

**A treatise on the dysentery : with a description of the epidemic dysentery that prevailed in Switzerland in the year 1765 / translated from the original German of John George Zimmerman ... by C.R. Hopson.**

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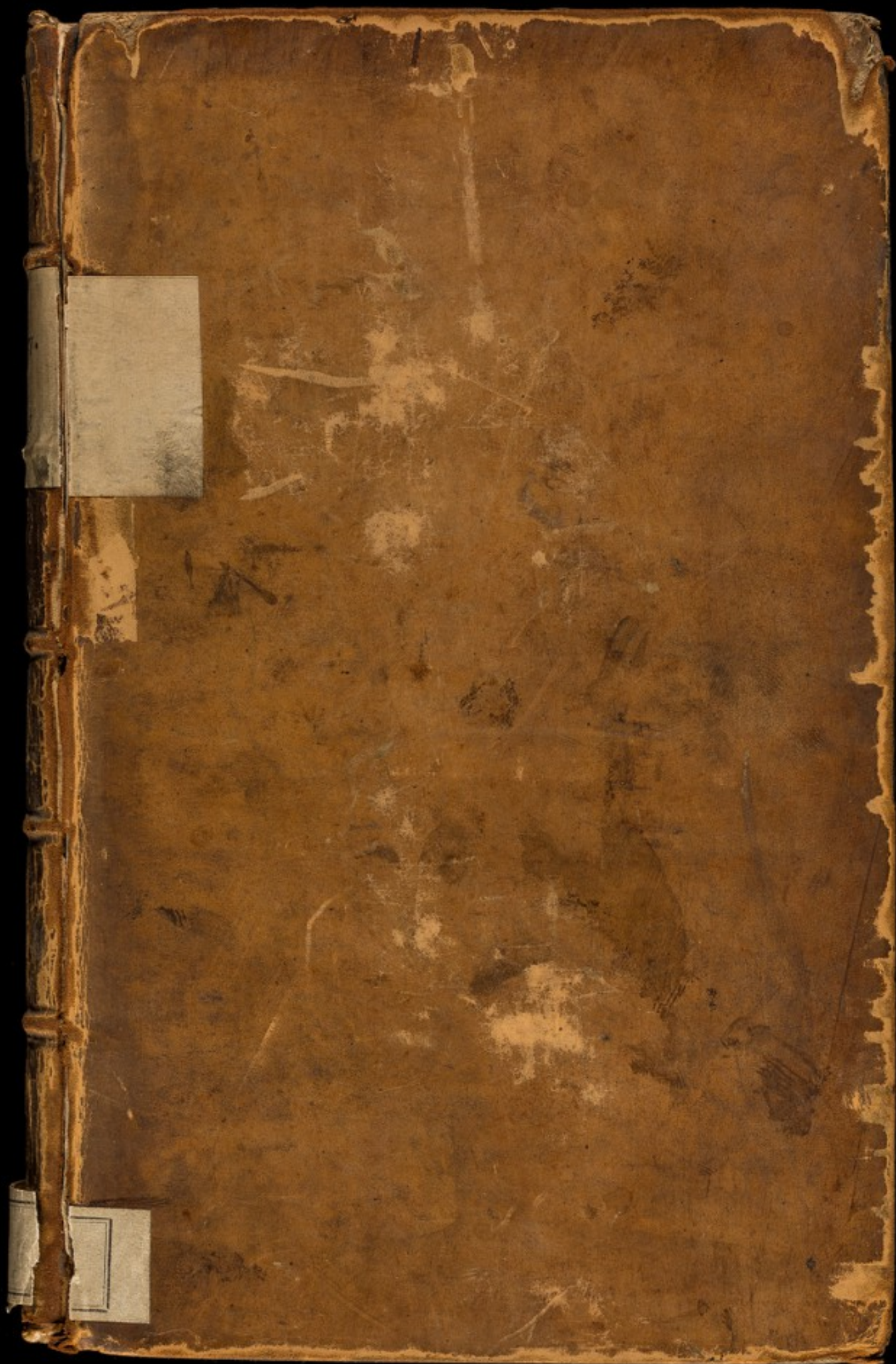
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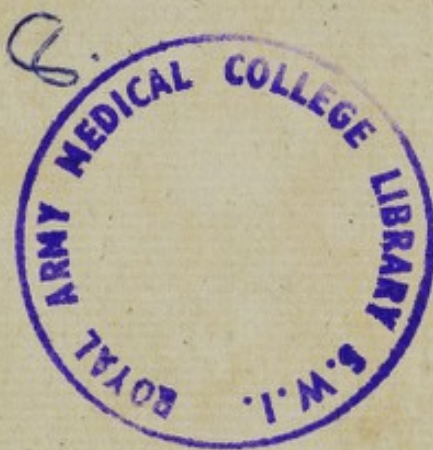
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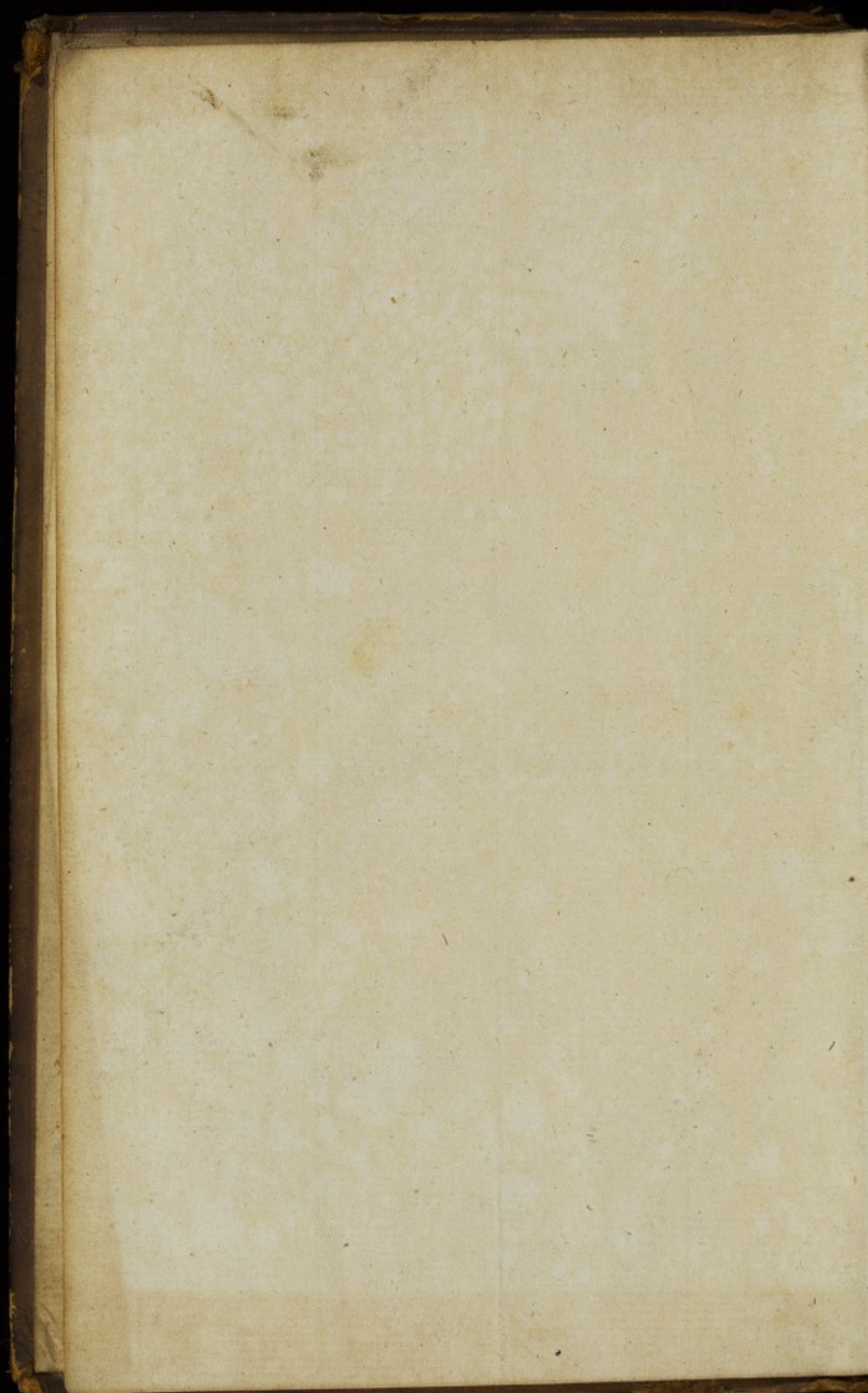
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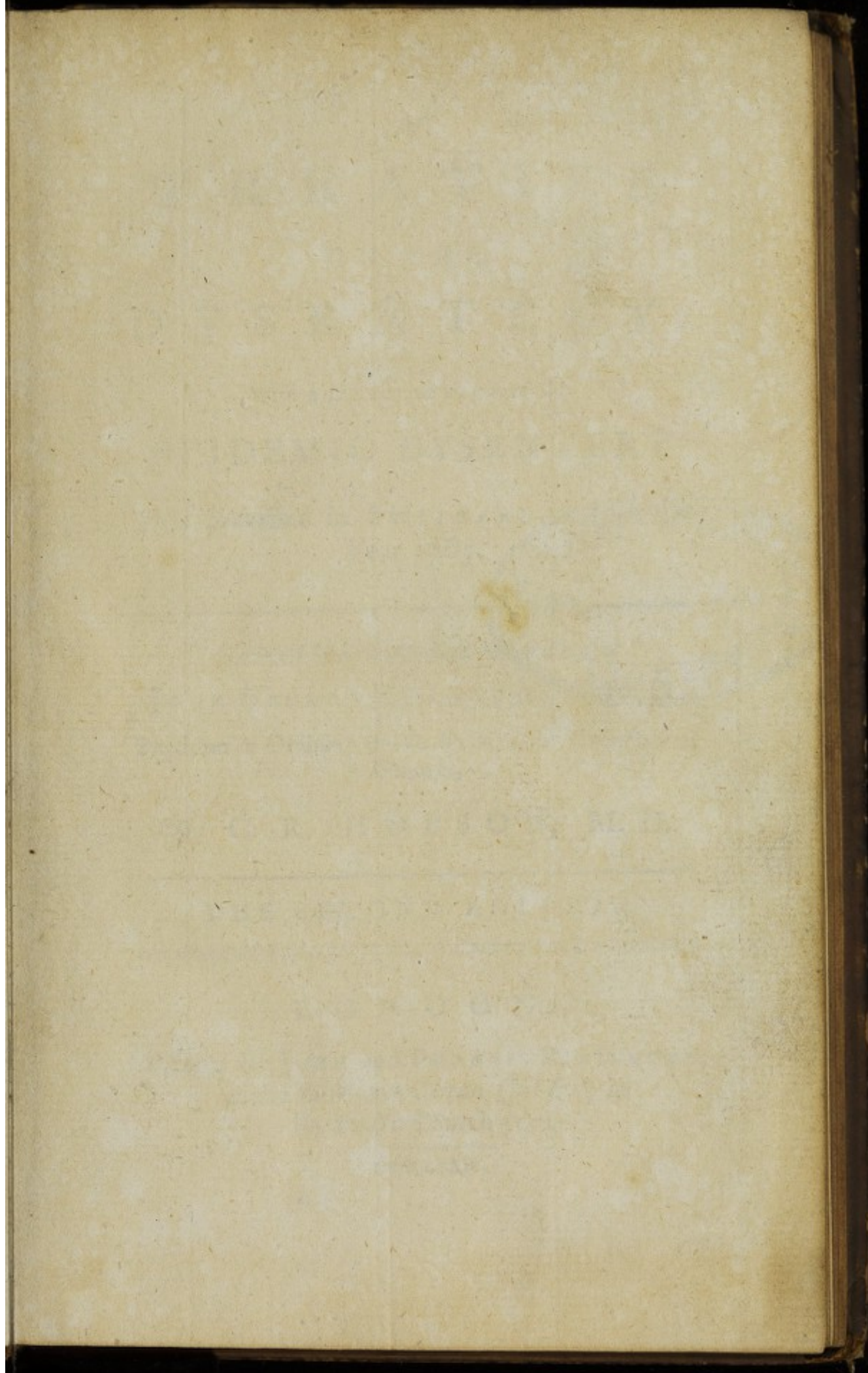


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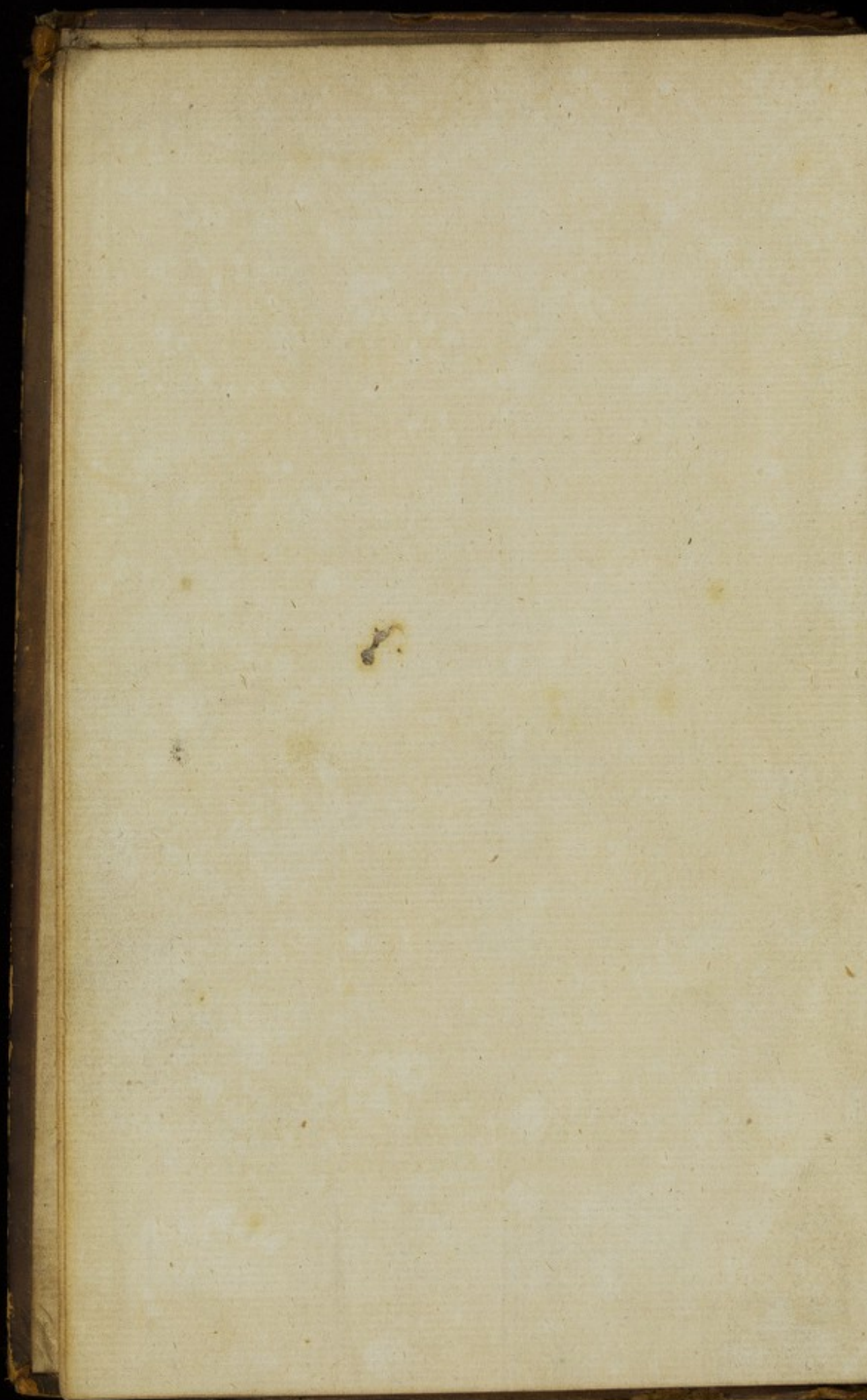
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T R E A T I S E  
O N T H E  
D Y S E N T E R Y :

With a Description of the  
E P I D E M I C D Y S E N T E R Y

That prevailed in SWITZERLAND in the  
Year 1765.

Translated from the Original GERMAN of  
JOHN GEORGE ZIMMERMAN, M. D.  
Physician in Ordinary to His BRITANNIC MAJESTY at  
Hanover,

By C. R. HOPSON, M. D.

THE SECOND EDITION.

L O N D O N :

Printed for JOHN and FRANCIS RIVINGTON,  
at the Bible and Crown (N<sup>o</sup> 62.) in  
St. Paul's Church-yard,

MDCCLXXIV,



THE

ON THE

DYSENTERY

WITH A DESCRIPTION OF THE

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MDCCLXXIV





T O

WILLIAM CULLEN, M. D.

PROFESSOR of MEDICINE in the  
University of EDINBURGH.

S I R,

THE distinguishing marks of civility, which I received at your hands during the stay I made some time since at Edinburgh, have induced me to offer the following translation, as a small token of the respect I owe you on many accounts. Indeed I could not so properly dedicate it to any one in Britain as to yourself: for (not to mention the just claim you have to my acknowledgements for the opportunities I have enjoyed of improving in my profession under your auspices) you are likewise entitled to the thanks

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of



## DEDICATION.

of the author, as having already in the most effectual and distinguished manner patronized his work, while it was in its native dress, by recommending it publicly to your disciples: and if it should now make its way in the world in its present disguise, it will perhaps be more owing to the force of your recommendation, than to its own merits; which, however great, might have been otherwise totally obscured by the defects of the translator. These defects, however, I humbly presume, lie chiefly in the style; and as they could not be well avoided (the translation having been made several years ago in the midst of Germany, when the translator had possibly, by a long abode in foreign countries, substituted the idioms of their languages for those of his mother tongue) it is to be hoped, they will find excuse with you and the public.

Indeed



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Indeed what I have principally aimed at in this translation is not elegance, but exactness; the former being by no means necessary in a work of this nature: though the author has displayed in this treatise a purity and elegance of stile, which have contributed to place him in the first class of German writers; and indeed has frequently indulged himself (agreeably to the genius of his countrymen) in such high flights of metaphorical expression and poetical language, as I have not in general ventured to imitate. But to do real justice to his work, would require much more leisure, than my present occupations will allow: I have only been able to make a cursory review of it, and for the rest must rely on your patronage for its favourable reception with the public; with which it will have the additional merit of being the only treatise, besides



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## DEDICATION.

fides your excellent Nosology, that has ever established the true criterion of the disorder, the subject of the following pages; which are here submitted to your indulgent inspection, with the greatest deference and respect, by,

S I R,

Your obliged

Humble servant,

C. R. HOPSON.



The TRANSLATOR'S

## P R E F A C E.

THE following treatise was written originally in the German language by Dr. Zimmerman, a Swiss physician, a friend and disciple of the great Haller, and not more admired by his countrymen for the beauty of his stile and force of expression, than for his great insight into the theory and practice of physic. He is the author of an universally admired work on *Experience in Medicine*, of which he has already published two volumes, and has promised a continuation, that is impatiently expected by the public. The Germans are so sensible of his merit, that some time before the publication of the above-mentioned production he was invited to fill the practical chair in his Majesty's university of Gottingen, which honour he however declined. The work, of which the following pages are a translation, was chiefly intended by its public-spirited author



## P R E F A C E.

thor to dissipate the prejudices of his countrymen (especially those of the lower class) with regard to the treatment to be used in the dysentery. That part of it the translator has omitted; and has occasionally abridged some other parts of the work, which did not immediately respect the principal subject. As to the stile, the translator is very sensible of his defects in that point, owing principally to his absence from his native country; but hopes for indulgence from the public, to which he was ambitious of being serviceable in any respect.

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T R E A T I S E

O N T H E

D Y S E N T E R Y.

C H A P. I.

Description of the D I S O R D E R.

**T**H E dysentery has raged this year in the canton of Bern, in the marquisate of Torgau, in divers other parts of Switzerland, and in Swabia. It has been also very formidable in those districts of Upper-Austria, which lie nearest to us.

It made its first appearance in the month of June; in August and September rose to its highest pitch; in the beginning of October lost ground in all parts; and, in the middle of this month, generally speaking, made its exit. Though still, in the middle of November, some here and there were seized with this disorder; and even during the severest cold in December,

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and January 1766, I saw people who were attacked by a gentle dysentery: in like manner, about this time, under the same constitution of the air, the putrid fever, as it is called among us, and particularly the putrid pleurisy, began their ravages, principally in Lausanne, and extended them wide around as far as our canton, and the neighbouring provinces of Upper-Austria and Swabia.

Many were taken with this malady, without the least preceding symptom, and that chiefly in desperate cases; in others, it gave tokens of its approach before hand, and came on by degrees.

All those who were violently disordered, were seized at first with an universal chill, which had different degrees of duration; sometimes it was long and very violent, many had only a small paroxysm, with many it returned in the course of the fever, and went off in a hot fit. All of them felt likewise an extreme lassitude over the whole body, at the first coming on of the disorder, and that generally in the back and loins. The cholic came on immediately at the beginning, with great violence; but the evacuation, with some people, did not follow so quick; many were at first even bound, these had violent  
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lent tormina, and were in a much worse condition, than those who were obliged directly to hurry to stool.

Almost every one, on their first being seized, complained of a bitterness in the mouth, and a continual inclination to vomit. Many brought up, just after the cold fit, a bilious matter; some vomited very violently the first day, and were relieved by it; many had this propensity to vomit, even in the progress of the disease, and continued to cast up with great benefit till the fourth day. Such as from the first had sought for refuge in wine, and other hot things, brought up every thing they took into their stomachs, almost every day, complained of the heart-burn, and were in the greatest danger.

The hot fit followed immediately after the cold; and in very bad cases, some had the first day an intolerable head-ach. The fever at first appeared to be small in most, but in the course of the disorder, was still more and more considerable; yet in the most violent species, and where there was the most danger, it was at times not observable, and the pulse infinitely weak; in less violent kinds, the fever was often very high: I saw too, in some, even at the first day, a perfect delirium; in others, a continual lethar-



gy, which accompanied many in desperate cases, and was particularly constant in children. The disease was very favourable in some, after a slight attack: these had little fever in the beginning, and their stools, even the third day, continued to be yellow, and very little offensive; but after that time, they began to complain of a bitter taste in their mouths, and the violence of the fever increased with, the increasing discolouration of their stools.

I always found the excrements thin; but very often viscous, and that even at the beginning of the disorder. With some, they were quite bloody the first day, with others, later: in those that were severely attacked, as well as young children, they were mixed from the beginning, with grumous blood. I have seen children, from whom, in the first days of the malady, the blood has flowed in streams down their legs; just after appeared a quite green matter, and this gave place to a red: with most, the excrements were at the same time white, red, yellow, brown, green, and sometimes even black, for the most part yielding a very bad smell, which was at times perfectly cadaverous. The excretions in some, who had taken no medicine, remained for a whole week quite white, and came away without pain; a week after that, red, with great pain; and throughout several



several succeeding weeks, red, white, and very little painful.

In slight indispositions, the patients went to stool about fifteen or twenty times a day, and many forty or fifty. I saw, and even cured some, that in the space of twelve hours, had from an hundred and fifty to two hundred stools, and whose evacuations came so quick one upon another, that one would have thought their whole inside was coming out at their fundament.

The tormina were always more violent before going to stool, and I thought my patients very well off, when the pains remitted after evacuation; in many they were very sharp, and in severe illnesses drove the patient almost to despair. They were accompanied in the course of the disorder, by a smart pain in the back, sometimes a heat of urine, and in most persons by a tenesmus.

In the worst species, the chest was oppressed. In all kinds I found the appetite and natural sleep entirely gone: most had an inextinguishable thirst, and the greatest part were obliged to keep their beds, by reason of their extreme feebleness; many were inconceivably weak, and at times fainted away. There were, however,



some who were able to sit up out of bed; and many, in light indispositions, walked about. Many sweated, but without benefit.

The bad forts of this dysentery lasted sometimes from fourteen to sixteen days, especially when proper evacuations could not be made during the first days of the disorder; though most of my patients recovered in five or six days. There appeared in some, that were very hard beset by the disorder, a rash on the mouth and tongue, in others, all over the abdomen, and in others, all over the body; though the disease, in reality, was as good as cured. In one single subject, I saw, after a happy and perfect cure, a prolapsus of the rectum. I have not experienced a relapse in any of my patients, excepting two in one person; the first proceeding from a violent fit of anger, and the other, because he got out of bed in the night, and was forced to run about the streets several times in a hard shower of rain.

They who were the most dangerously ill, had a regular miliary eruption, and at the same time, ulcers about the body, at a time when the disorder was at its greatest height, if they had not taken the purging medicine that was ordered. The greatest misfortune that attended very young children,



dren, who were very severely seized by this malady, consisted in the spasmodic contractions of the nerves, which came on at its first commencement, and by which they were immediately deprived of all sensation.

When the disease terminated fatally, the tormina did not remit after going to stool, but were every day more and more intolerable, and the stools remained equal in number; a hic-cough, at times a vomiting, and swelling of the abdomen next followed, and lastly, the chol-ic pains ceased. Death brought up the rear, (especially with them who had drank freely of wine) as early as the fifth, eighth, ninth, and fourteenth day, and sometimes later.

They that in severe cases, only took medicines in the beginning of the distemper, and afterwards laid them aside, were in very great danger; and though they took to them again in six or eight days, yet still they continued a long time ill, if at length they did not happen to die. Many that took no medicines at all, had a gentle, but tedious dysentery; gripes, tenesmus, and also blood mixed with their excretions, which otherwise had only been slimy; great weariness in the members, frequent returns of the cold fit, violent sweats, indigestion,



and pains in the stomach from every thing they eat. Others were harassed with a flying gout; others, among whom were likewise children, with a dropfy; others, again, with obstinate swellings in the feet; and with others, from whom the evil seemed to go away of itself, still remained a great pain in the loins, and a rheumatism in the joints.

The more favourable species of the dysentery, shewed themselves by an universal languor, a shivering, some propensity to vomit, a cholic of no very long continuance, and much less frequent, as well as less griping stools. The excrements were for the most part white, and their food came away undigested; the blood did not appear till after some days, or else the signs of it were hardly to be perceived.

Some, in the beginning or end of the epidemy, especially those who lived towards the boundaries of its ravages, were only troubled with a violent griping, which continued five or six days, and sometimes a fortnight, without purging, but rather a constipation of the belly: though when I had given them something opening, I found their excretions mixed with blood and white like pus. Such as had taken no medicine



dicine in these circumstances, fell into a most dreadful dysentery.

Many had a mere griping diarrhœa, which staid with most persons but a few days, in which, however, I found the excrements frothy, and mixed with gall. A purging of this kind remained six weeks with a lad, to whom I purposely gave no medicines, as I hoped, that by means of this, he would be rid of a different kind of distemper, which returned upon him every year; which accordingly happened.

Some, that were not attacked by the dysentery, where it had raged, but had attended on those that were sick of this disorder, or lived in the house with them, at the end of the epidemy were plagued with large boils on the breast, under the arms, on the knees, and legs; some had them on the head, and over their whole body; many, instead of boils, had great white bladders: yet none of these people kept their beds.

I have taken the whole of these remarks from observations made by myself, and that not with a superficial inattentive eye, but with all the exactness that the object of my profession required; and though, without doubt, this does  
not



not comprehend every thing that other physicians might have seen during our epidemy, yet is it quite sufficient for my purpose.

## C H A P. II.

## Explication of the D I S O R D E R.

SYDENHAM's noted observation on the close connexion between the epidemical disorders of the same year, was fully verified here. After an astonishing number of putrid fevers, followed the dysentery, attended likewise with a putrid fever.

Many thousands of people in Switzerland, and chiefly in the canton of Bern, were from the end of the year 1764, to Easter 1765, and still later, attacked with a putrid fever, which, for the most part, attacked the breast, and had the appearance of a pleurisy; though sometimes the liver was likewise ulcerated, or the intestines affected with a gangrene, after which even the heart was found inflamed and gangrened: these last cases, however, were very rare, and the distemper fixed itself mostly on the breast. In April and May 1765, it shewed itself at the fullest in our parts; I also saw even in June, some sick  
of



of the putrid fever at the very same time, and in the same villages in which the dysentery first began. In the same manner, at the going off of the putrid fever that ravaged with such violence in and about Lausanne, in the year 1765, a dysentery followed of the very same complexion, which like that too became epidemic in harvest time.

The analogy of our dysentery, with the preceding epidemical putrid fever, appeared from the resemblance of the symptoms in each disorder, of the method of cure that was the most successful in both, and even of the effects that followed the errors therein committed.

The putrid fever in May 1765, seized on the children and adults in my neighbourhood, so very suddenly, that they were perfectly in health, and extremely ill, within the space of a quarter of an hour; though I have for some days before the real attack, remarked a great sensation of cold in the hands and feet of some of my patients, together with a shivering, but for the most part the assault manifested itself very suddenly: it was just the same in the dysentery. In the putrid fever, all those that were violently ill, had in the beginning an universal chill, which had different degrees of duration, and sometimes



sometimes it was long and very violent; many had only a small paroxysm; with many it returned from time to time in the course of the fever, and went off in a hot fit: the same things happened in the dysentery. In the putrid fever, every one at the first coming on of the disorder, felt a pain in all their joints, as if they had been bruised, and especially in the back and loins: the same happened in the dysentery.

In the putrid fever, almost every one on their first being seized, complained of a bitterness in the mouth, and a continual inclination to vomit. Many brought up, just after the cold fit, a bilious matter; some vomited very violently the first day, and were relieved by it; many had this propensity to vomit, even in the progress of the disease: the same happened in the dysentery. In the putrid fever, the hot fit followed immediately upon the cold, and very often an intolerable head-ach. The fever at first appeared to be small in most, if they did not directly heat themselves with wine and brandy, but in the course of the disorder was still more and more considerable; though in very desperate cases, it had a sly, deceitful, slow manner, at the same time the pulse was very weak; some that were in great danger, fell into a lethargy: the very same happened in the  
dysen-



dyſentery. In the putrid fever, the expectorated matter was tinged with gall, and at times with blood; the ſtools were yellow, green, dark-brown, of a putrid, intolerably ſtinking, and ſometimes cadaverous ſmell: the ſame happened in the dyſentery. In the putrid fever, the excretions being mingled with blood, was no ſign at all of inflammation, as the blood diſappeared after taking the emetic: the ſame held good, with regard to the ſtools in the dyſentery. In the putrid fever, the appetite and natural ſleep were almoſt entirely gone; in bad caſes, the feebleneſs was inexpressible the very firſt day; the patients were frequently ſeized with faintings; the profuſe ſweat that I remarked throughout the whole courſe of the diſtemper in thoſe patients, who had neglected to take a purge at the beginning, was of no ſervice; gave not the leaſt relief, was evidently ſymptomatic, and never critical: I ſaw the very ſame thing in the dyſentery.

In the putrid fever, during the progreſs of an illneſs, that continued ſomething longer than uſual, a miliary eruption broke out, and ſometimes large exanthemata, that came to ſuppuration, if the bilious matter was not purged off in great quantity, directly at the beginning; ſometimes this raſh was taken away by a purging,



that came of itself. In Solothurn it disappeared directly, when at the commencement of the illness, recourse was had to emetics; it is also, according to the numerous observations I have lately made in that city again, every where about, since people have endeavoured to throw it out in all putrid fevers, during the space of many weeks; which makes it palpably evident, that the miliary eruption in such cases, is very often nothing more than an accidental effect of a disease not well looked after, and therefore is not critical, but the fruit of the method of cure. Already, in the beginning of this century, it has been observed in Breslau, that a mortal miliary eruption, has sometimes appeared out likewise in the dysentery; in that of Nimeguen, in 1736, the miliary eruption was frequently remarked at the end of the disorder; in the dysentery that was epidemic in Zurick, 1764, miliary pustules broke out sometimes on the day of the patient's death. In our dysentery, I saw a very dangerous symptomatic miliary eruption, in such, as in the beginning, had not taken the purge according to orders; and a harmless critical breaking out in such, as had happily got over a violent dysentery.

In the putrid fever, the physicians were afraid to trust the cure of the disorder to the evacuations



tions made by nature herself, as art was found to effect them much better than nature; it was the same in our dysentery. In the putrid fever, an inflammation sometimes joined itself with other effects of putrid matter; these cases were extremely dangerous; a short time too before death, the abdomen was observed to swell, and a gangrene on the inflamed part: it was the same in the dysentery. In the putrid fever, I have often remarked, that the disorder was of long continuance, when the patient, on account of his weakness (which proceeded from that very cause) would not allow the physician to purge his body perfectly of its bilious matter; and afterwards remove fully, by the use of proper means, the perhaps remaining corruption of the humours; I have remarked too, that the whole cure was unstable and imperfect, when they often changed their medicines, and did not continue long enough a well indicated remedy. The same I saw in the dysentery.

At the time that the putrid fever reigned, there were likewise many slight indispositions, resembling the other in miniature, which were of the same nature, but attended with infinitely slighter symptoms, were easily cured, and even vanished of themselves without the help of medicine: the very same happened in the dysentery.



tery. The boils and large white bladders, that were observed towards the end of the epidemy, in those that remained free from the dysentery, were besides well worth notice; these, however, shewed also a corruption of the humours.

In the putrid fever, all depended on the speedy evacuation of the bilious matter. The fever kept off, as soon as the corrupt matter was for certainty purged out of the body; so that after this manner, the cure of this otherwise dreadful disorder, appeared to me not in the least difficult, for I have cured a great many putrid fevers, in two, three, four, five, and six days: a strong proof that a good method of cure is the best specific. I made no scruple of procuring farther evacuations, when the danger appeared very great, and other physicians would have absolutely given the patient over to his fate; for in the greatest weaknesses, I gave emetics with the best effects, on the eleventh, and even after the twentieth day. I have also taken away bad consequences of the putrid fever, by purgatives; for example, an extraordinary obstinate cough, with the sulphur auratum antimonii: all this happened with the same success in the dysentery.

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In the putrid fever, I reckoned among my capital remedies, ipecacuanha, tamarinds, cream of tartar, all vegetable acids, and the sulphur auratum antimonii: in the dysentery, these same remedies had the best effects, and instead of sulphur auratum antimonii, I made use of the vitrum ceratum, with the greatest success.

In the putrid fever, I was under the greatest apprehensions, when every thing inclined for the best, as at that time the patient, or the assistants, very easily committed an error in the non-naturals, that became mortal: I feared the very same thing, for like causes, and with equal reason, in the dysentery. For in the putrid fever, I found wine, just as in the dysentery, very hurtful and dangerous.

But I discovered the most striking resemblance between our putrid fever and dysentery, in the manner, in which, after the use of the before-mentioned remedies, the symptoms of the putrid fever vanished by degrees; and on the neglect of these, or use of medicines of a contrary nature, became obstinate, and again got the upper hand: in short, in the manner in which they appeared under different shapes, and degenerated into the most dreadful symptoms, when the

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patient.



patient did not do his duty, so well as the physician.

From this perfect resemblance of the putrid fever with our dysentery, we can therefore most clearly determine the species of this last mentioned disorder. The reader sees, without my reminding him, that our dysentery was accompanied with a bilious, or, as it is called, putrid fever.

As the putrid fever was only catching in certain circumstances, so our dysentery was of itself not contagious. I have seen a great many people keep company with the sick, without any detriment to themselves; but many followed at the same time the advice I gave them for avoiding the infection; several did not follow it, and yet were not infected. In many houses almost every body was ill, and that not at once, but one after another; in many, I saw only one person sick. I do not indeed wonder, that one should be infected, and another not, as the constitution of the body, and even of the mind, can make one man much more subject to infection than another. The power of contagion in the dysentery, is also very different; while in an epidemical dysentery, that is, otherwise attended with a putrid fever, the distemper may differ very much, according



cording to the degree of the putrefaction; all those that were dangerously ill of our dysentery, had the putrid fever in the highest degree; on the contrary, in some gentle cases, many had not the least symptom of it, nor were their stools in so great a degree offensive. Now the contagious power of the dysentery, lies chiefly in the excrements; for the mere smell of them, has often communicated the dysentery to men in perfect health, and even beasts; Dr. Pringle even saw one that proceeded from the bare smelling to blood that was putrified, by being kept in stopp'd bottles; as in general the effluvia from putrid blood, are more apt to cause a dysentery, than any other malady. And even though one stop one's nose, one is not secure from infection; for the putrid vapours adhere to one's cloaths, and when they are in a high degree contagious, are thus communicated from one person to another; while, at the same time, he that has the cloaths on his back, is perhaps not in the least infected. The foetus was naturally infected in our dysentery, when the mother lay sick of it herself: a woman in the city of Frawenfield, that was troubled with this disorder, a fortnight before and after she was brought to bed, brought her child likewise into the world infected with the same, and it died three days after: but this case proves nothing at all. In general, it ap-



peared to me, that our dysentery became contagious purely through nastiness, and the crouding many people together in a small space, but was by no means so of itself; for though many were attacked with it at once, this seems to proceed from a more universal, and widely different cause, which operated at once on every one.

After this exact determination of the species, under which our distemper should be ranged, I betake myself, with the greatest fear and caution, to enquire into its remote and proximate causes, as they are called. People of narrow capacities, who think that learning consists in knowing every thing, will be very ill content with this enquiry. I on the contrary, must here in many things, as on most subjects in every thing, confess my ignorance; since it is much wiser, as well as better, to observe narrowly the works of nature, than to explain their causes by arbitrary hypotheses.

The weather this year seemed perfectly favourable to this dysentery. The air was in June very inconstant, but for the most part humid; and when the sun broke forth, there ensued a suffocating heat: July was full as changeable; but the heat never rose to so high a pitch: August was, during the better half, cloudy and rainy;



rainy; afterwards the days were fine and very warm, and at the same time the nights extremely cold: till the middle of September, and longer, the sky was continually clear; at noon, it was extraordinary hot, in the morning, evening, and chiefly throughout the whole night, intolerably cold, afterward the air grew foggy, damp, and cool; and we had fine weather and rain by turns: October was very variable, though for the most part cool; and the close of the month was stormy, rainy, and pretty cold. By means of these great changes from heat to cold, the perspiration was by turns first promoted, and afterwards on that very account the more violently checked; thus the putrid scum of our bodies remained for the most part behind, and was forced to empty itself into the inner cavities. I have, indeed, remarked, that those chiefly were taken with the dysentery, who after having very much heated themselves, cooled themselves directly after; especially such as drank great quantities of cold water, when they were in a profuse sweat. This seemed to be the reason, that most of our peasants fell sick of the dysentery.

In general, it is not the cold that follows on heat, and remains, but that which succeeds heat, and gives place to it by fits, that is considered as the cause of the dysentery. The cold



air before sun-rise, which is followed by a scorching heat at noon, after which the nights are again cold and damp, are thought to be the principal occasions of the malignant diseases of the army in Hungary; and in particular, the reason why autumnal fevers and dysenteries are more frequent and violent in that country than elsewhere. Now we had, this year, such weather for the most part, where the dysentery was most violent; but in a great many places, in the same weather, and at the same time, it was not remarked; it came on also, when this change from heat to cold was not at all observed. Sometimes it made its appearance, when in the beginning of the spring, a sudden heat ensued after a great cold; and on the contrary, the passengers in the Dutch ships, saw both the diarrhœa and the dysentery increase, in proportion to the coldness of the countries they passed through; though otherwise, the epidemy of the dysentery was mostly stopt by the approach of the cold. The hippocratic (if I may be allowed the phrase) southerly winter of 1764, appeared to us to have occasioned the great quantity of putrid fevers with which we were plagued; but other winters, to which it bore a perfect resemblance, did not bring these fevers on, and we have putrid fevers even in the coldest seasons; for the extraordinary cold winter, in the beginning



ning of the year 1766, was exactly the time in which the putrid fever, especially the putrid pleurisy, and even the malignant fever, raged more violently in Switzerland than ever they had done before. Generally speaking, the same disorders do not always show themselves in the same weather; and disorders, that perfectly resemble one another, often make their appearance in totally different kinds of weather. I cannot therefore comprehend, why some people explain the manner and ways, in which a certain particular state of the air has given rise to a particular epidemy, with as much confidence, as if it could not possibly be otherwise. All that I can therefore conclude with any precision, from the before-mentioned observations, is this; that cold alternating with heat, certainly contributed very much to our dysentery.

But the reason why this malady did not, in like weather, break out in so many other places, is to me unknown. Without doubt or contradiction, this year's dysentery arose from a corruption of the humours; as an exact observation of the disorder, taught me in the clearest manner. It is full as obvious, that a certain concurrence of causes, before-hand internally existing in the human body, is requisite to produce a disease, that nevertheless attacks it suddenly;



for without such a concurrence of internal causes, every one would certainly have had the reigning malady, and in the same degree. This union illustrates at once many undetermined, and in part, contradictory notions; and the consideration thereof, appears to me one of the principal objects of our art: where this exists, a man is attacked, and where it is not, remains free. I have remarked, that where the putrid fever does not reign, those that are subject to much vexation, and the excretion of bile that proceeds therefrom, are seized, rather than others, with that disorder. The most inconsiderable external causes are capable of producing the greatest effects, when joined with internal, already present.

It is allowed, by almost all the most learned physicians in Europe, that the dysentery (that is, with their leave, the dysentery attended with a putrid fever) is brought on by those causes, that make our juices very putrid, and incline their course principally towards the intestines.

The camp dysentery arises, for the most part, from a repulsion of the perspirable matter; when the soldiers lie in the field in all kinds of weather, and must do their duty, at the same time that their humours are grown thin and sharp,  
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through the intenseness of the heat. In general, it shows itself just after the armies begin to appear in the field, grows often frequent and considerable so soon as the end of June, still more so toward the end of July, and thus remains till the troops go into winter quarters. In the night after the battle of Dettingen, the 27th of June 1743, the English soldiers lay on the field of battle without tents, exposed to a heavy rain; and the next night likewise, after marching to Hanau, lay again in the open field, on wet boards, without straw. The summer had begun, and the heat had been hitherto great and continual; but the free and uninterrupted perspiration, that was the consequence of this continued heat, had till then prevented the rise of any epidemic malady. But now the pores of the skin were suddenly closed, the humours tending to putrefaction were tumid in the bowels, and occasioned a general dysentery, which lasted a great part of the summer, and in a few weeks had seized almost half the army. Such of the officers (among whom, indeed, it was not so general) as had lain wet at Dettingen, were attacked by it first, the rest received it by contagion; but a regiment that had not lain in the damp, nor been exposed to the rain, remained perfectly free from it, at a small distance from the camp, though (excepting that they were not subject to  
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the contagious effluvia of the rest) they breathed the same air, eat the same provisions, and drank the same water.

According to Dr. Pringle's observations, the dysentery rages without interruption, in camps that are perfectly dry and airy, after a continued and violent heat. But in such a camp, besides the natural damp of a tent, these people must be often exposed to wet floorings and cloaths, and to the chill and damp air of the night. The occasion of these disorders is the more inevitable, as in the field the variations from heat to cold, are much more sensible and frequent than in quarters.

The dysentery is seen in all parts, where after much heat, the perspiration is stopped, not only by means of a wet floor, or mists and dews, but also of damp cloaths. In the warmest countries, the dysentery reigns when the weather is rainy; and in all climates that are subject to constant rains, this disorder shows itself very often. It returns also every time one catches cold, after a seeming, and often, a perfect cure. Baron Van Swieten thinks, with the greatest reason, that cold seizing the body when it is heated, has killed more than the plague.

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With these external causes, internal may also concur. These compose the *femini*um of the disorder, and may lay awhile lurking in the body, till they break out on the person's catching cold. In summer, not only the solids are relaxed, but also the juices, through the intenseness of the heat, incline to putrefaction; now, when a sudden stoppage of the perspiration supervenes on relaxed fibres, and a putrid state of the blood, it is no wonder that a dysentery should be the consequence of this acrimony, formed within the body. Of all our humours, the gall is principally subject to putrefaction. Hippocrates, indeed, ascribes the diseases of summer and autumn proceeding from this cause, to a redundancy of bile; but most other writers, to its putridity; so that as well of old, as since, these disorders have been in general called *bilious*. Now we learn from a number of observations, that in the bodies of such as have died in the dysentery, the bile was faulty, as well in quantity as quality; that either none was there, or that which was there, was perfectly acrid and corrosive. We may therefore take it for granted, that the bile in summer time, if not more abundant, is yet at that time more corrupted than usual; and that this circumstance, if it be not the primary cause, is, at least, the consequence of all summer and autumnal disorders, and increases



creases their malignity. In a very general and epidemic dysentery, an acrid and corrosive bile has commonly the most considerable share; so that our dysentery seemed to me, nothing more than a particular determination of the very same corrupted humours, which occasion our putrid, or rather bilious fever.

From all this ensues, that the state of the air during this year, conduced very much to our dysentery; that likewise this dysentery proceeded from a putrefaction of the juices, which in particular cases, is very easy to explain; the general cause of which however, I, conscious of my own ignorance, leave to others to determine.

The proximate cause of our dysentery, the manner and wise in which it showed itself in the body, and its effects, can now be declared with greater ease and probability. I saw, with my own eyes, that a corrupt, putrid, and bilious matter, lay in the stomach and intestines, caused great pains, and at first upwards, and afterwards downwards, sought an exit out of the body. Now it is well known, that the bile, from various causes, may be so altered, and put on such a sharp, putrid, and acrid nature, as, like a poison, to corrupt the whole body; for from this corruption, either inflammations, ulcers, and gangrenes,



grees, take their rise, or all the juices in general fall into the like putrefaction in divers degrees, and produce miliary, or petechial eruptions; sometimes it happens, that the gall of itself affects this sharp, corrosive, and perfectly poisonous nature, and thus infects the other juices of the body. Sometimes this is preceded by an acrimony, formed in the blood, whether it proceed from contagious vapours, (as happens when many sick persons are crouded together in our military hospitals) or from what other cause soever, and this corruption is communicated to the gall. The remark, that the dysentery has sometimes owed its origin to the bare smelling to blood, that was putrified by being kept in a stopt bottle, makes good, thus far, that expression of Sydenham's, who calls the dysentery a fever that has thrown itself on the intestines.

Now when once such an extraordinary acrid matter is in the bowels, it is very intelligible, that these extremely sensible parts must be very much irritated. This irritation communicates itself to the stomach, which gives rise to vomitings; in the bowels each irritation provokes a greater conflux of the most liquid parts of the blood through the intestinal glands into the intestines, whence arises a purging. Now this conflux may, without doubt, be exceedingly great,  
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as we know from anatomy, that besides the larger glands, the liver, and the gall-bladder, there are an infinite number of small passages over the whole surface of the bowels, through which even the most unusual things can pass out of the blood into the bowels, and that a continued and strong irritation of these innumerable passages, occasions an incredible flux of the humours into the bowels; and this again such an incomprehensible purging, that at sight of the evacuations, one is apt, not very improperly to say, that their whole inside is coming out at their fundament. In this manner, in our dysentery, above forty pounds of a watery matter has been seen, in one day, to come away by stool.

From these phaenomena, we are enabled to explain the reasons of the dreadful pains in the belly, and other symptoms. The bile does not always occasion the pain; as there are dysenteries, in which the patients void not the least bilious matter; and, as in the putrid fever, very seldom a pain arises, from the mere presence of this matter in the intestines. But yet the belly-ach in the dysentery is very often at first a consequence of the irritation of the acrid and putrid humours in the bowels, and of the spasmodic contractions in those parts, produced by that irritation: in the progress of the disorder, it is the consequence  
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of the absence of their natural mucus, which makes the bowels, deprived of this mucus, more and more sensible to each fresh irritation; so that the greater acrimony of this matter, and its being accompanied with a fever, distinguish the dysentery from the diarrhœa. The tenesmus is the effect of an irritation in the intestinum rectum, the prolapsus ani of the tenesmus, and the stranguary of an irritation in the neighbouring parts.

But the excrements in the dysentery, of which we treat at present, do not merely consist of corrupted gall; besides, all that a man voids of a green or yellow colour, is not pure gall, since one drop of bile colours an astonishing quantity of water. They are very often white, and perfectly resembling pus; though it is for the most part a great error to take this matter for pus. For it is well known, that the intestinal glands, in the same manner as those of the urine-bladder, when torn with the stone or gravel, are capable of yielding a greater quantity of fluids, and those of a quite different nature than in health; this humour is in both cases a slimy white matter. On comparing these remarks with the foregoing, it is manifest, that stools of this kind may be produced, by an acrid bilious matter adhering to the bowels; and that, as my obser-



vations in the first chapter sufficiently shew, in a bilious dysentery attended with a putrid fever the excrements may be even perfectly white. From this appears, by the bye, how ridiculously some people constitute different species of the dysentery, from the different colours of the excrements, and treat them by quite different methods.

The particles of fibres and membranes, that often come away in the dysentery, hanging sometimes a foot long from the poor patients, and are considered as the inner coat of the intestines, are in reality very seldom any part of them, but often nothing else than an inspissated mucus. Great anatomists have demonstrated to us the passages, through which this mucus comes into the intestines; and withal, that a substance can come out of the blood into them, by which this mucus is coagulated, and under the appearance of a fleshy, membranous, or fat body, passes into the stool, when, at the same time, not the least ulcer in the bowels is to be perceived. I do not, however, deny, that the tunica villosa of the intestines, is not also sometimes abraded, and comes away with the excrements. I am likewise sensible, that the bowels are in this disorder apt to be ulcerated; but so late, that this matter is changed into a putrid thin pus, or is so  
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confounded with blood and mucus, that one cannot possibly see it. Hence we may perceive, how often physicians deceive themselves and others; when they, in the very first days of the disorder, mistake the forementioned mucus for pus, the fibrous and membranous substances for signs of the laceration of the internal tunic of the intestines, or of an ulcer in those parts; and thus in a bilious dysentery attended with a putrid fever, entirely omit purgatives, and give the patient over to death.

The bilious, putrid, and corrosive matter, inclosed, as it were, in the cavities of the intestines, irritates them so much; that often, the openings of the blood-vessels into the intestines are widened; so that pure blood runs out, and mixes itself with the stools. Thus there may be blood in the excrements, without the least perception, or even suspicion of inflammation in the bowels; it may also flow in great quantities, without their suppuration ensuing: hence appears the reason, why, when even the excretions are bloody, there is no need to be afraid of expelling the bilious irritating matter with a vomit and purges, and why it so often arrives, that a vomit alone puts a stop to this flux of blood. Nor is an internal heat, which the egregious Mr. Rahn, in his work on the dysentery,

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affirms



affirms to be an infallible mark of a violent inflammation of the bowels, any more a sign thereof, than bloody stools; for I have removed this symptom likewise by means of tamarinds, which evacuated the corrosive bilious matter; while, in case of the slightest inflammation, this ardor had been violently increased.

Notwithstanding what we have said, a bilious dysentery (or the dysentery attended with a putrid fever) may turn to an inflammation of the intestines and a gangrene, in the same manner as a putrid fever very often ends in a gangrene of those parts. Stools perfectly black, and of a cadaverous smell, cold sweats, the hiccough, and delirium, are considered as tokens of a gangrene in the bowels; and perhaps it is not easy to find an epidemical dysentery, in which, towards the end, the bowels are not inflamed. Almost in all parts of the *primæ viæ*, inflammations, suppurations, a number of ulcers and gangrenes are found after the dysentery; but in every one, these evils are conspicuous in the rectum and *intestina crassa*, which, for the most part, are putrid and mortified. Sometimes small pustules have been seen in the bowels, which came away even during the patient's life, and were full of a putrid stinking matter; and in the *intestina crassa*, little aphthæ, that bled when pressed,



pressed, and looked like the flat kind of small-pox, when this disorder is at the highest, but with this difference, that they were solid and without any cavities; they consisted of the two innermost tunics of the intestines, that grew one within the other, and were incrassated by the inflammation: the first of these was covered with a black mucus, and black spots were likewise partly visible on it; sometimes the mesenteric glands are swelled, relaxed, filled with a bad kind of pus, and very nearly mortified. Nay, after tedious dysenteries of long standing, inflammations are often found in the rectum, in the rest of the intestina crassa, sometimes in the small intestines, and even in the stomach.

The tenesmus, however, ought very seldom to be considered, as a sign of an inflammation of the inner coat in the extremity of the rectum, or of an ulcer in those parts. Great anatomists are of opinion, that what stimulates the rectum to evacuation towards the end of a dysentery, is no particular affection of the gut itself, but the remainder of a sharp humour, and sometimes of the blood itself, (when the excrements are of a dark-red colour;) in the next place, that this residuum may stay awhile in the cavity of the great guts, and by degrees be pushed into the rectum and so towards its extremities, which are, at that time,

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very



very sensible to this irritation. Yet, it is not without reason, that from a violent tenesmus remaining after the dysentery, some people have suspected an exulceration of the rectum, or some other considerable complaint; as the sequel has shewn this assertion to be true. A tenesmus has been really known to proceed from an inflammation of the rectum, that lasted several days, sometimes a week, and longer, and was afterwards followed by a greater or less excretion of a yellow pus, upon which the tenesmus ceased.

This essay towards an explication of our disorder, with all its imperfections, may not perhaps appear totally useless, when the influence of such researches on the cure is considered; and thence is perceived, how senselessly physicians of an ordinary cast, on occasion of such enquiries, pour out a volley of abuse against theory.

### CHAP. III.

#### The Curative Indications, Diet, and Prophylactic Remedies.

THE foregoing explication of our disorder, discovers, at the same time, the indications towards its cure. First of all, an enemy of itself so dangerous, and which would become



become still more so by a longer stay in the body, should be quickly expelled from it, and the putrefaction, at the same time, be resisted in the best manner possible.

In no malady does nature sooner get the start of art than in this, if one does not in the very beginning take care to do, what is often afterwards too late to be done. The morbid matter of a dysentery of this kind, has been likened to a rotten egg, that given to the quantity of a few grains, occasions a violent and continual vomiting: the putrid stagnating gall is not less venomous, for which reason, it should be without delay driven out of the body. White and red miliary pustules, and even petechiæ, are, in putrid fevers, an effect of the putrid matter that has passed into the blood; the same evils are produced from like causes in the dysentery. Not to evacuate, or correct immediately this matter, is to produce the miliary eruption that is so often mortal; but these excrements never break out in the bilious dysentery, and seldom in our putrid fevers, when evacuations are procured in proper time and quantity. Add to this, that the greatest physicians allow it to be most commonly difficult, and often quite impossible, to cure a dysentery of some weeks continuance.



We must therefore, not only abstain from the pernicious practice of stilling the disorder in the beginning, before we look out for more effectual remedies; but we should also take care above all things, not to stumble on such remedies as may retain in the body, an enemy so extremely dangerous. In severe cases of the dysentery, the forces of nature never suffice alone to expel the putrid matter out of the body, though nature endeavours to do it by this very way: and in all cases, it is contrary to her intention to retain it. The observation, that inflammations are apt to arise, in diseases of a putrid nature, and that in most of those, who die of the dysentery, the bowels are inflamed, indicates in like manner, that every thing should be avoided in this distemper, which immediately produces fevers and inflammation.

These indications towards the evacuation of the putrid matter I pursued with emetics, given directly at the beginning, when nothing particular hindered. Nature herself pointed out this way, as almost all that were taken with the dysentery, had, at the beginning, a continued propensity to vomit: many vomited, and that with benefit. I chose gentle medicines, as with these we can effect as much as one can wish: I gave these emetics, even at a time when the stools were very bloody; as I saw that less blood came away after-



terwards: I even gave a vomit very late, when I was called late, and no evacuations had been previously made. I always omitted the vomit, when there was the least suspicion of inflammation, or when circumstances of a quite different nature forbid it; as, for example, a rupture; or likewise in cases of very young children, by reason of the parents fears; for which, however, in other maladies of such infants, I have since shewed less indulgence; and particularly in the whooping cough, in 1766, with the greatest success.

After the emetic, I pursued these same indications with purgatives. These were indispensibly necessary, as the acrid putrifying matter, that lay burrowing in the intestines, from the prolongation of its stay in the bowels, grew more and more acrimonious, irritating, and apt to spread the putrefaction in the body, or to cause inflammations in the intestines. The bloody stools did not hinder me from giving purges, as I saw that they cleared the bowels of the acrid matter and that no more blood appeared in the stools, as soon as this matter was quite evacuated. I gave these purges, as long as there were any indications of an acrid putrid matter in the bowels, without inflammation or suppuration. But these purges were always of a gentle nature, and, to chuse, of the acid kind;



as strong purgatives in the dysentery always occasion an intolerable cholic, and greatly weaken the patient; and cathartics of an acid nature do not only for the most part evacuate the putrid matter, but also withstand any putrefaction that may still remain in the body.

This was the chief thing to be attended to, after, and even during the evacuation. The putrid venom should be opposed, and the humours of the body preserved from the like corruption. Quite above the prejudices of the vulgar, and indeed, of great physicians, particularly those of Dr. Degner, I gave with this view immediately in the beginning acid salts, not only in small, but also in very large doses. I followed likewise this plan in the diet I prescribed to my patients.

The pain could not be more effectually relieved, than by taking away the sharp corrosive matter. Yet was this sometimes so very abundant, that in spite of all evacuations, enough remained behind to keep up the disorder, and excite the most intolerable pains. In these cases I very seldom made use of anodynes of the narcotic kind, and never without the greatest caution and reserve. But in these and all other circumstances, I was extremely attentive to assist the  
bowels



bowels with a proper quantity of soft and mucilaginous liquors; since except in the case of inflammations, these pains are solely to be ascribed to the presence of an extremely acrid matter in the intestines, which irritates them to spasmodic contractions, and to the loss of their natural mucus in the course of the disorder.

The methods I took to fortify the stomach and bowels, after the dysentery, consisted in making choice sometimes of such remedies, as, while they strengthened, promoted some degree of evacuation, and at other times of such as strengthened without heating. For the most part, I had no indications at all of this sort to pursue, as my patients recovered their strength of themselves.

The diet was in general regulated by the cause of the disorder, and the peculiar circumstances of the patient. With regard to the air, I was extremely careful to have it always fresh in the chamber; though I gave them great caution with respect to taking cold, which is of so much prejudice in this malady. With regard to victuals and drink, I took care, above all things, to avoid every thing that promoted putrefaction; though at the same time, I enquired narrowly into the nature of those kinds of food,  
that



that are reckoned to promote or resist putrefaction; for, though Degner had in the dysentery at Nimeguen, which was of the putrid, (as it is called) or bilious species, the same indications to oppose putrefaction, yet he allowed his patients different kinds of flesh-broths, which, however, promote it, and eggs, which are manifestly of a putrid nature. Our excellent countryman, indeed, Mr. Conrad Rahn, advises chicken and veal in the dysentery, as he imagines that they expel wind. But this entire new discovery was at that time unknown to me; besides, I do not see why one should think on carminatives; and once for all, any flesh of what kind soever, is hurtful in all putrid and inflammatory fevers; as in the former they increase the putrid corruption of the humours, and in the latter, still more incrassate the blood already of itself too thick and viscid: accordingly I forbade all flesh and flesh-broths, as well as eggs, which are so much recommended by all physicians. As for Mr. Rahn's indications towards expelling the wind, I did not follow them at all; for the wind in the dysentery (which however I have seldom observed) is the immediate effect of putrefaction: as, according to Dr. Pringle's experiments, putrefied animal substances do not only of themselves produce air, but likewise excite a violent fermentation in all vegetable foods,



foods, and I could not comprehend how putrefaction could be hindered by veal, when all flesh so evidently promotes it. On the other hand, I found that carminatives were esteemed in the dysentery, on account of their having been found serviceable in pains of the bowels, proceeding merely from wind; and hence it was very absurdly concluded, that they would be of like service in tormina that proceed from quite different causes. I therefore forbade cummin seeds, and cummin sauce, as likewise the drink the Italians are so fond of, made of a decoction of coriander seeds; but in particular all hard and indigestible food. With a general view to hinder putrefaction, I forbade all fat, butter and oil. On the contrary, I ordered to all my patients barley-water and rice-gruel, and with each I mixed, for the most part, cream of tartar; after the purge, I gave a preparation of barley, which is nothing else than barley-water boiled down to a thick and strong consistence, and strained through a cloth: this served the patients instead of victuals, and when they chose, for drink.

With regard to washing away, and attenuating the bilious acrimony, I considered copious drinking as very serviceable. Indeed, some old women of the last century, were of opinion, that a great  
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part of the cure in the dysentery, consisted in abstaining from drinking, which, in their opinion, increased the purging; and that those were the easiest cured, who could suffer thirst with the greatest patience. But the experience of latter years has taught us, and very great physicians, Baglivi, Huxham, and Tissot, have advanced, that copious drinking is no where more necessary than in the dysentery. Water, once so much despised, is, when drank in great quantity, an universal remedy in this malady, bilious disorders, and ardent fevers. In the cholera morbus, as it is called, or continual vomiting, Dr. Degner himself drank, in the space of twenty-four hours, four and twenty pints of warm water; and again in fourteen hours, forty-eight pints more; and again in two hours, near thirty pints, with the greatest benefit. To be sure one has need of an Herculean stomach, to bear a deluge of this kind. In the meanwhile, thus much is certain, that the drinking of warm water in the dysentery, is of great service; and that a vast quantity of dysenteries were cured, only by taking a tea-cup full of warm water every quarter of an hour. In like manner I allowed whey in great plenty, and rather preferred it to water, and my patients found it agreed with them very well. Cold liquor was, in the beginning of the disorder, al-



ways noxious; on the contrary, warm drink not only does no harm, but also washes out the intestines better, and passes easier through the mesenteries and lacteals.

Every thing that was capable of binding or heating, I forbid. I disapproved of milk, cream, oatmeal, rice, and acorn-gruel; instead of oil, I made use sometimes of an almond emulsion, and a solution of gum arabic. I utterly condemned all kinds of pastry, cheese, spice, spirituous liquors, and especially wine. I gave also strict orders against holding the stools in the body, as a very pernicious practice: though these various orders and prohibitions, appeared in the eyes of our people, an extremely stupid and damnable heresy.

I considered cleanliness as a thing of the utmost importance in the cure of the dysentery. I took care of this in all respects, and advised, that the childrens clouts should be carefully washed.

Those that were getting well, I allowed as much boiled fruit as they chose, with lemons and lemon-juice, together with the gruels before-mentioned; or also, when they were further advanced, a light food, composed of almonds,



monds, milk, the white of an egg, and sugar. After severe illnesses, I advised them to regulate themselves for some weeks, just as if they in reality still had the dysentery; and I repeated to them over and over enough to make them sick, that errors in diet, and especially an obstruction of the perspiration, from exposure to a moist air, for the most part cause a relapse, and the second illness is always more dangerous or more tedious than the first.

According to the observation of Dr. Moehr-  
lin, of Ravensburgh in Swabia, a strict diet was not only of the greatest service in curing the dysentery; but also after a full remission of the purging, for at least a week or longer, (notwithstanding a return of appetite) the stomach should not be burthened with food; as otherwise the cure would be retarded, or a relapse ensue. Afterwards a milk diet agreed very well with his Swabish patients, but flesh meats very ill, for some weeks after; and even good strong-bodied wine, was the last thing that Dr. Moehr-  
lin found his convalescent patients could bear.

The preservative remedies were instituted according to the most accurate observations and experience.

At



At the time, when uncommonly cold nights came on after very sultry days, I advised my acquaintance not to heat themselves too much in the day-time, and either not to go out at all after supper, or if they should, to cloath themselves very warm. I myself in the month of September, on account of the great heat of the day, was ready to faint away, when I arrived at the chambers of such of my patients as lived at any distance; accordingly in the day-time, I wore the thinnest and lightest cloaths; on the contrary, I was obliged in my night visits, to wrap myself up closely in the thickest cloth. I ordered the peasants in particular, not to lay themselves down and take their naps, according to their laudable established custom, on damp floors.

Experience has shewn, that the smell of the patients was least dangerous, that their breath was worse, and their stools worst of all; that a shivering is commonly the first effect of the infection, and that a vomit is of service in such circumstances. In the chambers of the sick, I generally kept a window open all day long; or ordered them to be aired twice a day, by opening the door and windows, with the bed-curtains drawn; and the air to be frequently purified besides, by pouring vinegar on a hot iron fire-shovel. In the villages, I ordered the  
excrements



excrements to be taken out of the house as often as possible, and thrown into deep pits, digged for this purpose in the meadows, at a proper distance, and every time covered with fresh earth. In the interim, I bad them cover the stools up close that remained in the house; and very strictly forbad the peasants to throw them on the dunghill, or into the streets. I prohibited those that were in health from lying with the sick, or easing themselves on the same close-stools, as the sick used. I took care that these last should often change their linen; I commanded likewise, that they should take a precaution here very necessary, namely, not to keep the dead bodies too long in the house, or at least to carry them to a separate and cool place. It is of importance also, to interr the corpses in deep graves.

As a very good preservative, I advised those that were in health to eat less flesh meat; and on the contrary, as much fruit and grapes as they chose; as to the rest, to keep to the most digestible food, and of all things to drink wine; as it is a preservative against fear, and makes the use of the cooling prophylactic remedies supportable even by weakly persons; whence it limits the application of the maxim, that every thing that generates wind and relaxes, inclines the body to putridity.



putridity. I could not too often repeat to the peasants, that after having heated themselves, they should not pour warm water too soon, and in too great quantities, into their bodies. Dr. Moerhlin remarked in Ravensburg, that those were either not attacked by the dysentery, or else had it very slightly, who eat little, drank still less, and that not cold; and kept their bodies in a strong perspiration, as well in the day-time, as especially in the night, carefully covering themselves all over with the bed-cloaths.

I gave the nurses, when they were in imminent danger of being infected, a vomit, with the best success; to others tincture of rhubarb, and to most that asked for it, cream of tartar. I was myself, from too great fatigue and vexation, in the beginning of the epidemy seized with a violent pain in the belly, and an evacuation of an atribilious spumous matter: this indisposition returned a second time, and went away each time as fast as it came; my only preservative consisted in strong doses of cream of tartar, and in a certain indifference with regard to the distemper, whensoever it should attack me. In general, in this as in all other epidemic disorders, one of the best, though (to put in practice) one of the most difficult prophylactics, is, not to be afraid. For fear is more pernicious, than the very worst condi-



tion of the air; it gives the reigning disease to those that are in health, and very often kills the sick, when another, whom they have loved, has died before them. This passion and grief produce shocking effects on the healthy, and infinitely worse on the sick.

#### C H A P. IV.

General and particular Methods of Cure,  
and their Effects.

**T**HE principal indication in each patient, was the quick evacuation of the corrupt bilious matter.

In the beginning, I effected this by a vomit, that consisted at most of forty grains of ipecacuanha, and the weight was diminished in proportion to the age and other circumstances of the patient. I ordered it to be taken in a spoonful of warm water, or weak camomile tea, drinking two tea-cups full of the same immediately after, and as often as the vomit ensued, repeating the like quantity of the drink.

Stronger emetics than these, I did not find fit for my purpose; with milder I should have done nothing at all; besides it is well known, that ipecacuanha does not relax the solids, while it empties



empties the stomach and abdomen, and that it has something in it that makes it preferable to others. The new manner of giving it in small doses, does not always succeed, and it often operates very roughly; though it must be allowed, that for reasons very obvious, small doses have sometimes as much effect as great: given in the manner as I gave it, it excites the vomiting three or four, or even eight times. This vomiting took away the sickness, and the more gall there came away, the more service it did; I have even on the third day of a confirmed, though not very violent dysentery, with forty grains of ipecacuanha, brought away from a farmer's daughter such an astonishing quantity of bilious matter, that the dysentery was entirely subdued at once. With most persons the emetic got away pretty much of this matter; the excretion of blood was commonly for a time either stopped, or at least lessened, the tormina were immediately more easy, and the stools less frequent, though this alleviation remained but a few hours. The patients were in a very bad condition indeed, when this short relief did not follow at all; otherwise this usual consequence of the vomit was a good presage.

I likewise always gave an emetic with good success, when I was not sent for till a week, a



fortnight, or more had passed from the beginning of the disease, in case I suspected a corrupt matter in the stomach, and there was neither inflammation nor suppuration in the bowels. More than one I never gave; perhaps I did wrong; but even this one was very ill taken of me. Sometimes, compelled to it by contrary indications, I began the cure without the emetic, and purged so much the more violently for it with good success. To children that were extremely young, I very wrongly gave no emetic.

After having given the vomit in the morning, I ordered them to set out in the afternoon with the following drink: Take two ounces of barley, and boil them up with an ounce of cream of tartar, in two pints and a half of water, till the barley bursts; then strain it through a linen cloth, and set the liquor by, which will amount to about a quart, to be drank warm at proper intervals, during the first afternoon, and the whole succeeding night throughout. I lessened the dose of the cream of tartar according to the age of the patient, though I mostly stuck to the proportion before-mentioned.

On the second day in the morning, I gave to adults three ounces of tamarinds, boiled up for  
the



the space of two minutes, with half a pint of warm water, and strained off; to children two ounces, and to very small infants one. This gently opening medicine directly brought on the stools, more copiously than before, but after this their number was generally diminished; sometimes the tormina went quite away, but for the most part, were at least greatly alleviated. A large copious excretion produced by this medicine, had always an excellent effect. Instead of tamarinds, I sometimes gave Sedlitz salts to the quantity of an ounce, or an ounce and an half, with the like success. During the night, I repeated the barley-water with the cream of tartar. On the third day, I gave still the tamarind decoction, if the malady was not sufficiently diminished; otherwise I put it off till the fourth day, and ordered nothing further in the mean time, than the barley-water with cream of tartar.

I gave the peasants pretty often after the emetic, on the afternoon of the first day, a drachm of cream of tartar, with the like quantity of rhubarb: the same dose on the morning and evening of the second day, and the morning of the third. Sometimes I divided this into six doses, and ordered the whole six to be taken by the fourth day, while, at the same time, I prescribed the barley-water in the same manner; I diminished



nished the doses likewise in proportion to the patient's age. The success was not bad; for by means of a vomit given at the beginning, two drachms of powdered rhubarb, with the like quantity of cream of tartar, and the common barley-water, with an ounce of the same salt; I have done many people great service in three days time, and have in this manner even perfectly cured a woman fourscore years old, of the dysentery. By this method, however, the pains did not so soon remit; but on the contrary, grew much more violent; which did not happen when I omitted the rhubarb.

The cream of tartar and tamarinds did not only occasion no pain, but very much diminished it, when they proved sufficiently purgative. They had also this advantage over rhubarb, that by means of their acidity, they acted very powerfully against the putrid fever; while on the contrary, rhubarb, except a deterfive and (as it appears to me) not very antiseptic power, can boast of nothing more, than of being capable of contracting the fibres.

In obstinate and tedious cases, by means of an opening medicine consisting of three ounces of tamarinds, the stools became less frequent in the very height of the disorder, and the patients  
were



were always relieved. So far from being weakened by this purge, I perceived that they grew stronger and more alert than they had been before, when their bowels were distended with putrid matter.

In general, the tamarinds had a much quicker and better effect than rhubarb alone. So far from causing pain, they alleviated it very much, and accompanied with the cream of tartar during the intervals, finished the disease in three or four days, even when the attack was very violent. Notwithstanding the emetic, the stools grew very copious and of a bad appearance some hours afterwards, the pains great, and the weariness of the members very considerable. But very often all these symptoms suddenly vanished on purging the patient with tamarinds.

As fast as each symptom of the dysentery decreased, and at length vanished, I perceived that the fever in like manner decreased and vanished. It took a fast hold, and even grew very considerable, when the putrid matter was not evacuated in sufficient quantities directly at the beginning. I made use of no other remedy for it, than those which I have already indicated. They were sufficiently capable of correcting and evacuating the bilious matter, and thus likewise of putting an end to the fever.



After the emetic I sometimes too gave cream of tartar, rhubarb, and tamarinds by turns, with good success. But I was guilty of an error in not being content with tamarinds, and the other medicines alone, when I had omitted the rhubarb.

A woman of fifty-six years of age, at Brugg, went to bed in good health, and was suddenly taken in the middle of the night with a very violent cold fit, accompanied with some whitish-yellow stools and cholicky pains. She had besides a strong propensity to vomit, a taste of bitterness in her mouth, and a perfect bilious vomit. She called me in the morning: I found her still in the condition I have described, excepting that the cold paroxysm was changed into a hot one, attended with sleepiness and wanderings. I gave her half a drachm of ipecacuanha, which she took in the afternoon, while the cold fit was still absolutely on her; this vomited her violently with much relief, and the cold fit kept off. In the evening she had much heat, dosing, and wanderings; as to the rest, the stools were less frequent, and the cholic very tolerable. The whole night through I gave no medicine, and she had twenty painful stools, which were of the colour of saffron.

The



The second day I gave her, at eight and eleven in the forenoon, half a drachm of rhubarb, and an ounce of cream of tartar, in a quart of barley-water, which I ordered to be drunk out the same day. In the evening, I found the heat and fever much less than the preceding day; though the cold fit still came on at times, the stools were pretty frequent, and painful just before evacuation, of a saffron-yellow colour, and then for the first time bloody. All the night long they still continued in great number, being likewise attended with very violent pains, and blood.

The third day, in the morning, I gave her a purge of three ounces of tamarinds. In the evening, I found that this medicine had procured eight or ten large stools, on which ensued the greatest alleviation with regard to the pains: the fever seemed to me extremely mild. I now prescribed for this evening and night, nothing else than warm panada without wine: she had during this night too not the least pain, and only one stool.

The fourth day in the morning, I found a thick rash on her lips, and apthæ in her mouth. I gave her for this day two half drachms of rhubarb, and repeated the ounce of cream of tartar to be boiled in the barley-water, and taken in  
the



the usual manner. These remedies continued to evacuate a good deal of the peccant matter, which was all along somewhat bloody, but without the least pain: the pulse however appeared still to be a little feverish. During the night, the patient had three slight and somewhat bloody stools; all the rest of the time she rested perfectly well.

On the fifth day, I prescribed nothing but linseed-tea. Her stools entirely ceased, as well as her pains; notwithstanding which she did not sleep the next night, which I took for a sign of the presence of yet more matter, and gave her therefore on the sixth day, three ounces more of tamarinds in the usual manner. Those tamarinds evacuated at once an astonishing quantity of matter. From this time forward she had no more pains, slept all night perfectly well, had a natural stool the following day, and was in perfect health.

I have often seen that tamarinds were of service, when rhubarb was not. In order to prove this, I will at present relate only one case out of many others.

A farmer's son, in the district of Wildenstein, had the dysentery in the highest degree; on the fourth day I was consulted. I gave him a vomit  
to



to be taken immediately, half an ounce of cream of tartar for the usual barley-drink, and for the fifth, sixth, and seventh day, three drachms of rhubarb in powder, to be taken in six times.

The eighth day his friends gave me an account, that no more blood came away from the patient, but the stools were yet very frequent, and attended with intolerable pains : that the patient besides with each stool, felt a violent sensation of heat in the abdomen, and that his urine too scalded him in a very uncommon manner, as it passed off. I gave him three ounces of tamarinds to be taken at once, and an ounce of cream of tartar for the barley-drink.

The tenth day they brought me word, that the heat in the abdomen and urine had suddenly disappeared on taking the tamarinds, that the pain which remained was very tolerable, and the stools few. I gave once more the three ounces of tamarinds, and ounce of cream of tartar, both to be taken as before. This had likewise so good an effect, that the patient got perfectly well in a few days.

The tamarinds had in like manner a good effect, when I was obliged, for particular reasons, to leave the emetic entirely out.

A blind



A blind man of two and sixty years, in the district of Koenigsfeld, who had been long tormented with the arthritis, was taken with the dysentery and putrid fever in the usual manner; he sent for me the second day. I found it impracticable to give him a vomit, as he had two ruptures. I prescribed therefore three ounces of tamarinds, dissolved in water, which he was to take directly, and an ounce of cream of tartar, for a quart of barley-water, that I made him drink out during the night.

On the morning of the third day I was told, that my patient had taken all the medicines I had prescribed, had had an uncommonly copious and frequent evacuation during the whole night, that the pain was very much decreased, and had grown more and more easy at each stool. I prescribed again the three ounces of tamarinds, and for the night an ounce of the acid salt. On this all the pains vanished, my patient had the whole night through but two stools; as to the rest he slept well, and his stools were not longer bloody nor green.

The fifth day, I ordered my patient for the next four and twenty hours, nothing else than linseed-tea sweetened with sugar-candy; that I might be able to observe, according to my custom, the  
disease,



disease, when left to itself, and question nature on the success of my cure. I was told on the sixth day, that during that time he had still had some pain, and a few loose stools. I prescribed three ounces of tincture of rhubarb prepared with water, (as he was tired of the tamarinds) and ordered him to take a spoonful of it morning and evening. By the use of this, he not only got perfectly well with regard to the dysentery, but also told me some weeks afterwards, that he found himself better than ever with regard to his arthritic complaint, that he seemed to have lost his pains in his knotty joints, and could walk out whenever he pleased.

The tamarinds were also of service when taken alone. A child of four years of age, in the district of Castell, had laboured under the dysentery and putrid fever five days before I was called to it. I gave it six ounces of tamarinds, of which it was to take two ounces dissolved in water, every morning, for three days together. By the use of this it was re-established immediately, without any other help.

Acids were of great use. A very stout man in Brugg, had all day long a violent shivering, and a constant fruitless endeavour to vomit. In the evening he was seized with a violent belly-  
ach,



ach, which lasted almost without interruption all the night following, and was accompanied with frequent and copious stools. The second day he called me in. I gave him half a drachm of ipecacuanha, which vomited him twice with great relief; the pain though very violent, returned but seldom throughout the whole day, and he had about twenty stools. In the evening, I gave him half an ounce of cream of tartar, to be taken directly, and continued the whole night throughout, with a quart of barley-water. He drank this out, and his pain and stools disappeared entirely by the morning. The third day I gave him three ounces of tamarinds, that brought on three gentle stools: on the fourth, he was well. But in a much more considerable case of the dysentery, I have perfectly cured a person sixty-eight years old in four days, by the use of three ounces of tamarinds, and half an ounce of cream of tartar every day.

I could not however always bring the affair to pass, purely with evacuating and antiseptic remedies. The pains were at times extremely violent, when the patients had not been purged enough at first, and in the course of the disease were too averse to taking the opening medicines; accordingly the bearing down was in these cases intolerable. I was also sometimes obliged to  
think



think of medicines more immediately anodyne, and where my hands were bound in various ways, to lessen the too great violence of the purging by innocent means.

I always looked upon it as dangerous to give opium in the dysentery, before the fuel, that fed the fire of the disorder, was burnt out. I endeavoured therefore to find out a method of giving opium, in these obstinate and extraordinary painful cases, with as little prejudice as possible. This happened for the most part to be of benefit, but was not always without prejudice.

The laudanum liquidum Sydenhami, given to six drops in linseed-tea every six hours, to a pale young gentleman about nine years old, who for some years had been plagued with worms, soothed, indeed, his violent pains on the eighth day of the disorder, after a hearty evacuation, but it very much increased his fever; though at the same time I ordered him every three hours day and night, a large spoonful of tincture of rhubarb prepared with water. It caused likewise, in this child, an endeavour to vomit, as it retained the putrid matter still remaining behind, and indeed brought on a downright vomiting. But all these indispositions vanished on the repeated use of the tamarinds,



rinds, cream of tartar, powder of rhubarb, and on totally laying aside the laudanum.

Sixteen drops of the laudanum Sydenhami, given to a young man of Brugg, after copious evacuations made on occasion of his being afflicted with violent pains in the bowels, excited anxious dreams, and a pretty smart pain in the joints, while that in the belly ceased entirely; however, this pain in the limbs vanished the next day. Eight drops in the evening, and the same quantity at midnight, were on the contrary afterwards of good effect in the very same person; he had no pains in the joints, nor in the belly, no dreams, less sleep, and seven stools during the whole night, instead of an hundred and fifty or two hundred, which he had had before every night. Yet the distemper grew long and tedious, and continued on him a fortnight; this I ascribed to the laudanum, which to be sure eased the patient, but by the very ease it gave, lengthened the disorder. This is the only one among all my patients, who had the prolapsus recti at the end of the disease; but he soon recovered, and remained from that time perfectly fresh and healthy.

In four other cases I have observed, that the laudanum Sydenhami given after proper evacuations,



ations, alleviated the pains, and lessened the number of stools, without stopping them entirely; I began then immediately with the rhubarb. Whence appears, that it sometimes had the advantage of somewhat diminishing the stools, without putting a stop to them, and in the mean time of taking away the pains: but without rhubarb given in the intervals, or just after, it was very plainly pernicious.

In the child of a person of condition, a year old, notwithstanding all its crying and purging, the dysentery was not discovered till the fourth day, and then only from the circumstance of the pure blood being seen run in streams down its thighs. After the most violent pains, this child fell into a continued lethargy, with perpetual spasmodic contractions in all parts of the body: I expected nothing else to follow, but death. In the mean while I gave him a purge of tamarinds, every three hours the whole day and night throughout, two large tea-spoonfuls of the tincture of rhubarb made with water, a great deal of linseed-tea, and every six hours, three drops of Sydenham's laudanum. Its excrements were very copious, and of various colours, white, yellow, brown, green, red, and black. By this method the child, in spite of a miliary eruption, (which appeared

F towards



towards the end of the disorder, and went off spontaneously by desquamation) got well in a fortnight.

To a child of two years of age, in Brugg, that upon the first onset of the disorder, entirely lost all sensation from a spasmodic contraction of the nerves, I gave the tamarinds and the tincture of rhubarb, but no laudanum; accordingly it died. The death of this child is the only one, which I could ascribe to my want of capacity and knowledge in my profession; the few other deaths that happened, were entirely owing to the untowardness of my patients.

I found chamomile-tea the best means next to opium, of alleviating the pains, and besides that, it is at the same time antiseptic. I gave this infusion, which is even of service in inflammations of the bowels, in great plenty, and very often with good success. Linseed-tea, rice-gruel, barley-water, and clysters of gum arabic, were also very serviceable in mitigating extraordinary violent tormina; though the clysters came away often without effect, and therefore I could place but very little confidence in them at the height of the disorder. I likewise gave an almond-emulsion to be drunk quite warm, which the patient found very serviceable, whenever the pains were considerable.

In



In general I perceived very well, that the pain could not be radically cured by any means, unless the sole cause of the distemper, the putrid matter, were discharged. In like manner the violent tenesmus, which was so very troublesome even at the end of the disorder, was not put a stop to either by *Diascordium* clysters, or the *Theriaca* and milk, as *Huxham* advises; for the evacuations must be repeated, as long as the tenesmus continues. In many of my patients, I found at the end of a very violent illness, a painful irritation to stool, which for the most part was fruitless, and which was followed very seldom by a very small stool. I accounted for this, from the loss of the natural mucus in the rectum. But this explication was false; for I gave them in consequence of it, clysters of half an ounce of gum arabic dissolved in warm water, and they were of no service; I gave laudanum, and it was just the same; I then gave them morning and evening, a spoonful of the tincture of rhubarb above-mentioned; and this was of the greatest benefit. Whence I learned, that this tenesmus, which appeared towards the end of the disease, did not proceed from the too great denudation of the intestines, and an increase of their sensibility proceeding therefrom; but in reality from a substance, that still remained in the cavities of the great guts.



Many of my patients called me in late, and sometimes extremely so. In these cases, where Simaruba, Cascarilla, and the Terra Iaponica are usually thought to be absolutely necessary, I gave sometimes an emetic, and with rhubarb alone finished the whole affair, when the disorder had lasted very long. A woman of sixty-three years of age, in the district of Wildenstein, that had had the dysentery a week, and had at that time fifty stools in twelve hours, at the same time that every thing she eat and drank came away from her by vomiting, I cured with an emetic, and the other remedies above-mentioned, in a few days. I have made some people well in the country, that had been a month together without medicines, and were attacked with a long tedious dysentery, attended with a great sense of weariness in the members, shiverings, violent sweats, and a perfect indigestion. All that I gave them, consisted merely in a few doses of rhubarb in powder, to the quantity of half a drachm, which I ordered them to take in the morning for two days together, with chamomile-tea. With this powder they were tolerably well purged and with great benefit, getting well in a couple of days; on the contrary, these cases were dreadfully prolonged, when in contempt of physic and physicians, the disorder was left to nature, quacks, and old women. A woman in the district



district of Castel, had had the dysentery already ten days in a very high degree, when she consulted me. I gave her only for a couple of days, some cream of tartar to be dissolved in barley-water, the rhubarb powder, and chamomile flowers for tea, in expectation that she would send me an account of the manner in which she found herself, and ask for more medicines. She set those she had aside, as they were not of service the very first day, and let me hear no more of her. She continued thus with the dysentery on her for the space of nineteen weeks, following a thousand old womens receipts, and at the end of that time I learned by chance from her husband, that she had not yet got rid of her complaint, and still had blood in every stool.

To such, as without keeping their beds, had only a violent belly-ach, and at the same time were costive, I gave for some days together a drachm of powder of rhubarb, to take at twice. The excrements were likewise in those persons, immediately after the first evacuation, bloody, and white, as if they were purulent. But after some stools they found relief, the tormina vanished, and they were well in a few days.

Almost all the sick, that were cured by me to a considerable number, shewed an extraordinary



appetite while under cure. For which reason, I did not think any medicines to strengthen the stomach and bowels here necessary. Eating strengthened them enough: to some I gave, by way of corroborating the stomach, a spoonful of tincture of rhubarb every morning; to others, Hoffman's visceral elixir. But I never gave corroborating medicines merely with a view of hindering a relapse; for I do not think, that even our egregious Mr. Conrad Rahn \*, can prevent the dysentery by means of stomachics.

In general, at the beginning of the distemper, ipecacuanha, cream of tartar given in great quantities with barley-water, and tamarinds, were my principal remedies. Against the tormina, I made use of chamomile and linseed-tea, almond-emulsions, gum arabic clysters, and, but seldom, and that with the greatest caution, of laudanum. Towards the end of the disease, rhubarb was of singular service.

\* The reader will be pleased to observe, that what is said here and in the following pages, of this gentleman, is by no means to be taken in a serious light.



## C H A P. V.

## The Effects of other REMEDIES.

WE must try many things, observe and compare every thing; if we would not be mere novices in the knowledge of nature, and would wish sometimes to draw consequences from our observations, that may be of universal use, and extensive in their effects.

We grow sometimes rather negligent from some successful events, and do not examine, when the sick are cured, whether we could not have saved them by a shorter, better, surer, and more universally useful method. This self-applause in a physician, is a most invincible obstacle to his progress in the profession; for when one meets with approbation, one should always consider, whence it comes. I honestly confess, I did not treat the first patients I had in this year's dysentery, with as great depth and solidity of judgment, as those that came after; though not one of my first patients died: notwithstanding which my method was faulty.

In the fifteen years that I have practised physic, I never saw the dysentery so frequent as this



year. Notwithstanding which, I have during this long space of time, visited a tolerable number of dysenteries, and followed a method with them, that was so far not unfortunate, as none of my patients died; and of which I will give the two following examples.

A woman of sixty-one years of age, worn out with frequent hysteric fits, and who had been before this very often attacked with many violent distempers, was seized in the year 1759, with a terrible dysentery; she ordered me directly to be called. I prescribed her the tincture of rhubarb prepared with water, a large spoonful to be taken every three hours day and night, and in the intervals I made her drink plentifully of an almond-emulsion, in which gum arabic was dissolved: I likewise ordered them often to give her clysters of gum arabic and barley-water. By degrees her intolerable griping pains, her very high fever, and her tenesmus disappeared, on the use of these remedies: her stools too decreased very much. At the approach of the fourth night, I thought I might venture to give sixteen drops of the laudanum Sydenhami: this night she was very quiet. The fifth day the patient was easy, without pain, stools, bearing down, or fever, and quite chearful and hearty. I now gave her no more medicine,



dicine, in order to see, whether the laudanum did not deceive me. But likewise in the afternoon all the bad symptoms kept off, excepting that she was a little delirious. I gave her nevertheless the almond emulsion with the gum arabic in the evening, and things remained as they were before; in a few days, by means of some strengthening medicines, she was perfectly recovered. Two years after she had the dysentery again, and that very violently; in a week I set her up again, with the very same remedies.

A very stout, healthy, fresh, lively lad, about twenty years old, brought with him in the year 1763, the dysentery from Zurzach, where it then was epidemic. It was very violent, and attended with all kinds of bad symptoms: the sick person's father, a country parson, and a sage of the Paracelsian school, gave him infallible remedies against the dysentery one after another, while in the mean time the distemper rose higher and higher. I, a simple layman, was called on the eighth day of the disease, and found the lad quite spent and overcome, with a down-cast, shrivelled, and perfectly corpse-like countenance, though before he was very handsome in the face. His voice was slow, weak, and broken; the cold sweat ran from him on all sides, and bloody gangrenous stools came away with violent pains



pains every minute. I told the unhappy father to throw all his infallible remedies out of the window; and gave the son, on the eighth, ninth, and tenth day of his disorder, which was now in reality risen to a very high degree, not fiery cordials, and infallible remedies that would have killed him, but only strong doses of the tincture of rhubarb in water, almond-emulsions, (which at first he brought up again) barley-water, and gum arabic clysters. By this most unchemical, and in the highest degree, simple method, the youth that before lay at death's door, obtained in a few days his former health, and soon after his full strength, his usual chearfulness, and his fine lively colour.

These examples, selected from many others, induced me to try also the same method, or one very little different from it, in this year's dysentery. I will at present cite two examples of its success.

A woman at Brugg, thirty-seven years of age, of a very irritable temperament, and subject to the most violent hypochondriacal and hysterical symptoms, was seized this year in June with the dysentery. She sent for me on the third day, and told me, that she had hitherto had only twenty stools in twenty-four hours, but that these were accom-



accompanied with very violent pains, and that with each stool she had a propensity to vomit. I gave her three drachms of rhubarb in powder, divided into six parts, and ordered her to take one of them every two hours, with chamomile-tea, between whiles water just boiled up with rice, and almond-emulsion. The fourth day I found my patient had less pain, her stools were as copious as before, and still tinged with blood. I gave her again six half drachms of rhubarb, to be taken in the same manner as the first. In the evening she was something better, she had had in the mean while seven stools more: I ordered her at night nothing but the rice-water. The fifth day the sick woman told me, she had had in the night eight very painful stools, and an intolerable tenesmus. I prescribed her a spoonful of tincture of rhubarb every three hours, half an ounce of gum arabic dissolved in half a pint of water, to be taken by way of a clyster directly, and a second clyster of the same kind in the evening. Upon these medicines her pain almost entirely ceased, and she had the whole day long but two stools, and those without blood. During the night I made her drink almond-emulsion, and the rice-decoction. The sixth day she found herself very well; however, I let her still go on with the tincture of rhubarb, and the same diet. She recovered her health,  
but



but nevertheless had two relapses; the first from being put into a passion by a quarrel, the second from being twice wetted through at night with the rain. She was cured by the same means as before.

A sickly, heavy, lethargic person, of nine and twenty years, inclining to green sickness and white swellings, was attacked very violently at Brugg this year in August, with the dysentery. Being applied to for advice the same evening, I gave her an ounce of tincture of rhubarb prepared with water. She had the whole night throughout very violent pains, a great many stools, and a constant propensity to vomit. I gave her the second day half a drachm of ipecacuanha, and let her afterwards go on with the tincture of rhubarb as before; as to the rest, I allowed her to eat or drink nothing but rice-gruel, water-gruel, and chamomile-tea. In the evening she told me, that a vast quantity of mucus and bile was come away with the vomit, that her tormina were violent, and her stools not very copious: as to fever, I did not find that she had any, and gave her an ounce of tincture of rhubarb to be taken as before. In the night her stools were more frequent, and her pains almost intolerable. She was in the same state on the morning of the fifth day, when I  
ordered



ordered her an ounce of the tincture of rhubarb, and two-half ounces of gum arabic for as many clysters. But these clysters came away immediately each time, my patient was all day long obliged to go to stool every minute, with ineffable torments, and there came away an immeasurable quantity of water, mucus, bile, and blood. I bid her take an ounce of rhubarb as before, and drink almond-emulsion plentifully, with rice-gruel. Notwithstanding which, she had just in the same manner a large stool every minute, with cholicky pains. Her nurse could not bear any longer the smell of her stools, though she aired the chamber continually, and carried them out immediately, as fast as they came away.

The fourth day in the morning, all these complaints were at a very great height. I prescribed, together with the usual drink of almond-emulsion and rice-gruel, two spoonfuls of a mixture composed of an ounce of tincture of rhubarb, half an ounce of gum arabic, and seven ounces of water, to be taken every hour. In the evening I found my patient sitting almost continually on the close-stool, her excrements inexpressibly copious, enough to stink one to death, yellow, green, brown, black, and streaked with a quantity of blood; she at the  
same



same time full of pain, anxiety, and terrors almost to desperation, extremely weak, and at times even fainting away. I let her take all at once half of the mixture ordered in the morning, and which she had not till then made use of. I then gave her for ten o'clock at night, twenty drops of the laudanum Sydenhami, and ordered that she should drink as much almond-emulsion as possible all night long. Her dead pale cheeks were affected with a great heat, as soon as she had taken the laudanum; she slept some hours afterwards, had a few stools, and very little pain. On the fifth day in the morning, I made her take the other half of the mixture, with the almond-emulsion and chamomile-tea. In the afternoon I still found her with the flushing in her face, a sly undermining fever, and but few stools in the space of an hour, which were no longer of that cadaverous quality as before, nor bloody, but attended with great pains. I ordered that a clyster should be given her of gum arabic and water, which came away directly without effect. In the evening her pains were very violent, at night I gave her sixteen drops of Sydenham's laudanum, and prescribed a good quantity of almond-emulsion. She slept some hours, had five stools in the night without pain, and in the morning found herself better in all respects.

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The sixth day, I ordered nothing else in the morning than the same clyster, rice-decoction, and almond-emulsion; she had three stools, and her excrements were again somewhat red. In the afternoon I found my patient without fever, heat and pain: I prescribed again a clyster of gum arabic, and the same drink. Notwithstanding which the pain returned, her stools continued, and were green, black, and somewhat tinged with blood, but much less stinking than before; she herself was quite free from any fever, but feeble, and inflated: I gave her sixteen drops of laudanum. This medicine had the usual effect in the night, when she had three stools in the same manner as before. The seventh day I gave her early in the morning an ounce of tincture of rhubarb, of which she was to take a spoonful every two hours, and as to the rest, to go on with the same diet-drink as before. The consequence was, that the patient had that day nine perfectly yellow, ineffably stinking, but in no wise painful stools, which gave her the greatest ease. At night I gave her sixteen drops of laudanum; she had two stools, almost without smell. The eighth day I gave no medicines, to see how far the disorder had really gone: she had a few, bilious, painful stools, that began already to smell strong. I prescribed for the night, laudanum, and for the

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following



following day, every three hours a spoonful of tincture of rhubarb. The ninth day she found herself perfectly easy, was hearty, and contrary to her usual custom, in good humour: her stools were very few in number, but still continued bilious; I made her go on with the tincture of rhubarb, and advised her now to eat something more solid. In the night she had some pain, and on the tenth day five stools, otherwise she was very well. It was the same on the eleventh, when I prescribed her only a spoonful of the tincture of rhubarb morning and evening; she slept the whole following night, and her looseness had entirely ceased. Things were in the same state on the twelfth day, notwithstanding which I advised her to take the tincture of rhubarb twice a day. On the fifteenth day she was so well recovered, as to complain of nothing but some remaining weakness; I gave her an ounce of the elixir of vitriol, to take forty drops in water twice a day, with which she got perfectly well.

A person that has any knowledge in physic, will easily perceive the faultiness of this method, with respect to the dysentery of 1765. Many physicians think themselves very bold, when they venture to give the tincture of rhubarb in a few drops to adults; which, to me, has the look of a man's attempting



ing to make a breach in a battery, with the same shot as he uses to kill sparrows with. Degner gave in the dysentery at Nimeguen but half a spoonful, or a spoonful, every four or six hours. My doses were larger and more numerous; notwithstanding which, the effects of the rhubarb were too slow and tedious, as it was neither purgative nor antiseptic enough, and let the disorder get to a great height. In some very severe cases of the dysentery, which on account of the prolixity I have been guilty of in other places, I have not here related, I gave at first an emetic, and afterwards till the fifth day tincture of rhubarb in great quantities, with almond-emulsions, and rice-water, without any good effect: on the other hand, cream of tartar produced a sudden alteration for the better, by rendering the stools more copious, and of a more solid consistence. Hence I concluded, that this method was in general of no service in this epidemic; that I might for the most part reserve the tincture of rhubarb for slight indispositions, (in which indeed I commonly found it of benefit) but that it was an excellent remedy towards the end of the disorder.

In like manner, the rhubarb in powder did not purge sufficiently in the beginning. It always increased the pain, (which however did

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not



not happen on taking it in tincture,) and the number of stools was not very much lessened. Mixed with cream of tartar it purged better, though still with much pain; on the contrary, the tamarinds evacuated quickly, copiously, and without bringing on fresh pain; and directly after their operation, the number of stools was suddenly diminished. Those persons to whom I gave an emetic in the morning, and afterwards that evening together with the subsequent morning and evening half a drachm of rhubarb, always recovered slower than those, to whom I prescribed at the same time a great quantity of cream of tartar with barley-water. We may see from all this, that though many great physicians, and even Degner himself, look upon rhubarb as the choicest purge in nature in dysenteric cases, on account of its possessing at the same time a laxative and corroborating, or rather an astringent power, they did so without sufficient grounds: that rhubarb in a dysentery attended with a putrid fever, without the addition of acids, lets the disorder go on its own train; and thus is the occasion of its being prolonged, and is therefore by no means a specific in this distemper.

Being of a rather incredulous disposition, and acquainted with one particular only, a method that answered my views in every respect, I was not inclined



clined to try a heap of other remedies, otherwise very much prized in the dysentery. On the other hand, two other physicians have communicated to me some very important experiments on the use of the vitrum ceratum antimonii, grapes, and other fruit, which I will here relate with the most unfeigned pleasure, for their honour, and the benefit of my fellow-creatures.

A Lutheran clergyman, of great penetration and understanding, the Rev. Mr. John Merk, minister at Ravensburg in Swabia, encouraged Dr. Moehrlin, a physician in this city of great ingenuity, and twenty-eight years practice, to make a trial of the vitrum ceratum antimonii. Eight days afterwards this physician told him with a smile, the meaning of which a man, who has any sentiments of humanity, cannot be ignorant of, that he had tried the medicine on three persons; but had occasioned therewith so great indispositions, that he was in the greatest haste to have recourse to every thing he could think of, capable of putting a stop to them, and had therefore no great inclination to try it any further. But as Mr. Merk saw very well, that this remedy could not have ill performed the intended effect, in regard to the disorder itself; he begged the physician with the irresistible argument of the benevolence due to his brethren, not yet to give up the



affair, the rather, as the concomitant effects could be easily remedied. Some weeks after, the doctor saw Mr. Merk again, and told him with the greatest joy, that he had already saved some persons by means of the vitrum ceratum, the acrimony of which was obtunded with marsh-mallows root, and in the space of two days had very well recovered some, on whom the usual remedies had proved ineffectual, who had been even delirious, and had one foot in the grave. He therefore continued this remedy, especially where any thing malignant appeared, and that always with very good effect.

Upon this, Dr. Moehrlin was pleased to send me a circumstantial account of these cures from Swabia. He made the first of the above-mentioned experiments, upon a woman of seventy years of age. He gave her six grains in lukewarm water in the morning fasting, and ordered her not to eat or drink any thing for the space of three hours; after that he went again to see her, but found her quite weak and miserable, and apprehended a fatal and sudden end to the disorder: however he encouraged her, and gave her with his own hands a good portion of fat mutton broth. In the space of two hours she had twenty stools, after that the excrements were without blood, the cholicky pains went off,



off, and she rested well two hours in the night. The following day her looseness was still more diminished, and Dr. Moehrlin in the Hippocratic method, stood still without doing any thing. The third day the woman thanked her physician for his excellent remedy, and told him, that she had slept well the whole night through, and had scarce had three stools. Upon this the doctor ordered her nothing else than a good diet, and after some days found his patient perfectly set up again.

Hereupon Dr. Moehrlin continued the use of this remedy, and the rather, as at the end of August the number of the sick daily increased, and rhubarb and simaruba were too dear for the lower sort of people. The first dose of six grains occasioned sickness and faintings with every body; the second and third however did not; yet prejudiced people were much against the antimony, as the apothecary made them believe ill of it, because in truth he gets very little by it. However Dr. Moehrlin took it into serious consideration, whether he could not remedy these bad effects: this was not very difficult, for instead of making use of his Æsculapian authority to forbid all sort of drink, he had nothing else to do, than to order directly at the beginning of the disorder, a basin full of barley-gruel, or the like



emollient drink. At length he took it into consideration, whether it would not succeed to mix three or four grains of marsh-mallows root powdered, with six grains of the antimony; nature now effected what the doctor desired, the sickness and faintings did not come on, the excretions were quicker, more copious, and without pain.

Dr. Moehrlin had given this remedy to above seventy persons of all ages: there were but few that required more than three doses, (each dose containing six or eight grains) in order to be cured: the first dose increased the flux, with the second it diminished, and with the third it disappeared. It was very seldom necessary to increase the quantity of the above-mentioned doses, or to add to the number of them. With one person, who did not follow the diet prescribed, Dr. Moehrlin proceeded as far as the ninth dose, the last of which consisted of fourteen grains; this in the space of four hours occasioned above thirty stools, and upon that the tormina, tenesmus, and even the singultus ceased entirely, sleep returned, and after some days the patient was perfectly well. Dr. Moehrlin found that blood-letting was one of the best preparatives towards the cure of this disorder, when he was called directly at the beginning; on the contrary, he found



found it of great disservice, when the malady had already spread itself through the whole body. In this case three doses were not sufficient, and even then at the end of the disorder a dropfical tumor extended itself over the whole body, which continued for many weeks.

All these things being taken together, we must confess that this famous antimonial remedy, long since made known to us by the Edinburgh essays, shewed itself in Ravensburg, to be one of the best and choicest remedies against the then epidemic dysentery. I shall have occasion in the tenth chapter, to take it more fully into consideration.

A much more agreeable remedy, but which in consequence of a generally received, though very silly notion, was looked upon as a real poison, was made trial of with the same good success. Dr. Keller, an ingenious, careful, and extremely discreet young physician, at Weinfeld in Torgaw, had not only had an opportunity to vindicate the innocence of grapes and fruit, with respect to our dysentery, but even to experience in the clearest manner, their prodigious use in the cure of this dysentery.



He began with a child a year and a half old, which had been harassed with the dysentery for the space of eight days, in a miserable manner. Whatsoever artifice was employed, it could not be brought to take the least medicine, had already had several convulsions, and appeared to be very near its end. The parents in the greatest distress, begged of Dr. Keller in the most urgent manner, to try every thing in the world to save their child. He advised them to give it grapes: the parents fears for its death, got the better of their prejudices, which might otherwise have occasioned it; the child eat two grapes in the evening, and slept very sound the whole night. The next day they gave it more grapes, and after having eaten a great many of them during the space of eight days, it got perfectly well.

In the mean time Dr. Keller had under his care a gentleman of rank, and of great knowledge in medicine, who was attacked with the dysentery: this person had taken the necessary evacuating medicines with good effect, but could not resolve upon taking any other remedy. In these sad circumstances Dr. Keller advised him in the same manner the use of fruit, and three days afterwards received from him the following letter.

SIR,



SIR,

“AN aversion for all sorts of medicine has  
 “brought me at last to a resolution of try-  
 “ing the effects of fruit. In the forenoon I be-  
 “gan with two grapes; at noon I indulged  
 “myself with some fresh plumbs boiled; after  
 “that I eat some more raw, at the same time  
 “three peaches, and towards evening a few  
 “black-berries. All this agreed very well till  
 “eight o’clock, when the tumult in my bowels  
 “began, and continued on in the same way till  
 “midnight, so that in all that time I could scarce  
 “stay half an hour in bed; though all this was  
 “without pain, tenesmus, or any other indis-  
 “position. Without doubt two potions of  
 “manna, and four rhubarb powders, would not  
 “have had such an effect upon any man in the  
 “world. On this followed my natural rest; in  
 “the morning I found myself very well, and  
 “eat my hasty-pudding with pleasure. This  
 “happy success encouraged me to go on in the  
 “same manner the next day. The effect was  
 “exactly the same, though somewhat less sud-  
 “den. My appetite and sleep increase, and  
 “every thing goes on better, thank God, from  
 “day to day.”

This



This letter, which Dr. Keller incessantly read to all he met with sick or well, prevailed at last so much, that every body had a mind to eat fruit; and that every one, that was not obstinate to the highest degree of folly, did in reality eat it, and all with the best success.

A physician of penetration, but by reason of the milkiness of his disposition somewhat timorous, and perhaps not free from all kinds of prejudice, has since said in the presence of the society for natural enquiries in Zurich, That fruit, though he could not but allow it to be of real use in the dysentery, might nevertheless do harm, on account of the quantity of air which it generates, according to Hales's and Macbride's experiments, by distending too much the fibres of the intestines, already violently irritated by the disorder. Hereupon Mr. Chamberlain Heidegger of Zurich, a great statesman, who with the most inconceivable penetration pierces into every thing worthy of being known under the sun, replied, that this was really true; but the same experiments shewed, that the air generated was again absorbed on the cessation of fermentation, by the juices of the fruit, and therefore this effect could not last long. It appears to me, that grapes and other fruit inflate bowels that are very weak, and otherwise subject to too great expansion, when they do not prove  
purga-



purgative, and the body is rather bound, or the tenesmus very great; just as manna is very inflating, when it does not purge sufficiently; but by the purgative power of certain fruits, and principally grapes, the stools of most of my patients were promoted, and with them the wind mostly came away. Consequently it was just as little necessary to fear in this case, that the sick would burst asunder like a bomb, from eating a few grapes, as it was for the great Winslow to prostrate himself before the altar of the virgin Mary (when he had prescribed two ounces of manna in the hospital at Paris) under an apprehension that it might excite too strong a purging, or tear in pieces the tender tissue of the fibres of the intestines.

It follows from the contents of this chapter, that in reality the tincture of rhubarb prepared with water sometimes performs very good cures in the dysentery; but that this tincture in general, was too feeble a remedy in our dysentery; that the powder of rhubarb, without the addition of other remedies, let it go on its own train, and thus was the means of prolonging it, and that therefore rhubarb is no specific in the dysentery; that the vitrum ceratum antimonii, shewed itself to be one of the best and choicest remedies in this distemper; and that grapes and  
fruit



fruit likewise evidently appeared to be an excellent remedy for the same, though in the Hippocratic assemblies of old women, it still meets with a very bad reception.

## C H A P. VI.

Effects of Astringent and Constipating Medicines, of Aromatics, Brandy, and Wine.

**T**HE old physicians so far agreed with one another in the cure of the dysentery, that instead of striving to evacuate the matter, they chose unanimously rather to restrain it, and put a stop to its efflux, with incrassating and astringent remedies; by these indications the diet and the whole method of cure was regulated.

Such notions, as are the produce of ignorance and folly, are never to be eradicated. It is true, the physicians of our times, oppose for the most part that method, which is calculated to cure the bilious dysentery, by the means of constipating and astringent medicines; but mankind are too apt to reject in speculation, what they make use of in practice. Astringent remedies are as yet by no means banished, and are prescribed by ninety physicians out of an hundred; it is true, they begin with a few evacu-  
ating



ating remedies; but of what use is it, to give the first day an emetic, the second rhubarb, and afterwards nothing else but constipating and astringent medicines. I found myself forced twice in our dysentery of 1765, to prescribe a purge even at the ninth and eleventh day of the disorder; as my patients were then in the greatest danger, their fever very violent, their stools innumerable, and their weakness uncommon. This purge consisted of tamarinds; after the evacuation, which followed it, the stools were very much diminished in quantity, the patients heartier than before, and the disorder was at an end in a few days. Suppose now that I had done in these cases, what most physicians generally do, that is, after the evacuations of the first day, gone on with restringents: without doubt the consequence would have been a tedious fit of sickness, or death.

My hair stood an end, when the Provision (as it was called) against the dysentery, made by the excellent college of physicians of Bern in 1727, and distributed among the country people, lately fell into my hands. At the very beginning of it, the physicians of Bern make this remarkable observation, that the then epidemical dysentery did not perhaps only proceed from a disordered stomach, but should be considered in the light of an acute fever, which produced

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an inflammation of the bowels. We may hence conclude, that that species of the dysentery, which is accompanied with an inflammatory fever, was at that time epidemic there; and yet the physicians of Bern in their Provision, prescribed almost nothing else than extremely constipating and astringent medicines; consequently every thing in nature, that had the greatest power of increasing the inflammation.

The Provision (as it is called) against the dysentery, issued out by the very same college in the year 1750, which was printed and distributed through the whole land, is, it must be owned, something changed; however, excepting a very large dose of ipecacuanha, and a couple of doses of rhubarb, the other medicines are as constipating and astringent as possible. Without doubt this method was at that time good in many cases: but I hope to be excused for not giving credit to this Provision, in the epidemy of 1765, although it was dealt out by I know not what mistake this year, in several places up and down the country. Some practitioners gave credit to it, and followed it so well, that their patients could certainly not have recovered in less than a quarter of a year. But I fear on this account, that the light of this century does not shine upon these gentlemen,  
who



who have perhaps never read any other medical work in their lives, than this same Provision.

The spirit of contradiction is not my failing; as much a martyr to the truth as I otherwise am in this my beloved country. In the mean while it is and ever will be certain, and very easy to demonstrate, that astringents (or opiates given before the proper time) in the dysentery, retain the venomous matter in the body; increase the pain, fever, heat, and danger; excite anxiety about the precordia, the hiccough, ulcers in the mouth, vomiting of blood, inflammations in the bowels, and a mortal gangrene; or throw the patient into a continual cholic, with an obstinate constipation of the bowels, into the gout, hectic fever, jaundice, tympany, œdematous tumors, the dropfy itself, and even absolute lameness. However, I rather chuse to leave it to Dr. Degner and Tissot, to express my sentiments on this so much admired astringent and constipating method of cure.

Degner says; “ In the dysentery at Nime-  
 “ guen, the empirics were unanimous in mak-  
 “ ing it their sole endeavour to put a stop to,  
 “ and retain the alvine flux, little caring whether  
 “ the morbid matter were sufficiently evacuated  
 “ or



“or corrected. The too early and copious use  
“likewise of narcotics and opium, had a bad  
“and even mortal event, as the remission of the  
“pains and flux arising from thence was very  
“deceitful. The physician and his patients  
“grew too secure, and the hostile attacks of the  
“malady were less vigorously withstood, than  
“they ought to have been; whilst one sunk into  
“an eternal sleep, another died of an inflamma-  
“tion of the bowels, and with others the loose-  
“ness ceasing for a few hours or days, returned  
“afterwards more violent than before.” In another part of this excellent physician’s work, I find he is of opinion, that those who give astringents in the dysentery, keep the snake shut up in the patient’s bosom, by hindering the efflux of the acrid peccant matter out of the body, whence proceed inflammations, ulcers, gangrenes, and death.

Tissot says; “The very worst method of  
“cure, is just that which is most followed. The  
“evacuations are prohibited either by astringents  
“or opiates; a fatal method, that sweeps away  
“yearly a great number of persons, and throws  
“others into incurable distempers. By retaining  
“the excrements, the wolf is shut up in the sheeps-  
“fold. The matter that remains behind, irritates and inflames the intestines; from which  
“inflamm-



“ inflammation arise intolerable pains, an acute  
 “ inflammatory cholic, and afterwards either a  
 “ gangrene and death, or a scirrhus that dege-  
 “ nerates into a cancer, (of which I have seen a  
 “ dreadful instance) or else by suppurating,  
 “ brings on an abscess or an open ulcer. Very  
 “ often the matter is repelled elsewhere, and  
 “ produces indurations in the liver, anxieties  
 “ about the precordia, apoplexy, epilepsy, rheu-  
 “ matic pains, sore eyes, and incurable cutane-  
 “ ous disorders. Such, says Dr. Tissot, are the  
 “ effects of all binding and narcotic medicines,  
 “ as the theriaca, mithridate, and diascordium,  
 “ when they are given too early in this distem-  
 “ per. I was once called in to a very terrible  
 “ rheumatic case, caused by the theriaca be-  
 “ ing given on the second day in the dysentery.”

Having premised thus far from the observa-  
 tions of others, I now come to the main point,  
 namely, to what our own experience has taught  
 us in this epidemic, with respect to binding, con-  
 stipating, and astringent remedies. I could have  
 been furnished with an infinitely greater num-  
 ber of cases from all parts, if people had not  
 carefully buried in silence those faults, against  
 the commission of which they had been so ear-  
 nestly and urgently cautioned; and if mankind  
 did not usually cease to be sincere, as soon as  
 they perceive that they are observed.

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A young skinner at Arau, put a stop to his dysentery by means of oatmeal-gruel, a remedy prescribed by the physicians of Bern in 1750, which he made very thick, and by the use of it, became lame hand and foot; in December he could neither walk nor work, his hands and feet were immoveable, and were perceived to wither away daily.

A man of forty years in the county of Lentzburg had the dysentery; a quack gave him a restraining medicine, his looseness disappeared, and immediately he fell into a rheumatism, that tortured him to the height of despair.

A country girl of eleven years, in the same county, got from a hangman \* some restraining medicines, on the eleventh day of her disorder; immediately upon this her pains and looseness disappeared, and on the contrary her feet and abdomen were swelled up, and remained in this condition till her death, which followed in less than a month.

A peasant of thirty years of age, from Solothurn, had the dysentery; the same hangman gave him what he called his opiate drops, on taking which he began to swell, and lost the use

\* Who in some parts of Germany, practise physic with great success; especially in desperate cases, when the patient is given up by the physicians.



of his hands and feet. Towards the end of December, he was carried about in Arau from one physician to another, imploring their assistance.

Our peasants that were troubled with the dysentery, often drank likewise warm milk. This seemingly innocent remedy, was in some important cases very noxious; their stools were lessened by it, and even entirely stopped; the patients were seized with a violent pain in the limbs, and a total relaxation and weariness, that made them unfit for all kinds of work.

At least in Thurgaw Dr. Keller perceived no peculiar good effect from milk, and still less from oil. To be sure many people boasted, that they had cured themselves by drinking plenty of milk warm from the cow. This happened without doubt, where there was only a purging to be cured, if at the same time they used a good diet; but in a real dysentery, Dr. Keller observed very little benefit proceed from milk.

In the same city Dr. Dummelin, town-clerk at Frawenfeld, saw two children, one ten and the other thirteen years old, who at the beginning of their dysentery, had been made to drink plentifully of warm milk from the cow, directly upon which they complained of a painful contraction



and oppression of the stomach, after which a vomiting ensued, whereby the milk they had taken, was brought up curdled into a cheesy matter moulded into the shape of dogs excrements; upon this convulsions ensuing, both the children died in a few days. Dr. Dummelin remarked the same bad effects of milk on children, in the epidemical dysentery of 1738 and 1739.

This year all kinds of binding, constipating, astringent, and soporific medicines, of all sorts, forms, and colours were made use of in Thurgaw. The most famous specifics among the common people, were red wine with pepper, mutton baked in suet, brandy, and acorns pounded and boiled in red wine; most of them died, but some recovered. Acorns are indeed advised by the Provision of 1750, (issued out by the college of physicians at Bern) as a good remedy; on the contrary, the Council of Health at the same place, has forbidden them as noxious, in an edict read in the churches the very same year. In short, acorns are extremely astringent, and excite the most obstinate constipations of the bowels.

Most of the country people of Thurgaw, made use of cakes composed of mutton fat with  
eggs.



eggs and mint, under the denomination of approved family medicines. Many took powdered tormentil root, others lapis hæmatites, others gun-powder in a soft boiled egg, and others made use of garlick. Those that were only attacked with a purging, or had but a slight attack of the dysentery, found no bad effects from these things. But in severe sicknesses, a great weariness over the whole body was the consequence of such measures; and the patient fell into a dropsey and cachexy.

The barber-surgeons of the villages in Thurgaw, began their cures for the most part with astringent medicines. In all their patients the malady was extremely heightened, and commonly death was the result; so that these beard-doctors were at last forced to confess, that the disorder was above their reach.

A practitioner of Thurgaw limited his whole method of cure to two remedies. The first day he gave a mixture of ipecacuhana and rhubarb, the second Sydenham's liquid laudanum, and kept to this last, till the purging remitted. On the first of December, when I received this account from Thurgaw, all this practitioner's patients without exception were dead, either of a dropsey or a terrible rheumatism, or else lay



eagerly expecting the near approach of friendly death. In the mean while, the people of Thurgaw were too stupid to see into the deleteriousness of the method pursued by this destroying angel, though manifested by such flagrant proofs. Half Thurgaw cried out, that these people did not die of the dysentery, but of the dropsy and rheumatism.

In the city of Solothurn, the use of astringents and aromatics, according to the observations of the excellent Dr. Gugger, increased the tormina and fever, and produced a gangrene in the bowels. But nothing had more fatal effects, and was more certainly mortal, than the improper application of laudanum.

To the effects of a dysentery treated with restringents instead of good smart purges, I ascribe the case of an Englishman of distinction, whom I rescued from the most imminent danger by the means of purgatives and antiseptics ; while at the same time, without doubt, many a timorous physician by leaving the dysenteric matter in the body, would have left the patient in his disorder.

This gentleman came into my neighbourhood from Florence, on the 7th of August.  
He



He had been eleven days before attacked with a dysentery, not far from the Baromean islands. The Italian physicians gave him indeed manna twice in the beginning, and the first time a pretty strong dose of it; but directly thereupon endeavoured to put a stop to his flux, by means of opium, and other restraining and binding medicines. The sick gentleman in the mean while hastened towards Switzerland with the dysentery upon him, and taking these medicines; he performed his journey in the hottest weather imaginable, on horseback, as one is obliged to do in this country; the exercise of riding seemed to hearten him; he came luckily on the cloud-capt top of St. Gothard's, from the sultry air of Italy, into a piercing cold region. An Italian physician, whom he had taken to accompany him in his journey, gave him every evening a restraining medicine. But nature was wiser than art; for the gentleman, after two uncommonly large stools, which his physician undoubtedly did not mean he should have, and which he nevertheless had on the sixth or seventh of August, on his arrival at Zurich, found himself well. In this condition he came the same day into our parts, where he intended to rest himself a little after the fatigue of his journey, and give himself up to my care for his perfect recovery.



I found him perfectly hearty, without the least disagreeable sensation in his abdomen, without the least irritation to a stool, without fever, and not very weak. Notwithstanding this, as I thought the matter was not sufficiently evacuated, I therefore advised him to take in the morning and evening, a large spoonful of the tincture of rhubarb made with water, and at the same time to subject himself to a strict diet, such as was proper for his circumstances.

The eighth of August he told me early in the morning, that he had had two good natural stools, had rested perfectly well, and found himself entirely recovered. I ordered him however to go on with the rhubarb in the same manner, till evening, and even at supper he found himself perfectly well, talked chearfully without interruption, played at cards, and wrote.

The ninth of August I was called to him early in the morning, in the greatest haste. He told me that he had had two stools in the night, which were not offensive to the smell, but pretty large; that he had not slept at all, had a fever on him, had been extremely restless, and was still so. I found scarce any change in the pulse, and contented myself with ordering him to take a spoonful more of the tincture of  
rhubarb



rhubarb the same morning, and every two hours afterwards half a glass of almond-emulsion, in the mean while observing the course of the disorder.

In the afternoon I found the sick gentleman in a very dismal condition. His pulse was really quicker, and he had a vast heaviness and pain in his head. Towards evening, an uninterrupted slumber for some hours put an end to those symptoms. At the beginning of the night he grew excessively weak, and after that dozed till morning, while at the same time the fever was very considerable. It was however hard for me in this confusion to determine the species of his fever. I therefore resolved to continue till the morning with the almond-emulsion, to see if perhaps there was not some matter in the body, which it might be necessary to evacuate. His head-ach was diminished by the morning, but his pulse was still pretty quick.

On the twelfth day of his disorder, on the mere presumption, that some of the dysenteric matter might have still remained behind in his body, and have putrified by degrees, I gave him two ounces and a half of manna in water, with half an ounce of cream of tartar at one dose. The effect of this medicine was, that an  
astonishing



astounding quantity of an extremely foetid bilious matter came away, with a great number of stools, without the least sensation of pain in the abdomen, and with the greatest and most perfect alleviation, which further increased at every stool. The sick gentleman found himself very hearty, and without the least indisposition, till after one o'clock in the afternoon.

At two o'clock came on a violent cold fit, that shook his body all over, and continued in this manner for the space of three hours, with an unquenchable thirst, violent head-ach, and no inconsiderable nausea. On this cold fit followed a vast dry heat over the whole body, and an uncommonly violent fever, attended with great terror and delirium. I now prescribed an ounce of cream of tartar, ordered it to be divided into twelve doses, and one of them to be taken every hour in an infusion of elder flowers; at the same time I advised him to drink plentifully of lemonade.

The effect of this remedy, was an astonishing copious excretion of a putrid and inconceivably offensive matter. At break of day I saw this attack end in a stinking sweat, which smelled like that of an intermittent fever.

The



The third day in the morning I found the gentleman perfectly well again. I prescribed once more a potion of two ounces and a half of manna, and half an ounce of cream of tartar. Again there came away an immeasurable quantity of a perfectly putrid matter. In the evening he found himself very well, and rested well the whole night. I now let him drink nothing else than a good quantity of lemonade.

The fourth day I went early in the morning and found him very chearful, hearty and well. I prescribed him an ounce of cream of tartar to be divided into twelve doses, one of which was to be taken every two hours with lemonade, about noon I was sent for on a sudden. Another equally violent cold fit, shaking the very inmost parts of the body, began at half past ten, and kept on in the most violent manner till one o'clock, during which the patient very frequently vomited, and went to stool. After the cold paroxysm, ensued the same violent parching fit and unquenchable thirst, high fever and delirium, as before. However, the attack seemed inclinable to cease at ten in the evening, and soon after actually did so. I let him go on with the cream of tartar and limonade, according as I had ordered in the morning.



In the night time he rested tolerably well, at least as to his body.

The fifth day in the morning I gave a vomit of half a drachm of ipacuanha, which worked very easy, but did not discover any more than before, any unusual matter harbouring in the stomach. During the whole morning there still ensued a great number of very offensive stools, by which the sick gentleman was very much relieved. In the attack of the fourth day I had remarked, that during this uneasiness of mind, which proceeded principally from the nature of the disorder, the whites of his eyes were intensely yellow. I feared therefore, that at every future attack, the bile would flow in great quantity into the intestines, or return back into the blood; in fine, that from a simple putrid tertian fever, it might turn to a double putrid tertian; and consequently the disorder of this gentleman, who was of so much consequence to his country, might grow more and more difficult and dangerous. On these considerations I resolved now to make use of the bark, and to give a full ounce of it before the next attack, which according to the premature course of the disorder, might be expected on the fourteenth of August, at six in the morning. At two in the afternoon I made a beginning,



ginning, and by four o'clock in the morning the whole ounce was consumed. His stomach rose against the bark, and a strong irritation to vomit ensued, and with these his usual anxiety of mind. I had it in my power to put a stop to his vomiting, but I let his stools, which were pretty frequent, take their course; as I did not look upon them in a bad light, but merely as the effects of the bark.

In the evening and beginning of the night the pulse was unequal and fluttering, and at times quick; however, this I attributed to the condition of his mind.

On the sixth day his pulse was just as it should be, from early in the morning till nine o'clock, and the gentleman himself very chearful. After ten he had a little sensation of cold in his body, but nothing like a regular shivering fit, though his hands were at the same time perfectly warm. After eleven o'clock his dejection of mind came on, and upon that a middling heat, that continually increased, and towards evening became very considerable, being attended with much fever, and an uncommon depression of spirits; after eight o'clock this attack, already moderated by the bark, had an end. The whole day throughout I had given him



no medicine at all. I now prescribed an ounce of bark, ordered it to be divided into sixteen doses, and one of them to be taken every two hours, beginning from ten in the evening; whence at each time during the whole night ensued a very offensive stool, but no irritation to vomit.

On the seventh day the fever came to a perfect intermission, though the patient was not free from a dejection of spirits very natural in such circumstances, which towards evening bordered upon absolute melancholy. Till eleven at noon a stool followed upon each dose of the bark, which he now took every hour. His urine, which since the access of the fever, had come away in streams, was still bloody. He passed the night sleepless, but entirely without fever.

On the eighth day \* he was perfectly chearful all the morning long, the brightest ideas shone in great profusion through his whole discourse, and his departure was absolutely fixt for the next morning.

\* The fever ought to have come again, but not the least glimpse of it appeared during the whole day.

On



On the ninth day he set off on his journey. I gave him another ounce of the bark, which he was to consume in the space of that day, the seventeenth of August; I advised him to take an ounce more on the nineteenth; and a week afterwards, and so on, to repeat the same quantity, in order to prevent a relapse. I cautioned him very seriously not to take any purgative medicine within the space of a month, if he had not a mind that his fever should directly return. I advised him in the mean time to live entirely upon vegetables.

The second of September 1765, I had an account from some distance off, that this gentleman found himself quite well on the twenty-fourth of August. But the physician, whom he had at that time consulted, had thought it necessary to add rhubarb to the bark, on which his fever had returned directly the very same day; however, it was at that time cured by another physician. On the sixteenth of September the English gentleman wrote me word himself, that he now perceived no difference between one day and another, and was in perfect health. And indeed, since this time he has always had the best health in the world; and enjoys at present, in the sixty-fourth year of his age, such alacrity and strength of mind, that he actually transacts



transacts the most important and perplexed state affairs, with unspeakable facility and great reputation.

After this long but useful digression, I resume the thread of my discourse, and hasten to relate the noxious effects of aromatics, brandy, and wine in our dysentery.

Aromatics and wine in general, excite in dysenteric persons a dangerous irritation in the bowels, increase the pain, fever, and stranguary; and when they operate as astringents, (which however does not often happen) they produce all the above-related bad effects of those dangerous medicines; change the bloody excretions into a thin pus; and wine in particular excites a very dangerous sensation of anxiety in the pit of the stomach, that very often accompanies an inflammation of the bowels, or precedes it or a gangrene; but which ought not to be confounded with that oppression of spirits, that appears directly at the beginning of malignant dysenterics. Brandy is here an absolute poison, and all these remedies occasion, even in convalescents, a most dangerous relapse of the same disorder. All the Swiss physicians, that find the peasants, who are attacked with the dysentery, in a very perplexed condition, have the blame to lay on the



the use of binding medicines, and their beloved kitchen physic ; but chiefly to nutmegs, mace, ginger, pepper, wine and brandy, which to be sure keep the dysentery under for a while, but soon afterwards throw the patient into the most dangerous distempers. Dr. Tissot saw once eleven sick of the dysentery in one house. Nine eat fruit, and were happily cured ; the grandmother and a favourite child of her's went to their graves ; for she took care of the child in her own way with mulled wine, oil, and spices, and accordingly it died. She treated herself in the same manner, and died in her own way too.

Dr. Tissot saw in like manner a man troubled with the dysentery, who had drunk about two ounces of brandy, suddenly seized with a hic-cough, which he opposed by the external and internal application of aniseed-water. Upon this ensued an inflammation in the stomach, which almost brought him to his last gasp ; but Tissot was his physician. However he was sickly for about a year afterwards, but at length Dr. Tissot made him well.

Now all these noxious remedies, together with putrid cheese, were used in great quantities by the country people in our dysentery : and



also by those in the cities, that lived after the country manner. Our peasants took immediately at the first attack of the disorder, nutmegs, pepper and cheese; in a slight indisposition they got over it; in severe cases the vomiting continued, the medicines, that were afterwards given them, did not stay on their stomachs, and thus the patients were brought to their graves. In the county of Lenzsburg the country people, in obedience to the advice of the famous Senertus in the foregoing century, which is still propagated in our times by ignorant physicians, universally made use of red wine and rotten cheese in the beginning of the disorder. Upon this the price of cheese evidently rose; and an innkeeper near Solothurn, not far from Arau, sold during the dysentery's raging in the canton of Bern, seven hogsheads of red Alsatian wine more than the usual quantity he otherwise consumed in the same number of weeks; accordingly, directly at the beginning of the epidemic in the county of Lenzsburg, a great number of people gave up the ghost merely from this intemperate use of wine and cheese. In like manner the mortality that happened in Thurgau at the beginning of the epidemic, was most considerable among the great number of sick, that lived in the whole extent of the southern side of Ottenberg, as these people notwithstanding all the



the admonitions that were given them, continually followed their depraved appetites with regard to wine and brandy. At last such of the people of Thurgau, as still remained alive, and were not yet seized, grew something wiser by the constant tolling of the bell. They pursued a better diet, and rather had recourse to the physicians, than to the wine-cask or cherry brandy-bottle.

But this is not sufficient for me; for I propose to relate also some special observations made in our epidemy, on the dreadful effects of aromatics, brandy, wine, and other things of this nature.

A young woman of twenty years of age in Brugg, had had the dysentery eleven days to a very high degree. She was under the care of a very sensible physician, who did me the honour on the eleventh day to call me to the consultation. The evening before the patient at the instigation of an old woman, very famous amongst us for her skill in physick, had drank a good deal of wine. On this followed the whole night long, vast pains in the abdomen, copious stools full of blood, a violent fever, delirium, and cold sweats. I found too at the time that I was called, her stools very numerous, painful, and



bloody; her pulse extremely quick, and the patient herself full of anxiety, and in particular a violent pressure in the region of the scrobiculum cordis, which Morgagni says, is not seldom the immediate forerunner of death. I did not dare to think of any evacuation; for all things considered, I concluded that the wine had already absolutely occasioned an inflammation, for which reason I ordered nothing else, than every two hours two spoonfuls of a mixture composed of half an ounce of gum arabic, four ounces of water, and one ounce of syrup of marsh-mallows; and with it a great quantity of almond-emulsion, rice-gruel, gum arabic clysters, and the fomentations commonly used in inflammations, to be applied to the abdomen. Towards evening she had again a shivering fit, but no delirium in the night. The twelfth day I found her stools diminished in number, and of a green colour; she complained perpetually of a sense of heat in the pit of the stomach. I let her still go on with the same medicines, but was desired to omit the clysters. During the whole day our patient seemed very much relieved, but in the evening her pains, and particularly the tenesmus got again the upper hand. I advised them to continue using the same medicines without interruption, and in the night time to give her two gum arabic clysters. The next day  
all



all the symptoms were very much diminished, and in a few days she was perfectly recovered.

A farmer's lad of thirteen years of age, in the district of Wildenstein, was taken with the dysentery. He had the assistance of a very famous physician at Brugg, Dr. Fuchsin, and was happily cured with purgatives. But the seventh day he drank wine, and eat a pretty deal of cheese; the dysentery returned with violent tormina, and a pretty considerable loss of blood; Dr. Fuchsin cured him once more. A week afterwards he drank wine again, and again eat as much cheese as he could stuff; the dysentery returned with still greater violence, and continued a month.

A peasant eighty years old in the same district, was attacked with the same disorder. He made a shift to crawl as far as Brugg; however not to a physician, but to a wine cellar, devoured a good quantity of cheese, washed it down with a quart of red wine, staggered home, went to bed in the most dreadful pain, got upon that a bottle of wine from the good-natured parson of his parish, sent for advice on the tenth day of his disorder to a quacksalver in the county of Baden, and on the thirteenth day died.



A very hearty and otherwife healthy farmer's lad, fifteen years old, in this diftrict, was attacked with the dysentery in fuch a flight manner, that he was able to go about with it during a whole week. His mother undertook his cure; gave him a mixture of red wine, cheefe, nutmeg and pepper, and by the fourteenth day he was dead.

Another of sixteen years, in the fame diftrict, was feized in the fields with a shivering. The next day he went again to field, complained, when he was there, of a great wearninefs in his members, and directly upon it laid himfelf ftretched out for half an hour, during a violent ſhower of rain on the wet earth. On the third day he had a perfect dysentery with great bodily pains; on the fourth a violent vomiting. On the fifth I was confulted; I gave the ufual remedies; but he took only the emetic, and that with much relief; the reft of the medicines he threw away and drank wine in their ſtead. The eighth day out of compaffion I went myfelf to this fellow, and tried to prevail on him in the moſt friendly, genteel, and perſuaſive manner; but I loſt my labour. He did not deſire my aſſiſtance, for he had at that time medicines in the houſe from a quack.



quacksalver in the county of Baden, and withal a great inflammation in his bowels, of which he died the next day.

A country girl of eighteen years of age, in this district, was seized with the dysentery. I was applied to for advice, but my patient did not take half the medicines I had ordered for her; but during the time she should have taken them, partly made use of an elixir which she got from the charitable parson of her parish, partly of an elixir that her stupid mother (who was the oracle of the village) gave her repeatedly in wine. With this the mother made her daughter follow a most absurd diet; she put wine in all her broths, gave her flesh, curds, and pasteries, that an ostrich would scarcely be able to digest; at last she threw away all her medicines, so that the dysenteric matter remained behind, notwithstanding the insignificant excretions caused by the disorder, and the putrid fever by these means was still kept up. On the twenty-first day of the disorder a miliary eruption, and a considerable abscess in her body made their appearance; the dysentery continued, and her stools remained as before, yellow, green, brown, red, and black. They sent for the priest, whined, prayed, and made use of superstitious remedies, hanging a piece of scarlet cloth



about the patient, in hopes of banishing the imaginary scarlet fever. When all this was of no service, the girl's father asked advice again of his priest, who told him that a sick person, whom I had forbid wine, had drank two bottles, and was perfectly cured. Upon this the father came home like a mad man, and cried with many gesticulations, that his daughter should not only have as much wine as she chose, but every thing else she pleased. All this was accordingly done. However, when on the twenty-sixth day of the disorder, all this had been of no benefit, her father applied to me once more for advice. Quite astonished at the honour he did me, I endeavoured with a friendly earnestness to open his eyes to all this folly, and touched his conscience in such a manner, that he promised me with tears in his eyes never to listen to a woman any more. I ordered him therefore to give her some doses of cream of tartar, and three ounces of tamarinds dissolved in water. These medicines brought away a good deal of the usual matter with much alleviation, after this her stools decreased, her appetite increased, and the miliary pustles went off by desquamation. On the twenty-eighth day of her disorder, her father told me that his wife had given her in the morning a pretty deal of mulled wine, upon which she found herself again very ill.

The



The good success of the tamarinds I lately gave her, encouraged me to try them again once more in this extreme danger, which I pointed out to the father; my patient took the tamarinds, and at the same time her mother gave her butter-milk, whey, must, and every thing that came into her head. After that they asked my advice, as I rode by the door, but I gave them no answer. On the thirty-fourth day of the malady the patient died.

A wholesome, hearty, clever farmer's wife of eighteen years of age, in this district, was slightly seized with the dysentery in the third month of her pregnancy. Her mother gave her directly upon it every day three glasses of brandy, and at the same time white and red wine in great quantities. The first effect of this was her miscarriage on the third day, which was followed by a very great loss of blood. They went on boldly with the brandy, her legs grew cold, she had a mortification in her bowels, and died the fifth day.

A woman of seventy-eight years of age was taken with the dysentery in Arau, and made use of the usual specific of nutmeg and red wine. The second day of her distemper Dr. Seiler, a physician of great ingenuity and penetration, was  
sent



sent for, who found all the symptoms of a violent inflammation in the bowels, but notwithstanding all he could say, the woman took a whole deluge of her specific, and died in four days.

A country girl aged fifteen years, in the county of Lenzsburg, lay sick of the dysentery; they gave her red wine in the first days of her disorder; on the sixth day ensued a hiccough, and on the fourteenth, death.

A batchelor thirty-six years old, in the same county, drank red wine in the second day of his dysentery. He fell immediately into a delirium, and the fifth day he was seized with a continual hiccough, and on the fourteenth by death.

A man forty years old, of the canton of Zurich, was violently attacked with the dysentery; accordingly he had immediate recourse to the specific qualities of red wine seasoned with nutmeg. Neither copious bleeding, nor ipecacuanha, which was given afterwards on account of his belching and nausea, nor cooling purges, nor any other remedies that were given him by an excellent physician in Zurich, were capable of abating the violence of this dysentery, and the  
in-



intolerable pains attending it. The quantity of blood that came away was supernaturally great, and so early as the second day the physician thought he saw in the matter that was voided, the signs of a wound in the internal coat of the intestines; on the ninth day the patient died.

Under the denomination of approved family medicines, the country people in Thurgau (according to the account of Dr. Dummelin at Frawenfield) made use not only of old red wine in different forms and compositions, but even applied to melasses, genuine brandy, spirits of blackberries and juniper; such as were seized only with a diarrhœa, or even a slight dysentery got over it; but with most people the wine and spirituous liquors increased the gripes, stools, and tenesmus, caused a great sensation of ardor in the stomach and intestines, heightened the fever, occasioned great heat, intolerable thirst, vast horrors, and at length death itself.

A man in Frawenfield, that was almost got out of danger by the assistance of Dr. Dummelin, produced such an alteration for the worse in his dysentery, by taking a good draught of wine, that a singultus ensued, and upon that a vomiting of blood, and finally death.

Many



Many people in Thurgau opposed the first symptoms that appeared of the dysentery, by drinking plentifully of a mixture composed of red wine and spices; their looseness was stopped, and they began to triumph. After some days more or less, Dr. Keller of Weinfield, saw some of these fall into a relapse, which was worse than the first attack; others were in a most painful and miserable condition, which (as Dr. Keller expresses it) was a perfect assemblage of all the evils that plague mankind. At the least touch of any thing besides the bed-cloaths, they suffered in the part offended such violent pains, that they broke out into dreadful howls, and gave the utmost tokens of despair. Dr. Keller had two of these wretched victims to popular self-conceit under his care; and cured them both with copious bleeding, and the long-continued use of antiphlogistics.

The sick in Thurgau to the north of Ottenburg, who did not follow the most strict diet, and in particular did not entirely abstain from brandy, wine, and flesh, died almost all of them between the ninth and twelfth day.

In Swabia too, according to the observations of Dr. Moehrlin, nothing was more noxious and dangerous in the dysentery than wine, except  
brandy,



brandy, which was still more so. Those (said Dr. Moehrlin) that in the course of their illness drank wine, could not be saved. Such, as just before their being attacked with the disorder, made use of wine and brandy by way of preservatives, had it uncommonly violent and long, and were also at the end of it troubled for many weeks after with obstinate œdematous swellings.

A woman in Ravensburg had put a stop to her dysentery by the copious use of red wine; the effect of this was a great weariness, a pungent and excruciating pain in one leg, at length a perfect arthritis (which rendered her incapable of moving in her bed) and a great difficulty of breathing.

At length a case very apposite to illustrate this subject came by chance into my hands, from which I immediately made the following extract, and which deserves a place in the very important doctrine of the gradation of disorders, as well as the above-mentioned case of the illustrious Englishman, which fell under my own observation.

A lady of distinction in Swabia was on the eleventh of June, 1765, attacked on a sudden  
with



with a looseness, which was at length attended with gripings and a bearing down in the rectum. On the fifth day she took of her own head a dose of English salts; this in the opinion of the physician, who is the author of this account, produced a very bad effect, as her stools became bilious upon it; somebody gave her besides this the same day, eighteen drops of a distilled oil.

The sixth day the physician of the place was called. He found her in the condition just described, that is to say with the dysentery on her; and gave her a drachm of powder of rhubarb, which worked her pretty strongly, and tinged her stools with blood. Without any longer delay he proceeded directly with a powder composed of coral, crystallus montana, cornu cervi ustum, dragon's blood, and cascarilla.

On the eighth day another physician was called to his assistance. The patient had still some twitchings in the bowels, and her stools were mixt with blood; her two physicians gave her a powder of gum arabic mixt with a little cascarilla, to be taken in an almond-emulsion or barley-water.

On



On the ninth day the patient had in the morning a pretty natural stool, but again in the evening a dysenteric evacuation with gripings and pain in the upper part of the fundament. Both the physicians upon this added to the powder the incomparable theriaca. On the tenth day she had some few pretty good stools, without any bearing down, though they were still mixt with pure blood; the pain about the os sacrum still remained, and her pulse was natural; her physicians now mixt with the above-mentioned powder, instead of the cascarilla, two grains of jesuits bark. On the eleventh day her stools were very good, upon which her physicians gave her every five hours ten grains of the cortex without any addition, in order to strengthen her stomach and bowels; in the afternoon some hysteric symptoms appeared, upon which account they added to each dose of the bark, one grain of extract of castor.

On the twelfth day she was in the same condition, and towards evening she had her menses. The physicians ordered her to lay aside her medicines; on the other hand, they indulged her with two spoonfuls of Burgundy wine every six hours, upon her earnestly asserting, that when ever she was attacked with hysterics, even tho' they were attended by a fever, a glass of Burgundy



gundy was her best remedy. They found upon this with great pleasure, that her pulse rose after taking this wine, for which reason they allowed her on the fourteenth day to take two spoonfuls of Burgundy every four hours, and one of them took his leave.

On the same night the physician who was retained, was informed, that the lady was again seized with the hysterics, upon which he sent her directly a grain of *extractum croci*. On the fifteenth day, early in the morning, the physician went himself; he found her in great terrors, with spasms, restlessness, heat, great thirst, and a quick, violent, irregular pulse. This sudden attack of a manifestly febrile disorder, the physician mistook for the effect of a fright she had had the preceding evening; in consequence of which he gave her only some remedies for her fright, and in particular the *pulvis margravii* with the extract of castor.

On the sixteenth day the other physician returned. The lady lay since the morning in violent, and almost intolerable terrors, and complained most of a very great anxiety and weight at her breast; the fever, with all its symptoms, was more violent than the day before. Her physicians gave her again nervine remedies;



remedies; namely, two grains of the pulvis margravii, with a grain of extract of castor, to which they now added two grains of nitre. In the evening the lady had two stools, in order to prevent any more of which, her physicians gave her instead of the pulvis margravii, an addition of coral to the powder composed of the extract of castor and nitre, to be taken every four hours.

The seventeenth day early, the lady had convulsive twitchings in her right arm. These increased still more and more, and came by degrees into the left arm, at length to her head, where they manifested themselves by contorsions of the eyes, noise in the ears, and distortions of the mouth and countenance; her eyes grew red, muddy, and dim, her face bloated and livid, and her reason troubled. The physicians thought of taking away six ounces of blood, upon which every thing was on a sudden quieted. In the afternoon the patient had only now and then a depression of spirits, which however soon vanished. The whole night throughout she was pretty quiet.

The eighteenth day in the morning the lady had a very profuse and extremely foetid sweat,

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which however went off by reason of their having taken the precaution to change the sheets. Upon this followed insupportable terrors, with violent convulsions, and spasmodic respiration; her eyes were staring and distorted; her thirst unquenchable, and her pulse tremulous; her physicians tried in vain to recall the sweat; with this view they took away four or five ounces of blood, upon which the symptoms remitted, but did not absolutely cease. After this they gave her nothing but sudorifics; the symptoms at first increased, but at length disappeared about noon, when she had a small evacuation; in the afternoon the same scene was going to be played over again; but upon the sudorifics being repeated, the symptoms disappeared, and at the same time the sweat. In the evening the lady complained of a violent wandering pricking pain in her breast and abdomen, and said she found something in many places rolling itself up like a ball; the pain in her belly disappeared on the application of warm napkins, but remained the whole night in her breast.

The nineteenth day early she broke out again into a sweat, by means of which the pains of the abdomen went off. At first the patient appeared pretty quiet; but by degrees they remarked a distortion in her eyes and countenance,



nance, her muscles seemed convulsed, and her arms contracted. The lady said, that at times she saw something frightful, and something was observed in her conversation that was not natural to her. Both her physicians upon this took it into their heads, probably on account of their apprehending some malignity in the disorder, to apply a warm hen cut up alive to the soles of her feet, and another to her head, which was accordingly done. In half a quarter of an hour the lady was quieter, and the physicians took courage again; as she said, that from the application of the hen to her head and feet, she felt an agreeable sensation in the back. In the mean time about noon, a delirium ensued, and soon after that a short slumber, out of which she never awoke.

To this remarkable history the following account was added by one of the deceased lady's physicians. In her first illness, which was manifestly a dysentery, her pulse was never extraordinarily feverish, and when she was free from hysterical attacks, quite natural. These attacks were repelled by the use of foot-baths, aniseed, cinnamon, mint, and chamomile-waters; in her second illness her pulse was as irregular as possible, though always quick, with



a violent and continual heat; her urine in small quantities, thick, of an extremely high red colour, and without sediment: her stools were liquid, of a whitish yellow colour, and at times covered with froth.

Both her physicians joined in roundly declaring, that they were not ashamed to submit the history of this disorder to the judgment of every sensible man; upon an impartial research they must necessarily be allowed to have done right; that the physician cannot always cure, and that the distemper is sometimes too much for his art, though exercised with the greatest judgment. In fine, they both concluded in a manner which I did not expect, viz. what external preceding causes have occasioned the dysentery to turn to a violent convulsive distemper, is notwithstanding all our researches to us still hidden and enigmatical.

With these learned gentlemen's leave, the evident, true, and only external cause of this fatal change of the distemper into an acute one was, the Burgundy wine; and the evident, true, and only internal cause of this change, was the not sufficiently evacuated, though difficultly retained dysenteric matter.

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From this collection of observations and experiments it is clear, that astringents and constipating medicines, spices, brandy, and wine, were very noxious, and always extremely dangerous in our dysentery; and that it would perhaps be worth while to weigh in the scale of humanity that political maxim, "Where no accuser is, there is no judge."

## CHAP. VII.

Remarks, Observations, and more determinate Conclusions, with regard to the Diagnosis and Cure of most Species of the Dysentery.

A STRICT enquiry into, and precise determination of the different kinds and species of the dysentery, which next to the plague and pestilential disorders, is one of the most dangerous, and at the same time, one of the most common distempers that infect mankind, must, I think, necessarily have a great influence on the conduct of the physician, that intends to cure it. An essential distinction is usually made between a dysentery with fever and one without fever, a benignant and malignant, a contagious and not contagious dysentery. Without the most abso-



lute and precise insight into the truth or falsehood of these distinctions, it is impossible to have a good system in one's head; and without a genius for practice, in intricate and irregular cases, a man appears like a fool at the bedside of his patient, with all the systems in the world.

The essential distinction that is made between a true dysentery with fever, and one without fever, appears to me to have a very dangerous tendency, and, in my opinion, should be banished from the schools of medicine; as it rather determines the limits between a dysentery and a diarrhœa. To be sure, the fever that accompanies the dysentery, seems very often at first almost inconsiderable; upon which account many physicians affirm, that the dysentery is so far from being attended with a fever, that its concomitant symptoms are of an almost opposite nature, viz. a pale face, the pulse not quicker than usual, and small, and the disorder of long continuance. But chillness, weakness, and loss of strength on the first attack, are however the usual forerunners of a genuine fever, and these are never wanting in the regular attacks of a true dysentery. It is true, that the pulse in the first days of the disease, is very often not quicker than common, and very small; but  
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it appears to be manifestly quicker in the course of the disorder, and often extremely so. I even saw some cases in a dysentery of the putrid kind, in the epidemy of 1766, commence with a very high fever, and terminate very happily; while others began with a fever that could hardly be perceived, which however ended in death. In the first case the patient's countenance was as red as fire, in the latter, pale. I find this fever of still more consequence, when all the other symptoms are bad, when the patient loses all his strength, and the pulse is at the same time not quick, but extremely weak; for in this case there is an undermining malignant fever, or even a gangrene lurking behind the curtain. In those that lie sick of the dysentery, the fever sometimes, and that even on the days immediately preceding the death of the patient, seems to be quite vanished, while, at the very same time, the inflammation is hastening on to a gangrene. Upon this account, the effects of the dysentery have been very aptly compared to the effects of arsenic; as this, just like the dysenteric matter occasions reachings, copious stools which corrode the bowels, pains at the heart, terrors, intolerable belly-achs, inflammations, gangrenes, and death, without any considerable fever being at the same time to be observed. In fine, the length of the malady is no argument



in this case, as the worst fevers in some particular circumstances visibly run out to a great length; especially the fever with us, sometimes very improperly, called putrid. Though these observations made at the bed-side of the patient, are not very agreeable to the greatest part of our systemwrights, they are however of the greatest consequence; as many pre-occupied with a notion, that in a dysentery of this sort the pulse must be necessarily very quick, think it accordingly slight, and of no signification, when in this point of view the fever is imperceptible. This error was, according to Degner's account, very dangerous to many persons in the dysentery at Nimeguen, in 1736; and upon that account, I do not see why Dr. Aken-side appeals directly to that epidemic, in order to prove, that the dysentery is not attended with a fever.

Sydenham calls the dysentery a fever turned upon the bowels. This mode of expression, I must own, does not perfectly please me, as it is not taken from the consideration of the principal phænomenon: this distinction, however, seems to comprehend the very essence of a genuine dysentery; and I am convinced that this disorder should be treated sometimes as an inflammatory, sometimes as a bilious or putrid fever, some-



sometimes as a fever compounded of both, sometimes as a malignant fever, and sometimes as a bilious one, accompanied with manifest tokens of malignity; but I am sensible too that there are many cases, in which it is equal how they are treated. I considered this year's dysentery in all serious cases, as a bilious or putrid fever; for I should have been much mistaken, if I had looked on it as a mere inflammatory case, and accordingly bled a vein, and given neither vomits nor purgatives; or, if I had taken it for a malignant disorder, and accordingly allowed my patient wine, and strengthening remedies. Some physicians were, to be sure, very liberal in letting blood in our dysentery at Thurgau; as they (perhaps induced by an hypothesis) presupposed an inflammatory state of the blood in all their patients, and indeed might very naturally imagine this to be the case, on account of the propensity of our countrymen to drinking. It may be, that in that part of the country, the dysentery in many persons was a complication of inflammation and putridity together; at least it happened to be so with us, towards the end of such disorders as proved mortal; and indeed, as I imagine, is generally the case in these circumstances, just before the disorder terminates in death, excepting where there are other peculiar causes subsisting for  
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the patient's death, totally different from this. We should however be very careful to distinguish, whether this complication shews itself at the beginning of the malady, or whether it only accompanies the fatal turn of the distemper. It is not impossible, that it should happen in the beginning of the sickness; and it was observed to do so in our putrid pleurisy, to which an inflammation of the lungs was often joined even at the beginning, that made emetics, which would otherwise have been of so much service, prove fatal to the patient. In like manner that kind of pleurisy, which entirely belongs to the bilious, or (as it is called) putrid class, and all other simple putrid fevers often, like the dysentery, terminate just before the mortal crisis, in an inflammation and gangrene of those parts on which the putrid matter has settled. But I also hold it as a very important maxim in the exercise of our art, and perhaps not sufficiently taken into consideration even by some great physicians, that we should be very careful not to confound the divers periods of a disorder one with another, nor to take from what happens towards the end of the sickness, and still more especially from the dead body, the indications of what is to be done at the beginning.

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There are many circumstances, which occasion the junction of the dysentery with a malignant fever; but especially, when many sick people lie together in a narrow place, when the chambers are neglected to be aired, and in general, when little or nothing is done, that the rules of our art require to be done in such cases. This fever may attack people in health, without being attended with the dysentery, though it arise from the putrid and confined vapours of that distemper; it may however supervene on the dysentery, and in this case it will be of a perfectly pestilential nature.

After the battle of Dettingen, the dysentery immediately made its appearance in the English army, and committed great ravages in it during the month of July and part of August. The hospital was in the village of Fechenheim, about a league from the camp; during the time that the army lay near Hanau, about fifteen hundred sick, besides those wounded in the field of battle, were brought from the camp into this hospital, and among these the greatest part was ill of the dysentery; the air was by these means infected to such a degree, that not only the rest of the patients, but even the apothecary, nurses, and the other servants, with most of the inhabitants of the village were infected.



fect. To this was added a still more alarming distemper, namely, the jail or hospital-fever, the common effects of a foul air, proceeding from a great throng of people, and animal corruption. Both these together occasioned in so short a time as the month of July and part of August, a great mortality in the village: while on the other hand, those that were attacked with the dysentery, but were not removed from the camp into the hospital, remained free from this malignant disease, and were happily cured; although they were in want of many conveniences, which the others in the hospital enjoyed. After the English army had marched away for the Netherlands, in September 1743, three thousand sick were left in Germany, part in this same village of Fechenheim, and the rest at Osthofen and Bechtheim, two villages in the neighbourhood of Worms. At Fechenheim the malignant fever and dysentery grew worse and worse every day; few kept free from it, for whether the dysentery, on account of which the sick were sent to the hospital, was mild or malignant, this fever was always joined with it. The petechial spots, blotches, parotids, frequent mortifications, contagion, and the great mortality, sufficiently shewed its pestilential nature. In this point of view it was still worse than the plague itself, as here there was always  
reason.



reason to fear a relapse; and it might almost be depended upon, if the patient remained in the same contagious air. Out of fourteen mates that were employed about the sick, five died; and all the rest, except one or two, had been ill and in danger. The hospital lost near half of the patients; but the inhabitants of the village, by the dysentery and fever together, were almost entirely destroyed. Now I conclude from all I have said, and especially from the observations of that great physician Dr. Pringle, that not only a fever of different kinds, for the most part accompanies the dysentery, but that this fever in certain circumstances, is of the most alarming nature.

It is not without reason, that a distinction is made between a malignant and benignant dysentery; but at the same time, this distinction is little understood, and occasions a great many mistakes; as a disorder is often called malignant, which in reality is not so; and malignancy is often least suspected, where sily undermining the constitution, by slow advances it gets at last the mastery, and overturns every thing.

It is undeniable, that many dysenteries are of a good, and others of a bad species; that  
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some only attack one here and there, while others at once, with their pestilential miasmata, infect the whole country. There is a kind of dysentery peculiar to the island of Java, in the East Indies, which is commonly of a benignant nature. Its beginning and progress is very slow, the stools are not very copious, the pains not great, nor the weakness considerable. A slight, and often imperceptible shivering, which does not easily return in the course of the malady, without some error committed in diet, ushers in the disorder. The stools are liquid, yet not copious, insomuch, that such as are attacked with it, do not cease to transact their usual business, and commonly do not apply to the physician for advice, before three or four weeks are at an end. By degrees the stools become more frequent, though at the same time they are preceded by little or no pain. With these symptoms is sometimes (but not always) joined a tenesmus: the excrements are rather liquid than otherwise, sometimes without blood, and sometimes variegated with bloody streaks, though at times they are somewhat hard, and encircled round about with blood and mucus. The appetite is, in the first period of this dysentery, twice or thrice greater than in health; however, it diminishes by degrees, and at last is quite destroyed. The patient's strength does  
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not remain always at an equal pitch, but decreases more and more by degrees, in the course of the distemper. In this manner it goes on for three, four, six, or even twelve months, (according to the observations made on it from the year 1742 to 1748, by one Laurich, a German physician, who has very well described this disorder) and for the most part ends in another sickness, seldom in death. But we have also nearer home, an example of an uncommonly mild dysentery, with which almost all strangers are seized during the first week of their abode in Paris. I have myself had this dysentery so very like the Indian disorder, in Paris; it does not even confine the patient in the least to his bed, goes off in a few days, and does not even deserve the name of dysentery. We see very often in Switzerland, and in other particular places, epidemic dysenteries uncommonly benignant. In general, a dysentery is called malignant, in which all the symptoms that appear at the beginning, are of much more consequence than they seem to be, or in which unusual symptoms supervene on a sudden, or when the best remedies, selected with the greatest deliberation, are without the least effect; when many die without the least fault committed by the physician, the patient, or assistants; and when the sick, as Thucydides says of the Athenian



Athenian plague, die as well with, as without the physician.

Notwithstanding this, these species of the dysentery, partly on account of their frequent complication, and partly by reason of their changeable and deceitful nature, are very often not nicely enough distinguished in practice. Where the dysentery rages very much, and kills a great many, there is still always a number of slight, and easily curable cases: and in malignant dysenteric epidemics, there are likewise a great many fluxes in the same place, that are not malignant. The characteristic of malignity itself, differs vastly in degree: in the city and district of Zurich, reigned in the year 1746, a dysentery, only in a small degree malignant. In the same year raged in Saxony, a very malignant one, of which in a small space of ground and in a very short time, died an hundred persons, most of them on the third or fourth day, and none after the fourteenth. On the other hand, symptoms of malignity may supervene on a moderate dysentery; it may even grow perfectly malignant, or else in many other ways dangerous. The benignant species of dysentery becomes contagious, malignant, and extremely dangerous, when many sick people are crowded together in a small space, or  
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where peculiar external or internal causes, produce malignity in particular persons. It is not only possible for a putrid fever to supervene on the slightest dysentery, but this fever may likewise terminate in a gangrene of various parts of the body, at the same time that the intestines are absolutely free from any ailment of that sort. However, most dysenteries end at last in a real mortification of the bowels, if they are not properly treated directly at the beginning; or when certain circumstances prevail, that render the best method of cure abortive. But when these do not take place, they go off very easily and terminate very happily, or else seem uncommonly mild, merely on account of their being taken care of in a proper manner. In Sir John Pringle's opinion, a dysentery that has once got a good footing, is so fixed and obstinate, that it can scarce ever deserve to be called benignant. But I shall shew hereafter, how much the word malignant is abused.

The dysentery then is often more or less, either of itself primarily malignant, or generally speaking, dangerous; merely according to the presence or absence of certain circumstances. It appears in the army sometimes as early as the spring, when the troops have first taken the field; but is never so obstinate, nor so fre-

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quent as towards the end of summer, or the beginning of autumn. At this time it grows epidemical and contagious, continues for about six weeks or two months, and then ceases; it is always more violent, if the troops lie wet in warm weather. It has also been observed, that the dysentery is always the more malignant, the earlier in the season it makes its appearance; and that it manifests much less virulence, when it does not break out till August or September. Otherwise I do not see that these camp-dysenteries are in themselves more malignant, than those that happen in cities; although in the army and military hospitals, they become excessively malignant and contagious from several circumstances; which, however, in like manner, take place in cities, when a great quantity of people attacked with this disorder, are crowded together in a small place, or where the other different causes subsist, of a peculiar or general malignity.

There are in all places dysenteries, in which the distinguishing characteristics of malignity are observable. A malignant dysentery arises, whenever that degeneration of the humours, which produces a malignant fever, is joined with those causes, that generally occasion a dysentery. Sometimes this conjunction proceeds from causes, which are merely peculiar to one  
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or a few particular persons, and then it only gives rise to *sporadic* malignant dysenteries. Thus we generally see, in epidemics of the malignant fever, here and there a sick person, who is attacked with a malignant dysentery; and in epidemics of the mildest dysenteries, those whose juices are previously vitiated, are seized with fluxes of the most malignant kind, or else symptoms of malignity on various accounts mix themselves with the more common species. The ordinary bilious dysentery too may become malignant, from violent or frequently repeated fits of anger, as well as by means of a bad method of cure; such as, for example, the administration of brandy and astringents. Dr. Tissot saw a violent fever, that lasted fifteen hours, ensue on a dysenteric person's drinking a large draught of brandy, at the same time his stools entirely ceased; after this febrile paroxysm the patient lost all his strength, the dysentery returned with an intolerable bad smell, he fainted away upon each stool, his pulse was weak and very irregular, and he looked like a perfect corpse; he next went into a clammy sweat, and died in forty-eight hours after drinking the brandy. I myself have seen and cured a dysentery, probably not naturally malignant, but made so by art, and have given a description of it in the former part of this work. But when the conjunction of the general causes



of the malignant fever, with the peculiar causes of the malignant dysentery, has its origin in circumstances of such an universal influence, as to produce an epidemy, the certain consequence of this is a perfectly epidemical malignant dysentery; that is, a great number of people are at once, or very soon one after another, seized with a malignant dysentery. An epidemy of this sort, is, next the plague, of all others the most dangerous, and has likewise been seen in conjunction with the plague: unusual and extremely stinking vapours, an extraordinary heat, famine, or a camp pitched in marshy grounds, have often made this dreadful distemper epidemic. Bontius saw it in Batavia, when this city was besieged in the years 1724 and 1728, by the people of Japan. In Europe it has been observed from 1548 to 1746, and still later, and that principally in France, England, Germany, and Switzerland. In the year 1673, a squadron of horse, consisting of six hundred men, under the command of the marquis of Lassingen in Flanders, that had lain too long in swampy grounds, was attacked with this dreadful disorder, which was likewise attended with a mortification of the thighs; five hundred and forty dragoons died of it, and at the same time a great number of horses. Besides these manifest causes, such an epidemy is often also an effect of those degenerations of the air, which do not fall un-



der the cognizance of our senses, the terrible influence of which, however, we do but too sensibly feel.

These remarks on the difference between these species of the bloody flux, amount to this ; that without doubt there are benignant, and as incontestably also, malignant dysenteries ; but that we should not so readily look upon a dysentery as benignant, when the symptoms are not bad directly at the beginning ; because in that very case, influenced by certain circumstances, every thing may turn out bad ; that it would, therefore, be better not immediately to establish for a certainty at the bed-side of the patient, what is not so certainly established by nature herself.

It is just the same with its contagious nature. The same dysentery is infecting, or not, according as it varies in circumstances. Without possessing of itself any real malignity, still a dysentery often becomes truly pestilential in foul and crowded hospitals, and, of consequence, so much the more infectious. It is on this account, that the dysentery is so common and mortal in the field, and therefore, a constant and vastly dangerous camp-distemper. The great havock made by the dysentery, proceeds always in the army from the infection, that arises from the pu-



trid excrements of many people lying sick of it at the same time ; which, without proper measures being taken, is likewise the case in the country villages, and sometimes even cities. As mild too as this disorder may appear in the first days, yet with most of the patients, before it terminates in death, the excrements acquire a cadaverous smell, and are then excessively contagious. I have found this smell so offensive in a woman of eighty-one years of age, during the epidemy of 1766 at Brugg, that the continual keeping open of the windows and door, and perpetual scenting the room with vinegar, were not sufficient to prevent its infection, and two of her nurses were seized with it. Now, since a dysentery that proves mortal, is in a certain measure always of a contagious nature, though, to be sure, it does not always communicate that contagion ; it follows hence, that every dysentery is infectious, which reigns for any time in a country, attacks a great number at once, and has proved mortal to many. This is the more evident, when one considers how much fear assists contagion in every respect. In the malignant epidemic dysentery of 1746, in the city of Zurich, it generally happened, that many that were inhabitants of one and the same house, perhaps chiefly on this account, were seized within a few days with this disorder, as soon as one person in the house



house had got it ; for the very same reason all such as lived together in one house, grew much worse, and very often a great many of them died, when any one in that house had previously given up the ghost. When hospitals are filled with dysenteric people, some of the assistants are attacked only with the dysentery, and others with the jail, or hospital-fever, that ends in bloody and gangrenous stools ; in general likewise, almost all malignant fevers without exception infect the assistants, when there is not proper care taken with regard to keeping the air sweet, and particularly in removing the putrid stools. In the army, the long stay of the troops in one place keeps up the havock of the dysentery amongst them, which sometimes on the removal of the camp, goes off on a sudden ; nothing is therefore more wholesome for armies in such circumstances, than plenty of exercise, and being at a distance from the house of office, the foul straw, and other nastiness of the camp. From all these observations, made partly by me, and partly by other physicians, I conclude, that the dysentery is very often only accidentally contagious, but that it also frequently becomes essentially so, just before the death of the patient ; and that, in general, in all epidemic dysenteries, this disorder, without the use of proper preservatives, must necessarily likewise be



spread by contagion. But I cannot by any means admit with Degner, that contagion is the chief occasional cause of this disorder with every body; although, without doubt, the infection is easily communicated to linnen, beds and clothes, and thus produces the disease in such, as are in a condition fit to receive it.

After these observations on the different genera of the dysentery, I proceed to its species. Just in the same manner as the former are complicated one with another, so are very often the latter: a dysentery, attended with a putrid fever, may either openly, or else in an undermining and almost imperceptible manner, be accompanied with inflammation; or the putrid fever may be changed into a perfectly malignant one: and a dysentery, attended with an inflammatory, putrid, or even mild malignant fever, may, after all, turn out a chronic case. However, this should not hinder us from dividing the dysentery into its proper species, since it appears under so many different shapes, and should be, without doubt, variously distributed, according to them, as under each form it must be variously treated. From this, a person of any penetration may perceive, the dreadful difficulties that attend the exercise of the medical art: as its objects, namely disorders, are of so unstable



stable a nature, so liable to be mistaken one for another, and even sometimes so variable in their species.

In dividing the dysentery into its divers species, physicians have been at all times extremely liberal; they have committed the same fault, as Hippocrates blamed in the people of Cnidos, and in which M. de Sauvages is entirely involved in his *Nosologia*, having made particular and almost singular cases of so much importance, as to describe them as species. Degner is, in my opinion, one of those, that have written the best on this disorder; I look on him as a very good observer, and, indeed, a very respectable physician, but yet, not as a man of true genius; for it appears to me, that he was not very capable of joining phænomena together in a proper manner, developing sufficiently complex ideas, and ranging the heads in a natural order. On the one hand, he has not well distinguished our bilious, or, as it is called, putrid dysentery, from the malignant, though they differ from each other, in his history of the epidemic at Nimeguen, which was compounded of both species; and, on the other hand, supposes the bloody flux, the dysentery without blood, and the mucous dysentery, to be quite distinct, and different from the bilious. Other physicians,



cians, even in this enlightened age, speak of a grey dysentery ; of a dry dysentery, which I am very well acquainted with, but have made no particular species of it, and in which they very justly advise lenitives and emollients ; and, lastly, of an acid dysentery, which seldom happens, and principally affects weakly people : but there is as little reason for making a specific distinction between a bloody flux and a dysentery without blood, as between a grey, yellow, green, or black dysentery. Blood being mixed with the excrements, is indeed an usual, but not inseparable symptom of the dysentery ; for many have all the other signs without this, at least in the beginning, and others have blood in their stools for various reasons, without having the dysentery. But although this disorder is very often attended with blood, it does not, however, on this account, deserve the name of the bloody flux, as the appearance of blood here is not an essential and inseparable token of a peculiar species : one may then have a genuine dysentery, without any blood appearing in the stools ; and a dysentery may be extremely dangerous, without any appearance of blood. The excrements in a dysentery are likewise often only white, but frequent experience has convinced me, that they seldom remain of that colour during the whole course of the disease ; and that these perfectly  
white



white excrements in a genuine dysenteric case, are not accompanied by any one symptom, which may serve to distinguish it from a dysentery attended by a putrid fever. Formerly the dysentery without blood, or white dysentery, as it was called, was looked upon as much more dangerous than what is termed a bloody flux, or red dysentery; as to the former, they ascribed a malignant nature, and considered the excrements in this species, rather as purulent, than mucous or watery; but I have shewn in the second chapter of this work, that these purulent excrements are very often a mere chimera, and shall also shew in this chapter, that the appearance of danger in the dysentery is taken from quite different tokens. The most important and dreadful dysenteries were not, even in those times, looked on as dysenteries, if they were neither of the red nor white species; for the physicians, who published the Breslaw observations, have put it as a matter of doubt, whether the painful diarrhoeas, (as they call them) described by Willis and La Moniere, entirely without blood, should be looked upon as real dysenteries. This their doubt, seems to me to deserve compassion. A great man in our art, Dr. Morgagni, teaches us, that whether a watery matter, howsoever coloured, or even pure mucous, come away from the patient,

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a great many physicians, after Willis's and Sydenham's example, have nevertheless, for a long time back, always called such affection a dysentery, if the stools were copious and very painful, though, at the same time, entirely without blood. This opinion, maintained by Dr. Morgagni is, in my judgment confirmed by the following considerations: first, as the dysentery here in question, observed by Willis in the year 1670 at London, brought the patients down so much within twelve hours, that they really seemed to be on the brink of death, and, indeed, actually died, if the physician did not haste to assist them with corroborant remedies, and omit evacuations of all sorts; and secondly, as such a dysentery has been observed to prove mortal on the thirteenth day, while neither blood nor pus came away from the patient, and even in the dead subject the intestines were found perfectly sound. But an argument against these good gentlemen of Breslaw, that comes nearer to the point, and thrusts still more home, is this, that the dysenteries described by Willis and La Moniere, evidently belong to the malignant species. All this, taken together, I give it as my opinion, that the various species of dysentery are not to be distinguished by the difference of the evacuated matter, but of the fever, by which they are accompanied.

But



But great physicians have likewise shewn, that there are many dysenteries that do not come within the compass of a professed treatise on the dysentery, namely, such as are only symptoms of another very different disorder. After an inflammation of the stomach or bowels, ulcers, or even cancers, may be produced in them, the effect of which is a dysentery of this kind. An abscess in the liver yields a thin pus, mixed with blood and gall, that comes through the ductus choledochus into the intestines, and produces a species of dysentery; acting in the same manner, as an ulcer in the pancreas, which pours through the pancreatic duct a purulent bloody matter into the intestines. A suppuration has been observed to spread (by means of blood-vessels common to both) to the intestines from the mesentery, on which they are suspended, when this latter has been inflamed and suppurated, or else it has affected them by metastasis, and in both ways excited a very dangerous dysentery. That painful kind of flux, called the hæmorrhoidal, which proceeds from the inferior part of the colon, or the superior of the rectum, is often taken by ignorant people for a real dysentery, as it has some resemblance with it. All sorts of corroding and irritating acrid matter, whether taken in at the mouth, as having its origin in the body itself, from corrupted humours



mours flowing into the intestines, produces a species of dysentery. Bloody fluxes arise, as well as other hæmorrhages, after the amputation of any member. Sometimes a dysentery is a symptom of an intermittent fever. There are petechial fevers, in which a genuine dysentery is likewise a symptom at the beginning. It also very often terminates, or is a concomitant symptom of putrid and malignant fevers; but when a malignant fever supervenes on a dysentery before subsisting in the body, this is quite a different case, and constitutes a peculiar species of dysentery. In military hospitals the dysentery is complicated also with other disorders, particularly with coughs and pneumonic affections, when the weather sets in for cold. In the scurvy it is a very dangerous symptom.

However, we must distinguish from all these symptomatical species such, as do not depend upon another disorder, and of these only we here treat at present, and shall take four species into consideration, though there are, perhaps, more; if there be, however, they are but seldom seen. The most usual are, the species which accompanies an inflammatory fever; that which attends a bilious or putrid fever, the most common of any; that which is concomitant on

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a malignant fever; and, lastly, (if it may be admitted) the chronic dysentery.

The dysentery appears sometimes with a regular inflammatory fever, a hard and full pulse, a very violent head-ach, and a distended belly. An English physician, Dr. Akenfide, seems indeed not to believe the existence of that species of dysentery, which is attended with an inflammatory fever, affirming, that all fevers of this kind terminate in an inflammation of the bowels, which does not produce any diarrhœa in the least. He adds also, that there are no other ulcers in the dysentery, than those that are the effects, and not the causes, of the malady; and on the strength of this, he thinks he has a right to fall foul on Boerhaave, for not having attended sufficiently at the bed-side of the sick; but instead of that, confidently explained the causes of things from the chair to his disciples. Dr. Akenfide is in the right in considering the ulcers of the intestines, that are remarked in the dysentery, merely as an effect of the distemper; for if they were the causes of it, it would then belong to one of the symptomatic species before described. Dr. Akenfide would have been in the right if he had said, that a common inflammation, or even ulcer, in any part of the bowels, does not produce a dysentery;



tery; but when he denies, that an inflammatory state of the blood, which has almost the same effect on the bowels, as an inflammation of the eyes has on the tunica albuginea, may produce an inflammatory dysentery, he denies a thing which is demonstrated, though seldom seen in London; and argues directly, as if one should say, this man spits blood, and consequently has no inflammation in the thorax. Dr. Akenfide is also in the wrong, in committing the very same fault himself, with which he so unjustly reproaches Boerhaave; for it is very certain that we may see, in the course of practice, real dysenteries of an inflammatory species, which Dr. Akenfide did not see from his professorial chair, and in which there cannot possibly be any constipation of the bowels, as the stools in those cases are at times uncommonly frequent, though accompanied with very little excrement. In September 1734, this species of dysentery shewed itself in the village of Viterne in Lorrain; it came on with a breaking of wind upwards, and a very violent pain in the stomach and bowels; on this ensued a fever, and soon after frequent dysenteric stools, with a tenesmus and unquenchable thirst, and such an inflammation from the œsophagus downwards to the anus, that the patients thought their insides were on fire; the tongue near the œsophagus was inflamed



inflamed and black: if the patient vomited in this condition, he died on a sudden. In the space of ten days, fifteen persons died of this distemper, described by Dr. Marquet, dean of the college of physicians at Nancy. Some who were seen walking about the streets at five o'clock in the afternoon, were seized with it, and died at ten o'clock at night.

I say nothing in this place of that species, which is attended with a putrid fever; as this is the very same species, on the subject of which we have given some hints in the first chapter of this work; for, strictly speaking, it would be improper to say that they are therein described. Perhaps many additions, taken from my later observations in the year 1766, and dispersed up and down in this chapter, may fill up part of these chasms, and are sufficient for the end I proposed, as the whole treatise itself is nothing but patch-work.

We do not give the title of malignant to, nor make a peculiar species of every dysenteric case, in which symptoms of an alarming nature break out on a sudden, where the best remedies, chosen with the greatest judgment, have no effect, in which many of the sick die, and a great number of these very fast, and almost on a sudden; and

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where they die, as well with, as without the assistance of the physician. A dysentery of this kind may, notwithstanding all these circumstances, be of the inflammatory sort : it is, to be sure, extremely violent, dangerous, and alarming ; but, strictly speaking, it ought not, even then, to be called malignant, as it is important to employ this word in a quite different sense. A philosophical physician entertains the more strict and determinate notion of malignity with respect to the dysentery, in case only, that with the causes common to that disorder at all times, and in all countries, others still are joined, which corrupt the humours very quickly : it is this circumstance, that impresses on a dysenteric complaint the peculiar mark of malignity, and then constitutes that peculiar species, which we are now about to treat of. The malignant dysentery is, therefore that, in which either from external causes, or from a putrid fomes within the body, a malignant fever supervenes. The pathognomonic signs of this species are formed by the symptoms of a malignant fever mixed with the usual symptoms of the dysentery with different degrees of force, and are chiefly alarming on account of their complication.

The most important symptoms of the malignant dysentery are, besides the usual shiverings,  
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(which, though not always present, often return in the course of the disorder) a sudden total loss of strength, and an extraordinary anxiety about the region of the pit of the stomach; this remains till the end of the disorder, when it proves mortal, or till a remarkable change for the better, when the patient is destined to recover: it does not let him sleep a moment, though otherwise he shews a good deal of insensibility with respect to every thing, and even to his own disorder; for the most part his head is heavy and stupefied, but at times so intolerably painful, that his skull seems perfectly split asunder; he is often at the beginning of the disease in a calm delirium, which manifests itself particularly by an extraordinarily wild glance, a fixed ecstatic look, appearing in very deep thought, while, at the same time, he thinks on nothing at all. At times this delirium grows very high, the voice most commonly changes, and becomes weak; a slight impediment in the swallow is often observed just at the beginning of the disorder, which is an extremely bad sign. It happens very commonly, that the patient vomits worms, or that they are found in his excrements, or else that they creep up of themselves into his palate and mouth, and sometimes even into his nostrils, so that he can pull them out with his fingers; but we must take care not to



consider worms as a sign of the malignant dysentery, as they are seen in great quantity also in many epidemics of the bilious dysentery : a copious vomiting of a perfectly green matter often appears, without any relief following from it ; sometimes too, the patient vomits blood, which is a very bad symptom. The pains in the bowels are not always proportioned to the danger of the disorder : there are some who do not complain in the least of them ; with others they are extremely violent, and with others intolerable. Sometimes the belly remains soft, and sometimes it is distended ; the stools are sometimes inconceivably copious, and this is so very dangerous a circumstance, that the patient will appear in a dying condition in the space of twelve hours, and often really dies in that time. Sometimes hardly any thing at all comes away from him ; he has not the least complaint, except a very troublesome tenesmus, and dies in three or four days, if his stools cannot be rendered more liquid. The excrements are subject to great variations : sometimes perfectly mucous, sometimes of a dark brown, citron-yellow, or green colour ; at times they consist of mere water, and are at the same time amazingly copious ; sometimes entirely of thin watery blood. At this juncture, the patient is observed to grow worse and worse every hour, is light-headed, seems



seems to suffer very little, and dies on the third day. Sometimes the excrements are of a greyish red; they are often black, though still more commonly slimy, mixed with a substance that looks like chocolate and blood, and has always an extremely bad smell. Copious stools, with a low sinking pulse and increasing delirium, are bad signs; on the other hand, it is a good token to have bilious stools followed by a sweat: in slighter cases, a sweat often puts an end to the alvine flux, and the other symptoms almost on a sudden; while, on the contrary, the entire absence of this sweat is dangerous. Heat of urine, and the strangury, are still more frequent than in the common bilious dysentery: as these symptoms are in general observed directly at the beginning of malignant fevers, they are a bad omen in the malignant dysentery, in which there is also sometimes an entire stoppage of the urine. This fluid is sometimes perfectly brown, a circumstance which indicates death; sometimes it is as clear as water, and sometimes milky: the bad smell of the urine approaches sometimes to that of the excrements. The same has been also observed in the breath, in the sputa, and even in the sweat. The patient's disgust for all kinds of food is unconquerable, and often, with the greatest thirst upon him, he cannot abide any drink, that is not cordial: sometimes



the skin is extremely dry, and peels away in great pieces, or else it is constantly cold and clammy. In an epidemic disorder of this sort in France, it was remarked, that such as had a great number of watery bladders break out on the whole surface of the skin, recovered: the same good effects were observed in Switzerland, when a miliary eruption appeared, and continued till the seventh day, if, at the same time, tumors appeared here and there on the skin, together with an erysipelas. In other epidemics, just before the approach of death, petechiæ and large miliary pustules have been observed to break out. The petechiæ shew themselves very often on the fourth, fifth, sixth, or seventh days, though they are not constantly connected with this kind of dysentery: they appear mostly on the breast, back, arms and legs; rarely, and almost never in the face. They are not to be reckoned in the number of mortal symptoms, but they help, with other symptoms, to increase the danger; and the deeper colour they are of, so much the worse they are. I have seen them, in a case that proved mortal, of a brown, and even a bluish hue, in an inconceivable number all over the body: spots and pustules have been likewise seen on the neck, under the arm-pits, loins, and about the groin, that were turgid with a green pus, and manifested



fested a pestilential nature. The only characteristic of the pulse is, smallness; and it is very seldom that the respiration is not oppressed. Immediately at the beginning, a hiccough, an increasing difficulty in swallowing, a distension of the belly, a perfect dryness and blackness of the tongue, faintings, sometimes gangrenous spots on various parts of the body, and particularly on the legs and feet, denounce, for the most part, a near and inevitable death. However, in some instances, even a mortification, that has towards the end of the disorder suddenly seized on the feet, has been found curable; and in others, common inflammatory tumors on the arms, as well as erisipelatous eruptions, that came to a suppuration on the legs, have been observed to be critical, and easily healed; though, at the same time, the skin was covered with miliar and petechial exanthemata: the cessation of the patient's anxiety, the softness of his belly, the free passage of his urine, the diminution of his weakness, and particularly the return of his natural sleep, give certain assurances of a happy cure, which is often effected, to the great honour and triumph of our art; but also, full as often, cannot be brought about by the best physicians.

The slow, or chronic dysentery, does not constitute a peculiar species, till the disorder has



made some progress ; for though one may even in the beginning, from some peculiar tokens, foresee its long duration, it is not yet even then the question, whether it should be treated in the same manner as a chronic dysentery : for such a question would be rather too simple.

We call a dysentery slow or chronic ; when three or four weeks are passed since the first attack, without our having any hopes of seeing the disorder cured : it lasts very often many months, and sometimes whole years ; for at the very time, that I am writing this, an old man is come to me, that has had the dysentery already two years together, with the usual evacuations, and, notwithstanding that, still goes about, and does some work. This malady arises from an utter neglect of all remedies in the beginning of the distemper, as well as from leaving them off too soon ; great errors in diet, a bad method of cure and frequent relapses, and sometimes because, on account of the preceding bad condition of the bowels, the best remedies are without effect. In this species, the patient is very weary, his appetite very small, and his indigestion so great, that not only a violent pain in the stomach ensues upon eating most kinds of food, but also his food comes away perfectly undigested, as in the lientery. The pulse is very weak and  
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flow ; but when there chance to be abscesses or suppurations in any part, it is quick. The stools are, to be sure, not so copious as in the beginning of the illness, neither are they quite so painful, nor attended with such frequent attacks of the belly-ach. The excrements are, in general, just as in the first period of the disease, sometimes accompanied with blood, and sometimes entirely free from it : nay, there is frequently, even for some years after, an appearance of blood in them, or even of genuine pus, when abscesses in the stomach or in the intestines chance to break, or when the patient has obstinate ex-ulcerations in the bowels ; and when there is an ulcer of this kind in those parts, the excrements consist of a thin, sharp, foetid, and cancerous matter. All these chronic cases of the dysentery are extremely obstinate, and with many people mortal : they likewise terminate in other disorders, and chiefly in the dropsy ; and are never cured without extraordinary patience, obedience, and resolution on the part of the patient.

After this short view of the most usual species of the dysentery, it still appears worth while to collect the most common symptoms (for, to be sure, in this compendium, a great part of them must necessarily be omitted) belonging to  
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all these different species, with their various changes and terminations ; (though I do not intend to repeat what I have already in part treated of, especially with regard to the malignant dysentery.

An inflammatory dysentery makes its appearance, at the beginning, with a very violent fever, a very hard pulse, which, in other dysenteries, is mostly small, and but seldom (and that only in the progress of the sickness) becomes full ; an almost continual and intolerable pain in the belly, which increases on the part's being touched, and still more after vomiting ; stools very inconsiderable with respect to quantity, a head-ach, red face, and sometimes a distended abdomen. A putrid dysentery discovers itself by a bitterness in the mouth, that appears directly on the first attack ; a vomiting of a bilious matter, which is sometimes also mingled with worms, a shivering that returns in the course of the disorder, the sometimes apparent slowness of the fever, the commonly pale colour of the countenance, the ease that is found after vomiting, the variegated colour of the excrements, and sometimes by the worms contained in them. We may always suppose *a priori* the presence of a malignant dysentery ; where many people, sick of the dysentery, are crowded together in a small space ; but this disorder



disorder may likewise proceed from many other external, as well as internal, causes: its surest pathognomonic signs are, the quick approach of a more than natural weakness, great anxiety about the pit of the stomach, a heaviness in the head, a wild, and yet at the same time, a dead-like look, spirits extremely depressed, or a perfect indifference to every thing in the world, frequent slight convulsions, a very weak voice, a great many fainting fits, sometimes a miliar eruption, petechiæ, aphthæ, a very weak pulse, a vast sickness at the stomach, and the other usual symptoms in malignant fevers, which have been above related. The slow, or chronic dysentery, is manifest enough of itself, and requires no description.

A vomiting of a copious bilious matter, that comes on of itself in the beginning, is of service in the putrid dysentery; but one that returns very often in the course of the disorder, and always ensues, whenever the patient takes any thing, even in the smallest quantity, is quite the contrary: the least vomiting, even in the beginning of the disorder, in an inflammatory dysentery, is bad; a hiccough in the beginning is of very little consequence, when it proceeds from indigestion, wind, or worms: but when the distemper is at its height, or has continued  
any



any time, it is a token of an inflammation, and an approaching gangrene. It is a good sign, when the patient shews an appetite; the want of it, with an increasing disgust to food, is bad. Frequent stools, with a small evacuation, is the usual complaint; however, the disorder is always worse, the more frequent and smaller the stools are, and the more frequent and fruitless the tenesmus is in the first days of the illness. Large and few stools are good; large, very frequent, and such as do not in the least diminish the disorder, are bad, and a token of a very powerful irritation in the bowels. Large stools, when the disorder has continued any time, are bad, if, at the same time, the food comes away undigested, or if, without this circumstance happening, they are only frequent. Streaks of blood shew a laceration of some small vessels in the rectum, which is of no consequence; a great excretion of blood proceeds mostly from the same part, or from the lower end of the colon, the evacuation of which is likewise, in other cases, so very innocent. I saw, very lately, a great deal of blood come away in some dysenteric complaints, that yet were otherwise, notwithstanding the fever and the frequency of the stools, very tolerable, and almost entirely without pain. Hence it is, that so many observers have  
found



found a large excretion of pure blood to be of no disadvantage in the dysentery, but rather of service; while, on the other hand, many of their patients died in a short time without the least indication of blood in their excrements. Those who lost blood in great quantity, were, according to Degner's observations, always in less danger, than those that had but little pure blood in their excrements, but, instead of that, a white, frothy, tough mucus only streaked with blood; as these last complained of more violent pains, more frequent stools, and a greater loss of strength. A more intimate mixture of blood with the excrements, is looked on as a sign, that the blood comes from a higher part than the rectum, and physicians are, upon that account, very much afraid of this token: without doubt, we may hence conclude, that the disorder exerts itself chiefly in the intestina tenuia, where there must certainly be greater danger. In reality, I have seen this thorough mixture of blood with the excrements, in patients that were in extreme danger; but I have likewise seen it in very slight, and very easily curable cases. Towards the approach of death, the stools became less bloody, that is, less red; for the blood is then changed into a putrid, ichorous matter: in general, the danger in this disorder is not in proportion to the  
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the quantity of the evacuated blood ; and it is only in the malignant species, that any loss of blood whatsoever is, for the most part, extremely dangerous. With regard to the other signs taken from the excrements, there are very great errors committed, not so much on account of the pus being taken for a mucus, as by too liberally bestowing the name of pus on mere mucus : in general, the more the colour of the stools departs from that, which is natural to them, the worse they are ; a green colour is a sign of a perfectly vitiated gall, black is the worst of all. The excrements have always a putrid smell ; but when a gangrene supervenes, they prove perfectly cadaverous, though this may happen also just before, and at that time they are more infectious than at any other. Worms, which I saw in great plenty in the epidemic of 1766, in children as well as adults, make the dysentery worse, in the same manner as they do the putrid fever, and are sometimes found in the excrements, and, at other times, brought away by vomits. They are, for the most part, of the round kind, though I have likewise seen in the epidemic of 1766, a perfectly astonishing quantity of ascarides ; but, according to Sir John Pringle's important admonitions, worms, in general, should by no means be considered as the cause of this disorder, but  
merely



merely as a token of the preceding bad condition of the intestines, of their tone being weakened, of a diminution of the natural secretions, and of a coagulation and corruption of the aliment. Aphthæ often come in the mouth and on the tongue suddenly, and are very dangerous, as well as a difficulty in swallowing; the belly-ach is always more dangerous, the more violent, and longer continued it is, and the less it ceases after evacuation. An ardent heat in the abdomen, a scalding in the urine, and even the strangury itself, are in the bilious dysentery only a sign of an irritation from the gall, and are attended with no bad consequence; in the malignant dysentery, these symptoms are among the dangerous ones. An anxiety about the breast and pit of the stomach, are observed in divers species of this disorder, and is always very dangerous: all hysterical symptoms must be treated as such, and therefore should not be absolutely considered as immediately proceeding from the disorder; but all these symptoms are bad in a malignant dysentery: real convulsions in a common dysentery, after the use of astringents, are fatal with children. All nervous symptoms are dangerous in every species of this disorder; as they are always a sign of a very powerful irritation in the bowels, and sometime kill them almost on a sudden. Miliary,

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or petechial eruptions, are mostly dangerous ; and though they are not reckoned among the absolutely mortal symptoms, yet they help very much to increase the danger.

The distemper grows in general very dangerous, when either through neglect, or bad conduct, it lasts till the patient's strength is quite gone, the intestines relaxed, and the tunica villosa abraded ; though there are still hopes, as long as there are neither stools consisting of diluted blood, or coming away involuntarily, nor aphthæ, nor petechiæ, nor a hiccough, nor any complaints of a great weakness and anxiety about the præcordia ; in which cases, the best practitioners lose all hopes. A complication of many dangerous tokens, is a sure mark of approaching death, though many of them considered in themselves, and singly, by no means denounce death ; such are faintings, hiccough, vomitings, particularly of an unusual matter, heart-burn, anxiety about the præcordia, green stools, ash-colour stools, or consisting of a dilute, watery blood, and not tinged with real blood ; stools mixed with worms, and of an extremely cadaverous smell ; a constant rejection of clysters as soon as taken, extraordinary wakefulness, unquenchable thirst, cold at the extremities, a perfect loss of strength,  
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a weak sinking pulse, a slight fever of the malignant kind, or else, to all appearance, an entire absence of fever, an internal burning heat, cold sweats, aphthæ in the mouth, which grow black, a difficulty in swallowing, a gangrenous sore throat, perfectly brown sputa, a sudden cessation of all pain, retention of the urine, a desire of getting up, a great inclination for cold water, livid lips, heaviness in the head, a slight delirium, subsultus tendinum, convulsive motions of the whole body, the eyes sunk in the head, a wild look, and involuntary stools. The event is always very dubious, when the violence of the disorder has not been allayed by proper evacuations, as a gangrene very often slowly follows such neglect; on the other hand, the happy termination of the disorder depends on the speedy use of the medicines appropriated to each species, and applied at a time when the patient's strength is not as yet too much exhausted, nor the intestines in the least damaged. No illness is more subject to relapse than the dysentery, and frequent relapses occasion a continual diarrhœa, as they weaken the tone of the intestines, erode their tunica villosa, and even occasion ulcers in them. The signs of the distemper's having a happy exit, are the cessation of all the symptoms, that appeared at the beginning, with many other phænomena which,

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a man with a very small share of judgment may easily perceive.

These various circumstances require various methods of cure. There are species of the dysentery, in which remedies, that are found to be serviceable in a different species, prove fatal; and in which, on the other hand, those that prove mortal in another species, are of the greatest service. There are even dysenteries of the same species, in which the same method that was serviceable in cases that seemed perfectly similar, has a quite different and opposite effect. It must, therefore, be very senseless to employ the same remedy in all cases of the dysentery: it must, therefore, be very senseless to take it into one's head, that a specific is to be had for all species of the dysentery, or that such specifics are to be found in books, in which all the symptoms of the most different species are confounded together in the most indigested manner; and it is, therefore, in like manner impossible to determine on an universal method of cure for the various species and periods of this disorder. But also after the most accurate distribution of its various species, and their different methods of cure, much still remains here, as well as in the whole circle of medicine; the knowledge of which, though it cannot be transmitted



mitted by written precepts, is however of unspeakable importance, namely, the manifold and almost innumerable complications of cases, which are only determined by the particular circumstances of the patient. But, when once informed of the nature and method of cure of each species, every physician must be in a condition to advise himself in the most complicated cases; if he be possessed of that genius, which is best tried at the bed-side of the patient, and is of itself every thing in medicine.

In the inflammatory dysentery, venæsection in the beginning is a principal article; and there is no occasion to fear repeating it, if the patient has still strength, and is not too much exhausted by copious stools: it has sometimes an astonishing quick and good effect. After that should be given, every day, three or four clysters of barley-water, marsh and common mallows, and chamomile-flowers; but it is of great importance not to inject the whole clyster at once, but at different injections, as it were, that it may stay the better, and not come away immediately without effect: internally, soft, emollient, and mucilaginous remedies are of use; gum arabic, pulvis è tragacantha according to the London Dispensatory, syrup of marshmallows, and, with these, the frequent use of



warm almond-emulsion, or barley-water. Warm fomentations of chamomile-flowers boiled in milk, are to be applied to the whole abdomen, after having rubbed it previously over and over with ointment of marsh-mallows. When the inflammation is perfectly cured, we may make use of the tincture of rhubarb with water, in small doses, going on at the same time with the almond-emulsion.

From a violent inflammation of the rectum, which very easily comes to a suppuration, the signs of which are observed in the patient's stools, an extremely troublesome tenesmus may arise. This symptom is cured by venæsection, and often repeated clysters, but especially by leaches.

I have been of opinion, and probably most physicians in Europe, that all medicines, without any exception, are of no use; when an inflammation of the intestines is followed by a gangrene in those parts, and that such a gangrene was always absolutely mortal; but I have since found the juice of lobsters in broths and clysters, recommended in Mr. Rahn's famous work on the dysentery, in cases, that had all the tokens of an internal gangrene.

Emetics



Emetics are, in this species of the dysentery, a deadly poison. Purges, by their irritation, do not do less mischief, as they increase the inflammation. All opiates, heating, astringent and binding medicines, are here extremely hurtful. It is not uncommon for physicians of great reputation, after having found the true indication towards the cure of the distemper, to chuse, for executing their purpose, remedies that have a quite opposite effect, or at least appear to have it. The Breslaw physicians laid it down as an indication towards curing the dysentery, that the inflammation should be resolved; with this view, they advised *radix tormentillæ*, *valerian*, the *confectio ex hyacintho*, *pulvis Hungaricus contra pestem*, and even nutmegs; that is to say, remedies that are astringent, constipating, heating, and consequently increase the inflammation. Degner (with a view likewise to take away the slight inflammatory diathesis remaining towards the end of the dysentery) even advises the tincture of *cascarilla*, which nobody will ever give as a good remedy, in a genuine inflammation of the intestines. He cites also others to prove, that the *radix pimpinellæ albæ* is of special use in the dysentery, when the bowels are inflamed; though this root is acrid, hot, and irritating. Our excellent countryman, Mr. Rahn, in one part of his



work, cautions his readers very earnestly against the use of anodynes and astringents, and in another place he advises, (to be sure, for very weighty reasons) even when an inflammation is to be apprehended, Sydenham's laudanum, the species ex hyacintho, and pillulæ ex cynoglossò, that is to say, the very same remedies which he cautions his readers against. One great inconvenience in the administration of opium is particularly this, that during the use of it, the inflammation gets to a head, without either the patient or physician knowing any thing of the matter.

The saccharum saturni is of service in external inflammations; Rivinus and Dolæus have therefore made trial of it in inflammatory dysenteries, and thought it had a good effect. Now the saccharum saturni is, in general, a medicine, whose bad qualities have rendered it justly formidable, but whose salutary properties (notwithstanding Mr. Goulard's experiments) are not yet sufficiently known, and it promises not a little to physicians of genius, who intend to make trial of it; as we may learn from the important observations of Dr. Hoze, a Swiss physician of extraordinary ingenuity, experience and merit. It cannot, however, be admitted in the dysentery, as it confines in the  
stools,



stools and increases the pain, and consequently the inflammation.

Nothing can be more murderous, than the method which Marquet advised in the above-described inflammatory dysentery, observed at Lorrain. He forbid venesection, and prescribed ipecacuanha, rhubarb, diascordium, and a decoction chiefly consisting of astringents. If these counsels were of service, the dean of Nancy's description of that epidemy is fictitious; if, like the plague, they occasioned vast ravages, and death, they did nothing but what might be expected from them.

In the bilious, or, as it is called, putrid dysentery, the method may be pursued, which I have described in the first chapters of this work from my own experience, and towards confirming which, something more may here be added; but also a great deal more may be done, or let alone, which I have not hitherto been able to speak of, and must, therefore, make amends for it at present. To all this I shall add various observations made in the epidemy of 1766, and relate them always with sincerity; though they should hurt my reputation, by shewing when I have been unfortunate; for a medical book is not worth taking



into one's hand, if the author does not shew a most superstitious regard to truth.

Sydenham and Huxham have ordered venæsection in general, at the beginning of the disorder. Monro found it, in the English army in Germany, during the last war, extremely necessary in recent cases, and of very great use in alleviating and curing the disorder: but when the distemper had lasted some time, and began already to grow tedious; when the fever was off, and the patient very weak, he looked upon it as unnecessary, and even thought it did harm. Pringle, indeed, lays it down as a maxim, that the dysentery of itself does not stand in need of venæsection; but that when it is accompanied either with a plethora or inflammatory symptoms, he then looks upon blood-letting as often indispensable, and always of service towards the cure: yet, when the first-drawn blood has no tokens of an inflammatory diathesis, and the fever is not sustained by an extraordinary inflammation, he then finds it either unnecessary or hurtful to repeat it, as the patient's strength must be kept up in so debilitating and putrid a disorder; but all this is manifestly meant in those cases, in which an inflammation is joined to the putrid nature of the disorder, and so far I am perfectly of the same



same opinion with these great English physicians.

Now, inflammation and putridity, or, (if you will) a bilious degeneration of the fluids, are not always found together: it is, therefore, worth while to hear the Dutch and German physicians on the excellence of their method. Degner says, that in consequence of Sydenham's having called the dysentery a fever turned inwards on the bowels, he advised blood-letting, in order to drive away from those parts this afflux of acrid humours; but if the dysentery must be called a fever, it naturally merits the name of a sh—fever; as it expels, through the posteriors, the whole substance of the body. In the dysentery of Nimeguen, venæsection was not necessary; accordingly, Degner did not advise any body to it; as it does not correct the bile, but rather weakens the vis vitæ, and disturbs nature in her salutary motions: accordingly he likewise saw venæsection followed by vomiting of blood, and death. On these, and other considerations, venæsection appears to be very much suspected by Dr. Degner: as nature does not easily bear two such evacuations at once; and as taking all things together, it is very little serviceable: he found it rather more so in plethoric persons,  
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by way of preservative ; and yet seems to think, that in all cases one must proceed in it with great judgment and penetration, or, otherwise, one runs the risk of doing more harm than good. Eller says, we should in the beginning, and the first period of the dysentery, examine whether the patient be plethoric, and have a quick and full pulse : in this case, we may take away some blood, as it seems to be in a state of inflammation, and even repeat this evacuation, if the blood be covered with a yellow crust, which happens, however, extremely seldom ; but when there are no signs of a plethora, the letting of blood is not only superfluous, but also pernicious, as it takes away the patient's strength, so necessary to overcome the distemper, of which he has, at the same time, manifestly very little to spare. I conclude then from all this, that venæsection may, and should be omitted in a dysentery, that is merely attended with a bilious fever alone ; but that there is likewise not the least reason to blame the physicians, that make use of it in complicated cases.

Emetics, like purgatives, have been formerly either entirely neglected in the dysentery, or else too sparingly made use of ; and, nevertheless, later experiments shew, according to  
Dr.



Dr. Pringle's opinion, that they constitute the chief part of the cure. Eller says, he has found, (and it is confirmed by the long experience of physicians) that no evacuation conduces more towards the cure of an epidemic dysentery, than those that are cured by emetics. A dreadful dysentery raged in August 1721, in different parts of Upper Saxony. Eller was called in it, and soon found, that no medicines were so effectual in the beginning of the disorder, as those that at repeated times thoroughly expelled the irritating bilious matter; so that by his indefatigable pains he cured his patients most commonly within a fortnight or three weeks, merely by evacuations, and even cured relapses in the same manner. Out of three hundred sick, which he had in his care, he lost scarce one man in forty.

It has been observed, that emetics, with respect to the evacuation of the bile, are more effectual, and that they have the best success, when they work likewise by stool. Both these effects were obtained with more certainty by Dr. Pringle in the English army, when he gave, instead of the usual quantity, only five grains of ipecacuanha at once, and repeated it two or three times the same day, till a vomiting or purging ensued, which generally happened either



ther before, or just after the third dose. Fifteen grains, administered in this manner, procured a larger evacuation, than thirty grains given at once : however, though the Doctor found this manner of ordering the ipecacuanha very useful, especially when it is repeated once, or oftener, after having been omitted a day or two ; he left it off, on account of the extraordinary sickness of stomach that followed upon it ; though he imagined it to be the surest method of cure. Dr. Eller made use of this method so long ago as the year 1721 ; so that he gave twice, thrice, or even four times a day, four, five, or six grains of ipecacuanha, till a gentle vomiting ensued : for strong people, he mixed with each drachm of ipecacuanha four grains of emetic tartar, and of this composition he prescribed four, five, or six grains, to be taken in the same manner at different times, with the best success. Dr. Monro saw in the English army, when in Germany, that repeated small doses of this root, from four to six grains, occasioned vomiting and purging ; but, at the same time, such an intolerable sickness, that it was impossible for him to bring the soldiers to undergo this treatment. Dr. Francis Ruffel found, in the year 1756, that a few grains of rhubarb mixed with each dose of ipecacuanha, made it operate rather as a purgative ; while, at  
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the same time, his patients were not so sick with it. Dr. Akenfide gave only one or two grains of the root every six hours, but took care to mix it with a julep, composed of mint-water and *confectio cardiaca*; and excepting breathing a vein and giving a vomit, he seems to trust to this medicine alone for the cure of the dysentery.

I have myself, likewise, made trial of this method of giving *ipecauanha* in small doses, in the epidemy of 1766, with many of my patients. I gave it to children at four times, at each time five grains, with the same quantity of *cremor tartari*; to adults at three times, at each time ten grains, with half a drachm of *cremor tartari*, or else at four times, each time ten grains, with the same quantity of the said salt. The vast sickness at the stomach, taken notice of frequently by so many writers, and formerly by myself in two instances, I did not now observe; but neither did I find, that these repeated doses procured the desired evacuations better, than if I had given the whole at once: and many times no vomiting at all ensued on the first or second dose; while, at the same time, there was a great deal of pituitous matter in the stomach; and it was only in exciting a greater evacuation  
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by stool, that these small doses seemed to be of any use.

Perhaps, however, no method is better than that, which Dr. Tissot has given us in the putrid fever, and which consists in dissolving a pretty good portion of emetic tartar in a great deal of water, making it palatable with syrups, and drinking as much of it as is sufficient to excite repeated vomitings. That very ingenious English surgeon, Dr. William Ruffel, found, during the attack of Martinico by the English troops, that the tartar emetic was the best and chief vomit in all cases of the dysentery, where there is much putrid bile in the stomach and bowels, as it quickly evacuates the corrupted matter, which otherwise did the patients in that hospital the greatest harm, if it remained only for a short time in the intestines. Dr. Pringle thinks it always serviceable, to mix a grain or two of emetic tartar with a scruple of ipecacuanha, by which means, without in the least diminishing the peculiar virtues of the root, the medicine becomes more purgative, and more effectual in evacuating the gall. This mixture may, therefore, be made use of in the beginning of the dysentery, by those, who do not chuse to order the emetic tartar alone.

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The stimulus of the emetic tartar is so much the more necessary to be added to the ipecacuanha; as this last has sometimes, even in large doses, no effect upon stomachs, that are not sufficiently irritable, or loaded with too great a quantity of mucus; while, at the same time, it operates very well, even in small doses, in opposite circumstances. I was called, during the epidemic at Brugg, in the year 1766, to a child of twelve years, that had had the dysentery three days, with a very bitter taste in the mouth, a vast oppression on the stomach, violent gripings, and a high fever: I ordered him for that night, half an ounce of cremor tartari, and for the following day, thirty grains of ipecacuanha for a vomit; it did not excite any vomiting, but, on the other hand, evacuated by stool a great deal of an intolerably foetid matter, with much relief to the patient: in the evening, and during the whole night, I gave him still more of the cremor tartari, and the next morning four ounces of tamarinds to procure an evacuation, which they did not immediately produce; but at first occasioned a prodigious vomiting of a very copious, tough mucus; however, at last they purged him pretty smartly, and the oppression on the breast and the pains in the belly, vanished together with the fever: the cream of tartar completed the cure. In this case I ought, without doubt,



doubt, to have given the tartar emetic either alone, or with the ipecacuanha.

The repetition of the emetic is, in certain cases, of no small importance. In very obstinate ones, Dr. Monro saw emetics, properly administered, extremely conducive towards the cure; and many physicians rely on ipecacuanha alone for the cure of this disorder. In the epidemic of 1766, I remarked, that partly on account of heating remedies having been taken at the beginning, partly on account of the presence of a great quantity of bilious and mucous matter, and partly by reason of the patient's being pestered with worms, which crept up out of their stomachs, all the medicines they took were rendered useless, by a continual inclination to vomit, and frequently by absolute vomitings, in spite of the emetics, that were given them for many days together. In these circumstances, I ordered very often the tincture of rhubarb made with water, which, for the most part, staid on their stomachs, and at length (though after some time) brought the distemper happily to an end; but in vehement, dangerous, and urgent cases, in which there was no inflammation, I gave a second vomit. A man of thirty-four years, at Brugg, was violently seized with the dysentery: the first day, somebody prescribed him



him a vomit, and in the evening some cream of tartar. I was then called, and gave him, the second day, tamarinds in the morning, and during the night, cream of tartar with chamomile-tea; the third day, manna with *sal catharticum amarum*, and in the night, at proper intervals, tamarinds; he cast all these remedies up again, and with them an astonishing quantity of bilious matter; his stools were at the same time extremely frequent, but very small in quantity, perfectly bilious, and mixed with a great deal of blood: as well after, as before the stools, he had continual gripings, and his fever daily increased, after having been almost imperceptible in the beginning. Early on the fourth day I was told, that I should not be able to give him any more medicines, as the whole preceding night, and that morning, he had again brought up a vast quantity of bilious matter, and as to the rest, found himself in the same miserable condition as before. This induced me to try the *ipeecacuanha*; my patient took it willingly, and soon after vomited a very great quantity of bilious and mucous matter, together with a large worm: immediately on that, I gave a purge of manna and *sal catharticum amarum*; he did not bring it up again, but had from it twelve large and copious stools; the result of which was, that his pains diminished at each stool, and, at length

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length entirely ceased, without returning any more. The remainder of the history of this remarkable case I intend to relate, when we come upon the article of the regimen of the mind.

The purge may be given a couple of hours after the first emetic, or the morning following its exhibition; but the use of purges, and the time when it is proper to repeat them, must be regulated according to the influence they have on the pains. On this article I have again the assistance of two of the greatest physicians in England: his Britannic Majesty's physician in ordinary, Dr. Pringle; and Dr. Monro, formerly physician to the English army in Germany, and now physician to St. George's hospital in London: they have both seen the same things, as I have, and have both drawn from what they have seen the same conclusions, as I. According to Dr. Pringle's opinion, whether the emetic be repeated or no, the purge must, at all events, always be given the next day, or the day after; and after that, as often as is consistent with the patient's strength, or the obstinacy of the fever requires. However, the necessity for continuing the purges, is rather determined by the pertinacity of the gripings and bearing down, than by the blood, that appears in the stools; and Dr. Pringle thinks it impossible



sible to effect a cure, without copious evacuations of this kind. He admonishes us, therefore, not so much to attend to the dose, as to the effects, which are not to be judged of by the number, but by the largeness of the stools, and the relief which the patient finds with regard to the gripings and tenesmus after the operation; for the stools are commonly more frequent from the disorder alone, than from the purges exhibited. In like manner, my friend Monro found, that a great part of the cure depended on the frequent repetition of the gentle purges he gave in the beginning, which are capable of evacuating the corrupted matter: he gave purges of this kind to the soldiers of the English army in Germany every second, third, or fourth day, according as the case required; for the effect of the first purge, and the symptoms that appeared after its exhibition, determined the number of times it ought to be repeated. Dr. Monro was astonished at the little loss of strength, which his patients suffered on being so frequently purged: he gave strong people these purges, sometimes two, three, or four days, one after another; and observed, that the patient, instead of being weak upon it, appeared stronger, chearfuller, and brisker, from the relief, that ensued at the end of the operation of each purge; as his corrupt, putrid hu-



mours, were now evacuated, that as long as they remained in the intestines, kept up in him a constant sickness and nausea. From these experiments, so very like my own, the truth of this great medical maxim appears, with respect to purges in the putrid dysentery; that in it, no other medicines strengthen the patient, than such as diminish his disorder; and that he is very often strengthened most, when he thinks he is most debilitated.

By the speediness of this method, in evacuating the corrupt, bilious matter, one may cut off the disorder at the root, if there be not invincible obstacles in the way; while, on the contrary, by neglecting this method, it will, at least, be very tedious. In the epidemy in 1766, I saw many persons cured in two or three days by evacuations, made immediately at the first attack of the disorder, and sufficiently repeated; though they had all the tokens of a real dysentery; a violent and long-continued cold fit, vast sickness, an inclination to vomit, bitterness in the mouth, heat, head-ach, great pains about the spine of the back, gripings in the belly, and a looseness, with a very small quantity of excrement. A woman of thirty-nine years, at Brugg, found herself precisely in this condition: I gave her, on the first attack, in the evening,



evening, four drachms of cremor tartari; this occasioned four large stools in the night-time: the next morning I gave her three ounces of tamarinds; upon this followed a great number of large stools, to the great ease of the patient, and the fever went off: I gave her, for that night, an ounce of cremor tartari, to be mixed with two quarts of barley-water; and on the third day, two ounces of manna with six drachms of the Sedlitz purging salts, which the same day put an end to the disorder. I have seen not a few examples of this kind: sometimes the attacks were smarter, and were nevertheless pretty quickly cured by the very same method. A young woman of twenty-three years of age, at Brugg, had, during the epidemy of 1766, very violent gripings for a whole week together: and at length a confirmed and extremely painful dysentery, with such a fever as I never yet saw at the first attack; a fire-red face, a strong pulse, profuse sweats, an extreme bitterness in the mouth, and a constant inclination to vomit: I gave her, at five o'clock in the evening, a vomit composed of forty grains of ipecacuanha, and twenty of cremor tartari; and two hours after, a drachm of the same salt, with a drachm of rhubarb: and it was astonishing, how much bilious matter was evacuated upwards and downwards with relief to the patient.



The second day, I gave her an ounce and a half of the Sedlitz purging salts early in the morning: the evacuation was copious, and the matter evacuated red and green; her pains were much relieved about noon, the fever at the same pitch, but the heat was, however, less. On the third day, I gave her again an ounce and a half of Sedlitz salts early in the morning; this occasioned half an hour afterwards a copious vomiting of bile, notwithstanding which, ensued a violent purging: twelve hours after that, all her pains vanished, and at four o'clock in the evening I did not observe she had any more fever; towards night her pain came on again, I gave half an ounce of cream of tartar with a quantity of barley-water, to be drank by degrees in the night-time; this occasioned many more stools, and her pain went off. The fourth day I found my patient in a very good condition, and prescribed her the tincture of rhubarb; in the evening she had some pain, and a bitterness in her mouth; I ordered her some cremor tartari for the night. The fifth day the girl found herself perfectly well, voided a worm, had no stools the whole day throughout, and got quite well. But when the best remedies, exhibited to evacuate the bilious matter in this species of dysentery, do not perform their office; the same thing happens, as is observed in the use  
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of their opposites, namely, astringent and constipating medicines. In the epidemy of 1766, at Brugg, a child of six years, naturally bound in his body, was seized with a dysentery; the bilious matter it cast up the first and second day in great quantities, convinced me, that this case was of the bilious kind; the softness of the pulse, and the pains being so tolerable through the whole course of the disorder, as never even to make the child cry, was a proof to me of the absence of inflammation; the child had stools without number night and day, but not one good; and the dysenteric matter remained so pertinaciously in his body, that I made use of ipecacuanha, manna with a small quantity of cremor tartari, tamarinds, and tincture of rhubarb in the quantity it is usually given to children of that age, without any effect: for on the fourth night he became perfectly light-headed, voided a worm, and had many convulsive twitchings. I saw him early the next morning, when he was quite out of his senses; his eyes were perfectly convulsed; he tossed and tumbled about in his bed; I felt the cold hand of death upon him, and accordingly he died the same day; thus giving me a proof, that a child may very quickly die even of the bilious dysentery, without a violent pain in the bowels preceding, a hard pulse or distended belly, and consequently without any preced-



ing inflammation, when a copious bilious matter, that stimulates the bowels to deadly convulsions, remains in the body. In fine, during the above-mentioned epidemy, I saw in the most decisive manner, in the case of a reverend clergyman, how much the invincible inclination for strengthening and heating remedies, and (which is the consequence of it) an aversion for every thing that evacuates, increases the disorder, and makes it more serious and dangerous in all respects; so that even so late as towards the end of it, tumours appear on the legs, and the completion of the cure is prolonged above five weeks; supposing one can force as many evacuating remedies on the patient, as is just sufficient to save him from impending death.

With regard to the choice, that ought to be made of the purges fit to evacuate speedily the bilious matter, Dr. Monro, Dr. Brocklesby, and Dr. Russel have made various experiments, which agree with mine. The purge which Dr. Monro chiefly made use of for his first patients, was rhubarb; but after repeated trials he found, in the same manner as Dr. Brocklesby, that in general, rhubarb during the first period of the disease, was not so good as the *sal catharticum amarum* with manna and oil, which operated without pain or anxiety, evacuated much better,



ter, and gave more relief, than any other purge made use of in the English army. According to my latest experiments, all this is perfectly true; I gave in the epidemy of 1766, manna and Sedlitz salts together in a draught, with much better success than tamarinds, but left the oil out. Dr. Monro prescribed likewise at Bremen, the tincture of rhubarb made with water, and found it an easy purge, but not so well coinciding with his views in recent disorders, as the salts and manna. This is also perfectly just; but yet I saw in the same epidemy some cases, in which tamarinds, manna, and salts, would not keep on the patient's stomach; so that in these cases, the tincture of rhubarb given in great quantities had something very excellent in it, as the stomach bears it very well, as it often takes off the vomiting, and, as it at last puts an end to the disorder, though not so soon as the tamarinds, manna and salts; nay it sometimes even puts the stomach in a condition to bear the above-mentioned remedies. However, after all, these last are most speedy in the cure; the case must be then, that children have much acidity in their primæ viæ, and especially in their stomach, which is a great obstacle to the purging quality of the tamarinds and cremor tartari, and on that account these medicines are very often of no use at all to children. Dr.

Francis



Francis Russel saw at Gibraltar, in the year 1756, a rife and mortal dysentery; after having made trial of a great number of remedies, he found that nothing gave greater relief or more forwarded the cure, than repeated doses of the *sal catharticum amarum*. I have also made use of this salt with benefit.

It has nevertheless been always thought that salts, and even acids of all kinds abraded the intestines. It is true, that all rough and irritating remedies should be avoided in this disorder; but the point is to know rightly, what medicines have this effect in the bilious dysentery, for in this very point many physicians have been deceived. Zacutus the Portuguese, indeed, was not afraid of arsenic in the dysentery; but his countryman Amatus condemns even tamarinds, on account of their stimulating acidity. Degner says that all salts, for example, *tartarus vitriolatus*, *arcanum duplicatum*, *sal polychrest*, *sal prunellæ*, and others, are often prescribed by physicians, absolutely in opposition to all the dictates of common sense and medical prudence; as by their corroding properties they only excite more violent pain and irritation in the ulcerated bowels: he did not therefore even think nitre safe, in the height, and during the progress of the disorder; as it increases the  
diarrhoea.



diarrhœa. Now it appears to me, that Dr. Degner has here drawn conclusions without sufficient foundation. For first, it is false that the intestines are ulcerated in the dysentery, so often as is in general believed; and where they should chance to be inflamed, or even absolutely ulcerated, no physician of any sense would be venturesome enough to prescribe a salt: in the second place, it answers precisely the physician's intention, when by means of a salt properly chosen the flux is increased, as long as there is any corrupt bilious matter to evacuate. However, Dr. Degner was not utterly ignorant of the salutary influence of acids in general; for he gives whey great encomiums, and even commends the copious use of lemon-juice, which he did not find stimulating; and is very fond of Moselle and Rhenish wines, purely on account of their acidity. Had this famous burgh-master of Nimeguen, properly distinguished the bilious dysentery from the malignant, he would not perhaps have rejected in the bilious dysentery, what he undoubtedly found hurtful in the malignant.

With regard to the use of acids in the dysentery, the force of truth, even in former times, broke now and then through the clouds of prejudice. Dolæus, a writer of experience, that  
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according to the error of the age he lived in, ascribed the cause of the dysentery to an acid, had, however, sincerity enough to recommend strongly a mixture of lemon-juice and oil, and confesses, that he had cured with this medicine above a hundred people of the dysentery. Riverius, in all fluxes that proceeded from a putridity of the juices, ordered biscuits to be repeatedly dipped in vinegar, then to be dried, rubbed to powder, and a soup to be made of them. Among the modern physicians the famous La Mettrie, with others, found vinegar, lemonade, and whey, of great service in the common putrid dysentery, as well as that the dread of fruit was without any grounds. Perhaps I have made more use of acid salts in the dysentery, than any other physician; for Dr. Tissot does not order, as it is inserted in the German translation of his Advice to the People by an error of the press, an ounce of cremor tartari, to be taken with two quarts of barley-water, but only two drachms; though at present he gives even an ounce at two or three times in a very little while. By this procedure I found, that the opposition of physicians (at least to acid salts) in the species of dysentery here treated of, comes entirely from prejudice.

Syden-



Sydenham has in the strongest manner recommended by his authority, opium and its preparations in the dysentery; though many objections have been made since those times against them, objections, that are certainly neither diminished in number, nor otherwise weakened by my experiments. I will not tire my reader with repeating them, but recommend to him the cautionary rules, that may be drawn from them, and which, when we make use of opium and other things of that sort, should always be present before our eyes. Alexander Tralles looks upon the conduct of those, that in the dysentery, immediately pour a great quantity of opium into the body, as rash, and without judgment; and Freind remarks upon this place, that these remedies do indeed for a time put a stop to the alvine flux, but after that only increase it, and besides this, attack the head, and weaken the patient; upon which account Alexander is of opinion, that opium should be only used on the most extreme necessity in this disorder. Soporifics and opiates were very much suspected by Degner in this disorder; as in his opinion, it is necessary to be particularly attentive to the patient during their use; and as they must never be prescribed without great caution, and even then not in the day-time; that by their obscuring and torpifying the  
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the senses and vis vitæ, the malady may not lie concealed, and thus have an opportunity to increase, and make greater devastations. Pringle says, that all preparations of opium and astringent medicines, are of service for a short time only, and make the disorder towards the end more dangerous than before; it would be therefore better, that opiates were not given at all, till the primæ viæ were cleared; for though they at first give some relief, yet by confining the wind and the corrupted humours, they tend to fix the cause of the distemper; whence it is, that the premature use of opium in the dysentery sometimes occasions a real tympany. This fixing of the morbid cause by means of opium, Dr. Pringle has proved by repeated experiments; though Sydenham does not seem to apprehend much danger in it. To be sure he did not omit to purge his patients when the dysentery was most epidemic; but at all other times he seems to have trusted to laudanum alone. But whatever was the nature of these fluxes, Pringle was very sure that such as are most incident to an army, are not of so mild a nature, and can never be cured without evacuations; the best rule therefore that this excellent physician can give, is to defer the administration of opium, till the patient has undergone sufficient evacuations, and then if it be still necessary, to begin with small doses.



doses. But when opium given with these cautions does not procure any ease, Dr. Pringle with the greatest reason looks on it as a token, that some corrupt humours still remain in the intestines, and that it would be of more service to go on with the evacuations, than to stop the flux.

Physicians of equal authority are of the same opinion with regard to opium. Eller has in like manner found, that notwithstanding the short relief perceived on the use of this medicine, the pain attacks the patient afterwards with new force; and that from its property of diminishing the tension of the fibres in the intestines, the expulsion and evacuation of the acrimony adhering to them, would be put a stop to; and thus the disease, that we are striving to get the better of by means of opium, is increased. Notwithstanding this, Eller gave some slight preparation of this remedy, but not before he had very much diminished and nearly put an end to the pains, and had evacuated the greatest part of the dysenteric matter; he had however immediate recourse again to a purge, and repeated it, as often as the tormina returned, and consequently as often as there were any signs of acrimony being collected afresh; shewing by this procedure, how very differently a physician,



physician should conduct himself in the various periods of this alarming disorder. Dr. Young in Scotland, who has written excellently well on the virtues of opium, gave it in the dysentery, only when the disorder was very mild, or when its violence had already remitted by the means of evacuants and emollients. Dr. Baker in England, found opium not adviseable in this disorder, till the excrements were pretty nearly of their natural consistence. My friend Monro found in the English army in Germany, that diascordium, philonium, and other remedies of this kind, put too great a stop to the alvine flux, occasioned a violent cholic, and increased the fever; he therefore made use of them very seldom in the first period of the distemper; he gave however an opiate at night, when he had purged the patient in the day-time, and even repeated it every night, though he had not purged him the same day; but found himself obliged to use a great deal of circumspection with regard to the dose, as long as the distemper remained at its height; he gave his medicines too only in a quantity sufficient to alleviate the pain, and procure some rest, but never enough to stupify the patient, or stop the alvine flux, while it kept within proper limits. All these prudential rules coincide with those, I have learned from my own experience.

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Next to opiates, Dr. Pringle, as well as myself, found nothing better for alleviating the pain, than fomentations of the abdomen and drinking chamomile-tea; the latter is also useful on account of its antiseptic quality. During the epidemy of 1766, I saw likewise at times in difficult cases, the gripings and even the tenesmus happily quieted by drinking plentifully of almond-emulsion, and sleep promoted by the same means. When the pains of the abdomen were too much fixed to cease on the application of fomentations or demulcents, Dr. Pringle applied with great success a blister-plaister to the part affected. Dr. Eller found a thick gruel made of barley, oatmeal, or rice mixed with a good deal of oil in a clyster, very serviceable in a violent bearing down of the anus; but I have likewise found remedies of this kind useless, and have therefore considered the real nature of this tenesmus, selected other medicines for it, and obtained my end in the year 1765, in the manner I have related in the fourth chapter. In the year 1766, proceeding on the same principle in a very obstinate case, (in which however the patient had undergone a great many evacuations, as well at the beginning as during the course of his illness) I first gave tamarinds for a violent tenesmus, that drove the patient to

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the heighth of despair, and afterwards the tincture of rhubarb in great plenty, with a good many clysters of gum arabic, a deal of almond-emulsion, barley-water, chamomile-tea, and likewise a small quantity of opium, without that relief ensuing that might have been expected; on the 15th and 17th day of the disorder, I gave him a draught composed of manna and Sedlitz salts; this procured, with much relief to the patient, (though the stools were few in number) an amazingly copious evacuation of a matter, which was at first without smell, and yellow, but soon after extremely offensive, and almost black. From this theory, founded entirely on experience, I can conceive the reason, why besides clysters, rhubarb is made use of for a tenesmus in the East-Indies.

In case that the patient was suddenly seized with a terrible pain in the bowels, and a violent tenesmus on a day, when he had not taken physick, Dr. Monro prescribed the purging salts with manna: but when purges and gentle opiates were of no effect, he ordered the whole abdomen to be covered with warm fomentations; and warm barley-water, thin rice-gruel, weak broth, or chamomile-tea to be drank plentifully by the patient; afterwards he gave emollient clysters in great quantities, and when they were not sufficient,



## THE DYSENTERY.

cient, a small quantity of the same, with an addition of one or two drachms of the tinctura thebaica. For he had observed that clysters of this kind, impregnated with opium, often gave greater ease than opium given in any other manner. When the bearing down in particular was very troublesome, a clyster composed of ten ounces of water, one ounce of the mucilage of gum arabic, two ounces of oil of olives, with a proper quantity of diascordium and tinctura thebaica, or else a starch clyster, gave more relief than any thing else. In some cases, in which the pain was quite intolerable and accompanied with fever, the Doctor found himself obliged to breathe a vein, and sometimes to lay a blister on that part of the abdomen, where the patient felt most pain.

Blisters not only act as palliatives in the dysentery, but likewise contribute towards the cure; being of the utmost use in extraordinary cases of this disorder, as well as in the immoderate diarrhoeas attendant on putrid fevers, and indeed in general in all obstinate alvine fluxes. During the epidemy of 1766, I saw some slight dysenteries in children of divers ages, from a year and a year and a half, to seven or eleven years old, extraordinary obstinate, and some-

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times



times very tedious. My friend Tiffot saw something like it about the same time, and complained likewise of the same obstinacy and tediousness of the disorder, but called it only a looseness; I on the contrary, by what I could see of it, judged it to be in reality nothing else than a slight dysentery, as it was accompanied with a constant and sometimes very violent fever, which was full as pertinacious as the flux: however, our care was not about the name, but about the best method of cure; and this was found out by Dr. Tiffot. The children under my care had most of the symptoms attending the putrid dysentery, though they did not come on them on a sudden: I sometimes saw an astonishing quantity of tough, thick mucus, vomited up at repeated times; and yet they had from forty to sixty stools in twenty-four hours, which were frequently very bloody, and of all sorts of colours, and always very small in quantity; they had however much less pain than is commonly observed in the dysentery, and for the most part none at all: one child only had a prolapsus ani. With some I made use of an emetic in the beginning; with others, of tamarinds, and with all, of the tincture of rhubarb and chamomile-tea: in this manner I cured in twelve days time, a boy of nine years of age, that for several years past had



had been in a perfect consumption, and afflicted with various ulcers; he had indeed been something better for a few months before, but was still plagued with a considerable ulcer about the spina dorsi, and a constant hectic fever. I had not the like success with all the children under my care: some did not get well in less than three weeks; and one, notwithstanding all the pains I took, and the application of three blisters, not in less than a month; though to be sure the blisters were applied too late, and at a time when the fever was at a very high pitch, and the abdomen stretched as tight as a drum. Notwithstanding these misfortunes, vesicatories merit the preference above all the remedies hitherto mentioned in these obstinate cases. Dr. Tissot ordered them to be laid on eleven children: on one they had no effect; with another they had a visible, but transitory success; with all the rest they did more towards the cure, than all the other remedies employed for that purpose, and they cured children that could not otherwise be brought to take any medicine at all. The Doctor commonly ordered them to be applied to the calves of the legs, and, when the belly was distended, to the nape of the neck; but I, for my own part, in this case, laid them upon all three places at once.



With respect to the diet in this species of the dysentery, I have already treated of the most necessary articles in the third chapter; however, there remain a couple of remarks and observations, which perhaps are not absolutely superfluous. All hard and indigestible food occasions in this disorder pernicious obstructions, as the bowels which are extremely weakened, and indeed almost disabled, are not capable of propelling such a globular mass as must here be necessarily formed; I cannot therefore comprehend the reason, why Degner, during the whole course of the dysentery at Nimeguen, allowed his patients to eat potatoes. On the other hand I now perceive, why some physicians in the foregoing century, shewed such an aversion to drink; as I have since that seen cases, in which every spoonful the patients eat, if they drank after it, gave them a stool on the spot; but this very thing ought to have been an indication to them, to allow their patients to drink the more, instead of forbidding them to drink at all. Monro prescribed for the soldiers under his care, barley-water and thin rice-gruel in great plenty; and nothing, according to this great physician's observations, conduced so much to the cure of the dysentery, as the copious use of such drinks, as obtund and involve the acrid humours,



humours. In the epidemy of 1766, I heard much said in praise of milk, especially in various parts of the canton of Zurich; but I did not hear of any genuine and good observations, as nothing but the common talk came to my ears. Dr. Pringle never allowed his patients milk, even when they were getting well, except it was diluted with lime-water; as he observed, that milk by itself had a great tendency to increase the gripings. I allowed many of my patients grapes in the above-mentioned epidemy, without having ever observed any thing in them, otherwise than what was perfectly innocent; but, on the other hand, found in some obstinate cases, when the patient was recovering, though very slowly, that this fruit being permitted him without laying aside his other medicines, at first purged him very well, afterwards diminished the stools by degrees, and finally restored him to perfect health.

The mind, in the dysentery, as in all other disorders, has likewise need of a regimen. I shall in this respect only cite a couple of observations, to shew how the mind may do harm to the body in the dysentery: for more refined and metaphysical considerations on the regimen for the mind, a subject, I intend to treat of in



another work, would not suit with the simplicity I have adopted in these pages.

The first observation is on the pernicious effects of impatience. I have already said in my work *On Experience in Medicine*, that such persons as will not bear with any thing, are not only sooner ill than others, but are also much longer and more violently so; because the continual alarm of their passions, their tormenting fears at every increase of their indisposition, their restless and unremitting anxiety, that is not to be soothed by the tenderest endeavours of their nearest and best friends, always recalls to them the sensation of their malady; and likewise because by the perpetual disorder of their sensitive faculty, the regular and usual course of the distemper is changed and disturbed.

A man of forty-five years, at Brugg, that had been more used to indulge himself in the pleasures of life, than bear with its calamities, who for that reason had already been almost driven to despair with a mere head-ach, and in many considerable illnesses had been a melancholy instance of the greatest want of submission to his fate, that is possible to be shewn by man, was attacked in the epidemy of 1766, with a violent



violent dysentery. He had for a long time the advice of our famous and admired physician Dr. Fuchsin, and at last, without the least necessity for it, called me in to consult with him. I searched into the circumstances of the patient's complaint, with the greatest attention, and found that Dr. Fuchsin had pursued the best method possible: all the medicines he prescribed, had been effectual; the fever was cured, his gripes were gone, and the colour of his excrements were natural, only his stools and tenesmus were still considerable; in short, I found the sick man happily delivered from the danger of death by his first physician, the illness quite on the decrease, and nothing now seemed more to be done than to finish the cure. This province was given over to me. I laid it down as an indication, to remove the tenesmus gradually, by attemperating and expelling the peccant matter still remaining in the cavities of the intestina crassa, and so by this means put an end to the disorder. The patient had much ease; often during a whole day or night very little bearing down, and a good sleep of many hours duration: but yet the tenesmus returned from time to time, and each time in consequence a state of despair, which it is impossible to describe or give a name to; the patient's mind was obscured with a dark cloud,



cloud, which vanished as soon, as he had company. But when his friends took their leave, all comfort, hope, or views of future joy went with them; his usual anxiety then returned, with its long, black, and horrible train of melancholy ideas, even when he had no pain, even when he had just awoken out of his sleep and found himself in bed. The effects of this terrible condition of his mind, were now very bad, and therefore deserve to be described in a work, that is intended for the benefit of mankind. This truly to be pitied man, had been as well purged at repeated times of all acrid and corrupt bilious matter, as he possibly could be; his excrements very often did not shew the least signs of corruption, but in consequence of his miserable lamentations, whining, and mortal anxiety at each twitching about his anus, his bile overflowed each time, and immediately on that his excrements were green. I was thus driven backwards and forwards, without coming nearer to the point for many days, till at length, by the use of some medicines opportunely exhibited, these twitchings about the anus went off: but it was five weeks, reckoning from the commencement of his disorder, ere he grew perfectly well.

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The second observation is on the violent effects of wrath. Not the vulgar, but people of penetration, that is, heads that are capable of comprehending things in a philosophical manner, will easily see from this account, that a violent and often repeated provocation to anger, in a dysentery otherwise attended with a putrid fever, had converted this putrid fever to a malignant one, and that a fever of this sort became mortal, from a disposition of the bile quite different from that in the preceding case; though there was no inflammation in the bowels, and therefore nothing that could occasion a gangrene in those parts.

A man at Brugg, under the middle age, who by nature was inclined to anger, and was in circumstances of being often provoked to effusions of the gall, and had besides for many years before been very often seized with a sudden sickness at the stomach, had during the epidemic in 1766, the dysentery for four days, in the shocking manner described above under the article of Emetics. On the fifth day in the morning, he brought up six large round worms, he was as to the rest, still free from his pain, but not from his fever; the very same evening six more round worms came again out of his mouth; in the night he was obliged to

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go very often to stool, his excrements were now white, with but little blood in them, and the patient himself free from pain. On the sixth day he had a good many stools, but was still without pain; on the seventh day, his stools were as few again as on the foregoing, his fever was very inconsiderable, and he without pain; he was just in the same state during the whole night.

On the eighth day at five o'clock in the evening, I perceived on coming into the sick man's room, a horrid change. His face was as pale as death, his lips white, his eyes fixed and yellow, his looks wild, his whole body in anxious motion, and all his discourse was nothing else than a continual very boisterous clamour for cold water. Astonished in the highest degree at the horrid aspect of my patient and his disorder, I however asked the poor man with the greatest seeming indifference, if he had not had any great pain in the bowels, which had gone off on a sudden? he answered me, No: Whether since the fourth day of his illness, notwithstanding the frequency of his stools, he had not felt any more pain in the least in his bowels? he answered me still in the negative: I then asked him whether he had not found a difficulty in swallowing since the morning? he said he had: Whether he did not perceive a vast bitterness in his mouth? Yes, he did: If he



he had not anxiety at the breast? he had: Whether he was obliged often to go to stool? Yes: Whether his excrements were black? No, they were not: If they stank very much? No: Whether his urine did not scald him? it did. The by-standers told me withal, that the sick man dozed for a couple of minutes, at which time his eyes were convulsed, and that at times he was perfectly light-headed; his voice was also utterly changed, his pulse feverish, but weak; and in short, he was not to be known again. I gave him quickly some few tender admonitions of no signification, then slipped away out of his room, and told the family, that I would lose my head, if there was not a quite peculiar external cause, which they would not tell me of, that had subverted the course of my patient's disorder in so extraordinary a manner. After a long scrutiny into the affair, I now first found out, that he had been often vexed in the course of his distemper, but had that day in particular had a violent fit of anger, which had immediately brought about the change; I now comprehended every thing. Agreeable to the usual effects of wrath, the patient was farther attacked in the night-time with a very bad pleurisy, a considerable cough, and a violent head-ach; the anxiety too at his breast



breast remained, together with a vast bitterness in his mouth, and he had every hour three stools, which were still partly bloody. I thus saw a great effusion of the bile, and real symptoms of malignity, joined with a very violent dysentery.

On the ninth day early, I found the patient's countenance as pale as before, and the whites of his eyes quite yellow; but his looks were not quite so wild, and his lips a little redder. I had it now in my power, with some rays of hope, to bring his extremely dejected mind into a perfectly quiet and gentle state; I therefore, notwithstanding the vast danger he was in, still gave him hopes of life, and every time I came into his chamber, put on an air of cheerfulness. After I had now begun to treat the disorder as a malignant one, my patient vomited with great relief. He had no more sickness at stomach, his pleurisy vanished, the bitterness in his mouth went off, his head-ach was very tolerable, he had a better complexion, and all this happened in so short a space of time, as from the morning till the noon. At five in the evening his complexion was again very good, his eyes were no more yellow, and his head-ach had ceased; but all day long he had five or six stools every hour. I looked



I looked at them, and found them of a citron-yellow colour, very spumous, somewhat mixed with blood, and yet not offensive to the smell. He still complained of a very violent heat in his urine, and even of an excoriation of the extremity of the urethra, also of an oppression and strangulation about the region of the stomach, and of an inclination to vomit; all the night long he had six stools every hour, very small in quantity, red, yellow, and green. As to pain, he had none in the least, but was very weak.

Early on the 10th day, I found my patient to all appearance quite without fever, but still plagued with the oppression and strangulation at his stomach, and to be sure infinitely weak. Soon afterwards he vomited a copious thin matter as green as grass, with three large and live round worms; in a moment the oppression and strangulation in his stomach vanished, and he again became somewhat chearful. All that day he had six or seven stools in an hour, which were yellow, green, and white. At seven in the evening, I found him without that anxiety, indeed, about the pit of the stomach, but infinitely weak and dejected in body and mind; but on having taken a proper cordial, he said he found himself heartily well, slept likewise



likewise from time to time, and had, instead of seven, but two stools in an hour, which were in other respects like the former. On the eleventh day, I did not see my patient till three in the afternoon, and immediately found in his countenance such a chearfulness, as I had not before remarked in him, and much more strength in his voice; he had not more than two stools in an hour, which were less bloody than the former; his fever appeared to be very moderate. All night long till morning, my patient was astonishingly chearful, brisk, and free from all pain.

On the twelfth day my patient was again extremely vexed, which cost him his life. His eyes and face were of a vastly deep yellow colour, his looks were wild, and his mind was quite overwhelmed with melancholy; he was obliged to go to stool two or three times in an hour, he had some fever, and great heat in his urine, but otherwise not the least pain in the abdomen, nor bearing down; in the night, indeed, he had only two stools every hour, but no sleep; a considerable degree of terror and anxiety of mind, yet the heat of his urine went off. The thirteenth day he had two stools an hour, not the least pain in the abdomen, a yellow complexion, a violent cough, a considerable



siderable hoarseness, great difficulty in swallowing, a pulse slower than natural, and very dejected spirits; in the night-time two stools an hour, (with one of which he had voided a large round worm, the seventeenth that had come away from him in this sickness) no pains in his belly, but a constant cough. On the fourteenth day in the morning, I found this cough so violent, that he could scarcely speak; he was very hoarse, his eyes very yellow, he had to be sure some spirits, but those very low; no pain in the belly, no bearing down, but a vast irritation and oppression at his breast. From the morning till noon he voided nothing but a yellow liquor without blood; from that time till four in the evening he had very few stools, more oppression on the breast than before, a continual violent cough, a slow and weak pulse, his eyes fixed, and a very hoarse voice. From four till seven o'clock he had two stools, consisting of a yellow watery matter. At seven o'clock his voice was almost gone; he had an inclination to dose, was very little sensible, sometimes an answer could be got from him, but with inconceivable trouble; he fetched his breath with great difficulty, his pulse was very weak, and scarcely quicker than in health; he rattled gently in the throat, his tongue was

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of a dark-brown colour, and at ten o'clock at night he died.

Thus, by the force of the most powerful of all passions, the putrid species of the dysentery turned, in this poor man's case, to the malignant; and just as these symptoms of malignity began to cease, a new fit of passion brought on once more an effusion of the bile, and a fatal deposition of that humour on the breast. Instances of this kind are by no means uncommon.

I hope I may be permitted to farther give a few hints on the manner, in which we must conduct ourselves; when the cure is imperfect, when a relapse is apprehended, or when the patient has actually suffered one. Dr. Pringle prescribes in the first case the same diet, as during the first attack, and some gentle astringents; this last intention he fulfilled with lime-water, of which he gave a pint every day, with half that quantity of boiled milk; he sometimes found small doses of the bark not less effectual, added to the extract of Campeachy-wood, or the tinctura Japonica: though it appears to me, that tincture of rhubarb alone made with water may serve instead of them all; and Dr. Monro has found, just as I did, that rhubarb towards the end of the disorder is of great service, though



though at the beginning it did not answer his expectations. Dr. Eller advises gentle astringents and corroborants joined with slight opiates, towards the end of the disorder, when a great diminution or perfect cessation of the tormina shew, that all the acrimony is evacuated. These remedies are cascarilla in powder, or the extract of it given with simple cinnamon-water, with an addition of the extract of orange peels, and a small quantity of the *pillulæ ex cynoglossæ*. But on the least griping that his patient complained of, he had immediate recourse with the greatest reason to rhubarb and manna; and laid it down as a maxim, that evacuants of this sort must be repeated as often as the pain returns; that the acrimony may not be collected again by degrees, and produce the disorder afresh.

In relapses, what was done in the original distemper, should be likewise done now, in proportion to the patient's strength. But it must be remembered withal, that it is full as dangerous to suppose too little strength in the patient, as too much. In the epidemy of 1766, I saw relapses happen to some children from laying their medicines aside too soon, and likewise to some adults, from their having exposed themselves too soon to a moist air, or ventured



too soon on indigestible food, or from their having been put into a passion. I cured the children with manna, tincture of rhubarb and almond-emulsion; and adults with rhubarb, or cream of tartar, or else with this salt alone; though sometimes I returned again to the ipecacuanha. A young woman at Brugg, about thirty years old, having been exposed to the rain during the vintage the whole day, was wet through to the skin, and immediately upon that was seized with the dysentery in an extraordinary violent manner; I gave her forty grains of ipecacuanha, and the same quantity of cream of tartar, to be taken all at once, and two hours after that, a drachm of powder of rhubarb, with the same quantity of the above-mentioned salt for one dose; with all these medicines, she voided both upwards and downwards an amazing quantity of a bilious matter, with much pain. The second day I gave an ounce and a half of Sedlitz salts; this likewise brought away an astonishing quantity of bilious matter, with the greatest relief to the patient; I gave her then for that night, half an ounce of cream of tartar to mix with a quart of barley-water; this she drank all out, and her pains went off entirely. The third day she thought herself perfectly well, and in the morning before break of day went to work in a very damp



damp place; but not being able to stay there above an hour, went away, and was seized with a violent continued cold fit of a fever, and with such a pain in the abdomen, that she did nothing but turn and wind in her bed, with the most horrid cries; I gave her forty grains of ipecacuanha, with the same quantity of cream of tartar, divided the whole into four doses, and ordered her to take one of them every hour, with a good deal of chamomile-tea. This occasioned her, without any extraordinary sickness at stomach, to vomit after each dose, only once indeed, but that gave her great relief and a good many stools; in the night-time I gave her half an ounce of cream of tartar, to be taken in barley-water, with which my patient, after a good many copious stools, found herself better and better by degrees. On the fourth day in the morning, she wanted to slip from me again, but I forced her to stay at home and follow my orders: I let her have nothing else all day long than almond-emulsion, her stools were no longer copious, and her pain very inconsiderable; but towards evening she was put into a passion, and directly upon that her pain was three times as violent as before. The fifth day I gave her eighty grains of powder of rhubarb, with the same quantity of cream of tartar, and divided



it into two doses, which purged her very smartly and put an end to her complaint.

To this section on the cure of the bilious dysentery, I will yet add a sketch of an universal method of curing it, which deserves notice, and which I recommend to be made trial of, though it should not square throughout with my own opinion; for I am not at all solicitous about that, but only about the truth, which ought to be above any other consideration. Dr. Duncan, one of the physicians in ordinary to his present Britannic majesty, followed this method in the dysentery of 1762.

After having taken away a greater or less quantity of blood, according to circumstances, from such of his patients as were plethoric or feverish, he gave every half hour four ounces of the following julep, till it occasioned a vomiting and purging; namely, three grains of tartar emetic, and two ounces of manna dissolved in a pint of barley-water. The next day, and for five or six days following, he gave his patient as much as was necessary to purge him well, of a drink composed of manna, tamarinds, and tartarus solubilis. When the irritation and pain were very great, he found manna dissolved in the almond-emulsion, sufficient



cient for his purpose: if the pain and tenesmus were too violent to be borne, he found a clyster of chicken-broth, or an infusion of linseed in warm water, with an ounce or two of oil of sweet-almonds dissolved in the yolk of an egg, of great use, given once or twice a day. He was in general very well pleased, when the first evacuation by stool was very large; and he was still better pleased, when he was able to procure this by gentle means. In this manner he often cured the dysentery in a few days, without giving any more medicine. But when the disorder lasted above six or seven days, he then added thirty or forty drops of the tinctura thebaica to the clysters, and ordered a scruple of extract of Campeachy-wood to be taken three times a day, in a proper kind of vehicle. He allowed his patients nothing to eat but boiled rice, sago, panada, and the like, but no meat, and not even chicken-broth in the beginning of the disorder, no more than oil, butter, or any other kind of fat. For their drink in common, he gave them almond-emulsion, thin rice-gruel, or barley-water with gum arabic. Out of eighty sick of the dysentery, Dr. Duncan lost but one, who was dying when he sent for him; and they were all treated in this method.



I conclude in fine, with a word or two on some remedies and methods, which are erroneous in dysenteries of the bilious kind. All very violent emetics and purges ought to be rejected; as by the former the body is attacked too roughly, and by the latter all its liquid parts are brought into the intestines, digestion is spoiled, the intestines weakened, and sometimes covered with slight exulcerations, that terminate in an incurable diarrhoea. Scammony, aloes, and all resinous purges are improper, and increase the pain. Many physicians of great consideration in Switzerland make use of nitre; as this disorder is undeniably accompanied with a fever, and, as they imagine, every fever requires nitre. But Dr. Tissot has shewn, that nitre is of more hurt than service in the putrid fever, and that it rather promotes than lessens putrefaction; as it only dissolves the putrid matter more than it was before, and makes it fitter to pass into the blood, instead of properly evacuating it. I therefore look upon salt-petre, at least in the bilious dysentery, as entirely useless; since in the opinion of that great enemy to all empirics, Dr. Hirzel, (whose penetration and caution in examining into the causes and effects of every thing, that happens to his patients in the course of his practice,

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are not to be exceeded) it is of no real use, with respect to the disorder itself.

Of all the species of dysentery, the malignant deserves the greatest attention, as well of itself, as more especially on account of the method of cure appropriated to it, since this is also very contrary to all other methods; and as Mr. Rahn's famous work on the dysentery is still overcast with some clouds, with respect to the distinguishing character of this particular species. The precise determination of this character lays a much better foundation, (at least in my opinion) towards an exact knowledge and judicious treatment of this peculiar species, than mere receipts; especially as according to Gruber's account, in the epidemy of 1746, in the middle of the city of Zurich, a world of people died for no other reason, than that many a good honest practitioner with his receipts in his hand, was not acquainted with this truth, which indeed is not to be found in the code of empiricism.

In the cure of the malignant dysentery, a pure air is above all things requisite. It has been found in the army, that the more the sick are distant from one another, and the better the hospitals are provided with purer air than usual,  
the



the less number of people there dies of this otherwise extremely dangerous species ; so that those quarters were always the wholesomest for the soldiers, in which, on account of broken windows and other want of repairs, the fresh air could not be kept out. In general the greatest danger proceeds from an impure air, which can never be made amends for either by diet or medicine. But cleanliness likewise in all respects is here of extreme importance ; for we find in the military hospitals, that not only the most airy and spacious quarters must be pitched upon, and the number of sick in them be lessened as much as possible, but that in general the hospital and patients must be kept extraordinarily clean. If all this be not done, the malignity spreads to the other patients, a great number of them die, and even the most powerful remedies are without effect. Nay, when the infection once becomes considerable, the greatest caution, and some space of time is requisite, before the hospital is entirely quit of it.

It must be owned that these observations have been made in the camp, and may therefore be thought of no use to my peaceful country ; but I have already said in my work on Experience in Physic, that a worthy minister told me, he often went into houses during the dreadful dysentery of



1756, in a village something less than an hour's distance from Bern; where in one very low, small, and close chamber, a couple of dead bodies lay upon the table, and four or five persons sick of the dysentery, men, women, and children, in their bed, who had a vessel standing open by them, in which they did their needs. We see then plainly, that we have also cases at home, in which the dysentery, through the accidental corruption of the air, must not only be contagious, but even extremely malignant; as without this additional circumstance it has influence enough to breed the malignant fever. It is therefore also not to be doubted, that a fever of this kind not only insinuated itself in the year 1750, in more than one place appertaining to the canton of Bern, but also in 1749 and 1751, in which same years the people of the canton of Bern in like manner died of the dysentery in great numbers. Now, even in those epidemics of the dysentery, which are indisputably benignant, as well as in epidemics of the malignant fever, there are always here and there malignant dysenteries, in which the observation of these rules is of the greatest importance. And as we see plainly, that malignant disorders invade Switzerland daily more and more, perhaps the dreadful time may come  
but



but too soon, in which such rules will be looked upon with less contempt.

Evacuations must be sometimes entirely omitted in the malignant dysentery; sometimes emetics are noxious at the beginning, and on the contrary purgatives are serviceable. It is very often necessary to give a vomit at first, and afterwards purges.

Now and then, and especially in case the disorder be not as yet well known, a vein is opened directly at the beginning of malignant fevers; when the patient complains of a violent head-ach, and his pulse is quick and full. Venæsection is even sometimes repeated; if a pain in the side, or a violent one in the bowels discovers itself; if the patient be otherwise of a strong constitution, and if a plethora still be observed at the very time; that one thinks of giving the bark; but in other circumstances it has always been seen to do harm, and weaken the patient too much. Venæsection has been advised and tried in Switzerland without due consideration, even in the malignant dysentery; but in other places the sick have been seen to die upon the use of this remedy in the most deplorable manner; and I read in Dr. Baldinger's important treatise on the Diseases of the Army, which,



which, to my detriment, was not known to me till just before this sheet was printed off, that it was at least not serviceable in the Prussian army during the last campaign. I, for my part, entirely reject venæsection in the malignant dysentery on this account, especially as I have already found it unnecessary in the bilious dysentery.

Emetics too and purges must be omitted, when the excrements are quite watery, and so inexpressibly copious, that the patients within the space of twelve hours seem as if they were dying, and sometimes actually die; in which case all evacuating medicines should be avoided, and recourse be immediately had to strengthening and constipating medicines.

Emetics are omitted occasionally, when in particular circumstances or times experience shews that they are noxious: and sometimes they do not make the patient vomit in the least. In that extremely malignant dysentery, that happened in Saxony in the year 1746, and which is so excellently described by Dr. Vater, ipecacuanha at the beginning of the disorder was manifestly hurtful; though on the other hand, during the progress of the same, it did very good service. In the malignant dysentery,



tery, that appeared the same year, though in a much less degree, at Zurich, emetics were found just as noxious; for as to their effects in benignant cases, it is not here the question. Siegesbeck has described in the Breslaw Journals, a dysentery of the malignant kind, observed by him in the year 1717, in which the choicest ipecacuanha, which had excited vomiting in all other cases, did not provoke it in the least at the beginning of the dysentery, even given at the time when the patient absolutely retched to vomit. In like manner I saw in the epidemy of 1766 at Brugg, an extremely malignant case in a boy of seven years, whom, on the first day of his disorder, I could not get to vomit with twenty grains of the best ipecacuanha, neither had he any stool from a purge, that I gave him directly after. On the second day he was obliged to go to stool often, but, except a large worm, he hardly voided any thing at all; he looked very oddly, his eyes were as fixed as if they were made of glass, his head vastly heavy and stupified, and the lad was indifferent to every thing, even to the pain in his belly, which he only spoke of now and then when I asked him about it; I could not find any pulse he had, though I felt for it all over his body. About eleven o'clock at night he grew quite cold, had often convulsive motions in his eyes, was  
forced



forced to go to stool four or five times an hour, his excrements were black, and each stool did not amount to the quantity of half a tea-spoonful. The third day in the morning, I found the child in the same stupified state as before, his face and lips quite pale, his eyes fixed, his tongue brown, no pulse in any part of his body, though none of his limbs felt in the least cold; he often fetched a deep sigh, and told me with the most extraordinary indifference, that he had a pain in his belly. On his hands, arms, back, neck, and breast, I found many thousand very small brown and bluish spots, the very worst sort of petechiæ. I saw him again at two in the afternoon; he went to stool very often, but each stool was not half a tea-spoonful; about four o'clock he was at times cold, and the spots then appeared paler, he went seldomer to stool, and did not void any thing; at six in the evening I found him in the same condition, with the same indifference about his pain, which still remained; he had a frequent and very violent bearing down, and did not bring away the least excrement. From nine till eleven o'clock at night, he still spoke at times, when he was spoken to, but always with the greatest indifference, and without any other symptom intervening, he died at half an hour past one the next morning.

Where



Where then emetics do not succeed, we keep to purges alone; and when these too, as in the case just related, have no effect in the least, we endeavour to promote sweat, if nature appears to incline to this evacuation. Professor Vater gave with no small relief to his patients, in the dreadful epidemy in Saxony, directly at the beginning of the disorder, gentle and sometimes likewise smart purges; the first to such as had very copious stools, the latter to such as with a considerable bearing down, had no stools at all: however, he kept to gentle purges even in the last case, when the tenesmus was quite intolerable: in all cases he gave three or four hours afterward something strengthening, and repeated this procedure every two days, with good success. In the epidemy at Zurich, the judicious Dr. Landolt, at that time chief physician to the city, gave sudorifics immediately at the first attack of the disorder; when the patient had as yet no pain nor alvine evacuation, by which means he in effect forced out the exanthemata with good success; but when the sick did not ask his assistance before the fourth day; when their pain was great, and their stools copious; the Doctor prescribed a dose of rhubarb, and did not till after that provoke the sweats. Perhaps in this last method of proceeding, the eruptions did not follow; though Dr. Gruber does  
not



not say any thing about it: but I know too well, both from my own experience and that of others, and will prove it in its proper place by apposite observations, that in general a miliary eruption, and even the petechiæ, may be very often prevented, when proper evacuations are made directly at the commencement of the distemper.

On the other hand, when the stomach and bowels are loaded with great quantities of corrupt matter (which is often, though not always the case) the evacuation of the former is of vast importance, as well as of the latter; especially, if the cause of the sudden and total dejection of the patient's strength be situated in the stomach. In general ipecacuanha is used in malignant fevers, when the patient complains of much sickness at stomach; and he commonly finds himself better a few hours after having taken it. This emetic should by rights be given at first; but (when it has happened to be neglected so long) it has been often found very serviceable, when given at the eighth, ninth, nay twentieth day in malignant fevers; and it may be always given after the commencement of the malady, when no inflammation is observed in any part, and the patient has still some force left. It is also repeated in the course of the disorder with good effect;

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if



if the nausea and sickness at stomach return, or in case that the stools smell uncommonly offensive. Huxham saw very often in a malignant fever an astonishing change for the better ensue on a vomiting with stool supervening on the eighth or ninth day. Dr. Brocklesby is convinced from repeated trials, that gentle vomits prescribed even a second time on the seventh and eighth day in these fevers are of service, and even after that time, if ordered with prudence. There is much also to be learned with respect to the evacuation of the putrid humours, from what Dr. Baldinger says on the method of cure in the fever, with which the Prussian soldiers were afflicted, by the German physicians usually called the malignant catarrh fever, and by me simply the malignant fever.

These observations are however not to be absolutely relied on without some exception in the malignant dysentery. Ipecacuanha is without doubt the principal remedy in this species of dysentery; but it is of the greatest importance to give it by way of emetic directly at the beginning, before all the humours of the intestines are infected: its operation is promoted by chamomile-tea, which perhaps is much more requisite in this disorder than in any other; as chamomile flowers are extremely antiseptic.

Seven



Seven or eight hours after this first evacuation by vomit, rhubarb should be given in order to procure an evacuation also by stool.

Some great physicians do not stick at making use of manna, sal catharticum amarum, and oil, or any slight purge of that sort ; but prescribe after it a gentle opiate at night, to ease the patient's pain, and give him some rest : they likewise repeat this purge three or four days after, that the putrid excrements may not be collected in the bowels in too great quantities. Dr. Monro does not hesitate to give gentle purges from time to time throughout the whole course of the malignant dysentery, when he has done every thing else in the mean time requisite in a dysentery of that kind. A person of equal reputation, Dr. Baldinger, late physician to the army of the king of Prussia, gave purges as long as any pain was perceived ; but he also saw with great penetration into the true use of ipecacuanha, which he mixed with equal parts of rhubarb, and gave the first day to the quantity of twenty grains, and afterwards five grains three times a day.

However it is best perhaps, after having purged the patient with rhubarb, to have recourse again to the ipecacuanha alone, and that on



account of the antiseptic powers quite peculiar to it, and of the great use, it is found by experience to be of in malignant disorders in general. This however must be given only in very small doses to the quantity of two, three, or four grains at most, every two hours, with a tea cup full of chicken-broth, or of veal-broth, to which is added a small quantity of chicken-broth, with scorzonera roots, carrots, or celery.

These broths (as much as I have otherwise spoken against them in the bilious dysentery) should be the patient's only food, and that with a view to keep up his strength: for the degeneracy of the humours in malignant fevers seems to differ from the degeneracy of the same in the bilious species not only in degree, but even in characteristic symptoms: the considerable difference subsisting between the medicines employed in bilious and malignant dysenteries, shews the necessity for making this difference in diet, especially as it is of great importance to keep up the patient's forces in malignant dysenteries, with what is found to do it by experience; and this quality belongs incontestably to chicken-broth, though in other cases it has manifestly a contrary effect. But if it be found necessary to strengthen the patient more effectually, some crumbs of bread are to be boiled in the broth, and



and directly after eating it the patient should take every four hours a spoon full of old white wine, which must not however be too strong. The Frankfort, Moselle, and Rhenish wines are most proper for the Germans; the wine from the marquise of Baden and the Lacote wine for us; and for the French, a wine very like the last mentioned, which comes from Grave in Guienne, a few leagues from Bourdeaux, on account of their respective cordial, and at the same time antiseptic powers.

Wine does as much good in this species of dysentery as harm in the others: though some Swiss philosophers, quite ignorant of medicine, are as little informed of this, as of the slightness of some and the malignity of other cases in the dysentery; and yet proud of their sophisms, think themselves able to overturn with one whiff of their breath the pillars of physic, and with their shallow doubts quibble the physicians out of all pretensions to the least certainty in their profession.

In malignant fevers in general, according to the observations of her Britannic majesty's physician in ordinary, now Sir John Pringle, nothing exceeded the effects of wine in such pa-



tients, as were weak and deprived of all strength. His patients shewed a particular desire for something cordial; when, together with a slow and weak voice, they had had the fever a considerable time; and nothing was then so salutary as wine: they did not long after any kind of food, but yet eat with a great deal of pleasure a little soup with crumbs of bread, provided there was wine in it. On the other hand such as were delirious, with a \* quick voice, wild looks, subsultus tendinum, or violent gestures, could not bear either wine or heating medicines, nor even common cordials. Now Dr. Pringle will have the malignant dysentery treated in general like a malignant fever; he therefore advises the use of wine in certain circumstances in this dysentery: he allows it in general in this disorder, when the patient's strength is decreasing, and his voice low and weak; but he adds that we can be never absolutely sure of the effects of wine, till we have tried it. Dr. Monro in like manner made use of wine in the malignant fever with great success, and in general the latest and best physicians in Great-Britain agree in this respect. In the malignant dysentery one of the greatest masters of our profession, her imperial majesty's

\* These are Sir John Pringle's words: though the German (by mistake, as I imagine) has it "weak voice."



first physician, baron Van Swieten, orders an ounce to be taken every hour of a diet drink, which consists of half a pint of wine, a pint and a half of barley-water, one ounce of cinnamon-water, and six drachms of sugar.

Acid liquors are usually given in malignant fevers, as plentifully as ever the stomach and bowels will permit. But the latest discoveries with us have shewed, that acids given alone are noxious in these fevers, and more especially in malignant dysenteries; in which therefore the excellent Dr. Schintz in Zurich, seems with good reason to be afraid of fruit; though professor Vater saw a malignant dysentery cured with raw prunes. The bowels are in this dysentery so much weakened by the venom which they harbour, that they can neither bear the same quantity of liquids, nor those of so very emollient a nature, as in the other species of dysentery. A too great quantity of liquor finds no passage out of the body, increases the anxiety, distends the belly, and causes a retention of urine. The same happens, when the liquor is only emollient; by which besides the patient's weakness is increased. This same debility is also the cause, that the use of pure acids, which are otherwise an antidote to putridity, does more harm than good in the malignant dysentery; for which reason the patient's

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drink



should be neither in too great quantity, nor too emollient, nor too acid. A ptisan of fresh Seville oranges cut into thin slices, strewed over with some sugar, and infused in boiling water, possesses all the qualities here requisite; the peel is aromatic, the white has a kind of a corroborating bitterness, the juice is acid, and all this together has a very good effect. A great many succedaneums to this ptisan may be prepared by pouring water on a bitter substance, and then making it a little sour. But when the patient's loss of strength is extremely great, wine is the only acid that should be made use of.

Clysters of a laxative, emollient, fat, oily nature, are pernicious. A great many clysters should never be given, and those not large, at most not containing above seven or eight ounces: the only proper ones are such as consist of nothing but infusions of bitter herbs and flowers, as chamomile flowers, melilot, and burnet.

Some physicians, who first remarked that the watery pustles appearing on the skin were of service, and yet did not know, that instances of cutaneous disorders, that went and came according to the increase or decrease of the diarrhoea, are to be found in the writings of Hippocrates, and that Themison has long since advised the use of  
cupping.



cupping-glasses, ordered their patients to be cupped with the best success. Others ordered their patients arms, thighs, and legs to be burnt with red-hot irons, as directed by Hippocrates, and very much practised in the sixteenth and seventeenth centuries; which, in a very bad epidemic, accompanied with black spots all over the body, that happened in England in the year 1513, was the only means of recovery. In our times we know the art of doing as much or more service with infinitely less pain. Galen advises in the dysentery every thing in general, that draws the morbid matter to the skin, and many have followed this doctrine. Restaurand published 90 years ago divers observations on obstinate diarrhoeas and dysenteries, that he had cured not only with red-hot irons, but also with blisters; and Theophilus Bonnet says, that these last are the most effectual of all remedies to procure an afflux of the humours towards the skin.

However, for as much as I know, these hints have not been pursued; for Dr. Pringle and Monro made use of blisters merely for the pain. The honour of first having revived the use of vesicatories in malignant dysenteries, belongs to two physicians illustrious for their inventions in the practice of physic, Dr. Hirzel of Zurich and Dr. Tissot, though neither of them knew any thing



thing of the other's discoveries. Dr. Hirzel began with a woman, that in the malignant dysentery had convulsions and fainting fits every quarter of an hour, and during the intervals lay in a perpetual delirium; he delivered her from this dreadful disorder chiefly by means of blisters; and thus effected a cure, which to me indeed appears considerable, but the lustre of which the doctor obscures by making as dextrous and important cures almost every day. Dr. Tissot saw in many cases his patients stools and anxiety diminish, and their strength increase, as fast as these plaisters operated; he therefore never neglects this auxiliary in malignant dysenteries, except a great deal of pure and dissolved blood comes away with the stools.

All these remedies are sometimes not sufficient, when the patient's pulse sinks, his strength is brought down, and he himself oppressed with anxiety; the disorder then requires all the same remedies that are necessary in malignant fevers. The bark claims a place here above all the rest.

It is well known, with what success her imperial majesty's physician in ordinary, Dr. De Haen, made use of this simple in malignant fevers; and what great merit he has, in having exactly determined the method requisite to be followed in this case. Dr. Monro imitated him  
in



in the English army in Germany, and gave in malignant fevers in general, the bark in large doses: he treated above 150 English soldiers in this manner, and though he did not obtain his end with all of them, yet he found this medicine better than any other.

Dr. Medicus of Manheim, now residing in Paris, a first-rate medical genius of 29 years practice, has confirmed this doctrine to me by word of mouth (while this work was at the press) from his own numerous observations. I shall find another place for my own observations; which tend to prove in like manner the excellency of the bark in malignant fevers, when the putrid matter is previously evacuated.

Degner, as estimable as he is in many other respects, in the second edition of his Treatise on the Dysentery, judged in a very unphilosophical and indeterminate manner, on the use of the cortex in the dysentery in general; as he only supports his opinion with saying, that certain surgeons had killed with it a good many soldiers, that lay ill of the dysentery. It is indisputable, that all surgeons do not understand the catechism of experience; but this I know, that great physicians have made use of the bark in the malignant dysentery with good success. Dr. Monro,  
as



as soon as petechiæ appeared, or the fever was observed in any wise to remit, gave every four or six hours a drachm of an electuary, consisting of equal parts of the usual electuarium *è cortice Peruviano*, and *diascordium*; or half a drachm of powder of bark, or 20 grains of its extract in the *spiritus mindereri*, with four or five drops of the *tinctura thebaica*; and in the evening an opiate proportionate to the effect of the preceding dose, and to the number of the patient's stools. It must be confessed, that my friend Monro was not successful with all his patients; however, he found this method better than any other he tried. Dr. Tissot gives in malignant dysenteries the extract of bark dissolved in orange flower-water, but never in very large doses, and not above two drachms in 24 hours.

The cortex is also principally of importance, when any external part of the body is seized with a gangrene. This does not seldom happen in malignant dysenteries; and Dr. Baldinger, who has seen so many cases in the Prussian army during the last war, and those, contrary to custom, with so great accuracy, has often remarked in fevers and diarrhœas, that the gangrene began at the tip of the nose; that then the whole cartilaginous part of the nose became of a dark-red colour like a cherry; whence it proceeded



proceeded to the eyes, attacked the cheeks, and for the most part killed the patient within five or six hours. I remember to have read a remarkable case that happened in England, and is written in the English language, which deserves to be repeated here. A brisk and tolerably healthy widow of a middle age, that had lain a fortnight or three weeks very ill of the dysentery, and had not been sufficiently purged, was attacked with violent distractile pains, deeply situated in her legs and feet, and particularly in one leg and foot, which her physician at the same time found cold and stiff. He gave her directly internally the compound decoction of snake-root, according to the Edinburgh Dispensatory, and strong aromatic fomentations for her leg and foot; notwithstanding which, the next day the first joint of all the toes belonging to that foot was mortified; the gangrene proceeded too round about the margin of her foot under the little toe, and a broad spot of a brownish-yellow hue appeared on the top of her foot towards her great toe: her dysentery was still very violent. The decoction of bark was given her immediately upon that, which she took for a long time. This put a stop to the progress of the gangrene: a slight inflammation appeared round about the margin of the gangrened part; the dark-yellow spot on the top of



of her foot grew at first of a bright-red, and assumed by degrees the natural colour of the skin. Her gripes and tenesmus decreased by degrees; her stools grew natural without the assistance of any other purgative or anti-dysenteric medicine than rhubarb, which was mixed with the decoction of bark; the mortified parts separated every where from the bone, and the sick person recovered.

Camphor deserves a place next the cortex, or in the same rank with it for raising the patient's forces in the malignant dysentery. This is in like manner a strong antiseptic; and, according to Dr. Baldinger's frequent observations made in the Prussian army, increases the efficacy of the bark, and heightens its antiseptic power. Camphor is very conveniently joined with the extract of the bark, and even with ipecacuanha; these three medicines may be given at the same time, and even mixed together in a mixture or bolus; or the two first be administered likewise after the ipecacuanha; which last is particularly useful when the patient abounds with mucus; but the use of it may be dispensed with, when no more mucus appears, and the abdomen remains soft: but the camphor must not be given in large doses any more than the extract of bark, and not above the quantity of  
 sixteen



sixteen grains in twenty-four hours. Sometimes as an external application, with the same view and with good success, we make use of a piece of flannel dipped in a bitter decoction boiled up with the theriaca, and applied warm to the stomach and abdomen; or even of a plaister prepared with the theriaca alone.

When in the malignant fever in general, even though the patient at the same time took the cortex and wine, the pulse sank, and a delirium came on with other bad symptoms, Dr. Monro laid the bark aside, and gave a cordial mixture with fifteen grains of musk, ordering the wine to be boiled up with cinnamon. The next day his patients were better, their skin was moistened, their pulse rose, the feverish symptoms went off by degrees with the use of the same medicines, and they got well: the confectio cardiaca, snake-root, with other medicines of that sort, had the like effect. I relate this however only with a view to mark out with one single stroke of my pen the perfectly peculiar nature of a malignant fever for the use of such, as make a hotch-potch of all fevers, and then attack it with the like hotch-potch of medicines. It is well known how advantageously Bontius has spoken of the extract of saffron in malignant dysenteries, and how famous this extract



tract is at present, since Dr. Pringle's latest observations, as much on account of its antiseptic as of its cordial properties: but I tremble, when I think, what havock physicians, that understand nothing but receipts, will make among their patients with all these medicines, in disorders which they do not know, and in cases which they cannot distinguish.

Astringent and constipating medicines are of use, in certain obvious circumstances, as well in the malignant dysentery, as in malignant fevers in general. Many persons afflicted with the malignant fever, have sometimes a diarrhœa withal, which seldom terminates favourably; and some are even at that time seized with the dysentery. A slight diarrhœa, that does not very much weaken the patient, is indeed in general serviceable, particularly if it appears at the height or towards the end of the disorder. But one that is very considerable, or actually degenerates into a dysentery, is extremely dangerous; as every thing that retains the stools increases the fever; and as, on the other hand, the continuance of the purging brings the patient very low, and indeed in a short time to the grave. In this case Dr. Monro was absolutely obliged to give an opiate after each purge. Dr. Pringle made such a point of gradually stopping  
by



by these means the purging, which appears towards the end of a malignant fever, that he added a few drops of laudanum, or a small quantity of theriaca to his alexiterial julep, or else exhibited a spoonful or two of a restraining mixture. For though this looseness might be looked upon as serviceable, it was still to be put a stop to; if the patient was too weak to undergo such an evacuation. Dr. Pringle has also very often observed, that when it was stopped in the above-mentioned manner, the sick person fell soon afterwards into a moderate sweat, that carried off the disorder. In the worst cases of the malignant fever, and especially when it is accompanied with the dysentery, the stools are often bloody; in which dangerous situation the Doctor orders these same medicines to be tried, if any thing can yet be done for the service of the patient. After frequent relapses of the malignant fever the blood was so dissolved, that the patients bled violently at the nose, and blood even came away with their stools: if they had a diarrhoea with it, Dr. Monro joined diascordium with the bark, giving a dose of opium at night, and at the same time nevertheless exhibited the tincture of rhubarb.

Now it is really dangerous in this dysentery to proceed immediately without the preliminaries

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above-mentioned to reſtringents. To be ſure the ſtools have been ſometimes retained by theſe latter without the former having been premiſed; but they have alſo occaſioned the greateſt anxieties and a violent perturbation of the ſenſes, and have finally been the patient's death, or threw him into a quartan ague, hectic fever, or oedematous complaints. But when the violence of the diſorder was allayed, when the head-ach, fever, tenefmus, convulſions, and the other ſymptoms remitted, and nothing remained but an obſtinate purging, in that caſe Dr. Vater gave in the epidemy in Saxony I have ſo often made mention of in this treatiſe, the ipecacuanha as an emetic with the greateſt ſucceſs; for it often put a ſtop to the diarrhœa: if it did not, he gave with a very good effect aſtringent powders compoſed of radix tormentillæ, nutmegs, and terra Japonica, in a mixture of theriaca, diſcordium, and cold water, (which he found much more ſerviceable than warm) and with this cured his patients in a ſhort time. Sometimes however one is forced to add reſtringents to the corroborant remedies early in the diſorder. In very ſevere caſes, when the patient's mouth and œſophagus were threatened with aphthæ, and when they were actually covered with them, the ingenious Dr. Whytt of Edinburgh preſcribed  
with



with success the *confectio Japonica* according to the Edinburgh Dispensatory, with a strong decoction of the bark. And in general an extraordinary quantity of stools in this dysentery require narcotics and restringents; on which account also baron Van Swieten prescribes a grain of opium morning and evening.

But we must here proceed with the greatest caution. Malignant disorders do not only appear at first not so dangerous as they really are, but all the remedies made use of with success by very great physicians in these disorders in general, and especially in the malignant dysentery, are a deadly poison in ignorant hands, if its various species are not distinguished with the greatest penetration; or if the physician be ignorant that in the same species the same remedies either kill or cure at different junctures. Millions of people might have been saved from an untimely grave; if in consequence of a more accurate knowledge of the true causes of weakness in fevers, this great maxim had been understood, that the patient is most strengthened when the cause of the distemper is diminished; and that the restoration of the forces is the first, chief, and only view in all disorders with blockheads alone.



The catalogue of the medicines that have been recommended to this time downwards in malignant dysenteries, is of an infinite extent. If we erase all those which experience has shown to be detrimental, we shall see, that all the rest agree in properties with those I here advise. I have only recommended the most efficacious, and I believe they may very well be substituted for the rest, and do every thing that is expected from our art in malignant dysenteries; for in this species nature does nothing; and the reader has sufficiently seen, that such as despised all physic and physicians, suffered and died in the most miserable manner. But it is upon this very account, that our art often falls short in this dreadful distemper, as not being supported by nature, especially when the physician does not attack the disorder immediately at its first rise, and before it has irrevocably damaged the *primæ viæ*. Great physicians have fully experienced, that there are degrees of malignity in which all methods and medicines are of no avail, and in which there are unexpected metastases of the malignant matter from parts, on which they had not so pernicious an effect, to the brain, where they induce sudden death, at a time when the patient thinks himself almost recovered. They honestly own likewise, that they never durst make any certain prognostic of the event in malignant epidemic



epidemic dysenteries; as on the one hand patients, whom they looked upon in a very bad light, and perfectly despaired of, happily recovered; and on the other hand, some died suddenly, that had but slight symptoms of the distemper, and whose recovery appeared to be certain.

The indeterminate idea commonly annexed to malignant disorders in general, and to the symptoms of malignity in particular, is as great an evil, as the just now remarked uncertainty in the thing itself. Throughout all Switzerland the common-rate physicians call every disorder malignant, which they do not understand; and according to them, every distemper, of which their patients have died must be malignant beyond all contradiction. Formerly all distempers attended with pustules or spots on the skin, were looked upon as malignant without exception; and on this account they always endeavoured to cure them by sweating the patient with heating remedies. The small-pox and all fevers attended with any notable degree of inflammation, which were only to be cured by cooling remedies, were nick-named malignant, attacked with the most heating medicines, and consequently, as Sydenham said, this same word malignity did more hurt to the world than the invention of gunpowder. In order to expel this malignity, it



was formerly the custom at Vienna, (which has now in these later times taken a more philosophical turn, and that in my opinion chiefly by the means of some philosophichal physicians that practise there) to call the *fratres misericordiae* at the first sight of the *exanthemata*, who, by the means of blankets, wrappers, &c. fastened the patients down to their beds so effectually, and covered them up so close, that they could neither stir nor breathe; so they had the *exanthemata* very happily out upon them, and died. But I also often find here and there in modern writers such confused indeterminate ideas of malignity, and those so very hypothetical withal; that I should be astonished at the want of a philosophic turn of thought in this our most philosophic age, on this and other occasions, if I did not see with my own eyes how many physicians of the highest reputation know as yet nothing of the improvements made in our days.

In fine, the abuse of many medicines, which in some cases are of real service, and in a thousand others extremely destructive, serves to prove here in its right place the following maxim, that a partial notion of physic is just as dangerous as one that is entirely false. I have, from an experience of their virtues, recommended corroborant and strengthening remedies in the cure of  
of



of malignant fevers in general, and of the malignant dysentery in particular. But I am afraid of their being abused, a fate that has often been known to attend them; as the general rules for the cure of malignant fevers are extremely limited; as a perturbation of the senses may proceed from two quite opposite defects, the one from large and repeated venæsections, the other from heating and cordial medicines having been given too soon; and likewise, as the imprudent and on that account very common use of wine, as surely hurts and kills the patient in a malignant dysentery, as in an inflammatory fever. Physicians, that want for genius and experience, can never perceive the precise juncture of time, in which a rapid and very dangerous disorder requires the use of wine, in which there is that peculiar species of weakness, that only yields to the use of warm and cordial medicines. Nothing is easier in this case than to commit an error, and the certain consequence of the least error of this kind is death.

I now turn to the cure of that period or species of the dysentery, which is called the chronic, and in which as many blunders are committed as in any other state of this disorder.



It is infinitely difficult to cure people of the dysentery, that have been ruined by a false method of cure with carminatives, cordials, astringents, and narcotics, and thence are afflicted with slight inflammations in the bowels, or a kind of paralysis in them, have indeed little pain, but yet are daily and frequently harrassed with painful stools, and whose forces are vastly exhausted. If the physician is called too late, or the patient neglected, or badly treated; if he has, from a too great loss of his fluids, a slow weak pulse, vast general debility, a rough dry crust on the tongue and the inside of the mouth, excrements, in which the villous coat of the intestines may be distinguished, and a great relaxation of the bowels, he is then without doubt in much danger of his life; and in that case likewise, in the opinion of many great physicians, there is nothing more to be done, than what is used to be essayed in a suppuration of the intestines: as in this high and dangerous degree of the dysentery vomits and purges are very seldom of any use; and as too at that time opiates have hardly any effect either in relieving the pain, or putting a stop to the flux. The rest of the cure should be left to the sick man's natural forces, of which he is perhaps not yet entirely destitute; with which however the quite exhausted,



exhausted, but patient sufferer is sometimes still supported for many weeks, and even months, on the brink of the grave, and by degrees brought to a perfect recovery. Dr. Monro says, that he was never more successful with any disorder in the English army in Germany than fresh contracted dysenteries; but when they had continued some weeks, and were in a manner become chronical, all his endeavours were then frequently frustrated, and a great number of his patients died. Dr. Cleghorn too at Minorca found all dysenteries, that were not cured speedily and in the beginning, at least obstinate, and in spite of a great number of highly extolled specifics, too often fatal. The English physicians and surgeons, that were last war in the American service assured Dr. Monro, that they had full as bad success with dysenteries of long standing in America, as he in Germany. However it must not surely be concluded from all this, that every chronic dysentery is a lost case, and on that account should be given over, and the cure not attempted; for many have with great care, and by the strength of their constitutions, got over even this disorder by degrees, and enjoyed their health again; especially those that held out the winter, and remained alive at the appearance of the warm weather.

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The indication towards the cure of the chronic dysentery is in general, to evacuate the putrid humours, and at the same time strengthen the bowels. In suppurations of the intestines especially, we should endeavour to cleanse, and withal heal up the ulcers. But all this is not so easy to be done: for a great many attempts have been made to cure this dysentery, many have failed, and some were not useless. I shall pass over such as have miscarried, and shall recommend those that seem to promise something more; after that I shall give the most universal and best method of curing this species, and lastly add a few more cautions on this head.

In difficult cases of the chronic dysentery Baglivi advises to pour turpentine on live coals, and to take in the vapour of it at the posteriors, and hence he promises a certain cure; to which however I do not give a great deal of credit. Huxham, with many others, at first makes use of warm water, as it cleanses the intestines very well, and likewise passes very easily into the blood; but when once the acrid humours are evacuated, he then very rightly advises cold water, and assures us, that with this alone and opium he has sometimes, after the proper evacuations had been premised, compleated the cure. This method should by all means be  
tried



tried in the chronic dysentery; and while this work is at the press a very remarkable instance has happened to prove the salutary effects of cold water in obstinate dysenteries. Dr. Smith of Bellikon, physician in ordinary to the princely foundation at Einsidlen, one of the most learned and judicious physicians in Switzerland, writes me word, that during the epidemy in 1766, he had treated with the greatest care a woman of 63 years, that lay ill of the dysentery, with various medicines during the space of ten or twelve days; but when at length he saw the disorder was not in the least diminished, he ordered her to drink a glass of quite cold water every four hours, and allowed her no other nourishment than lukewarm milk. She did this three or four days with such success, that her stools grew much less frequent, and there was no more blood to be seen in them; her pain and bearing down diminished, and at length the patient was compleatly cured by this method, which, by its noble simplicity, does honour not only to the physician, but likewise to the art of physic itself.

The simaruba has been most made trial of. Jussieu and others make a great noise with this bark; persons that have been plagued with diarrhoeas, and chronic dysenteries for many months



months and even years together, Jussieu has for the most part set up again more speedily and certainly with this, than with any other medicine; and that without occasioning any indisposition, without the least hindrance of any of the natural functions, and without the least bad consequence ensuing; he even cured diarrhœas with this bark without the least prejudice in the midst of the hemorrhoidal flux, or the menstrual evacuation; and he actually gives it out universally, that this bark is a certain cure for inveterate, watery, mucous diarrhœas, proceeding from a continual convulsive motion of the intestines, without prejudice to the stomach, and without the least irritation in the bowels. Du Buiffon has long made use of it in all immoderate alvine fluxes, in old loosenesses with indigestions, and in general in all diarrhœas of long standing with a good effect. Dr. Winter, formerly physician to the prince of Orange at the Hague, and professor in Leyden, cured three persons with the simaruba within a few days of an extremely obstinate, though mild dysentery, in which ipecacuanha and rhubarb, paregoric, astringent, and other remedies had not been able to do any thing in many months.

But all this requires some limitations. The simaruba does not always effect what is expected from  
from



from it; for during the impression of this work, my advice has been sent for from Germany in a tedious dysentery-like diarrhœa, attended with manifold bad symptoms, with which a gentleman was seized, who had from his youth upwards been extremely hypochondriacal and weak, and previously to this had had a continual diarrhœa in 1763 and 1764, and in the year 1765 a violent dysentery, after which attack the *simaruba* seemed rather to increase than diminish the malady. In my judgment this medicine does best in cases, where the patient requires merely to be strengthened, and not when a detergent is wanted, for in that point it is excelled by the tincture of rhubarb. In every diarrhœa and dysentery, where the bowels harbour a corrupt putrid matter, the *simaruba* is either useless or pernicious; but when this is cleared away, it braces the relaxed bowels, and all their vessels. It is extremely hurtful in dysenteries, that are attended with ulcers in the bowels. It has likewise been observed, that the *simaruba* operates much better and is more effectual in such chronic dysenteries, as are at the same time bloody; but when after the blood ceases to appear, the stools remain liquid and mucous; if the *cascarilla* be then added to the decoction of *simaruba*, the stools are then much more opportunely diminished, and by their  
united



united force the cure is also compleated much more speedily and certainly.

All things taken together, select, genuine, and undamaged simaruba is no bad remedy with the above-mentioned proviso in dysenteries of long standing. The best method to give this bark to the sick is this; take two drachms of it, and let them digest two hours in a pint of water in a warm place; then boil the whole for half an hour, pour it through a sieve, and give one half of it in the morning and the other in the evening; continue every day in this manner, and in case it should be requisite, for the space of three or four weeks; if it be observed, that with the use of this decoction the urine passes more plentifully, and grows of a paler colour, it may be looked on as a sign, that the remedy takes effect, and that the looseness will soon cease. Others mix two drachms of this bark cut very small with two pints of water, boil it to one third, and order it to be taken warm at four times in the space of a day; or else they exhibit half a drachm of the powder with two ounces of water or syrup of maidenhair, and repeat the dose till the cure be compleated.

When Degner had patients, to whom every thing, and even the simaruba itself had been  
given



given in vain, or without the wished for effect, and whose bowels were grown excessively weak and relaxed, he then made use of corroborating remedies, and even of such as were absolutely of a restraining nature, as cascarilla and terra Japonica with great benefit. The cascarilla is a good strengthener, though in other respects Stahl's followers in Germany have made too much of it. The terra Japonica requires more caution, being of an astringent nature; but it is not at all to be rejected in cases, where there is need of astringents. Extract of Campeachy wood dissolved in mint-water, and lime-water diluted with milk, were very effectual too in this respect.

In dysenteries attended with ulcerations, trials have likewise been made, which I cannot pass by in silence. In that degree of the dysentery, in which the body was excessively weakened and exhausted of all its strength, in which the pieces that came away from the tunica villosa of the intestines, betrayed a very considerable relaxation of the bowels, in which, instead of blood, a thin purulent matter was seen in the stools, Degner found no purge of any service besides manna and the extract of rhubarb. With these he gave daily vulnerary herbs infused in water; also in the interim extract of bark



bark and cascarilla; and in this manner, in the space of six weeks or two months, he conceived hopes of some of his patients, that they might still get perfectly well. Gum arabic was of good effect in the chronic suppurative dysentery, and is therefore with much reason greatly prized in such cases, and given with the usual decoction, or in barley-water: Dr. Baldinger, from whose treatise, known to me but too late, I have learned so much with the greatest gratitude, found this gum very good, when the bowels were eroded. Gum tragacanth was in like manner salutary in these cases. Mastich was a good and sure remedy, partly as a corroborant, and partly as a balsamic; Dr. Baldinger has also observed, that the balsam of mastich (as it is called) according to the prescription of his Prussian majesty's physician in ordinary Cothenius, is a very efficacious remedy if it be made use of as an astringent, with prudence. In abscesses of the stomach, that were formed in consequence of the dysentery, and were burst, Mead got his patients well with the balsamum locatelli.

The method of cure found from mature experience, to be most universal and best in chronic dysenteries, remains still to be taken into consideration. Among the remedies that come under this predicament, purgatives are very necessary



cessary even during the use of quite different remedies, or else given at intervals from time to time. Not only the putrid humours, but likewise the hard excrements, that often remain in the cavity of the intestines, must be evacuated; if this be neglected to be done, the patients are often seized with a sickness at stomach, tormina, and a violent looseness. If they should at any time have a pain in the bowels, and little morsels of hard excrement come away from them, this is most commonly a certain sign, that evacuations are necessary; and for the most part they give relief to the patient. Sickness at stomach, with the other circumstances, that usually attend it, requires an emetic to be given, before the patient be purged; in cases where the patient is very weak, or in violent pains and tenesmus, clysters are made use of. It has been remarked, that in complaints of long standing, and already arrived to a high pitch, the patient has appeared to get better; but on evacuation of the above-mentioned globular hard excrements, has had a relapse; as these scybala came away for many days together, and caused thereby a perpetual irritation: they should therefore be expelled in proper time either by a good dose of rhubarb and manna, or else with tamarinds, or the frequent exhibition of oily clysters.

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Some gentle purge should always be given alternately with the other medicines, when there is no ulcer, nor any thing worse in the bowels; and this should be continued, till the belly-ach and tenesmus is entirely put a stop to. I do not know from my own experience, what power Glauber's purgans catholicum, so much esteemed by Dr. Werlhoff, in the dose of half a grain or a grain, in diarrhoeas of long standing, may have in this respect; but this I know, that the tincture of rhubarb made with water is with this view a very excellent medicine. I have often seen, that it braces the patient more, and even cures the purging more certainly in this state of the disorder, than astringents.\*

Brocklesby made use of a method in the chronic dysentery, which deserves notice, as it consists in the junction of two medicines, which are seldom seen together. Every morning and evening he gave two grains of opium made into pills with three grains of powder of ipecacuanha, and found this remedy uncommonly serviceable to many people. The ipecacuanha given in this manner became a mere gentle purge; while on the other hand the opium alleviated the irritation occasioned by the ipecacuanha and morbid matter. The Doctor found no remedy  
more



more extensively useful in the chronic dysenteries, that came under his observations, when the purging and bloody stools were still considerable, but the fever was quite gone; and he affirms, that no one can conceive without making trial of it himself, how much the mitigating power of the opium corrects the irritation of the ipecacuanha, and on the other hand is itself corrected by it. I know from my own experience that thus far is true; but this medicine has often proved unserviceable.

In general the following method seems the most likely to cure dysenteries of this sort, when they are not arrived to too high a pitch.

The patients must be content with a thin low diet, consisting chiefly of milk, rice, sago, and salep. They may be indulged in weak meat-broths, and chicken or veal, when they find themselves actually in a state of recovery. Their usual drink must be barley-water, thin rice-gruel, toast and water, or almond-emulsion. They must go warm cloathed, and be particularly careful not to give occasion to the repulsion of the perspirable matter; for errors in diet of every species and catching cold are the most usual causes of relapses.



Gentle purges should be given from time to time either of manna or salts, or else of manna dissolved in almond-emulsion; or rather tincture of rhubarb; and sometimes a gentle emetic.

Among the strengthening and gently astringent remedies the bark combined with astringents and opium is of service to some persons; to others astringent and anodyne clysters; others do better with other things; and many find themselves better, when they do not take any medicines of this sort at all.

The patient should occasionally take opiates, go into the fresh air, and ride with moderation by way of strengthening the bowels.

Dr. Monro, the inventor of this method, has seen cases in this dysentery (at the commencement of which the patient had gone through a due course of evacuation) cured with nothing else than broths, white meats, riding out every day, and a glass of good wine. But he remarks very earnestly withal, that this method was serviceable only in slight cases, which had been previously palliated by the means of evacuations.

Dr. Brocklesby indeed is more favourable to wine in chronic dysenteries, than my friend  
Monro.



Monro. In all those dysenteries of long continuance, where the patient is quite worn out and wasted away, which followed those bilious fevers that were in particular very frequent in the year 1758 after the return of the English from the coast of France, Dr. Brocklesby found port wine mixed with water very necessary; and often allowed his patients a pint and a half of it mixed with a sufficient quantity of water every 24 hours during the space of three weeks or a month. This with a pleasant decoction of cinnamon, orange-peel, and other aromatics boiled in spring-water, and given in a proper dose, was an excellent remedy, but was only prescribed to such as had no fever in the least. The soldiers took sometimes the species aromaticæ in the dose of ten or fifteen grains every eight hours in this grateful decoction, with a view to warm their cold and relaxed bowels, to put their blood in motion again, and restore to the solids their wonted force. But when the purging continued, and the tenesmus was joined with it, (a circumstance, which at this time was not at all unusual) the Doctor found it indispensibly necessary to prescribe again the gentle purges of salts, manna, and sweet oil; and to repeat them in proportion to the patient's forces, till such time as the tenesmus was over; which mostly happened in a short time after. Yet having opened two



persons, that died in this juncture, he found in both of them the rectum inflamed in the highest degree some inches above the anus, though their fever had ceased a long time ago. A new proof, how cautiously we should proceed with wine even in these old and tedious cases of the dysentery.

But unskilful imitators should not only be cautioned on the subject of wine, but also concerning the abuse of astringents, and that even with respect to the chronic dysenteries here treated of.

One cannot be too cautious with restringents. Some years ago professor Schobinger had a young lady of quality at St. Gallen for his patient, in a slight but tedious dysentery; after copious evacuations this worthy physician, so little known in his own city, at length gave her corroborants and gentle astringents; the Peruvian bark mixed with a certain quantity of cascarilla, the species hyacinthi, and the bolus armena, all in very moderate doses, and at a time, when the purging and pains were almost quite gone; notwithstanding which there ensued on the use of these medicines a flying gout, that lasted three weeks. Brocklesby confesses, it has but too often happened to him, notwithstanding the caution.



caution with which he made use of astringent remedies, that instead of shortening the disorder he only prolonged it, brought the fever on again, and was obliged to begin afresh with vomits and purges. The miscarriage of Dr. Monro's various endeavours to cure the chronic dysentery appears too mostly to proceed from the use of astringent or constipating medicines. Even in that uncommonly mild chronic dysentery at Java, described by Dr. Laurich, which in gentleness much exceeds most of our European dysenteries, restringents are extremely noxious. The physicians of the country, as well as the European physicians settled there, have recourse to them in this dysentery. The Indian physicians make use of the fruits called billingbing, macandou, nimbo, carambolas, and jangomas; with these and other medicines of the same kind they put a stop to the looseness, without having prescribed purgatives beforehand, and that to the great prejudice of the sick. Even the European practitioners there, who are mostly surgeons in the service of the Dutch East-India company, fall into the like errors; and a manual printed in the Dutch tongue at Middleburg for their instruction, teaches them these very errors. Their most efficacious remedies are the bolus armena, terra Japonica, a kind of terra figillata from Spain,



dragons blood, burnt harts-horn, corallium rubrum, the peels of unripe pomegranates, solid opium, and the inspissated juice of sloes: from all and each of which remedies Dr. Laurich saw an erosion of the bowels, a consequent suppurative fever, the most terrible fistulæ in ano, and very often death itself take rise in this otherwise slight though tedious dysentery. It is consequently a very necessary and universal caution even in the chronic dysentery, never to give astringents without being first perfectly convinced, that the peccant matter is evacuated, and that the sole cause of the complaint is a laxity of the fibres.

I shall now conclude this long discourse by farther taking into consideration some new remedies, and lastly the various specifics recommended in the dysentery.

The vitrum ceratum antimonii was first made known as a powerful remedy in divers distempers, and chiefly in the dysentery, in consequence of the experiments of Dr. Young, Francis Pringle, Simpson, Paisley, Stephen, and Gordon, which were inserted by Dr. Pringle in the Edinburgh Essays. Dr. Young takes an ounce of the glass of antimony in powder and a drachm of white wax; the wax being previously melted



melted in an iron ladle, the powder is cast into it; the whole mass set over a gentle fire without flame for half an hour, stirred about with a spatula continually, then taken off, poured on a sheet of white paper, and reduced to powder. Of this powder Dr. Young gave in the dysentery ten or twelve grains to adults; but usually for greater certainty began with six grains; to children of ten years of age he gave from three to four grains; and to those of three or four years of age from two to three. In general the powder given in this manner occasioned a sickness at stomach and vomiting: most people were purged by it; though sometimes the cure was compleated without any sickness or evacuation. When it had operated too violently, the Doctor omitted the use of it for a day: some were cured with one single dose, others required five or six; especially when the first doses were too weak. He gave this medicine fasting, and forbid all drink for three hours after it; but allowed warm water as with other emetics, when the patient was sick at stomach, or felt an inclination to vomit: the diet was the same, as is usually prescribed in the dysentery.

Dr. Francis Pringle's, Brown's, and Simpson's experiments agreed with Dr. Young's,  
and



and were extremely favourable to this remedy. Dr. Simpson was aware, that on account of the variety in the species of the dysentery, it could not be serviceable to every body; and yet he looked upon it to be in most cases as great a specific in the dysentery, as the bark in intermittent fevers, and external mortifications. Dr. Paisley at first made use of this remedy prepared in the same manner with much success; but afterwards, in pursuance of another receipt, he only rubbed the ladle over with the white wax, and did not reduce the glass to powder, before he put it into the ladle; after having held it the usual time over the fire, the wax stuck fast to the ladle, and when all was cold, he reduced the glass to a fine powder. He had seldom occasion for more than three grains of this preparation, and never gave above five to strong persons. In this way it operated full as well; and, notwithstanding the smallness of the dose, in the same manner as the other; and Dr. Paisley cured with it a great number of dysenteries. Four or five doses for the most part perfected the cure, if they were used in time; if the disorder was of longer standing, he was forced to give ten or fifteen doses, and never saw any bad effect from it. Dr. Stephen, out of a hundred and ninety persons that he treated  
with



with this remedy, lost but one. Dr. Gordon cured some hundreds of people with this medicine in small doses, and since that it has never miscarried with him; except in one or two cases, in which he had proceeded rather too far with his patients; he commonly gave three grains of it, and never above five; a dose or two was often sufficient, and he seldom gave three; he ordered it to be taken in the morning, and it was often two hours, before it operated; some were purged by it, others both purged and vomited, and were sick for six or eight hours together after it: at night he always gave a good dose of opium.

Since that time this medicine has been tried in various manners over all Europe. La Mettrie, who is so great an enemy to astringents and opiates, is on the other hand very fond of emetics in the dysentery; and especially those prepared with antimony but dissolved in a great deal of water, which rather act upwards than downwards, and which he looked upon as milder than rhubarb, as they rid the body at once of a sharp stimulating matter. Even when a gangrene was apprehended, in obstinate dysenteries La Mettrie made use of the vitrum ceratum antimonii in the quantity of a quarter of a grain, and vastly extols its virtues even in  
taking



taking away the pain; especially when the body has not been previously well purged either by nature or by art. Many experiments were made besides in France and Germany; and very lately an ingenious physician, Dr. Lentin, has found this remedy of great service in the dysentery; the Westphalian peasants, a people as tough as leather, can however bear but ten grains of it; and even our egregious Conrad Rahn honours it with his approbation. I have related in the sixth chapter the latest experiments made with it in the dysentery of 1765.

Now these experiments seem indeed to promise a great deal, but yet posterior experience has very much limited the reputation of this medicine. Her Britannic majesty's physician in ordinary, Dr. Pringle, whom we have to thank for the publication of these experiments in the Edinburgh Essays, found this medicine the most specific of all emetics with the English army, not only in giving relief to the stomach, but to the bowels too, if exhibited in the beginning of the disorder. But notwithstanding his being convinced, that it was a medicine of great power, he could not help being solicitous on account of its constant boisterous operation towards the end; and wished that he was able to cure his patients with more gentle remedies,  
though



though they should chance to be slower in their operation. He therefore limited its use to obstinate cases; and saw that it did good service, where other things did none at all; if the bowels were but in a tolerable good condition, the patient but little feverish, and not too weak. He makes withal the following good remark; that this remedy is attended with an inconvenience common to all preparations of antimony, namely the difficulty of assigning a proper dose for it; as a middling dose is at one time too small, and at another time too large. Dr. Eller made use of this medicine with two strong persons ill of the dysentery with the greatest success; on the other hand he found it very difficult with others of his patients to fix on a proper portion; as sometimes the same dose excited neither vomiting nor purging, and sometimes produced both but too violently. Dr. Monro found in the English army during the last war, that this remedy operated much too powerfully; and therefore it was almost entirely laid aside.

Mr. Geoffroy at Paris has indeed endeavoured to find a corrector for this medicine, which, as it was imagined, would be able perhaps to prevent the indeterminate mode of its operation. Without doubt the exact mixture of the wax with the vitrum antimonii, renders this otherwise



wife very terrible medicine a salutary one, and on this account Young's receipt is better than Paisley's: on the other hand Geoffroy has shewn a still better method of involving this glass by the means of an oil, with which the glass is to be levigated on a porphyry-stone. But with all this, though it must be owned to be an excellent medicine in the bilious, and sometimes too in the chronic dysentery; it is, partly for the reasons above-mentioned, and chiefly on account of the caution with which it ought to be used in inflammatory or even malignant dysenteries, at all times a dangerous remedy in ignorant hands, and not always adviseable in the most judicious.

The orchis, that comes to us from Persia under the name of salep, is also reckoned among the new remedies for the dysentery. Du Buiffon, who got this root directly from Mocha, did not look upon it in reality as a root, but as a kind of fig dried in the sun: my great master baron Haller, takes it for what it really is, and calls it the Persian orchis. It has the property in common with our, and even the Swedish orchis, of being very clammy and full of a thick mucilage; the powder of it mixed with a good deal of water, and set over a very gentle fire, turns to a jelly, and is looked upon to be full as mucilaginous as tragacanth. It is on that  
account