

An essay on the malignant ulcerated sore throat : containing reflections on its causes and fatal effects in 1787 : with a remarkable case accompanied with large purple spots all over the body, a mortification of the leg.

Contributors

Rowley, William, 1742-1806.
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Publication/Creation

London : C. Nourse, 1788.

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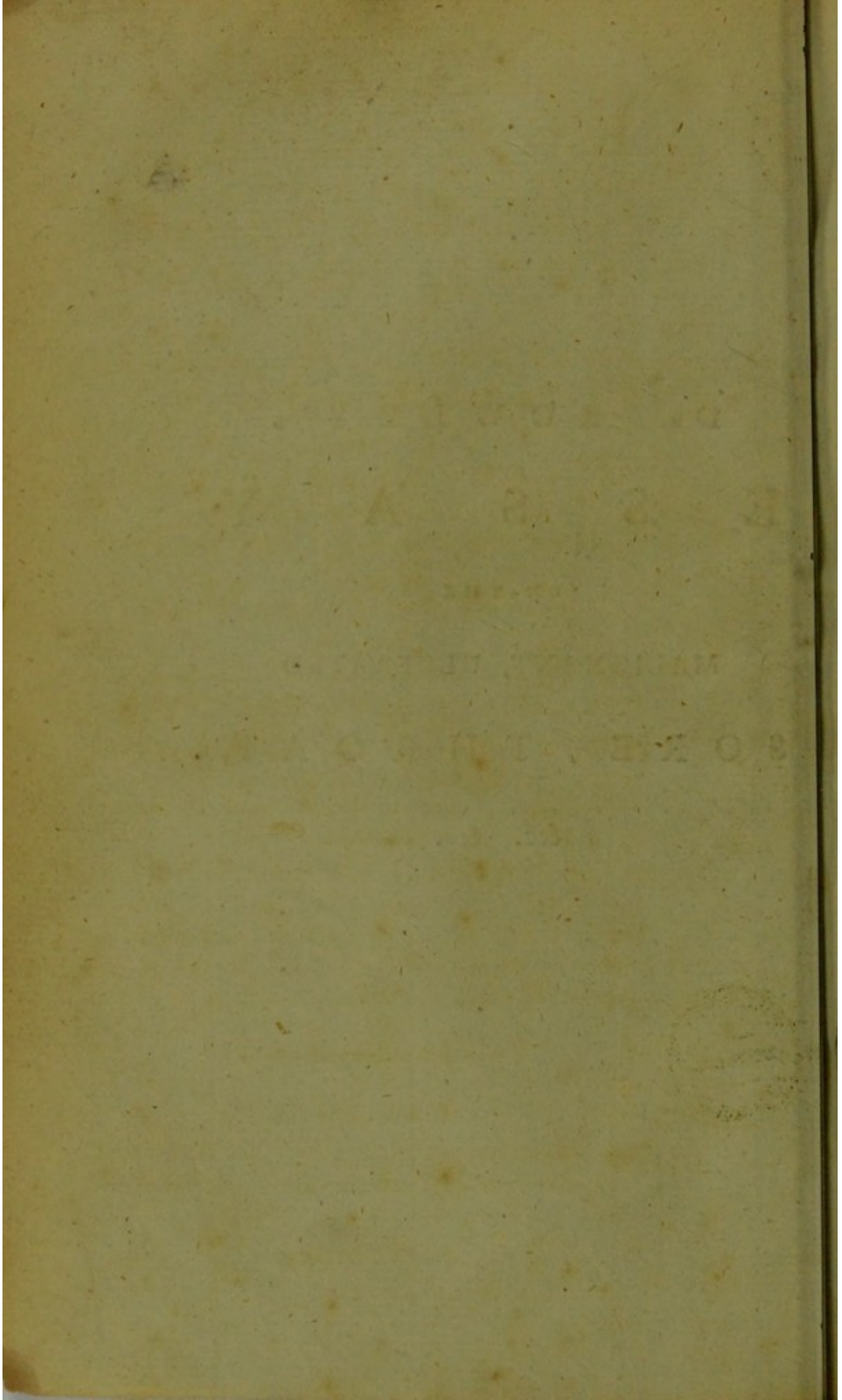
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DR. ROWLEY'S
ESSAY
ON THE
MALIGNANT, ULCERATED
SORE THROAT,
&c. &c.



AN
E S S A Y

ON THE
MALIGNANT, ULCERATED
S O R E T H R O A T;

CONTAINING
REFLECTIONS ON ITS CAUSES AND
FATAL EFFECTS IN 1787.

WITH
A R E M A R K A B L E C A S E,
ACCOMPANIED WITH
LARGE PURPLE SPOTS ALL OVER THE BODY,
A
MORTIFICATION OF THE LEG,
&c. &c.

BY WILLIAM ROWLEY, M. D.
Member of the University of OXFORD, the Royal College
of Physicians in LONDON, &c. &c.

TO WHICH ARE ADDED,
A N I M A D V E R S I O N S
ON THE
Present Defects in treating the Disorder, improved and
successful Methods of Cure, and an Account of a new
Species of temporary Madness, &c.



L O N D O N:
Printed for C. NOURSE, STRAND; E. NEWBERY,
Corner of LUDGATE STREET; and T. HOOKHAM,
NEW BOND STREET.

1003 28c

F. S. A. 1

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THE

DEPARTMENT

OF

AGRICULTURE

WASHINGTON

1917

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UNITED STATES

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PRINTING OFFICE

WASHINGTON

1917

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INTRODUCTION.

TO communicate more univerſally the moſt effectual means of treating the putrid, malignant, ulcerated Sore Throat, has the following Eſſay been written. It is not conſidered as a complete, but intended rather as a uſeful performance. At ſome future period the whole may undergo a reviſion; the arrangement of the materials being then re-examined, it may, perhaps, appear with greater advantages. The cauſes which give origin to putrid epidemic diſeaſes may be more minutely and elaborately inveſtigated; the doctrines of morbid changes in the atmofpheric air inducing deleterious effects in the human fluids more ſatisfactorily explained by a variety of experiments on aërial fluids; and a more extenſive application of the neweſt reſearches and demonſtrations in

anatomy, physiology, pathology, and therapeutics.

The present work commences with a remarkable cure of the malignant, ulcerated Sore Throat, and some short view of its causes and effects, theoretical and practical: for though curing diseases is the greatest test of medical abilities, yet sound reasoning on successful treatment gives satisfaction to every conscientious and regular practitioner. Rational practice is the very soul of the art; empiricism, frequently, the unsettled wanderings of superstition, infatuation, uncertainty, and error.

After the recital of the case, some observations are introduced on the most celebrated writers of this fatal disorder: their comparative merits and defects are freely, and, it is hoped, candidly discussed. The causes of the disorder proving fatal are reduced to fourteen propositions, in which no disrespect is intended to the learned writers produced, who, no doubt, have much contributed to the present improved modes of cure. Other authors may hereafter appear, who may take the

same liberties with the present little work, and extend the utility of the doctrines, or introduce new inventions more serviceable to society: on either occasion I shall sincerely rejoice, and be ready, on conviction, to relinquish any of the present opinions, in favor of more salutary methods of treatment.

The third part contains the most improved plans of curing the malignant, ulcerated Sore Throat, under the heads of distinguishing symptoms, causes, prognostics according to its judicious or erroneous treatment, and, lastly, the cure. The whole is interspersed with practical observations, the result of long experience, extensive practice, and reiterated reflection.

Afterward is delivered a short view of a new species of temporary madness.

The learned medical reader will, perhaps, discover several original reflections; and it may be thought, that an apology is expedient for presuming to differ so materially with many other physicians, particularly on the European Continent.

The liberty of objecting to many former medical doctrines is founded on a conviction that they were erroneous in principle, and unsuccessful in practice. The veracity of this assertion is well known, and will scarce be denied by unprejudiced physicians; yet attempts to abolish the old, and communicate new principles in the healing art, often excite such jealousies and violent opposition, that serenity of life is preferred by several to literary or medical warfare.

The common consequence of public innovations in the art is private dislike amongst some members of the profession; yet by the peaceable indolence of several excellent practitioners, or a disinclination to publish observations, through fear of illiberal censure, many useful discoveries are often buried with their ingenious inventors.

If such timid considerations had actuated all physicians from the time of Hippocrates to the present moment, the ancient chimerical delusions, which had reigned for near two thousand years, would still have been retained; numerous useful improvements, essentially necessary for the preservation of health,

health, or removal of diseases, would have never appeared. The most important discoveries, that have elevated the medical art to its present respectability, have frequently been introduced amidst the fury of party and hissings of envy*. Every professional man, therefore, who has penetration to detect, and courage to expose error, or intrude new doctrines, however meritorious, has no more right to expect confidence or candor, until time establishes the truth, than his predecessors. If calumny, detraction, misinterpretation, and falsehood, excited by envy, rapidly fly with eagle's wings; truth follows with the tardy and cautious steps of experienced old age. It is, however, to be lamented, that whatever obstructs the progress of beneficial improvements in medicine, operates against the principles of humanity, and consequently becomes injurious to the community.

The acquisition of a master's degree, *sine gratia*, in the University of Oxford,

* As the circulation of the blood, mercury, antimony, bark, inoculation, &c. &c.

and an admission into the Royal College of Physicians in London, both which I enjoy, are not considered, in this country, disreputable appendages of a regular physician; for the former is not obtained without many years personal attendance and studies, as student, bachelor of arts, &c., according to the statutes of that learned seminary; nor the latter without the strictest Latin examinations on anatomy and physiology, pathology, and therapeutics. These distinctions, however respectable, are not a sufficient apology for deviating from the common paths of medical practice; the cautious, inquisitive, and discerning, may require more substantial reasons; these necessarily include some of the Author's medical pursuits.

Men, educated and confined to a certain spot, are frequently supposed to contract narrow prepossessions of a local nature: they are apt to imagine the knowledge of one place, or seminary, the criterion or standard for all others; therefore I determined, after receiving the most regular education in surgery, &c., this great city,

its

its hospitals, and lectures, could furnish, to observe the difference of diseases, gunshot wounds, &c, &c., in hot climates, with their various and necessary modes of treatment.

Being in His Majesty's service, from the year 1760 to 1764, in the war against France and Spain, the objects I most desired were answered; for I had opportunities of seeing at Bellisle, Barbadoes, Guadaloupe, Martinico, Havannah, Jamaica, &c., not only the difference of diseases compared with European, but the French, Spanish, and English modes of their treatment.

The principles and practice of the great Boerhaave, whose memory must always be revered by liberal physicians were, at the period I began my studies, (1756) in the highest estimation. Educated in the Boerhaavian school and tenets, which seemed compiled to conciliate the friendship and unanimity of all the contending parties of the preceding medical sects, it must be confessed I was delighted with the plausibility of the art so rationally illuminated, when compared to the obscurity, darkness, or mystery,

mystery, of the Galenic, chemical, and other visionary sects, that had previously pervaded every medical department.

The warm attachment to my favorite author was soon shaken; for the most excellent Boerhaavian doctrines, in conjunction with those of Hoffman and Stahl, were quite inadequate to the cure of transatlantic putrid diseases, whose rapidity and fatality by no means admitted of the calm and placid attendance on the termination of acute diseases, under the specious pretext of a physician being the mere *minister naturæ*: for by these doctrines thousands perished amongst the French and Spanish, and not a few under the guidance of English medicine, attached to the doctrines of the great Boerhaave. These facts gave rise to suspecting the *ipse dixit* of the learned professor, and more successful methods of treatment were discovered, and happily adopted, by every practitioner open to truth and conviction.

After returning from the war, I attended diligently the practice of St. Thomas's in particular, and occasionally the other London hospitals, anatomical lectures, dissections,

sections, midwifery, &c., but wishing to receive every information relative to the art, I visited Leyden and Paris, and observed the practice of *l'Hotel Dieu, la Charite, l'Hotel des Invalids, &c.*, and was an auditor to all the public lectures on anatomy, surgery, midwifery, botany, chemistry, &c., in that famous city.

On my return from these speculative and practical studies in the year 1766, I fixed my residence in this great city, first in surgery and midwifery, and afterwards, in 1773, solely as a physician, having obtained my first medical degree from a university in Scotland.

From the moment I entered into practice, being determined to render what medical knowledge I possessed useful to society, I permitted numerous indigent persons to partake of my services, which practice I have continued, except when attending the University of Oxford, or making foreign excursions, for a period of near twenty-two years. The advantages of experience from these sources have been considerable.

At

At different periods, however, in the summer season I have repeatedly visited the principal hospitals and universities in *France, Italy, Germany, Flanders, and Holland*, to collect the newest discoveries, and to compare the different methods of treating all diseases, in order to select the most useful.

Thus has a period of above thirty years been dedicated to the medical art, not as an idle spectator, but in the most active scenes; whether the judgement of the Author has been equal to these extensive advantages, future publications, of a more elaborate nature, and, perhaps, future ages may best determine.

Some learned men affect to despise the knowledge and practice of all the separate branches in medicine, and think it sufficient to comprehend one department: in my opinion, all the parts of the healing art are so closely connected, that, for the welfare of society, they all should be well understood, unless it could be proved that the fewer ideas a man possesses, so much the more capable he is of reasoning and judging on abstruse, complicated, and extensive

tensive subjects. The knowledge and benevolence of a physician should be equally universal.

It is not from any ostentation that these circumstances are mentioned; but to demonstrate that the adopting deviations from the common modes of practice, in the present or other diseases, has not arisen from any sudden caprice. Whether these opportunities have answered the intentions of improving the healing art, is submitted to the determination of the candid and learned in the profession.

Another powerful reason for mentioning the circumstances that have given rise to a rejection of some exceptionable medical practices is, the probability of this essay being perused in different parts of the world; therefore it became necessary to inform foreigners that it was not the performance of youth nor inexperience. If these facts induce unprejudiced and impartial physicians to make trial of the doctrines the essay contains, the intentions of the Author will be amply gratified, which are to render improved medicine universally beneficial. Physicians should be citizens

tizens of the world : they should be tender of the reputation of one another ; and they should warmly endeavour to diffuse the blessings of the art through the whole habitable globe,

If these reasons of an individual were considered insufficient for quitting the common beaten track of medicine, there are others still more cogent,

Within these last thirty years a spirit of inquiry has proved the principal doctrines of many celebrated modern authors fallacious ; a multitude of discoveries in anatomy, physiology, pathology, practical medicine, chemistry, pneumatics, &c., have laid the foundation for a thorough revision and reformation of the whole art of medicine. Those who have reaped the greatest benefit from the new philosophy and medical improvements will be best enabled to judge of the truth of these assertions : those who have most neglected them, on supposing the art sufficiently perfect, are unlikely to avail themselves of any discoveries, however important.

The late and present fatality of the disorder urged the necessity of the performance ;

formance ; the motives are general utility : it is therefore hoped the remarks will be perused with liberality, and received with candor.

The case is recited, to strongly inculcate the necessity of never deserting a desperate disease; the *rationale* is given, to promote a liberal spirit of inquiry into the physical causes of evident effects; the improved treatment of the ulcerated Sore Throat is subjoined, from a thorough conviction of its necessity.

It must be confessed, I felt no small degree of reluctance on introducing the facts relative to the long experience, which may give some sanction to the free animadversions on many common opinions; but a conscientious discharge of the medical duties I owe mankind, impelled me rather to incur censure, than not become useful, by enforcing, with all the energy and reasons in my power, some of the salutary principles I had to offer on the present subject.

C O N T E N T S.

GENERAL causes of the ulcerated Sore Throat in the latter end of the year 1787, from p. 1 to 6

Remarkable case, attended with purple spots, partial mortification of the leg, &c., from p. 6 to 9

The causes of the symptoms, p. 9 to 19

Cure and prescriptions used, - p. 19 to 37

Observations on the writers on the malignant, ulcerated Sore Throat, - - - p. 37 to 49

Fourteen common modes of treatment exceptionable or fatal, with remarks, &c. - - p. 49 to 90

The improved treatment, - p. 91 to 126

ERRATA CORRIGENDA.

	<i>Page</i>	<i>line</i>	<i>read</i>
Introduction,	xiv	16	has laid
	7	3	singular cure
	13	20	irritates
	14	28	and its sedative
	50	4	<i>contrayervæ</i>
	64	6	prevented from increasing, or
	72	17	in its
	76	22	is
	88	2	are no less
	89	23	putrid fordes
	97	27	nor towns

This little Essay having been written and printed amidst the hurry of extensive town practice, the Author could not, on account of his other avocations, always attend the press: if, therefore, any other inaccuracies should be discovered, the candid reader, it his hoped, will correct them.

A
R E M A R K A B L E C U R E
O F A
M A L I G N A N T, U L C E R A T E D
S O R E T H R O A T,
A T T E N D E D W I T H
L A R G E P U R P L E S P O T S,
A M O R T I F I C A T I O N O N T H E L E G,
&c. &c.

INTEMPERATE heat, and superabundant moisture, not only in England, and other parts of Europe, but likewise in all hot climates, are commonly productive of diseases that have a putrid tendency.

In Europe, however, unless in the warmest regions, the malignant, contagious, or putrid affections, are neither so common, rapid in their progress, nor so generally fatal, as in the climates of Asia, Africa, and southern districts of America.

The principal causes in hot climates are :

1. Infectious and putrefactive particles floating in atmospheric air, raised and directed by the wind from one country to another, or exhaled by the heat of the sun.

2. Animal or vegetable putrefaction, either from previous extraordinary drought, drying up the water in lakes, rivers, ponds, or marshes, leaving a mud contaminated with the effluvia of dead fish, reptiles, &c., or filth from vegetable putrefaction. The component particles of air from these bodies are now better understood than formerly, and of course the diseases they produce.

3. Heavy and continual rains, by which millions of insects, reptiles, &c., leaves of trees, plants, &c., are destroyed, lying in heaps on the earth, and rendered putrid by heat.

4. Vegetable and animal putrefaction, rising in exhalations from the land, or in vapors from stagnated waters, marshes, &c., or contagious mephitic air, arising from mines, or exuding through the earth, &c., &c., are all capable of producing very deleterious effects to the human species.

The rainy seasons are always most dreaded in the hot regions, particularly in Africa, the West Indies, &c.; for long experience has

proved their fatality, independent of medical observations*.

In the temperate countries of Europe, though malignant infections are less frequent or dangerous in the rainy seasons of August and September, &c., yet few years pass without many instances of disorders that have a putrid tendency, as fluxes, putrid sore throats and fevers, &c. &c., particularly in armies.

To ascertain the differences of years with regard to salubrity, or diseases, it is necessary to keep a register of weather, winds, warmth or coldness, moisture or dryness of the seasons, and their effects on human bodies.

By reiterated observations of this nature, a physician may be enabled to foresee and avert the consequences of certain states of the air, climate, or seasons, and secure mankind from many evils, to which otherwise they are frequently liable.

* Those who wish to comprehend more than the limits of the present short publication can admit, may consult a little treatise I wrote for the use of the army and navy serving in hot climates, which was presented to His present Majesty in 1775, at the commencement of the American war. This little book was written from a journal I kept of the history of malignant and other diseases of hot climates, when I had the honour to be in His Majesty's service in 1761, 1762, and 1763, in the West-India islands, America, at the Havannah, &c. &c.

The precepts on this subject are contained in a new treatise on diet, salubrious and insalubrious air, which will be shortly published.

For above twenty years I have collected and preserved observations on the prevailing diseases, and their evident causes in this great city, and have endeavoured to investigate their various and more obscure origin.

The constant admission of seldom less than two hundred patients, or more, weekly, has afforded the most ample advantages of ascertaining not only the force and power of diseases, but likewise, in many instances, their predisposing, actual causes. The numerous opportunities of opening dead bodies, and examining morbid appearances, have furnished a variety of irrefutable facts*.

The summer of 1787 was remarkable for heavy and continual rains before the usual season; the air in and about London was contaminated with the exhalations of animal and vegetable putrefaction; and the common disor-

* For near twenty years I have seized, whenever I could obtain permission, every curious or obscure case that offered, and have, by this means, explored the real causes of most diseases, with their various effects: these have been compared with those of Bonetus, Morgagni, Sauvages, Lieutaud, Haller, &c., and, from the aggregate collection, a foundation for rational practice has been principally formed.

ders had a greater tendency to a putrefactive state than usual.

The small pox, scarlet fever, malignant putrid sore throat, proved, in many instances, very dangerous, or fatal. At the village of Kentish Town, and other places contiguous to London, the small pox has ravaged with uncommon fatality, and malignant, ulcerated sore throats continued, even in the month of December, to be very destructive; with purple *petechiæ*, and all the symptoms of exalted putridity.

In many other parts of the kingdom very malignant fevers have appeared. From different countries informations have been received that several have died, in little more than forty-eight hours, of putrid, contagious distempers.

Amongst the trading and inferior ranks of people, who reside in London during summer, numerous have been the instances of putrid sore throats and low nervous fevers of the remitting kind, which, in general, have yielded to the administration of antiseptic laxatives, bark, aromatics, the vitriolic acids, and antiputrescent proper regimen.

One patient, amongst these, was a young man, covered with purple spots all over his body, who voided an immense quantity of bloody

urine, with all the concomitant symptoms of the blood approaching to a putrescent dissolution. This case was successfully treated by the bark and vitriolic acid, given very frequently in large doses, conjunctly with a dry, but not animal, diet.

From a comparative view of the diseases of this last summer and autumn with many preceding years, it evidently appears, that the rains commenced much sooner and continued longer. The putrid vapors or exhalations from the contaminated waters, the destruction of insects, reptiles, and vegetables, spread their baneful influence much beyond the usual period in which disorders of the putrid class most predominate, attended with some circumstances of malignity not so common in England as in the hotter climates.

The case annexed is a remarkable instance: for though I have formerly attended the most dangerous, bilious, yellow, and other putrid fevers of the contagious kind in the West Indies, I have not seen any patient, with so many fatal symptoms, ever recover.

Mr. K***, aged twenty-six years, of a robust habit of body, was attacked with febrile symptoms, for which he was advised to drink mustard whey.

On Saturday, the 1st of December, 1787, Mr. J****, in Albemarle Street, a person on whom I had formerly effected a very extraordinary cure, requested my attendance on Mr. K****, whose symptoms appeared as follows, in little more than forty-eight hours :

I. In every part on the surface of the body were broad, purple, livid blotches, either spreading to one another, or in their interstices innumerable purple or livid-coloured *petechiæ*, known by the name of purples.

II. On the middle of the right leg, immediately on the tibia, was a part mortified, extremely offensive to the smell, accompanied with a sanious discharge, common to sphacelated parts, and it seemed to spread rapidly.

III. In the arms, legs, and all the muscular parts, were excruciating acute pains, which were greatly augmented on any voluntary muscular actions. The legs and thighs were, likewise, tumefied and emphysematous.

IV. The eyes had a glaring appearance, the pupils seemed dilated, and the vessels of the conjunctive membrane were all in a state of distention; and a darkish red blood had been forced into numerous vessels, which, in a healthful state, conveyed limpid serum.

v. The fauces, uvula, and the posterior part of the palate and mouth, had a dark red, or livid appearance.

On each side of the internal part of the throat, near the tonsil glands, the parts were putrid, and in a state of actual mortification, surrounded with specks and small sloughs of a very putrid appearance.

vi. The breath smelt intolerably putrid; indeed, so extremely offensive, that I ordered the door and window of the room to be opened, to admit some fresh air, and vinegar to be poured on live coals, in order to enable me to bear the noxious exhalations.

vii. The tongue was covered with a dark brown mucus; the teeth and their interstices had a livid appearance, from a similar matter adhering to different parts.

viii. The pulse beat a hundred and forty strokes in a minute, not strong, but feeble. The pulse was depressed, though very rapid; this is a characteristic sign of the most dangerous, malignant, putrid diseases.

ix. The respiration was quick, and the air emitted highly putrid and hot.

x. The mind of the patient seemed in a state bordering on torpidity, not the least suspicious, nor apprehensive of the immediate and surrounding dangers.

xi. There

XI. There was nausea in the stomach.

XII. A constipation had remained for some days.

In a disorder, so replete with danger, accompanied with such a variety of alarming symptoms, a clear conception of causes, just reasoning on effects, spirited conclusions, and a rapid execution of whatever should be determined, became absolute^{ly} necessary: how these were conducted, the cure will clearly illustrate.

As the rational principles of practice, however, should precede every regular method of curing diseases, these are first introduced.

1. From the putrid acrimony exciting a very increased action in the arterial system, the texture of the blood was nearly destroyed, approaching to a state of dissolution. This contaminated putrid-tending blood was forced into the minutest arteries of the cutis by the increased arterial system.

The arteries, which exhale naturally a fine pellucid serum, suffered the putrescent blood to pass towards the external pores of the skin, through rapid force and changed state of the fluids: from hence purple or livid spots on the surface of the whole body.

In very hot climates, I have sometimes,
though

though rarely, observed the dissolved blood to transpire through the external pores: in colder regions, and in England, the pressure and coldness of the external air may prevent such symptoms.

II. From the same sources, and an increased deposition of the depraved fluids, the mortification on the leg. In the extremities gangrenous appearances are more common than in the parts near the heart; the circulation is more likely to be languid, impeded, and even to cease, which constitutes the *sphacelus*, or destruction of circulation, and sensibility in parts mortified.

The external treatment of the leg was committed to the direction of Mr. Humpage, of Harley Street, Member of the Corporation of Surgeons in London, who scarified the part separating, and applied spirituous applications and *oleum terebinthinæ* to the sphacelation, in order to promote a separation, correct, or prevent the putridity from spreading.

Some very ingenious surgeons, whose merit is justly held in high esteem, have lately produced new doctrines on mortifications. Opium has been recommended, in considerable doses, as a very efficacious remedy, both externally and internally. As far as I have been able to comprehend the declared *rationale* of such a preposterous

preposterous practice, I am greatly deceived if they do not mistake the effect for the cause of the mortification, and they apply remedies to check the arterial action, or increased stimulus, when the circulation of the blood has entirely ceased, and consequently there can neither be irritation, stimulus, nor any vital action to restrain.

There is every reason to assert, if, in the present case, opium, according to the prevailing fashion, had been prescribed for the mortified appearance, by diminishing the nervous powers, and arterial action, death must have been the inevitable consequence. This subject, however, is more particularly examined in another treatise.

III. The acute excruciating pains in the muscles, appeared to arise from the putrid tendency and irritating power of the vitiated fluids, not only circulating in the arterial and venal system of muscular parts, but likewise pervading the cellular substance of the *tela cellulosa* in the interstices of the muscles, and even sub-divisions, however minute, of the muscular fibres. From the putrid state of the fluids, and partly of some of the solids, perhaps the combining principle, or air, began to be extricated, and the emphysematous swellings

lings of the legs and thighs seemed to favor such an opinion.

iv. The appearance in the eyes indicated a determination, or augmented flow, of blood to the head, with some retardation, or obstructed circulation in the venal system: hence the turgency of vessels.

The dark appearance in the vessels of the conjunctive membrane, and the transmission of the dissolving blood into the most minute vascular system, gave the strongest and unequivocal demonstrations of the high putrescent state of the fluids, and their power of increasing the action of the arteries.

v. The most dreadful putrid ravages being in the throat, fauces, uvula, palate, &c., with the gangrenous and other putrid symptoms, ulcers, &c., gave reason for concluding, that the disease, *ab origine*, was caused by putrid miasmata in the air, similar, but more noxious, than those producing the common malignant, ulcerated sore throat. In short, the disorder was received by breathing in putrid air.

vi. The putridity of the breath was easily accounted for. The air passed and repassed in inspiration and expiration, not without conveying and reconveying some of the putrid effluvia exhaling from the sphacelated and ulcerated parts about the throat, tonsils, &c. The lungs constantly
constantly

constantly received fresh malignant putrefactive air in respiration, and contaminated the blood: this probably caused the augmentation of all the putrid symptoms.

VII. The putrid appearances on the surface of the tongue, gums, and interstices of the teeth, were in a great measure owing to the putrid exhalations from the lungs, ulcerated parts, diminished secretion of the saliva, or the mucal glands pouring forth a putrescent, discoloured mucus from the degenerated blood, brought by the arteries for the secretion of that lubricating fluid.

VIII. The rapidity of the pulse, and its feebleness, were owing to two causes: the putrid tendency of the blood irritating the heart and arteries, and the laxity of particles composing the blood, inducing a laxity in the muscular fibres, and hence a general debility.

The putrefactive state of the fluids irritates the nervous system of the heart, and cause increased, though weaker, action in the moving muscular and arterial powers.

Augmented heat, putridity, and attrition, soon weaken the muscular fibres. No diseases produce so sudden a diminution of strength as putrid, nor none so quick pulsations in the arteries: this all the putrid diseases of hot climates most decidedly demonstrate.

Putrefactive

Putrefactive diseases, therefore, are accompanied with great weakness, increased heat and irritability, and quicker, though feebler, pulsations in the arteries.

ix. The quickened respiration appeared to arise from the lungs, diaphragm, and muscles destined to the office of respiration, being irritated by the degenerated, acrimonious, and putrescent state of the blood.

The heat of the breath, to the phlogiston in the air passing from the vesicular structure of the lungs; this organ of respiration being itself heated by a rapider circulation and irritation in all its larger and minuter vascular structure, including the pulmonary artery, vein, bronchial vessels, and lymphatics.

The noxious smell of the breath originated in mephitic particles of the air, not only passing from the lungs, but the ulcerated parts about the fauces.

x. The insensibility of the mind to the immediate danger of this violent malignant disease, shews the sedative and stupifying qualities of a very powerful predisposing putridity on the nervous powers, that convey to the mind all our various sensations.

Perhaps an extrication of air, from commencing putrefaction, and of ^{its} the sedative effects

fects on parts deprived of this combining principle, may account for this symptom.

Noxious air, if breathed, destroys, in a moment, animal life: respiration, the circulation of the blood, and nervous influence, immediately cease, and death ensues. It extinguishes the flame of a flambeau. It seems a combining principle of animal solids; for its extrication shews the most indisputable signs of animal putrefaction and dissolution.

Animal substances, deprived of this connecting air, become extremely putrid, and insufferably fetid.

While pure combining air is regularly diffused through the parts of the human body, health is present: its absence is the mortification or destruction of parts; for its antiseptic qualities preserve human bodies, during life, from dissolution.

In the tympanites, arising from a sphacelus of any of the abdominal viscera, air is excluded from the diseased parts, which, occupying the cavity of the abdomen, death is commonly the consequence.

The floating of dead bodies, after drowning, is the putrefaction of the body excluding this air.

The lungs of new-born infants swimming
in

in water, where wilful murder has not been perpetrated, or executed, is often owing to putrefaction, and is no decided proof of infants having respired: a want of this knowledge amongst surgeons, and in courts of judicature, has often, shocking to humanity and science! led innocent victims to lose their lives publicly at an ignominious place of execution.

Fixed air is prevalent in the bottom of mines, and called *choke damp*.

It arises from liquors in a state of fermentation, and occupies their surface, called, by the former chemists, *gas*, and, indeed, lately *gasses*, by a very ingenious philosopher.

It exists in alkaline salts and calcarious substances: deprived of this air by fire, they become caustics.

In *Il Grotto del Cane*, near Naples, it rises constantly and naturally from the surface of the earth, and destroys animals, and extinguishes the flame of a flambeau instantaneously.

Its gravity, however, prevents its rising much above the surface of the earth; for I have sat in *Il Grotto del Cane* for an hour, or more, repeatedly, and have seen different animals perish near my feet, while I remained in this grotto uninjured.

Mr. Cavendish has discovered that this aërial
acid,

acid, or fixed air, is one and a half heavier than atmospheric; therefore its deleterious particles cannot ascend, unless buoyed up by a strong wind; but, by this means, there is a possibility of producing mischief, although its effects are much mitigated by an union with atmospheric air*.

The discoveries on air being yet in their infancy, one philosopher often refutes what another advances; but the world are greatly obliged to every experimenter in this abstruse pneumatic science: for by their researches and disputes mankind will be benefited. Numerous branches of science, obscure or unintelligible thirty years ago, have been clearly investigated, and data fixed, beyond the reach of idle disputation: visionary hypotheses are, in many instances, degraded; the dignity of truth and demonstrations maintained by irrefutable experiments, deductive reasonings, and just conclusions.

The inflammable or phlogisticated air arises,

* In marshes, ponds, and rivers, where the soil contains mud, or substances in a state of putrefaction, on stirring, a great quantity of phlogiston is disengaged.

Animal substances, in putrifying, emit $\frac{2}{3}$ fixed, and $\frac{1}{3}$ inflammable air. Putrid cabbage, or the water in which it is boiled, are dangerous, and their putrid vapors should be avoided: all garden collections of filth and putrid vegetables are unwholesome.

C

and

and may be diffused in the atmospheric air, so as to be injurious to animals.

Air balloons are constructed on the principle of levity in phlogisticated air.

It appears, then, that neither a heavier nor lighter air than the atmospheric is healthful for human beings to breathe; but it is a curious phenomenon, that the former descends towards the feet, and the latter ascends to a great height; so that, unless from the change of situation of these two natural aërial fluids, little is to be dreaded from their noxious qualities*.

Fixed air, or aërial acid, however, being nearest the earth, explains the mischiefs arising from human beings unguardedly sleeping, in certain places, on the ground; examples of which are common in the West Indies, America, and between *Rome* and *Terracina*, in the road to Naples, where death is most frequently the consequence.

The people, in these horrid stations, burn fires all night; but lying on platforms at a

* In atmospheric air, or the air we breathe, $\frac{1}{4}$ part is pure air; $\frac{1}{8}$ part aërial acid, unfit for breathing, capable of destroying irritability in the lungs, and even the heart; $\frac{2}{3}$ parts are not accurately determined, but is supposed phlogisticated. These calculations, however, vary according to seasons, weather, and situations.

certain height, well covered, would be a much better preservation against vapors, the phlogiston excepted.

These few remarks on the putrefactive qualities of aerial fluids arise from the present subject; but are only to be considered a very imperfect sketch of what might be delineated in these very scientific and useful regions of modern philosophy.

XI. The nausea in the stomach seemed to owe its origin to the descent of some of the putrid ichor issuing from the ulcers about the fauces and sphacelated parts.

XII. The constipation, perhaps, from the determination of the diseased fluids to the surface of the body, producing the purple, broad discolorations on the skin; or, from a decreased action in the peristaltic motion of the intestines, diminished saliva, bile, pancreatic juice, &c.

PROGNOSIS.

From a consideration of so many dangerous symptoms, some of which, even singly reviewed, prognosticated an approaching dissolution: there was every thing to dread, but little to hope. Notwithstanding all these unfavorable circumstances, it was determined not to desert the patient, but to exert the ut-

most force and efforts of medicine in attempting the preservation of his life.

C U R E.

The contemplation of all the symptoms, their causes, and probable consequences, pointed out the curative indications, which were :

I. To remove nausea, constipation, and prevent the putrid matter issuing from the mouth and fauces injuring the stomach and intestines, and inducing a mortification of those parts.

II. The correcting, restraining, or counteracting the putrid disposition of the fluids.

III. The removing the putrid fordes, and mortified parts about the fauces, throat, and mouth, to prevent absorption, descent into the stomach, or their putrid halitus into the lungs.

IV. The supporting the *vis vitæ*, as much as possible, by antiseptic food and drinks.

V. The removal of the morbid parts on the leg, to prevent the absorption of the putrefactive sanies discharging from the sphacelus before the separation of the eschar could be accomplished.

VI. The admission of fresh atmospheric air continually, that as few particles of air, already breathed, should be again conveyed by the breath into the lungs.

VII. The

VII. The removal of the bed-clothes surrounding the patient, which were already tainted with the putrefactive particles, or likely to be infected.

VIII. The correcting the respirable air of the room in which the patient lay.

The *first indication* of removing the nausea and constipation, required serious reflection.

Purging would have been dangerous, and emptying the rectum merely by a clyster inadequate to the grand purposes of evacuating the putrid matter, already deposited in the stomach, occasioning sickness, or an inclination to vomit.

It was concluded that the bark and antiseptics would prove useless, or be ejected from the stomach, unless the symptom of nausea could be alleviated.

A gentle eccoprotic of the antiseptic kind was thought most expedient, and the following draught was immediately ordered, after well washing the fauces with vinegar and water :

R. Infus. fen. ℥iss.

Pulv. crem. tart. ℥ss.

Tinct. fen. ℥ss. M. f. haustus, statim sumendus.

It was determined not to wait for the operation of the above draught ; but to give the following powders and mixture in the course of an hour, if no alvine evacuations should be pro-

cured. These powders and mixture were intended to answer the *second indication*, of correcting, restraining, and counteracting the putrid disposition of the fluids*.

R. Pulv. cort. Peruv. ʒvj.
Spec. aromat. ʒij. M. f. pulvis dividendus in xij.
doses quarum capiat unam secunda quaque hora,
vel sæpius cum coch. ij. misturæ sequentis.

R. Decoct. cort. Peruv. ʒxiiifs.
Elix. vitriol. acid, ʒij.
Tinct. cort. Peruv. Huxham, ʒiifs. M. f. mis-
tura.

The *third indication* was detarging the putrid accumulations about the mouth and fauces, and restraining the putrescent acrimony, its absorption, or descent through the œsophagus to the stomach; the following gargle, therefore, was directed to be used every ten minutes:

R. Tinct. Rosar. ʒvij.
—— cort. Peruv. Huxham, ʒj. f. gargatisma,
faucibus ulceratis & ori sæpissime abhibendum.

The *fourth indication* was to support the *vis vitæ* by antiseptic food and drinks.

All *animal broths* or *meats* were strictly forbidden; red port with water, not weak, or red

* The principles on which the bark, mineral and vegetable acids, or aromatics, act in restraining putridity, is much better comprehended now than formerly, by *Sydenham*, *Boerhaave*, *Hoffmann*, *Huxham*, and other celebrated modern writers.

port alone, recommended, and panada with red wine.

Drink, acidulated with the acid elixir of vitriol, was likewise used, but prescribed in small portions, not to be taken unless a desire should be excited by thirst; for *diluting*, as it has been called, relaxes the stomach, and counteracts every curative intention of bark and antiseptics.

The oftener liquids went into the stomach, the oftener it was highly probable some of the offending putrid fordes might descend. The smallest quantity imaginable of putrid matter, absorbed from a very small puncture in anatomical exercises, has deprived the world of many a valuable life.

Before swallowing panada or drink, the mouth, therefore, and fauces were assiduously cleansed, lest, with the drinks or aliments, if the latter were taken, any putrid particles might be conveyed into the stomach and produce purgings, or other dangerous symptoms.

The *fifth indication* was judiciously managed by Mr. Humpage: checking the putrid tendency, and separating the mortified parts of the leg, were assisted by spirituous applications and proper antiseptic dressings.

The *sixth indication* required the constant admission of fresh air, by opening the door and window, in a certain degree, so that air re-

novated might freely pass, without blowing in a strong stream or pointed direction on the patient.

The *seventh indication* was of great importance: the removal of those noxious things which had previously surrounded the patient, and which there was every reason to suspect, from the exalted and ravaging state of the putrid symptoms, were infected. The changing or fumigating the moveable bed furniture was directed, and the curtains were withdrawn to admit purer air, and keep the patient as cool as possible.

Nothing can be more injurious than the vulgar idea of suffering patients to continue through the stages of the small pox, or any fever, but particularly of the putrid kind, without a frequent change of linen, sheets, bed-clothes, and air.

The exhalations from perspiration, the absorption, or reception of respired air in the bed or bed-clothes, must contribute to render the air impure, unfit for the purposes of life, and of dangerous tendency to the assistants of the sick, whether medical, domestic, or visiting friends.

The air which has been once breathed is well known to be unfit for future respiration.

The same breath which has been respired
proves

proves fatal in a few minutes, without an addition of fresh air.

Though the impure air received or exhaling from bed-clothes, linen, curtains, &c., surrounding the sick bed, is not so noxious as fixed or confined mephitic air, yet, in a less degree, it proves injurious, and should be corrected or prevented by every means art or prudence may suggest.

From observations on the English hospitals, and most which I have inspected in France, Italy, Germany, Flanders, Holland, or the West Indies, America, &c., I am convinced considerable improvements might be planned for the safer accommodation of the sick; some remarks on which may be seen in my Medical Advice to the Army and Navy serving in Hot Climates.

The *eighth indication*, intended to correct the putrid exhalations, or vitiated air, was attempted by raising acid vapors from vinegar, the firing and explosion of gunpowder, as recommended in the plague, &c.

The acid of vinegar is indubitably an excellent antiseptic; but I believe the mineral acids and pure alcohol mixed in an open glass vessel are more powerful: from these arise a vitriolic, muriatic, or nitrous æther, intimately combined with the vinous spirit. A diffusion of
such

such artificial air, in sick rooms, is highly grateful, and is an excellent preservative against the malignant particles of infection.

In the evening of the 1st of December Mr. Humpage visited the patient, removed the dressings, and found the pulse was only an hundred and thirty, which was a diminution of ten strokes in a minute in eight or nine hours.

The eccoprotic antiseptic draught had fortunately operated in three quarters of an hour after it had been given.

The powders and mixture had been repeated every two hours, or oftener.

The mouth, fauces, and ulcerated parts, had been washed every five minutes, and neither medicines nor drink swallowed until the diseased throat and fauces were previously deterged.

No food whatever had been requested, nor was its necessity urged, the whole medical dependance being placed on the efficacy of the remedies prescribed.

A strict injunction was delivered to the nurse not to permit the patient to sleep, but to continually solicit the necessity of gargling.

This treatment was prescribed, lest any of the putridity should pass with the saliva, during sleep, into the œsophagus and stomach: a neglect of which has frequently proved fatal.

Sleep

Sleep is refreshing and grateful; but its indulgence, in such moments of danger, is highly hazardous, if not destructive.

The medicines were continued through the night; fresh air was transmitted; vinegar was either steamed, or gunpowder was exploded frequently; and all the directions, by the vigilance of the nurse, were exactly observed.

As the sordes appeared incrustated round the teeth, gums, and, in some measure, on the tongue, of the aphthous or black thrush kind, the following lotion was ordered to cleanse those parts; after which the former gargle was continued.

R̄. Borac. ʒij. solve in
Aq. pur. ℥vss.
Syr. moror. ℥ss. f. gargarisma.

This gargle, by the assistance of fine linen tied on a skewer, soon removed all the sordes attached to the fauces, tongue, gums, &c.

On Sunday, the 2d of December, on visiting the patient in the morning, the pulse was discovered to be an hundred and twenty in a minute, which was ten different from what had been observed the preceding night, being twenty strokes less in a minute than when first examined.

The purple spots appeared nearly the same.

The

The mortified part had not spread on the leg.

The mouth was cleaner, but large sloughs of putrified parts adhered near and about the tonsil glands.

The breath smelled horridly offensive.

The acute pains and swellings in the thighs, legs, and muscular parts, continued.

The urine was very high colored.

Upon the whole, little impression had been made on the disorder, except that the mouth and fauces were less pale or livid, the celerity of the pulse was diminished, and the gangrenous part on the leg had not extended; but that the patient still lived, was more than could be reasonably expected.

As the medicines agreed perfectly well with the stomach, it was resolved to add fresh vigor to the prescribed plan, to augment the dose of the bark in powder, and to increase the antiseptic force of the mixture.

℞. Pulv. cort. Per. ℥j.

Spec. aromat. ℥iij. M. f. pulvis. Dividendus in xij. doses, de quibus sumat unam secunda quaque hora in coch. ijs. misturæ sequentis.

℞. Decoct. cort. Peruv. ℥xiiij.

Extract. ejusdem, ℥iss. solve dein adde.

Adde Elix. vitriol. acid, ℥ij.

Tinct. cort. Peruv. Huxham, ℥iij. M. f. mistura.

The

The gargle, composed of *tinctura rosarum* and *tinctura corticis*, was repeated, and directed to be used very frequently.

The admission of cool air, raising acid vapors, or burning gunpowder, and the removal of whatever might be conceived capable of increasing putridity, were still continued.

The patient was permitted to drink red-port wine in considerable quantities, and as often as desired.

The ulcerous sloughs about the throat were cleansed by means of a skewer, on which fine linen was placed; some of the putrid parts separated, and were carefully extracted, to prevent their conveyance to the stomach.

The same rules were recommended as the preceding day; but as the patient expressed an inclination for food, a little panada with red wine was received into the stomach without any disagreement, and, in the course of the day, repeated with like success.

Mr. Humpage declared the putrid parts on the leg appeared favorable in the evening, and continued the spirituous dressings,

In the night the patient was not suffered to sleep, except at very short intervals, but solicited to cleanse and gargle the diseased parts of the throat frequently, lest, with the breath

in respiration, or saliva in deglutition, any of its deleterious effects might be conveyed to the lungs or stomach, which probably had been already overcharged with putrefactive effluvia.

On the morning of the 3d of December the patient spontaneously declared himself easier, and required frequently panada and wine: he drank during the night a bottle and half or two bottles of red port.

The medicines and gargle had been repeated through the night with the utmost exactness.

The room was very powerfully filled with the acid vapor, and the putrid smell, before so predominant, unless very near the afflicted patient, was scarcely perceptible.

On examining the pulse, it beat an hundred strokes in a minute, which considerable decrease in its celerity was favorable.

The eyes appeared less inflamed.

The mouth, throat, and fauces, assumed a more favourable color.

The sloughs on the left side of the throat had separated, and though a considerable loss of substance appeared, yet the hollow surface of the ulcer was not livid, nor indicating any disposition to spreading mortification. Having been accustomed

accustomed to a very extensive practice in surgery in the juvenile period of life, with the opportunities of observing the progress of gunshot wounds, ulcers, &c., in hot climates, I had every reason to hope I could not be deceived in supposing and pronouncing the patient in less danger. There were other reasons that co-operated to confirm this supposition.

Mr. Humpage removed a great part of the putrid sloughs on the tibia; the surface underneath appeared in a favorable state, considering the nature of all the dangerous symptoms, and the mortification, which had spread so rapidly.

The spots, before livid, or those called purples, approached nearer to a dark red and livelier color.

The pains and swellings of the muscular and adipose parts of the arms, thighs, legs, and feet, were mitigated and diminished, though still, on motion or pressure, were troublesome.

The alvine feces were not retained; for two evacuations had happened in twenty-four hours; nor were these highly putrid, but much mixed with the powdered bark.

Reflecting on the dangerous symptoms on Saturday, and comparing these with the present, the same remedies which had proved so beneficial were repeated, no new symptom nor additional

tional indication requiring a change in the curative antiseptic system adopted.

The patient was not considered out of danger; for the diseased, mortified part, on the right side of the throat, had not separated, but appeared in a manner to leave doubt of the depth of its ravages. The putrid halitus issuing was likewise very disagreeable to the olfactory organs.

The urine was still high coloured.

Mr. Humpage visited the patient in the evening, dressed the leg, and considered all the dangerous symptoms less alarming.

On Tuesday morning, the 4th of December, all the former symptoms were considerably amended; the remaining putrid slough had been forced away from the right side of the internal part of the throat, and the place it occupied formed a deep ulcer.

The purple spots, which before had nearly covered the body, had a much milder aspect, and seemed gradually changing into a livelier red.

The swellings and pains in the limbs and muscular parts had considerably abated.

The mouth, tongue, uvula, and fauces, all acquired a more lively and fresh appearance, from additional vigor in the circulation, and a more salutary state of the blood, though far
distant

distant from what might be denominated healthful.

The pulse was stronger, and did not exceed ninety pulsations in a minute.

A slight nausea was troublesome, and as no intestinal evacuation had happened for twenty-four hours, an antiseptic laxative was thought necessary.

The nausea was suspected to originate in some matter descending from the mouth, or from bile irritating the duodenum, which by the nervous consent of parts, or an inversion of the peristaltic motion of the intestines, had been deposited in the stomach, and occasioned the ventriculous irritation, exciting nausea.

R̄. Decoct. fen. cum tamarind, ℥iss.

Pulv. crem. tart. ℥ss.

Tinct. fen. ℥ss. M. f. haustus statim sumendus.

This acidulous draught, in the course of three hours, not only removed the nausea, but procured two evacuations. The fecal discharge seemed chiefly composed of the powdered bark mixed, and, in some measure, changed in its passage from the stomach to the rectum.

No animal diet having yet been administered; but panada united with red wine only received as food, was, perhaps, the cause of averting putrid feces: this is a circumstance

worthy of strict attention in treating putrefactive diseases.

If bile be the cause of the nausea, nothing corrects it so effectually, nor prevents its putrid tendency in the stomach and intestines, as forcing and evacuating the offending, irritating, and noxious matter through the inferior passage, by antiseptic laxatives, without violent purging.

If the descent of the putrid steams or matter were the cause of nausea, their evacuation downwards becomes equally necessary.

Fevers, I believe, often return by the absorption of putrid matter, or contaminating air, from the surface of the intestines; therefore physicians cannot be too circumspect in gently and repeatedly evacuating, by antiseptic laxatives, these offending causes*.

On Wednesday, the 5th of December, all the morbid symptoms were evidently better; therefore the bark powders, mixture, and gargle, were repeated, but not taken nor used so often.

Red port, as drink, and panada, as food, were received in considerable quantities.

* In the yellow and other low remitting and putrid fevers of the West Indies and America, one principal object is to correct bile, and evacuate the putrid-tending matter through the stomach and intestines. See *Medical Advice to the Army*, &c.

The ulcer on the leg had a more favorable appearance, the sloughs having been removed by Mr. Humpage.

On Thursday, the 6th of December, the pains in the limbs and muscular parts were considerably abated, the eruptions, which had been purple, were dying away, succeeded by a livelier red, and in some parts the cuticula was separating and scaling off in a furfuracious or bran-like appearance.

The patient was weak; but as all the symptoms, which before had a dangerous tendency, were now nearly removed, strengthening the habit became now an object worthy of attention, a light antiseptic and stomachic purgative was ordered for the following morning, as a preparative for changing the diet.

R̄. Infus. fen. ℥iſs.

Pulv. crem. tart. ʒſs.

Tinct. sacra, ℥ſs. M. f. haustus cras mane sumendus.

On Friday, the 7th of December, the patient was considerably recovering: he was permitted, after the operation of the purgative, to eat white meats.

On the 8th of December, no symptoms remaining that required the assistance of a physician, the patient was transferred to the entire management of Mr. Humpage.

From the 8th to the 16th of the month he was gradually recovering, yet he was ordered the bark and antiseptics three times a day, and occasionally a laxative.

On the 21st, at the time this very passage is writing, the patient is so well recovered as to walk in the streets, and is acquiring strength daily; nor is there any vestige of disease remaining, except debility, and a slight ulcer of the leg, in a state indicating a disposition to speedily incrust and cicatrise.

OBSER-

OBSERVATIONS

ON THE

MALIGNANT, ULCERATED

SORE THROAT;

WITH A

SUCCESSFUL METHOD OF TREATING THAT
DANGEROUS DISORDER.

AN extensive experience in this metropolis brings frequent conviction, that the ulcerated, malignant Sore Throat is not, in general, treated judiciously: this, perhaps, has been the cause of its lately proving so fatal. There are, no doubt, many practitioners who understood its successful management perfectly; but by far the greater number, depending on the doctrines advanced by Fothergill, Huxham, Ruffel, Pringle, &c., while the methods of cure were imperfect, instead of Wall, Cameron, Johnstone, Gregory, and Cullen, lose the most favorable opportunity of preserving patients from this mortiferous distemper.

The principal improvements in this disorder have been collected since the former writers published their works, from experience and success;

their doctrines, therefore, become less useful, and are justly superseded, by more certain modes of treatment.

To shew a method of managing this disorder, that, if timely applied, never fails of succeeding, is the principal intention of this little essay.

In order to prove the assertions true, concerning the treatment of the ulcerated Sore Throat, a short review of the authors, who have written on the subject, becomes indispensably expedient.

The medical writers on the Continent are totally unacquainted with the treatment of the putrid, ulcerated Sore Throat, excepting what they have collected from English authors.

Neither Boerhaave, Hoffman, Sauvages, Lieutaud, Ludwig, Vogel, nor any other writers, have delivered the true and successful mode of cure; consequently practitioners, whose practice depends on faith in these writers, must fail in answering the curative intentions, and the disorder of course commonly terminates fatally; many instances of which I have known, or received information of, in my continental travels*.

F O T H E R.

* I have seen numbers repeatedly bled in the putrid remitting fevers, and nitre with other saline antiphlogistics administered.

FOTHERGILL.

Dr. Fothergill wrote the first treatise, in England, on this infectious disorder, and merits much of society for introducing a more rational mode of treatment than was before known.

Though, he observes, bleeding is commonly injurious, yet he sometimes admits that operation.

stered. The frequency of the pulse and heat is the pretext for this practice in France, Italy, and Germany.

It is not as yet well understood, that intense animal heat can arise from opposite causes; from a true inflammatory *diathesis*, and from a relaxed and dissolved state of the blood, tending to putrefaction: these require opposite treatment.

What counteracts causes in one instance, must do irreparable mischief in the other: large bleedings and antiphlogistics are proper in the inflammatory diathesis; but in the putrid no bleeding nor antiphlogistics, but cortex Peruvianus and antiseptics. The symptoms of *heat* and *celerity* of the *pulse* direct unreflecting physicians to cool and evacuate, when they should support strength and restrain the putrid tendency of fluids.

When the most intense heat exists, bleeding and saline coolers are most injurious; as in the West Indies, &c. Indeed so violent is the heat, as to feel like a degree of *fire*, and yet evacuants by bleeding, purging, perspiration, or antiphlogistics of nitre, &c., kill the patients; when bark, mineral acids, and cleansing the intestines, save the lives of many. See *Medical Advice* in Hot Climates.

He justly objects to the use of purges, nitre, antiphlogistic remedies, or regimen.

Admits the use of emetics of ipecacuana, or infusum card. benedict. chamomile flowers, &c.

Draughts of tea and red port.

Advises the patient to keep warm in bed.

The pulvis contrayerv. composit. species aromaticæ, vinum croceum, mint and alexiterial waters cum aceto, &c.

Electuarium e scordio in case of a diarrhœa.

Blisters to the neck.

Aromatic gargles, not, indeed, very efficacious.

The bark in tincture he recommends towards the termination of the disease; but writes nothing of its early exhibition in substance, or in large doses.

H U X H A M.

Dr. *Huxham* recommends vomits, and light purgatives of rhubarb.

A volatile saline mixture.

The pulvis contrayerv. composit. with nitre in a bolus, if the fever ran high.

In adults, *two grains* of camphor were added on the second or third day to the saline mixture; a temperate cordial might be added, and a little tinctura corticis Peruviani.

Elixir

Elixir of vitriol and tincture of bark were commonly ordered on the *fifth* and *sixth* day.

SIR JOHN PRINGLE.

Sir John Pringle saith, I lay the chief stress of cure in the *angina maligna*, on the use of a gargle composed of barley water, or sage tea, mel rosarum, and vinegar.

SIR WILLIAM FORDYCE.

Sir William Fordyce justly condemns bleeding, and asserts, that hæmorrhages from the nose do not relieve the patient. “Emptying
“ the stomach by a gentle vomit cannot fail of
“ being useful in discharging the putrid hu-
“ mors from the stomach,” and then proceeds,
“ Where there is a looseness, I generally cor-
“ rect the humors with my antiseptic wine
“ whey, No. II., by limonade, tamarind tea,
“ or imperial *.

“ I never

* No. I.

Serum antisepticum.

R̄. Lact. vaccin. ℥iſs.

Aq. pur. ℥iſs.

Simul ebulliant; dein admisce succ. aurant.

Sevill. limonior. ā ℥iſs. ut f. serum.

No. II.

“ I never saw the looseness treated in this
 “ manner do hurt, though the purging is com-
 “ monly dreaded as the greatest scarecrow in
 “ the malignant sore throat, and therefore
 “ checked by every power of art.

No. II.

Serum antisepticum vinosum.

R. Lact. vaccini, ℥iſs.
 Aquæ puræ, ℥ſs.
 Simul ebulliant; dein admise vini rhenani veteris
 vel albi cujusvis Hispanici, ℥ij.
 Succ. limon. ℥j. ut fiat serum.

No. VII.

Hauftus diaphoreticus sedativus.

R. Spirit. Minderer.
 Aquæ puræ, ā ℥vj.
 Liqueor anodyn. min. Hoffm. g^{tt}. xv.
 Syr. e meconio, ℥j. M. f. haustus bis in die fu-
 mendus aut octava quaque horâ.

No. VIII.

Hauftus cardiacus divinum.

R. Vin Burgundic.
 Vel Burdegalens.
 Aut rhenani veter. ℥ij.
 Sexta quaque horâ fumendus vel pro re nata.

No. XII.

Febrifugum antisepticum.

R. Decoct. (fortior.) cort. Peruv. ℥ij.
 Spirit. sal. marin. g^{tt}. v.
 M. f. haustus pro re nata fumendus & repetendus.

“ It

“ It did not hurt last summer in two young
 “ gentlemen of noble families, though it went
 “ on after the scarlet and crimson eruption
 “ was complete; and where it has been stopped,
 “ by opiates and astringents, it has still proved
 “ fatal.” — A just observation.

“ We have seen cases in which blisters did
 “ not mend the matter. *Heredia* seldom found
 “ any benefit from them; and we have re-
 “ marked above, that if made from cantharides,
 “ they are totally against the genius and cha-
 “ racter of the putrid fever.” — Sensibly re-
 marked.

“ To look for any utility from the discharge
 “ they occasion in a disease, where there scarce-
 “ ly exists any purulency, and where there is
 “ too much stimulus every where, appears ra-
 “ ther to be worthy of a doating nurse, than
 “ of a man of sense and skill.

“ Dr. Fothergill has given us the history of
 “ two cases, where warm aromatic cordials
 “ and anodyne astringents were administered
 “ assiduously, with suitable nourishment, and
 “ vesicatories applied successively to the neck,
 “ the back, and arms, but without effect.

“ There is not in this disease a more favora-
 “ ble symptom than a disposition to sweat,
 “ with a soft and moist skin. Nothing seems
 “ to shorten it so much, to take off the deli-
 “ rium sooner, or to promote so happily a good
 “ sediment

“ sediment in the water. Our first and seventh
 “ formula have the best effect in this way.
 “ *How seldom does Peruvian bark perform any*
 “ *of these good offices for the patient!*

“ I never gave volatiles, except Mindere-
 “ rus’s spirit, salt of amber, or the anodyne li-
 “ quor of Hoffman, which are all antiseptic,
 “ because I know that volatiles only dispose
 “ the juices to be more putrid, or quicken the
 “ putrid process, where it has already taken
 “ place too surely.

“ When cordials are wanted, or indicated,
 “ we can be at no loss, while currant jelly,
 “ oranges, and lemon, or wines diluted into
 “ what is called *bishop*, or *negus*, or yet pure
 “ wine, or old cyder, can be had. I am not
 “ acquainted with any better cordial draught
 “ than our seventh or eighth formula. I never
 “ did, nor ever do, expect to see the strength
 “ supported, or the disease alleviated, by any
 “ possible preparation of animal substances.

“ After sweating has begun, I believe wine
 “ will never hurt, if given with moderation,
 “ either diluted as above, or mixed with pa-
 “ nada, sago, rice, and other gruels.

“ Contrast with this kind of practice theirs
 “ who give draughts, composed of *God knows*
 “ *what*, so often as every two or three hours,
 “ day and night, for days and nights succes-
 “ sively,

“ sively, as if nature neither required other
 “ drinks, or food, or repose.

“ If the circumstances of the case require it,
 “ *Peruvian bark is hurried down with the same*
 “ *haste and solicitude*; and *bark* must be given
 “ in our times, whether indicated or not,
 “ where this best and only true febrifuge drug
 “ is necessary; (and it has often the happy
 “ power of triumphing over malignity in this
 “ disease, as well as in other putrid fevers,
 “ given as in our twelfth formula.) Let it, in
 “ God’s name, be given in sufficient quantity
 “ to put them in a state of safety, but not per-
 “ severed in for days and nights together,
 “ without any respite to the poor, persecuted
 “ patient, when either the difficulty no longer
 “ exists, or the state of the skin, or the in-
 “ creased dryness, blackness, and hardness of
 “ the tongue, so strongly and fully point out
 “ the impropriety of persisting longer in its
 “ use, or as if it were, even in such a situation,
 “ our last and sole resource, though, in fact,
 “ we have so many other acids from *fruits,*
 “ *wines, and strong antiseptics, both vegetable*
 “ *and mineral.*

“ These last remarks are equally applicable
 “ to the putrid fever at large, and to the ma-
 “ lignant sore throat under consideration.”

W A L L.

Dr. Wall prescribes bark and antiseptic remedies, steams of vinegar, myrrh and honey mixed in gargles, bark and opium, if nasal hæmorrhage appears.

C A M E R O N.

Dr. Cameron succeeded where breathing was even difficult, by giving the bark plentifully from the commencement of the disorder, with antiseptic gargles; and I have experienced the like success.

J O H N S T O N E.

Dr. Johnstone, who has written a complete treatise on the disorder, and whose practical experience was equal, in point of numbers, to any other physician, condemns bleeding, nitre, or saline antiphlogistic remedies, and administered the bark and acids, with certainty of success, from the commencement of the disease to its termination.

In the cure he condemns evacuations, particularly bleeding, which, in particular with the French, was in great use till *Dr. Fothergill* wrote against it.

Dr. Huxham and *Dr. Ruffel* were rather too favorable to venesection.

Dr.

Dr. Johnstone has this remarkable passage :
 “ So long as the prepossession in favor of
 “ *bleeding* prevailed at Kidderminster, it was
 “ one of the most *fatal* of diseases ; but since
 “ the *lancet* has been laid aside, and the anti-
 “ septic method only depended upon, it has
 “ proved one of the most *certain* and *easy* to
 “ be cured.

“ *Emetic tartar* and *James’s powder* proved
 “ very hurtful ; large evacuations by stool
 “ commonly followed their use to the certain
 “ *destruction* of some, and the great *injury* of
 “ others.”

He depended mostly upon the bark, and
 says, “ its efficacy has surpassed the healing
 “ powers experienced from it in every other
 “ instance. Those who have tried it most in
 “ this complaint, best know how absolutely it
 “ subdues the disease, which is more certainly
 “ cured by the early application of this remedy
 “ than any disease of equal consequence by
 “ any means whatever. This is the language
 “ of all those physicians who have, from long
 “ experience, had the best opportunities of
 “ learning the nature of the disorder, and ob-
 “ serving the good effects of the bark, a me-
 “ dicine upon which great dependance has for
 “ many years been placed in this country.”

HOME.

Dr. Home, in his *Principia Medicinæ*, recommends light vomits, cordial medicines, lightly diaphoretic, red wine, and restoring antiseptic diet.

To sustain the tumor of the external parts with a warm bed, which best prevents a diarrhœa.

Bark, mineral and vegetable acids, are recommended, if they should not produce a diarrhœa.

Blisters are to be applied to the throat.

Bleeding, purging, and antiphlogistics, are, by experience, hurtful.

DR. GEORGE FORDYCE.

Dr. George Fordyce, Physician to St. Thomas's Hospital, begins the cure with an emetic of tartar emet.

The patient to be kept in a bed moderately warm.

Purging to be checked by stimulants or opiates.

But it is a more successful practice to exhibit as large a quantity of bark as the patient's stomach will bear, at least an ounce in twenty-four hours in substance, &c.

Wine,

Wine, as old hock, may be given along with the drink, which ought to be acidulated, if it does not produce a purging.

In the mean time, the throat is to be washed with astringent gargles, &c., acidulated.

G R E G O R Y.

Dr. Gregory says, “ Bleeding and cathartics
“ do mischief; gentle vomits and blisters are
“ occasionally of use; acids and neutral salts,
“ by themselves, often do hurt.”

The principal remedies are, *Peruvian bark*, wine, antiseptics, injections into the throat, steams of vinegar and myrrh directed into the fauces, &c.

C U L L E N.

Dr. Cullen recommends bark from the beginning of the disorder, antiseptic gargles, and, in tumefaction, blisters.

The most exceptionable methods of treating the malignant, ulcerated Sore Throat are the following :

- I. The admission of bleeding.
- II. Vomiting, which is rarely requisite.
- III. The ordering diluting liquors, as tea, &c.
- IV. The detaining patients in bed, and pro-

E

moting

moting perspiration by volatile saline mixtures, &c.

v. The depending on such insignificant remedies as the *pulvis contrayervæ compositus*, *vinum croceum*, and two grains of camphor, for the first three or four days, or the more dangerous exhibition of nitre, and the neglecting the most efficacious mode of immediately administering the bark in large doses.

vi. The application of blisters to the throat.

vii. Waiting until the third, fourth, or fifth day before the bark is prescribed.

viii. Administering the bark in the trifling form of a tincture, in so dangerous, rapid, and destructive a disease.

ix. The giving Dr. James's powder, tartar emetic, or diaphoretics.

x. The decrying the bark, and scarcely admitting this excellent antiputrescent for the putrid sore throat, in which its efficacy, when joined with mineral acids, has been more conspicuous than in any disorder whatever.

xi. The checking purgings too suddenly, particularly by opiates.

xii. The not sufficiently attending to cleansing the putrid ulcerations about the fauces; nor preventing the descent of the putrid matter to the stomach.

xiii. An inattention in not conveying a stream

stream of air through the patient's room, and the preposterous method of drawing the curtains round the bed, instead of admitting the freest ingress of fresh air.

xiv. The feeding the patient with animal broths, made of mutton or veal, or beef tea, or the permission of animal diet, or any sort of meat whatever, in such a disposition to putrefaction.

Amongst those who have lately died of the malignant, ulcerated sore throat, the foregoing modes of treatment, collectively, or partly, have been adopted: on the contrary, where bark and acids, a cool room, and pure air, have been immediately directed, no perspiration forced, nor animal diet admitted, not one person in several hundreds has fallen a victim to this contagious disease.

These assertions flow from immense observation, experience, and practice, for a period of above twenty years, in this great city: though previous opportunities of seeing the rise, progress, fatal termination, successful and unsuccessful treatment, of putrid fevers, in hot climates, laid the foundation for that plan of cure in the ulcerated sore throat, which commonly terminates fortunately*.

* The treatment of the ulcerated Sore Throat is given in the Medical Advice to the Army, &c., in 1775.

1. *Bleeding.*

Bleeding is now seldom prescribed, unless the disorder be mistaken for the true inflammatory sore throat. The appearance of the mouth, uvula, and fauces, to physicians, or practitioners, with a clear sight, distinguishes the putrid, ulcerated sore throat from the inflammatory. The former has a darker red color, with little white specks, about the fauces, or near the tonsils, with depressed spirits, debility, and a diminished force in the pulse: the latter, a lively red inflammation, and swelling, stronger pulse, little or no debility.

The seasons of the year, and intelligence of the contagious sore throat being present or absent, are to be considered. The inflammatory sore throat is common to the winter and spring: the putrid, to the latter end of summer and autumn.

There are several symptoms common to both; yet, to experienced practitioners, nothing can be more obvious than the difference of one sore throat and the other. The inexperienced should practise with caution.

Many authors mention the mistakes in treating the ulcerated sore throat for the true inflammatory; did not daily observation prove, that *bleeding*, and giving *nitre*, *diluting*, &c., frequently

frequently prove destructive, the repetition of such errors would be superfluous.

After a *single bleeding*, the pulse has sunk, the putrid symptoms spread rapidly, and, in a very few days, terminated fatally; notwithstanding the bark, elixir of vitriol, and the most-approved antiseptics, have been spiritedly prescribed, to correct or counteract this unfortunate mistake.

II. Vomiting.

Vomiting is not quite so objectionable as bleeding; but, in general, it is unnecessary: and certainly, if the disorder may be successfully treated, without so violent an operation, it is not difficult to determine which is most eligible.

Vomiting is supposed to evacuate any putrid matter in the stomach, and perhaps, in very rare cases, may be requisite.

An antiseptic laxative is a much safer practice.

A laxative not only evacuates the offending matter from the whole intestinal tube, but prepares the stomach and intestines, after being thus cleansed, for the reception of large and repeated doses of bark, so necessary in this disorder.

The vomiting, on the contrary, by inverting

the peristaltic motion of the stomach and intestines, may create such a nausea, that the stomach will not be able to bear the antiseptics; this, though it may not always prove fatal, retards the progress of the cure. Loss of *time* is frequently loss of *life* in such a ravaging disorder.

The exciting such an universal shock in a local disease, is quite contrary to the most excellent intentions of cure, which are not to stimulate violent action in the arterial system, but to correct and counteract the putrid tendency of the disorder. Emetics have no antiseptic qualities; but, by their force and violence, increase heat, perspiration, &c., which, in this disorder, should be avoided, unless in very singular cases.

III. *Diluting Liquors, as Tea, &c.*

Diluting the blood in fevers, &c., is present in the mouth of all mankind, whether medical or not, though the theoretical doctrines on which diluting was built by the celebrated *Boerhaave*, and many of his followers, have been long refuted*.

The

* It is no reflection on the great *Boerhaave*, that many newer discoveries have refuted his doctrines: he promoted the greatest spirit of inquiry through Europe, and the world are much

The blood is not so easily *dilutable* in inflammatory disorders as may be imagined; but in the putrid, that have such a known tendency to dissolving the crasis, and inducing a putrefactive state of the blood, nothing can be more preposterous.

Teas, and all watery or warm liquids, relax the stomach and whole body; therefore are quite contrary to the intentions of bark, tonics, vitriolic acids, and all antiseptics.

If bark and other tonics and antiseptics be proper in putrefactive diseases, which a series of successful practice proves, all teas and *diluters*, as they are called, must be improper and injurious.

Tonics and antiseptics check the dissolving tendency of the fluids in the putrid sore throat, and in all putrid remitting fevers, acting as bracers; relaxing *diluters*, as teas, &c., induce laxity, and increase the putrefactive disposition.

The ulcerated throat, therefore, is best treated when *diluting liquors* are most avoided.

IV. *The detaining patients in bed, and promoting perspiration.*

The ulcerated sore throat is a local disease, not requiring so universal a remedy as continued perspiration.

much obliged to this physician for many improvements made by his successors.

The bed promotes heat and perspiration; therefore should be rejected.

Heat increases the putrid tendency of the fluids, and relaxes the whole body; but as the putrid tendency is local, and easily restrained by cool air and antiseptic remedies; whatever promotes a general relaxation of the solids, or a dissolution of the fluids, as breathing in respired air, or perspirable exhalations, is likely to increase the disease, and render its cure more difficult.

The *petechiæ*, or eruptions in this disorder, which the objectionable writers mention as salutary, are commonly the production of art, and the effect of a hot perspiratory clinical regimen. They were produced in the case recited, most probably, by the mustard whey inducing heat and perspiration.

If the putrid sore throat be properly treated, there is no necessity for expecting an eruption; which symptom is oftener produced by medicine injudiciously applied, than the disorder.

v. *The depending on insignificant remedies in so dangerous a disorder, &c.*

The *pulvis contrayerv. composit.* is a very trifling medicine in so fatal a disorder. The origin of this preparation was founded in credulous superstition, or while the furor lasted concerning acids and alcalies.

A few

A few grains, or half a drachm, is directed. I have seen an ounce or two of this powder repeatedly swallowed, by way of experiment, without any sensible effect; the conclusion is obvious. Many other celebrated remedies have undergone the same trial with like effect: these will be accurately considered in the *Schola Medicinæ universalis nova* *.

The prescribing *vinum croceum* and two grains of *camphor* shew little knowledge of the disorder, or improved practical medicine.

Some medical practitioners, if they do no service, highly applaud themselves in not committing injuries: they suffer diseases to take a natural course, under the wise and specious direction of *nature*.

This invisible agent, nominated *nature*, is a common and ancient expression, very familiar in medical discourses, and unmeaning language of the multitude, but hitherto undefined.

To enumerate, describe, or expatiate on all the pretended attributes of what has been pronounced *nature*, would comprehend a considerable mass of all the visionary caprices, whims,

* A work in Latin, comprehending all the branches of medicine, and newest discoveries. Above forty copper plates are already engraved for this laborious performance, which has already been the labor of many years.

hypocritical cant, and false hypotheses, of ancient and modern physic: this the intentions of the present production cannot admit.

1. It has been a received opinion, that *nature* discovers when a disease is present, and rings the alarm bell to the mental intelligence.

2. The same *nature* has a secret mode of repelling the enemy, and points out to the physician the best means.

3. That a physician should imitate *nature* in the cure of diseases.

4. That the disorders should be left to *nature*, and the physician should watch with vigilance the intentions of *nature*, and second her efforts.

5. That physicians were only the ministers of *nature*, and had only to follow the *vis medicatrix nature*.

It would be very difficult to comprehend or explain what is meant by *nature*; for all the writers on this subject are obscure, and yet plausible to those who receive phrases or words for investigations and truth, or appearances for realities.

It is therefore attacking a visionary phantom, perhaps, to oppose the word *nature* in any philosophical scrutiny. The word *nature* seems an apology for every thing inexplicable, and contains as much meaning as the *occult qualities* of Aristotle,

Aristotle, the *Archæus* of Van Helmont, or the *vis conservatrix & medicatrix naturæ* of Stahl, and many modern physicians. †

The word *nature*, as used in medicine, is intended to convey the sensations of pain, the battle between disease and the constitution in various disorders, and their natural termination, without the art of medicine.

The natural and best method of repelling dangerous symptoms, it is said, *nature* plainly points out to an observing physician*.

It is denied, that what is called *nature*, in this sense, either judiciously alarms mankind in sickness of approaching danger, directs the means of recovery, or discovers to the physician the most eligible modes of treatment.

Symptoms of diseases indicate to physicians their differences.

* Many medical readers, for they merit not the name of physicians, or true observers of diseases, boast of the extraordinary wisdom of the ancients in curing the affections of the human body by observing *nature*.

Seventy patients died out of a hundred in the epidemics of Hippocrates; and whoever will impartially examine the cause, capable of judging, will pronounce the great father of medicine totally ignorant of the causes of fevers, or the use of remedies. Elegant descriptions may raise the reputation of a writer, but they cannot remove disorders.

The

The industry of physicians, not *invisible nature*, has demonstrated by dissections after death, and by various modern discoveries, the similitude, dissimilitude, and true causes of diseases.

The industry and experience of physicians, *not nature*, in the patient's constitution, discovered bleeding and antiphlogistic remedies to be proper in true inflammatory distempers, though hurtful in putrid: on the contrary, medical observation, reasoning, and just conclusions, *not nature*, demonstrated bark and antiseptics, so useful in putrid complaints, to be injurious in the pleurisy, inflammation of the lungs, and other true inflammations.

Diseases, operating in the human body, summoning and alarming this *nature*, never discovered *bark* to be useful in intermittent fevers, antimony in others, mercury in the *lues venerea*, &c., &c.; but commonly chance, accident, or bold empiricism. Afterwards the facts and experiments were reduced to greater regularity by learned and reasoning physicians.

It must obviously appear, that *nature* neither discovers to the suffering patient, nor the physician, the various stages or differences of diseases.

Nature clamorously calls for more strong liquor in drunkenness.

Nature

Nature inclines the fluids and solids to a state of dissolution in putrid diseases.

Nature, in the pleurisy or peripneumony, never directed large bleedings, evacuants, diaphoretics, blisters, &c. These disorders, left to *nature*, prove fatal, as likewise many others.

Nature creates a great sensation of thirst in dropics, which, if gratified, unless in warm climates, where perspiration or a large evacuation of urine is the effect, must do mischief. Where the blood is already watery, aqueous or palatable diluting drink can only relax the patient, and cause the disease to prove sooner fatal.

Nature prompts consumptive persons, and debilitated old age, to pursue and indulge amorous passions, though the consequences are frequently fatal to both.

Nature is so excellent a guide, that it inclines infants of the lower classes of the people to drink porter, gin, brandy, rum, or other spirits, after once having tasted those fiery liquors, so destructive to children*.

Nature,

* In some districts in London scenes of this nature may be constantly seen. Infants of beggars, and the very lower class are plied with gin or aniseed as fast as their parents drink: they hold out their little hands for a share, and become outrageous

Nature, in the early part of life, would be guilty of innumerable instances of unseemly actions and indecencies, did not the refinements of education and laws of civilised societies restrain mankind.

It would be curious, if it were possible, to consider man in a state of nature and refinement; ascertain the births and diseases, and deaths of both: it would, perhaps, be found that millions of the uncivilised perish through ignorance or superstition, while as many of the politer nations are preserved by reason, foresight, and judicious prevention.

Nature sends the plague and other epidemical diseases, by which, in the Turkish dominions, millions are annually slaughtered.

Though these disorders are common, yet it is indisputably true, that in countries where it is most destructive the people are most ignorant of any rational prevention or cure.

Neither the *experience* of ages, nor *nature*, in those countries, have indicated any rational means of treatment; but the industry of learned

geous if not indulged. At a moderate computation, I can prove that five or more children die out of ten, by improper management, under two years. Perhaps a proper and humane interference of the Legislature might prevent such devastation of the human species, arising more from ignorance than design.

Europeans

Europeans have made extraordinary and useful discoveries in the plague, &c. *

Nature, or infectious air, indubitably produces the putrid, ulcerated sore throat; but what remedy or indication has been discovered by *nature* for this disease?

Nature vehemently desires cold drink when men are overheated by any violent exercise; drinking cold liquors, or water, at such times, have produced sudden death, inflammatory or fatal fevers.

If *nature* directed, wisely, it cannot be supposed she would prompt man to his destruction.

Nature and *reason* must not be confounded; the former is an internal stimulator of man, inclining him to various dangers and misfortunes; the latter is a practical system, founded on the experience and reflection of the most ingenious and studious men for ages, the protector and preserver, as far as human industry extends, of either health, ease, or happiness.

Nature does not cure the ague; but bark and tonics, with certainty.

* Sole experience, for ages, scarce improved physic; nor does the *longest* experience ever form a great physician: old age often rivets the fallacies driven into the juvenile mind. It is deep and constant study, reflection on every day's practice, an unprejudiced mind, and the constant exercise of good sense, that improves the art.

Nature being suffered to preside in repeated colds, coughs, pleurisy, or pulmonic inflammation, either produces asthma, consumption, emphysema, or is fatal to the patient; whereas, by not trusting to *nature*, these diseases, when recent, are frequently prevented or removed by the medical art.

A *phrenitis*, or inflammation of the brain and its membranes, if left to *nature*, soon produces mortification of the parts; but being judiciously treated by medicine, it is often cured.

Nature acts very unkindly in many chronic disorders — the gout, for instance: for apoplexy and sudden death is frequently the consequence of a retrocession, as it is called, of the gout attacking the vital parts.

The supposition, that what has been so speciously called *nature* being capable of performing such wonders in diseases, has led mankind into many fatal errors. Recent disorders are easily cured, in many instances; but by depending on *nature*, what, in the commencement, appeared trivial, has become a disorder of great magnitude. This every experienced physician's daily practice may fully prove. Mankind too often neglect rational medical advice, when the art can answer the most beneficial purposes, and call for assistance when disorders become very formidable, or even incurable. This not unfrequently

frequently happens from depending on what is called *nature*.

Nature induces savage nations to eat one another, their children, or enemies.

Nature prompts men to vicious passions, frequently productive of great injustice and misfortunes, not only to empires, but to civil society.

If *nature* be allowed to govern the actions, passions, or diseases of mankind, and to discover the most effectual remedies; such doctrine is only applicable to savages, who live in a state of rude nature; beings who hunt for food, live in fields and woods, eat the natural uncultivated productions of the earth, without coverings to their bodies, &c. In civilized European countries, in proportion as people are reared from such a state of savage nature, and as they refine in their habitations, tables, and indulge in luxuries, so proportionably medicine should change the modes of curing diseases. The nobleman, who, from infancy, possesses every species of luxurious life, should not be treated, if indisposed, like the rough, masculine, field rustic, or American savage.

The great partizans for following what they call *nature*, should first reduce mankind to their original state of barbarity, without any cultivation of the arts or sciences, &c, and then

might appear some shadow of reasoning in their professions concerning *nature*.

From long observation, from reiterated and cool reflection on these subjects, it is affirmed, that diseases can be never worse managed than when left chiefly to *nature*; nor can there be greater reason for a successful expectation in their events, than if skilfully and judiciously treated by art from their commencement*.

Numerous instances, besides, of *nature* strenuously requiring what is likely to prove most injurious, might be adduced.

If *nature* were to be imitated in the cure of diseases, it would be first necessary to determine what diseases are curable by *nature*: these, on

* A physician of great eminence in this metropolis was called to a young gentleman, suddenly attacked with a phrenitis; the pulse almost immediately sunk to about forty. He was in the vigor of health before the disorder commenced. The physician, a great follower of what he called *nature*, would not suffer the patient to undergo a large bleeding, which was proposed from physiological reasoning: he obstinately insisted on waiting *nature*, to see what she would perform, and the young gentleman died in three days.

I opened the subject, and found, what had been predicted, an extravasation of blood from a rupture of a vessel in the brain. There was great reason to suppose, a large bleeding in the jugular might have saved this patient. A patient of Mr. Samuel's, of High Street, Marybone, in similar circumstances, was cured by large bleedings, antimonial diaphoretics, and active purges, under my direction.

exami-

examination, would be found very few, either acute or chronic.

If the putrid sore throat be left to *nature*, no physician will doubt of its generally killing the patient; but, not leaving it to *nature*, lives are preserved by the certain cure of the disorder, not discovered by *nature*, but human study and experience.

If the venereal disease were left to *nature*, rotten bones, ulcers, the loss of the nose, and other parts, would indubitably be the consequence, accompanied with a long train of misery; but, on the contrary, by the discoveries of medicine, not of *nature*, this dreadful disease is now, with certainty, remediable.

Ulcers of the legs are curable not by *nature*, but a regular course of mineral alteratives. How many have led miserable lives before these methods were discovered, under an absurd supposition that *stinking old ulcers* were salutary, and therefore should be left to *nature**?

If, by understanding *conservatrix vel vis medicatrix naturæ*, it is meant that a physician should comprehend the power and force of a

* Above twenty years ago I discovered a method of curing *old ulcerated legs*, which long experience has reduced to a certainty. This, with all the improvements, theoretic principles, and remedies, has been lately published in a Treatise for the benefit of junior Surgeons, who desire to cure patients, and will depart from old prejudices.

disease in the constitution, and of medicine in the cure, it is acknowledged such science is absolutely necessary.

Nature, however, never indicated one nor the other; but symptoms, and the known effects of remedies; which having been ascertained by numerous facts in practice, and rational medicine, cannot be attributed to what so pompously is denominated *nature*.

These cursory reflections, on an old phrase, which has ever been used as an ancient and modern substitute for real knowledge, and a cloak for ignorance, would not have appeared, were it not requisite to attempt the abolition of fallacious delusions, so disgraceful to true science. This pretension, of submitting diseases to *nature*, has induced physicians, who received shadows for substances, with great appearance of gravity, solemnity, and a profusion of pomposity, to suffer their patients to perish, *secundum naturam*, in various diseases.

It has been productive of an inefficacious practice; for physicians, pretending to follow *nature*, have declined acting with spirit, when the most urgent necessity required it; and they have often prescribed, in the commencement of diseases, violent emetics, or purges, &c., when *nature*, to use their own term, never directed any such active remedies.

The

These facts, the works of hundreds of ancient, and even the practice of many modern physicians, amply testify, particularly on the Continent.

Again, at those periods, or stages of disorders, in which a physician should not look but act, the same *sectatores naturæ* have remained inactive, and instead of proceeding to decidedly prescribe the most efficacious mercurials, antimonials, bark, or antiseptics, they have placidly become idle spectators of the patient's death, under the disguised and modest mask of *trusting all to nature*.

Notwithstanding the numerous discoveries and improvements of many excellent physicians, particularly in this country, there are many other similar prejudices, which require a total exclusion from the art. The ancient and modern doctrines have been so intimately blended, that, without a thorough reformation, and expunction of many received opinions, the art will never acquire that dignity and perfection which every humane physician must devoutly wish, though, perhaps, from the clashing of interests, pride, and prejudices, it may be thought visionary to expect.

VI. *The applications of blisters unnecessary, &c.*

The application of a blister to the throat appears an uncertain curative practice. Where

there exists already a very increased stimulus, it cannot rationally be prescribed as a stimulant.

When the fluids are in a disposition to produce gangrene, or mortifications, it may be a question worthy of consideration, whether blisters, by increasing arterial action, may not promote heat, inflammation, and a disposition to putrefaction.

Blisters, in the anasarcaous dropsy, have been frequently known to induce a mortification in the limbs, and to occasion death.

As to their application in the putrid sore throat, though they have been often prescribed, yet they have not proved a fatal remedy like bleeding; for numerous patients recovered who have been blistered.

The proof, however, that blistered patients have escaped death, is no recommendation of its salutary effects. They have recovered even when sweating and the hot regimen have been advised. Singular instances might be produced of persons recovering of diseases, in which the most preposterous practice, ignorance could invent, has been prescribed: but single and extraordinary instances of escapes from dangerous situations, in any affair of life, is, by no means, to be admitted as a rule for human conduct.

It

It is not here intended to shew, by what various and opposite practices, some few have braved the danger of the disease; but, by comparing different methods of treatment, to select for use the most rational and successful.

If blisters are likely to prove serviceable, it should seem, they are most rationally prescribed when the throat is most tumefied; but in numerous instances of the putrid sore throat little or no tumor appears.

The difficulty of swallowing is more owing to a putrid-tending affection of the uvula, fauces, muscles, and other parts necessary for deglutition, than to tumors; which are more common to the true inflammatory or dropical swelling of the throat than the ulcerated; in which former cases blistering may have excellent advantages.

On the whole, I have rarely prescribed blistering to innumerable patients in the putrid, ulcerated sore throat, and have never seen one patient die of this disorder, who was treated, from its commencement, in the manner recommended in this little essay.

In putrid fevers, the efficacy of blisters is extremely dubious; but in delirium, or *in articulo mortis*, this application may be less exceptionable, as the patient may die whether blisters be applied or rejected. In such despe-

rate situations, medicine may be more justifiable in attempting relief from every quarter, however trivial, than to desert the afflicted in such moments of imminent danger.

Blisters to the throat, then, in the disorder now treated on, are considered unnecessary, and perhaps injurious, as a septic, exciting additional misery, without any advantages; they are, therefore, excluded, as possessing no antiseptic qualities to restrain the rapid and dangerous progress of this putrid disease.

VII. *Waiting to the third, fourth, or fifth day before administering the bark, &c.*

Fothergill, Huxham, and other celebrated writers, have erred in this instance, from a knowledge of the disorder and its remedies being in ^{its} their infancy, when these authors published their observations.

More recent, repeated trials, and constant success, have proved the necessity of immediately administering the bark and antiseptics, after clearing the stomach and intestines by an antiputrescent laxative of the decoct. senæ, tamarind, and cremor tartar, rhubarb, &c.

If the bark and antiseptics of the vitriolic class be immediately directed, all the dangerous symptoms are prevented, and the very cause of the disorder is removed by the restraining

straining and antiputrescent qualities of those remedies.

VIII. *Administering the bark in the form of a tincture.*

The symptoms of heat, thirst, or quick pulse, which physicians have thought sufficient for opposing the immediate use of the bark, are the most cogent reasons for its administration. These signs always arise from the putrid taint vitiating the whole mass of blood, and operating as a stimulus on the pulsatory solids.

The sooner and more powerfully the antiseptics are applied, the less ravages the putrid-tending fluids make in the constitution. It is certainly more humane and eligible to cure a dangerous disease in two or three days, than to suffer it to ravage uncontrolled in the habit four or five days, at the hazard of losing the patient, before the most efficacious remedy is prescribed. It is not to the honor of medicine to voluntarily engage in hazardous, and sometimes insurmountable difficulties, when they may be avoided, merely to shew the power of the art.

To avert probable danger, and restrain diseases instantaneously, if possible, is most commendable in all the disorders incident to the human body.

Whenever the bark and antiseptics are omitted in the commencement of the disease, or
given

given in so trivial a manner as in the form of a tincture, the opportunities of saving the patient are often lost, and the disorder increasing in malignity, may become fatal to those who are the unfortunate victims of its attack.

On the contrary, when the most efficacious methods are adopted, the disorder is not only rendered milder by never suffering it to become very dangerous; but the contagion itself, in some measure, is checked, which must be a real benefit to the attendants or visitors of the sick, and society in general.

ix. The giving Dr. James's powder, tartar emetic, or any other antimonial or diaphoretic medicines, &c.

The noblest medicines, the art of physic has to boast of, are the above and similar antimonials.

The efficacy of antimonials, in febrile diseases of the true inflammatory class, have been so long known in this country, and are now so universally applied, that they require no additional encomiums.

In other fevers, from different causes, in the gout, rheumatism, pleurisy, peripneumony, inflammatory sore throat, and a variety of other diseases, James's powder, tartar emetic, and similar antimonial preparations, are in such
general

general use and approbation; that they are prescribed, sometimes, when their power is not required, and where they may prove injurious.

Dr. James's powder, which I have formerly prescribed, in His Majesty's service, is in such estimation in this country, and its effects so well known, that though I am no admirer of secrets, or what are vulgarly called quack medicines, yet it would be injustice not to applaud this valuable medicine*. It is undoubtedly an antimonial: its effects are exactly similar to the *tartarum emeticum*, regulated in proper doses; one or the other may be equally depended on, when skilfully applied, which abundance of practice daily confirms.

It is not derogatory to any medicine, however efficacious, to deny its utility in some cases. Antimonials, such as have been just mentioned, are more universally active in the human body, and have a more general utility, than any medicines yet discovered; but their powers and effects are more beneficial in universal than partial or local diseases, like the putrid, malignant, ulcerated sore throat.

* The present use and knowledge of antimonials is, perhaps, owing to the introduction of this medicine by Dr. James: it was violently opposed, until repeated trials established its reputation.

Antimonials operate by vomiting, purging, increased perspiration, or urine.

In many acute, dangerous fevers, it is surprising what excellent advantages they effect; but as the putrid, ulcerated sore throat neither requires vomiting, purging, profuse perspiration, nor an increase of urine, antimonials producing these effects are unnecessary, and often injurious.

It would be a repetition to urge more in opposition to their administration, as these subjects have been already considered amongst the objections to vomiting and increased perspiration.

As to purging, or augmenting the quantity of urine, they can have no place in restraining the putrid tendency of the fluids; but are more likely to increase the disease.

x. *The decrying the bark in this dangerous disease, &c.*

The reputation of the bark and antiseptics are so generally known in the disease here treated of, that nothing but a total unacquaintedness of their excellent effects, or a predetermined obstinacy and opposition to all new improvements, could induce any physician, unless very inexperienced, to doubt their united efficacy.

The

The prejudices of education, or false pride, may operate so powerfully on the human mind, that it is possible for a physician, as well as the rest of mankind, to acquire old age without reaping much benefit from experience.

The art of physic requires constant study and application, observation on practical facts, and an ardent solicitude for investigating causes.

Whoever supposes, after the most regular education, and greatest opportunities for improvement in practical knowledge, that he has nothing more to learn, will never become what merits the appellation of a complete physician.

Every year produces some new discoveries, and every year requires a recapitulation of former attainments, and an examination of present improvements.

Though it may shew great weakness of understanding, or credulity, to rashly embrace all novelties, yet, on the other hand, nothing can be more dangerous in the mind of a physician than a species of self-important pride, which disregards and opposes every new discovery, because it happens to acquaint themselves or mankind of former errors.

The present question, whether the bark and antiseptics should be decryed in the cure of the putrid, ulcerated sore throat, has been so strongly determined in the negative, that who-
ever

ever is not convinced, by the united voice and observations of so many practical physicians in favor of the bark, must be left to pursue practices replete with danger to society.

XI. *The checking purgings too suddenly, particularly by opiates, &c.*

Opium, a most efficacious and useful remedy in many distempers, is too frequently prescribed in fevers, attended with purgings.

These febrile purgings are generally owing to putrid or acrimonious matter irritating the stomach and intestines.

In the putrid sore throat, and in other putrid diseases, capable of producing a brown fur on the tongue, or about the teeth and their interstices, some of the putrid fordes passing with the saliva may excite purgings*.

In putrid diseases, the exhaling arteries, likewise, which are most minutely spread on the whole surface of the stomach and intestines, and on the surfaces of all the viscera, may send off, in exhalations, putrid air or fluids.

Purple petechiæ, or spots, may as easily be conceived on the internal surface of the intestines as on the skin of the body: putrid exhalations may arise as frequently in one part as the other.

* The *thrush* in children pass from the tongue and mouth through the œsophagus, stomach, and intestines: why may not the same happen to an *adult* in the *putrid fever*?

Dissections, after death, in putrid disorders, commonly shew the stomach and intestines spha-celated, or other viscera in a very putrid state.

This I can assert from my own dissections.

These putrid exhalations, or other accumulations on the surface of the intestines, poured forth from the orifices of arteries, in which the blood is accelerated, and in a disposition to putrefaction, must heighten the danger in all putrid fevers, ulcerated sore throat, &c.

Some of these putrid particles may be absorbed by the absorbent veins, whether they be lacteals or inhalent sanguiferous veins; the existence and power of these last, I pledge myself to fully prove in a manner equally demonstrable with the blood's circulating.

Without contending whether the lymphatics alone absorb, or the capillary sanguiferous veins attract, and receive *volatile, saline*, and other *particles*, not admissible in the lymphatics, all scientific physicians and anatomists agree that the lymphatics certainly absorb; the proofs of which are so fully illustrated by many ingenious men, that no farther demonstrations are wanted to evince the fact*.

The lacteals, therefore, on the surface of the
intestines

* It has lately been imagined, that no system of vessels attract and absorb superfluous humidity, except that strictly called *lymphatic*, consisting of the *lacteals, receptaculum chyli,*

intestines may absorb some of the putrid particles poured out of the mouths of arteries, while the remaining putrid fluids may irritate the intestines, increase their peristaltic motions, and cause purgings, either the diarrhœa or dysentery, if the villous coat be abraded or destroyed.

The absorption of putrid particles by the lacteals being conveyed to the blood by the thoracic duct entering the subclavian vein, can easily give additional force to the putrefactive miasmata already circulating in the blood, producing irritation, quickened circulation, and all the symptoms attendant on putrid diseases.

The prevention, therefore, or evacuation of any putrid collections in the intestines, become a very necessary object in the cure of putrid or febrile diseases.

The preventative practice can only be indeed conjectural, by supposing the possibility of putrid collections being deposited in the intestinal canal.

The most rational method of prevention is to administer gentle acid laxatives, only sufficient to prevent constipation.

thoracic duct, and lymphatic absorbents of the whole body, terminating in the left and right subclavian veins. This doctrine, though much countenanced, is certainly erroneous, as may be fully proved by various experiments.

Clysters,

Clysters, by only emptying the rectum, cannot answer this purpose.

Light laxatives pass from the stomach through all the intestines, and carry before them putrid or other congestions, by a circular canal, that measures from twelve to fourteen yards, folded in various forms and circumvolutions; so that any lodgment of offending matter is likely to be removed in every part, and excluded.

If putrid accumulations, air, or fluids, may be supposed possible to remain in the stomach or intestines, from the causes and facts already enumerated, it must follow, that their prevention or actual evacuation become highly necessary.

If, from irritation, they produce purgings, the irritating acrimony should certainly be discharged; therefore purging with acid, correcting, and antiseptic laxatives, not only prevent, but remove the danger, which putrefactive particles might create. The acrimonious, putrid-tending causes of those febrile purgings being removed, all the mortiferous or threatening effects are likely to cease: this I have experienced in numerous instances, both in the West-Indian and European putrid fevers*.

* See the bilious fever in *Medical Advice*, &c.

It should, however, be remarked, that purging violently, or repeatedly, is not intended; rough or even saline purges, such as sal Glauberi, Rochelle salt, sal polychrestus, or other neutral purging salts, are all improper in putrid diseases, though too frequently prescribed: it requires little knowledge of chemistry, the intentions and effects of remedies in putrid affections, to perceive the reasons.

Therefore senna, tamarinds, cremor tartari, stewed prunes, and such like mild laxatives, are most adapted to putrid accumulations in the stomach or intestinal canal, with tincture of senna, rhei, or pulvis rhei, &c.: these spirituous tinctures, however, are improper, if the stomach or intestines be inflamed.

As a principal part of the cure must depend on clearing and preserving the intestines from putrid exhalations, acrimony, or putrefactive corroding alvine feces, even if a purging should be present, how preposterous and dangerous must that prescription be which checks the purgings by *opium*? This practice has indubitably proved fatal to patients in many instances; therefore it cannot be too much discountenanced.

It has been urged, as a reason for restraining the purgings, that the patient will perish under a diarrhœa, and it must be confessed that this
may

may happen; but in some instances, after a dose of rhubarb, or any of the mentioned laxatives, to remove the irritating cause, if it may be thought absolutely necessary to check the purging, solutions of *extractum ligni Campechensis*, or *pulvis terræ Japonicæ*, &c., are to be preferred to *opium*, unless the case be absolutely a diarrhœa, not arising from febrile impetus.

Upon considering the whole, great reflection, caution, and just reasoning, from the appearance of the *sedes*, the stage of the disease, the state of the patient, are all necessary to determine whether febrile purgings should be restrained by any means, as fevers often terminate happily by this evacuation.

XII. *The not sufficiently attending to cleansing the putrid ulcerations about the fauces, &c.*

The saliva is constantly descending from the mouth, through the œsophagus, into the stomach; and in inflammations, or irritation of the fauces, the saliva is often increased in quantity. The salivary glands, excited by increased stimulus, is the cause.

If the saliva descends, as it must pass over the diseased parts, it conveys into the stomach some of the putrid matter hanging about the tonsil glands, *velum pendulum palati*, *uvula*, &c.

The truth of this assertion must appear
 G 2 evident,

evident, and its effects can be easily conceived, from what is already advanced.

The deterging or constantly clearing the ulcers about the fauces, mouth, &c., of all putrid or other matter, become a principal object in the cure.

The *saliva*, likewise, should not be swallowed, but constantly ejected, to prevent every possibility of the putrefactive fomes, or fordes, entering the lungs or stomach. These are the means by which the disorder may be rendered milder, and putrid purgings, mortifications in the stomach, intestines, and other viscera, prevented, or the inhalation of mephitic air into the lungs, in a great measure, avoided.

The continually cleansing the ulcers does not a little contribute to the safety of all persons who visit patients afflicted with the putrid, ulcerated sore throat; therefore, of course, must, in a considerable degree, check the usual progress of this dangerous, spreading, contagious disease.

XIII. *An inattention in conveying a constant stream of fresh atmospheric air through the sick room.*

In all putrid diseases, and indeed every species of malignant fever, small pox, &c., the renovation of fresh air contributes greatly to check
the

the putrid-tending disposition of the over-heated fluids, whilst a negligence, in this point, will aggravate all the alarming symptoms, produce *petechiæ*, &c.

As nothing can increase the heat, fever, and putridity in fevers, more than air already respired, or noxious steams exfuding from the human body by the pores of the skin, received into the lungs again; so nothing can so well prevent or counteract these dangerous effluvia as the constant admission of fresh air into the patient's chamber.

Great attention is necessary in acquiring purer air; for it should not be permitted to flow in a full stream on the patient, but rather in a circular direction; to effect which, the situations of doors, windows, bed, and fire place, should be considered.

The seasons of the year, and the differences between the day and night air, moisture, or dryness, cold or heat, are not to be neglected.

These determine whether a fire may be permitted or not; for the transmission of cold and moisture, heat and moisture, or a sharp, keen north-easterly air, may all prove injurious. The due regulation of these circumstances will depend much on the experience, care, and good sense of the physician.

The patient should be detained, as much as possible, out of bed; and if he lay down in any putrid disorder, there should be no curtains to the bed*. The bed curtains, or even clothes, may absorb mephitic or putrid exhalations in the day from morbid bodies, which may be diffused again in the night by the warmth of the fire or closeness of rooms: much mischief may accrue from these sources, and they are frequently the cause of contagion spreading, as the jail fever, plague, putrid fevers, sore throat, &c., not only in hospitals, poor houses, or prisons, but likewise in private families.

Every thing which can possibly vitiate the air, as fetid animal or rotting vegetable substances, putrid feces, clothes in which infections have been received, or retained; vessels that have been used for the exoneration of the natural excretions, should be all immediately removed from the sick chamber, and the room purified by the circulation of fresh air, the fumes of vinegar, muriatic acid, explosion of gunpowder, &c.

The fewer attendants are admitted in a sick room, the more successfully medicine and do-

* In putrid disorders, it is proper to entirely remove the curtains from the bed; experience has convinced me that little or no dependance can be placed on attendants of the sick in this particular and important circumstance.

metic management succeed in the cure of all putrid-tending diseases.

Whoever touches the patient in putrid fevers should first well rub his hands in camphorated oil*. Camphor, powdered, detained in the mouth of the physician, is not to be disregarded in malignant diseases: it is likewise useful for nurses, to prevent the reception of this putrid disorder, which necessity, most commonly, more than inclination, obliges them to attend †.

They should be allowed, likewise, wine, or spirituous liquors mixed with ginger tea, in moderation; if bark, likewise, or bitters be added, the certainty of prevention would be greater.

* Two drams of camphor, dissolved in two ounces of sweet oil, as recommended in the *Medical Advice*, &c. This preparation I always used in anatomical inquiries; but, by an omission, I nearly lost my life in a very particular instance. Camphor in powder, chewed, is an excellent preventive.

† In the *Medical Advice*, &c., I have recommended the rubbing the fingers with camphorated oil before feeling the pulse in the putrid diseases of hot climates: the same method of preventing absorption I have always used when dead bodies have been opened after putrid diseases. It is known that numbers, who industriously pursue anatomical studies, have died by receiving infection from morbid or putrid bodies. The same composition will, in most instances, prevent the communication of the venereal infection.

A free circulation of air, then, and its purification, ~~are~~ no less necessary for the patient than the physician and respective attendants.

XIV. *The feeding the patient with animal food in putrid fevers, sore throat, &c.*

Though this subject has been frequently argued, and its prevalence censured by several learned physicians, yet every day's experience in extensive practice proves that eggs, animal broths, beef tea, jellies, or similar substances, are continually administered in low fevers, under the pretext of supporting the strength of the patient.

None but reasoning physicians can perceive the debility in putrefactive fevers, or sore throat, to be owing to an universal change of the circulating fluids, acting as septics, and weakening all the powers of the solids by the commencing dissolution of the fluids.

The attendants on the sick, not knowing the immediate causes of debility and destructive tendency of the symptoms, suppose it necessary to pursue the same modes of refreshing and strengthening the body, as if arising from fatigue or any natural, but over exertion of the bodily powers. Thus, with the best intentions, infinite mischief is produced.

The objections to any species of animal food
are

are so obvious, that very few arguments are necessary to illustrate the subject.

I. There is rarely a desire of food, particularly of the animal kind, during fevers, &c.

II. The principal organ of taste, namely, the tongue, is so covered with inspissated mucus, or a foul surface, that scarce any thing, except sharp acids, are tasted.

III. Patients themselves seldom desire any animal broths; for their bare mention, in fevers, will excite aversion and nausea: their admission, therefore, is more owing to the well-meaning officiousness of friends than any requisition of the sick.

IV. When a putrefactive disease has seized any person, what can augment its dangerous symptoms more than animal food? — No substance so rapidly becomes putrid in the stomach or intestines, in health, and consequently its augmentation must be the constant effect in every febrile disorder of a putrid kind.

V. If animal food be admitted, all the proposed advantages of evacuating the putrid ~~so-~~fordes in the intestines will prove abortive; for when dangerous symptoms principally arise from absorption of putrid particles by the minute vessels on the surface of the intestines, to send more animal food to increase or add fresh contamination to the deleterious particles, must
only

only accelerate the final dissolution of the patient.

VI. A variety of other arguments might be produced against the admission of animal diet in putrid or other acute febrile disorders, as the probable extrication of putrid air, during digestion or chylication, supposing either regularly happened in fevers, the possibility of animal food being immediately tainted in the stomach by coming in contact with particles already in a state tending to putrefaction, &c. &c.

VII. If very small portions of putrid matter, received into the habit by absorption, can produce such dreadful effects as have been constantly seen from anatomical dissections, how easy is it to conceive the same happening in abrasions of the villous coat of the intestines; supposing, during fevers, no intestinal absorption in the vascular systems could be effected, from the morbid state of the parts, and the adhesion of an obstructing mucal surface on the whole intestinal canal * ?

* It is well known that very little variolous matter can produce a violent fever, and change the whole mass of blood.

A small quantity of the venereal virus will communicate its baneful influence to the whole body, and continue many years.

Wounds by poisoned weapons, the bite of a snake, &c., in a short time exert their dire effects, so as to destroy life itself, and causing a quick putridity in all the fluids and solids of the human frame.

ON THE
 IMPROVED TREATMENT
 IN THE
 C U R E
 OF THE
 MALIGNANT, ULCERATED
 SORE THROAT.

TO render the antecedent observations of more extensive utility, the succeeding concise view of the improved treatment of the ulcerated, putrid Sore Throat is introduced here.

The malignant, putrid Sore Throat was a disorder well known to the ancients, although Dr. Fothergill traces its first appearance and description amongst modern writers.

Neither the ancients nor moderns, until very lately, understood the true nature of the disease, nor the most efficacious manner of its treatment.

Celsus, Aretæus, Ætius, Trallianus, Paulus Ægineta, and other ancients, have distinguished different species of the Sore Throat; among

amongst which the present disorder appears to be described. The modern writers are *Sgambatus*, *Cortesius*, *Ætius Cletus*, *Severinus*, *Heredia*, *Thomas Bartholinus*, *Fothergill*, *Chomel*, *Aurivillius*, *Huxham*, *Johnstone*, &c.

Some histories are related in the Philosophical Transactions and *Journal de Medecine*: these, with the authors already mentioned in the former part of this essay, are the principal physicians who have written on the subject.

Notwithstanding the disease has been most accurately described above an hundred and fifty years, yet slow has been the progress of treating it successfully. This is common to the healing art; for Hippocrates, Celsus, Aretæus, and Galenus, have well delineated morbid symptoms; but how superficial and imperfect are their directions of cure, when compared to the present practice.

Many ancient medical prejudices are not at present eradicated, so intimately are they interwoven with modern knowledge; nor the doctrine of waiting for a critical termination of febrile diseases, in a certain number of days, disbelieved, although every day's practice proves their uncertainty and fallacy.

In the putrid, ulcerated sore throat the doctrines of commencement, augmentation, *acme*, or heighth, and critical termination in recovery,

very, death, or some other disease, in a certain number of days, seems to have been superstitiously adopted and expected. These notions, perhaps, in some measure, influenced *Fothergill*, *Huxham*, *Russell*, *Pringle*, and many others*. These days were always irregular, which shews no great uniformity in *nature*; but had they been exact in their periods, yet if more compendious and safer methods of cure are discovered, does not humanity demand their preference to the more slow, uncertain, or hazardous?

It has been lately discovered, that such opinions and practices are erroneous, dangerous, or fatal to patients in the ulcerated sore throat, or putrid fevers; therefore, without waiting the *natural progress and termination* of the disease, by permitting *nature* to perform or direct her own operations, &c., the putrid tendency of the fluids, and the rapid relaxation of the solids, have been corrected, and restrained by methods, which, if more extensively applied to

* Those who have argued most in favor of critical days have asserted, as a strong reason for *nature's* not observing the ancient periods in *fevers*, is owing to the application of *modern remedies*, which perverts the wise intentions of *nature* on the third, fifth, seventh, ninth, eleventh, fourteenth, &c. days. Mankind should be felicitated on the use of antimonials, bark, mineral acids, &c., which often promptly cure fevers without the medium of *critical days*.

all putrid diseases, may become a most valuable acquisition to the art of medicine, and a blessing to the unfortunate sufferers.

Symptoms or Signs of the putrid, ulcerated Sore Throat.

1. The throat feels sore, and swallowing is impeded, painful, or difficult.

2. On the mouth being opened, and the tongue pressed down, the uvula and fauces appear sometimes of a darker red than natural; at others, of a brightish red.

3. White or yellowish spots appear about the surface of the tonsil glands; which afterwards sloughing, form ulcers.

4. In some instances, the parts affected are swelled; in others, not. Abscesses sometimes, though rarely, are formed.

5. The countenance is paler than usual, except in the young and plethoric, and shews evident marks of depression and languor.

6. The eyes commonly appear more languid than usual.

7. Alternate heat and chilliness do not always accompany the other symptoms.

8. The *pulse* is weak, small, quick, and irregular.

9. The animal spirits, or mind, are considerably dejected.

10. The

10. The bodily strength is diminished, and faintness is perceived; the skin is dry.

11. The head is sometimes affected with vertigo; but more, in general, is free from that sensation or pain, yet feels a degree of heaviness.

12. The tongue is white, and rather moist, with little thirst.

13. The urine is pale, or whey-colored.

These are the general symptoms in the commencement of the disease, which, if promptly treated with spirit, are with facility removed; but if suffered to follow their successive *natural* course, then all the symptoms of exalted putridity appear in a few days.

Erysipelas, efflorescence, appears on the neck, breast, arms, hands, &c., if perspiration be promoted.

A general tendency to putrescency, fetid breath, stools, hæmorrhages, purple spots, diarrhœa, dysentery, subsultus tendinum, delirium, coma, death.

The last-mentioned symptoms, however, seldom appear, unless the disorder has been improperly or unskilfully treated in its commencement.

The disorder has no regular crisis. Although this is acknowledged, yet it has been treated as if acute and critical, and suffered to continue a certain

certain number of days in expectation of some critical evacuation.

As the most destructive effects have been produced by mistaking the putrid, ulcerated, and malignant, for the true inflammatory sore throat, the distinctions of both should be accurately attended. Venereal ulcers of the throat have been likewise confounded with the putrid, though very different.

The distinguishing Characteristics of the putrid, true inflammatory, and venereal Sore Throat.

1. In the true inflammatory sore throat the pulse is strong and quick, if the disorder be sufficiently violent to accelerate the action of the heart and arteries.

2. The throat and fauces are considerably swelled with red inflammation, so that the tonsil glands nearly close; of course the swallowing is very difficult.

3. The countenance, spirits, nor pulse, are depressed.

4. There are no white spots about the fauces.

5. No diminution of strength is experienced in the true inflammatory diathesis; for the arterial powers are all augmented.

6. The inflammatory sore throat is not contagious; and it is most common in winter and
in

in the spring, when the air changes suddenly; whereas the putrid seldom appears, except in the latter end of summer and autumn, and is always infectious: in the former, consequently, individuals at a distance suffer; in the latter, whole families, neighbourhoods, villages, towns, and cities, experience its dreadful ravages.

7. The true inflammatory sore throat terminates in resolution by the use of repeated bleedings, evacuants, and antiphlogistics; or in suppuration, and in the evacuation of the matter forming the abscess: but in the putrid sore throat suppuration rarely happens, and bleeding, evacuants, or antiphlogistics, kill the patients.

Venereal ulcerated Sore Throat.

1. Venereal ulcers are commonly seated near or on the tonsil glands, sides of the tongue, palate, &c.

2. No fever accompanies venereal ulcers; nor depression of spirits, languor, &c.

3. Venereal ulcers not being acute, and destitute of febrile symptoms, are slow in progress, and commonly attended with other symptoms of the *lues venerea*.

4. The venereal ulcers are not contagious from the breath, nor epidemical: they do not ravage through families, or towns, but affect in-

dividuals only, without any concomitant symptoms of acute inflammation or putridity.

5. Venereal ulcers of the throat happen in every season of the year, commonly from the disorder being originally ill treated or neglected.

6. The bark and antiseptics cannot cure venereal ulcers; but fumigations of cinnabar, mercurial lotions, and a judicious mercurial course.

Though these distinctions are well known, and perfectly comprehended by all experienced physicians in this country, yet so many fatal errors have happened from a want of accuracy and knowledge in the diagnostic symptoms of the putrid, malignant sore throat amongst the inexperienced, that these explanations have not been considered superfluous.

Causes of the malignant, putrid Sore Throat.

I. The *remote causes* have already been investigated, which are, principally, some putrefactive effluvia contaminating the atmospheric air.

II. The causes, which give a continued and fresh origin to this fatal disease, may, however, remain after the atmospheric air has been purified; for the disorder being once received, it may be re-communicated by the breath, clothes, &c., of persons already infected: thus the dis-

order may proceed from family to family a long time after the original causes in the air have been diffipated.

The plague rages in a fimilar manner.

I. The *immediate* or *proximate* causes are, a sharp, corroding, putrefactive air received by the mouth and lungs in respiration. What are the constituent particles of this air, and the most rational means of its prevention, counteraction, or mutation into purer air, may be considered in a future publication *.

II. This contaminated air comes first in contact with the fauces, when respiration has been performed, either through the nose or mouth.

It is sufficiently corrosive or caustic to act on the external membrane of those parts, raise little pustules, which are the small white spots mentioned: these detach the skin, corrode the parts underneath, and form, from the separation of the putrid slough, the malignant ulcers.

III. A considerable portion of contaminated air, received into the lungs by being absorbed, is conveyed to the whole circulating fluids: hence the changed state of the blood.

IV. This changed state of the blood tending to dissolution, relaxes all the muscular powers of the body; hence debility: its stimulating

* Experiments have been long making for this purpose.

powers on the heart and arteries excite a quicker, though feebler, arterial action; hence from attrition and a change in the uniting particles, heat, &c.

v. This putrid-tending change of the blood acting on the brain, its membranes, and the nervous system in general, is productive of a sense of dejection in the mind, and a diminution of power in the nervous system.

vi. If the putrefactive causes act with great energy, delirium may be the consequence, by the changed acrid blood irritating the membranes, arterial and venal sinuses or system, or the cortical and medullary substances of the brain.

A laxer texture of blood, approaching to dissolution, is productive of debility and laxity in all the human functions, whether animal, vital, or natural*.

Prognostic of the putrid, malignant Sore Throat.

The prognostic of the disorder will be com-

* In the putrid diseases of hot climates, on the first apparent attack of the disorder, many patients are so dejected, and feel such an inexpressible weakness, as to consider and believe the disease fatal; which pre-sentiment has been very often verified, notwithstanding the most powerful modes of cure have been adopted. The mind has acted so potently on the body as to induce a fatal despondency, which neither remedies nor reasoning could counteract.

prehended

prehended principally from the modes of cure adopted.

I. When the disorder is treated in the most improved manner, it is neither dangerous nor fatal.

II. If restrained immediately by bark and antiseptics, it is cured in a very few days.

III. The cure being properly conducted, the disease diminishes from the first exhibition of the remedies, and continues to decrease until the cure is accomplished, and generally without any critical evacuation.

IV. In the foregoing prognostics it is supposed that the disorder was skilfully treated on its first attack, or while recent.

V. If the disease be mistaken in the first instance, and bleeding, saline or antiphlogistics of nitre, &c., be administered, *death* is generally the consequence.

Purple petechiæ, delirium, nasal or other hæmorrhages, from the dissolved and putrid state of the blood, putrid diarrhœa, dysentery, &c., mortifications of the viscera, &c., &c., are induced, and the patient, frequently sensible to the last moments, with diminished circulation, faint respiration, syncope, cold sweats, &c., expires.

VI. The same has happened, though in a less degree, when the treatment has been conforma-

ble to the doctrines of *Fothergill*, *Huxham*, *Pringle*, &c., chiefly, as far as I have been able to observe, from attending more to the fever than putridity, and omitting the bark until it was too late to be serviceable. Several instances of this nature I have been lately called to prescribe for, when the disease was too far advanced, and above the reach of all medicine.

VII. The longer the disorder has ravaged in the constitution, and the more violent the symptoms appear, so much the less expectation of success in its treatment.

VIII. Leaving the disorder to *nature*, as it is called, is better than prescribing bleeding and evacuant antiphlogistics, &c.; for these commonly destroy the patient.

IX. Treating the distemper by the inefficacious modes recommended by *Fothergill*, *Huxham*, *Pringle*, &c., is preferable to submitting the disorder to *nature*, and will succeed, in some years, when the disease is not highly malignant; but the not immediately ordering the bark may suffer the disorder to become so unmanageable as to resist the most powerful remedies. The disorder continues from five, seven, eleven, or twelve days, according to those writers, with the risk of dangerous symptoms; whereas, if the antiseptics be immediately directed, bad symptoms rarely appear, and it is cured commonly

monly in three, four, or five days. Which is most eligible, requires no commentary*.

The methods of preventing the infection of the putrid, ulcerated Sore Throat.

The preventive methods of counteracting this contagious disorder are of two kinds, domestic and medical.

The domestic prevention comprehends the modes already described when the disease is present: to which may be added the immediate removal from the situation where the disorder actually predominates to a distant part where it does not exist.

Those who are obliged to remain in the midst of the surrounding evils, should avoid, as much as possible, patients already infected.

After cleansing the bowels with any light opening medicine, Glauber, Rochelle, or Ep-

* The reason of mentioning those practitioners whose authority has had great weight and influence in medical practice, is not from any disrespect; for they have justly merited the esteem of society in eradicating some of the prejudices of their predecessors: it is no reflection that they were unacquainted with many newer discoveries. The motive for introducing the names of those physicians is in consequence of frequently observing, that when patients have died of this disorder, practitioners have quoted and appealed to the writings of Fothergill, Huxham, Pringle, &c., in support of an inefficacious practice.

fom salts excepted *, a tea-spoonful of powdered bark may be taken in a glass of red wine and water, with a little grated ginger, three times a day.

Quilled bark, ginger, cinnamon, cloves, allspice, pepper, or any aromatic, may be continually in the mouth, and lightly chewed, that their effects may pass to the fauces and stomach in conjunction with the saliva †.

The chewing of tobacco, though disagreeable to many, or smoking the dried plant, are useful preventives.

What relates to houses or rooms is fully considered in the observations and methods of cure contained in this essay.

Tea and all watry liquids should be very sparingly drank while infectious diseases spread their baneful influence.

* These salts are adapted to the true inflammatory diseases, but do mischief in the putrid: all learned practitioners know the reason; namely, that they are relaxant to the whole habit, &c.

† A relation of mine, in the medical department last war, was ordered up the river *Gambia*, in Africa, where he was in his voyage three weeks lying with the men in an open boat, or only covered with the sail forming an awning. The worst putrid diseases are very common in that country; but he effectually preserved the health of the men by giving them each a glass of Madeira wine three times a day, on condition they drank it mixed with a dram of *powdered bark*.

An extra glass or two of wine, spirits, and ginger tea, punch, &c., are not improper; for they are often capable of resisting the power of the disease.

The common meats, but not broths, should be received as aliment, according to the season; less in very hot, more in cold weather.

All acids, and acid fruits, may be moderately used, provided there be no contra-indication, as disagreement with the stomach, colic, purgings, &c.

Whatever strengthens and invigorates the constitution should be adopted; whatever weakens or enervates should be avoided; therefore all bitters, stomachics, and tonics, are beneficial; nitre, and all cooling salts, injurious.

The cure of the putrid, malignant, ulcerated Sore Throat.

I. The patient should be removed to the uppermost part of the house, or to a place remote from that in which the infection rages. A lofty is preferable to a low situation.

II. The fauces or parts affected should be gargled frequently with water acidulated with elixir or spirit of vitriol, or the acid spirit of sea salt and port wine.

III. The stomach and intestines should be cleared

cleared by an antiseptic laxative, composed of infusion or decoction of senna and tamarinds, cremor tartar, and some Daffy's elixir or tincture of senna, preparatory to prescribing the bark, which may be repeated occasionally*.

iv. The bark, then, is to be given in substance: an ounce, or an ounce and a half of its powder, with a quarter of an ounce of aromatic spices, may be put into a quart bottle; to which may be added half a pint of Madeira wine, red port, or mountain, and the bottle may be afterwards filled with decoction of bark, strong chamomile tea, or water, with a sufficient quantity of the oil or elixir of vitriol to give a grateful acidity to the composition.

Three table-spoonfuls of this mixture may be taken every two, or three, or four hours, according to the violence of the symptoms.

v. Previous to swallowing any of the mixture, the parts of the affected throat should be

* As it is intended to render this little essay as useful as possible, the plainest directions are given, that persons distant from medical assistance may know how to proceed in the first moments of the disease appearing, or before they may be able to acquire medical assistance. Tamarinds boiled with senna, cremor tartar, and rhubarb; lenitive electuary and cremor tartar; manna, rhubarb, and cremor tartar, &c., are proper laxatives; but Rochelle or Glauber's salts, sal polychrestus, or such antiphlogistic purgatives, are improper in putrid diseases.

cleansed with the gargles already mentioned, and the patient should be kept from lying in bed, unless when much fatigued by sitting up.

VI. The *saliva* and all humidity in the mouth should be spit out, and never suffered to pass into the stomach.

VII. The sick patients' apartment should be kept cool, and the *air* is to be renovated frequently by opening the door and windows; but a stream of wind should not be suffered to pass in a direct line to the patient, but conveyed in a circular direction through the chamber. The weather and temperature of the air is, however, to be considered in the introduction of fresh air.

VIII. *Vapors* of vinegar, with spirits of wine and camphor, brandy, or rum, spirituous lavender water, or Hungary water, should be diffused through the room, and held near the patient's mouth, that their antiputrescent qualities may be received into the lungs, &c.

Glauber's spirit of sea salt, or the muriatic acid, mixed in boiling water, is a powerful antiseptic; but cannot be safely conducted but by the advice of medical practitioners.

Small portions of the fuming spirits of nitre; oil of vitriol; *Glauber's* spirit of sea salt, united with alcohol, or ardent vinous spirit, forms excellent antiputrescent aëreal fluids; but require
chemical

chemical knowledge in accommodating them to medical practice.

Glasses must be used, containing the vinous spirit, and the acid preparations should be cautiously dropped; an effervescence ensues by a light sand heat, and the air diffused is highly salutary in every species of putrid fever, diarrhoea, dysentery, &c. &c.

Explosions of gunpowder are useful.

The burning of tobacco, fragrant gums, or resins, as frankincense, myrrh, resin, pitch, benzoin, &c.; aromatic or nervine herbs, as lavender, rosemary, &c., assist in purifying the air.

ix. The bed-clothes, curtains, and all linen, cotton, or flannel, should be repeatedly removed, fumigated with tobacco, washed, purified on the top of the house, if convenient, and the body linen of the patient should be daily changed, not only in this but in all putrid fevers.

x. The liquids in the mouth, after gargling, the excrements, urine, and all impurities, should be instantaneously excluded from the sick chamber.

Handkerchiefs wiping the mouth should be sprinkled with camphorated spirit of wine, Hungary or lavender water, or vinegar, brandy, &c.

xi. The drinks most proper are red-wine
negus,

negus, tincture of roses, imperial, which is a composition of cremor tartar dissolved in boiling water poured on a little lemon peel*.

Vinegar and water, juices of currants, currant jelly, gooseberries, raspberries, apples, plums, damsons, floes, oranges, citrons, lemons, or juices of any acidulous fruits united with water, and sweetened with honey or sugar, are proper.

The muriatic and vitriolic acids are, however, the most powerful, and should be preferred to all others, unless there be a *difficulty of breathing* accompanying the other symptoms.

Twenty drops of spirit of sea salt, or two tea-spoonfuls of the acid elixir of vitriol, are sufficient to acidulate a quart of water, or wine and water; for the acid drinks should not be too powerful, lest they too much constrict the fibres or contract the excretory tubes, and occasion an unnecessary sensation of thirst †.

Nitrous drinks, or nitre and barley water, and all *diluting teas*, &c., are injurious in this distemper.

* About a tea-spoonful of cremor tartar makes a pint and a half or quart of this drink.

† As these acids are different in point of strength, the organ of taste should determine the quantity of acid necessary.

No drink whatever should be swallowed until the mouth and throat have been previously well gargled.

XII. The separating sloughs of a putrid nature in the throat should be assiduously removed either by the gargle, forceps, or by lint tied on a skewer.

XIII. If abscesses form, which, however, not frequently happens, when suffered either to break, or if opened by a lancet, the matter issuing should be carefully excluded through the mouth, lest the putrid particles descend and injure the stomach.

XIV. During the disease the patient should be seldom suffered to sleep any length of time, but frequently urged to gargle.

XV. If the surface of the tongue, interstices of the teeth, or gums, be covered with brown or livid fur, the gargle of borax should be used, and these parts should be well deterged.

XVI. Animal food of every sort, as mutton or veal broth, beef tea, &c., should be absolutely forbidden. At a time when neither deglutition, digestion, chylication, nor sanguification, are regularly performed, there requires little solicitude for food, which, if even taken, cannot prove nutritious.

Panada made with bread or rusks, with wine,
roasted

roasted apples, or some bread soaked in red wine, fago, falep, tapioca, fimolina, sea-biscuit powder, &c., with a little wine, are all the foods necessary in this or any other putrid disorder.

The successful treatment already delivered presupposes that medical assistance was early solicited, and judiciously applied: under which circumstances the disorder hourly diminished, and, in the course of two or three days, was perfectly cured.

It frequently happens, however, in practice, that the disease has been misunderstood, neglected, or injudiciously managed from its first appearance: in this case medicine should more vigorously oppose the dissolving tendency of the fluids and the debility of the solids, by administering the antiputrescent remedies as often as the patient's stomach can bear them without rejection*. It is worthy of observation, that in patients who never before could admit the bark, take it in immense quantities when laboring under this putrid disorder, without any

* It is possible, after receiving the infection, that, like the small pox, the venomous particles may circulate two, three, or more days in the blood before the symptoms appear sufficiently evident to determine the disorder is present: when, however, the disease is epidemic, there is strong presumption of its possibility, and no mischief can accrue from using the preventives, unless contra-indicated from some important cause.

inconvenience whatever, and with the most salutary advantages*.

If *hæmorrhages, purple petechiæ, efflorescence, &c.*, appear, as their causes are similar to all the other putrid symptoms, so should be their treatment.

Bleeding generally urges on all the fatal symptoms, and can seldom be repaired by the most skilful practitioners:

In colliquative, putrid purgings, or dysentery, symptoms which are often fatal, the irritating acrid causes being evacuated by rhubarb, or any other eligible antiseptic laxative, the bark, with aromatics, extract or decoction of logwood, red port, simple and spirituous cinna-

* *Bark and vitriolic acids* are frequently contra-indicated in *difficulty of breathing, asthma, coughs, &c.*, and various diseases of the thorax or its viscera, experience having found them injurious, by producing difficult respiration, pains in the chest, strictures, &c.; but in such a putrid tendency of the fluids all inferior considerations should give place to the threatening danger of this disease, and, unless great difficulty of breathing, stricture, &c., should ensue, there can be no objection to attempt saving the patient's life by the remedies. In very nervous patients, with *tense, rigid fibres, contracted bile ducts, constipation, &c.*, where the bark and tonics have constantly disagreed; in the putrid sore throat they have produced none of their usual effects, but, on the contrary, have succeeded.

Other preparations of the bark may be directed, according to the urgency of symptoms and judgement of the prescriber.

mon water, with the sweet elixir of vitriol, instead of the acid, or Hoffman's anodyne liquor, may be prescribed, which is both antiseptic and tonic.

Though *opiates* have already been objected to, yet there may be circumstances that require their admission, joined with a solution of *extractum ligni Campechensis, pulvis terræ Japonicæ,* &c., with simple cinnamon water, and some warm invigorating cardiac tincture.

When the disease, from neglect, or bad management in the beginning, proves fatal, putrid purgings, cold sweats, extreme languor, faintness, and a mortification of the intestines, close the tragic scene. These I have found lately occur, from practical observation, and by some few dissections *post mortem*.

Whatever other symptoms appear, not already enumerated, should be treated according to circumstances, always recollecting *septic* and cooling saline medicines to be injurious; for on *antiseptics* with cordials can alone be placed dependence, or any reasonable expectation of success.

In delirium, a strong camphor emulsion, made by rubbing with decocticated almonds, sugar, and afterward with water, is both antispasmodic and antiseptic*.

Prepa-

* Ten grains of camphor dissolved in ʒj. *sp. vin. rect.*, and united with *pulv. gum arab.* ʒss. aq. pur. ʒij. Sacch.

Preparations and Remedies, which are frequently prescribed in the putrid Sore Throat, that should be rejected.

Though enough, perhaps, has been advanced concerning the successful treatment of the disorder, contrasted with that which is either inefficacious or injurious, yet a brief recapitulation of the whole may not be unacceptable.

I. *Class of improper diluting drinks, &c.*

1. Tea, and all watry infusions, unless acidulated with muriatic, vitriolic, or vegetable acids.

2. Water gruel, barley water, or any farinaceous drinks, or what are named *diluters*.

3. Almond emulsion, capillaire syrup and water, or orgeat.

4. Rennet whey, wine whey, and all warm, sudorific drinks.

II. *Class of improper saline remedies.*

All saline preparations, composed of the vitriolic acid, and the vegetable or fossile alkali, &c.

1. Glauber's purging salt.

2. Epsom salt, or *sal amarum catharticum*.

3. Rochelle salt.

4. Sal polychrest.

5. Soluble tartar.

6. Sal enixum.

7. Arcanum duplicatum.

8. Nitrum stibiatum.

9. Nitrum vitriolatum.

10. Sal nitre, or sal prunell.

alb. q. f., is quite superior to the *julep. e camph.* for most purposes, when camphor is necessary.

III. *Class*

III. *Class of improper remedies, composed of the vegetable acid and the vegetable, fixed, and volatile alkali.*

1. *Saline draughts*, composed of salt of wormwood, and lemon juice*.

2. *Spiritus Mindereri*, formed from vinegar and volatile salt.

3. *Sal diureticus*, made from acetum and fixed alkaline salt.

4. Volatile saline draughts from the union of lemon

juice and the volatile alkaline salt.

5. *Magnesia alba* is improper *volatile acids* are administered, as it forms a neutral salt.

6. *Testaceous powders* and *confectio cardiaca* must not be given for the same reason.

The general intentions of the three foregoing classes of medicines are either to empty the intestinal canal, to diminish the febrile impetus of the blood, allay heat, thirst, to cool the whole body, promote perspiration, and to dissolve the viscid crasis of the blood, &c. &c.

* The *saline draughts* that every family are taught to make from salt of wormwood, lemon juice, &c., which has been used ever since the times of *Riverius* and *Sylvius*, a period of above an hundred years, with a most credulous veneration, may be drank in pints without any very sensible effect by persons not suffering under *putrid diseases*: what use a two-ounce draught of this sort can be supposed to possess in any important disease, need not be mentioned. When learned physicians adopt this preparation, it is with intention to do little or nothing, and is an innocent remedy in trifling diseases, though improper in putrid, or dangerous.

All these practices can be clearly proved to be founded in blindly following medical fashions, rather than cool reflection on the nature of putrid diseases, unless in particular instances.

These remedies, though frequently prescribed, are, in different degrees, *septic*. They are known to diminish the circulating powers, debilitate and relax the stomach and nervous system, cool, &c., and certainly are more likely to promote than correct or prevent the putrefactive dissolution of the fluids.

They are admirably calculated for the *true inflammatory* diseases in their commencement, progress, and augmented state; but are exceptionable in the putrid stages.

When the blood and fluids are approaching to a state of dissolution, certainly no physician would prescribe what must give additional vigor to the disease, and injure the patient.

All those saline cooling medicines, as they are nominated, are supposed to render the blood more fluid, consequently opposite to the indications in putrid diseases; which are, to check the dissolution of the blood, invigorate the solids, and resist the putrid-dissolving acrimony.

If, however, it could be supposed that saline draughts, &c., produce no mischief, it appears very reasonable that they are not likely to prove beneficial. In such an acute putrid disorder

disorder as the putrid sore throat, in which there is neither time for omissions, nor superficial practice, it is a desperate game to hazard the lives of mankind by losing the earliest opportunities of curbing or counteracting the destructive tendency of the disease.

It has been observed that the heat of putrid diseases is caused by a state of the blood different from the true inflammatory; therefore if bleeding, evacuants, saline coolers, are proper in the inflammatory, which no physician doubts, bark, vitriolic acids, &c., are injurious: if these last remedies absolutely cure putrid diseases, stop mortifications, &c., the proofs of which are numerous, saline coolers, by acting oppositely, are likely to do mischief.

No arguments whatever can induce several learned physicians on the Continent to depart from the doctrines they have imbibed; one often succeeds another not only in situation and fame, but likewise in sentiments. They pronounce it *charlatanerie*, to deviate from the precepts of their universities, schools, or professors, which they blindly follow, with implicit zeal and confidence, as though the art of medicine could not receive any improvement, or that innovations were criminal.

If the boundaries of empiricism and rational, regular medicine were stated judiciously, those who follow any *beaten track* of medical practice without reflection on times, seasons, differences of constitutions, ages, sexes, &c., wherever educated, deserve the denomination of *quacks*: those who prescribe remedies with the most satisfactory reasons improved medicine affords, merit alone the appellation of *regular physicians* *.

Other

* No sensible regular physician can suppose his knowledge or dignity consists in being educated at any particular university, college, or country; nor will any but those who have nothing else to recommend themselves assume importance on such a superficial foundation. The acquisition of knowledge does not depend on place, nor long residence in any learned seminary; but in the industry and mental endowments of the student, and a fervent inclination to avail himself of every opportunity of acquiring the practical as well as theoretical principles of the art. It must, however, be confessed, that large cities and hospitals are the grand scenes for the attainment of practical knowledge, when under the guidance of truly learned physicians and surgeons. For my own part, after reviewing almost every hospital throughout Europe, I am convinced the whole art of medicine is capable of much improvement; and I consider it the duty of physicians, in all countries, to be as ready, at any time of life, to receive, liberally, instruction as to diffuse useful knowledge. I differ totally from those learned gentlemen who are displeas'd at being inform'd of what they did not before understand.

These

Other exceptionable practices.

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| <p>1. Bleeding.</p> <p>2. Nitrous or other improper gargles.</p> <p>3. Vomiting.</p> <p>4. The detention of patients in bed.</p> <p>5. Blistering.</p> <p>6. Promoting perspiration by James's powder, tartar emetic, &c.</p> <p>7. Checking purgings suddenly by opium.</p> <p>8. Not cleansing the ulcers of the throat.</p> | <p>9. Suffering the patients to sleep.</p> <p>10. Not freely admitting fresh air.</p> <p>11. The giving animal broths, milk, beef tea, jellies, &c.</p> <p>12. Volatiles.</p> <p>13. The depending upon inefficacious remedies.</p> <p>14. The not administering the bark, &c., on the first appearance of the disease.</p> |
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Necessary Remedies.

Laxatives.

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| <p>1. Antiseptic laxatives of senna.</p> <p>2. Tamarinds.</p> <p>3. Cremor Tartar.</p> <p>4. Tincture of senna,</p> | <p>5. Infusion of chamomile flowers and senna.</p> <p>6. Compound powder of senna.</p> |
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These observations are intended for those medical practitioners who build their reputation and affect dignity on the fame of the school, college, hospital, or professor, from whence they received their education, as though preceptors or places were accountable for the abilities of scholars.

Gargles.

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| 1. Gargles, composed of elixir of vitriol. acid or spirit of sea salt and water. | tincture of bark, and camphor julep. |
| 2. The tincture of roses, &c. | 4. Vinegar and sage tea. |
| 3. Tincture of myrrh, | 5. Currant jelly, or currant juice with water, &c. |
| | 6. Red port and water. |

Antiputrescent remedies for internal use.

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| 1. Bark in powder. | 8. Acid elixir of vitriol, from 10 to 15 drops in a dose. |
| 2. Aromatic spices or powdered ginger. | 9. Sweet elixir of vitriol, from 40 drops to one dram and a half. |
| 3. Extract of bark in cinnamon water. | 10. Hoffman's anodyne mineral liquor, from 20 to 60 drops. |
| 4. Huxham's tincture of bark added to mixtures. | 11. Camphor. |
| 5. Decoction of bark with the acid of vitriol. | 12. Bitter spirituous tinctures. |
| 6. Powder of snakeroot with the bark. | |
| 7. Tincture of snakeroot. | |
- These rarely necessary,

Drinks.

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| 1. Tincture of roses *. | 5. The acid juices of fruits with water. |
| 2. Water acidulated with the acid of vitriol, or spirit of sea salt. | 6. Currant jelly dissolved in water. |
| 3. Lemonade. | 7. Orange juice and water. |
| 4. Cremor tartar dissolved in water, called Imperial. | 8. Red port, or red port and water, negus, &c. |

* This composition has been recommended in putrid diseases above an hundred and sixty years. Poterius says, "Usus est in febribus putridis, cor exhilarat, & ardorem febris compefcit, fit etiam extinguit."

Remedies to remove or counteract the causes of purgings.

1. Powder of rhubarb, to 20 or 30 grains.

2. Extract of logwood, dissolved in simple cinnamon water, two drams of the former to six ounces of the latter.

3. Japan earth, powdered, in cinnamon water, two drams to six ounces.

4. Dulcified elixir of vitriol to a tea-spoonful and half, with any of the before-mentioned compositions.

5. Hoffman's anodyne liquor to 60 drops in simple cinnamon water.

6. Opiates, if absolutely necessary.

Domestic management.

1. Purifying the air of the room.

2. Removal from the infected place, or to an upper airy part of the house.

3. Fumes of vinegar.

4. Explosions of gunpowder.

5. Burning of Frankincense.

6. Burning of Benzoin.

7. ——— Pitch.

8. ——— Resin.

9. ——— Shavings of yellow Saunders.

10. ——— Tobacco.

11. ——— Lavender, rosemary, &c.

Other regulations in the sick chamber.

1. Patients to sit up as much as possible.

2. Linen to be daily changed.

3. Bed curtains to be taken down.

4. All woollen or cotton clothes to be removed.

5. Few visitors admitted.

6. All evacuations to be

immediately carried out of the sick room.

7. The room to be kept cool.

8. No broths or animal diet whatever to be admitted.

9. Sleep never to be long indulged.

10. The mouth and throat to be frequently gargled.

Foods,

Foods, or aliments.

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|-----------------------|-------------------------|
| 1. Panada, with wine. | 7. Barley pudding. |
| 2. Sago. | 8. Roasted apples and |
| 3. Salep. | bread. |
| 4. Simolina. | 9. Any acid fruits with |
| 5. Tapioca. | bread soaked in wine. |
| 6. Rice. | |

These remedies, or foods, are to be occasionally prescribed, excluded, or varied, according to the judgement of medical practitioners: every one has a just right to administer whatever, in repeated instances, may have been found salutary, only recollecting, that all septic medicines are improper in disorders of a putrid nature, and that single instances of success ought never to be a guide for general practice.

The treatment of children in the ulcerated Sore Throat.

As the disease frequently infects children, a mode of cure should be adopted, in which, though the general principles may be the same as in the adult, yet some deviation is expedient.

Children abound commonly with acidities; milk composes the principal part of their food; therefore neither the vegetable nor mineral acids

are so proper as the bark, given in powder, mixed in milk, or a solution of the extract of bark in simple cinnamon water.

Children cannot gargle : in some, the ulcers may be touched with acids ; in others, not ; therefore the intestines should be occasionally emptied with *pulvis rhei*, *pulvis e sena compositus*, or such like laxatives. In other respects, all the precautions and general methods of treatment are useful.

After the disorder has terminated favorably, while the patient feels debility in a convalescent state, the bark, steel preparations, air exercise, and a restorative nutritious diet, should be prescribed.

If any hectic complaints, as night sweats, consumption of body without cough or ulcerated lungs, flushings or heat after meals, slow irregular nervous fevers, &c., should attack the patient, the causes are, in general, a tendency to scirrhoty in the liver, mesenteric, or other lymphatic glands *, an obstruction in the mouths of the lacteals, from laxity or stricture, so as to hinder nutrition, pervert secretions, excretions, and digestion ; vitiate chylication, or sanguification.

* These I have frequently found in the dissections of those who have died of hectic complaints, unattended with pulmonary consumption, &c., after putrid and other fevers.

In laxity, steel preparations, joined with bit-
ters, admirably succeed; but in glandular scir-
rhosities, or obstruction, the mineral altera-
tives, such are cinnabar with antimonials in
small doses, Æthiop's mineral, Plummer's pill,
or from a quarter to half a grain of washed
calomel, every night, or two or three times a
week, with or without some bitter laxative of
the aloetic kind, bid the fairest to remove the
causes.

It may be observed, however, that mercu-
rials alone do not so effectually remove ob-
structions in the lymphatics, or resolve scir-
rhous lymphatic glands, as when combined
with sulphur, or preparations of antimony:
this fact has been many years proved by abun-
dant experience.

Thus have been delivered free sentiments on
a disorder that has lately proved fatal in va-
rious parts of England, particularly in and about
London. If the doctrines advanced be judici-
ously and candidly applied, they may become
very useful, and preserve many lives.

When the malignant sore throat appears, it
should be immediately cured, by which the in-
fection will be much prevented from spreading;
because it is not so contagious while recent as
when suffered to continue and increase its pu-
tridity several days, in hopes of a remission of
the

the febrile symptoms, or a crisis. The former method prevents, the latter promotes, the malignant contagion. By the old treatment, it is likely to ravage through families, towns, and cities; by the new, individuals only suffer, and mankind in general are preserved. There is great reason to conclude, that a similar practice, and preventive method, would effectually check every species of putrid disease, and perhaps the plague itself.

A brief Account of the Phrenitis Maligna, or new Species of acute Madness, which has lately prevailed.*

1. The patients are seized with a species of delirium without fever.
2. They talk wildly, expressing false fears, and describing false images of the mind.
3. No heat, thirst, discoloration of the tongue, cold shiverings, or any other febrile symptoms appear.
4. Sometimes they are melancholy; at others so obstreperous as to require three or four persons to hold them.
5. The pulse is never, or rarely, quick, but,

* This disorder has not been described by Sauvages, Lieutaud, Cullen, nor any other nosologist.

on the contrary, is depressed, and slower than usual; some have beat so slow as forty in a minute.

Bleeding shewed the blood not to be in an inflamed, but lax state; and, if repeated, did manifest injury.

Evacuations of vomiting, sweating, and purging, answered no purpose, except to lower the patients, and prolong the disease.

The disorder appeared so similar to a maniacal affection, which is a delirium without fever, that the straight waistcoat was, in some instances, proposed, or the removal of patients to a mad house.

It differed, however, from the true inflammatory phrenitis, being destitute of fever; and from madness, because it has happened to numbers, and terminated in a few days.

From many circumstances, it appeared of the putrid kind, absorbed from putrid *miasmata*, and determined to the brain and its membranes.

The remedies, which have cured the cases I have seen, are, camphor in large doses, and, after a proper laxative, the *cortex Peruvianus*.

If any future observations should occur, it will be considered a duty to communicate them to the Public.

A D V E R T I S E M E N T.

THE PUBLISHERS beg Leave to inform the Public, that the following Publications, (the major part of which perished in the late unfortunate fire at E. NEWBERRY'S) written by Dr. ROWLEY, will be reprinted as speedily as possible :

I. A Treatise on Female; Nervous, Hysterick; Hypochondriacal, Convulsive Diseases, Melancholy, and Madness, &c.; in which the causes of these complaints, and the methods of cure are explained in a new manner.

II. A Treatise on the principal Diseases of the Eye; containing an hundred and sixteen affections of that useful organ, with the manner of restoring sight in many cases without operations, &c. The third edition; the first of which was published in 1769; now illustrated with many improvements.

III. The Gout alleviated; containing the manner of preparing baths with tepid water and the muriatic acid, as practised with great success at Paris, &c.; with observations on arthritic complaints, and causes assigned why, in general, they are incurable. Second edition.

IV. Medical Advice to the Army and Navy; containing the diseases of hot climates, putrid fevers, fluxes, &c.; presented to His Majesty in 1776. Second edition.

V. A Treatise on the Diseases of the Breasts of Females; with the new manner of alleviating or curing cancerous complaints. Third edition.

VI. The Causes of Death in Child Bed investigated.

VII. Letters on the dangerous Tendency of Medical Vanity: occasioned by the Death of a noble Lady; with the remarkable cure of a cancerous ulcer of the Womb and Rectum, and the prescriptions, &c. Second edition.

VIII. A

A D V E R T I S E M E N T.

VIII. A Treatise on Diet adapted to different Constitutions, Rank in Life, &c.; on the Adulterations of Foods, Wines, &c.

IX. Seventy-four select Cases in the Cancer, Scrophula, &c.; with some few instances of restoring Sight by internal Remedies. Second edition.

X. Observations on the new and extensive Use of metallic Alteratives in chronic Disorders, their Preparations, &c.

XI. A Treatise on the Cure of old Ulcers of the Legs without Rest; with the prescriptions, and new improvements. Fourth edition.

XII. A Treatise on the Gonorrhœa; or, The mildest Method of treating the Venereal Disease, &c. Third edition.

XIII. The State of Medical Practice of all the Hospitals in Europe, with the newest Improvements of each; collected in several Tours through France, Italy, Germany, Flanders, Holland, &c., between the years 1764 and 1786.

XIV. *Schola & Historia Medicinæ Universalis nova*; a work in Latin, comprehending all the branches of medicine, with the newest discoveries.

Forty copper plates are already engraved for this work; specimens of which may shortly be seen at C. NOURSE'S, Strand; E. NEWBERRY'S, Ludgate Hill; and T. HOOKHAM'S, New Bond Street.

