

A treatise on the principal diseases of the eyes; containing a critical and candid examination of the antient and modern methods of cure, of the present defective modes of practice, with an account of new, mild, and successful methods for the cure of diseases of this organ / By William Rowley.

Contributors

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A
T R E A T I S E
ON THE
PRINCIPAL DISEASES
OF THE
E Y E S ;

CONTAINING A
CRITICAL AND CANDID EXAMINATION
OF THE
ANTIENT AND MODERN
METHODS OF CURE,
OF THE
PRESENT DEFECTIVE
MODES OF PRACTICE,
WITH
An Account of New, Mild, and Successful Methods
for the Cure of Diseases of this ORGAN.

By WILLIAM ROWLEY, SURGEON.

L O N D O N :
Printed for F. NEWBERRY, the Corner of St. Paul's
Church Yard.
MDCCLXXIII.

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PRINCIPAL DISCIPLINES

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N. B. Mr. Rowley has been obliged to postpone
this last publication, on account of the many discoveries
he has made, and is constantly making on this nice
chirurgical Operation, all which have escaped the no-
tice of other Operators of justly esteemed merit.

E R R A T A.

Page 5, line 8, Of the Address, for reasoning has, read reasoning have.

9, l. 6, Erase hu-

3, l. 3, Introduction, for have, read has.

12, l. 21, For ingenuous, read ingenious.

40, l. 1. For improvements, read improvement.

143, l. 12, For infemal, read infernal.

150. l. 22, Put a parenthesis after the word glasses;

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

Mr. Rowley begs leave to acquaint the public, that he has removed from St. James's street to Castle-street, Leicester Fields.

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A N
A D D R E S S
T O T H E
R E A D E R.

TH E R E have been many Treatises written on diseases of the Eyes, but the principal defects, in all the authors of those productions, have been owing to a want of knowledge in the other branches of medicine. For this reason, those who have been merely operators on the eyes, have ever been ignorant of the medical treatment necessary to perfect the cure; and physicians, who have written on the subject, have been frequently ignorant of the operative part, the anatomy, and even the distinguishing characteristics of these diseases *. The following Work, it is hoped, will supply these defects, as it not only comprehends the general practice of both antients and moderns, but likewise new observations, arising from many years close attention to practical facts; particularly these last two years, at an hospital opened for the relief of persons afflicted with

* This may be proved from the writings of many authors of merit in other respects.

these

these and other diseases *. Though this charity did not meet with that success which I could have wished, it furnished me with great opportunities to make the justest observations on practice, having commonly between four and five hundred objects under cure. The first part of the following work contains a general review of the antient and modern practice in the inflammation of the eyes, with the methods of cure for the different species of inflammations, which I have reduced under four general heads. I then proceed to the more compound diseases, as the ulcer, opacity of the cornea, and gutta serena. These are the principal disorders which require medical treatment, and the whole is illustrated with cases selected from extensive practice. In these I have not endeavoured to mislead the unskilful by false relations, but have candidly given an account of my ill, as well as good success in practice. I must observe, that this work is not so much calculated for private persons, as for practitioners in physic; for no person who does not previously understand the anato-

* St. John's hospital for diseases of the eyes, legs, and breasts.

my of the eye, can conceive my meaning in many parts of this Treatise; and, in the physical treatment, unless they understand the practice of medicine, they cannot apply those rules with advantage which I have recommended. I have not presumed to write particular recipes, but have given general rules, which every person versed in the science of medicine may apply with success; for there are such various circumstances in every case of disease, and so many things necessary to be considered, before we prescribe, that any rational observer cannot, with propriety, recommend particular medicines. A physician must regulate his ideas by the unbounded variety observable in nature; the temper, physiognomy, diet, exercise, particular propensities, all the mutual relations of the symptoms, and every thing which corresponds in nature to clear to us the cause of a disease. We are then to draw our conclusions from past observations on the effects of medicine, in the same or similar disease, and we ought to well know the practice of the antients and moderns. These observations will clearly shew the ignorance of applying one remedy to various

rious constitutions in the same disease; and will prove, that a medicine may be salutary to one, and injurious, if not fatal, to another. I have, in several parts of my work, censured the misapplication of what is called theory in the practice of medicine; and as some may imagine that I would insinuate, that the liberal sciences are unnecessary in this profession, I must declare, that I entertain the highest respect for every branch of learning, and learned men. It is not the sciences I condemn, but their misapplication to the cure of diseases.

I consider many modern discoveries of great use in the whole practice of medicine, but I would not have any depend on such knowledge alone in the cure of diseases; but, on a close observation on the effects of remedies, on a knowledge in anatomy, and a thorough acquaintance with the different constitutions to be observed in nature.

The antients had their sects of philosophers, the peripateticks, sophists, platonists, and others who depended on artful reasoning, bold affirmations, and plausible
infe-

inferences ; and the moderns have produced a set of men equally prejudiced. We have had the mathematicians, mechanicians, chemists, and other sects of adventurers in physic, who have boldly defended the most erroneous opinions, by logical subtilties. Within these last fifty years, experiments and plausible reasoning has engaged the attention of the learned, and there are as many gross absurdities believed now (or affected to be believed) by the faculty as formerly. These methods of examining human nature, and diseases, have led men to vain hypotheses ; there is scarce any phenomena in nature, however intricate, which mankind, influenced by vanity, have not pretended to account for. But if we examine these productions with perspicuity, we must admit nothing but matter of fact, for this is a principle these labourers in experiments seldom reason from ; overturn the first principle, and the ingenious fabric is totally destroyed. Matters of opinion must never be admitted where the health of man is concerned ; and yet mere matter of opinion supports the greatest part of the modern theory of medicine.

cine. I believe it will be allowed, that whatever admits of a doubt, cannot be proved true by any reasoning ; if therefore the first principles of any science are doubtful, the inferences are likewise so. I know that many dull labourers in science (reputedly learned) conclude a man ignorant, who cannot have faith in their exalted notions and prejudiced whimsies. But, whatever may be the opinions of such puerile philosophers, I hope that every sensible man would rather wish to appear ignorant in the opinion of the heavy dull chemist, mechanical contriver, mathematical calculator, and fabricator of experiments, if he can but cure the sick, and secure the friendship of penetrating, learned, and sensible men.

When we have made experiments on the bones, bile, blood, pancreatic juice, &c. we can say, after our analysis or experiments, that the bones, &c. are composed of such particular elementary bodies. But what inference can we draw from such ingenious enquiries? Can we cure diseases of the body by a knowledge of such phenomena? Can we investigate causes
and

and effects? Do such ingenious enquiries lead us to any certainty in the cure of diseases? If not, what is their use? To perplex the ignorant, render the superficial vain, and make the real learned in physic* conceive an utter contempt of all such fantastical pretensions, which are frequently used by the crafty, as a mysterious cloak for their ignorance.

What have all the systems and various experiments on the nerves produced? Have all the inhuman cruelties, exercised on living animals, explained the influence of the soul on the body, or the body on the soul, by means of these organs? Have they led us to cure nervous diseases? No; we are as ignorant as formerly of the nerves, and the cure of nervous diseases. We know no more, than that particular remedies produce particular effects in various diseases; that a dose of opium will produce convulsions in those who are very susceptible of

* By the real learned in physic, I do not mean those who are confined to any particular branch, as the study of anatomy, chemistry, &c. &c. but those who well understand the sciences, and their application to medicine; who have had practice in every branch in physic, who have drawn their conclusions from repeated experience in practice, and who can behold nature in her various forms without prejudice.

tender impressions, and exceedingly delicate; that the same quantity may be salutary, and allay irritation in other habits. But no experiments, or reasoning in physiology, chemistry, mechanics, or mathematics, have proved this. We know it from experience, by the effects opium produces in the living body, and by our having applied this remedy in various diseases. The same may be observed in the application of all other efficacious remedies *.

If we really understood the nervous system, we might naturally expect to be able to cure madness, palsy, convulsions, grief, fits, delirium, &c. but will any honest physician assert, that he can cure these diseases? No, on the contrary, he will always confess his fallibility and uncertainty of knowledge in these, and many other things in nature, above the bounds of human comprehension. None but the vain, superficial, and ignorant practitioners, pretend to

* I would not mean to have experiments suppressed in medical researches. The confining any branch of learning, at the expence of our understanding, to explain the phenomena in nature, and the operations of medicine; and forcing our experiments (however remote to our subject) to support any prejudiced doctrines, is what I think justly deserves our censure.

cure these and many other diseases, equally doubtful. Mankind in general are more fond of those who flatter their hopes, and soothe their desires, than those who honestly declare their opinions with circumspection, from a consciousness of the inequality of human abilities to many things in nature: it is therefore most certain, that both quacks and regulars prosper in proportion as they are capable of plausible deceptions; and as they can accommodate themselves to the caprice and humours of mankind. It is very common to see the ignorant, as well as the real learned physician, arrive at great practice. The ignorant man of physic will depend on self importance, mental reserve, and a solemn affectation to gravity; but men of liberal sentiments, despising all low artifices, depend on their abilities. A cringing address to the great, and a mean condescension to the vulgar, will secure the respect of the major part of mankind to the unlearned practitioner; whilst an utter abhorrence of artifice, and a contempt of servility, characterises the great and generous mind. We know how incapable mankind in general are of judging things from appearances, I shall therefore leave every one to draw his

his own conclusions from the foregoing observations.

If we ever produce an indisputable theory for the practice of medicine, it will not be founded on the principles of mechanics, mathematics, hydraulics, or uncertain experiments; but on just observations, drawn by experience from nature; from a thorough knowledge in anatomy, and by the real effects which remedies produce on the living body. But I am persuaded that we can never arrive at any certain theory, nor shall we ever be able to practise with success on any fixed principles. For to confine the operations in the animal œconomy to any fixed or narrow principles, we must first make all men alike in sentiments, diet, propensities and constitutions; but as all men vary in their tempers, opinions, sense, pursuits, and habits, so must the practice of physic conform to a thousand circumstances, which will immediately overturn our vain pretensions to any fixed principles. Let us lay down rules for diet, exercise, or any other human actions, we may expect the same success, as though we were to advise all men to be noble in their sentiments, and to be conformable to the strictest rules
of

of morality. To view nature clearly, we must not think to develope her mysteries by artificial aids in many instances, such attempts are often as visionary as the pursuits of enthusiastic and deluded chemists. We must not think, that all the unbounded laws in nature, can be confined to the narrow limits of our capacities. We should first, as Mr. Locke has justly observed*, examine the narrow limits of human understanding, and not let our imagination govern our judgment; for we can arrive but

* “ If by this enquiry into the nature of the understanding, I can discover the powers thereof, how far they reach, to what things they are in any degree proportionate, and where they fail us; I suppose it may be of use to prevail with the busy mind of man, to be more cautious in meddling with things exceeding its comprehension; to stop, when it is at the utmost extent of its tether; and to sit down in a quiet ignorance of those things, which, upon examination, are found to be beyond the reach of our capacities. We should not then perhaps be so forward, out of affectation of an universal knowledge, to raise questions, and perplex ourselves and others with disputes about things, to which our understandings are not suited; and of which we cannot frame in our minds any clear or distinct perceptions, or whereof (as it has perhaps too often happened) we have not any notions at all. If we can find out how far the understanding can extend its view; how far it has faculties to attain certainty; and in what cases it can only judge and guess, we may learn to content ourselves with what is attainable by us in this state. LOCKE on Human Understanding.

at few facts, and when we reason from any other principle, the imagination may ever lead us into error; for, however a warm imagination may be necessary for a poet, or, however delightful are its reveries, it must never govern us, when we consult the health of man.

I have here freely communicated my sentiments on a subject, which the more prudent and reserved part of mankind may condemn me for; but if these unfavourable truths are condemned by those learned men who appear to wear the fetters of science, such men will never disquiet me; I will invariably pursue the plan, which, I flatter myself, has engaged the attention of my whole life. To detect ignorance and error, however veiled or disguised by artifice; and to endeavour to make some improvements in the profession. How far I have already succeeded, I shall submit to the judgment of the learned*.

* This address only contains some loose observations; I intend hereafter to explain myself more fully on these important subjects; and shall endeavour to prove how far the sciences are applicable to the art of medicine.

INTRODUCTION.

THE preservation of the organ of vision is of the utmost consequence to mankind, and though this assertion will gain universal assent, it is certainly true, that improvements in the cure of diseases of the eyes have been much neglected by men of learning in all ages. Some writers mention this with concern, but we do not find them exerting their genius to remedy the evil. Physicians have remained idle spectators, whilst illiterate pretenders have assumed a knowledge in the cure of these diseases, which can be only equalled by their flagrant impositions and ignorance*. They have been consulted and encouraged at all times, and many are the ill consequences which have ensued

* One oculist in this town orders snuff for the cataract, gutta serena and opacity of the cornea; and I have lately known an instance of a foreign oculist making use of a charm applied to the forehead, under pretence of curing a credulous lady of the gutta serena; many such impositions have ever been, and are daily practised.

from the neglect of men of science, and the enterprising ignorance of empirics.

I shall begin my observations on the regular practitioners, and account for the cautious advances of the antients by the prudent maxims of the moderns.

Physicians and Surgeons must have either thought, that the treatment of diseased eyes was brought to perfection, or that they hazarded their reputation in attempting the cure of diseases so obvious. For mankind in general are judges in these diseases from ocular demonstration, and have the power to praise or condemn the physician in proportion as his practice proves successful or unsuccessful. This prudential regard to reputation, has done considerable mischief, and cannot be too much discouraged; how contemptible does either physician or surgeon appear, when they recommend the afflicted either to the physical treatment, or chirurgical operations of itinerant oculists. Yet, as this is too much the practice in this enlightened age of science, it is not to be wondered at in those ages which passed in darkness and superstition.

Thus

Thus from a neglect on the one hand, and chicanery and fraud on the other, the cure of diseases of the eyes have not been improved equally with other branches of surgery. From this source are derived the many absurd applications handed down to us by superstitious tradition, there being scarce a family in any part of the world without some wonderful specific and infallible nostrum for the eyes, which they indiscriminately prescribe in all the diseases of this important organ.

An infatuation has prevailed amongst mankind, that to become eminent in any particular branch of physic, a man must make that branch his particular study. I will venture to affirm, that a man of a narrow or contracted genius will make no advances or improvements in any branch, though he apply to it with indefatigable industry during his whole life; and, in the practice of medicine, all the branches are so mutually connected, that practitioners in any branch cannot be too well acquainted with the whole art. Unless a man has a genius adapted to this profession, and takes such a delight in it, as to sacrifice all

other pleasures and private considerations for its promotion, there is but little probability of his having either knowledge or success; there is such a variety in nature, and life is so short, that either physician or surgeon will find sufficient employment during life, if they discharge their duty with that disinterestedness and love of mankind, which ought to be the distinguishing marks of their characters.

The OPTHALMIA, or inflammation of the eyes, is a disease of the conjunctiva, or (according to some authors) other membranes of the eye, and, in proportion to the violence of the inflammation, so has the disease been considered dangerous, or easy of cure.

This general definition is sufficient to answer our present purpose, which is intended for an explicit account of the ancient and modern practice of cure in the ophthalmia.

We find Hippocrates ordering, in the cure of inflamed eyes, large draughts of wine, bleedings, bathings and fomentations of simple herbs to the parts affected. Internally, he prescribes purges, but he thinks emetics highly improper.

The

The writings of Celsus prove, that his clearness of conception surpassed those who went before him, and are striking instances of the great improvements which had been made in the science of medicine in that flourishing empire of Rome ; for there can be no doubt, but physic and surgery made considerable advances and improvements under those great encouragers of learning ; and, in proportion to the luxury of those ages, so must the practice of physic have been found necessary, and consequently encouraged.

The works of Celsus are worthy of admiration, both for the good sense of the author, and the concise manner in which he has delivered his thoughts. He made, or recites improvements in the cure of the ophthalmia, which does him great honour, and his doctrines, if attended to, must have been of considerable consequence.

Beside the remedies made use of by Hippocrates, he orders abstinence and frequent purgation. In inflammations of the eyes, attended with pain and tumor, he orders the patient not to use either solids or fluids, to refrain from speaking, and even forbids

forbids the use of water. He directs plentiful bleedings, if the vessels in the forehead are turgid, and the body plethoric; and orders us to observe, that as the inflammation of the eyes abate, the quantity of food is to be gradually increased.

Galen has written much on the subject, but the most material parts of his practice may be comprised in a few words; he says he cured violent inflammations of the eyes in an hour, by profuse bleedings; the quantity which he took from patients in this disease amounting to four pints; he likewise practiced arteriotomy, and his external application to the eyes was the white of an egg, mixed with water, or such like mucilaginous preparations.

Internally, he orders various purges to act on the different humours of the body.

This is the general practice to be found in the antients; nor from their times was there any considerable improvements made in any part of the world, in those ages which succeeded the decline of the Roman empire; for mankind were influenced either by a false ambition of conquest, or a
super-

superstitious zeal for religion, which led one part to a total neglect of every thing learned, and the others to an utter contempt of every thing which did not tend to the promotion of religion, or their own private interests.

I must observe, that the practice of the antients in the opthalmia, far excelled that of the moderns. There is a consistency and simplicity which well deserves our notice, and this arose from practical observation, joined with a clearness and solidity of judgment. It were to be wished, that the moderns had imitated and improved the art of physic, by the same means that the antients acquired their knowledge. For though a great part of the antient theory was founded on false principles, yet it is not an improbable conjecture, that they never believed in their theory, any more than a sensible physician does in many of our modern hypotheses. Mankind have thought it necessary, in all ages, to make a mystery of their knowledge, and have often covered their ignorance, by assuming a specious shew of profound learning, or
by

by an ingenious invention of perplexing intricacies.

I shall now examine the more modern authors, and consider them in two views, those who have only given the practice of their times in their general treatises on physic, and those who have written expressly on the subject. In the first we may observe a servile imitation of Galen, though in different parts of their works we find something new gradually creeping into practice, which is not much to our purpose, as they are of no importance in the cure. But as a lively instance of the ignorance of one of the most eminent men of his time, I must not omit the imposition which one Burrhus made on Bartholinus. He so far imposed on his credulity, as to actually make him believe, that he could restore the humours of the eye, when evacuated*.

Those authors who have written expressly on the subject, have made a practice of

* Vide epistolam F. J. Burrhi, Cl. D. Thomæ Bartholino, in appendice ad Armamentarium Chirurgicum Sculteti.

multiplying diseases of the eyes, and have been lavishly profuse in their remedies. Instead of following that simplicity which nature observes, and which is the surest guide in practice, they have diverted the attention by a number of useless refinements and distinctions; and have rendered confused a true idea of the diseases and cure*. Besides this unintelligible obscurity in their writings, some affect to secrets, which (they say) would not be to their interests to reveal; so that their works are strongly tinged with the spirit of quackery, produced from mean, sordid, and pecuniary motives; but these observations will be more fully explained, when I treat on the present methods of cure in particular.

If a practitioner strictly conforms to the most received opinions and common methods of cure, his genius will ever be confined. And it requires the strongest efforts to eradicate the many false principles and chimerical notions, which we most commonly find in the junior practi-

* Maitre jean, Kennedy, Platner, Brisseau, St. Ives, Mouchart, &c. &c.

tioners in phyfic. In practical obfervation, and I do not doubt fuccefs, the antients excelled the moderns in the practice of phyfic. But then the moderns have reasoned philofophically, mathematically, chemically, and mechanically on the caufes and cure of difeafes. And though a great part of thefe reasonings are vague and uncertain, yet they have been received with the greateft avidity at different periods, and fupported with a folemnity of countenance, as though they were the moft pofitive facts.

Whether reasoning plaufibly on difeafes, and often lofing fight of nature in the moft fimple of her operations, according to many of the moderns, or curing difeafes in the fimple manner of the antients be preferable, I fhall leave every one to determine.

But I muft obferve, that if the time which the moft celebrated authors in phyfic have beftowed, in idle difputes and vain conjectures, had been employed in making practical obfervation, I am pofitive, that the practice of phyfic would not have been fo uncertain as it now is, but would have arrived at a great degree of per-

perfection. I have been led into these observations from finding, that in the modern authors on the diseases of the eyes, there is the same affectation to account for causes and effects, which we find in the other branches of phyfic for this last hundred years.

I am concerned to find men of learning in the profession employing their whole time in useless pursuits, and even despising or neglecting the study of anatomy, which certainly lays the foundation of all true medical knowledge. All the improvements which have been made in surgery owe their rise to anatomy, and that servile imitation, which may be observed in the practice of phyfic, is frequently owing to a want of knowledge in this useful branch of science. The most considerable improvements in medicine have chiefly arose from practical observation on the effects of remedies: and I believe, that all future improvements of consequence will be produced by a thorough knowledge in anatomy, and an unprejudiced and close attention to practical observations. I shall therefore de-

liver it as my opinion, that plausibility of reasoning, however countenanced, unless supported by facts in practice, will never be regarded by those men who search after truth, and who draw their conclusions with clearness and precision.

If we examine the different theories which have been advanced and received by the medical practitioners in this age, the disputes between Haller and others ; and when we reflect, that a part of the doctrines of that great man Boerhaave are universally rejected, the whole of theory will amount to this ; that it is an ingenuous display of human invention, drawn from many curious experiments, and applied with a plausible chain of reasoning to the cure of diseases. A great part being matter of opinion only, will ever be liable to change, according to the fancy of every new and ingenuous contriver. It may be observed, that though the theory of medicine has suffered many changes, yet it has had no sensible effect on the practice ; and we find in the antients, and our own countryman Sydenham, with
many

many others, a practice which will probably bear the test of all future ages.

For though I must acknowledge, that a great part of the present theory is more rational than the former, yet I am far from being perfectly satisfied with it, or prejudiced in its favour. It must be remembered then, that whatever I have advanced in the following work, which comes under the denomination of theory, may be liable to many objections. I therefore do not deliver it as matter of fact, but as only my opinion on the subject. For, as most theories are built on conjectures, I shall be insensible to whatever objections may be started against mine, nor would I attempt to defend a subject so uncertain, which perhaps must ever remain controvertible.

A RE-

A
R E V I E W
OF THE
METHODS OF CURE
IN THE
O P T H A L M I A.

IN this Review I shall not enter into a minute detail of either the theoretical refinements, or useless distinctions in the cure of the ophthalmia, which are to be found in the French authors, for they seem to be the effect of a volatile and lively imagination, and could not have arisen from solidity of judgment, or just observations in practice. Nor shall I follow that heavy dull tract which may be observed in some of the German authors, who are profuse in their divisions and subdivisions, and are tedious beyond description. I shall attend closely to that practice, which is in universal esteem in Europe; in this I shall not dwell on particulars unworthy of notice, but shall reduce the general practice under particular heads, and endeavour to review them with impartiality, though

though at the same time with the utmost freedom.

The first and most common remedy is bleeding.

Bleeding is certainly a sovereign remedy in the opthalmia, as in all other inflammations ; but to produce good effects we must be profuse in this evacuation ; for no advantages in the cure will be obtained by small bleedings ; however, the quantity ought to be regulated by the habit of the patient, and violence of the inflammation.

The next remedy to be considered is purging.

Purges are of service in the cure, and in some constitutions are absolutely necessary. To prevent the formation of chyle, or to carry it through the intestinal canal, is of considerable consequence in the cure of inflammations. Purges, by preventing the chyle from entering the lacteals, and by forcing our aliment quickly through the intestines, greatly contribute to deplete the vessels, and depletion is a principal object in the cure of the opthalmia. But drastic purges are highly improper,

proper, for these acting with violence, do often quicken the blood's motion, and increase irritation.

Lotions of brandy and water, astringents of the vitriolic kind, sacch. saturn. dissolved, and such like remedies, are constantly prescribed in the cure of the opthalmia.

The principal means by which these applications have been introduced into practice, are from the great ease which succeed their use; for both physician and patient are often happy, if they obtain ease by any means. A great number of eye waters, to which have been attributed wonderful effects, when we examine their composition, and are not prejudiced by common report in their favour, we shall find just the contrary of answering any end in the cure. Some are highly superstitious, others dangerous, and notwithstanding the great encomiums to be found in authors, and the great reputation they have gained from vulgar error, all astringents, and such applications are useless in the cure of the opthalmia.

Spirituous applications are highly improper in all inflammations; brandy and water is not calculated to cure an inflammation in any part, but particularly the inflamed membranes of that nervous organ the eye. However, less mischief will arise from this application than from astringents, although I believe they act on the same principle in a less degree. It is most certain, that astringent collyriums give temporary relief, and greatly alleviate the acuteness of the pain; this is performed by constricting the vessels, which is the known property of these remedies. Thus removing the cause of pain, by suppressing the increased discharge, the painful sensations cease for a time; but this temporary relief, however agreeable to the patient, is not lasting. For the motions of the eye gradually producing the return of a fresh discharge, as that increases the pleasing sensations, which arose from a cessation of pain, cease; the astringent effect of the lotion is soon destroyed, and the acute smarting pains return. This will happen sooner or later, in proportion

as the inflammation is more or less violent, and then the patient naturally repeats the use of the collyrium.

There is a great variety in nature, and likewise in the same disease, for one lotion will seldom agree with two persons, though to all appearance under the same circumstances of disease. So that the strength and other properties of the lotion is always best determined by the patients themselves in the ophthalmia, as they are certainly the best judges of what gives them ease. Many derive all their happiness from such feeble aids, and are constantly changing their lotions during life. From this cause we find the afflicted always praising and recommending to their friends some invaluable specific water to cure the diseases of the eyes; and from the same source we have that great number of eye waters, not only to be found in dispensatories and medical writers, but in almost every family, under the pompous title or patronage of some great name.

It is a common opinion, that in local diseases, topical remedies are only necessary; this may be true in some cases, but

but not in inflamed eyes. The inefficacy of this practice must evidently occur to every one, who will without prejudice observe their effects in the inflammation, which continues a number of years.

I believe it will be allowed, that if friction be applied to an inflamed part, that it will irritate, cause pain, and heighten the inflammation. This is always the case in the ophthalmia, for the eye is constantly moving in its orbit, and a saline fluid is ever discharging. The more violent the inflammation is, in proportion will the motions of the eye and the discharge be increased, as may be observed when the eye is irritated by any extraneous body. In order to illustrate my objections to lotions, let us conceive an inflammation on any external part with excoriation, the cure is easily performed by external applications alone. But if a constant friction be applied to the inflamed and excoriated part, and a saline fluid, such as the eyes secrete, flow constantly over it ; under these circumstances the cure will be obtained with difficulty ; so that beside the

difference of the eyes being more irritable than other parts, when we attempt the cure of the inflammation, we have many difficulties to surmount, which do not occur in the simple inflammation of any other part of the body. The motions of the eye, and the constant discharge, must therefore render all astringents useless. Indeed it would be a difficult matter to prove them of any consequence, or to ascertain their effects in the cure, for bleeding, purging, and other remedies, always accompany their use. In the recent inflammation when not violent, bleeding and purges will prove the cure, without any other assistance whatever; and if the inflammation is violent, the cure will entirely depend on the skilful administration of proper remedies internally, an exact regimen, &c. in which cases we may naturally suppose astringents may do mischief, and retard the cure; but this will be more fully explained, when I come to treat on the method of cure which I have found the most successful.

Were we to follow that simplicity which nature directs, we should never apply astringents

gents to stop a discharge except in an hæ-morrhage and other particular cases. In inflammations, where a serum is ouzing through the skin, as in some cases of the erisepalous, it would be thought imprudent, if not dangerous, to stop a discharge by astringent applications. In the opthalmia, I consider the increased discharge as nature's efforts towards effecting a cure, which would often be accomplished without any remedies whatever, were we not to counteract those wise intentions by injudicious applications. Disease has been defined to be nature's effort, to throw off whatever causes disagreeable sensations, and this is probably the case in this increased discharge from the eyes. Then how absurd is that practice, which opposes these salutary intentions.

The strongest argument I can bring against these applications are facts, which I constantly have under my care from all parts, at St. John's hospital. Here we see many living witnesses, who prove the impropriety and uselessness of such applications. Some have inflammations which have remained in one state above twenty years,

years, in which cases these remedies have been constantly used during the whole time. Others apply with opacities of the cornea, and various other diseases, some of which are incurable. I am concerned to find, that many of these miserable cases have arisen, in all probability, from the injudicious treatment, not only of empirics, and that great number of private persons, who ignorantly boast of curing diseases of the eyes, but frequently from the mistakes, or neglect of regular practitioners.

I should not have dwelt so long on this subject, had I not found it absolutely necessary to discountenance the indiscriminate use of such injurious remedies, which often occasion irreparable evils. The diseases of the eyes are of too great consequence to be trifled with. Errors in practice in other diseases often admit of remedies, but a small error in the treatment of diseases of the eyes is often succeeded by blindness.

The next remedies I shall consider are the application of ponderous powders, as the lap. tut. cerus. ppt. lap. calaminar. &c.

I must

I must observe, that what has been advanced against astringent applications, may be repeated on the use of the drying ponderous powders, with this additional circumstance. The powders being insinuated between the globe of the eye, and lower lid, a constant irritation is often produced, and in consequence the inflammation is more obstinate and violent.

Solutions of sal. ammoniac, common salt, and lime water, have been separately used as lotions.

These applications are absolutely cruel, they put the patient to exquisite torture, and produce no good effect whatever. By what means such injudicious remedies were ever introduced into practice is not easy to determine; but they seem to belong to those chimerical notions, which a delusive knowledge in chemistry inspires, to those who cannot draw happy conclusions from their experiments. In short, one would be inclined to imagine, that some fiend had exerted his genius to invent such inhuman tortures, for the destruction of the most useful and sensible part of man.

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The diet, by the generality of authors, is directed to be very low.

This doctrine cannot be too implicitly followed, the best remedies will prove ineffectual, unless assisted by the most exact regimen. I shall however extend this observation when I treat on my method of curing the ophthalmia, and the operation for the cataract.

If bleeding, purging, a lotion, and low diet should not succeed, then are blisters applied behind the ears, between the shoulders, and to the whole hairy scalp, which by some are ordered to be perpetual.

Blisters are of no essential service in the cure. In advancing this I shall not escape censure, as this practice, like many other prejudices in physic, is well supported by custom. Though were we to imagine blisters necessary, if a cure can be obtained without their use in a much shorter time, which I shall prove, I appeal to the sense and humanity of every practitioner, if he would use them.

Blisters are applied in these cases on the doctrine of derivation and revulsion, which

which doctrine has undergone the fate of many others, supported by some, and condemned by others. Blisters may be useful as a stimulant, when nature requires them toward the crisis of acute diseases; they may likewise have their advantages in the rheumatism, and some other morbid affections. But in the ophthalmia, where there is already too much irritation, they may be dispensed with, and the patient spared from such torturing and useless applications.

It is common to apply leeches to the temples, and to the inner canthus of the eye.

Bleeding with leeches is attended with very great advantages in the cure, and particularly to children in those inflamed eyes, which accompany or succeed the small pox.

Sternutatories are recommended.

Sneezing is highly improper, as it accelerates the circulation, and consequently increases the inflammation. But I have seen a great number of instances, in which a modern oculist has prescribed snuff, not only in inflammation, but in the gutta serena,

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cataract,

cataract, and even opacity of the cornea. The success attending this practice has been equal to the ignorance and absurdity of the attempt; but this must occur to every sensible practitioner with the least knowledge in the nature of these diseases.

Plaisters of pix. burgund. and mastich have been thought useful.

Such applications will not bear criticism, as their insignificance may strike every practitioner at first sight.

Cupping and scarrifications are ordered in the neck.

Whatever are the good effects produced by these methods, bleeding will in general answer the same end. I always prefer the last, as the least complex, and most certain.

Scarrifying the conjunctive membrane is likewise a common practice.

This injudicious and cruel practice was introduced by an English oculist at Paris*, who made a great secret of his method. From his time it has been in considerable esteem. The contriver of this extraor-

* Woolhouse.

dinary practice, availed himself of the credulity of mankind, and amassed considerable sums by its novelty. He boasted of it as a discovery of the utmost importance * ; and this induced several practitioners in Europe to make trial of its effects, after Platner of Leipzig had written an elaborate treatise in its favour. Before this method of Woolhouse was made public, different methods of scarifying the conjunctive membrane had been used. Some employed a thistle, others a steel rasp, and others the pumice stone, or *sepiæ* †, &c.

The instrument used by Woolhouse was beards of barley or rye made into a brush, and rubbed with force on the conjunctive membrane, either that part which lines the lid, or the *Albuginea*. After the operation, to prevent an adhesion of the parts, he applied a barley corn, two or three seeds of clary, or some gold-beaters skin; this is the process of the operation.

* *Dissertationes scavantes & critiques de Woolhouse,*

† *Hippocrates, Celsus, and Ægineta.*

The severe pain, occasioned by an instrument with many sharp points, rubbed with violence and swiftness on so sensible a part as the eye, may be easily imagined, by persons not of the most exquisite feelings. When I reflect, that such practice is not attended with any advantages, but that on the contrary it has occasioned blindness, I am filled with horror at the many victims, who have been sacrificed by this inexpressible cruelty. I have seen this method tried repeatedly, and other methods of scarrifying the conjunctiva, but ever without success. In some it has produced a fever, attended with violent pains in the head, a delirium, and many other disagreeable symptoms*; one remarkable case I shall here relate, which I lately had under my care.

A very agreeable young lady, had an inflammation in her right eye; her friends imagining it dangerous, applied to an

* I have lately seen an instance, where an eminent surgeon, attempting to scarrify the eye in an inflammation, evacuated the humours, and destroyed the eye.

oculist of reputation, who lives in town: he immediately magnified the danger, and proposed scarrification; at this time the young lady had her sight perfectly, and no doubt would have been easily cured by proper bleedings and internal remedies; but the consequence of this operation was a total blindness, for the whole transparent cornea became opaque, and makes a disagreeable appearance. I could only attempt the cure of the inflammation and pain, in which I have succeeded; but no remedy whatever will recover the sight of the eye.

The objections are many against this practice. It is unnecessary in the cure of the ophthalmia. Besides, if the points of this sharp instrument break during the operation, they must occasion the most intolerable racking pains, nor can they be extracted. I don't doubt but adhesions of the parts have ensued, though the authors are not candid enough to confess it. As those who have adopted the practice are very liberal in prescribing other remedies, I suspect, that the operation was often dispensed with, and only a parade made of performing it to enhance

hance the merit of the cure, and what success has been attributed to scarrification, has been chiefly owing to the other remedies made use of. Scarrification has been recommended by Mouchart and Platner as useful in all disorders of the eyes, as wound, cataract, pterigium, hypopyon, staphiloma, and the like *. Here they have carried their pretensions too far, as every one acquainted with the anatomy and diseases of eyes must be convinced of.

Issues, setons, and caustics behind the ears have been recommended; the last is the practice of some of the most eminent surgeons in town.

Issues and setons were made use of in the early ages †, upon a presumption of diverting the discharge from the parts affected, and are used as the last resource.

I must observe, that in the recent ophthalmia, either issue or seton are unnecessary. I shall proceed to examine their importance in the habitual ophthalmia, and here shall attend to facts alone. Those who have had inflamed eyes many

* Vid. Mouchart et Platner dissert. de scarif. oculorum.

† By Hippocrates, Galen, and others.

years, in which there is constant irritation and discharge, we most commonly find with either seton or issue; from this circumstance it plainly appears they do not effect a cure. If it should be advanced, that they cause a less discharge from the eyes, or produce any good whatever, this can only be conjecture, and by no means whatever can be proved; for to say a remedy relieves a disease, when we have no demonstrative proof in its favour, does not deserve a serious refutation.

Practitioners have preached up the great danger of healing issues or setons, when the patient has been used to these discharges any length of time. The patients are under the greatest apprehensions on this account, though there is no doctrine in physic more erroneous.

I think it cannot be proved, that the seton or issue is of any essential service in the cure; and those patients who have had inflamed eyes many years will confirm this. I must declare positively, that no danger, or any ill consequences, attend the sudden healing of an issue or seton, as I can prove by some hundreds of instances.

stances. In the essay which I published in 1769, on the cure of ulcerated legs without rest, I have mentioned the insignificance of issues in preventing a relapse after the cure, I can now with certainty declare decisively on that subject. The received opinion is, that a translocation of matter will ensue, and attack the brain, or the lungs, produce a diarrhæa, fever, or that some other dangerous consequences will arise from the healing of the ulcer if habitual. In answer to which, I shall only mention facts. Since the publication of that essay, I have cured some hundreds of the most inveterate and habitual ulcers, from five to twenty or thirty years standing. I have always immediately healed up the issues, and have never made an issue after the cure; no ill consequences have succeeded, nor have the ulcers thus cured broken out again, agreeably to the prejudiced doctrines to be found in authors. I have not advanced this, as many have done in cases of the same nature, from having success in a few instances only; on the contrary, I am convinced of it after many years extensive practice;

practice ; few I believe have had more remarkable cases for trial, and none greater success.

I have only mentioned these particulars to shew, how necessary it is for practitioners not to build their faith too steadily on many prejudices to be found in practice ; nor is it adviseable to embrace new doctrines, but with the greatest prudence and circumspection.

The ung. tutiæ, powdered vitriol with butter, and Sir Hans Sloane's ointment, I shall range under one class.

As to the butter and vitriol, it is so analogous to the astringent lotions, that I shall only observe it to be more dangerous ; the vitriol not being dissolved, and greasy applications seldom agreeing with the eye in an inflamed state.

The ointment of Sir Hans Sloane was kept a profound secret many years ; and said to be of use not only in inflammations, but in the opacity or films of the cornea, the cataract, and many other diseases of this organ. Some authors have said so much in its favour, that we might be led to believe, it would be im-

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possible

possible for any person to have an incurable disease in this organ, after such a noble remedy had been made public. But we are taught by experience from many living witnesses, that it is not only ineffectual in promoting the cure of the diseases mentioned, but is absolutely in many cases injurious.

To prove this, I shall not descend to examine the particulars of this liniment, as I have already given my opinion concerning the powders. I shall only mention one part of the composition, which is the adeps. viper. Every practitioner of experience must have observed the effects of greasy or oily applications to the eyes, as they always occasion great irritation and pain; so that it can only be serviceable to the edges of the lids, if any virtue can be allowed it. As to its being useful in the cataract, opacity, of the cornea, &c. they who believe it, must be very ignorant of the diseases of the eyes.

According to the directions of Sir Hans Sloane, when this liniment was used, he always prescribed bleeding, and other powerful remedies. So that it requires
no

no small sagacity to ascertain what part of the cure was effected by the liniment; though had it been of such consequence as was believed, many of the other methods which accompanied its use must be allowed superfluous.

Poultices of various sorts have been used. Poultices are highly improper, and do considerable mischief. More injuries have been done the eyes, and more persons have been blinded by the injudicious use of poultices, than all the other methods joined together; they promote the formation of abscesses between the laminae of the cornea, which ends often in that species of blindness, which no remedy whatever can recover. There is not an incurable case out of a hundred patients who apply to St. John's hospital, in the opaque cornea, but has been owing to the imprudent application of this remedy; but I shall more freely treat of this subject hereafter.

These are the general methods made use of in the cure of the ophthalmia; there are many more, but so absurd, that I shall pass them over unnoticed, as they do

not require criticism, as the blood of a pigeon, oil of linen, infusion of eye bright, boring the ears, and wearing earings, urine, &c. &c.

After examining the methods of practice, both antient and modern, the following observations occur.

The practice of the antients was exceedingly simple, and that of the moderns very complex. The antients cured by large bleedings, purgings, simple inoffensive applications to the parts, and a strict regimen.

The moderns have neglected, or but slightly attended to those methods by which the antients proved successful, and have introduced a series of cruel applications, which, instead of curing the disease, have often caused blindness.

In the cure of inflammation of the eyes, there has not been a single remedy since the time of Celsus, which is not either insignificant or injurious. Authors have written more for their own private interests, than from any intentions of serving mankind. This may be seen by their writings, where we find an endless multiplying

plying of diseases. St. Ives makes sixty-five; Maitre Jean is lavish in accounting for causes and effects in diseases of the eyes; Platner has been very profuse on the scarification of the conjunctive membrane, and strongly recommends a destructive operation. The authors likewise affect to secret methods, which they reserve to themselves. St. Ives and others say, if a man bestows proper time and attention, he may arrive at the most hidden secrets in curing these diseases, but do not inform us of these secrets. This is sufficient to show their want of candour, and on what principle they published their elaborate treatises. They might as well have advanced nothing on the subject, and mankind might then have been spared many cruel torments. From their writings they appear not unlike the race of secret chemists and projectors, amongst whom is the famous Basil Valentine, he, after giving a process in chemistry, in inexplicable terms, finishes with this pious observation, "If heaven reveals to you by supernatural means what I have related (for I have been very explicit) you may consider

consider yourself one of the elect; if not, you may content yourself in ignorance, for you can never arrive at any knowledge in secret chemistry". So, if we can conjure out the cure of diseases of the eyes, we may think ourselves happy; if not, we may sit down contented in a state of ignorance, for any advantages which are to be found in these modern authors.

I would not have it thought, that I am insensible to many absurdities of the antients; my veneration does not rise so high for either antients or moderns, as not to discover their faults; many superstitions to be found in the antient theory, no argument whatever can defend. But many of the later systems are equally erroneous, and reflect no great honour on the moderns. The learning of the antients was confined to a few individuals. The moderns, with the advantages of printing, have diffused their knowledge to most parts of the world; and though we far excel the antients in the knowledge of many sciences, if we examine the present state of physic, we have no great reason to boast of our improvements. For, when

when we except a few medicines, which have been introduced by chance, by empirics, or otherwise, where are the improvements in curing diseases? It may be observed, that every medicine of efficacy, and the great improvements in anatomy, have always been warmly opposed by the most learned, eminent, and regular practitioners; and we always find them the last in promoting improvements, or curing the sick out of the common dull tract. Whether this arises from envy, vanity, or negligence, it has been often productive of fatal consequences.

I shall conclude this part with hopes, that regular practitioners will unite their endeavours to improve the treatment of these diseases. We have seen what a state the treatment is in at present; and the many impositions of foreign oculists and others to the disgrace of all learning. I would advise those who attempt to make improvements, to never use complex remedies. If they would wish to try any new remedy, let them depend on that alone, by which means its utility will be ascertained. I am fully persuaded, that whatever

ever improvements is made in this or any other branch of physic, it will depend on simplicity. Complex practice produces complex arguments for its support, but simple practice and facts will support themselves against all opposition.

The

ON THE
OPHTHALMIA.

THE Ophthalmia, or inflammation of the eyes, most commonly arises from external causes. These causes may be various, as a sharp cold wind blowing strongly, and rushing with force, when confined between two streets. This happening in winter, sometimes causes sudden blindness. Some instances of this I have seen where the crystalline lens has become suddenly opaque. I lately performed my operation for the cataract on both eyes at one time, and restored to sight a poor man at the hospital, who became blind in this sudden manner, and is a remarkable instance of the great effects which cold air may have on the organ of vision. Extraneous bodies lodged between the lids and globe of the eye, are often the cause of inflammation.

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Blows

Blows with a stick, or any other external violence, will likewise produce inflammation. But it may be observed, that the greatest number owe their origin to the first cause, though authors consider the ophthalmia as arising from some pre-disposing cause in the blood; as viscidities, acrimony, acidity, fermentation, rarefaction, &c. This may be seen in the writings of Maitre Jean, St. Ives, Morgagni, Hoffman, Haller, and many more. These opinions may be considered doubtful, for, though the authors speak very positive on the subject, they have given us no proof of the truth of their assertions. We find nothing more in these notions, than what is common in other branches of physic; authors accommodating themselves to the prevailing theory of the times, while some, neglectful in thinking for themselves, receive the doctrines and conjectures of others as positive facts. These speculative opinions have had considerable effect on practice, or I should not have mentioned them. And I think we have no occasion to seek for remote causes, when we have those

those before us, which may strike our senses as indisputable truths.

Without entering minutely into the causes, we can always discover by our sight, and the patients feelings, when the eyes are inflamed. The causes being of no great consequence, the many distinct inflammations to be found in authors are useless. I shall therefore consider an inflammation of the eyes, from whatever cause arising, when in its first state, as a simple inflammation. In this view it must be remembered, that I except those arising from a venereal or scrophulous cause, which I believe are the only internal causes of inflamed eyes to be met with in practice.

SYMPTOMS of the recent OPTHALMIA.

THE first symptoms are pain, and an increased discharge, for which the patient naturally rubs the part, and the irritation and discharge increases. As these increase, the inflammation and pain become more violent, and the eyes cannot bear the rays of light. Sometimes the

inflammation is attended with great heat, and the upper lid is considerably thickened and œdematous ; but this most commonly happens when the inflammation has arisen from a blow, or the Small-pox. The vessels in the conjunctiva, which before only admitted lymph, are now preternaturally distended and filled with red blood. If the inflammation is very violent, then the albugineous part of the conjunctiva is considerably thickened, and the transparent cornea appears sunk, in proportion as the conjunctiva projects. This state of the inflammation has always been considered the most dangerous, and is known by the name Chemosis. In some cases the vessels are ruptured. When the eyes are thus violently inflamed, as a reason for not being able to bear the light, authors have imagined, that the retina was inflamed, but this cannot be proved ; and it is more probable, that the choroides is the cause of this symptom, as it is exceedingly vascular, and more likely to be inflamed, which can be proved by anatomical preparations ; sometimes the discharge

charge is so great and acrimonious, as to excoriate the under lid and cheek. And the most violent pains in the head often accompany inflammations of the eyes.

PROGNOSTICS.

Inflammations of the eyes when recent, however violent, if judiciously treated in the beginning, are in general easily cured. But if the disease is trifled with, or improper remedies administered, then is the inflammation rendered dangerous, and often succeeded by a total blindness.

Before I proceed to the method of cure which I practice, it will be necessary to explain the principles on which I act.

PRINCIPLES.

1. A distension of the minute vessels, in an exceeding nervous and vascular membrane, will cause pain.

2. When pressure and constant friction be added, the irritation will be more violent.

3. If

3. If the vessels are kept distended with a fluid, the effects will continue.

OBSERVATIONS *on the* PRINCIPLES.

1. That the conjunctiva is both vascular and exceedingly nervous, is beyond dispute. As a proof of distension, let any one examine the eye when inflamed, through a magnifying glass, and vessels which do not appear in the healthful state, will be then found considerably enlarged in their diameters, full of red blood, and on the utmost stretch; that this distension causes pain, we need only appeal to the feelings of the patient.

2. That there is a constant pressure and friction of the parts, I believe will be granted. The eye is continually moving in its orbit, and gently pressing against the lids; and if the conjunctiva is considerably thickened by the inflammation, then will the pressure be increased. That this pressure and friction on the inflamed parts increase the inflammation, is obvious, the irritation must therefore be increased, and the pain more violent.

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This may be proved from practical observation ; for the inflammation which at first is trifling, if left to nature, will in a few hours become intolerable, from the acute smarting pains. It is this constant pressure and friction that is the cause of that difficulty which has been observed in the cure of the habitual ophthalmia, and ulcers of the eye-lids.

3. It is most certain, that if the distension of the vessels is the cause of irritation, and if the vessels are kept distended with a fresh supply of fluids, the effects which the distension produces will most probably continue. The common practice in the cure of the ophthalmia will prove this; for if the inflammation is violent, the common methods of cure are often tedious or ineffectual, even where depletion is liberally used. For, though the patient may be forbidden the use of all strong diet, yet he is allowed to drink plenty of thin diluting liquors, as a great part of these liquids probably enter the lacteals, the vessels will be kept distended ; for even water will distend a vessel equally with any other liquid,

liquid, and the only difference which I have been able to observe between weak fluids, and those of a stronger nature, is the heat which the more strong liquors produce. So that depleting the vessels is not only necessary, but we must prevent them from filling, or all our attempts to cure the ophthalmia, if violent, may prove ineffectual.

From the foregoing principles and reasoning, the method of cure, which I have practised with success, will be easily investigated. But I must here observe the distinct division of the different ophthalmias; which are,

The recent ophthalmia, arising from any cause.

The habitual ophthalmia of many years standing, arising from the small-pox, measles, or from the recent ophthalmia, not being originally judiciously treated. This commonly affects the eye-lids.

The venereal ophthalmia.

The ophthalmia arising from a scrophula, or king's evil.

These

These four will be found sufficient to answer every intention of cure. In the recent ophthalmia it is of no consequence whether it arose from dirt, blow, or any other cause, as the methods of cure must in general be the same.

The habitual ophthalmia requires a distinct treatment from the former, as I shall hereafter explain. The venereal and scrophulous ophthalmia require likewise a particular treatment; and first I shall begin with the cure of the recent ophthalmia.

On the CURE of the OPHTHALMIA.

THE cure of inflamed eyes will depend on the removal of extraneous bodies, depletion, proper internal remedies, and a strict regimen.

In the removal of extraneous bodies, no violence ought to be used. It is much more preferable to leave the extraneous body, than by repeated fruitless attempts to irritate the parts, and increase the inflammation. The most useful instrument in removing extraneous bodies, is a fine hair pencil, dipped in
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any innocent mucilage, which for this purpose ought to be very viscid. If it should be impracticable to remove it by carefully applying the point of the pencil, I generally leave it to be excluded by the motions of the eye, at the same time often applying some mucilage, by gently pressing it out of a syringe into the internal canthus.

D E P L E T I O N.

Repeated bleedings are of singular service in the cure of the ophthalmia. We can scarce be too profuse in this evacuation in plethoric habits; the quantity must be regulated in proportion as the inflammation is more or less violent, considering at the same time the usual diet of the patient. In children I prefer bleeding in the jugular to any other vein, as a large quantity of blood may be drawn from this vein with the greatest certainty.

REGIMEN and MEDICINES.

Depleting the vessels will not alone avail in the cure of the ophthalmia, if violent.

It

It is necessary to keep them in a state of depletion. This may be effected by two means, either by giving laxatives after every meal, or by the patient strictly avoiding the use of fluids. The first of these methods is inferior to the last, as constant purging will greatly relax the tone of the stomach and intestines, and injure the viscera in general. I never order laxatives, unless the patient will obstinately persist in the use of a free diet. The last method is the most eligible, as it hastens the cure, and raises no irritation in the body. Half a pint of some innocent liquid, during the whole day, is fully sufficient. The grand point in the cure is to prevent fluids from entering the lacteals; the stricter this is observed, so much the greater will be the success; and, as a substitute for liquids, the patient may use oranges, apples, or any innocent fruit.

As depleting the vessels, which are preternaturally distended by the disease, is the first step towards a cure; so is it reasonable to prevent a fresh supply of fluids, or this depletion is useless. In all inflammations, where very minute vessels are af-

fectcd, as in the pleura, intestines, &c. this practice of profuse bleeding will be found most successful. In the pleurisy large bleedings are universally known to effect a cure; but in the inflammation of the intestines this operation is too often neglected in the beginning, and the disease proves fatal, from the sudden mortification which succeeds the inflammatory state of the disease. I have observed, that large bleedings and abstinence, with very little assistance from medicine, have proved very successful in inflammatory fevers. It is a matter of doubt with me, whether those large quantities of diluting liquids, universally prescribed by physicians in inflammatory fevers, is so rational a practice as an abstinence from fluids; but this I must leave time and experience to determine. I have only mentioned it as a hint for those practitioners who can discern the defects in practice, and who depart from the common received opinions when not attended with success, in search of improvements.

The internal medicines necessary in the cure of the ophthalmia, are such as are supposed

posed to enter into the minutest vessels; saline preparations are to be given in large doses, and often repeated, and when necessary, may be joined with gentle laxatives. Antimonials and mercurials are likewise to be administered in some cases which are obstinate; but the generality of patients, with the recent ophthalmia, will be cured by the strict regimen which I have directed, and the common cooling remedies.

This method of practice will be found successful in the recent ophthalmia, when not attended with any other indisposition of the body, as the scrophula, or the lues venerea. It must be observed, that if these methods fail of success after two or three days, some other plan of cure should immediately take place. For an obstinate perseverance in an erroneous practice may soon cause irrecoverable blindness. I have observed, that a very great relaxation has succeeded these evacuations in weakly habits, and the inflammation has continued apparently as violent as in the first state. When this has happened, the cortex peruv. proves the sovereign

reign remedy. In other obstinate cases I have found mercurial purges, and alteratives most successful.

From the foregoing it appears, that the tone of the vessels may be so much injured by excessive distension, as to be incapable of contracting, after profuse evacuations, to their original diameters. This laxity in the fibres does but seldom happen to those of robust habits, but in those who live temperate, and in very delicate constitutions, this relaxation succeeds the inflammation, and ought to be particularly attended to, or our attempts to cure the disease may prove fruitless. Here we may observe, that if astringent lotions can be of any service in the cure of the ophthalmia, it must be in the state of the disease just mentioned ; but I never place any dependance on them. Saturnine lotions are what I sometimes use in this state of the disease, joined with mucilage ; these greatly alleviate the excessive smarting, which an increase of the discharge, which is acrimonious, occasions. Internally, I prescribe the bark, and such like remedies, in large doses, and

and frequently repeat them; for if the bark be given in small portions, and at the distance of four or six hours, no good effect whatever will be produced. But the recent inflammation, which might have been cured by the methods I have recommended, may, by a mistake in treatment, degenerate into an obstinate and habitual ophthalmia.

In the recent ophthalmia, the external application which I prefer to all others is a lotion composed of gum arab. dissolved in water. The quantity of gum necessary in this solution must be regulated by the patient's feelings, the violence of the inflammation, and the discharge from the eyes. If there should be a great discharge, and that so acrimonious as to excoriate the under lid, then may a greater quantity of the gum be used; but if the discharge is small in quantity, the contrary should be observed. The best method of applying this remedy is on the point of a fine hair pencil to the inner canthus of the eye, and the motions of the eye will dispose of it equally on the surface of its inflamed membrane which it lubricates, and in general produces
pleasing

pleasing effects ; this innocent application may be repeated according to the urgency of the symptoms ; it is an useful palliative, and renders the patient much easier while the cure is performing.

In the healthful state, the fluid, which is destined for facilitating the motions of the eye, is slightly mucilaginous ; but in the increased secretion, arising from inflammation, this balsamic quality is destroyed. This is proved from its being so corrosive in some cases, as to excoriate the surrounding parts, and even produce ulcers on the under lid ; so that we only follow nature, when we supply the part with an artificial mucilage. Whenever the wise intentions of nature are defeated by disease, we should endeavour to imitate that simplicity which nature observes when we supply the defect ; for the more we are acquainted with the laws of the animal œconomy, and the more strictly we observe simplicity in the practice of physic, so much the greater will be our success.

I cannot too strongly recommend the most immediate and powerful assistance in diseases of the eyes. Mistakes in the
cure

cure of most other diseases often pass undiscovered, or admit of reparation. But inflammations of the eyes often elude all the common methods of cure, and a supuration ensuing, the humours burst externally, in consequence of which the patient must remain in darkness, without any prospect of ever being restored to sight. Hence will appear the absolute necessity of surgeons well understanding the practice of physick, and the method of curing these diseases. But I must with concern intimate, that it often happens through want of attention, that many practitioners, and even authors of merit in other respects, have not understood the anatomy of the eye, and consequently much less the diseases of that noble organ. This has arisen, in all probability, from authors following the doctrines of others (an idle practice too common in the fabricating physical treatises) without exercising their own reason and judgment, to discover truth from error: or, from that great encouragement, which is given to those who pretend to skill in the cure of these diseases.

I shall illustrate the practice which I have recommended by a few cases, which will clearly prove the necessity of a rapid cure in this disease, and the success attending the methods of cure which I have advanced.

OBSERVATION I.

A Case, where, by the Delay of proper Assistance, an incurable Blindness succeeded.

MR. R. a country gentleman, riding in the cold air in turning the corner of a lane which led to his house, a strong confined stream of wind blew directly in his face. He did not immediately perceive any ill effects, but in a few hours he felt a violent pain in his eyes, which the next morning was succeeded by an inflammation. Various applications were applied for two or three days without success; upon which he sent for a surgeon who lived in the next town, and desired his assistance. The surgeon immediately bled him, sent him a purge to be taken the next morning, and a lotion of the astringent kind to wash his eyes with frequently. Two days after
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the surgeon visited him again, and found that the inflammation was rather increased: upon which, in a few hours after, he was blistered on the back, his purge was repeated, and poultices of white bread and milk were ordered to be applied to the eyes. But these methods not being attended with success, he was, by the advice of his friends, removed to town, and put under the care of an eminent surgeon, who, with the advice of another surgeon and physician in consultation, ordered two caustics to be applied behind the ears, and a poultice composed of apples, bread, and camphor dissolved in oil, to the eyes, and bleeding and purging were again repeated. This method was persisted in for four days, but no very great success attending it, the gentlemen proposed to scarrify the eyes, but the patient being timorous, would not consent. After this, he went under the care of an eminent itinerant oculist, who immediately proposed to scarrify the eyes, which the patient, with much persuasion, submitted to, and accordingly it was performed; other methods were likewise used, as

frequent purgings, bleedings, and different lotions were applied to the eyes, and a blister to each leg. These methods not succeeding according to those sanguinary hopes, which the patient possessed himself with from coming to town; by the advice of another physician he drank salt water. A relation of his, who happened to be present at the hospital, at an operation for the cataract of a poor man, who had been sent out of the country, whom I restored to sight, related the case to me, and two days after, being desired, I visited the patient. Upon a minute examination of his eyes (for this was attended with some difficulty, owing to the swelling of the lids) I found that one eye had suppurated, and that the humours were evacuated. On the other eye I could perceive, that the whole transparent cornea was opaque, so that I could not flatter the unhappy patient with being of any service to him, and accordingly gave my opinion, that I could only cure the inflammation and pain, but that it was out of the power of any human being ever to restore him to sight. I began the cure

sure of the inflammation, and in about eight weeks effected it.

From the circumstances of this and many similar cases, for which I am frequently consulted, I am convinced, that the common methods are very defective. In such cases no time is to be lost, especially in plethoric habits; something capital must be done on the first days, or all our efforts afterwards prove useless. The following cases will give a clear idea of my practice.

OBSERVATION II.

A servant to Mr. Giles, butcher, Bloomsbury market, was recommended to the hospital for an inflammation of one eye. He was young, of a plethoric habit, and the inflammation was very violent; the whole transparent cornea appeared sunk from the excessive distension of the vessels of the conjunctiva. This sort of inflammation is called by authors the chemosis, and is the most dangerous of any. I ordered twenty-four ounces of blood to be taken from him, and administered the cooling remedies I have recommended in such

such cases. The next morning he was perfectly cured of this violent inflammation, without any other application whatever, and has continued well ever since.

OBSERVATION III.

Being a remarkable Proof of the ill Success of the common Methods of Cure, and is a lively Instance of the superior and sudden good Effects of the Methods recommended in this Treatise.

Nurse Savage, aged between fifty and sixty, who belonged a number of years to the Brownlow-street Lying-in Hospital, Drury-lane, in attending the duties of her office, caught a cold, which was immediately succeeded by a violent inflammation of both eyes. She was treated in the common methods now in use, leeches were repeatedly applied to the temples, purges were ordered, and a poultice was applied to the eyes, composed of white bread and milk, camphor, and sweet oil. One of the gentlemen ordered an astringent lotion, and I make no doubt, but that every method was tried according to the common

mon rules of art by the gentlemen belonging to the hospital, who are eminently distinguished for their abilities in their professions. However, all the assistance which this woman had, was not attended with success, and in about a month or more she totally lost her sight, and was rendered miserable, from the exquisite pain which attended the inflammation.

Being blind, and incapable of doing her duty at the hospital, she was discharged, and in the greatest distress imaginable led to me. On examination, I found the whole conjunctive membrane in both eyes violently inflamed and thickened, with an opacity of the cornea, which did not admit any rays of light. I immediately bled her, and ordered half a dram of the nitre to be taken every two hours, joined with the tincture of antimony and julep. *à camphor*, without any external application whatever, and these means were attended with amazing success, for in four days she so far recovered her sight, as to walk without any assistance to my house, and in four days after, she perfectly recovered the sight
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of her left eye, and the inflammation was cured in both eyes; but there still remains a partial opacity of the transparent cornea in the right eye, yet she can distinguish objects, and discern colours at this present time in the last-mentioned eye.

What is remarkable in this case is, that the eye, which is perfectly cured, had the poultice already mentioned only applied in the day-time, whereas the other had it day and night, which is a strong proof of what I have advanced on the impropriety of applying such external remedies to the eyes when in an inflamed state*.

OBSERVATION IV.

Mrs. A——, Great Queen-Street, Lincoln's-inn-fields, a lady well known in the

* At the Hospital this fact has been denied, the cause of this will be easily accounted for. What is a strong proof of the cure, she was admitted as a nurse to the Hospital, after I had restored her to sight, where she continued till the publication of my Essay on the Ophthalmia, and was then soon discharged, on account of the numbers who went to make enquiry of the case; however, the woman can be produced at any time, in vindication of what I have here advanced.

polite

polite world, and respected as an artist, was afflicted with a most violent inflammation of one eye; it was that sort which authors have distinguished under the denomination of chemosis, and is imagined to be the most dangerous. The whole conjunctive membrane was violently inflamed and thickened, the transparent cornea appeared sunk, and the sight of the eye was lost. That part of the conjunctive membrane which lines the lid, likewise hung over, and made a disagreeable appearance. The remedy I ordered in this case was the common saline mixture, joined with an antimonial tincture and nitre, which was taken in large doses, and frequently repeated: I would have bled, but the lady had some gouty complaints, and therefore I directed leeches to be applied to the temples. A gentleman, who met me to consult on this case, would fain have scarified the conjunctive membrane, but I rejected the proposal, as I have known it attended with dangerous consequences, such as violent pains in the head, and even a delirium. The success attending my method in this case was great, for in four or five

days we found the patient painting a fruit piece ; all the inflammatory symptoms had disappeared, and the cure was completed.

OBSERVATION V.

Ann Paylen, aged 70, Eagle-court, Strand, had been afflicted nine months with an inflammation of the eyes ; she had been bled, purged, and blistered without success, and had nearly lost her eye-sight. Upon her application to me I bled her, and ordered her a cooling remedy as in the last case, with an addition of nitre, which was attended with success ; all the red appearance which had continued for months, with the most violent distracting pain in her head, and a discharge which had rendered her miserable from its excessive sharpness, on the inflamed parts the whole time, entirely went off, and in seven days, by repeating the bleeding and medicine, the eyes reassumed their usual colour, and the woman declared she saw better than she had done for six or seven years ; this I imagine was only ideal, and must have arisen from the agreeable impression made on her mind in being restored to her sight.

OBSERVATION VI.

In the year 1766, Thomas Lyons, Newtoner's Lane, had a violent inflammation in both his eyes, and he being of a robust habit, I took from him twenty ounces of blood, at the first bleeding, the mucilaginous lotion was applied to his eyes, and I ordered him a calomel pill of three grains every night, and a nitrous mixture, with tinct. of antimon. in the day-time. This method, and repeated bleedings, in about six days effected a cure, and he has remained well ever since.

OBSERVATION VII.

A youth related to Mr. Bulmer, Great St. Andrew Street, Seven Dials, about four years ago, after the confluent small pox, had a most violent inflammation of the eyes, he had taken purges, and the other common remedies were made use of before I saw him, under the direction of the gentlemen at the Small Pox Hospital. On examination, I found that the conjunctive membrane was violently inflamed, and

the cornea so affected, as not to admit the rays of light. In this situation his friends had very little prospect of his ever recovering his sight. I began the cure by bleeding freely, and giving the cooling medicines and the lotion as in the other cases, which succeeded. In about a fortnight the inflammation had entirely subsided, but an ulcer was formed on one part of the transparent cornea, yet this was soon healed; a speck on the cornea remained some time afterward, but I gradually reduced that in the manner I shall hereafter mention. The youth at this time, has no obstruction in his sight, and lives at the same place.

OBSERVATION VIII.

A young lady, being overheated by dancing, imprudently going into the cold air in a state of perspiration, received a cold which affected her eyes with a violent inflammation. After trying, for two or three days, family receipts recommended by friends, they sent for their apothecary, who immediately took some blood from
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the lady, and sent a purge to be taken the next morning. The disease not being relieved, according to the expectations of the family, they had the advice of a surgeon and physician, who agreed to scarify the eyes; but this the mother, objected to, and declared, that she considered it dangerous to tamper with the eyes. This prepossession, which is almost universal, I really believe has often been productive of bad consequences, and has often prevented physicians from pursuing those methods of cure which their reason has dictated. I must confess, I have often found it necessary to behave very absolute, even in repeating the necessary bleedings in these cases. This happened in this case, for on my being consulted, and finding the inflammation very violent, I immediately proposed bleeding, which was warmly opposed by all the elder female relations. But persisting in my request, with great reluctance I was admitted to bleed the lady. She being of a plethoric habit, I took away at least twelve or fourteen ounces of blood, and ordered a saline draught to be taken

taken every hour, with abstinence from all other fluids. This method succeeded, and the inflammation was cured in three days. After the cure of the inflammation, a discharge still continued; this arose in all probability from the vessels losing their elasticity; upon which I ordered the cort. peruv. for a few days, and this accomplished the cure.

On

ON THE
HABITUAL OR CHRONIC
OPHTHALMIA.

THAT inflammation of the eyes, which has continued for a number of years, I call habitual. It most commonly arises from the recent ophthalmia not having been treated judiciously at its first commencement; or from the inflammation which accompanies the small pox and measles. The habitual ophthalmia seems not to have been rightly understood, for in the accounts of the disease and remedies, there is apparently a confusion and uncertainty, which strongly prove this. Nor have we any plan extant, in the writings of authors on the subject, which conveys a just idea of the radical cure of this disease.

SYMPTOMS *of the* HABITUAL OP-
THALMIA.

The symptoms and appearances in the habitual ophthalmia are various. Some have
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the lower lids turned outwards, making a very disagreeable red appearance. This is attended with a largedischARGE, which often excoriates the cheek and the adjacent parts. In other cases, besides the discharge, small superficial ulcers are formed on the under lid, and in some instances we have only an increased discharge. In this disease it often happens, that the patient cannot bear a strong light, particularly that from candles. The pain, which is acute in all these various degrees of the disease, is in proportion to the violence of the inflammation, quantity, and quality of the discharge. For I have observed, that persons of thin habits, who have a delicate sensibility, are more tortured by a discharge only, than others of more robust habits, who, to all appearance, have the inflammation in a violent degree. This clearly proves, that the same disease will produce quite different effects in the animal body, and that, in the application of medicine, we cannot be too minutely acquainted with all that variety of constitutions which may be observed in nature.

P R O G N O S T I C.

The radical cure of the habitual opthalmia is both tedious and uncertain ; for in the great number of cases which I have had under cure, not above five out of ten have been cured. But though the radical cure in many cases cannot be obtained, yet the disease may be so far relieved by proper internal remedies and regimen, that the patient's life may be rendered much happier than it could be, was the disease left to nature, or were the common methods now in practice only used.

CURE of the HABITUAL OPHTHALMIA.

THE methods of curing this disease which have been hitherto used, can only be considered as palliative. Perpetual blisters, setons, issues, and caustics applied behind the ears, with various eye-waters, compose the chief part of the common practice. I have mentioned my objections to these cruel applications. I cannot conceive how any practitioner can make use of remedies, which will appear evidently,

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if he uses his senses, to be useless. I have never seen one patient afflicted with the habitual opthalmia, without seton, issue, perpetual blister or caustic, and yet the disease has continued for years in one state. This is a demonstrative proof that no cure is effected by these means. I believe these applications are used in blind compliance with custom, perhaps to amuse the patient, and to keep up the appearance of doing something; however this may be, as they are not of any use, I think they ought to be expunged from practice in these cases. I am not at all unacquainted with the many plausible reasons which are used in vindication of these applications; but as those who offer them, perhaps, have not in the course of a year but few patients diseased in the habitual opthalmia, consequently they can form but a very indifferent judgment from practice. Besides, no reasoning can oppose facts. Facts of cures performed are what I have drawn my conclusions from, and can always produce numbers in defence of what I have advanced. I should not have said so much on this occasion, but from a principle of humanity. I really consider it very
cruel

cruel to use such torturing applications, when it is plain they are useless.

There are two methods of radically curing this disease, in those cases which are curable. The one is by the use of evacuations, and a cooling alterative course; the other by the bracing remedies. I shall endeavour to investigate with clearness how these different methods are to be applied, and to mark out the constitutions and particular habits which require these opposite methods of cure. The habitual opthalmia either arising from the small pox, or any other cause, in habits which have a natural tendency to plentitude, will, on examination, have a florid red appearance. This may be seen in the under lid, or in the albuginea, and sometimes this florid red appearance may be seen in the vessels of both these parts, which are preternaturally distended. In persons whose fibres are of a more delicate texture, especially those of a thin, nervous and lax habit, the habitual opthalmia makes quite a different appearance. In these, no such florid red is seen passing through the vessels, but on a minute examination

mination they are found to be distended with a fluid of a dark yellow tinge, nearly approaching to a brown. I have sometimes seen this fluid in the vessels of the albuginea, so much discolour that coat, which is naturally white, that it has appeared of a dark yellow. Another method of distinguishing these different species of the opthalmia is by the blood, which in those of a plethoric and robust habit will be found in a healthy state, and inclining to viscosity. But on the contrary, in those persons who have a delicate nervous habit, the crassamentum of the blood is most commonly found to be of a loose texture, and dark colour, with too great a quantity of serum. Besides these, the physiognomy may be consulted, which is no small guide in drawing just inferences of the constitution of a patient; and the manner of living ought to be enquired into. All the lower classes of people, who drink malt liquors, and all those who live freely, are in general of the plethoric habit. But those who live very temperate, and do not use exercise, who have a languid pale visage, are the reverse of those of a plethoric habit.

habit. It is on this variety in the constitutions of patients in the same disease, that these two opposite methods of cure are formed. It must be here observed, that far the greatest number are of the plethoric habit.

After what I have mentioned, concerning the different effects which the same disease has apparently on different constitutions, it will be no difficult matter for those, who are well versed in the science of medicine, to form the plan of cure necessary in those different cases. In those of a plethoric habit, bleeding may be used freely, with the saline remedies, and sometimes cathartics will be necessary. The medicines I use are calomel, in the dose of half a grain, or a grain, every night. Æthiop's mineral to some, particularly children, in full doses, and repeated three times a day : to the æthiops may be added nitre, from half a dram to two drams, according to the constitution and manner of living of the patient. These remedies must be persisted in for two or three months, or longer, or no cure can be expected. The diet is to be the same as in the recent opthalmia,

ophthalmia, particularly with regard to drinking small quantities of fluids; for on this circumstance the cure greatly depends, agreeably to the principles which I have advanced.

In the cure of persons of delicate constitutions, and under the circumstances already mentioned, the last practice is to be reversed. For in these cases, bleeding and the cooling remedies will render the disease evidently worse, and is discoverable in a few days. The remedies in the cure of this ophthalmia, are the cort. peruv. and corroboratives, which must be given liberally, and continued for a length of time. The same abstinence from liquids is to be observed in this, as in the other cases; but if the patient will drink, red wine ought to be preferred to any other liquor.

ON THE METHOD OF
TREATING THE EYES
IN THE
S M A L L P O X.

AS the habitual opthalmia arises frequently from the small pox, it will be necessary here to lay down some rules for the treatment of the eyes in this disease. For if these are attended to, many evils, which are originally owing to this ravaging disease, may be prevented. And here I cannot say too much in praise of that useful art of inoculation ; an art, which has been much improved in this country, and has been productive of the most happy consequences. What pleasure must result to every humane mind, when it reflects on the number of those whose vision has been preserved by this salutary practice ?

In the small pox it is common to keep the eyes closed till after the crisis of the disease ;

case ; this consequently must close up a great quantity of acrimonious serum, between the globe of the eye and lid. Every one conversant in the practice of surgery, knows the consequence of matter being pent up in any part, for it will often corrode and do considerable mischief. But when we reflect, that a quantity of serum exceedingly acrimonious in that morbid state of the fluids, which the small pox produces, is pressing on that delicate and nervous organ the eye, it is natural to suppose, that injuries will be produced in proportion, as that part is more susceptible than other parts. This we find true, by the ill effects which it evidently produces. For the small pox often occasions total blindness ; a species of blindness frequently out of the power of the medical art to cure.

As these ill consequences are produced by the eye-lids being closed for a length of time, if we frequently open the eye-lids during the inflammatory state of this disease, such ill consequences may be prevented. I always order the lids to be raised two or three times in the day ; and if
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the eyes are violently inflamed, bleeding in the jugular vein will be necessary, particularly to children. If this operation is impracticable, leeches are to be applied to the temples, and repeated in proportion to the violence of the inflammation. However, bleeding must be used cautiously during the different stages of the disease, for the purple petechiæ and other symptoms may forbid its use. If the upper lids should be swelled and œdematous, as is frequently the case when the inflammatory symptoms run high in the confluent small pox; then the eye-lids may be frequently fomented with warm water. Milk or any other fomentation is improper, as such applications most commonly cause irritation: and I have ever found, that the most simple applications in inflammations of the eyes have always proved most successful.

The internal treatment of the small pox till its termination, must be regulated by the physician according to the rules of art. But I am well convinced, that if large quantities of fluids are drank, although they be innocent, yet they will augment the inflammatory symptoms. I have

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therefore always ordered a very moderate quantity of liquids to be drank. After the crisis of the disease, I have cured the opthalmia in the manner I have directed for the recent inflammation. If the inflammation has continued any considerable time, then the methods which are recommended for the cure of the habitual opthalmia must be persisted in.

On the PALLIATIVE METHODS *of relieving the* HABITUAL OPHTHALMIA.

The palliative methods for this disease are applicable to persons far advanced in years, to those who will not adhere to the foregoing regimen and method of cure, and in cases which are absolutely incurable. Those persons afflicted with this disease, who are far advanced in life, and those in which the radical cure cannot be effected, may be considered in one view. For the causes which prevent the cure are evidently the same. The tone of the fibres is so much destroyed, as to have lost their power of contraction. The increased discharge (called also rheum)

rheum) arises from a greater quantity of the saline fluid being secreted than is necessary for lubricating the motions of the eye. This increased discharge not being absorbed, constantly causes irritation. That an increased discharge alone will cause irritation, is proved by the same effects being produced by a flow of tears from grief. The vessels then, having been preternaturally distended for a number of years, have constantly produced this increased discharge, and having lost their elasticity, cannot contract to their original diameters; on which, the cure of the ophthalmia alone consists. In aged persons the elasticity of the fibres are much impaired, and in cases which have arisen from the small pox, or measles, in infancy, and when the dilatation of the vessels have continued thirty or forty years, the prospects of cure are doubtful. So that in such cases, and in those wherein the radical cure has been attempted without success, the palliative method may be useful.

The palliative methods are, to observe an exact regimen, and occasionally to administer

minister the remedies recommended for the radical cure, with the use of proper lotions or eye-waters.

The regimen to be observed in the palliative method ought to be much the same, as that which I have recommended in the recent ophthalmia, and must be regulated according to the constitution of the patient. But as few patients will refrain from using their accustomed quantity of drink, their diet in general must be as innocent as possible, avoiding all stimulants. The internal remedies may be occasionally used which I have recommended, or a dose of salts and manna may be given twice in the week. In short, diuretics, or any method or remedy which will in some degree prevent an accumulation of fluids in the habit, will be found useful. The lotions or eye-waters of the astringent kind, though I consider them highly improper in the recent ophthalmia, may be used here with advantage. For, when we only attempt to ease the patient, without any prospects of completing a cure, I think every means justifiable to obtain that end, which will not injure the constitution. The lotions
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I use in these cases are of the saturnine kind, but I cannot recommend any in particular, as I have always found that the patient's feelings is the best guide for the regulation of whatever lotion is used. If the lotion is made too astringent, though it may check the discharge and give temporary ease, yet it will sometimes occasion an aching pain, and prevent the patient from bearing the light, If, on the contrary, it should not be sufficiently astringent, it will not answer any end in relieving the patient. The rule, by which I ascertain what eye-water will agree with any case, is by the quantity of the discharge; for if there be a large discharge, then may the lotion be made more astringent, and *vice versa*. In this manner may those persons who are advanced in years be greatly relieved, from the smarting which a constant discharge of the rheum occasions. And, in all other cases in which the radical cure cannot be performed, these methods will be found beneficial.

There is another method which I have lately invented to radically cure these cases. This is by an operation, and may be very
safely

safely practised. But as I have not had a sufficient opportunity to ascertain its utility, I cannot at present recommend it. Though from what success I have already had, it bids fair to take place of all the other methods ; when I am perfectly satisfied of its certainty, I will immediately communicate it to the public.

OBSERVATION IX.

A young gentleman of family, caught a cold by sleeping in a garden, which produced an inflammation in both eyes. Various methods were used for the cure by a neighbouring surgeon, as repeated bleedings, purges, blisters and lotions. By these means, and an exact regimen, the inflammation disappeared from the albugineous part of the conjunctiva, but there remained a redness on the lower lids of each eye. This redness continuing, and being accompanied with a discharge, which occasioned at times acute smarting pains, he was, by the advice of his physician in the country, ordered a seton in his neck. In this state the disease had continued near three years, but had, during this time,
grown

grown gradually worse. About two years ago he was recommended to be under my care. Upon examination, I could perceive three or four small ulcers on the under lid of each eye. He had a considerable discharge from the eyes, which constantly irritated the ulcers, and occasioned at times very acute pains, particularly by candle light. In the morning his eye-lids were so firmly closed, that they were with difficulty opened. He could not bear the day-light, particularly when the sun shone, and was obliged to wear a piece of silk over both eyes. He was of a sanguine habit, and of an athletic constitution, having been much used to the country exercises. I therefore at first bled him freely, and prescribed the cooling regimen and medicines, with gentle laxatives occasionally. A mercurial pill was taken every night, and he strictly observed as great an abstinence from liquids as possible. Externally I ordered the mucilaginous lotion, and forbade him reading, which he was fond of, although it always increased the discharge, and caused pain. Those methods were continued near twelve weeks, before
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any considerable alteration for the better could be perceived. At the time I found that the ulcers on the lid were healed. This induced me to encourage him to persevere in his medicines and regimen, which proved an absolute cure. He had taken the medicines from the time he first applied to me for eight months. Though for the last two months no visible appearance of his disease remained, nor did the strongest light in the least affect him. I continued the remedies for the last two months, gradually decreasing the dose, to prevent a relapse.

OBSERVATION X.

A remarkable Cure performed at the Hospital, being an Habitual Opthalmia, which had continued sixteen Years.

Edward Taylor, Ratcliffe Highway, had been afflicted with a discharge from his eyes sixteen years, originally owing to the small-pox. Many attempts had been made to cure this disease, but proved fruitless. The lower lids, which were of a florid red, were considerably thickened, turned
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outward, and forming a furrow, a quantity of the discharge was continually lodged on the part. This had occasioned at different times excoriations, and small superficial ulcers; some of which had been healed, as the cicatrixes could be plainly discerned. But as these little ulcers healed in one part, some other part of the lid always became ulcerated, attended with a very acute pain, from the constant flow of the discharge. The eyes could not bear a strong light, nor could he look at any minute object a minute, without a severe sensation of pain. He had been blistered repeatedly; caustics had been applied behind his ears, by the advice of an eminent surgeon; and he had a seton in the neck when he first applied at the Hospital, which had continued discharging near four years. This last remedy he innocently conceived contributed much to his ease, by diverting the discharge from the diseased parts, as his surgeon had informed him. Being of an athletic strong constitution and sanguine habit, I ordered at first frequent bleeding. The seton I directed to be immediately healed, which was effected in a few days. Internally

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he took a saline draught four times in the day, and a mercurial pill every evening. This course was continued eleven months, and proved the radical cure of this inveterate disease.

OBSERVATION XI.

A young gentleman, who had applied much to his studies, was afflicted with an habitual opthalmia. This disease had been gradually increasing for many years, and proving very troublesome, he applied to me for relief. In the day-time, particularly if the rays of the sun were strong, he informed me, that there was an appearance like flies floating about in the air. The discharge from his eyes was not great, but exceedingly acrid, and he compared it to scalding water. He was very thin, of a pale visage, and his nervous powers seemed to have been much exhausted by his intense application. That florid red, which may be observed in the inner part of the eyelids of persons of a plethoric habit, did not appear. But, on the contrary, the inner part of the lids were of a pale brownish colour, and the vessels in the albugi-
neous

neous coat of the eyes were strongly tinged with the same. I considered this case as arising from extreme relaxation, and prescribed the most corroborating remedies. I began at first with small doses, as the tone of his stomach had been much impaired from his sedentary life. This method, with exercise, and a relaxation from study, soon increased his strength, and his spirits, which were before very languid, were considerably enlivened. In this course he continued for near four months, but his eyes scarce received any relief, though his health and strength were much improved. He persisted a considerable time after this without obtaining a radical cure, for there still remained a discharge from the eyes. This discharge however was not acrid, nor was it attended with any great inconvenience; I therefore declined any farther attempts towards effecting the radical cure; and advised him to rest satisfied with the assistance of a proper eye-water, to take occasionally some of the cort. peruv. and observe a strict regimen, particularly in drinking.

OBSERVATION XII.

Being the Case of a Lady Sixty-four Years Old, in which, though the Disease was not cured, it was considerably relieved.

A Gentlewoman, who had in the early part of her life attended much to fine needle-work, was, at the age of forty, afflicted with an inflammation of the eyes. This disease had been gradually increasing for near five years, as the menstrual discharge decreased. But when the menses were totally suppressed, which happened in the fortieth year of her age, the inflammation was very troublesome at particular periods. There was such a determination of the blood to the arterial system in the head, that monthly it caused an inveterate head-ach, a violent opthalmia, and frequently occasioned a nasal hæmorrhage. This hæmorrhage, though but small in quantity, always gave relief. These symptoms had been gradually decreasing as the patient advanced in years, and all had left her except the discharge from the eyes, when she was recommended to be under my care. The physician who had attend-
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ed her at different times, had ordered an abstemious regimen, and, by his skill in directing proper remedies, had considerably contributed to the relief of her complaints. She was so far advanced in years, that I did not attempt the radical cure, and only wished to give relief. The discharge from her eyes was considerable, and a great part coagulated on the edges of the lids, which appeared like gum, and surrounded the eye-lashes. This was so troublesome every morning, that the eyes could not be opened but with great difficulty. The patient was of a thin habit, costive, and used no exercise. I therefore ordered her a laxative pill of the aloetic kind, to be taken every night, and to refrain as much as possible from fluids. To the eyes I ordered an astringent lotion, and directed a fomentation of warm water to be used every morning, to assist in relaxing the gummy matter which closed the eye-lids. But these methods were not attended with any success. I observed, that the gum adhered to the eye-lashes during the whole day, and as it constantly pressed on the parts, I imagined that this was the cause
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of the irritation. From this suggestion I was determined to extract the eye-lashes of the lower lid, which I effected with a pair of fine forceps. This method produced good effects, and the remedies above-mentioned succeeded in greatly palliating the acute pains, which the discharge and the concreted gum occasioned. The operation of extracting the eye-lashes is occasionally performed, which, with the other remedies, and a strict regimen, she can frequently read without any great inconvenience, a circumstance, which seems to be an additional happiness to the life of the patient.

From the foregoing circumstances it will appear, that the cure of the habitual, or chronic opthalmia, is very difficult and tedious; from this cause it is probable, that it has always been considered incurable. Many patients will not submit to a tedious course of medicines, and a strict regimen; without which no cure in such cases can be effected. It may be observed here, that if a disease attacks the minute vascular system, it is with much greater difficulty cured, than when it attacks parts where the vessels are large. This may be proved,

proved, when we consider those diseases which attack glandular parts, where the lymphatic system is effected, the minutia of which is not as yet clearly ascertained, nor can be traced. The gout cancer, dropfy, and all chronic diseases, are nothing more than diseases of this system, which I flatter myself I shall hereafter clearly prove. There is a great prepossession to be observed amongst mankind, against any tedious course of medicine ; but this prejudice, in all probability, has arisen from the indiscriminate use of mercurials, antimonials, &c. and the fault is more frequently in the prescriber, than in the remedy. All powerful remedies, when intended as alteratives, ought to be given in such doses as not to occasion any sensible irritation in the body ; for if this is not strictly observed, the most salutary remedies may do considerable mischief. This knowledge of exactly ascertaining the dose of remedies to every particular habit, cannot be expressed by words, nor can it be obtained, but by the most exact observation on the real effects which different medicines have on different constitutions. For
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there is as much difference in the manner of living, and habits of mankind, as there is difference of opinions and faces; and the mental qualities, as well as the diet, will have a considerable effect in the animal œconomy, all which is the duty of the physician carefully to consider. These observations will clearly shew the absurdity of specificks, or quack nostrums, in any disease; and likewise the vanity of physical authors, in fixing the exact dose of any medicine. Every powerful remedy, as the preparations of mercury, antimony, steel, &c. may be given, in eight times the quantity to some patients to what it may to others, and yet the same salutary effects be produced in both. I am positive, from practical observation, that persons of the most delicate habits, and even females, by a judicious application of the most powerful remedies, may be frequently relieved of the most inveterate diseases, and that with the utmost safety.

ON THE
VENEREAL OPHTHALMIA.

THE venereal ophthalmia is a distinct disease, which cannot be cured by the remedies recommended, either in the recent or habitual ophthalmia. It is owing to the venereal virus being fixed on the coats of the eye, to the injudicious application of mercurials in the cure of the venereal disease, to the patient's receiving cold when under a mercurial course, and sometimes to the raising a salivation too suddenly in plethoric habits.

Symptoms of the Venereal OPHTHALMIA.

The symptoms of the Venereal Ophthalmia to all appearance are the same as those of the recent, except in one circumstance. This is a remarkable dimness of the transparent cornea, which in many cases can be evidently seen, particularly if the disease has

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been of long continuance. If with the inflammation of the eyes the patient should have venereal eruptions, nocturnal pains, or there should be other proofs of the venereal virus being in the habit, then we may safely conclude the case to be venereal, and administer our remedies accordingly. It is necessary that we should be cautious in these cases; for if they are treated as the inflammation arising from simple causes, no good effects will be produced. But the disorder gradually encreasing, frequently terminates in blindness.

P R O G N O S T I C.

The Venereal Ophthalmia is most commonly easily cured by the administration of mercurials, or other remedies, according to the circumstances of the case, even when an opacity of the cornea has caused blindness. It must however be observed, that the earlier proper remedies are applied, the greater will be the prospect of success; and the cure of an inflammation from the venereal virus attacking the part, will be performed with greater facility, and is attended

tended with less danger, than the cure of that which arises from too suddenly raising a salivation, or the imprudent use of mercurials in general.

Cure of the Venereal OPTHALMIA.

In the cure of the Venereal Ophthalmia, the causes must be first considered, whether it has arisen simply from the disease, or from the imprudent use of mercury. If it has arisen simply from the disease, it will be cured by the skilful application of mercurial preparations; but if from any imprudent use of mercurials, then it must be cured in the manner I have directed in the recent Ophthalmia. The most plentiful bleedings, and other evacuations, according to the circumstances of the case, must be persisted in; for there have been instances of a suppuration, and a discharge of the humour of the eyes, from a powerful salivation having been too suddenly raised. In other cases, an incurable blindness has succeeded, from the opacity of the transparent cornea; so that if a violent inflammation of the eyes happen from a copious salivation, in which the face is considerably

swelled, we must assist the patient by every means which art can suggest.

The mercurial preparations with which I have cured the venereal Ophthalmia are calomel, solutions of the merc. corros. sub. with decoct. sarsaparel, and Plenck's solution *. To the two last remedies the antimonial wine may be added, in small doses. The solution of corros. sublimate is most proper for persons of robust habits, to whom bleeding may be repeated, according to the urgency of the symptoms. Plenck's solution will be found the most proper remedy for persons of delicate habits, and children. The calomel has likewise its advantages as an alterative, given in the dose from a quarter of a grain to a grain. These are the means by which I have successfully cured the venereal Ophthalmia. If the cure should be performed in winter, the patient should be confined to a warm room ; for I must observe, that the difficulty which is found in curing some obstinate venereal cases, in this country,

* Argentum viv. united with mucilage of gum arabic.

is owing to the climate. In France it is easier cured than in England, in Italy easier than in France; but in some of the northern parts of Germany it is almost impossible to cure the disease in the winter season. In the West Indies, and southern parts of America, I have known many instances in which the most inveterate lues venerea have been cured by the heat of the climate, causing a constant and copious perspiration, without the use of mercurials, or any remedy whatever. It is therefore necessary, that these circumstances should be strictly attended to in winter. In the cure of the inflammation, arising from the imprudent use of mercurials, besides the remedies recommended for the cure of the recent inflammation, I always direct a very free use of sulphur. Experience proves, that no remedy will counteract the violent effects of mercury as this does. I am sensible, that those physicians who reason from false principles and misapplied experiments, contradict this effect in sulphur; they will not allow that any part of sulphur can pass through the lacteals, or counteract
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the effects of mercury when predominant in the habit ; however, this is not the only case in which practical facts prove the falsehood of theory, when it arises from remote experiments and plausible arguments ; for, in the whole practice of medicine, we often find facts in practice contradicting the most artful hypothetical reasoning.

The greatest part of that reasoning which has been advanced to explain the causes and cure of diseases by experiments in chemistry, are not just ; and we are ever liable to errors in practice, if our principles are deduced from such experiments. Many attempts have been made to account for the operation of medicine in the constitution, but what success has attended these enquiries, or how satisfied men are of the truth of such productions, I cannot pretend to determine ; but I will venture to assert, that as long as men are vain of their superficial and confined knowledge, so long will different notions arise about that which may probably ever remain matter of opinion.

The application of a knowledge in chemistry, to the practice of medicine, though

though it may be in some cases true, and very useful, yet a great part of such reasoning is inconclusive, and by no means applicable to the diseases of the human body. We must therefore conclude that reasoning uncertain, which every one who understands the subject has a right to dispute. Indeed I cannot suppose, that the professors or teachers of the art of medicine believe in many of the doctrines which they endeavour to inculcate into the minds of their credulous young students; or, if they do, I must confess, that I consider them very happy in their physical faith. Some of the teachers of the different branches of medicine are so candid as to acknowledge how defective human knowledge is, when they endeavour to explain any phenomenon above the bounds of human reason. But there are others, who, from self-interested motives, and to support their assumed importance amongst their deluded and unsuspecting young pupils, vainly attempt to explain, by plausible experiments and sophistical reasoning, all the phenomena of the human body. It would be more honourable for such men

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(if they are capable) to draw the line between facts and matter of opinion, between solid judgment, governed by truth, and the flights of imagination, which lead men into endless error; generously declare their ignorance of many things, than to impose on young men principles which may influence their conduct in practice, and often prove injurious and fatal to mankind.

OBSERVATION XIII.

A remarkable case where a woman was cured, who received the venereal infection from her child, which affected her eyes, and caused first an inflammation, and then a blindness.

In 1768 Mrs. S. had a violent inflammation of the eyes, with great pain, an opacity of the cornea, with total loss of vision in one eye, and the transparent cornea in the other was so dim, that she could not walk without a guide. This case had been treated in the most regular manner, as inflammatory, by a surgeon of eminence, but without success. Upon my observing

observing some small tetters on the upper part of the neck, I concluded the case to be venereal, but she being married, it was too delicate a point to communicate my real opinion immediately. I therefore closely examined her husband, but could not obtain the least acknowledgment of his ever having such a disease. She had a child which had been put out to be nursed, and had sucked the milk of a woman who they considered healthy; but, on examining the child, I found it covered with venereal scurfy eruptions. This disease the child had received from the nurse, who was infected with the venereal disorder, as afterward appeared by her own confession. On some of the first days after the child had been weaned, the mother applied the child's mouth to her nipple, in order to amuse it when crying, by which means she received the infection; and the disease fixing on the coats of the eyes, caused the effects which I have related. I began the cure of this case by bleeding, then ordered mercurials, joined with antimonials, with a decoct. of farfa. and this method proved

successful, for the remedies had not been administered but a few days before the patient was considerably relieved of the inflammation, pain and blindness; and by persisting in these remedies, the cure was effected in nine weeks. I made repeated attempts to cure the child of the disease, but without success, and it died in a languishing condition. It unfortunately happened, that I could not get any woman to suckle the child, and at the same time take mercurial remedies; by which method I have in many instances cured infants of the venereal infection.

OBSERVATION XIV.

Being a Case where the Venereal Infection caused Blindness, and was cured.

Mrs. R — in 1767 had a violent inflammation in both eyes, which at first rendered the cornea dim, and afterwards deprived her of her sight. I attempted the cure of this case by the methods which I have recommended in the recent inflammation, but without success. Being disappointed—

appointed, I suspected the case to be venereal, and, on a strict enquiry, I was confirmed in my opinion by the patient acknowledging that she had formerly contracted the disease. I treated this case in the same manner as the last, and she had not taken the remedies above sixteen days before she was restored to sight, and the inflammation was considerably subsided; by a continuance of the remedies she was cured in about three months, and has been well ever since.

I must observe here, that we are not to conclude every case venereal which is cured by mercurials; for in the simple inflammation mercurials are sometimes necessary, as I have before observed. Indeed some cases occur which it is impossible at first to know to be venereal. The only considerable difference by which we can distinguish the venereal from the simple Ophthalmia, is by the dimness of the cornea, (though even this happens at times in the simple Ophthalmia, though but seldom) and the obstinate resistance this disease makes to those methods by which the simple inflammation is cured,

OBSERVATION XV.

Being a Case which was imagined to be the Erysipelas, or St. Anthony's Fire, but proved to be Venereal.

A gentlewoman was lately recommended to be under my care for an inflammation of the eyes, attended with a great swelling of her face, the skin of which was so distended by an inflammation, that it appeared of a shining red colour. In some parts the skin had been broken by the violence of the distension. Her whole body was covered with large serpiginous eruptions, which her apothecary had called the scurvy; and the swelling in the face, the St. Anthony's fire. Various methods had been attempted to cure this disease, but they proved unsuccessful. I was convinced that the case was venereal from the eruptions, and its having been gradually increasing near three months. I began the cure by plentiful bleeding, and the patient being of a robust habit, I gave her a solution of the merc. corros.

corros. sub. in a decoction of farfa. with a few drops of vin. antimon. in each dose. By these remedies, and the patient observing a strict regimen, the cure was compleated in eight weeks.

OBSERVATION XVI.

Being a Case which proved incurable, and at last ended in the Death of the Patient.

A poor young man, of thin habit, received the venereal infection, and after taking some of the advertising remedies, he considered himself cured. Some few months after this he came to me for advice for some violent pains in his limbs, which were considerably more violent in the night than in the day-time. I informed him immediately that his case was venereal; upon which some of his friends gained him admittance into an hospital in town, where he was salivated. This happened in the winter, and when he was discharged he was, to all appearance, cured of his venereal complaints; but was exceedingly

ceedingly emaciated and relaxed by the course he had undergone. A few weeks after his cure, by some imprudence, and by drinking freely, he caught a violent cold, which was succeeded by an inflammation in both eyes. I treated it as a simple inflammation, but without success, and his nocturnal pains increasing, I concluded that his case was venereal, he being in very low circumstances, and having no conveniences for undergoing a mercurial course at his lodgings, he was again received into the same hospital, and put into a salivation a second time. During the time he was spitting he received a cold, which greatly increased the inflammation in his eyes; and before he came out of the hospital he had lost his sight. By the desire of his friends I examined the case, and found that the transparent cornea was opaque. In this situation I had but little prospect of success, and gave my opinion accordingly. As he was desirous of my assistance, I attempted first to strengthen his habit by the cort. peruv. &c. but it did not succeed, for he remained very weak, and the
tone

tone of his stomach was destroyed ; sometime after the upper part of the ulna of his right arm became carious, part of the bone came away, and the wound was exceedingly foetid. After this, as the Summer advanced, and he appeared rather better in his habit, I began a mercurial course, the medicine I gave him was Plenck's solution, as it is certainly one of the mildest of the mercurial preparations. This raised no irritation in his body, nor did it produce any good effects, for his disease became more inveterate, and he more miserable, both in his appearance and feelings. From there being no prospect of curing him, I desisted from any farther attempts by medicine. After this, he went under the care of two other practitioners, who humanely gave him their assistance, but all their efforts to assist him proved fruitless, and an additional misery made its appearance, which was a tumour first, and afterwards a caries of one of the parietal bones. In this miserable situation, with the loss of his sight, he continued some months, gradually becoming worse, by being attacked with a hectic fever and cough ;
and

and after languishing under such a dreadful variety of disease, he died.

This is an instance where the venereal virus resisted every attempt of a cure ; there are some constitutions in which this disease makes such a ravage, that it proves incurable. When the powers of human nature are much weakened, and in some particular habits which are not able to resist this disease, even with the assistance of medicine, it is truly deplorable ; and, it must be confessed, proves the fallibility of physic, even where we imagine that we have a specific. For it must be acknowledged, that if any remedy can deserve such a name, it must be mercury, for the cure of the venereal disease.

OBSERVATION XVI.

A young gentleman, who had the confirmed lues, was under my care ; I was curing him by a mild mercurial course ; but he thinking that his cure would be expedited by taking a larger quantity of the medicine than I had directed, he imprudently

prudently took of the mercurial preparation three doses for one, for three days successively; this suddenly raised a salivation, and produced a violent inflammation in his face; he had lost the motion of the lower jaw, the vessels in the conjunctiva were so much distended, that the cornea appeared sunk; the lids of the eyes were likewise inflamed and considerably thickened. This inflammation, though extremely violent, arising from the imprudent use of mercurials, was soon cured by bleeding, abstinence from fluids, and by taking a large quantity of the sulphur internally. I have seen many instances in which the imprudent use of mercury has produced very dangerous symptoms; but I have always had success, and have prevented any ill effects ensuing, by giving the sulphur in considerable doses, and by frequently repeating it.

OF THE
INFLAMMATION OF THE EYES,
ARISING FROM THE
SCROFULA, OR KING'S-EVIL.

THE inflammation of the eyes, arising from a scrofulous affection, is not to be easily distinguished from those which arise from other causes, as the symptoms of this disease are the same as those in the habitual Ophthalmia. The means by which we can with certainty determine on this disease, are by those scrofulous indurations or ulcers of the glands which accompany this inflammation, or by any other swellings in the body, which can be considered to be owing to a strumous indisposition. If therefore a violent inflammation of the coats of the eye be attended with an acute pain, from an excessive acrimony in the discharge, and if the glands about the neck are enlarged, indurated, or have formed small

small ulcers, which are very obstinate of cure, we may justly conclude the case to be scrofulous. In short, any other scrofulous swellings, or ulcerations in other parts of the body, may be considered as a distinguishing guide to prevent us from mistaking this species of ophthalmia, from those which arise from other causes. I know but of one circumstance by which means the struma is mistaken for another disease, which is, in cases where patients have received cold, during a mercurial course. The glands at that time being considerably enlarged, sometimes indurate, form abscesses, and from their obstinacy of cure, have been mistaken for the scrofula: But as such cases happen but seldom, and as the cure must be similar to that arising from a scrofulous cause, they may be considered in one view, and treated accordingly.

P R O G N O S T I C.

The scrofulous Ophthalmia is sometimes very difficult to cure, for, besides the difficulty of curing the inflammation of the

eyes, which may be considered habitual, we have that obstinate disease the scrofula to encounter with. However, by a perseverance in a tedious course of medicine, I have cured many obstinate cases, and have, at the same time, eradicated the scrofulous disease. In other instances I have cured the Ophthalmia, but have not succeeded in curing the other strumous symptoms; so that the prospects of radically curing an inflammation of the eyes from scrofulous affection, is rather more uncertain than the cure of the Ophthalmia, arising from other causes.

The Cure of the Scrofulous OPTHALMIA.

To cure the scrofulous inflammation of the eyes, the same points are necessary to be considered, as those which I have recommended in the cure of the habitual or chronic Ophthalmia. We must consider the habit of the patient, and determine whether corroborants, mercurials, or alteratives are necessary. If the scrofulous ulcers about the neck have loose, soft, and flabby lips, the patient is commonly of a relaxed

relaxed habit, in which case the bark, and such remedies, are proper. But if the indurations about the neck, or in whatever other part the glands are affected, are very hard or slow in suppurating, then in general the alterative course is necessary. I have repeatedly tried the millepedes, sponge, and other methods recommended by authors, but have seldom found them to prove successful. The medicines and regimen which I would recommend in the cure of the scrofulous inflammation, are the same as those prescribed for the cure of the habitual Ophthalmia. The successful application of those remedies will considerably depend on a thorough knowledge of the constitutions of the different patients to whom they are administered.

OBSERVATION XVII.

A Case in which the Inflammation of the Eyes, and the Scrofula, or King's Evil, was cured.

A youth, about ten years old, was brought to the hospital with a considerable inflammation of the eyes, the lids turned outward,

ward, a large discharge, which had flowed for near three years, had excoriated the internal parts of the eye-lids, and, from the corrosive quality of the discharge, had caused many small ulcerations on the lower lid of each eye. He could not bear the light, the whole parts were of a florid red colour, and many inflammatory eruptions had repeatedly appeared in different parts of his face. Both his lips were considerably thickened, and in many parts of the neck and throat were glandular indurations, two of which having bursted, had the appearance of fistulous ulcers. Many attempts had been made to effect the cure of this patient at different hospitals in town. Blisters, lotions, the salt water, and other remedies had been administered, but without success. I at first ordered bleeding, and gave him internally one scruple of æthiop. min. ter de die, joined with nitre. To the indurations surrounding his neck and throat I applied some ung. simp. in which a considerable quantity of camphor had been dissolved. This plan of cure I persisted in five or six weeks, before I found any visible alteration to flatter my hopes

hopes with a prospect of success. In about nine weeks the inflammation of the eyes had nearly subsided, and this encouraged me to persevere in the same course, and increase the dose of his medicine. In consequence of these methods, I happily succeeded in not only curing the inflammation of the eyes, but likewise the Scrofula, or King's Evil. For the indurations resolved, and the ulcers were cicatrized, by persevering in the remedies about nine months.

OBSERVATION XVIII.

A child about three years old was brought to the hospital with an inflammation of both eyes, she had scrofulous swellings on the back of her hands, and the right foot was much enlarged, and very hard. This case being clearly scrofulous, and the child being robust and plethoric, I at first bled her in the jugular vein, and ordered a small pill, composed of a quarter of a grain of calomel, and the same quantity of sulph. antimon. præcip. to be made into a pill, and to be taken every night and morning. By continuing this
course

course eleven weeks, the inflammation of the eyes was cured; by a perseverance in the same remedies, and by the application of camphor mixed in ung. simp. to the glandular swellings, the cure of the hands and foot was effected in ten weeks after the cure of the inflammation of the eyes.

OBSERVATION XIX.

A Case in which the Inflammation of the Eyes was cured, but the scrofulous Symptoms still remained.

A young man, about nineteen years old, applied to the hospital with an inflammation of both eyes, which to appearance was not violent. But he complained of much pain from the sharpness of the humour (as he termed it) which flowed from his eyes. On his neck were many scrofulous ulcers, the lips of which were very soft and loose; he had likewise more abscesses forming, which were only hard, in proportion as they advanced to maturation; for the apex of these abscesses were
soft

soft and thin, according to the length of time which they had been forming, though their surrounding parts were more hard, and these abscesses I opened as they suppurated. For these diseases in his eyes and neck he had been taking, by the advice of different surgeons, various medicines of the alterative and mercurial kind. He likewise had the assistance of a quack, who pretended to cure his disease by a poultice of potatoes, by drinking salt water, and wearing some powder tied up in paper on his forehead (as a charm I suppose). No success had attended these methods, but, on the contrary, he was in such an emaciated and relaxed condition, that I entertained no great hopes of curing him. In this situation I conceived that the corroborating remedies were necessary. I ordered him the cortex with elix. vitriol. acid, which had an immediate effect in restoring his appetite, promoting a digestion of his aliments, and thereby increasing his strength. I continued these remedies, and successfully cured the diseases of his eyes, but could not cure the ulcers which remained in his throat after

the opening of the abscesses ; for, as one was healed, another tumour formed in some other part, suppurated, and became an ulcer with loose flabby lips. As I have met with similar cases where I have been as much tired of the tediousness of the course of medicines, as the patient has been of taking them, I desisted from any farther attempts, and rested satisfied with the cure of his eyes.

OBSERVATION XX.

A tradesman's son, about four years old, in Covent Garden, had a violent inflammation in both eyes, so that he was not able to bear the light ; the glands on both sides of his groin were much indurated and enlarged, and on one side an abscess had formed, which had bursted, and discharged some matter ; the lips of the wound were loose and flabby. I was convinced that this was a scrofulous case, and that it was hereditary, arising from the father, who had many scars surrounding his neck and throat, which had been formerly abscesses, but were cured. Another child,

child, about three or four years older, I had cured near six years before of a scrofulous ulcer in her breast, and no symptoms of the scrofula have since appeared. It must be remarked, that though there were seven children alive belonging to the same parents, yet these two only were afflicted with the scrofulous disease. The indurations feeling hard in the groin, I at first ordered a light mercurial alterative course, but this did not succeed, for the child was evidently worse, and was afflicted with a feverish heat, which however was irregular as to its paroxysms. Finding that no advantages were likely to ensue by the foregoing methods, I prescribed the cortex in a mixture, joined with the elix vitriol. acid. This produced good effects, and, by a perseverance, in three weeks perfectly cured the inflammation in the eyes, and feverish heat. When the child's eyes were well, we could not prevail on him to take the medicine. The abscess, which had formed an ulcer in his groin, is not as yet cured, but remains in the same state, though it is now

near twelve months since the child's eyes were cured. It is plain, that this case had arisen from the relaxed habit the child was in, joined with the scrofulous indisposition.

I may observe, that the scrofula is a disease of the lymphatic system; and, notwithstanding the discoveries which have been made by many eminent men who have made anatomy their chief study, concerning this system, yet, I do not know of any who have applied these discoveries to the practice of medicine; I have for some years endeavoured to apply these discoveries to the cure of particular diseases, and can with pleasure declare I have had considerable success. I have considered the cancer of the breasts, and all other glandular affections, as distinct diseases of the lymphatic system. I have radically cured the dropsy, in many instances, both the anasarca and ascites, and the hydrocele, or watery rupture, without any operation, by only conceiving, that such complaints have arisen in general from a relaxation of the vessels which compose this system, and by administering the cortex and other corroborating
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remedies. The principles, and their application to glandular diseases, I shall hereafter communicate, when I finish my observations on the cancer of the breasts, the introduction to which I have already published *. It has been by considering that ulcers in general, especially those of the legs, arise from an obstruction in the minute vessels, that I have cured many obstinate cases, which have continued in a bad state from twenty to forty years.

I can only add, that in treating the scrofula, we should always endeavour to ascertain whether the vessels are so relaxed as to have lost their powers of absorption, or whether the disease arises from an obstruction in these minute vessels †. This may be known in general by the physiognomy of the patient, method of living, and appearance of the disease; for I have ever observed, that in lax habits the indurations soften and suppurate sooner than when the ves-

* Treatise on the diseases of the breasts of women during lying-in, and the method of preventing the cancer.

† I shall hereafter clearly prove, that these vessels are obstructed in many diseases, as the gout, and other chronic diseases.

sels are totally obstructed, and the first is cured with much greater facility than the latter, for in some cases the last is absolutely incurable.

GENERAL OBSERVATIONS.

I have now explained, on the most simple principles, the methods of cure which I have practiced with success. The recent Ophthalmia, agreeably to the principles, I have considered as a distension of the minute vessels in the conjunctiva. In which I have recommended depletion, and simple methods to prevent repletion. I have explained the necessity of using corroborants, when by powerful evacuations a relaxation has ensued. The difficulty and tediousness in the cure of the habitual Ophthalmia, will be easily explained by applying it to the second principle, and other causes mentioned in the treatment of the habitual Ophthalmia. Besides which it will be allowed, that vessels, which have been distended many years, will require a considerable time before they contract to their original diameters; and it may be observed,

observed, that the recovering the elasticity in the vessels in persons advanced in years, is very uncertain. In the methods of cure which I have recommended, though I have not succeeded in some cases, yet I have cured in others, the chronic Ophthalmia, which had continued from ten to twenty years, notwithstanding the same cases had resisted all other attempts to cure. One great difficulty in curing this disease is, the obstinacy of patients, for many will not submit to a tedious course of medicine, without which no cure can be performed. I have endeavoured to clearly ascertain in what cases the cooling method and evacuations are necessary; and have given the distinguishing marks of those habits, in which the corroborating remedies are to be adapted with success. In the venereal and scrofulous Ophthalmia I have given, without reserve, the methods of cure, and likewise what success has resulted from such practice. I have endeavoured to render intelligible the cure of inflammations of the eyes from practical observation, and flatter myself, that I have avoided that parade, obscurity, and reserve,

serve, which may be found in other authors on this subject. I am convinced, from the great opportunities I have had of making close observations in practice, that many improvements may still be made in the cure of these diseases, to effect which I shall use my utmost industry; whatever is the result of these observations I shall freely communicate, with the most earnest wish, that they may prove serviceable to mankind.

I am sensible, that the prevailing fashion in physic, is to produce a number of experiments, to prove the truth of any doctrine advanced; and I must confess, that physical faith has been greatly enlarged within these last fifty years. Any principles, however contradictory to common understanding, under the auspices of a great name, will have a number of deluded votaries, if they be but supported by experiments and plausible reasoning. We may see in physiology how many men have attempted to explain animal heat, voluntary and involuntary motion, the nervous system, respiration, digestion, &c. and to account for the operations

tions of medicine on the human body, and various other phenomena, by the laws of hydraulics, mechanics, &c. but with what success, I shall leave the discerning, sensible, and unprejudiced part of the profession to determine.

This raging heat, to explain the phenomena in the animal œconomy, by experiments, has continued with an incredible warmth ever since Sir Isaac Newton formed his system of philosophy; and many whimsical notions have been advanced, supported by experiments, believed, and overturned by others which succeeded them. But, however just the doctrines of this great man may be, the mathematics, chemistry, or any other branch of science, when applied to the human body, or its diseases, are always liable to objections. That great and penetrating philosopher was ever cautious in his assertions on things which were disputable, and it were to be wished, for the good of mankind, that many dull pretenders to science since his time had been thus ingenuous. For, however vain the different fabricators of hypotheses and plausible theories in physic may be, all their productions are little better than the visionary delusions of a

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dream,

dream, and are ever liable to be overturned. Amongst the whole number of mechanicians, mathematicians, and experimental projectors, they have not produced a Riverius or Sydenham. Those great men studied nature, and cured diseases by experience, without the assistance of a thermometer, stop-watch*, idle disputes, or vain hypothesis.

I must confess, I had made some experiments, and had deduced some plausible reasoning therefrom in support of my practice; but as I was not satisfied by such speculations, I have avoided attempting to impose on others what I could not positively believe myself. Facts of cures performed, or ill success in practice, drawn from repeated experience, is what I have endeavoured to attend to; for, as Hoffman has judiciously observed, *Experientia, plus profecto valet, quam centum acutissimæ rationes.*

* If some of our physical sages are so ignorant of diseases as to regulate their methods of cure by such feeble aids, they are to be pitied; but if such auxiliaries are used to impose on the weak minded and credulous, such mysterious and formal jugglers deserve our utmost contempt.

On

ON THE
DISEASES
OF THE
TRANSPARENT CORNEA.

THERE are three diseases of the transparent cornea, but authors in general write on many. This has been owing to their copying from one another, from their interested views in rendering their works obscure, or for want of opportunities of ocular examination into the nature of these diseases. If we examine the disorders of this part ever so minutely, and draw our conclusions from just observation, we only find to exist in nature, the ulcer, abscess, and opacity of the cornea. Therefore I shall exclude from this treatise the names of Nebula, Leucoma, Nubecula, Albugo, &c. &c. as such names cannot either convey a just idea of the diseases, or give us any assistance towards effecting their cure.

On ULCERS of the transparent CORNEA.

An ulcer of the transparent cornea, or tunica adnata of the eye, not unfrequently attends a violent Ophthalmia; but more particularly happens in the inflammation which accompanies the confluent small pox. It is most commonly owing to an abscess happening in either of the fore-mentioned parts, which, when maturated, bursting, immediately forms an ulcer. This may be known by the patient not being able to bear the light, and by feeling a pricking sensation, as though the points of needles were piercing the eyes. It frequently happens, in the small pox, that we cannot examine the state of the eye, without putting the patient to much pain, owing to the preternatural enlargement of the eye-lid, in which case we are to form our idea of the disease by the severity of the symptoms. When the ulcer only happens in the tunica conjunctiva, it is not attended with any ill consequences, nor does it ever impair vision; but it is dangerous when it is situated on the

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the transparent cornea, for it sometimes impedes vision; by the parts which fill up the ulcer, and form the cicatrix not being transparent.

The ulcer is cured by the proper administration of internal remedies, which must be ordered according to the circumstances of the case and habit of the patient. In some cases the Cort. Peruv. will be necessary, to others, a cooling regimen ought to be prescribed. In short, the rules observed in the treatment of the inflammation may be successfully practised in the ulcer of this part, which must be left to the skill and discretion of the practitioner.

The astringent or drying lotions are improper in the ulcer, though I am sensible that they are prescribed by practitioners in medicine. The simple application of the mucilage, diluted with water, greatly relieves the patient, obtunds the acrimony of the tears, and prevents those pricking sensations which are attended with such inexpressible pain.

OBSERVATION XXI.

Being the Case of a Woman, who, from receiving Cold in Lying-in, had an Inflammation in her Eyes, and in one Eye an Ulcer was formed in the transparent Cornea, which had continued in a bad state for three Years, and was cured in Eight Days.

Mary Garden, at the Birch Broom, Newtoners lane, was recommended September 28, 1771. She had an inflammation of both eyes, which had continued three years, and had arisen from receiving cold during lying-in. The whole conjunctive membrane was inflamed, the edges of the eye-lids turned outward, and were considerably thickened; in the right eye there was an ulcer in the direction of the pupil, and the light caused such exquisite pain, that it was with difficulty I got an examination of it. The discharge from both eyes was very considerable, and so very acrimonious, that she compared it to scalding water. This woman being of a plethoric and robust habit, I began the
cure

cure by plentiful and repeated bleedings, gave her internally one dram of nitre, dissolved in three ounces of water, with a few grains of the pulv. jalap, to be taken every three hours, and used the mucilaginous lotion to her eyes. I ordered her to abstain from fluids, and to observe as strict a regimen as possible; by which means in eight days she was perfectly cured of this obstinate inflammation, and ulcer, which had continued such a length of time.

OBSERVATION XXII.

Another Instance cured in Six Days.

John Scoltock Smith, Gilbert street, had an inflammation in both eyes, and could not bear the light, it causing pricking sensations, as though sharp points were piercing through his eyes. There was a great discharge, which was so acrimonious, that it excoriated the parts which it flowed on. The albuginous part of the conjunctive membrane was not so much inflamed as that which covers the internal part of the lids;

lids ; but, so acrid was the discharge, that it had corroded the transparent cornea in different parts of both eyes, and some very small superficial ulcers were formed on this coat. This was a recent case, and I cured him in six days by plentiful bleedings, by applying the mucilaginous lotion frequently to his eyes, and giving him *sal. nitr.* $\mathfrak{z}\text{ii}$. eight times in the day, dissolved in any convenient liquid.

I have cured a great number of similar cases, many of which have arisen from the confluent small pox, by the same methods which I have recommended for the cure of the inflammation. I must observe, that the earlier this disease is cured, the less danger will attend it ; for I have seen instances where the tedious and common methods of cure have been practised, which have terminated in an opacity of the cornea, causing an incurable blindness.

On the ABSCESS of the transparent CORNEA.

There are abscesses which form between the laminæ of the transparent cornea, and
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are proportionably dangerous as they are large, or attended with violent inflammation; for in some instances this coat has suppurated, bursted, and discharged all the humours of the eye. If the abscess should be small, forming a pellicle, the best method of treatment is, to carefully take off the whole diseased part with a knife, which may be done at one incision by a steady hand. Afterwards the mucilaginous lotion may be applied, and if an inflammation accompanies the abscess, the same methods are to be practised as are already recommended.

On the Bursting of the CORNEA, and Evacuation of the Humours of the EYE.

The bursting of the cornea, and the evacuation of the humours of the eye are caused from a violent inflammation not being judiciously treated, from the application of poultices to the eyes when in an inflamed state, and frequently from the eyes being closed in the confluent small pox. In some instances, after the discharge of the humours, the convex part of the eye
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becomes flat, in others, the cornea continues greatly extended, forming a preternatural convexity. In both cases it causes a total loss of vision; a loss of vision, which the medical art cannot remedy.

I could wish, for the honour of the profession, to draw a veil over the blunders in practice, which have in general produced such melancholy effects, but, as a faithful observer of facts, I am under an indispensable necessity to relate them. In the course of my practice I have seen many hundreds of patients who have been blinded by the destructive application of poultices. Sometimes they have suppurated the whole humours of the eye, and the unhappy patients have felt the sudden evacuation of the humours; in other instances they have caused an abscess to form between the laminae of the transparent cornea; and though the humours of the eye have not been evacuated, yet an incurable blindness has ensued. But, whether the eye has bursted from the suppurating property of poultices, from the eyes being closed during the small pox, or from the treatment in
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the inflammation being inadequate to the rapid progress of the disease; the only thing which can be done in this case is to supply the part with an artificial eye. As such are the irreparable consequences from the indiscriminate use of poultices, I hope that practitioners in medicine will exclude them from practice.

On the OPACITY of the CORNEA.

I shall now consider the opacity of the cornea, when the humours of the eye are not evacuated. When an abscess between the laminæ of the transparent cornea suppurates and bursts, or if by the knife we cut off the apex of the abscess; in both cases it commonly produces an ulcer. We are sensible, that ulcers are not filled up with the same uniform substance with which they were composed, before the solution of continuity, and this is the case in the cornea; for, when these ulcers are cured, we may demonstrably prove this difference of substance, by comparing the space which the ulcer occupied, with the cornea of an eye in its transparent state. The methods of preventing this disease,

arising from the small pox, or other causes, I have already mentioned in the former part of this work, to which I must refer the reader.

P R O G N O S T I C.

To conceive clearly of this disease, we must consider the structure of the transparent cornea, it being composed of several laminæ; and, in proportion as more or less of these laminæ are affected, so in proportion will the case be curable or incurable. If the cornea be diseased through all the laminæ, and that happening immediately in the direction of the pupil, then the case is frequently incurable, and the patient will remain for ever blind. But if only a part in the direction of the pupil, or some of the external laminæ be diseased, then the case may be cured by proper escharotics, or internal medicines.

I have seen instances where the external laminæ have been quite transparent, and the internal opaque; in this case no external remedy can reach the seat of the disease, and we must then depend entirely on

on internal remedies. In order to ascertain the true state of the disease, I always take a side view of the eye, and particularly examine the convex part of the cornea. Whoever thus views it, and is previously acquainted with the anatomy of the part, may form a just prognostic in these cases.

METHODS of CURE.

The common methods of curing the opacity of the transparent cornea, is to blow double refined sugar, alum, vitriol alb. or glass finely powdered into the eye, but these methods are injudicious and cruel, though they often succeed in curing these cases. For, I must observe, that the specks or opacity in many cases cover but part of the transparent cornea; hence the absurdity of applying a corroding remedy to the surface of the whole eye will appear evident. If the whole transparent cornea was opaque, such a practice is injudicious, for the acute painful effects of such remedies are very sensibly felt on the whole conjunctive membrane, and puts the patient to exquisite torture. The remedy acts on
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the sound, and on the diseased part with equal severity, though it will be allowed that the sound part could not require any such corroding application.

The method which I practise, and would recommend, is to apply the remedy, whether powder, or any corrosive solution, exactly on the part affected. The instrument which I have found useful is a small quill, in which is fixed a piece of fine sponge, which may be dipped in the liquid or powder. The eye may be kept steady by a speculum, and after the sponge has been dipped in any corrosive liquid, or powder, is to be applied to that part only which is diseased; the corrosive remedy should be so small in quantity, that its effects may not extend farther than on the diseased part. It is by this means that the opacity may be removed, when curable with the greatest ease to the patient, for the opaque body appears, from repeated observation, to be insensible.

Some have recommended us to pare the cornea with a knife, but this is an hazardous operation, I saw an instance where the speculum was used by a very steady

steady operator, who unfortunately cut a piece out of this coat, and, though the aperture is very small, it is continually discharging the aqueous humour. I am of opinion, that the application of corrosives is superior to this, and we should always prefer a mild, though tedious cure, to a quick one, when attended with danger. The corrosive liquid for this purpose may be a weak solution of the corrosive sub. or a small portion of the lap. infemal. dissolved in water.

As I have lately discovered, that the opacity of the cornea may be frequently cured by internal medicines; and as I have already cured many who were totally blind by this method, I shall communicate it without reserve by the following cases.

OBSERVATION XXIII.

The daughter of Mr. Wheelwright, the corner of Young street, Kenfington, had a blindness in one eye. This had been occasioned by a puncture of the cornea, from a needle accidentally piercing the eye at school. She had the assistance of
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the surgeons at Kensington, who declined any attempts, after a few unsuccessful trials to restore the sight of the eye, and advised Mr. Wheelright to get assistance at London. In the coach he met with the Reverend Mr. Du Rosel, of Parson's Yard, Kensington, and communicated to him the unfortunate event which obliged him to go to town, and Mr. Du Rosel recommended the patient to be under my care. On examination, I found the whole transparent cornea opaque, and she could not discern the light in the diseased eye. I began the cure of this case by giving a quarter of a grain of calomel in a pill every night and morning, and ʒss of a powder composed of æthiops min. and nitre, equal parts was given four times in the day, mixed in tea. I at first gave a sufficient quantity of medicine to last a fortnight; and when that time was expired, I saw the patient a second time. The sight of the eye was recovered, but the cornea was not quite so transparent as that of the sound eye, having a cloudy appearance; but this was dispelled by a continuance of the remedies, and at this time it is impossible

possible to discover which was the diseased eye. Thus was this truly alarming case cured in about three weeks, without any external application.

OBSERVATION XXIV.

Ann Escott, West End, Hampstead, had an opacity of the transparent cornea, attended with a violent inflammation, which had lasted three months, and had deprived her of her sight. She had applied to many gentlemen of the profession, but had received no relief from various applications which were administered. I ordered her a plentiful bleeding, and prescribed internally *æthiop. min. cum nitr.* in considerable doses; by these means, and by observing a strict regimen, she was restored to sight in a few days. This is a very remarkable instance of a rapid cure, after the common methods had so long failed.

OBSERVATION XXV.

John Eldrick, a young man, was led to the hospital blind, from an opacity in both eyes. For the cure of this disease he had

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been

been under the cure of an eminent oculist five months, without receiving any benefit. There was no inflammation of the conjunctive membrane ; but, from the colour of the opacity of the cornea, I did not conceive any hopes of curing him. However as an attempt to cure could not render him worse, I began by bleeding, which was occasionally repeated, gave him the merc. dulc. in the dose of gr. fs. made into a pill every night and morning, and he took sal. nitri. ʒij. joined with camphor quater de die. This method I continued for three weeks, and, beyond expectation, I had the inexpressible pleasure to find him capable of attending the hospital without a guide ; and, by a perseverance in the above remedies, he received the sight of his eyes in about two months.

OBSERVATION XXVI.

Isaac Crouch, of St. Ann's Court, Soho, Smith, had a child which was blinded with the small pox, the case was an opacity of the cornea of four months standing. This child was restored to sight by taking
nitre,

nitre, joined with the vin. antimon. in seven weeks.

OBSERVATION XXVII.

John Crow, Fisher Street, Red Lion Square, had an opacity of the cornea of the right eye; he being of a robust habit, I at first prescribed bleeding, and internally he took a decoction of sarfa, with a solution of the corros. sub. These methods were attended with success, they soon dispelled the dark cloudy appearance which impeded vision; and, by a continuance of the remedies, the cure was performed in about nine weeks.

OBSERVATION XXVIII.

A child, aged six years, belonging to Mr. Harris, Bear Yard, Clare Market, had a violent inflammation of the eyes, arising from the measles, which terminated in blindness, from the cornea becoming opaque. Bleeding in this case was first ordered, as the child was of a plethoric habit, and internally was given a nitrous mixture, joined with camphor; a small

pill every night, and a strict regimen was observed. By persevering in these methods two months, the child was restored to sight, and cured of the inflammation.

I could have given a great number of similar instances of cures performed by internal remedies, but as they would in general be only a repetition of the foregoing, I have omitted them.

I must however observe, that I have attempted the cure of many cases, in which I have not succeeded. In some instances I have tried the bark, in patients who have been greatly weakened and relaxed, but ever without success. I have in such cases strengthened the habit of the patient, but the blindness has remained. There are cases of an incurable opacity which are attended with an inflammation of the eyes; the inflammation I have commonly cured by the remedies already recommended, which has been a considerable comfort to the unhappy patients. Blindness alone is certainly a melancholy circumstance, but the misfortune is much aggravated, when attended with an acute painful inflammation.

G U T T A S E R E N A.

THE gutta serena is said to be a disease of the expansion of the optic nerve, called the Retina* ; but whatever is the cause of the disease, or whatever part is affected, it is certainly the most difficult of any to cure.

The gutta serena is a disease of the eyes which causes total blindness ; we have no idea of objects by vision in this disease, the soul perceives not any image of light, and yet, to all appearance, the coats and humours of the eye are in a sound state.

Various methods have been attempted to cure this disease, but they have most commonly proved unsuccessful. Physicians have advised nervous remedies, blisters, setons, caustics behind the ears, mercurials, antimonials, and electricity. I have tried these and various other methods on an immense number of patients blinded by this disease, but have never cured but

* I have dissected four eyes of persons who have died of this disease, but could not discover the least imperfection either in the coat, or humours of the eye.

two persons, whose cases were recent, out of some hundreds.

I therefore conclude, that there is but little probability of our curing this disease, and we should always candidly give our opinions accordingly, and promise with circumspection.

The methods by which I cured the abovementioned two cases, was by giving one the nitrous remedies and mercurials; and the other I cured with a decoction of farfa, and a solution of the corrosive sublimate. I have never seen one cured either by electricity, nervous remedies, or any other means, except those which I have mentioned.

It may be observed, that when the disease is gradually coming on, (which is known by the patient seeing objects double, by an appearance of black spots floating in the air, and by a dimness of sight, which is never relieved by glasses; the cure or prevention may be attempted by the internal remedies recommended in the cure of the opacity of the cornea. In such a state of the disease I have sometimes succeeded; but in other instances the disease has

has eluded every effort to cure, and has terminated gradually in total blindness. It frequently happens, that oculists and pretenders to the cure of diseases of the eyes mistake the first symptoms of this disease for an incipient cataract; and they as frequently mistake the incipient cataract for the Gutta Serena, many instances of which I have been witness to.

OBSER-

O B S E R V A T I O N S
O N T H E
U S E O F G L A S S E S.

G L A S S E S are necessary to rectify the defects which are caused by a peculiarity in the figure of the eye. When the eye is preternaturally convex, it occasions the person to be near-sighted; and if the eye is too flat, the contrary effect is produced. In the first, the concave glasses are necessary; and in the latter, convex glasses are to be used, agreeably to the doctrine of optics.

The convex glasses are always necessary after the operation of couching, or extracting the cataract.

There have been instances of persons being near-sighted, from an apparent convexity, who have been obliged to use convex glasses of a very short focus. This is contrary to the laws of optics, and is a phenomenon

nomenon which we are not able to account for.

A person lately applied to me who had a convexity of the cornea, which formed a conic point, that no glasses could remedy. This remarkable case happened from the force of crying aloud in a hard labour.

Persons should be cautious in the choice of glasses, they should have them particularly adapted to the figure of the eye; for by using glasses more convex, than the eyes require in the early parts of life, instances have often happened, where they have proved useless in an advanced age.

Of the Use of PRESERVERS.

When vision becomes indistinct or imperfect, without any apparent disease, the glasses called preservers are frequently useful; the focus of these glasses are generally from fifty eight to thirty inches. The criterion, by which we may know that these glasses are necessary, is, if when we look at small objects, such as reading the news-paper, we are obliged to place the paper more than twelve or fifteen inches from the eye.

ON GREEN GLASSES.

It may be observed, that crown glass, which is of a greenish hue, refracts the rays of light with an agreeable shade, and does not cause those disagreeable sensations which are produced from the pure white flint glass; for which reason, in all weak eyes, the dyed glass is exceedingly useful, but the green in particular.

A young lady, from too early use of glasses, which were too convex, and being intent upon doing fine needle-work, produced very painful effects in her eyes, and a great discharge. Afterwards this lady used glasses with a faint green shade, with considerable advantage*.

ON PARALLEL GLASSES.

Those persons, the figure of whose eyes is not defective, and who find that the rays of a strong light affect their eyes with a painful sensation, should use parallel

* Persons should not buy glasses of pedlars, as they often produce evils, but of opticians of character.

glasses

glasses of a green colour. It may be observed, that those persons who work on minute objects, such as watchmakers, use these glasses, adapted to the figure of their eyes very early in life, without any injury.

There has been a prejudice, that glasses may be adapted to the age of persons, but this is absurd, as the application of glasses depends on the figure of the eye, which manifestly varies almost in every person. It is remarkable, that persons who have black eyes require glasses earlier in life than those whose eyes are grey or blue; and it rarely happens, that persons with dark eyes are near-sighted; their eyes have not that convexity which is frequently seen in the grey or blue; these from their convexity being commonly near-sighted. The reason that persons who are near-sighted in the early parts of life see small objects more distinct, and at a greater distance as they advance in years, is owing to the eyes becoming flatter. So that those whom we consider perfect in vision when young, have often defects in their vision when old; and those who have defects early in life, are

amply compensated, by having a clear and distinct vision in old age.

Those persons who have their eyes neither too convex nor too flat, may be considered to have the strongest and most durable eyes; in such, no methods whatever ought to be applied to assist vision, unless requisite from the most absolute necessity. In all other cases nature ought to be our guide, and we should never have recourse to artificial aids, till some defect in vision justifies our attempts to obtain relief. The most general causes of a defect in vision are owing to intense study, particularly by candle-light; to working fine needle-work; to too close an attention to our modern amusement, cards; to excessive grief; and frequent shedding of tears; sudden cold air; a false light, as in some of our counting-houses in the city; from frequently riding in a coach when the glasses are up; from a dilatation and contraction of the pupil from various causes*; from an alteration in the colour of the chrystaline lens,

* A dilatation sometimes happens from the palsy, and I have known an instance of a contracted pupil causing blindness from too close an attention to fine needle-work.

which,

which, though of a light colour and transparent in youth, becomes gradually yellow as persons advance in years; from too strong light; from the too early use of improper glasses; from intemperance, or excesses of any sort, and many other causes. It is therefore the physicians or surgeons duty to be clear in the causes of any impediment in vision, and to recommend the most probable methods of preventing or curing the same.

The Strabismus, or squinting, is cured, when recent, by an instrument perforated in the centre, with a small hole secured on the eye, which by obliging the patient to look in a direct line, recovers the original and natural actions of the affected muscles; the defect of which is the cause of this disagreeable complaint.

We have now considered the most common diseases of the eyes, which require medical treatment; in the future part of this work, which I shall hereafter publish, I shall examine the operations on the eyes, and explain what improvements have been made, both antient and modern. And here I could wish, for the honour of physicians,

ficians, that they had made the same attempts at improvement in their department, which the operating surgeons have in theirs. By the joint labours of Brisseau, Daviel, and others, we have much improved on the knowledge of the antients, who had not a clear conception of the cataract; many ingenious surgeons within these last thirty years have attempted to extract the chrystaline, and at present some eminent surgeons prefer couching to extraction.

I have operated for the cataract, and restored to sight great numbers by a new method: I have had considerable success in preventing the inflammation attending this method, and hope I have made such considerable improvements by the invention of two instruments, that in time this operation (which most regular surgeons decline on account of its difficulty, and their ill success) will be as easily performed by the steady hand of surgeons, as the simple and common operation of bleeding. If these my labours are attended with success, it will give me inexpressible pleasure, and will be a means to prevent those flagrant impositions, which the crafty itinerant oculists often practice
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on the unwary, to the great disgrace of all learning, and the learned of the profession.

I could wish, for the honour of the medical art, that men of liberal education would leave that spirit of envy and detraction, which too strongly characterises many in our profession. Men of learning should be generous to one another, and unite their endeavours for the public good. It is a lamentable reflection to those who think, that the most liberal, useful, and honourable profession in the world, should too frequently be composed of men of the most illiberal and depraved sentiments. There are some learned men in this profession who possess the most noble and exalted ideas, and are an honour to human nature; but there are others, who, from their meanness, envy, and contracted views, would be a disgrace to the lowest stations in life.

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