

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Cocoa-nut *(Palma cocos nucif.)*——Emulsion and oil of the kernel. Pound the kernel in a mortar with water, then put it in a vessel with a larger quantity of water; let it settle, and then skim off the cream. This is preferable to the expressed oil, which soon becomes rancid.

Mackaw fat or oil of the Guiney palm *(Elais Guiniensis.)*——The negroes make great use of this, externally, for easing pains. This is the oil which has been made use of for anointing the body, all over the East, from the most ancient times.

Melon seeds.——Emulsions of them.

Pindars or ground-nuts.——Emulsions of them.

For promoting the Terms in Women—Emmenagogues.

Cerasee *(Momordica balsamin.)*——Slight decoction of the plant. The balsamthat exudes, on cutting into the full grown unripe fruit, is used for fresh wounds.

Barbadoes pride *(Cæsalpinia pulcherrima.)*——Infusion of the leaves and flowers.—Syrup of the flowers.

Contrayerva *(Aristolochia odorat.)*——*See page* 382.

Water Germander *(Stemodia maritim.)*——The juice, infusion, decoction, and powder. Dose of the last—½ dr. to 1 dr.—Infused in red port, good against fluxes.—*Barham.*

Wild tansey *(Parthenium hysteroph.)*——Decoction of the plant may be used in clysters, baths, &c. and internally.

For purifying the Blood—Alteratives.

Lignumvitæ.—Gum guaiacum.——*See page* 381.—Barham prefers the fruit to either the wood or bark, and says he has cured the lues venerea and yaws therewith, without mercury.

Locus or courbaril (*Hymenea.*)——The gum in spirits, according to Browne, has the same efficacy as gum guaiac.—*Martyn.*

Manchioneal

Manchioneal *(Hippomane mancinella.)*——Barham says the gum of this may be used in place of the gum guaiac.—*Barham.*

Myrtle leaved spurge *(Euphorbia tithamiloid.)*——Decoction of the plant used in South America for curing lues venerea—*Jacquin*—*Martyn.*

Majoe, or Tom Bontein's bush *(Pierania antidesma.)*——An infusion used for curing lues venerea.—*Schwartz.* Decoction also given.—*Gray.*

China root *(Smilax pseudo chin.)*——Bastard sarsaparilla, or wild yam.—Decoction of the root in place of true sarsaparilla.

Yellow saunders or mountain olive *(Hudsonia* of A. R.)——The bark, in decoction, cures venereal complaints. Negroes call it negressa.

Snowberry or David's root *(Chiococca racemosa.)*——Decoction of the root, in rheumatisms, old venereal complaints, bone-ache, spina ventosa, &c.—The smaller the plant, the greater the efficacy of the roots.—*Bro. Jam.* 164.

Bastard cedar *(Theobroma guazuma.)*——The decoction of the inner bark is gelatinous, like that of the elm in Europe, and is deemed a cure for leprosy.—*See Schwartz Obs. Bot.*

For strengthening the Stomach, &c.—Stomachics, Tonics.

Contrayerva *(Aristolochia.)*——Root infused in wine, with orange peel.—*Long.*

Calabash coccoon antidote *(Fevillea scandens.)*——The kernel, sliced and infused with orange peel, and a little wild cinnamon, in rum, an excellent bitter, and opening medicine.

Locus *(Malphigia crassifol.)*——Bark of the small branches may be used for the Peruvian bark.

Lilac—Hoop tree *(Melias.)*——Bark of this tree, Dr. Roxburgh says, is used in the East Indies for the Peruvian bark.

Adrue *(Cyperus articulat.)*——*See Fig. in Sloane, tom.* 81. The roots aromatic and stimulant, may be used in the place of Virginian snake-root.—Infusion good in vomitings, fluxes, &c. The late Dr. Brodbelt, of Spanish

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Town, made great use of this in his practice; as has also the author of this work for thirty years past.

Rose wood *(Amyris marit. et balsamif.)*——Infusion of the leaves aromatic and cephalic, good for weak eyes.—*Long.* The berries like balsam capivi. Dr. Martyn suggests, that if the amyrises of Jamaica were tapped at a proper season, a balsam, similar to that of Gilead, might possibly be obtained.

Portlandia *(Grandiflora.)*——The bark, bitter and astringent, cures intermittents.—*Wright.*

Quassia or bitter wood *(Qu. polygama.)*——2 dr. or ½ oz. of the chips, in a pint of cold water, for bitter infusion.—15 to 30 gr. of the powder.—*See Lindsay in Ed. Phil. Transact.*

Jamaica bark *(Cinchona, viz. c. caribbæa—C. brachycarpa—C. triflora.)*——These are indigenous species of the jesuits or Peruvian bark, and are successfully employed, like that, in stopping intermittents, but must be given in small doses, being considerably emetic.—*See Dr. Wright and Mr. Lindsay Ph. Tr.*

Neeseberry bullet-tree *(Achras.)*——The bark may be given for the Peruvian bark.—*Browne.*

Halbert weed *(Calea Jamaicensis.)*——Fresh herb in infusion, a good bitter. *Browne.*

Neeseberry *(Achras sapota.)*——Seeds in emulsion, a fine bitter.—*Martyn.*

Such as are Binding—or Astringent.

Guava *(Psidium.)*——The young leaves, buds, and fruit in decoction.—The half ripe fruit stewed.—Marmalade of the ripe fruit excellent in fluxes.

Pomegranate *(Punica granat.)*——The rind of the fruit. Boil in water, with cinnamon, and add port wine and guava-jelly. A conserve may be made of the flowers or pulp, with sugar.—*See Pomet's History of Drugs.*

Mammee sapota *(Achras sapota.)*——Marmalade of the fruit in fluxes.—*Martyn.*

Cashew *(Anacardium.)*——Expressed juice of the fruit in red wine sangree.

gree. Good in female weaknesses. Cure also for dropsy. The Portuguese turn their dirt-eating negroes out in the cashew season, and force them to live on the fruit.—*Labat, tom. II.* 233.

Mahogany.——Boil an oz. of the shavings in 2 pints of water, till one half is wasted. Dose—from 2 to 4 table spoonfuls frequently, in diarrhœa or looseness.—*Hughes in Medical Facts and Observations, vol. VI.*

Logwood (*Hæmatoxylon.*)——Decoction of the wood with cinnamon. Add guava-jelly.

Opopanax.——Extract of, the same as the succus acacia; a strong astringent.—*Barham.*

Birch tree (*Bursera gumm.*)——Decoction of the roots. This tree affords a fine transparent varnishing gum.

Sea-side grape (*Coccoloba uvifera.*)——The fruit is so very astringent as to cause a degree of costiveness in some cases dangerous. Of this I have known instances. It may therefore be a very useful medicine in some loosenesses.*

Hog gum (*Hermannia.*)——Made into pills acts like balsam capivi in stopping gleets.

Nickars (*Guilandina bonduc.*)——The powdered nut in seminal weaknesses. —*Grainger.* Piso says they are good to throw out the yaws.

Hog meat (*Boerhaavia diffusa.*)——Decoction in dysenteries.—*A. Robinson.*

Star-apple (*Chrysophyllum.*)——The juice of the unripe fruit, with orange juice, very binding.—*Browne.*

Hog-gum (*Hermannia.*)——Pills of it good in gleets and female weaknesses.

Trumpet-tree (*Cecropia.*)——The young buds.—*Barham.*

Such

* An old lady I was once called to, had nearly lost her life by eating too many of these grapes. She had no motion for three weeks, and it was with great difficulty that any were afterwards procured, even by mechanical means.

APPENDIX.

Such as act upon the Nerves, viz. Fœtids, Narcotics, &c.

Eryngo, or stinking weed (*Eryngium fœtid.*)——Infusion of the leaves in the place of valerian, and for clysters, in hysterics, &c.

Yellow thistle (*Argemone.*)——Seeds smoaked intoxicating.—*Barham.*

Bull-hoof or Dutchman's laudanum (*Passiflora murucuja.*)——Decoction of the plant made into syrup. The flower infused in rum. Used for laudanum.—*Browne.*

Nickars (*Guilandina.*)——Nut in powder. Dose—½ dr. Good in convulsive affections.—*Barham.*

Prickly yellow wood (*Zanthoxylon clavi Hercules.*)——2 spoonfuls of the expressed juice of the young roots give ease in dry belly-ache, relieve spasmodic symptoms, epilepsy.—*Dr. Henny—Dr. Harris—See Mem. Med. Soc. vol. V.* Infusion of the roots, a collyrium.

Contrayerva.——*See page* 382.

Guinea-hen weed (*Petiveria alliacea.*)——Root in the mouth for tooth-ache.

Thorn-apple (*Datura stramon.*)——Leaves applied to the temples relieve head-ache. Applied to the joints give ease in the gout. Seeds may be given to 10 gr.—*Browne.* Dr. Hufeland, in his account of small-pox, says he has found the tincture of the seeds of the thorn-apple a narcotic remedy superior to laudanum, and that he has cured by it many obstinate complaints of the mental and convulsive kind. An ointment prepared from the leaves gives ease in hæmorrhoids or piles. Could the extract be substituted for that of hemlock, which is not to be kept good long in this climate? An extract is directed by the Edinburgh college, which is given in convulsions and epilepsies. An extract may be made by boiling any quantity of the bruised seeds in water, then evaporating the strained liquor, &c. Dose—½ gr. to 1 gr. This extract, given in small doses, is cooling, diuretic, and anodyne; it renders the pulse slower; in large doses it occasions a loss of vision and speech, palsey, &c.—*See Dr. King Med. and Phys. Jou.*

Water germander (*Stemodia.*)——*See page* 386.

Locus (*Hymenea courbaril.*)——Vapours of the gum burnt as incense.

Such

Such as destroy Worms—Vermifuges, Anthelmintics.

Cabbage bark* (*Geoffræa inermis.*)——Boil 1½ oz. of the bark in a quart of water, till it acquires the colour of Madeira wine. Dose—from two table spoonfuls to four, for three mornings, then a dose of oil. In powder, 15 gr. with as much jalap, a good purge.—*See Dr. Wright, Ph. Tr.*

Worm grass (*Spigelia anthelmia.*)——Infusion of the herb. Dose—2 table spoonfuls to children 4 or 5 years old. Expressed juice, 1 table spoonful to children 4 or 5 years old. When given in too large doses, narcotic and dangerous. Should never be given to children under 2 years old.—Dr. Clark gives to children above this age from 5 to 10 gr. of the dried plant.—*See Medical Facts, vol VII.* Dr. Browne, who first recommended this useful medicine, directs 2 handfuls of the plant to be boiled in 2 quarts of water down to one. To the strained liquor, a little sugar and lime-juice may be added. The dose, to a full grown person, is ½ pint every 6 or 12 hours, for three or four times, and then a purgative.—*Browne's History of Jamaica—See Paper on the Worm Grass, in the Amænitates Academicæ.*

Cowitch (*Dolichos pruriens.*)——Dip the pods in syrup or melasses, then scrape off the hairs (*setæ*) with the syrup, for an electuary. Dose—from a tea spoonful to a table spoonful, for 3 mornings, then a dose of castor-oil.—*Chamberlaine.*

Antidote against Poisons.

Indian arrow-root (*Maranta.*)——The expressed juice with water, good against all acrid poisons.

Coccoon (*Fevillea.*)—The kernel infused in water and rum. In all cold poisons.

Cane-piece sensitive plant (*Cassia chamæcrista.*)——Decoction. 2 quarts in the day against the poison of night-shade.—*Dr. Wright.*

Creeping and prickly sensitive plants (*Mimosa.*)——Root (cleaned and barked) beat in a mortar till it makes a paste. About 15 gr. (*poids de 15 sols*) to be taken in red wine. Labat relates some most extraordinary instances, which he saw, of persons who were poisoned, being recovered by this remedy, which, from the violence of its operation, might be deemed

* There is a prevailing notion, that there are two species of the cabbage tree in Jamaica, *viz.* male and female, and that the bark of one is poisonous; but this is erroneous—there is but one species, that before named. What may have given rise to the mistake is, the different habit of the tree, according to its place of growth.

APPENDIX.

a poison itself.—*Labat, tom. IV.* 511. Piso speaks both of the deleterious and antidotal effects of these two plants.—*See page* 304. *1mo. Quidem folio in pulvere redacta, et exiguâ quantitate aliquoties exhibita, clam exitium hominibus inferunt. 2do. Radices non minus tutum præstant antidotum, quam foliæ pernicioso turgent veneno.*

Sour-sop (*Annona.*)——Decoction of the roots used in Guadaloupe against fish poison.—*Grainger.*

Fig-Tree (*Ficus benghal.*)——Sap or milk of the young branches, against the Manchioneal poison.

Germander (*Stemodia.*)—*See page* 386.

Jaborand (*Piper reticulat.*)——Juice an antidote to the poison of mushrooms and cassada.—*Piso.*

Wild passion flower, or contrayerva (*Passiflora normalis.*)——The root recommended as a counter poison.—*Hernandez.*

Spurge (*Euphorbia hirta.*)——*See page* 381.

White cedar (*Bignonia lencoxylon.*)——Against the Manchioneal apple.—*Grainger.*

Contrayerva* (*Aristolochia.*)——*See page* 382. This is the lianne, or serpent wythe of the French.—*See Labat, tom. III.* 229.

Citron juice.——According to Labat, this and cordials, the antidote to the Manchioneal poison.

Externals.

Collyria, or eye waters, *&c.*——Infusion of the root of the prickly yellow wood.—Juice of the plantain leaf (*Plantago major.*)

For taking specks off the eyes.——Juice of the yellow thistle.—Papaw juice.—Juice of wild celandine.

Sternutatories,

* It has been asserted in a former part of this work, that the West India islands are uninfested by poisonous serpents. From a paper of Dr. Gillespie's, lately published, it appears that in three of the islands, *viz.* Martinique, St. Lucea, and Becouya, there are some that are venomous, which, according to Du Tertre, were introduced from Terra Firma. The cure for the bite of these serpents is the contrayerva and cordials, *viz.* rum and other spirits.—*See Philosophical and Medical Journal, No.* 20.

Sternutatories, or such Things as excite Sneezing.

Powder of wild cinnamon (*Can. alb.*)——Ditto of wild rosemary (*Croton.*)—Ditto of the gland, contained in the stem of the wild cassada (*Jatropha gossypif.*)

Gargles and Mouth Waters.

Wild-hops (*Clinopod. rugos.*)——Infuse with honey and alum.

Sea-side purslane (*Sesuv. Portulac.*)——Decoction.

Capsicum, or bird pepper.——Peppered vinegar in barley-water and honey.

Germander.——Decoction.—*See page* 386.

Penguin fruit.——Pulp mixed with honey, for ulcerated mouth, &c.

Self-heal, or all-heal (*Ruellia paniculat.*)——Decoction with honey and vinegar.—*Barham.*

Clysters.

Decoction of gourd leaves, with the addition of castor-oil.—Decoction of 15 or 20 leaves of wild cassada, in dry belly-ache.—Decoction of the plant of vervain.—Sempervive juice, mixed with any of the above.—Red head, or wild ipecacuan. Expressed juice in bleeding piles.

Styptics, for stopping Bleedings.

Bruised leaves of the red head, or bastard ipecacuan (*Asclep. curass.*) applied to bleeding wounds.—Expressed juice, for a clyster in bleeding piles.—Cerasee (*Momordica balsam.*) The juice of the unripe fruit dropped into the wound.—Decoction of the bark of the black olive (*Bucidas buceras.*)—Decoction of mangrove bark.—Water of the plantain-tree, internally and externally.—*Barham.*

Corrosives, Escharotics, &c.

Milky juice of the green fruit of the papaw, and of the euphorbias or spurges, to destroy warts and ring-worms.

APPENDIX.

Juice of the wild celandine, or parrot weed (*Bocconia frutes.*)——Oil of the cashew-nut for taking out freckles in the face.

Jucato calleloe (*Phytolacca.*)——The leaves of the plant bruised, as a poultice in cancer, very detersive. The extract as a plaster.—*Browne.*

Juice of the dumb-cane.—Bruised leaves, or the expressed juice of the ring-worm bush (*Cassia herpetica.*) as also vervain, for the cure of itch, tetters, and ring worm.

South-sea rose (*Nerium oleander.*)——The leaves are acrid and poisonous. Oil in which these are infused is recommended for the cure of itch, &c.—*Martyn.*

Baths, or Fomentations.

Aromatic, &c.—These may be made of the leaves of limes—guava—spike-nard (*Ballota*)—wild rosemary (*Croton*)—Sea side ox-eye (*Buphth. marit.*) a fine aromatic—pimento—wild wormwood (*Ambrosia*)—wild tansey (*Parthenium hysteroph*)—pepper elder (*Piper amalago*)—common physic-nut (*Jatropha curcas*)—germander (*Stemodia marit.*)—rose wood (*Amyris marit.*) leaves—dog wood (*Piscidia erythrina*) bark. A decoction of the last may be used to clean foul ulcers.—*Barham.* Mangrove (*Rhizophora*) bark, and mammee bark, for hardening the soles of the feet after the cuticle has separated.

In Anasarca—Fomentations of the bark of the hog plumb (*Spondias lutea.*) —*Barham.*

For the craw-craws and ring-worms—Decoction of, or expressed juice of, either the stinking weed or ring-worm bush (*Cassia occident. et Cassia herpetica.*)

Emollient fomentations may be made of ochrow, and all the mahoes, the sidas, althæas, and other malvaceous plants—chickweed (*Holosteum*)—hog meat (*Boerhaavia.*)

Cataplasms.

Softening—Oil-nut leaves, with cassada bread, and oil or pork lard.—Calabash guts, roasted, also the guts of the common gourd. The French apply the calabash poultice to burns, and to the shaved head in the *coup de soleil*,

or stroke of the sun.—Indian arrow-root, pounded.—Green wythe (*Arum*) roasted.—Chickweed (*Holosteum cordat.*) the plant heated and bruised.

Maturating—Lily-roots, roasted—guts of oranges, roasted—curatoe leaf, roasted.—Fresh roots of the different cocoes applied raw.

Embrocations and Liniments.

Soap-berries, bruised and mixed with rum, in rheumatism.

Dumb-cane, bruised root mixed with pork lard, and heated over the fire, to be rubbed on dropsical limbs.

Capsicum berries, bruised and mixed with lard, to be rubbed on paralytic limbs.—Cow-itch sprinkled on the same.

Common fig leaves inflame, if kept long on a part.

Garlic pear (*Crateva gynand.*)——The bark of the root vesicates or blisters, like cantharides.

In a detail of country remedies, the fat of the yellow snake, though not a simple, may be mentioned. The negroes rub it on pained and swelled joints, &c. Labat says it is much preferable to viper's fat.

Ointments and Dressings for Ulcers, &c.

Green tobacco leaves, or the same of catclaw (*Mimosa.*) pounded and applied to sores with vermin.

Curatoe dressing, *viz.* juice of the curatoe leaf, lime-juice, and melasses, boiled together to a thick consistence.

Thorn-apple.——Expressed juice, made into an ointment with hog's lard, good for irritable sores.—*Barham.*

Bitter cassada (*Manihot.*)——Grated, and applied as a poultice, an excellent detergent in foul ulcers.—*Martyn's Dict.*

Powder of the bark of the roots of the prickly yellow wood, a good antiseptic in putrid sores, answering in the place of rhubarb or colombo.—*See Mr. Felsted's account of it, in the Royal Gazette, March* 8, 1794.

APPENDIX.

Plasters.

Hog gum, of the same nature as Burgundy pitch.

Curatoe juice, boiled to a thick consistence, spread on leather, to be used in the gout.

ADVERTISEMENT.

MANY of the plants, recommended in the catalogue of simples, in the Appendix to the Medical Assistant, being imperfectly known, or, perhaps, wholly unknown, to some of those who have the greatest occasion to use them, it has been suggested to the author, that he should have given a short and clear description of them:—This he would have done, were he satisfied that it could have answered the purpose intended; but such descriptions as those given by Dr. Barham, or that are not scientific, are of little or no use in conducting the search; and there are few of those for whom this work was chiefly intended, either versant in botany, or who have leisure for such a study. The only way, therefore, of supplying the deficiency of the work in this respect, would be by engravings or figures. The author has such an undertaking in view, *viz.* of publishing a set of engraved figures, of all the medicinal plants, except such as are perfectly familiar, of a size to bind up with this work. He only waits to know how far such a publication, describing and designating the plants by their various names, &c.; mentioning their place of growth, season of gathering, &c.; with a reference to the Medical Assistant for their properties and uses, may be deemed necessary, and whether the encouragement it is likely to meet with, would justify the expence.

INDEX OF THE PREVAILING DISEASES, TO WHICH THE SEVERAL COUNTRY REMEDIES ARE AFFIXED.

FEVERS.—Purges, *viz.* tamarinds—vervain—cassia—calabash—cerasee.

Coolers and diluters, viz. sorrel drink—tamarind beverage—lemon grass tea—sage tea—liquorice vine tea—cerasee.

Tonics to stop the return of the fever in the place of bark, viz. cinchona of the country—mahogany bark—bully tree bark—contrayerva—locus tree—lilac, or hoop tree—Portlandia—quassia, or bitter-wood.

FLUXES.—*Vomits and purges, viz.* yellow thistle—castor-oil.

Demulcent or sheathing medicines, viz. ochro—vangloe—Indian arrow-root—hog meat—burr bark—mahoe bark.

Astringents, viz. guava—logwood—adrue—pomegranate—birch tree—mahogany—germander—mammee sapota.

BELLY-ACHE.——Yellow thistle—(*Euphorbia Caucica*)—wild cassada—sand box—castor-oil—hog gum.

COUGH, ASTHMA, CONSUMPTION.——Liquorice vine—calabash—ochro—arnotta—vangloe—velvet leaf—balsam—broomweed—cotton tree—maiden-hair.

DROPSY.——Gamboge thistle—common physic nut—castor-oil nut—contrayerva—spikenard—trumpet tree—arsemart—turnsole—sea side potatoe—dumb-cane—stinking weed—lily-root—quassia, or bitter-wood—halbert weed—cashew—green wythe—Manchioneal gum—plum tree bark.

PALSY.——Capsicum—wild cinnamon—dumb cane—cowitch—garlic pear.

CONVULSIONS and EPILEPSY.——Prickly yellow wood—eryngo, or stinking weed—contrayerva—antidote cocoon—thorn apple—bull hoof—nickars.—*See worm medicines.*

HÆMORRHAGIES,

APPEN-DIX.

HAEMORRHAGES, or BLEEDINGS.—*Styptics.*——Bastard ipecacuan—water of the plantain tree.

FEMALE OBSTRUCTIONS.——Vervain—cerasee—Barbadoes pride—contrayerva—germander.

FEMALE WEAKNESSES.——Guava—pomegranate—logwood—cashew—nickars—star-apple—bitter-wood—rose-wood—hog-gum—bastard ipecacuan.

RHEUMATISM, BONE ACHE, *&c.*——Lignumvitæ gum—Manchioneal gum—snowberry—green wythe—yellow sanders—locus, or courbaril—china-root, or bastard sarsaparilla—hog-gum—soap-berries.

INDIGESTION, WANT of APPETITE, *&c.*——Sempervive—coccoon antidote—contrayerva—bitter-wood—majoe bitter—halbert weed—Cayenne pepper—wild cinnamon—Portlandia—adrue—neesberry seeds.

INFLAMMATION of the EYES.——Plantain-leaf—prickly yellow wood.

TOOTH-ACHE.——Country pepper put into the cavity of the tooth—root of the guinea-hen weed applied to the tooth—milky juice of the spurge *(Euphorbia tithamyloides)* spread on leather, and applied behind the ear as a blister.

CUTANEOUS FOULNESSES, ITCH, CRAW-CRAWS, *&c.*——Ring-worm bush—vervain—stinking weed—oil-nuts.

WORMS.——Cabbage bark—bastard ipecacuan—worm grass—cowitch—vervain.

TETTERS and WARTS.——Papaw juice—celandine juice, or parrot weed.

ULCERS.——*See baths, cataplasms, and ointments.* Powder of the root of prickly yellow wood.

YAWS.——Infusion of oil-nuts—lignumvitæ—Manchioneal—majoe—yellow sanders—myrtle-leaved spurge.

MINERAL WATERS OF JAMAICA.

Bath Waters of St. Thomas the Apostle.

SULPHURIC—hot—not purgative. Beneficial in gout, rheumatism, dry belly-ache, gravelly complaints, debility of stomach.—*See Treatise on Bath Waters, &c. by the author of this work*, 1785.

APPENDIX.

Blue Mountain Valley.

Sulphuric—cold—purgative. Useful in itch, and all cutaneous defædations.

Liguanea Mountain, called Smith's Spa.

Chalybeate aerated—cold—tonic. Beneficial in most cases of debility, particularly after fever; in dropsy, and in stomach complaints, female weakness, &c.

St. Faiths, in the Parish of St. John.

Similar to Liguanea spa, but not so strong a chalybeate.

Milk River Bath.

Sea-water—warm—purgative. Good in bilious congestions; bathing in useful in rheumatism.

Artificial Mineral Waters.

Mephitic alkaline water.—*See Forms, page 354.*

Soda

APPENDIX.

Soda water may be made in the same way, by substituting soda instead of kali.

Seltzer water.—*See page* 349, *No.* 63.

Harrowgate water.—*See page* 349, *No.* 64.

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Quamoclit,

* It was before said that the genus of this plant was not known.—*See page* 384. It has since been said to be the andropogon schœnanthus, but, I believe, through a mistake; for the lemon grass, when dry, has none of the virtues attributed to the above-mentioned plant, called camels hay.—*See Martyn's Botanical Dictionary.* The lemon has no smell or taste, except in the green state.

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ADDITAMENTA.

SINCE this work went to the press, several new and interesting publications have made their appearance, containing many practical improvements, which, as they deserve attention, I shall, in a short supplementary chapter, refer to them.

Strictures in the urethra—see page 257.—A new constructed bougie has been proposed, which appears to be better suited to the purpose of obliterating strictures in the urethra, than any of those in use, intended to act mechanically; but will not, perhaps, supersede, in all cases, the necessity of the caustic.

This bougie is made of a very thin silver plate, curved like a common catheter, and is slit on the convex part nearly the whole length, so as to admit of dilatation after it is introduced into the strictured urethra, by passing a round ball mounted on a flexible stillette. Balls of different sizes may be employed as they are required.—*See Med. and Phys. Jou. No.* 116.

Tetanus—see page 197.—A successful method of treating tetanus has been lately discovered in the military hospitals of Germany, *viz.* by giving opium, alternately, with the carbonate of potash (kali prepared).—One third only of the dose of opium is, in this mode of giving it, required.

Ophthalmia

Ophthalmia—see page 249.—To the excellent works recently published on this subject, and before referred to, three others highly interesting have just issued from the press; two by Mr. Wardrop, one on the morbid anatomy of the eye, in which are represented, in elegant coloured plates, most of the diseases of the coats of the eye.

Another entitled, Observations on the good effects of evacuating the Aqueous Humour, in violent Inflammation of the Cornea.

The above practcie is sanctioned by the eminent Mr. Ware, in a third work entitled, Remarks on purulent Ophthalmia.

In the Egyptian or contagious purulent ophthalmia, it has been found necessary to bleed to the extent of thirty, forty, or even sixty ounces.—*Keate.*

Tic douloureux.—Face-ache—page 246.—Cured by calomel and opium.—*See Dr. Cortindale, Edin. Med. Jou.*

The following paragraph, on Incontinency of Urine, should have appeared in page 269.

Incontinency of urine, or a perpetual dribbling, arises in children, sometimes from weakness, at others from the mind's not having gained the usual command over the sphincter, or muscle constricting the neck of the bladder. In the former case, the cold bath and other tonics are proper remedies, as also tincture of cantharides, and blisters applied to the os coccygis, or crupper-bone. In the latter case, where perhaps the nurse is sometimes to be blamed, shame and terror are the

only

only cure, as is known from the practice in boarding schools. When incontinence of urine arises from palsy, occasioned by injuries to the spine, or back bone, it is rarely curable. Blisters and electricity may be tried.—*See palsy.* When the disease is incurable, there is a contrivance called a yoke, which may be used with boys, or an elastic bottle may be appended. In females, sponge must be worn, for absorbing the urine, and preventing excoriation. Incontinence of urine has been cured by hepatized ammonia.—The patient began with three drops, increasing the dose to twenty-five.—*Med. and Phys. Jou. vol. II. page* 288.

The following list of the diseases of patients, admitted last year into the Kingston hospital, may serve to shew what diseases are most prevalent in that city, if not through the whole island, which, with the exception of yellow fever, are nearly the same. According to the account of a gentleman, who had a very extensive practice in the centre of the island, remittents, intermittents, dyspepsia, diarrhœa, dysentery, and hepatitis, comprised the whole catalogue. Phthisis pulmonalis rarely occurred, and calculus never. The gout, though it sometimes occur, is not severe as in northern countries, but rheumatic complaints are common. The dry belly-ache, formerly so frequent, now very rare. Cancer seldom occurs, and is peculiar to water drinkers. The putrid or ulcerated sore throat, is often epidemical and fatal, also the small-pox, measles, and influenza.—See an account of the climate and diseases of Jamaica, by Dr. George Farquhar, in the *Philadelphia Med. Museum, vol. I.* This statement, respecting the diseases of Jamaica, should have appeared in the beginning of the work, *page* 66.

A statement of the number of patients, admitted into the public hospital of the city of Kingston, from first November, 1807, to the 31st October, 1808.

Total admitted and died with their diseases throughout the year:

	Tot.	*Dd.*
Anasarca	2	0
Ascites	3	0
Asthma	16	6
Bruises	5	0
Cephalalgia, headache	3	0
Contusions	7	1
Debility	13	2
Dysentery	45	17
Dyspepsia, indigestion	1	1
Explosion by gunpowder	2	0
Fevers	494	200
Fractures	3	2
Gun shot wounds	8	3
Hepatitis, inflammation of the liver	6	0
Hæmorrhagy	1	1
Iliac, passion	1	1
Insane	20	2
Ischury, stoppage of urine	3	1
Jaundice	3	1
Luxation of the hip	3	1
Mumps	1	1
Œdœma	1	1
Ophthalmia	1	0
Phthisis	3	3
Pneumonia, pleurisy	11	3
Rheumatism	38	4
Removed testicle	1	1
Schrophula	2	0
Scurvy	4	1
Syphylis, lues venerea	34	4
Variola	1	1
Ulcers	107	10
Wounds	1	1
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QUACKERY EXPOSED,

IN A

SET OF EXTRACTS

FROM

THE MEDICAL OBSERVER,

1808.

EXTRACTS

FROM

THE MEDICAL OBSERVER.

A HIGHLY interesting publication has lately made its appearance in London, entitled, *The Medical Observer*. The object it has in view is more particularly the suppression of quackery in every shape, as well amongst *regular practitioners* as *empirics*. The undertaking is a most laudable one, and it is conducted in so masterly a way that it bids fair for success in extirpating quackery out of the land, in putting an end to monopolies of every description, and in placing the practice of physic on its proper basis.

The mysteries laid open in this publication will not fail to surprise; and those who have, during half their lives, been quacking themselves and others, preferring any advertised patent medicine to one regularly ordered and adapted to the particular case, will wonder at their cullability, or be terrified to behold the rashness of which they have been guilty.

Out of the almost incalculable number of these vaunted remedies, sold under the sanction of patent authority, it will be expedient to select such as are in more general use in this island; having premised the following remarks concerning the valetudinary constitution of people, which induces them to have recourse to quack medicines of every kind.

REMARKS, &c.

Remarks on the Valetudinary Constitution of some orders of people in society.

"It is not among the common people, the ignorant, and the poor, that quackery finds the greatest encouragement. Among the certificates and vouchers in testimony of the miraculous efficacy of the various patent nostrums, we see inserted a number of great names; *Reverend*, *Right Reverend*, *Honourable*, and *Right Honourable*, &c. &c. What are we to infer from this? Can we suppose those persons, of high character and situation, confederate with empirics? or that they are so deficient in judgment as to allow themselves to be dupes to charlatan puffs? The true explanation of the matter seems to be this: That there is a malady peculiar to the higher circles which

REMARKS, &c.

which may be termed the cacoethes of acquiring a *valetudinary reputation*. They swallow greedily every new medicine, and volunteer their testimony in its favour, for the purpose (not of serving the vender) but to make themselves *popular*. A reputation thus acquired will last somewhat longer than that obtained by a paragraph of a carriage overturned, or broke down at a route. By vouching the efficacy of a quack medicine, they have the gratification to see their names in every news-paper, and not only this, but pasted up in every warehouse, on every post and pillar, &c. with their titles emblazoned in full.

" But, to be more serious, there is a certain constitution, or state of health, among some people, more particularly among the indolent, and those in high life, which is perpetually attended with *deranged feelings*, that prevent them from ever enjoying themselves; they, therefore, get into the habit of eternally taking medicine, and as they find, perhaps, little benefit from what is prescribed for them by their physician, whose patience is worn out, they have recourse to quack medicines, trying first one then another, until their primary factitious disease degenerates into a real one, and their constitution is totally impaired.

" The habit or temperament of the persons above alluded to, consists in a high degree of irritability, which renders them sensible to the slightest impressions, and it is not peculiar to females, or to such as are apparently delicate, it affects even the seemingly athletic and robust. This is the state which lays the foundation for the numerous train of nervous complaints that imbitter life, if they do not shorten it; and these are the persons, who seeking relief from medicine, instead of regimen and exercise, that encourage the use, and promote the sale, of deleterious nostrums."

FEVER POWDER.

" Whether the discovery of the new world has been attended with more benefit or injury to Europe, is a matter to be doubted: That it has enlarged our sphere of knowledge, extended our ideas of the human race, and lengthened the chain of our intercourse with society, cannot be doubted; but that it has at the same time increased our artificial wants, introduced us to an acquaintance with luxuries which we had formerly no conception of, and likewise augmented the number of ills, which are the unavoidable lot of suffering humanity —is but too true. From this discovery has been disseminated that poison which corrupts the source of existence, and mars those pleasures, which by our nature we most ardently desire. In the same region, we have to lament, has originated a disease, new in its nature, more rapid than the plague, and as fatal in its effects; for the yellow fever in America, and the West Indies, may be considered in the same light as the plague in Europe. *A contagion* of a most virulent nature is the cause of both; but of the peculiar nature and modifications of this we are ignorant.

" From

" From the general fatality of this disease, its treatment has employed the fullest exertion of medical ability, to find a successful plan of cure.—*Mercury* has been found the most effectual remedy, which is prescribed so as to bring on, as soon as possible, a salivation, or a tendency thereto.—This practice is supported by the concurring testimony of all the most respectable practitioners.—But now for the nostrum, the yellow fever powder, *said* to be recommended and approved by the eminent Dr. Willich. Now Dr. Willich, though perhaps a man of some merit as a literary writer and translator, was not a regular bred physician, was entirely ignorant of chemistry, and had never seen a case of yellow fever in his life. Nay, it has since come out, that Dr. Willich wanted a professional chemist to analyze these powders for him, which he refused making, and consequently the letter of Dr. W. (who went soon after to Russia and died) to the proprietor, is devoid of truth.

" We shall now enter on an analysis of this pretended infallible specific. The preventive, the first part of the composition, is nothing but a watery solution of musk, with a slight addition of ammonia, or volatile alkali. That this trifling composition should be capable of opposing the attack of yellow fever, is beyond the belief of the weakest and most credulous man alive. The thieves' vinegar might be supposed to be possessed of some power, but this can have none.

" We proceed next to examine the *real specific*, or cure, of which, we are told, that *one thousand pounds worth* was ordered by one house.—This specific, contained in four coloured powders, is composed of chalk, with so small a proportion of antimony, as hardly to admit of detection; so that it is a totally inert remedy; a powder of post, that can do no harm, but at the same time can do no good; and to recommend it as a certain cure, in the fatal disease, yellow fever, is a criminal and nefarious deception.—*Si populus vult decipi, decipiatur* is a proverb frequently quoted—but no! if the public are insensible to the impositions practised on them, and are indifferent to their interests, they must be *made* or *forced* to know them, through the zeal and exertions of those, whose duty it is to maintain the cause of truth and humanity."

FEVER POWDER.

DR. JAMES'S FEVER POWDER.

" The only apparent difference between this nostrum and the pulvis antimonialis of the London pharmacopœia is in being less potent, and of course a larger dose is requisite to produce the same effects. This medicine, which was a few months since sold at two shillings and three pence per packet, containing only forty grains, has been advanced by Mr. Newberry, the present proprietor, to two shillings and six pence, although one would suppose, from the composition, it cannot cost the proprietor more than two pence.

" Mr. Perrin, of Southampton-street, states, that he was the original and only person who ever prepared it

FEVER POWDER.

it for the late Dr. James, from the time he first invented it (upwards of four years before he obtained the king's patent, and until fourteen month's after his death), retails them at one shilling and three pence a packet, on which he allows a discount of twenty-five per cent. and we can venture to say, that his profit at that rate is very considerable. A packet containing the same quantity of the pulvis antimonialis may be put up for a penny. We appeal to our readers, whether, therefore, Mr. Newberry had any reason to advance the price from two shillings and three pence to two shillings and six pence. Had it been prepared from gold, instead of antimony, it could not have been sold at a dearer rate. We do not, on examination as well as experience, find that there is any difference between Mr. Perrin's and Mr. Newberry's preparations.

"A letter some time since appeared in the Gentleman's Magazine, the intent of which was to prove the superiority of James's powder over the pulvis antimonialis of the London pharmacopœia; the writer of these comments can say, from many and repeated trials, he has *uniformly* found the pulvis antimonialis *more certain* in its operation than James's powder, as well as more efficacious in inflammatory affections; and if the author knows himself, he may venture to affirm, that he is the last person in the world that would make false assertions for the purpose of infringing on the rights of his fellow subjects; what he states is the result of the most impartial and repeated experiments, one of which he will relate:—

"An elderly medical doctor, who held the appointment of physician to a provincial infirmary, was often in the habit of prescribing for the patients of the hospital, the true James's powder, as well as taking it himself. The apothecary being out of the article, and not being able to get any in the city, he was under the necessity of substituting the pulvis antimonialis for James's powder, of which he did not apprise the physician.—The doctor took it in the usual way, and with the same satisfaction. After taking several doses, the apothecary had some conversation with him relative to the difference between the two preparations, when he declared, that he never could take the pulvis antimonialis without producing nausea at the stomach, which James's powders never did. The funds in the charity having experienced a considerable reduction, the apothecary prevailed on him to prescribe the pulvis antimonialis, and after witnessing its effects for some time, although before much prejudiced against it, he agreed to take it himself in proportionate doses, and, after persisting in its use for some time, he declared it never disappointed him in its diaphoretic effects, which he could not say of James's powders.

"Antimonial preparations are active remedies, and by promoting perspiration, and by diminishing the vis vitæ, are very valuable medicines in fevers strictly inflammatory, but even

in

in such cases, there may be symptoms which may render its exhibition highly improper, such as irritability of stomach, vomiting, violent purgings, and some predisposition in the system to disease of debility, as dropsy, &c. Fever may be considered in domestic medicine, a *generic term*, comprehending a great variety, arising from very different causes, and attended with opposite states of the system. Hence, we meet with fevers accompanied with increased vigour of the system, as the synocha of Dr. Cullen, when medicines calculated to reduce the powers of the system, as James's or the antimonial powders, are very proper. Again, we meet with fevers of a doubtful nature, commencing with symptoms of too violent action, but suddenly assuming an opposite character, as the synochus, when the employment of James's, or the antimonial preparations, must, from their debilitating effects, endanger the life of the patient. Again, there is a fever, produced by the introduction of putrid effluvia into the system, termed typhus or putrid fever, which often requires the most powerful tonic medicine to support the powers of the system, and preserve life, and in which the use of James's or antimonial powder would tend to accelerate the dissolution of the patient, and under certain circumstances, such as profuse perspirations and diarrhœa, its fatal effects would be as instantaneous as a poisonous dose of arsenic. This nostrum being therefore advertised as a remedy *for fevers*, it is to be feared that its indiscriminate employment has destroyed many lives.

NORRIS'S DROPS.

" Dr. Monro observes, 'that he has known several instances where antimonial preparations have been given in putrid ulcerated sore throats, and in low fevers; and it has brought on such a purging as to hurry the patients to their graves in a short time.' This renowned author adds, 'that people ought to give such active medicines with great caution in low or putrid fevers, or when the strength is already much exhausted.'

" As it is generally imagined that the pulvis antimonialis and James's powders are of the same strength, we think proper to observe, that four grains of the former are equal to about six of the latter. There is now prepared by chemists a *pulvis antimonialis mitior*, which approaches near to Dr. James's powder, and is prescribed in the same doses."

DR. NORRIS'S FEVER DROPS;
For Fevers of every description, and for all epidemics there is no equal.

" Of the mortality of the human race, two-thirds are owing to the attack of fever. This form of disease, therefore, is the most important that can occupy the attention of practitioners. It has accordingly engaged it at every period of medical history, and yet its nature is still equally hid from our knowledge, as at the commencement of the investigation.—That it arises from a peculiar contagion we know, that the contagion threatens the extinction of life is equally clear, and that the system is roused in its defence, or excited to certain preternatural motions or exertions to free itself from this morbid cause,

NORRIS'S DROPS.

cause, are facts fully established.—But this is the extent of our knowledge: as we are unacquainted with the principle of the contagion which generates fever, so we must remain ignorant of the true specific which is to impart the cure. Dr. Norris, however, assures us he has found it in his drops, and this valuable remedy it is necessary the public should be made acquainted with in respect to its nature and composition. From a careful analysis of this medicine, we find it nothing more than the antimonial wine of the dispensary, with a proportion of laudanum, and therefore it stands much on the same footing with Dr. James's fever powder; the only difference being, that the one is in a dry, the other in a liquid, form. That antimony is useful as a medicine in fevers we do not deny: it is exhibited accordingly in one form or another, by every regular practitioner, in order, by its action on the skin or bowels, to produce a remission of the disorder, or at least a partial mitigation of the symptoms, which is perhaps all that can be expected from it. So much was Dr. James convinced of this, that the moment that a remission was produced by means of his powder, he immediately began to finish his cure by the bark, knowing that he had gained all that was to be expected from his antimonial. Dr. Norris, however, seems to be more sanguine than his predecessor, but on no sufficient grounds. His drops were brought out as a rival to James's powder, and therefore it was necessary he should go a step further. In the height of hyperbole, he asserts that these drops cure by reconciling *nature* to *herself*. What he means by this expression he must explain: nature is a word which, from the time of John Hunter, has been introduced on all occasions, even by regular practitioners, without much meaning affixed to it: it is allowable, therefore, for a quack, following their example, to employ it without any meaning at all. The extent to which antimonial remedies should be carried in fever is much more limited in modern practice than what it has been. Fevers have of late years considerably changed their nature and type. The tendency to the nervous and putrid form precludes greatly the use of antimonials except in their first stages, and where the remedies are indiscriminately exhibited and largely employed, as always happens in popular practice, the most fatal consequences arise from their use: the junction of the laudanum, with the antimonial preparation, will render Dr. Norris's drops a more effectual medicine in its action on the skin than the James's powder; and thus, in the advanced stage of fever, if an antimonial is found a proper remedy, it will deserve a preference. Before concluding, we cannot help smiling at the effrontery of the proprietor in his caution to the public. Though the medicine, we assert, is nothing more than the antimonial wine with a proportion of laudanum, he has the hardihood or ignorance to say, that Norris's drops defy analysation, and a perfect imitation is impossible. We would answer by saying, they must be poor chemists indeed who could not detect antimony by the usual tests, and who could even not smell laudanum

laudanum in almost any composition. It is his interest, however, to hold out this language, and we shall not quarrel with him about it.

"We cannot dismiss the fever drops without remarking, that no diseases require such a nice and guarded treatment as fevers, and in no maladies is the judgment and discrimination of a practitioner so much shewn. This being the case, what danger must arise from the general use of any remedy of a powerful nature, where no regard is paid to the attending or peculiar circumstances of the case, but merely the presence of fever? Practitioners also well know that no diseases have experienced so great revolutions in their type and nature, even in this climate of late years, as fevers. If we look into Sydenham, bleeding was formerly the chief and most successful remedy in this disease; but since his time, such a change has taken place in the constitution of those attacked by fever, *that bleeding is seldom ventured on without* manifest injury to the patient. The same observation will apply to all powerful evacuations. Febrifuge medicines, therefore, from the patent shop, cannot be too cautiously received, and too prudently administered."

DR. JAMES'S ANALEPTIC PILLS.

"Dr. James, not satisfied with the sale of his fever powder, in the true spirit of trade, brought forward another medicine under the name of his analeptic pills, conferring on it an appellation which, as John Bull did not understand, he would naturally suppose contained something highly valuable in its composition. The fact is, Dr. James's analeptic pills are nothing more than a common purge, held out as an infallible specific for bilious and other disorders. JAMES'S PILLS.

"This term bilious is one which has long been in vogue with most empirics: it has supplanted the word nervous, which was formerly more general, and that in its turn got the better of the hyp or spleen, considered before that period the fashionable malady. This term 'bilious' derives its influence in the metropolis from our colonial connections. The East and West Indian, returning to this climate, talks of nothing but bile in all his complaints; and the citizen, accustomed to his table and society, considers himself, when he is ill, affected in the same way. *The fashionable deception is increased by the silence of the regular practitioner, who humours for his own interest the prevailing mania of the day.* Of this description of practitioners we fear there are too many, and quack medicines obtain more sanction from their acquiescence in the use of them, than from all the puffs in the news-papers. We lament also to observe the names of physicians, who, during their life time, were ornaments to their profession and their country; and who were known to be particularly hostile to empirical practices, now recorded in the list of empirics!!! It is extremely indecent in a tradesman, as soon as a person is dead, to advertise a nostrum under the sanction of his name. By this practice the names

JAMES'S PILLS.

of Dr. Fothergill, Dr. Hugh Smith, Dr. Hunter, Sir Richard Jeb, and other very eminent practitioners are introduced into the schedule.

"Dr. James's analeptic pills have been long a celebrated medicine with the nervous, bilious, and hypochondriac: it is fit, for the information of such patients, we should state the particulars of its composition. It contains, then, equal parts of the common aloetic pill with myrrh, of gum guaiac, and James's powder.—However proper such a form may be under certain circumstances, it can certainly never apply to one half the cases in which it is used. It is held out with the usual hyperbole, as an infallible preserver of health, and as a medicine of universal power and operation. But its composition shews it is evidently nothing more than a common purge, for the action of the aloetic and the other laxative ingredients naturally carries off the antimony along with them by the bowels, and thus prevents its entering the system, much less shewing any operation there."

REVEREND MR. BARCLAY'S ANTIBILIOUS PILL.

The following is a literal copy of the proprietor's specification, as obtained from the patent office.

BARCLAY'S PILLS.

"'*Rev. Mr. Barclay's Invention.*

"'Take of the mass of the simple colocynth pills, two drams; of resin of jalap, one dram; of soap of almonds, one dram and a half; of extracts of *guaicum* wood, three drams; of tartar emetic, eight grains; of the essential oil of juniper berries, four drops; of the essential oil of caraway seeds, four drops; and of the essential oil of rosemary buds or flowers, four drops; mixing them well together with as much syrup of buckthorn berries as will make a mass for pills, and then divide the same into sixty-four equal parts, and make each part into a pill. The dose is, from three to four of the pills, or more of them, taken at night or in the morning, as occasion or necessity may require. The above ingredients will form *my* pill, which *are* known by the name of the Rev. Mr. Barclay's *Antibilious Deobstruent Pills*. IN WITNESS, *&c.*'"

"We do not discover any thing in the recipe that can entitle the Rev. Mr. Barclay to the privileges of a patent. It exhibits nothing new! nothing like an original invention! The combination of colocynth, scammony, and resin of jalap with aromatic oils, is so common a domestic recipe, that a copy of it may be found in almost every druggist's shop in the kingdom. No boy that has been a servant in such shop a year, but is conversant with its composition.—Upon what ground then could the proprietor found his claim to the protection or privilege of a patent! or the legislature grant it?

"Emetic tartar, combined with bitter apple, scammony, resin of jalap, (all very drastic purges) forms an herculean remedy for gout. When gout attacks an athletic person, and is attended with obstinate costiveness, dry skin and plethoric habit of the body, such a medicine may be necessary,

sary, and a *few* doses, by unloading the system, might prove beneficial; but gout, occurring in a constitution so reduced by frequent attacks and an irregular life, that nature is not equal to bring on a regular fit, what must be the consequence of a dose of these *patent* deobstruent pills! The probability is, that a *patent coffin* would be the next thing the patient would require.

BARCLAY'S PILLS.

"The *compound colocynth pill, known by the name of pill coccia, we conceive to be a purge, infinitely superior* to this composition, to which the antimonial powder may be added, (in the proportion of twelve grains of the former to two of the latter for a dose) when the constitution is feverish, or the skin hot and dry. But in cases of gout, from some peculiarity of constitution, the indiscriminate use of even those pills may be productive of great mischief.

"As a specimen of this reverend empiric's anatomical and medical knowledge, we give the following quotation from an advertisement obtained at his *elaboratory* in Bedford-street.

"'The bile is the fruitful parent of the complicated bodily miseries to which human nature is heir, such as gout, rheumatism, nervous affections, &c. &c.; that we bring it into the world with us; that the *first pang* the infant suffers proceeds from it; and that it haunts us more or less during our continuance in it!!!'

"We will venture to assert, that a more absurd doctrine, blended with impiety, could scarcely be uttered; nor could this clerical adventurer have given a greater proof of his total ignorance of anatomy and physic."

WORM MEDICINES.

CHING'S LOZENGES.

"'*Death by Chings Worm Lozenges.*

"'A patent quack medicine, known by the name of '*Ching's Worm Lozenges,*' having lately been intruded on, and recommended to the public, I deem it a duty incumbent on me to declare, that the above worm lozenges, from the quantity of *mercury* contained in them, are a most destructive and deadly *poison*, less active, but equally capable of destroying life, as *arsenic*. Numerous, it is to be feared, are the cases where life has been destroyed by them, and the cause not suspected, from the want of medical assistance. But the following lamentable case, which has happened in my own family, can be well attested by many professional gentlemen, and which is confirmed by an inquest taken on view of the body, before W. W. Bolton, Esq. coroner for this place, on Tuesday, the 3d instant, will, it is hoped, operate as a caution to parents, and others who have the care of children, and prevent the administering a sure mercurial poison, in the form of Ching's lozenges, from which the most direful effects may be apprehended.

"'On Sunday and Wednesday, December 4th and 7th, 1803, Ching's worm lozenges were administered, according to the directions, to my

WORM MEDICINES

unfortunate child, (a fine boy of three years old) and on Friday the 9th, he was in a high state of *salivation*.—Medical assistance was immediately called in, when he was pronounced in imminent danger, from *mercurial lozenges*. Remedies were immediately applied, and all the aid that medicines could afford resorted to, but without effect; for the mouth ulcerated, the teeth dropped out, the hands contracted, and a complaint was made, of a pricking pain in them and the feet, the body became flushed and spotted, and at last black; convulsions succeeded, attended with a slight delirium; and a mortification destroyed the face, which, proceeding to the brain, put a period (after indescribable torments) to the life of the little sufferer, on Sunday, the 1st instant, twenty-eight days after he had taken the poisonous lozenges.—This shews how cautious people ought to be in administering *quack medicines*.

"'A coroner's inquest being summoned, and the evidence of the medical gentlemen adduced, the jury returned a verdict——*poisoned by Ching's lozenges*.'"

"All the advertised nostrums for worms we have had an opportunity of examining, prove to be a composition of mercury, combined with scammony, jalap, gamboge, and other drastic purgatives, which very few medical practitioners would venture to give to delicate children or infants. To say the best of them, they are *kill* or *cure* medicines, and as the public are only informed of their beneficial effects, so it is impossible they can form any estimate of their real merit. From their drastic qualities it must appear evident, in the hands of ignorance they must often be productive of much mischief, particularly in ricketty or weakly children, or when an acidity prevails in the stomach and bowels, with which all children are more or less affected."

BALSAM OF HONEY.

"Whatever Sir John Hill's botanical knowledge may have been, if he were the author of the directions, &c. which accompany this nostrum, we do not hesitate to pronounce him ignorant both of the properties of the medicine, and the nature of those complaints for the cure of which it is recommended; the expression that it is capable of opening the thoracic duct, betrays a want of anatomical knowledge. We cannot suppose that Sir John Hill, as a regular physician, would have recommended such a medicine in those diseases, or have impeached his character, by advertising a preparation which every person the least versed in chemistry must know could not, by any chemical process whatever, be made from honey. In pharmacy, or chemistry, there is no such preparation known as balsam of honey, or is the spirit with which this pretended balsam is made, capable of extracting any of the medicinal properties of honey. In coughs, arising from obstructed perspiration, in which there is always more or less a disposition to pleurisy or inflammation of the lungs, what must be the effect of this stimulating tincture? We can have no hesitation in declaring that it

it must be productive of the most serious, if not irreparable mischief.

" Every preparation under this name, *viz.* Cundal's improved balsam of honey, &c. that we have examined, is nothing but *tincture of tolu, or tincture of benzoin*, which, in their virtues, are diametrically opposite to honey."

GODBOLD'S VEGETABLE BALSAM.

" On examining this nostrum we do not discover any property that can in any degree entitle it to the appellation of ' balsam ;' the propriety of the term ' vegetable,' we cannot dispute, as vinegar, sugar, and honey are vegetable productions ; we can however positively deny that it possesses the *balsamic* property of vegetables, and from our examination, as well as the trials we have known to be made with it, we cannot attribute to it any virtues superior to the *simple oxymel* of the shops (made of honey and vinegar,) although sold at the very exorbitant rate of 18*s.* a pint, for which a regular chemist would be ashamed to ask as many pence. Why a patent was granted to the proprietor for so simple a medicine,* we are at a loss to conjecture. It is a sanction which has a great influence with the ignorant, and to which it is by no means entitled."

WHITEHEAD'S ESSENCE OF MUSTARD.

" We do not find, on examination, that this nostrum is, from its composition, entitled to the term of essence of mustard. On a very careful examination, it does not appear to be any thing else than *spirit of turpentine*, blended with common oil, to which we conceive Mr. Johnson's encomiums on the virtues of *mustard* are not strictly applicable, nor can we agree with him in pronouncing it a '*safe* and *effectual*' remedy for those complaints, for the cure of which he so warmly recommends it. The expressed oil of mustard may have been employed to dilute the spirit of turpentine, but this oil does not contain the *aromatic* quality of the mustard in which its medicinal virtues reside. —The oil is insipid, and by the manufacturers of the flour of mustard, is sold at a cheaper rate than common linseed oil. ESSENCE OF MUSTARD.

" As an internal remedy, we conceive there is a very great difference between the stimulating properties of mustard and turpentine. Diluted spirit of turpentine has been puffed off in the daily prints, under the name of *essence of mustard*. Mustard is a stimulus of a *peculiar* nature, and very different to turpentine. If therefore a person that was desired to take the mustard seed by a physician, and he preferred the *essence of mustard*, in consequence of the proprietor's assertion that it contained in a pure and concentrated state all the virtues of the mustard, the most serious

* Among an immense number of herbs, selected for preparing this vegetable balsam, are the following, *viz.* thistles, nettles, mallows, yarrow, planton *(Plantain)*, huers pastory *(Bursa pastoris)*, aron wake robin *(Arum)* endive, damisons, mirabolanos *(Mirabolins)*, &c. &c.

INGLISH'S PILL.

ous mischief might ensue, and in a court of justice, a person so injured, might recover heavy damages."

INGLISH'S SCOTCH PILL.

"This wonderful composition is said to be the production of a Dr. Anderson, physician to Charles II.; but it surely required no great extent of either medical, pharmaceutical, or chemical knowledge, to find out that aloes will purge, and that any essential oil will somewhat lessen its irritation. The selection of aloes for a pill of this kind we think a bad one: its action is chiefly exerted on the rectum; hence it is an unsafe purgative for all persons subject to any complaint of these parts. The mischiefs that have arisen from this pill almost equal the whole of quackery besides. Ulcerations of the bowels, incurable piles, flooding, and other disorders of the female sex, have owed their primary origin to it, and this circumstance is easily accounted for. The great quality which the purchasers of every patent medicine look to, is its action on the bowels: if it purge them well, they are sure it must be an excellent remedy. John Bull and his wife are fond of living well. Hence the pill-box becomes as necessary an appendage of the table as any other article of food, and digestion cannot go on without it. The death of a near relation, the writer of this has occasion to ascribe to the use of Anderson's pills. By a habit of having recourse to them every other day, the bowels were brought to that state, that schirrus, and afterwards ulceration of the rectum, ensued, and he died with a strong and vigorous constitution, a victim to the malpractice of the empiric, and an unfortunate confidence in this nostrum."

GODFREY'S CORDIAL, AND DALBY'S CARMINATIVE.

"An infusion of opium, in a weak proof spirit, chiefly flavoured with the essential oil of sassafras, and sweetened with treacle, has been sold in every market town and village, under the name of *Godfrey's Cordial*, and we believe it has experienced a much greater demand than any other quack medicine whatever. It is principally advertised for the diseases of children, as pain in the bowels, gripes, flatulency, fits, &c. &c.

"More than three parts of the children that die in this country, under three years of age, fall a sacrifice to inflammatory affections, either of the brain, lungs, or bowels; and it is a melancholy fact, that parents whose circumstances will scarcely admit of calling in regular advice, have recourse to cheap advertised medicines, which, in such cases, from their anodyne and stimulating properties, are poisonous, and in a few days generally destroy all hope of recovery. The most frequent disease among children in London is inflammation of the lungs, which is always attended with cough, pains in the chest, and great restlessness. These symptoms indicate to the nurse the propriety of an anodyne medicine; hence syrup of meconium, Godfrey's cordial, or some similar preparation, is employed, which answers the nurses's expectation and often

often her chief wish, in allaying the poor infant's pains, and procuring it some sleep; but the inflammatory affections are increased by it, and a medical man is seldom called in till either mortification or suppuration has taken place, and the child within a few hours of its death; and it does not unfrequently happen among the poor, that many, very many, children are suffered to die, without even being seen by a medical man, through their trusting to quack medicines. Inflammation of the bowels is always either attended with griping pains or violent purgings; on which occasions, what is more common than for nurses immediately to fly to the use of Godfrey's cordial, Dalby's carminative, or some such medicine, the consequence of which is, that by trusting to them, a medical man is not called in till the child is past recovery, and too often to witness its last gasp. Nurses who deal much in medicines are always to be suspected. They trust to it and neglect their duty. I never knew a good nurse who had her Godfrey's cordial, Daffy's elixir, Dalby's carminative, &c. at hand, such generally imagine that a dose of medicine will make up *for all defects* in food, air, exercise, and cleanliness."

DAFFY'S ELIXIR.

"The compound tincture of senna, of the Edinburgh pharmacopœia, with the substitution of treacle for sugar candy, and an addition of aniseeds, has been very generally sold under the title of *Daffy's elixir*, but so far from being improved by such alterations, it is rendered very inferior to the compound tincture of senna; the treacle in flatulent cholic proving more injurious than otherwise. In cholicky affections, attended with inflammation of the intestines, such medicines we conceive improper."

BLACK DROPS.

GENUINE BLACK DROPS.

"Experiments have been made, which shew that an extract similar to opium may be procured from the different species of the lettuce. This fact has been laid hold of by the proprietor of the genuine black drops, a Mr. Braithwaite, surgeon, at Lancaster; and he announces it under this title, considering it as free from all those inconveniences which attend in general the use of narcotics, especially laudanum, in nervous and irritable constitutions. In examining, however, Mr. Braithwaite's medicine, we can see no difference between it and laudanum, except in the vehicle. If Mr. Braithwaite is a gentleman in practice, he must know that the prejudices of patients are greater in regard to opium than any other article of the materia medica; and that he will often hear from patients, not to give them a drop of laudanum, otherwise it will make them mad, or such like talk, while, during this very time, they are cautioning the practitioner, they have, perhaps, been taking it without their knowledge, and consequently without any inconvenience. The writer of this article had occasion to see one lady who had applied for relief to Mr. Braithwaite's genuine black drops: it was for the purpose of relieving the violence of an occult cancer, and from

BLACK DROPS.

from some dislike to laudanum, which she had been in the habit of taking, she wished to find a substitute, and had cast her eye on Mr. Braithwaite's advertisement,—his black drops were repeatedly given in the fullest doses, without the smallest effect in alleviating pain, while the same proportion of laudanum possessed the desired influence. Either, then, the black drops, if genuine, must possess very weak narcotic powers, and of course do not deserve any character as a medicine, or if it is opium itself, to prevent its soporific effects, something must be added to it."

ON THE ARTIFICES EMPLOYED IN ADVERTISING QUACK MEDICINES.

"There is no species of quackery more deserving of censure than that of vending compositions under fictitious names, for the purpose of inducing the ignorant to suppose that they are really preparations from the herb, &c. from whence they are named, when at the same time they are as diametrically opposite in their properties as two medicines can possibly be.—So prevalent, however, is this practice, that we can positively aver, that out of the 500 articles specified in the schedule of the act of parliament, upwards of 400 are of this description. It is generally supposed that this kind of trade is not cognizable by the laws of this country, and we suppose that Dr. Allen by advertising his medicine under the customary *sanction* of 'his majesty's authority,' is of the same opinion: this idea is, however, erroneous, and in a court of justice, proprietors of such medicines could make but a very lame defence, and this boasted royal authority, which is nothing more than the stamp, would avail nothing in mitigation of the crime.

"A learned barrister has lately given his opinion, that it is a *criminal* offence, and that the vender, as well as proprietor, of such a nostrum, may be indicted at any of the criminal courts, which is confirmed by the opinion of the late lord chancellor, who, when he presided in the common pleas, observed, 'that those who advertise medicines of this description are subject to a prosecution for a *fraud* on the public.'

"One would suppose, that to every man's mind and conscience, to tamper with the lives of our fellow-creatures for the sake of lucre, must appear a crime of the greatest magnitude, and that he contracts thereby an awful responsibility to his Creator —but we fear the conscience is little consulted.

"A respectable bookseller at Hull, on the testimonies published by quacks in favour of their medicine, asserts, 'that he took the trouble of making application to the people, whose names are adduced as principals or vouchers to many *miraculous cures*. Many, he declares, that appear in the periodical publications, are fictitious, others are obtained through the influence of *gold*, and many have written to have informed him, that they never received the least benefit from the nostrum to the recommendation to which their names had been assigned; others that they had

had no knowledge whatever of the medicine; some that the venders had asked them whether they did not receive considerable relief from the medicine which he sold them; and on their replying that they found themselves much better, that the said vender had, without their knowledge or consent, published their names in the public papers, as having recovered from the most dreadful stages of a fatal disease, after trying the various remedies in vain, and consulting many eminent physicians!!!' which our inquiries have confirmed.

QUACK ARTIFICES.

"Dr. Buchan, in his treatise of the venereal disease, declares, 'that he was much shocked on meeting a poor person in company with a quack doctor returning from the mansion house, where he had been to make oath of having been cured of the venereal disease by his nostrum, with which the doctor states he was not infected at the time he took the quack's medicine.'

"We well know that an advertiser of nostrums in London refused to employ a printer, unless he would take his restorative balsam, and attest its efficacy, to which, for the sake of lucre, he assented. We are also very credibly informed by a vender of medicines, that on discontinuing the advertisements of quacks, he uniformly found the demand for their nostrums to cease, a plain proof that, notwithstanding their boasted cures, the sale of their wonder-working nostrum entirely depends on being frequently advertised, which, if the cases published were genuine, would have so established their reputation as to render their public addresses unnecessary.

"The nostrum of a celebrated nervous doctor, who perhaps advertised more *extraordinary cures* than any of his cotemporaries, has lately fallen into entire disuse from its being assigned to a person who could not afford to advertise it properly; a convincing proof of its *intrinsic* value, and of the *reality* of the cures. It is well ascertained, that Dr. Solomon pays seven thousand pounds *per* annum. for advertising."

N. B. A number of medicines are promiscuously advertised, and vended with quack medicines, that are not to be considered of this description, but are approved forms taken from the pharmacopœia, or they are the compositions of eminent medical practitioners; such are Huxham's tincture of bark, calcined magnesia, Dover's powders, *&c. &c.* No objection lays against medicines of this sort, because their nature and effects are perfectly well known. They are not secret compositions, or pretended cures of numerous maladies, the most opposite to each other.

To satisfy the world of the high degree of credit quack medicines must derive from the inventors of them let it be known, that the famous Dr. WARD was a *footman*; the celebrated Dr. ROCH, and his no less renowned successor, Dr. WALKER, were both *porters*; GRAHAM, of celestial memory, was a *mountebank*; MEYERSBACK was a *rough-rider* in a

riding school; TURLINGTON a *ship-broker*; GARDINER, of the worm museum, a *carver* and *gilder*; SOLOMON, of Liverpool, a *Jew pedlar*; and, for shame be it mentioned, BARCLAY, a *clergyman*, turned empiric for want of a living.—*Cætera desunt.*—*See Medical Spectator, No. 1.* a new work, in which all the patent and other quack medicines are taken cognizance of.

It is well known that the most direful and, frequently, fatal effects follow from the eating of certain fishes. To what the poisonous nature of these fishes is owing is not ascertained; but the common opinion is, that it is owing to their feeding on copper banks. This notion, so unphilosophical, and so totally devoid of foundation, is combated in Dancer's Medical Assistant. The reasons the author assigns for not giving in to this vulgar error are as follow: 1. No such copper banks have been discovered in these seas. 2. It is very unlikely that copper should enter into the composition of any animal, if it did, it might be detected by infallible tests. 3. The poison appears to lie in particular parts only, *viz.* the liver, entrails, and fat. 4. The poison is destroyed by only slightly corning or salting the fish. 5. The effects produced are not exactly such as might be expected to arise from copper, nor are the antidotes such as would be deemed most adviseable against the poison of copper.

The foregoing arguments appear sufficiently strong against the generally received opinion that the poison of fish is owing to copper. But the intelligent Doctor Chisholm, whose authority may have great weight, having ascertained the actual existence of copper banks among the Windward Islands, seems inclined to give in to the popular opinion. In a very elaborate paper, communicated through the Edinburgh Medical and Chirurgical Journal, v. iv. he has given a long detail of facts and reasonings on the subject; but he has not been able to state any thing convincing or conclusive. As it is not an idle topic, but an enquiry highly interesting to the inhabitants of the West-India islands, it may be worth while to shew by some further remarks the absurdity of this notion.

1. Allowing that such strata of mineralized copper do actually exist among the other islands to windward, none such have been discovered in the seas about Jamaica; but, supposing that copper should be universally found in the bed of the ocean, or among reefs and shoals, it does not appear that the water of the sea is any where impregnated with copper. How then are the fish affected by copper? And why are particular fish only affected, and these fish only at particular seasons and in particular parts, *viz.* the liver, entrails, and fat? Do they eat the mineralized ore? Should not copper be a poison to the fish themselves? If any part of the fish contained copper, even in the smallest quantity, it would be made apparent by the test of ammonia, or volatile alkali—striking a blue colour. If the poison consisted of copper, how should salting the fish destroy it. The muriat of copper ought to be more active than the mineralized ore.

Dr. Chisholm states that some persons escape the poison altogether, others, who escape it at one time, are affected by it at another. How can this be explained upon the supposition of copper? But, what is still more ridiculous, Doctor Chisholm asserts that persons who have been once affected by the poison of fish, are ever afterwards liable to suffer from eating fish which are not poisonous. Allowing this to be a fact, it shews that the symptoms attributed to poison are rather owing to some idiosyncrasy or particularity in the constitution of persons eating the fish. Many analogous instances of such idiosyncrasy exist with respect to other aliments, as milk, oysters, acids, &c.

It has been supposed that if fish do not directly feed on copper ore, they may be rendered poisonous indirectly from feeding on the lithophyta, or zoophyta, found on these copper strata. It is just as improbable that these should be impregnated with copper, as that the fish should be so; if they were it could be ascertained in the way before proposed.

Why should the poison of fish be attributed to their food? Are not animals and plants poisonous in their own nature, independant of the food they live on, or the soil they grow in? Does not the nature of animals and plants undergo considerable variations from climate, at particular seasons, and at different periods of growth? The poison of plants as well as that of animals is in many instances lodged in particular parts, divested of which the other parts are not unwholesome.

The enquiry, therefore, into the cause of fish being poisonous is of less importance than that which respects the particular fishes that are so; at what season of the year they are so; the means of counteracting the poison generally, and of counteracting the poison of each particular fish. A catalogue is subjoined of most, if not all, the fishes in these seas that are considered poisonous.

CATALOGUE OF POISONOUS FISH.

1	Spanish Mackarel	*Scomber cærules argenteus.*
2	Yellow billed spratt	*Clupea Thrissa.*
3	Barracuta	*Esox Barracuta.*
4	Grey snapper	*Coracinus fuscus.*
5	Porgie	*Sparus chrysops.*
6	King-fish	*Scomber maximus.*
7	Hyne	*Coracinus minor.*
8	Bottle-nosed cavallo	*Scomber.*
9	Old-wife	*Balistes monoceros.*
10	Conger eel	*Murana major.*
11	Sword-fish	*Xiphias gladius.*
12	Smooth bottle-fish	*Ostracion glabellum.*