

A N
E S S A Y

ON THE USE OF THE
RED PERUVIAN BARK.

[PRICE TWO SHILLINGS.]

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ON THE
U S E
OF THE
RED PERUVIAN BARK
IN THE CURE OF
INTERMITTENTS.

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A LOVE of novelty, and a readiness to admit facts upon slender authorities, have perhaps been more injurious to the promotion of medical knowledge, and the improvement of the practice, than any other cause.

It has been remarked, that many modern practitioners have shewn a peculiar credulity of this kind, and that it is owing to this circumstance, that so many new medicines have so lately been brought forward to public notice, few

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of which have, in any degree, answered the high expectations conceived of them, from the warm manner in which they have been recommended to medical practice.

It is obvious, that such an eagerness for new medicines as disposes the practitioner to admit them, whether their efficacy be ascertained by much or little experience, must subject the practice to great uncertainty and frequent disappointment, and that the consequences of this must be not only injurious to the practice in the first instance, but have a remote tendency to be more extensively hurtful to the art itself, by ultimately producing, in many persons, such a reluctance to the use of new medicines, as must be an obstacle to the introduction of those which might become valuable acquisitions to the materia medica;—for frequent disappointments in the use of new medicines, must naturally beget an

an unwillingness to try any more new ones, and experience, even in a few instances, contradicting the extravagant relations of writers respecting the effects of medicines, must produce a backwardness to give credit even to the best authenticated medical histories.

So various are the circumstances which accompany many diseases, and the causes of their terminations are so frequently concealed from the most attentive observer, that where a medicine has been administered but in a few cases, let the events of them have been ever so successful, we should not be hasty in drawing inferences from them respecting its powers, much less in communicating accounts of it to the public; as it must be impossible to ascertain with precision, whether the success of the cases has been owing to the medicine or not. Nothing less than the united evidence of such a number of cases in which a medi-

cine has been given, as shall comprehend many of the varieties which in different subjects attend the disease, and in which its effects have been uniformly alike, should establish the reputation of any medicine, and nothing less than this will induce the cautious practitioner to adopt a new one.

BUT when medicines, which are introduced to public notice, come recommended by such a testimony as this, one would imagine that but little opposition would be made to their immediate and general use.

THERE is, however, among those, who have been many years in practice, and even among some of the most liberal and unprejudiced of them, such a partiality for those medicines and modes of treating diseases, which they have been long in the habit of using, as renders them very reluctant to adopt any thing new ;—Instances of the inefficacy

ficacy, or trifling effects of medicines, which the hasty zeal of improvers has recommended to practice, and magnified into a temporary importance, must tend very much to increase this; and not only make such practitioners still more unwilling to deviate from them, but even produce in them such an incredulity respecting new medicines, as disposes them to reject every thing new, merely because it is so.

UNFAVOURABLE as this circumstance must be to real medical improvement, there is reason to fear, it is not unfrequently the case; and every instance, therefore, of the use of medicines of real efficacy being obstructed by such a cause, is to be particularly lamented.

I AM sorry that this remark should be applicable to a medicine of such singular and extraordinary efficacy as the Red Peruvian Bark; a medicine, which, if we consider the nature and frequent
occurrence

occurrence of the disease to which it is particularly applicable, promises to be more generally useful to mankind than any in the *materia medica*; and which, notwithstanding the short time in which it has been known and tried in this country, comes recommended by more decisive experience, and the concurrent unequivocal testimony of more persons, than perhaps ever yet honoured any medicine at its first introduction.

I AM, however, fully convinced, that the general use of this valuable drug is much obstructed by this very circumstance; for I know many intelligent gentlemen within the circle of my own personal enquiries, and have been informed of still more, who appear to reject it upon no other principle, than its being new.—The practice of many of these is so extensive, their reputation so respectable, and their influence on other practitioners so considerable, that
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their refusing it is to be particularly regretted; as I am persuaded their example must very greatly tend to prevent its beneficial effects being so widely diffused as they would otherwise be.

THAT upon subjects of speculation and hypothesis, there should so frequently be a difference of opinion among medical people, is not to be wondered at:—We see theories, the best of which must be, in some measure, the fabrications of fancy, constantly fluctuating; the favourite one of to-day, being to-morrow disapproved; and we know that the reputation and ingenuity of peculiar persons will, for a time, give a value to peculiar systems, which of themselves would have scarce excited notice.—This always has been, and probably ever will be the case, upon subjects where the imagination is concerned, and which cannot be investigated by actual experiment, or be proved by an unequivocal appeal to the

the senses. But that practitioners should seem to differ about simple facts, and should maintain opposite opinions in matters, which experience can so easily decide, is peculiarly strange, and seems not to be reconciled to that spirit of liberality, which the profession would, at present, lay claim to.

THE many opportunities I have had of proving the efficacy of the Red Peruvian Bark, and of ascertaining that its wonderful powers are uniformly the same, and my experience of its great usefulness in curing, with such certainty, a complaint which, if not put an early stop to, will, in many cases, immediately produce very dangerous consequences, and in most others, will, in time, bring on a train of very calamitous symptoms; from which likewise, no class of persons is exempt, and with which, moreover, so large and so respectable a part of the community as the labouring poor is so especially afflicted,

afflicted, has so strongly impressed my mind and interested my feelings, that I should not be satisfied with myself, if I did not, in the most public manner, make known the very great success with which its use has been attended in my practice, and by contributing all in my power to establish its reputation upon the most positive and repeated evidence, endeavour to induce others to make use of it.

THE observations of Dr. Saunders, upon this subject, which have been already communicated to the public; contain so full an account of the properties of this Bark, and such very ample testimony in its favour, as would seem to supersede the necessity of any other publication upon the same subject; and any thing written by me upon it may, perhaps, appear particularly superfluous, as I have before, in his pamphlet, given very full evidence in its support; this certainly would have

been the case, had the use of this medicine become so general as its virtues would have led one to have expected. —There are few books, unless upon subjects of a very popular nature, which fix the attention of the public beyond a limited time; and Dr. Saunders's pamphlet, which has been published more than a year, well as it is written, and important as is the matter it contains, cannot expect the honor of a notice much beyond such a period; these pages will not, therefore, be without their use, if they serve no other purpose, but to recall the attention of medical readers to the Doctor's observations, the truth of which will, at the same time, be still more confirmed, by the fresh proofs of the efficacy of this Bark, which my practice has furnished me with since that time; and in a matter which must rest totally upon experience, every additional testimony has its value.

ONE would imagine that those who refuse to admit this Bark into their practice, must have some reasonable objections to it; these objections, however, it is obvious, can be but of two kinds,—they must either positively object to it, from having found it injurious to the patient, or unequal to the cure of the disease, or they must negatively object to its use, from its being unnecessary; in other words, either the Red Peruvian Bark must want efficacy, or the common Bark must not have failed with them.

WERE the first the case, we might have expected that accounts of its failure would have been published, or at least would have been reported, and we should have heard of persons, who, having been disappointed in its application, had relinquished its use; as this has, however, not been the case, we may fairly presume the fact has not happened, for it is no want of candour to suppose,

pose, that those practitioners who are peculiarly averse to new medicines, and more especially those druggists, who may be interested in the reputation and sale of the common Bark, would have been very ready to have made known such instances of its inefficacy.

WITH regard to the last, if those persons who continue the use of the pale, in preference to the red, do it because they have found no instances of its failure, they have indeed been singularly fortunate: But this proves but little, when opposed to the general accounts of others; for it will be no difficult matter to prove, from the most authenticated general testimony, which I can likewise confirm by my own experience, that the common Peruvian Bark has within these few years, in many cases, totally failed of stopping the fit of the intermittent; that where it has done it, it has seldom done it

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it in the usual time, and it has always required much larger doses of it than have been heretofore given.

THE various substitutes for Bark, such as metallic salts, opium, volatile alkalis, sal ammoniac, myrrh, chamomile flowers, &c. which many physicians have lately been in the practice of using, in the treatment of intermittents, and the great sale which there has been, within a few years, for quack medicines for the cure of agues, and more especially for a popular tincture, which has been proved to contain a very dangerous portion of arsenic, all prove, that the reliance both of the faculty and the public at large on common Bark, has been very much diminished within that time; and certainly, this having been the case for some years past, argues a want of confidence in the powers of common Bark, founded upon something more than the casual opinion, or prejudice of the day.

I HAVE

I HAVE now before me a Latin Treatise* on intermittents, written in the year 1780, by a physician of considerable practice, in a country where intermittents are very frequent: having found the common Bark so frequently fail, he proposes the addition of myrrh and sal ammoniac to it, and gives several cases of intermittents, which did not give way to Bark, administered in the usual mode and quantity, which he imagines were cured by the addition of the before mentioned medicines, but all which, evidently appear to me to have been removed by his having persevered a long while in large doses of the cortex; for he usually gave a drachm of it every two hours, during the absence of the fits, for several weeks.

THE book begins thus—"Cum illud
" medicamentum divinum, magnum il-

* Concise et practice observationes de intermitten-
tibus febribus, &c. Auctore Gulielmo Norford, M. D.

“Iud Dei donum, cortex peruvianus,
 “exploratus fuerit, ejusque in lucem
 “prodierit, fortasse videatur medicis
 “parum necesse aliquid amplius anqui-
 “rere, quo, quenquam febre inter-
 “mittente laborantem ad sanitatem re-
 “vocare possint. Sed cum longo re-
 “rum usu appareat, vel corticem peru-
 “vianum febrem intermittentem haud
 “semper profligasse, operæ pretium est
 “quærere, quod aliud medicamen in
 “statu quopiam peculiari hujusce mor-
 “bi tuto adhibere possent medici.—Au-
 “deam enim affirmare nullum esse me-
 “dicum, qui quidem multos annos me-
 “dicinam factitavit, quem sua de cor-
 “ticis ipsius peruviani efficacia concepta
 “spes non aliquando in febre intermit-
 “tente fefellerit.”

IN case I. he says—“In primis mali
 “hebdomadis, sub pharmacopolæ curâ
 “sumpsit æger corticis peruviani mul-
 “tum sed frustra.”

IN case III. he says—"Febre quar-
"tanâ multas hebdomadas laboraverat
"ægra et maximam corticis quantita-
"tem frustra sumpserat."

AND in another case—"Varia medi-
"camenta diu sumpserat æger, et corti-
"cis peruviani multum frustra."

WITHOUT adverting to the opinion of the author concerning the cure of intermittents, for which indeed I have not made these quotations, it must be admitted, that he bears the most positive testimony to the failure of the common Bark in many cases, and to the weak powers of it, even in those which appear to have been cured by it, as it required so large a quantity of it, and it was necessary to continue its use, in some of them, for many weeks.

MY own experience of the common Bark, has, within these few years, sufficiently convinced me of its comparatively

paratively weak powers; for though I am ready to acknowledge, that I have not had a single case under my care, in which, provided my patient would but persevere in its use in considerable doses, a cure was not effected; and though were I not in possession of the red, I should still consider it as a very valuable drug; yet the necessity I have found of giving much larger quantities of this Bark than usual, and of continuing it longer, and the many instances, which, notwithstanding this, have occurred to me, of its not putting a stop to the fit the first time of its application, evidently prove its weaker quality.

AMONG many cases which I could mention of its not succeeding in the first intermission in which it was given, a striking one occurred in my own family in the summer of the year 1779; one of my children, at that time a delicate girl, almost nine years of age, was

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seized

seized with an intermittent, attended with delirium and other severe symptoms during the presence of the fever; the intermission, however, being perfectly clear, and there being a sufficient length of time, the disease proving a tertian, to admit of the use of the Bark, I began to give it her at the termination of the third fit, and being aware, at that time, of the necessity of giving a large quantity of it, she took more than an ounce of the powder, and almost a pint of a strong decoction of it, before the time of the expected return of the fit, which, however, was not stopped by it, as she had another fit nearly as severe as the former ones; —but a perseverance in the same large quantity, in the succeeding intermission, proved more efficacious, and the complaint, which was a very formidable one, was happily removed.

I HAVE in my recollection, moreover, the cases of two gentlemen, who
had

had each an obstinate intermittent in the year 1779;—they were both under the care of an experienced physician, who prescribed the cortex in various ways and in considerable quantities, but without being able to put a stop to the fits, or scarcely to weaken the force of them; at length, being wearied with taking such quantities of the medicine, and mortified with such constant disappointments, they were determined to take no more of it, and left their cure to time, and being both men of good constitutions, and the season of the year, it being spring, proving favorable to them, they recovered as the weather became warmer.

I REMEMBER, likewise, a few years ago, to have attended an elderly lady, who had an intermittent more than a year:—Very early in the disease she put herself under the care of a physician, who gave her the com-

mon Bark, but not finding it put a stop to the complaint, he prescribed various other medicines, among which were myrrh, *sal martis*, columbo root, and opium, and many of which she continued to take for several weeks successively, but without the least interruption of the fit; he then ordered her to take Bark again, and to persevere in its use for a long while:—Accordingly, she took a strong decoction of it three or four times a day for several months, but still without efficacy; at length, she took it in substance, and in a much larger quantity than she had before taken it, and from continuing it a long time, she had the good fortune, at last, to obtain a cure.

I DOUBT not but numberless instances might be collected, if not of the absolute failure of the common Bark, at least of its not stopping the fit with certainty the first time of its being applied, and I will venture to say, that
those

those who continue the use of it cannot be without instances of the latter; indeed, I have lately been informed, by the patients themselves, of two recent cases, which were under the care of a gentleman, who cannot be suspected of administering any medicine carelessly, or improperly, in one of which two ounces of the common Bark were given without stopping the fit, and in the other one ounce was given without better success.

BUT it must be needless to insist upon further proofs; as those which I have already adduced, joined to the many strong ones contained in Dr. Saunders's Pamphlet, establish the frequent inefficacy of the pale Bark, beyond a possibility of contradiction.

I SHALL therefore proceed to the immediate subject of these pages, namely, to consider the medical qualities of the Red Peruvian Bark; but
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in doing this, I mean not to say any thing about its natural history*, to do which

* WHEN I first read Dr. Saunders's Pamphlet, and found that he and his correspondents considered the Red Bark as the produce of the same tree from which the Pale was obtained, but that the latter was taken from the small branches, and the former from the trunk and large branches, the account seemed so probable, and the opinion so much favoured by the analogy of oak bark, and the observations of tanners on the difference between that of the small branches and that of the trunk, that I readily admitted it; but having since that time thought more upon the subject, I cannot now help suspecting that it is a different species, and that the reasons given for the contrary opinion, are not quite satisfactory.

It is intimated in several parts of the Doctor's Pamphlet, that the Red Bark was the bark which was originally known and used in Europe, and that the introduction of the pale was owing to the natives, who gathered it, having experienced that, in taking it from the trunks and larger branches of the trees, the trees were destroyed by it, and that they therefore afterwards took it only from the smaller branches; or from very young trees, whose bark was smaller and paler, and that the merchants who sold it had the address not only to reconcile medical people to the use of this, but even to persuade them to prefer it: But if true, it

which with any degree of accuracy,
I believe we are yet, by no means,
furnished

it must be one of the most extraordinary circumstances which ever occurred in the history of the materia medica, that after having been for a considerable time in possession of the best sort of a drug, not only one country, but that every nation in Europe, should be induced to prefer the worst to the best, and still more so, that this should be the case, with regard to a drug, concerning whose efficacy there could not be long a difference in opinion, as the experience of so many persons, who lived in such various places, must very soon have proved its inferiority:--Nothing but the accidental circumstance of intermittents being, at the time in which the imposition was first practiced, very infrequent, and remarkably easy of cure, could have rendered this possible.

BESIDES, the idea, of lopping the trees and stripping the branches only with a view to saving the trunks, from whence branches might again spring, which is evidently taken from a custom which takes place in countries where land is dear, and where every tree having been raised by art, is of considerable value, does not appear to be applicable to the place where the Bark Tree is found; for on that part of the continent of South America there must be immense tracts of land, which never have been cultivated, and which are of little or no value, and on these

furnished with sufficient materials ; nor do I think it necessary to give the
chemical

these, probably, there are great natural forests, perhaps even of the Bark Tree itself, which, if so, cannot be likely to be exhausted for ages, if taken down for no other purpose than to furnish Bark, and, consequently, it must be very improbable, that this practice of taking the bark from the branches only should take place.

BUT supposing that the Bark Tree is rather scarce, if the accounts of the first writers deserve credit, a scarcity of the Bark is not likely, even from that circumstance, soon to take place, as it appears that, like the bark of the cork tree, it grows again, and a fresh supply is obtained from the same tree in a little while.

THE account which favours this opinion I have taken from Dr. Oliver's description of the Jesuit's Bark, in the fourth volume of the Abridgement of the Philosophical Transactions, and is as follows :—" Peruvian
" Bark comes from a tree about the bigness of a plumb-
" tree, with leaves like ivy, but not quite so big, and
" are always green.—The Indians call it querango.—It
" is gathered in autumn, and the rind takes off all
" round as well from the trunk as boughs, which grows
" again in four months, as cork does. The trunk is
" about the bigness of a man's thigh ; it bears fruit
" not

chemical analysis of it, which perhaps would serve as little in the investigation

“not unlike a chesnut, except in its outer rind,
 “or shell, which is properly called China china, and
 “is esteemed by the natives beyond the bark taken
 “from the trunk or boughs.

“THIS account I received from an ingenious apothecary at Cadiz, in Spain, in the year 1694, who
 “had lived in Peru, and had seen it growing, and
 “had gathered it several times.—From which history
 “I made this observation, that probably China china,
 “or the rind of the fruit, was first only in use, and
 “the more powerful medicine used in smaller quantities,
 “and that the bark of the tree came not into use
 “until some time after, when the virtues of it being
 “more known in Europe, occasioned a greater demand
 “for it.”

BUT admitting that the above account is not sufficiently authenticated, and that the bark does not grow again as is there mentioned, surely in the very climate, where nature originally planted the tree, and in which it must consequently flourish most, it must be a very easy matter to propagate it, and raise plantations of it; and in a country, where, as before observed, it is probable, the land has very little value, is it to be supposed that a tree which produces so important an article

tion of its medical qualities ; but shall simply confine myself to an account of
of

in commerce, would not be an object of cultivation, as well as indigo, or the sugar cane ?

THAT there are different species of the bark-tree, various writers testify, and is fully proved by a late account of *Quinquina*, published in the History and Memoirs of the Royal Society of Medicine at Paris, in which are given reflections on two kinds of *Quinquina*, newly discovered in the environs of Santa Fè, in South America ; one of which very much resembles the Red Bark which is the present subject of enquiry, and I cannot help conjecturing is the same thing ; but will give an extract from the account as it appeared in the appendix to the Monthly Review for July, 1783.

“ HERE we have the sum and result of the report
“ made by Messieurs Daubenton, Macquer, Bucquet,
“ De Jussieu, and Cornette, who were appointed to
“ examine the discovery in question.—This piece is
“ adapted to excite diffidence and suspicion with respect
“ to the Peruvian Bark which is sold in the shops.
“ The several kinds of bark are so different in their
“ strength and efficacy, that it is no wonder we see fe-
“ vers often resisting this excellent remedy. M. de la
“ Condamine, who was upon the spot where the tree
“ flourished most, described three kinds of *Quinquina* ;
“ the red and yellow, which are the most esteemed,
and

of its effects, as they have appeared to me in the actual use I have made of it in

“ and the white, which is not esteemed at all. M.
 “ de Jussieu, who was also upon the spot, and ex-
 “ mined the tree and its bark with a botanical and me-
 “ dical eye, admitted a larger division of kinds, which,
 “ he nevertheless, reduced to two principal ones. Un-
 “ der the first, he comprehends the red, yellow, and
 “ knotty Quinquina, which have all smooth, purplish,
 “ almost inodorous flowers, and a bitter bark, more or
 “ less coloured. Under the second, he comprehends four
 “ species of white Quinquinas, which are all distinguished
 “ from the former, by having rough, red, strong smel-
 “ ling leaves, having within, fruits larger in size, and
 “ the exterior bark whitish. In two of these, the bark,
 “ when recent, has, though in an inferior degree, a feбри-
 “ fuge quality, which it soon loses. In the two
 “ others, whose flowers exhale the finest odor, the bark
 “ is insipid and without the least efficacy.

“ As the Red Bark was become very scarce, the
 “ discovery of two kinds of Quinquina at Santa Fè,
 “ in $4\frac{1}{2}$ degrees of northern latitude, is a matter
 “ of great importance. The first, which resembles
 “ the red Quinquina in its leaves, is pronounced by
 “ our examiners to have all the excellent qualities which
 “ recommend this remedy; such as odour, bitterness,
 “ stipticity, a facility of being dissolved in the different
 “ menstrua, and the abundance and the exact combi-

in the various kinds of intermittents;
and I confine myself principally to its
use

“ nation of its mucilaginous and resinous principles.
“ The second is rejected on account of its resemblance
“ to the white Quinquina. The discovery of the
“ Quinquina tree at Santa Fè, will not only procure
“ a great abundance of this precious bark, but also ren-
“ der its transportation more expeditious and easy, by a
“ river, whose mouth is near the harbour of Cartha-
“ gena.”

WHETHER the bark lately discovered at Santa Fè be the same as that which we are now in possession of, or not, it is evidently a good bark, as resembling the red Quinquina, and it being further evident, that the opinions of M. de la Condamine and M. de Jussieu, coincide with experience, in proving that the Red Bark is the most efficacious, and the white the least so, may we not conclude that the pale, or common Bark, is a different species from either of them, and as holding an intermediate place between the two before-mentioned kinds, has only a proportional efficacy ?

BUT after all, whether the Red Bark be a different species to the pale, or not, or whether the pale, at present in use, be the same as what was formerly known, or even whether the uncertainty of curing intermittents with the pale, which has principally been observed within a few years, be owing to the drug, as a natural production,

use in intermittents, because, in whatever other disease it may be applicable, the experience of it in this disease must be the test by which its efficacy is most certainly proved; for in no other disease does the certain effect of a remedy so obviously follow, its use, as in the intermittent.

THE removal of putridity in malignant fevers, the putting a check to the progress of a gangrene, and the restoration of vigor and tone to the habit, when debilitated by long continued fevers, or excessive discharges, are all gradual operations; and though

production, having degenerated, or the disease having within that time become of a worse kind, it is comparatively but of little consequence to determine; for though the knowledge of it would much gratify the curiosity both of the naturalist and the physician, yet, it is sufficient for all the purposes of medical practice, to have it proved, that the red, which has been lately brought into this kingdom, is much more efficacious than the pale, which has for some time past been used, and is at present sold by druggists.

we may in most instances, where the cortex is administered in those diseases, be allowed to attribute the favourable change of symptoms to its salutary influence on the constitution; yet, as the precise time of its operation cannot be ascertained, it is impossible to speak decisively of its effects; whereas in this singular disease, where there is a fixed period for the recurrence of the paroxysm, and in which the experience of former fits, makes the return of others almost a certainty, if when a due quantity of this medicine has been previously administered, the fit should not return, the prevention of it may, with as much certainty, be attributed to its influence, as that sleep should in any case be considered as the effect of an opiate, or that a vomiting should be occasioned by a dose of ipecacuanha.

WE may therefore make no scruple in concluding that Bark to be the best for all purposes, which in the smallest quantity,

quantity, and with the greatest certainty, puts a stop to the fit of an intermittent; and no one will, surely, hesitate to give that the preference, in every disease in which the Bark is usually exhibited, whose superior efficacy has been established by such a criterion.

IN October, 1781, I first received a specimen of the Red Peruvian Bark; it was a small quantity for trial, and not more than sufficient to make the experiment with in two cases, which, out of several, which were then under my care, I selected as being the worst; the one was a quartan of many months standing, the patient, a boy about eleven years of age, very much worn down by the disease; the other a quotidian of nearly as long a date, the patient a young woman, eighteen years of age, and whose constitution was also much impaired by the long continuance of the complaint; to both of them, after their stomachs had been cleared

by tartar emetic, given at the approach of the fit, I gave, in the intermission which followed, an ounce of it divided into twelve doses, all of which were taken before the period of the expected returns of the complaint, the intermediate time in which the doses were taken, being pretty equally divided; both lost the fits, and though they took no more of it, for they had taken nearly all which was sent me, they had no return of them until many weeks after, when the weather proved very wet, and then the fits went away without their taking any more of this or the common Bark; for they were both at this time removed to such a distance in the country as not be able to send to me.

My success in these cases induced me to procure a considerable quantity of it, as from these trials it appeared to be, at least, as good as the common Bark, and as soon as I received it, I
made

made use of it in several tertians then under my care, in all which it answered the intended purpose.

ABOUT this time I had a patient, a gentleman about fifty years of age, who had had a quartan more than three months; he had been endeavouring to cure himself by a variety of popular receipts, among which was one which contained a considerable quantity of the common Bark; when I first saw him, it was the day after he had had a fit, but he was then much indisposed, his pulse was too quick, he had no appetite, and was much reduced; he took a saline fever medicine and an opening draught before the next fit, at the approach of which I gave him a grain of emetic tartar, which vomited him considerably, and he repeated half a grain of it every three hours until the fever terminated, which, though it lasted a long while, went off with a greater

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and more general perspiration than was usual at the close of the former fits.

I now thought it right to begin giving him the Bark, but his intermission not being quite so perfect as I wished it, and moreover, my not having yet had a sufficient number of cases, in which I had given the Red Bark, fully to establish its reputation with me, I thought it most prudent to give the common Bark, of which he took two scruples, at such intervals during the intermission, that he got down more than an ounce and a half of it before the time of the expected return of the fit, but it did not succeed, and he had another fit fully as severe as the former ones; I then resolved to make the next trial with the Red Bark, an ounce of which was taken in the course of the succeeding intermission, and in doses of two scruples, and this stopped the fit; I prevailed upon him to continue its use in the same dose, three times a day

day for a little time, which he did till he had taken two ounces more of it, but he has taken none since; and though his employment exposed him at that time very much to the weather, and he was soon after frequently wet, yet he had not the slightest return of the complaint.

FROM that time to the present, I have confidently given it in every case which has been under my care, and its use has been invariably attended with the same immediate success; and though I have administered it in every species of the intermittent, and have given it to patients under the greatest variety of circumstances, respecting age, constitution, date of the disease, &c. and more than two hundred and fifty persons have taken it under my direction, yet it has not failed in a single case to stop the return of the paroxysm in the first instance of its application.

In the number of those who have been cured by it, were several whose legs were much swelled, and their bodies hard, and who appeared to be rapidly hastening into dropfies; in many of them the fits were so severe, and of such long duration, other unfavourable circumstances likewise occurring, that I am persuaded if the disease had not been put an early stop to, it would have terminated in a hazardous fever.—More than thirty were young children, and six or seven were infants not a year old.—A considerable number of my patients, moreover, being poor and ignorant people, and some of them living at some distance from Norwich, to whom I could only give general directions, as it was impossible for me to attend them, it may be easily supposed that most of that class took it carelessly; and I recollect one person, a strong country girl, about seventeen years of age, who took an ounce of it at two doses,

doses, yet all of them were immediately cured.

As the taste of this Bark is so much stronger, and more pungent than that of the common Peruvian Bark, I have been surprized with what little reluctance my patients have usually taken it, and more especially that children should have gotten it down with so little difficulty; I believe, however, that it nauseates much less than the pale Bark; and many of my patients, who upon former occasions have taken the pale, have assured me that they preferred the taste of the red:—Should further trials confirm this, it will be found no trifling circumstance in favour of the red, particularly in its use with young children, as it is well known what trouble has usually attended the administering Bark to such patients, and that it has been in so many instances found impracticable to do it, as to produce various contrivances to get it into the circulation by other means, such

such as injections, long continued applications of it to the body in Bark waistcoats, &c.

I HAVE likewise, hitherto, in every instance, given it simply in substance, not once having, for the above reason, found it necessary to join any thing with it by way of covering the taste; nor having ever yet judged it proper, on account of any symptoms accompanying the disease, to add to it any other medicine: the advantage in giving every medicine uncombined, or unchanged by any process, is sufficiently obvious, and is more especially so, when we wish to ascertain with precision the powers and properties of a new one.

THE dose in which I have usually given the Red Bark, has been two scruples, and the quantity which I have always endeavoured to get down before the time when the fit was expected,

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has been one ounce to adults, and a proportionable less quantity to younger persons and children; but I am persuaded that this is more than in most cases is necessary.—I am convinced of this, not only from what Dr. Saunders has said on the subject, and from the cases mentioned by several of his correspondents, but in my own practice, from many of my patients having obtained cures by taking much less of it than was directed by me: my reason for not giving a smaller quantity of it than the above, which has not in a single instance been fallible, was my wish not to run the risque of its failure, by giving a less quantity, until the reputation of the medicine was fully established, and its use become general.

MUCH has been said by different writers, and various opinions have been entertained, respecting the part of the Bark in which its medical quality principally resides; but whether the external,

nal, or internal coat of it be the best, or whether its efficacy be chiefly confined to the refinous part, with which indeed the red seems most plentifully to abound, I am not competent to say, and it would be perhaps very difficult, if not impossible to ascertain: an accidental, and indeed a trifling circumstance in my use of this Bark, would seem to prove, either that its virtue is equally distributed in every part of it, and that the outer and the inner Bark, the finest and coarsest particles, that which is most brittle, and that which is most tenacious, are equally proper for medical purposes; or that if there be a difference, the dose in which I have given it has always been so large, that even when I used the greatest quantity of the worst of it, there was still enough of the best to answer the purpose of a cure.

HAVING, for very obvious reasons, always bought the Red Bark in its
rough

rough state, I have had it powdered at home, and from not knowing in what part its quality most resided, I always directed that a certain quantity of it should be powdered at once, the larger and smaller pieces being indiscriminately taken, and that the particles which most easily passed through the sieve, should be perfectly mixed with those which required more beating, and were longer in passing through, and when the whole was powdered, that it should be well mixed together, so that the powder finished for use might be equally composed of all the various parts of the Bark: For many months, however, it happened, from the inattention of the persons to whom this business was entrusted, that some of my patients took only that which came first through the sieve, that others took what next came through, which must consequently be some degrees more tenacious as it resisted the first beating, and that even some took

only what must have been principally the more gross and ligneous parts of it, I mean that which is most difficult to reduce to powder, and which even in the common Bark, is by many persons usually left for decoctions.

THE success with which my first use of this Bark was attended, was such as to flatter me there was but little occasion to continue giving it after the fit was once stopped; but though I have not found this to be absolutely the case, and have therefore always directed my patients to continue its use two or three times a day for ten days or a fortnight, yet I am persuaded that its preventive power, if I may so express myself, remains longer with the patient, than is the case with the pale, for out of the great number who have taken it, many of whom I know could not be prevailed upon to take it more than a few days, and some not at all after the fit was stopped, but six or seven

seven instances have come to my knowledge of its having returned within the month.

It is the practice, I believe, with some persons, not to continue the use of the Bark every day after the fit has been put a stop to, as they imagine that its effect on the habit is more sensibly felt by omitting it entirely until some time between the tenth and fourteenth day after it, and then by giving it in as large a quantity as when first taken; and I find in Dr. Saunders's pamphlet, that my ingenious friend Mr. Sherwen, of Enfield, intimates that the daily use of it may so habituate the constitution to its effects, as to render it useless at the time when the fit is most likely to return; meaning about a fortnight after it has been stopped.—Without my pretending to say that the mode I have hitherto adopted in giving it after the fit has been stopped, is better than the other I have just mentioned, and much

less without entering into the principle of its action in either case, I may certainly conclude, that the success attending it in the way I have given it, proves that the daily use, at least, of the Red Bark, does not render the constitution so insensible to its effects, as to endanger the return of the fit at the end of the fortnight, as I have not had a single instance of its return at that period, where it has been taken two or three times a day until that time.

It would be absurd to expect that this, or any other medicine should protect the patient from future and more remote attacks of the complaint, for when the same return of season, and the same peculiar state of the atmosphere which first induced the disease, should again take place, is it to be wondered at that the same complaint should again make its appearance? but unavoidable as this appears to be, and
more

more especially as it is in some situations, how much is the evil of it lessened, by our being in possession of such certain means for putting a stop to its pernicious effects?

It would be needless and tedious to enter into a detail of all the cases which have occurred to me since I have used the Red Bark, nor can it be necessary to give even a catalogue of the names of all the persons who have been cured by it; yet as the circumstances which tend to recommend a new medicine cannot have too great a notoriety, I will, as they occur to my memory, give a list of some of the persons in this neighbourhood who have been cured of intermittents by this Bark, the situations of most of them rendering them well known here; and some of the cases having been, moreover, attended with some peculiar circumstances, which made them very striking instances of its efficacy, I shall likewise

wife select some of such, and subjoin a brief history of them.

List of persons who have been cured by the Red Peruvian Bark *.

Mr. Thomas Smith, quartan; Mr. Garland, tertian; Mr. Carter, jun. tertian;

* WERE it necessary to make an apology for thus publicly mentioning the names of some of my patients who have successfully taken this Bark, I presume the obvious reason which induced me to do it, would be a sufficient one.

THE reputation of a medicine can rest upon nothing but the actual experience of its usefulness, and the testimony of this cannot be authenticated but by an appeal to the persons who have been the subjects of that experience; for the mention of those who have taken it, merely in round numbers, be the amount ever so large, and the writer's veracity not the least questioned, can never be so satisfactory to the public, as the personal proofs of the parties themselves, who thus become witnesses to it.

SHOULD there be, moreover, any who are disposed to censure my taking this liberty, as being unusual with medical

tian; Mr. Ph. Money, Trowse, tertian; Master Money and Miss Money, quotidians; two children of Mr. Barham, at Kirby, quotidians; Mr. Oliver, tertian; Mrs. Taylor, tertian; Mr. Kettle's daughter, of Colney, quotidian; Mr. Howlett, of Earlham, tertian; servant of James Crowe, Esq. quotidian; servant of J. Gay, jun. Esq. tertian; servant of Mr. Bloom, of Trowse, tertian; Mr. and Mrs. Clift, tertians; Miss Clift, tertian; son of Rev. Mr. Ansdell, tertian; Mr. Dixon, tertian; Master Webb, quotidian; Miss Kett, quotidian; Master Bunn, quotidian; Mrs. Denny, of Shottisham, tertian; Mr. Wright, of Bracondale, irregular;

medical writers, and countenanced only by the lowest order of the profession, the authors and venders of nostrums;—to these persons, however I might be hurt by such a censure, I can offer no other reasons for it, than that it appeared to me absolutely necessary to establish an important matter of fact, and I trust that the most candid even of them would, upon reflection, admit it as a proper one.

Mr.

Mrs. Glover, of Kirby, tertian; Mr. Smith, of Burlingham, quartan; servant of Sir Lambert Blackwell, Bart. tertian; Miss Day, tertian; Mrs. French, quotidian; Mr. Hirst's maid, quartan; Mr. Turner's son of Trowse, quotidian; Mr. Thomas White, irregular; Mr. Peake, tertian; Mr. Oliver's maid, tertian; Mr. Holywell, tertian; Mrs. Clarke's child, quotidian; Mr. Francis Sillis, tertian; Master Grout, tertian; Mr. John Bafeley's maid, tertian; Miss Kitton, tertian; Miss Bardwell, quotidian; Mrs. Ann Day, quartan; Mrs. Wolverton, tertian; Mrs. Gittens, tertian; Miss Gittens, tertian; Miss Forder, tertian; Mrs. Garland, tertian; Mr. Shepperson, tertian; Mr. White, of Kessingland, irregular; Mr. Carter's maid, tertian; Miss Newton, Palgrave, quotidian; Miss Burks, tertian; two children in the neighbourhood of Mrs. Gurney, at Bramerton, and at her request, quotidiens; Mr. Pratt's child, tertian; several children at Hetherset,

at the request of Mr. John Browne, quotidian; Mr. Fish, of Postwick, tertian; Miss Garland, tertian; Miss Wright, quotidian; Mr. Coke's coachman, irregular; Rev. Mr. Wells, tertian; Mr. Betts's daughter, at Trowse, tertian; Master Edward Thompson, tertian; Mr. Larkman, of Colney, irregular; Mr. Sillis's Servant, irregular; Mr. Bacey, quotidian.

CASES of persons cured by the RED PERUVIAN BARK.

*Case in which the intermission was short,
and the principal quantity of the Bark
was taken very near the time of the
approach of the fits.*

IN August, 1782, I visited a gentleman about twenty-five years of age, he was robust and of a full habit:—he had had an irregular intermittent

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about a fortnight ; it began as a quartan, of which he had three fits ; it then became a quotidian, and he had three or four more fits ; I saw him about the time when it began to come every day, and I found the fever, the fit being then upon him, was very considerable ; the usual treatment, which I need not particularise, was made use of, until he appeared to be in a state to take the Bark : the fit, after which he was to begin to take it, terminated about ten o'clock at night, and its return was expected the next day between twelve and one at noon. The time of the intermission being short, he began to take it in doses of a drachm each.—I had a message from him early in the night, that it disagreed with him, and that he could not keep it down ; I desired him to persevere, to consider what he had thrown up as lost, and to supply its place with another dose : between five and six o'clock in the morning he sent to me again, and
desired

desired me to go and see him ; I found him much fatigued for want of sleep, which he had been entirely hindered from getting, by his repeated endeavours to take the Bark, every dose of which, except the first, had been rejected, and he seemed convinced that his stomach would not retain it : I prevailed upon him, however, to take half a dose of it, and this kept down ; I staid with him for some time, and half an hour after his taking the first half drachm I repeated the same quantity, and this likewise kept down ; I then left him, desiring him to continue it every half hour, in the same doses of half a drachm.—Between eight and nine o'clock I was sent for again to him, and he gave me the same account of its coming up again as before ; notwithstanding which I ventured to give him another dose, which he immediately threw out of his mouth, before any of it could have been swallowed ; observing this, I was more particular in

enquiring in what manner the former doses had been vomited up, as he called it, and from the attendant's account I was convinced that what he imagined to have been vomited up, had never been swallowed; by this unlucky mismanagement of himself, he had taken but two drachms and a half of the Bark, instead of five drachms, and there remained five drachms and a half to compleat the ounce, which was to be taken in little more than three hours; however, I was determined he should persevere, and immediately gave him another drachm of it, as I was no longer under any apprehensions of its coming up, being fully satisfied that all had been retained which had been actually taken into the stomach; this kept down, and by strictly attending him with a dose every half hour, or at least every three quarters of an hour, the whole was gotten down before the time of the expected return of the fit, which happily prevented

vented its coming, and he had a very speedy recovery.

THE night having been entirely without sleep, and the patient having been excessively fatigued and fretted by his many fruitless endeavours to take his medicine, were very unfavourable circumstances in his situation, and prevented his fever from going off so perfectly as it did in the former intermission, for he was much hotter, and his pulse quicker than was to be wished, when taking Bark: however, the event fully justified my perseverance, and strongly proved the efficacy of the medicine.

Cases in which a very small quantity of the Bark put a stop to the fit.

AMONG the many poor people to whom I gave the Bark in the autumn of 1782, was a child about eight years old

old, who had had a quotidian more than two months, and was directed to take half an ounce of the cortex, between the fit, which was to terminate on a monday noon, and was expected to return the day following, about the same time: on the saturday following, the child's father came to inform me that he was cured: upon enquiring how the child had taken it, I was surpris'd to find that he had not then finished the half ounce; for when I told him that I meant the child should have gotten the whole quantity down in one day, he said he had understood before, that I had directed it to be taken between the monday and the saturday night, so that it is probable the child could not, the first day, have taken more than one drachm of the medicine, which it is clear, proved sufficient to stop the fit.

IN September, 1783, Master ——
a young gentleman about two years
of age, was suddenly seized with a
very

very smart convulsion fit, it lasted many minutes, and was succeeded by great heat and restlessness, which continued many hours and went off with a considerable perspiration:—within twenty-four hours from the first attack, there was another return of the convulsion, attended with the same consequent symptoms.—The day following he was to appearance as well as usual, but the following morning, an equally strong convulsion came on, and was followed by the same fever as at first, and went off likewise by sweat:—being in the country at the time when these fits happened, he was brought to Norwich the day after the last, on which, being his best day, I found him free from any complaint.

BEFORE the next morning the fit returned, without the convulsion, but in other respects with great severity.—The disease being now evidently an intermittent, and the two last fits being
clearly

clearly of the tertian type, I ordered the Red Bark to be given him upon the going off of this fit:—I proposed his taking three drachms of it, in half drachm doses, before the time when the fit was again expected; but he took less than a drachm and a half, which I imagined would have had no effect upon him, however, it so far stopped it, that the time of its return was observed only by a restlessness and heat, which were not of long duration:—He was prevailed upon afterwards to take three or four doses of half a drachm each every day for several days, after which he had not the least return of the fit, and his recovery was quick and perfect.

Cases in which the patients had hectic symptoms.

Miss ——— is about twenty-seven years of age, she has a weak constitution,

tution, and has always been subject to a cough and affections of the lungs, complaints to which all her family have been particularly liable, two or three of her brothers and sisters having died of true pulmonary consumptions.—In the spring of 1782, having resided some time in a marshy country, she was attacked with an ague, which in a very little time reduced her extremely, and very much aggravated all her other symptoms. She came to Norwich for my advice, and was excessively fatigued by her journey.

I FOUND her in a very weak state, the fits were very severe ones, lasted a long while, and were irregular in their periods, but mostly recurring every day; her pulse was exceedingly quick, even during the whole of the intermission; she coughed much and discharged from the lungs, as indeed I had more than once before observed in

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former

former attendances upon her, what had a very suspicious appearance, though I could not pronounce it to be absolutely pus.—The intermittent being the disease which seemed more immediately to affect her, and all her other complaints being plainly increased by it, I thought it right to give her the cortex, but not without some doubt about the success of it, and some hesitation as to its propriety in the state she was then in;—however, after a long and severe fit, she began to take it, and got down almost twelve doses of two scruples each;—the fit was at once stopped by it, the other complaints immediately abated, and she has enjoyed since that time rather better health than usual.

MISS ——— is a young lady of a very delicate constitution; she has weak lungs, and for several years past
has

has occasionally had hectic symptoms. In September 1782, when for several weeks past she had been indisposed with a cough and slight symptoms of feverishness, she was seized with a quotidian intermittent;—the fits were very severe, and of long duration, and ended with excessive perspiration; so that having had several fits when I first visited her, I found her very much reduced and weakened by it; there was a very peculiar quickness of the pulse, which evidently indicated the hectic disposition of the habit, and this continued during the absence of the fever. I gave her medicines which emptied the stomach and bowels, but found the fits came on sooner and lasted longer, and plainly threatened the utmost danger, if they were not soon put a stop to; I ventured therefore to administer the Bark, but not without much anxiety, as the intermission was very imperfect, and the pulse had still a very formidable quickness: She began to take it

late in the evening, after having had a very fatiguing fit; she was unable to get down more than nine doses of two scruples each, making together six drachms of the Bark, before the evening of the following day, at which time the fit was again expected; but this stopped the fit, and from this time her recovery was very quick, the formidable symptoms before mentioned leaving her immediately.

IN the month of March of the present year, the weather being remarkably cold and wet, the same young lady was again seized with an intermittent, but at this time, though she had been poorly for some days before the attack, she was free from her cough, and had fewer of those symptoms which seemed to belong to her constitution, than in the former attack; she suffered herself to have several fits before she sent for me, and was reduced, if possible, more than on the former occasion,

occasion, and the intermissions were more indistinct, insomuch that nothing but the singular success of the Bark in the former instance, would have induced me to have given it her now. It was very difficult to mark with accuracy when the fit terminated, and during the whole of the intermission, the pulse, tongue, and urine, were such as with most persons would have utterly forbidden the use of the cortex; but on the other hand, there appeared to be an absolute necessity for the immediate stopping of the fit, as the complaint gained ground rapidly, and every fit flattered her so much, and left her in a state of such extreme weakness, it being scarce possible to keep her from continual fainting, that it was evident there would have been the utmost hazard in suffering the complaint to continue, and even such was her extreme feebleness, another fit might have been fatal to her. .

I FEARED,

I FEARED, however, that she would not have been able to have taken a quantity sufficient for the intended purpose, or that her stomach, in her very weak state, would have rejected it; but though she was able to get down no more than seven papers, (little more than half an ounce,) before the time of the expected return, and though she had several formidable fainting fits, during one of which I was sent for, her friends imagining her to be dying, she was so fortunate as to escape the fit, and to obtain a compleat recovery, though more gradually, with regard to her strength and spirits, than on the former occasion.

MR. W—— is a tall thin young man, about eighteen years of age; he has been for years subject to frequent coughs, and a brother of his died some time ago of a consumption; having in the year 1782 lived some months in a marshy

marshy part of Suffolk, he was in october attacked with an ague, which soon brought on an increase of his cough; he took the common Bark and other medicines, under the management of a surgeon, but without being able to remove the intermittent, and he became in a few weeks so reduced by it and his cough so much aggravated, that his friends apprehended him to be in a consumption, and he was sent to Norwich to be put under my care.

I FOUND him very pale and much emaciated, he had totally lost his appetite, his nights were restless, cough troublesome, and his pulse always very quick; there was great tenderness on the abdomen, which, however, was not full or hard, and the chest was sore, but he raised nothing that could be called purulent; the fits of the intermittent still recurred at certain periods, but with occasional irregularity, sometimes

times as a quotidian, but more frequently as a tertian.

As his complaints began with a true ague, and as it was still the predominant disease, it was obvious that the mode of treatment should be chiefly directed to the removal of this; accordingly having emptied the stomach and bowels, in doing which, however, I did not think it right to lose much time, I began to give him the Red Bark after the close of the second fit he had had since I saw him; his fits ending with profuse sweats, left him extremely languid, and his pulse were small and very quick, even at the greatest distance from the fit, but notwithstanding this, I thought it right to persevere, and he took ten doses of two scruples each, (being in all rather less than an ounce) before the time of the fit's expected return; this at once put a stop to the fit, his cough and feverishness immediately left him, his appetite

tite returned, his spirits became good, and his recovery was so rapid, that he was able to return into the country in a fortnight perfectly well: he continued, however, the use of the cortex in the same doses two or three times a day, for several weeks.

Cases of patients who were dropsical.

C. A—— is a strong young rustic, naturally of a good constitution, and who gets his livelihood by hard and daily labour; soon after michaelmas 1781 he was seized with a quartan ague; he neglected it for several months, working and being exposed to the weather the intermediate days, until the complexion of his face and his skin universally became of a dirty yellow colour, his legs were much swelled, and his body remarkably large, hard and tense, and evidently containing

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taining water.—In january 1782 he applied to me, and was then in the state just described.

AN ounce of this Bark, which I gave him without his taking any previous medicine, at once put an entire stop to the intermittent, and it being the sole cause of his other formidable symptoms, they by degrees left him, and he was in a very little while restored to perfect health and strength, the hardness of the body continuing the longest, but even this was reduced to its natural size in a few weeks; he continued to take a small quantity of the cortex twice a day about a fortnight.

MR. K——'s daughter was about four years of age, and from her birth had a good constitution, but she had been much indulged, and with regard to her health, had been treated too tenderly;

derly; soon after christmas 1782 she was seized with a tertian ague, which continued at times, though not constantly until the end of april, nothing in that time having been given her for its cure, except some popular medicines, which the neighbours had recommended: at that time the child was very much altered, its complexion was yellow and bloated, and the body was very large and peculiarly prominent, attended to the touch with an evident undulation.

I CONSIDERED the Bark as the only medicine likely to save the child, but feared it would have been impracticable to have given it her; however, I prescribed three drachms of it divided into six papers, to be taken during the intermission following the next fit, the stomach having been emptied at the access of it by a dose of tartar emetic; contrary to my expectations, the child took the Bark perfectly willingly, and

had not the least return of the ague.—The use of the Bark being continued in small doses two or three times a day for a few weeks, the dropfical symptoms entirely left her, and she was restored to perfect health.

A ———'s child, of Hetherfett, was about four years old, and had had a quotidian ague from march to july 1783, which was the time I was applied to for it; the child was at this time compleatly dropfical, the legs were swelled, the body large and hard, and the complexion yellow; I ordered three drachms of the Bark divided into six papers, all of which the child took during the intermission, and the fit at once left it.—The medicine was continued in small doses daily for about a fortnight, the dropfical symptoms soon disappeared, and the child had in a short time a perfect recovery.

*Cases of neglected agues in which the fever
became continual.*

MR. W——, a gentleman about thirty-five years of age, of a thin spare habit, and rather weak constitution, and who had lived many years in a marshy country near the sea coast, was late in the autumn of 1782 attacked with an irregular intermittent, for which he took various medicines, but without success : in december he came to Norwich for my advice.

I FOUND him very thin and extremely weak ; his countenance was swarthy and his eyes yellowish ; he had a small quick pulse and a constant fever, his appetite was bad, his nights restless, and he had frequent and profuse sweats ; though the symptoms were truly characteristic of the disease which produced them, yet the fever was now so continually upon him, that it was impossible

possible to mark the time of the coming on of his fits, otherwise than by an increase of his general symptoms, and which generally took place once in the twenty-four hours, the recurrence of which was, however, at no certain period. I gave him an emetic, and the day following he had a purging draught, and for two or three days he took an antimonial febrifuge; but the symptoms did not appear to be at all mitigated by this treatment, I therefore thought it right to give him the Bark, which he began to take a few hours after I had observed the before mentioned increase of fever; the fit, if it might be so called, did not return, and the day following the feverishness became considerably less; he continued the use of the Bark daily for two or three weeks, before the end of which his fever was entirely gone, his appetite and strength returned, and he obtained a perfect recovery.

MR. ——— is the same young gentleman whose case was described page 62:—In the beginning of august 1783, he came to Norwich very ill, having had an irregular intermittent for some weeks; he was much emaciated, and with regard to his general symptoms, was nearly in the state of the last recited case, but at this time he was free from a cough, and the increase of feverishness, which, as in the last case, was the only mark of a fit, returned more irregularly than in the last case, but mostly as a tertian; I treated him nearly as I did the foregoing patient and gave him the Bark, of which he took two scruples every four hours: in less than twenty-four hours he was evidently better, the fit returned no more, and though at the time of writing this it is not three weeks since he put himself under my care, he is quite well, and has very much recovered his strength.

I could

I could relate many cases in which the fever fits were very severe, became worse every time of their return, and the disease was evidently tending to a continued fever, but shall select only the following, as being one of the worst; the fever fit being unusually long, the intermission imperfect, and the disease very rapidly hastening into a continued fever, with dangerous symptoms.

IN the Norwich assize week of the year 1783, I was desired to visit the coachman of a country gentleman; I found him very ill at an inn, and in a very inconvenient hot room; the house being also very full of company, and there being a great deal of noise and confusion in it: it was on the tuesday afternoon when I first saw him, he had very severe symptoms of fever upon him, and he told me he had been as ill ever since the preceding night, and that he had not been quite well for a few days before.

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I TOOK away some blood from him, gave him an emetic immediately, and sent a purging draught to be taken the following morning. When I visited him the next day, I found he had had a very restless night, but having sweated towards the morning, he got some sleep in the forenoon, and was now, it being about noon time, much better: in the afternoon he was so much better as to be able to walk out, the weather being very fine and warm; but towards the evening the fever returned, but it was not preceded with any cold fit: he had a very bad night, and continued very ill all the next day, in the evening of which he was removed in a carriage to more quiet and convenient lodgings; a mistake happening respecting the place he was gone to, prevented my seeing him from the thursday noon until the friday forenoon; I then found he had had another bad night, but got into a perspiration towards the morning, since which time

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the fever had considerably abated, in-
somuch that had I not expected the re-
turn of the fit in a few hours, I should
have given him the cortex immediate-
ly; I desired him, however, to con-
tinue taking a mixture with spiritus
Minderi, and essence of antimony,
which he had before been taking, and
thought it right to wait the event of
another fit, hoping that he would after
that be sooner in a state to take the
Bark.

ABOUT five in the afternoon the fit
returned with more violence than ever,
the approach of which was, as before,
unattended with any chilliness; he was
exceedingly hot, the skin dry, tongue
much furred, and pulse excessively
quick; he had had no sleep in the night,
and was at times delirious; the fever con-
tinued, with little difference as to the de-
gree of it, during the whole of the next
day and the succeeding night, until
the Sunday morning; it then began to
abate,

abate, in consequence of his having sweated the latter part of the night, which seemed to have been induced by an anodyne antimonial medicine, which he took about eleven o'clock the preceding evening.

THE fever seemed to gain ground so fast, and the symptoms to be so much more severe at each return of it, that I resolved to catch this opportunity of the abatement of the fever to give him the Bark ; but I could by no means be confident of its succeeding, as the intermission was very imperfect, and I knew could not be of long continuance ; however, he began it in doses of two scruples, and continued it every hour in the same dose ; his stomach was in such a state that he expected every time to have rejected it, and he could get down no more than six drachms of it ; this, however, fully answered the purpose, for though the beginning of the night was restless, and

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from his apprehending the fever was returning, he could not be prevailed upon to take any more of the medicine that night, yet he fell asleep before three o'clock; the remainder of the night was very comfortable, and the fever was inconsiderable the next day; the following night was a very good one, and there was not the least return of the fit on the tuesday afternoon, which would have been the time of its return; on the wednesday he got out, and on the saturday he was well enough to ride thirty miles on horseback.

It being contrary to the usual practice to administer the Bark after the first fit of an intermittent, or without any other medicine having been previously given, I shall mention the following cases in which it was so given.

MISS ——— having some time before had a tertian intermittent, and having
received

received a cure from the Red Bark, had a return of it in june 1783; being very certain that it was a true paroxysm, and being confident that the Red Bark would prevent her having another fit, which should it come, would interfere with an engagement she wished very much to fulfil, she resolved to take it immediately upon the going off of the fit, and she got down the usual quantity before the time that, supposing it proved a tertian, it would have come, and from that time to this she has not had the slightest return of it.

IN the beginning of august 1783, another lady, who about three months before had a very severe intermittent, had a return of one fit; being acquainted with the before mentioned lady, and having been informed by her of her success in taking it after the first fit, took it in the same manner, and it was attended with the same success in preventing

venting the least return of the complaint.

ABOUT the end of the same month, a gentleman who has had several returns of the intermittent in the course of the last year, and which if he had more than two or three fits never failed to become irregular, had at this time a smart fit of it; having been a little poorly the preceding day about the same time, there was reason to believe that it would prove a quotidian:—The Red Bark having never failed with him to put an immediate stop to the fit, he was very desirous of taking it now immediately; but being a stout man, and of a full habit, I wished him to undergo some evacuation and wait for another fit, however he was so importunate to take it at once, that I consented to it, and he took ten papers of two scruples each between six o'clock in the evening

ing and the noon of the following day, which prevented its return, and he has continued well ever since.

A HEALTHY young woman, about twenty years of age, was taken ill on friday evening, august 29, 1783, with a feverish complaint, which continued all the next day, but went off towards the night with a considerable diarrhoea; on the sunday and monday she was so well as to attend to her usual business; between six and seven in the evening of monday she was seized with a cold fit, and a very severe pain in the region of the stomach; she took an antimonial powder, which happened to be in the house, but without its exciting vomiting; between eight and nine I found her with a very severe hot fit, and the head so much affected by it, as to approach very nearly to a delirium; I took away ten ounces
of

of blood, ordered her to continue taking the antimonial powders, and to drink plentifully: towards the morning there came on a profuse sweat, the symptoms abated, and between six and seven I found her in a good sleep.

WHEN she awaked she was free from fever, and it appearing clearly to have been a true fit of an intermittent, many persons in the neighbourhood being at that time attacked with it, and it promising to be a quartan, as she was first taken ill on the friday before, I ordered her to begin taking the Red Bark, but there coming on a diarrhœa that day, as had been the case on saturday, little of it was taken in the course of it, but as it abated the next day, she was able to get down the full quantity, from which she received a perfect cure, the fit returning no more.

IN the beginning of October 1783, I was desired to see ——— W : who lived in a village near Norwich; he was a strong man, about twenty-seven years of age, and had had a quartan more than five weeks.—His health was so much impaired by it, that for two or three weeks before I saw him, he was scarce able to go abroad, and even on his best days was frequently confined to his bed the greatest part of the day.

WHEN I saw him the hot fit was very severely upon him. Had I seen him sooner, I should, probably, have given him an antimonial at the approach of the fit; but the great success with which the immediate and unprepared-for use of this Bark had been attended in the preceding cases, induced me to direct him to begin to take it as soon as the fit, then present, was over; he therefore took twelve doses of it, making together an ounce, before the time

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when the next was expected: He became better the first day of his taking the medicine, had no return of the fit at the usual time, and continuing the use of the Bark, very soon recovered his health.

The following case, which in point of date should have preceded the last, is an evident instance of the inconvenience of waiting even for a second fit.

A GENTLEMAN, in whose family the Red Peruvian Bark had been several times successfully used, was seized with a smart fever fit, but unattended with any bad symptoms, in the night time between Sunday and Monday the 24th and 25th of August 1783; it went off in the forenoon with a considerable perspiration, and I found him early in the afternoon free from fever; he was very desirous of taking the Bark immediately, from a conviction that it
had

had been a true fit, in which he was confirmed, by recollecting he had been a little poorly the preceding friday; as he had undergone no evacuation, and I had but in a few instances given it so early, I advised him to wait for another fit, take the chance of its not coming at all, and in the intermediate time to take a purging draught, to which he consented, though unwillingly.

HE continued perfectly well the next day, but about twelve at night was seized again very severely; this fit was much more violent than the former, lasted until the evening of the next day, and then left him so excessively weak, that he fainted away upon being taken out of bed; however, as the fever had declined, I desired him to begin to take the Bark, which he did about nine o'clock; one or two of the first doses were rejected, he vomited up a good deal of bile with them, and

he slept very little in the night; the next day the pulse was much quicker than in the former intermission, but as this was more, perhaps, the effect of fatigue and want of sleep than of fever, he persevered to take the Bark, and got a sufficient quantity down to prevent the return of the fit, by which means his recovery was immediate; notwithstanding it is very certain, that had I given him the Bark in the first intermission, I should have had much less anxiety for the event of the case, and he would, manifestly, have had much less suffering.

Case of a neglected ague, in which the fever became continued, and was attended with symptoms of putridity.

IN the beginning of october 1783, I visited Mrs. ——— an infirm and very old lady, being then in the seventy-ninth year of her age. Her
usual

usual residence was in the country, in the neighbourhood of which intermittents had been frequent during the preceding summer, and she was seized with one about the beginning of autumn, which continued under different shapes until the above date, at which time she was brought to Norwich.

For several weeks previous to this, it had been a quotidian, and a little before, and at the time I saw her, her symptoms were such, as, at her advanced age, threatened the utmost and most immediate danger. Her tongue was remarkably dry, foul, and of a dark colour, and the whole fauces and throat covered with a thick brown fur, and which, from the imperfect manner in which she articulated, it was evident extended beyond the mouth and throat; her pulse was small and very quick, the skin hot and dry, and the urine was high coloured and turbid, all which
clearly

clearly pointed out the putrid tendency of the disease. At the same time she had a constant nausea, and such an uneasiness on the abdomen, as clearly shewed the morbid state of the contents of the stomach and bowels.

THOUGH she was never free from fever, yet there came on with great regularity a true cold fit every afternoon, which was succeeded by great heat and thirst, soon after which she fell into a state of stupor and great drowsiness, which lasted many hours, during which she took very little, and scarce ever had the least perspiration.

UNDER these circumstances, though the use of the cortex was obviously indicated, and appeared to be immediately requisite, both with a view to stopping the fits and correcting the putrescence, yet the necessity of first removing the foul matter from the stomach and bowels, was also evident,
and

and this was effected by a few doses of tartar emetic, which, though it acted very little on the stomach, brought away some large, foul, and highly bilious stools. As I saw her for the first time in the afternoon, just before the approach of the fit, and as the use and operation of the antimonial took up more than twenty-four hours, it is obvious that she must have had two fits before I could give her the Bark; this, however, gave me an opportunity of observing the symptoms accompanying them, and of being satisfied that the account of their recurrence had not been misrepresented.

AFTER the second fit, from the time of my first seeing her, I began to give her the Red Bark in the usual quantity, and though she took but six papers before the time when the fit generally returned, yet even this small quantity (half an ounce) proved sufficient to stop it, and I found her three
hours

hours after the time when it was expected more free from fever, and in every respect much better than I had yet seen her.

I COULD not but observe with surprise how instantly and greatly she was relieved from her general symptoms, by missing this fit; she immediately took more plentifully, which under the state of debility she was then in, was of the utmost importance, and which till then, she could not be prevailed upon to do in any degree equal to the want of it; and having a comfortable and refreshing night, her spirits were good the next day, in the course of which, as she continued to take plentifully, the tongue became moist, and the foul slough in the mouth separated: she persevered in the free use of the Bark, had not the slightest return of the fever fit the next and following days, became very soon free from all the threatening appearances she first had,

had, and though at the time of writing this it is but a few days since she began to take the Bark, she is recovering much faster than could have been expected at her very great age.

AFTER having mentioned so great a number of instances in which this Bark has been efficacious, and having related the particulars of so many cases in which it succeeded, though attended with circumstances very unfavourable to the application of Bark, it cannot be necessary to insist much further upon its efficacy, much less to draw a particular comparison between it and the pale; its superiority over which is plainly evident from its not having failed in a single instance out of the very great number in which I have given it, and from its having succeeded in some cases where the intermission was imperfect, and in others in which

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only

only a small quantity of it could be given.

INDEED its great value with me principally arises from these last circumstances; for those cases in which the intermission is so short and imperfect as to admit of the patient's taking but a small quantity of the medicine, are unfortunately such, in which the complaint is gaining ground most, and in which, consequently there is the most urgent necessity for the immediate stopping the fit.

IF the Red Bark were considered as possessed of no other power beyond that of removing a common ague with certainty, it would still be a medicine of considerable value; but in cases where the danger of a bad fever presses hard upon the patient, and the complaint gains ground so rapidly as to make us apprehend the worst consequences from a very little loss of time, surely,
if

if it enable us, by its wonderful power of putting an immediate and entire stop to the fever, to rescue the patient at once from so hazardous a situation, it cannot be too highly estimated.

THE satisfaction which has resulted to me from my success in its use in such cases as these, in many of which I am persuaded the patients must, otherwise, have had to struggle with a long and dangerous fever, and in some of which they would probably have fallen a sacrifice to it, is greater than I can describe; and it cannot, therefore, be wondered at, that, from a principle of common humanity, I should be very earnest in recommending the liberal use of it to my medical brethren; and that I should more especially urge the immediate trial of it to all those practitioners who live in marshy countries, where the state of the atmosphere is such, as to be almost constantly productive of this disease, and where even

the common traveller, who merely passes through, cannot but observe the pernicious effects of it upon the inhabitants.

HOWEVER useful the common Bark may have been, its beneficial effects have certainly been much limited, by the unwillingness of many persons to take so large a quantity of it as is necessary to produce a cure; by others having had their confidence in its powers lessened by the instances of its failure, which have sometimes occurred, even when most properly taken; and, probably, by a still greater number of persons having adopted the common popular prejudices against Bark, and, more especially, having been induced to believe that it is always injurious to the constitution, where it does not immediately succeed in removing the disease.

I DOUBT

I DOUBT not but almost every surgeon, who has been much employed in cases of intermittents, and who consequently must have used much common Bark, must often have observed this, and frequently have been awkwardly situated with patients who have taken a large quantity of it without its having answered the purpose in the first instance, from its being no easy matter to persuade persons, under such a disappointment, to persevere taking a considerable quantity of so nauseous a medicine.

NOTHING, on the other hand, can be a more agreeable circumstance in practice, than to be able to foretell the effects of a medicine with certainty, and nothing surely can be so comfortable and encouraging to a patient, labouring under an acute disease, as to have his cure predicted with confidence: as it appears that this may be done in the use of the Red Bark, and as, also, that a much smaller quantity of this
than

than of the pale, will effect a cure, I should hope that a very little experience of it will remove the obstacles, which, as before remarked, have limited the use of the pale Bark, and that when its wonderful powers and beneficial effects have been more generally known and felt, that all prejudices against it will subside.

BUT to enlarge more on the efficacy of the Red Bark would, as I have already observed, be a needless repetition, and indeed there can be little occasion for arguments, where positive matters of fact have been adduced; where, too, the events in all of them have been uniformly alike, and where, moreover, the number of those facts has been so great, as to put it beyond a possibility of doubt that the success attending them has not been merely owing to a happy chance, as might, perhaps, have been urged, had the number of facts been small: I shall, therefore,

therefore, no longer trespass on the reader's time, than whilst I briefly mention the remarks on the general treatment of intermittents, and the particular application of this Bark, which obviously arise from the consideration of the foregoing cases.

It appears, in the first place, very evident, that the Bark may be administered much more early, and with less previous preparation, than has been usually thought necessary:—That there is seldom occasion, when the Bark is given in common agues, to premise an emetic and a purgative, has already been observed by Dr. Saunders, and the experience of the cases which have occurred to me, prove incontestibly, that, even in the intermittent fever, where the symptoms run high, and the fever is very considerable, that there is not that necessity for waiting until the patient has had several fits before

fore the Bark is given, which has been heretofore supposed.

IN those intermittents, which, if neglected, are so apt to degenerate into continued fevers, and which is peculiarly the case of the autumnal ones of this part of the kingdom, I have never had an instance, where, by waiting for more fits, though the intermediate time has been employed in taking emetic, opening, and the common saline or antimonial medicines, that the fits have not been more severe and of longer duration, and the intermission, of course, shorter and more imperfect; nor have I known, though so many cases have occurred to me, a single instance, where, by putting an early stop to the fever, any possible inconvenience has followed.

IF the common theory be true, which supposes a fever fit to be an effort of nature to throw off something from the habit, which would be injurious to it,

it, that practice, which, in intermittents, at once puts a stop to the fever, and consequently counteracts this supposed natural and necessary effort, would seem to be wrong; but the fact contradicts this, and proves the absurdity of the opposite practice, which delays to check the progress of the fever, under an idea that the doing it would (to use a favourite expression of some practitioners) lock up an imaginary something, which would be unfriendly to the constitution.

AN idea, similar to this, prevailed many years, with regard to the small-pox, and for a long while resisted the modern attempts to treat that disease upon rational principles; it being imagined by many, that the lessening the quantity of pustules on the surface by mercury, cool air, &c. was not in reality diminishing the quantum of the disease, but only changing the seat of it, by throwing upon the internal and

more important parts, what nature, if uninterrupted, would have carried off more safely by the surface; experience has, however, at length fully proved the absurdity of this reasoning, and convinced practitioners, that mercurial purges, cool air, &c. as far as they act in lessening the eruption, so far do they actually extinguish and annihilate the virus of the small-pox.

ON the same principle, I doubt not, but it is that the cortex acts in the cure of intermittents, and that it has a specific property of extinguishing the disease; a property, indeed, upon which we are unable to reason; but this can be but of little consequence, whilst the fact is established; and admitting this, where is the evil of making use of it to put a stop to the disease as soon as we are satisfied of its existence?

BUT it may be further urged, that when the Bark is given so early in the disease,

disease, as appears to have been the case in several of the instances which I have mentioned, and more especially when it is given after a single fit, that it must be impossible to ascertain whether the complaint be a true intermittent or not; and that, on the one hand, should it prove to be any other disease, the application of so powerful a medicine may be injurious; or should it, on the other, be one of those fever fits which sometimes attack a person without being succeeded by any more, that the taking the Bark is unnecessary.

I SHOULD imagine that neither of these objections can have much weight in preventing the early use of this medicine; for even in cases where there has been only a single fit, there can be no great difficulty of judging concerning it, there being no kind of fever but the intermittent (except indeed the rigor which attends suppuration, and this may usually be distinguished by

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circumstances) which attacks a person in full health, affects the patient violently, lasts a few hours, and then goes entirely off; I should therefore imagine, that if a fever fit have been marked with the characteristic hot and cold stages, if it have gone off by a sweat, and if it have left the patient after a limited time apparently well; if, likewise, the situation in which the person lives, and the season of the year be conducive to this disease, and the patient have before been subject to it; and if, moreover, upon more particular enquiry it should be found that he was a little indisposed a day or two before; (for a fever fit of any magnitude is usually preceded by such an indisposition, though it is mostly so slight as not to have excited the patient's attention, and scarce to have dwelt upon his recollection until a real fit occurs;) if, I say, all these circumstances, which are the usual ones attending a fit of an intermittent, should concur, there can be
little

little doubt about the nature of the disease, and no danger in the immediate application of the Bark; and even should it prove possible, which, indeed, cannot be known, that the patient, without taking it, would not have had a return of it, no harm can follow its use, unless we admit that such a quantity of Bark as the patient has taken, would be injurious to a person in perfect health, which in that case must be the situation of the patient.

It appears in the next place, that the Bark may be given under circumstances of feverishness, which have been always considered as absolutely forbidding its use; a calm pulse, a moist tongue, a soft and cool skin, and more especially a urine which throws down a sediment, have ever been considered as symptoms absolutely necessary for the safe and successful application of this medicine; my experience, however, in many of the foregoing cases, authorises

authorises me to say, that when the disease is gaining ground, and the symptoms are urgent, that though these favourable circumstances should not be present, yet the Bark may, notwithstanding, be very safely and efficaciously given.

PRACTICE has not indeed yet decided, whether the Bark might not in some cases of peculiar urgency be given with advantage, even during the paroxysm, but I have never heard of sufficient reasons why its use should be invariably confined to the stage of perfect intermission; at least the common notions of its exciting heat in the patient, and increasing fever where the least degree of it is before existing, seem to be fully contradicted by the facts which have occurred to me; and as far as one may be permitted to judge, from the obvious qualities of this medicine, this does not appear to be at all likely, it being very slightly aromatic, and when applied

plied to the tongue not very pungent : nor is, moreover, any reasoning founded upon its supposed astringent, or tonic powers at all more conclusive ; for though it may have been urged, that by this last mentioned property it has a tendency to increase the action of the heart and arteries, by which means the circulating fluids are more quickly moved, and greater heat and fever are produced ; yet, until positive facts have been adduced to prove this, the reasoning upon it, plausible and ingenious as it may be, ought not be admitted.

ALL the qualities of Bark which come immediately under the cognizance of the senses the Red Bark possesses in a greater degree than the pale ; it is larger and coarser, it is of a deeper colour, it is much more bitter, it affects the tongue with more pungency, and, from chemical trials, it appears to contain a much larger portion of resin : one would imagine, therefore, that if
any

any of these properties could excite heat, that the Red Bark would be more likely to do it than the pale; and that it would be most likely to do it, when given to patients who were at the time affected with a considerable degree of heat and feverishness; but my experience of it in such cases absolutely contradicts this, proving, that its tendency is to lessen fever, even in its immediate influence, and consequently instead of aggravating, that it moderates those symptoms, the presence of which have been before mentioned as incompatible with its use.

THE experience of some of the foregoing cases likewise tends very strongly to prove, that in those intermittents, which from length of time or neglect have become so far continued fevers as in a great measure to have lost the true type of the disease, and in others, where meeting with some unfavourable constitutional circumstances, such as a disposition

disposition to pulmonary affections, or to hectic symptoms, the disease is so aggravated by them, and such an additional feverishness induced, as prevents the usual intermission, this Bark may nevertheless be applied with advantage; and that in every stage of the disease, and under every appearance which it may assume, provided it has originated in the true intermittent, that it is still the proper subject for this medicine.

It can scarce be necessary to add, that in making the foregoing remarks, which I have considered as fairly arising from the events of the cases which have occurred to me, and which doubtlessly prove, that we may in such circumstances as have been mentioned, deviate with advantage from the usual mode of treating intermittents, I mean not to encourage a carelessness or temerity in the use of the Bark, or by any means to intimate, that the use of other

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medicines is totally unnecessary; as it is obvious, that there must frequently arise symptoms which indicate the propriety of other means: in the hot stage of a fever fit there may be delirium, or such other evident marks of oppression upon the brain, as plainly require bleeding; unusual costiveness, uneasiness, fullness and hardness upon the abdomen, must require the use of purgatives; and the sickness and inclination to vomit, which so often take place at the access of a fit, should certainly be promoted by emetics, whilst there is any suspicion of the stomach being foul; and in all cases where the habit is full, and there is time for it, it may perhaps be right that the patient should undergo some evacuation at the beginning of the disease.

I WOULD, therefore, wish to be understood no further, than that where symptoms are very urgent, where the disease seems to gain ground rapidly,
and

and there is consequently but little time, we may give this medicine more early than has been commonly thought right; under a degree of feverishness, which has hitherto been considered as forbidding its use; and that even when such other adventitious circumstances attend the disease as have been heretofore imagined to be obstacles to its use, that still the principal reliance for a cure is to be had upon this most wonderful febrifuge; my account of which I cannot conclude, without repeating my most earnest wish that it may soon be universally adopted in medical practice.

NORWICH, Oct. 10, 1783.

T H E E N D.

E R R A T A.

Page 40, line 11, *for in, read through.*

Page 42, line 2, *for parts, read part.*

Page 49, line 16, *for fits, read fit.*

Page 74, line 7, *for Minderi, read Mindereri.*

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