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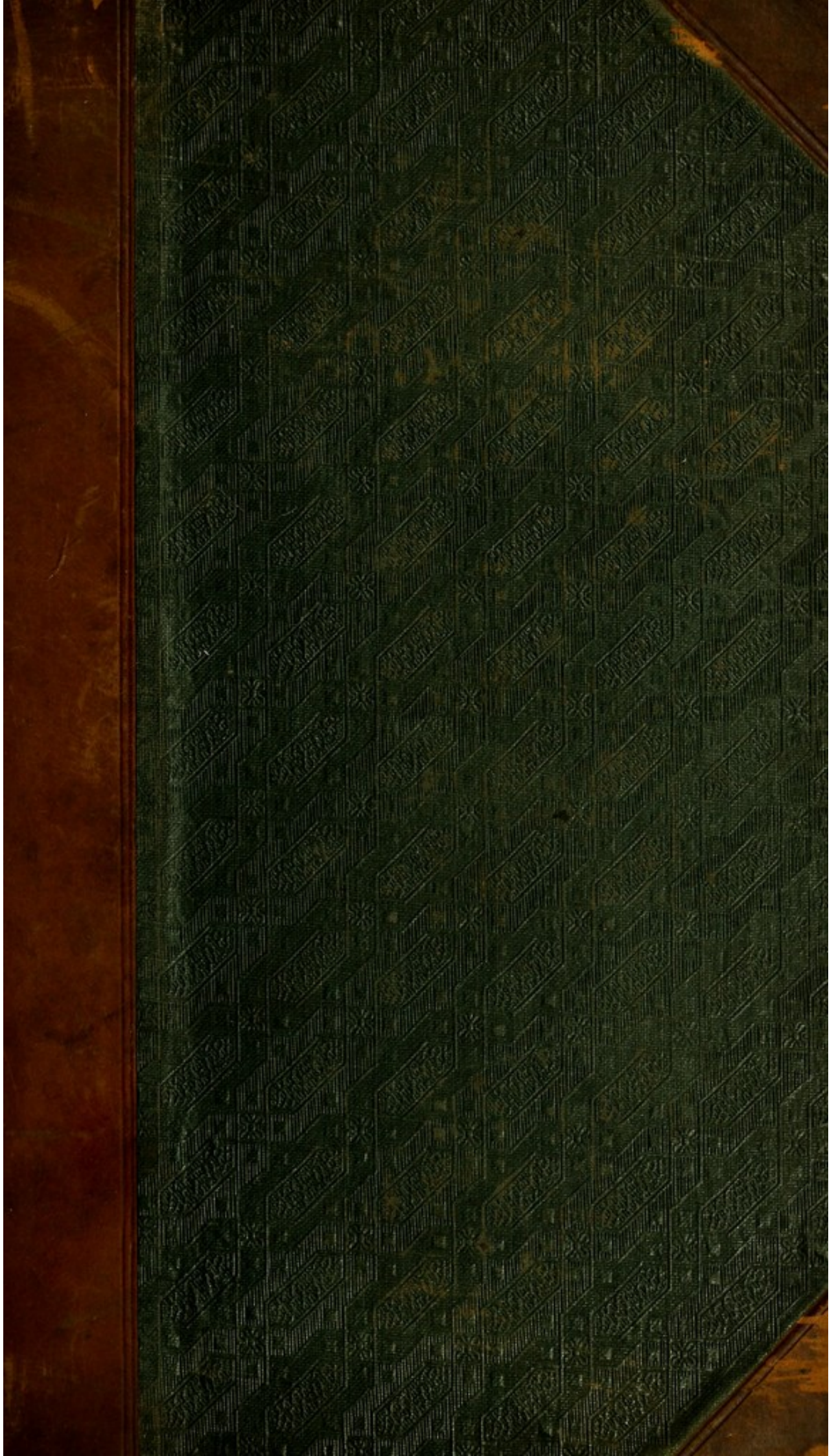
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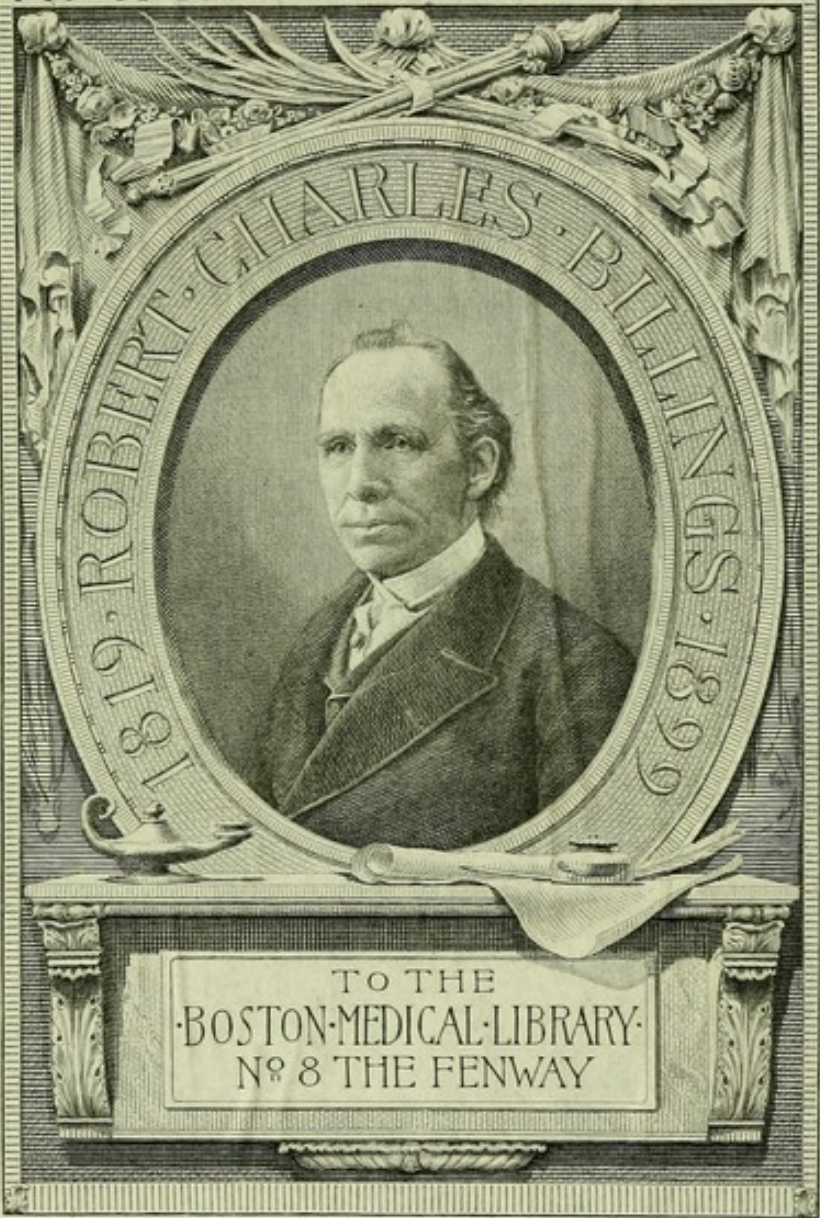
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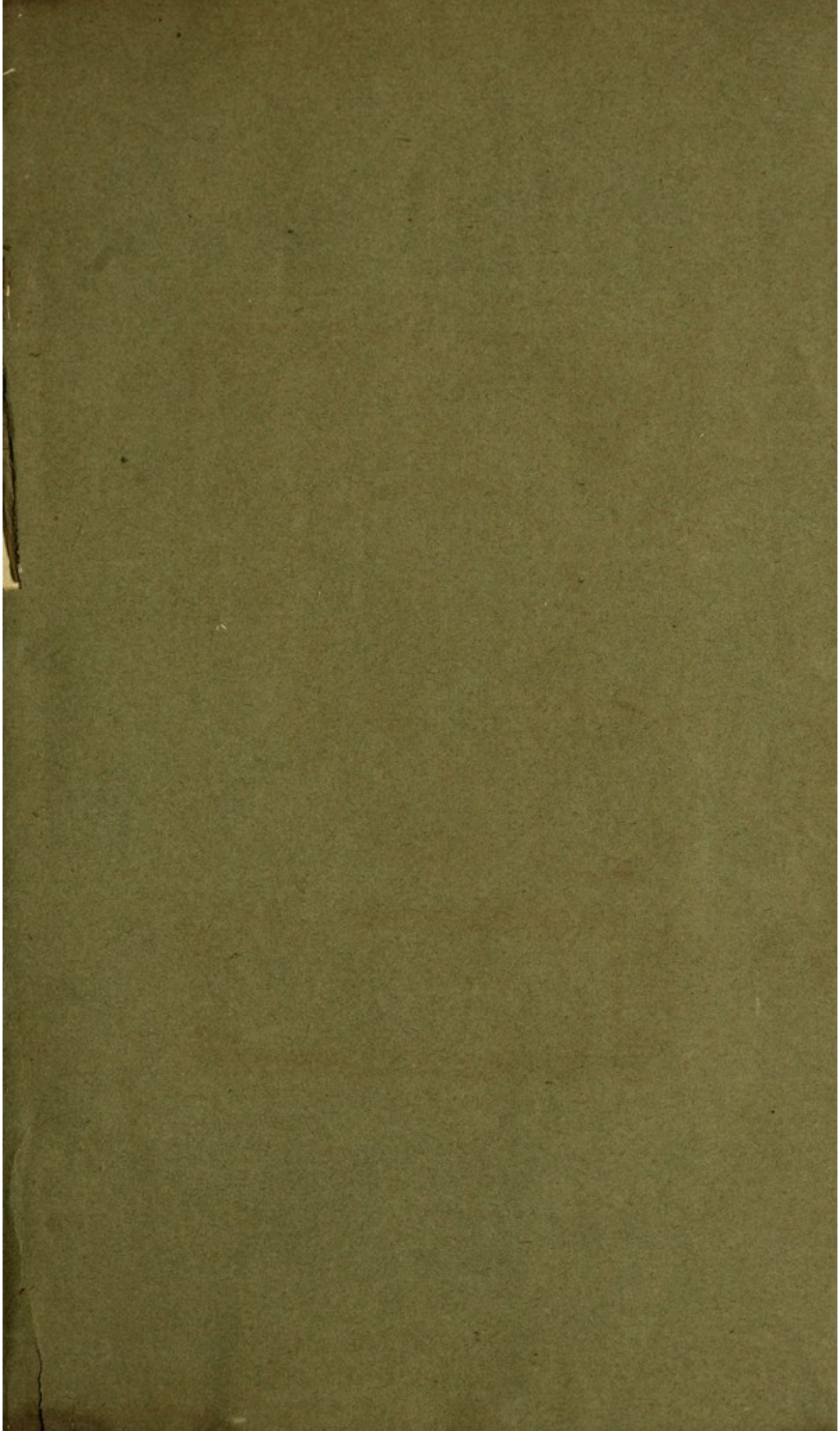
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PRACTICAL OBSERVATIONS
ON
THE CURE
OF
WOUNDS AND ULCERS
ON THE LEGS,
WITHOUT REST;

ILLUSTRATED WITH CASES.

BY THOMAS WHATELY,

MEMBER OF THE CORPORATION OF SURGEONS
OF LONDON.

“ IT IS THE BUSINESS OF GOOD SURGERY TO ASSIST NATURE.”
POTT.

London.

PRINTED BY W. SMITH,
FOR T. CADELL AND W. DAVIES, STRAND; J. JOHNSON,
ST. PAUL'S CHURCH YARD; AND J. CALLOW,
CROWN COURT, SOHO.

1799.

FRANCIS & TAYLOR

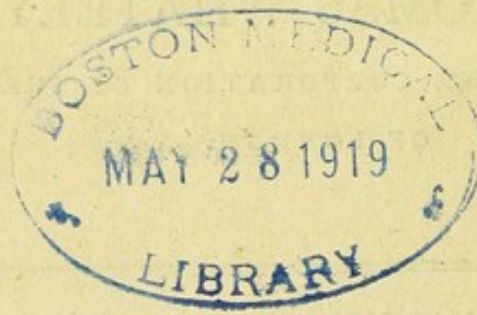
THE

WOUNDS AND ULCERS

ON THE

MEMBERS

1714 Bc 175



DEDICATION.

*TO THE PRESIDENT, VICE PRESIDENTS,
AND MEMBERS, OF THE SOCIETY FOR
THE RELIEF OF THE WIDOWS AND
ORPHANS OF MEDICAL MEN, IN LONDON
AND ITS VICINITY.*

GENTLEMEN,

THE following work is presented to the Public with the hope of its contributing something to the ease and comfort of mankind. From a firm belief of the soundness of its

principles, I cannot but be solicitous of its being so far noticed as to be read by the profession. Should it be thus honored, it will gratify a wish that I have often indulged while composing it; which is, that it might enable me to aid your benevolent design of raising a fund of 10,000*l.* for the distressed families of our unfortunate brethren.

Permit me, Gentlemen, to appropriate the profits of this publication, (should any arise

from it,) to your charity, till that sum be raised. Should the work not be able to struggle through a single edition, yet let me hope, that it may eventually benefit your society, by suggesting to some future author, more worthy of the notice of the public, the like dedication of his literary labours.

From the interest which you take in the prosperity of this humane institution, I persuade myself, that you are ready to countenance any undertaking

which may in the smallest degree contribute to the accomplishment of your design. Under this impression I take the liberty of inscribing to you, this fruit of my studies and experience.

I have the honor to be,
with much respect,
GENTLEMEN,
your very obedient
humble servant,

BEDFORD ROW,
JUNE 17, 1799.

THOMAS WHATELY.

PREFACE.

THE author of the following pages is very sensible that they contain but little of novelty to recommend them to the attention of practitioners in surgery. Some perhaps will affect to say, that they hold forth no improvement in the cure of the complaints in question since the time of Wiseman.—Perhaps not.—The truth is, that whilst modern surgery has undoubtedly received much improvement in many branches, particularly in the performance of some nice and difficult operations, and in the treatment of fractures, and other recent accidents, the subject of this essay, though allowed to be of the greatest importance, from the immense number of sufferers, has been but little cultivated by men of science in the profession. Of this there

needs no other proof than the want of uniformity in the practice adopted for their cure.

The efficacy of pressure in counteracting the effects of the dependent posture, was indeed known to the father of English surgery; and the use of the laced stocking was recommended by him for this purpose; nor can there be any doubt, that the good effects of it in his hands were very manifest. His ideas however seem not to have been much regarded by succeeding surgeons. We find but little said by the writers on surgery, on the effects of pressure in the cure of ulcers on the lower extremities, previous to the appearance of Dr. Underwood's treatise. Yet I am aware, that there always have been practitioners who were acquainted with the importance of this mode of treatment, and have adopted it in their practice. I had myself an opportunity of seeing the extraordinary

success attending it, during my apprenticeship in the country. It is matter of fact however, that the practice is very far from being general. Even in one of the latest publications on the subject, and this too by a surgeon of the first eminence, the effect of pressure is not much relied upon for the cure of these complaints. It is indeed there stated in several passages, not only that no benefit is derived from compression in several species of these ulcers, but that many ulcers are rendered worse, more painful, and more unhealthy in their appearance by its use.* That there are certain conditions of an ulcer, which will not bear compression, I have allowed, and have endeavoured to point out the proper treatment, to bring on a fit state for the application of that pressure; but that an experienced surgeon should pass over so slightly this most essential part of the cure, and even

* See Home on Ulcers on the Legs.

speak of it as *frequently* injurious, is a circumstance hardly to be attributed to any other cause, than that of a careless and ineffectual application of the bandages. For my own part, having now been for twenty years constantly in the habit of treating a very large number of these cases, I can speak so confidently, of the good effects of pressure, properly applied, that I can venture to affirm, that he who doubts of its efficacy has never given it a fair trial.

In the cases which are added to this essay, very little variety of dressing was used; the cure was almost always trusted principally to the pressure made on the limb, under the exceptions particularly specified in the work. My success has been so uniform, that I cannot but be anxious to see this practice become established, and generally followed. Nothing but a conviction that in promoting this end, I am really doing an important service to my fel-

low creatures, could have induced me to appear before the tribunal of the public, conscious as I am, of my incompetency as a writer. But may I not hope, that the plain tale of a practical man will be heard, though not told with the graces of elegant language.

In whatever manner this attempt be received, I cannot doubt but that the practice here recommended must in the end prevail, notwithstanding it has this great obstacle to contend with, that surgeons must condescend, for the most part, to apply the bandages with their own hands. The clumsy and ineffectual manner in which this business is too frequently done, can never be expected to produce the desired effect. I am certain that if the necessary pains be taken, according to the directions here laid down, such effects will uniformly follow, as must convince the unprejudiced mind, that to have recourse to the operation of tying varicose

veins, and the application of a great variety of remedies, can be *very rarely*, most probably *never* necessary. I can safely declare, that all such cases as are described by Mr. Home * to be cured by this operation, have readily yielded under the proper management of pressure alone.

Since these papers were preparing for the press, I have seen with pleasure Mr. Baynton's new method of treating these complaints. Every thing that is there said on the efficacy of his method may be considered as confirming the doctrine laid down in the following pages. His mode however of making the pressure with adhesive plaster appears to me inconvenient, and on several accounts objectionable. I have no doubt but that the proper application of compresses and flannel rollers, would, in every case recorded by him, have produced similar good effects. The instances of success by his method after

* See *ibid.*

the supposed failure by the roller, I can only attribute to this, that the pressure made with the plasters was applied by his own hands, whereas that with the roller, was probably, as is usual, so made, that the effect intended by it could not possibly have been obtained. No surgeon, who will not be at the trouble of applying them himself, can be a judge of what may be effected by the proper management of the roller and compresses.

With respect to the cases here recorded, I have been under some anxiety, lest the frequent mention of the patients having been previously under the care of other surgeons, or in hospitals, or other public institutions, should appear to have been ostentatiously done. Had it appeared to me that this work would have been of the same authority without the cases, I should willingly have omitted the greater number of them; but conscious that my name

would not carry with it sufficient weight to establish the doctrine here laid down, my grand object has been to bring forward such a mass of evidence to shew the practical utility of it, as should not be easily controverted. In doing this, some particularity was necessary: yet I hope I have used a becoming modesty of language. That I might give no offence, I have every where avoided mentioning the name of the surgeon by whom, and even of the public institution where, the patient had been treated.

These complaints have long been a sort of opprobrium to the profession; it being too generally supposed, that any dabler in medicine, any pretender to the healing art, can cure them as well or better than the regular practitioner. To remove this stigma, to establish a uniformity in the practice, and thereby to benefit mankind, are the sole motives which induce the author to lay these observations before the public.

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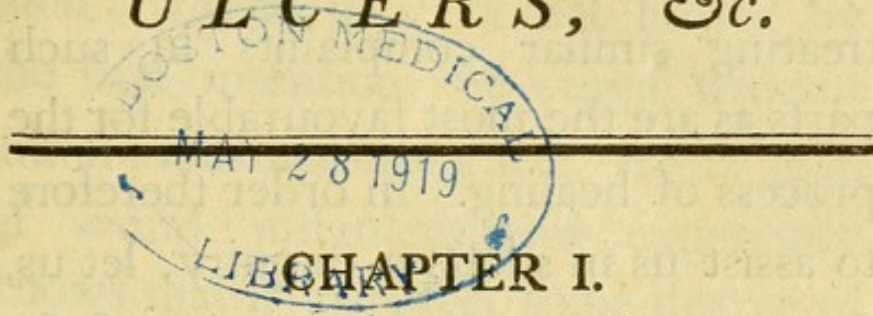
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OBSERVATIONS

ON

ULCERS, &c.



CHAPTER I.

WHY WOUNDS AND ULCERS ON THE
LEGS ARE OF MORE DIFFICULT CURE,
THAN THOSE IN OTHER PARTS OF
THE BODY.

THAT wounds and ulcers on the legs are generally of much more difficult cure, and require more assistance from art, than those in other parts of the body, is a truth, I believe, almost universally acknowledged. It is therefore of the utmost importance in surgical practice, to ascertain the causes of this difficulty.

We cannot with any degree of propriety, or probability of success, attempt their cure, unless we be previously acquainted with the best method of treating similar complaints in such parts as are the most favourable for the process of healing. In order therefore to assist us in such an enquiry, let us, for the present, take no notice of the distinction between a wound, and an ulcer; nor of the causes which lead to their difference. Let us enquire merely into the operation of nature in healing a common wound of any kind, in any of the upper parts of the body: by this we may perhaps be enabled to find out the causes, which retard the cure of a similar wound in the lower extremities, and be led to a proper method of removing the obstacles to its healing.

Suppose, by way of illustration, that an incision were made through the

integuments of the upper part of the arm of a blacksmith, or that a portion of them were entirely removed; can such a wound, if it be not healed by the first intention, be cured without much assistance from art? Every man of sound judgment and experience knows that it can: yet some degree of inflammation and excitement of the vessels around the part, is necessary, to bring it into a state of digestion. But it often happens that these take place to a greater degree than is required for this purpose; so that the treatment of a fresh wound at the beginning, ought, in many cases to be very different from the treatment which is necessary, when the digestion of it has taken place.

While this wound is in an undigested state, the limb is not fit for the exercise of its usual functions; it should therefore be kept at rest as much as possible,

until the excess of inflammation, and the tension which usually attends it, be removed: and this, with the constant application of a warm emollient poultice, or any application that will at the same time sit easy and exclude the external air, will in most cases, be sufficient for the purpose. But in some cases, something further will be requisite: we must call in the aid of evacuants, or other remedies, to assist in these intentions.

If by these means the tension and inflammation be removed, and the wound brought into a complete state of digestion, is it necessary in order to cicatrize it, to change the innocent emollient for such remedies as are supposed to have the powers of incarning and cicatrizing; and without which, it was formerly supposed it could not be healed? I apprehend, that we shall not find either the one or the other neces-

sary, in a healthy habit. The completion of the cure is the work of nature; and if the surface of the wound be kept constantly moist, by the poultice, or by any mild dressings, so as to prevent incrustations from the drying effect of the air; and if moreover these applications be renewed as often as is necessary, to prevent the corrosive effects of putrid and stagnated matter, it will be spontaneously filled up with a new formed fleshy substance, and covered with a new skin. Yea, all this will nature sometimes perform, in those wounds, which are not very large, even where no dressing whatever is applied, and where the matter is suffered to dry into a hard scab.

But although these are facts which are very easily proved, yet I would by no means be understood to infer, that it is a matter of indifference, whether any assistance be given by

6. WHY WOUNDS ON THE LEGS ARE OF

art or not; for I am persuaded, that in many cases, the cure may be very much expedited, by the judicious application of such dressings as are best suited to the particular state and appearance of the wound. All that I wish to assert in this place is, that the healing of a common wound in the upper parts of the body, and in a healthy habit, can be effected by nature alone; whether this or that particular dressing be applied to it.

To illustrate this point a little farther. Let us examine the progress of the healing of a wound in the mouth; where we can apply no permanent dressing, and where, through the constant change of its secretions, and the taking of food, its surface can neither become dry and incruusted, nor be vitiated by the corrosiveness of stagnated fluids. Every one knows, that such a wound will by the mere action

of nature incarn and cicatrize, though it be as deep, or as extensive, or be attended with as much loss of substance, as the nature of the parts will permit. Nevertheless, as has been already observed, it may be in our power, (especially in some habits) to assist nature in this work: were we to forget this, we should presume too much upon natural powers.

The next thing I wish to consider is, whether after a wound inflicted on the arm has been brought into a proper state of digestion, &c. the free motion and exercise of the limb will retard its healing. I am decidedly of opinion that it will not. The motion of the limb may be permitted through the day, even in the laborious occupation of the mechanic already mentioned; provided that suitable dressings be used to preserve an uniform moisture on the

part. One might indeed, from mere theory, be led to suppose, that much disturbance would arise from exercising the wounded limb: but experience teaches us, that in most cases, the powers of nature supersede the necessity of keeping the body in an inactive state.

There are however cases in which from some unusual cause or peculiarity in the habit of body, exercise may not only be painful, but very injurious. It will likewise be readily supposed, that in those which are the most favorable, a patient will not use his limb without feeling more or less of inconvenience from its being in an unnatural state. But still I maintain my position, having received the fullest convictions of its truth, that the most violent exercise will not in general re-

tard the compleat cure of such a wound.*

I have been very particular on this subject, from a desire to discover the true cause of an acknowledged fact; namely, that wounds on the lower extremities, are healed with much more difficulty, than those, which are made in other parts of the body. If the cause of this fact be ascertained, we may then hope to arrive at a certain method of cure.

That wounds and ulcers of the legs are of more difficult cure than those in any other part of the body, is a circum-

* It is of the utmost importance to ascertain this point to a certainty. And I particularly recommend the examination of it, in order to prevent the influence of a contrary opinion maintained by one of our latest and best writers. His words are these,

“ In every species of ulcer, even in those of the most
 “ *simple nature, rest of body, especially of the part affected,*
 “ *is particularly requisite; insomuch that unless this cir-*
 “ *cumstance be attended to, all the applications that can*
 “ *be used prove commonly of little importance.*”—See Bell
 on Ulcers, p. 210.

10 WHY WOUNDS ON THE LEGS ARE OF
stance that is attributed either to their
dependent situation, or to the greater
languor of the circulation in them as ex-
treme parts. The more general opinion
I believe is, that it is owing to the
former cause; but Dr. Underwood at-
tributes it to the latter.* I think how-
ever, that we shall find on the strictest
examination, that it is almost entirely
owing to their dependent situation. We
know, that when the body is erect, the
blood and lymph return to the heart
from the extremities contrary to their
gravity, in a column of several feet.
And although the veins, as well as the
lymphatics, are well supplied with
valves for preventing the inconveni-
ences of such a load of pressure on the
more distant parts of the extremities;
yet it is impossible to counteract it
entirely. In this position, a general
pressure is made on the extremities of

* See pages 12 and 79 of his Treatise.

all the vessels, by the sluggish return of their fluids. For even in the most perfect state of health, and at all ages, and in all habits, these effects may be daily seen, by the greater quantity of fluid poured out from the exhalents into the cellular membrane when the body is erect, than takes place when it is in the horizontal position. The legs therefore of every person are somewhat fuller in the evening than they are in the morning. Now although this does not constitute a disease, yet it shews the natural tendency of the position.* We see also, how much more readily this effect takes place, and to what a greater degree it obtains, from

* Perhaps it may be said by some that this consequence arises from a defect in the absorbents, the fluid poured into the cellular membrane not being taken up as fast as it is secreted. But whatever be the specific cause, the effect is evidently brought on, through the erect position of the body, aided perhaps in many cases by the tight ligatures of an European dress.

the most trifling external injury done to these parts while the body is erect, than what happens when a similar injury has been received in the upper parts of the body. The action of the vessels in the injured part being excited, the exhalents pour forth a greater quantity of fluid than can be taken up by the absorbents; whose office is no doubt impeded by the pressure of the weight of blood upon them. Hence we almost always find more or less of an edematous swelling on the lower extremities when any trifling wound or accident has happened to them. And let it be recollected, that this swelling is not confined merely to the neighbouring parts; (as is generally the case when wounds are received in other parts of the body) the most distant extremity of the limb, or the whole member, is frequently affected in a similar way; and the pain and inflam-

mation attending such an injury is also much greater, than what happens to a similar one in any other part of the body.* None of these effects, (which happen alike to the young and the aged, though with a difference in the degree of violence) are I apprehend to be so well accounted for from the languor of the circulation in these parts, occasioned by their distance from the heart, as from the dependent posture of the limb.

When a wound therefore is inflicted in the lower extremities, it is not to be expected that, if it be kept in the erect position, it will heal as kindly as one in the upper parts of the body, where the state of the vessels in and around it is

* When a wound happens upon any part of the arm, the same effects, (though in a less degree) are in general produced on the parts below it. And were it not a usual practice in these cases to keep the fore arm and hand in a sling, I have no doubt but we should find these effects produced to a still greater degree.

such, as to favor the processes of incarnation and cicatrization. For these vessels must unquestionably be in a certain natural degree of action for such purposes; but if this natural action in them be disturbed, we may reasonably conclude, that an impediment to the cure will arise. And in fact we find by experience, that unless some means be used by art to counteract these effects, wounds of the lower extremities will not heal in the same speedy manner, even with the same applications, as those of other parts. And though in many of these cases much depends on the habit, age, and other circumstances of the patient; yet even in the most favorable circumstances, a very considerable difference may be always observed in the healing of these different wounds.

These ideas will lead us we trust to a successful method of cure. If the limb in such a case be placed in

the compleat horizontal position, and the most simple applications be used to the wound, upon the plan (already described) of curing those in the upper parts of the body, we shall always find an immediate change in its appearance, and a disposition to cicatrize. And by a continuance of this method, the cure will in general be effected in as short a time, as in the case of a similar wound in the most favorable situation of the body. Or if an equable and general pressure be made on the whole leg, and particularly upon the surface of the wound; * it will heal even in the

* An equable pressure upon the skin, whether it be from its strengthening the cellular texture, and thus impeding the flow of lymph into the cells, from its lessening the weight of the column of blood by resisting the dilation of the veins, from its promoting the progress of the fluids in the lymphatics, or from any other cause; certainly counteracts the effects of a dependent posture of the lower extremities.

Another important purpose is answered by this equable pressure of the leg: the bad effects of dilated or varicose veins are counteracted more effectually by this, than by any other remedy.

erect position, and during a constant motion of the limb. We shall consider in its proper place which of these methods it will be best to adopt in practice; but as such a wound can be as speedily cured by the one of these methods as by the other, it is another proof to me, that the obstacle to its healing, when the limb is kept in the erect position, without a support from bandages, does not arise from the distance of the part from the heart, but from that position: a position which puts the vessels and parts in such a state, as prevents nature from repairing the injury done to her.

When wounds on the lower extremities are only superficially dressed, and neither the horizontal posture be enjoined, nor pressure applied, they very soon change their appearance; they become foul, and although there be no fault in the constitution, dege-

nerate into unkindly ulcers, merely from their dependent situation.

By these previous considerations, we shall be much assisted in the further prosecution of our subject.

CHAPTER II.

WOUNDS AND ULCERS ON THE LEGS,
MAY BE DIVIDED INTO SUCH AS ARE
LOCAL; AND SUCH AS ARE CON-
NECTED WITH DISEASES OF THE CON-
STITUTION.

FROM the review which we have taken in the preceding chapter of the impediments to the healing of wounds in the lower extremities, (and the same arguments will apply exactly to ulcers,) it must be extremely apparent to every one, that in the great variety of these, some, without any fault or impediment whatever from any diseased affection either of the solids or fluids of the body, but merely from their being in a dependent part, and from the want

of the proper means of counteracting this circumstance, will continue unci-catrized. We may therefore with great propriety say, that such are merely local.

Others are undoubtedly connected with some constitutional affection, from which may arise other impediments to the cure besides those already mentioned.

These in all their varieties we may stile, constitutional wounds or ulcers. To this distinction it is of great consequence to attend in our practice.

The cure of a local wound or ulcer on the leg, will depend much upon the nice adjustment of pressure on the limb, if it be not confined to the horizontal position. But in the cure of a constitutional wound or ulcer in this part, it is absolutely necessary, in addition to this method, to remove the particular obstacles or defects in

the constitution, to which, either the origin or the continuance of the disease may be attributed.

These constitutional ulcers have been for the most part properly denominated venereal, scrophulous, or scorbutic. Some local ulcers may also without impropriety have distinct names given to them, in order to convey a discriminate idea to the mind, as well as to induce us to alter in some degree our plan of treatment; yet I conceive, that by following the old method of giving a great number of different titles to them, from trifling differences in their appearance, we are in danger of forgetting this fundamental and simple question, namely, whether the ulcer be local, or constitutional. Losing sight of this important question in practice may be a source of great error. It should therefore be most seriously and carefully examined; inasmuch as many

of the very same appearances, which occur in ulcers of the one kind, are frequently met with in those of the other. Thus for instance, local ulcers have been called phagedœnic, callous, inveterate, sordid, malignant, &c. we may doubtless find in them these and other different appearances; yet upon investigation it appears, that all or most of these varieties proceed almost entirely from a few obvious and simple causes; such as the dependent situation of the limb, its not being supported by proper bandages, natural constitution, age, poverty, want of cleanliness, a due change of dressings, &c. when these causes are united, and continued for a length of time, the tone of the vessels is more and more weakened; and the same ulcer often puts on many of these appearances at different periods of its continuance. If these be facts, we should be careful in deciding the ques-

tion, whether an ulcer be local or constitutional: The most cautious investigation of all the particulars relating to it, should precede its determination; trifling differences in the external appearance of the cases are no sufficient criteria.*

In treating of the cure of these complaints, I shall therefore always keep in view these ideas and distinctions, and shall point out, as clearly as I am able, the most effectual method of removing the different causes, which impede the cure in each of them.

* Since the above was written, I have been much pleased to find, that Mr. Bell has drawn the same inferences from the numerous appellations given to ulcers; and that he has also very judiciously divided all ulcers either into such as are local, or such as are constitutional.—See Bell on Ulcers, p. 125 and seq.

CHAPTER III.

OF THE TREATMENT AND CURE OF
LOCAL WOUNDS, AND OTHER RECENT
ACCIDENTS ON THE LEGS, WITHOUT
REST.

IN the first chapter it has been I hope satisfactorily explained, why wounds on the legs are of more difficult cure than those in other parts of the body. We now proceed to point out such a method of cure, as the deveiopement of this difficulty naturally suggests.

It is well known, that bandages with a free exercise and motion of the limb, have long been recommended by some, for the cure of these complaints; others have advised, that the limb be

kept strictly in a horizontal position. Either of these methods, as has been before observed, will answer the intention of cure very well. I have reasons however, for preferring the former method; and of this I mean here to treat.

It has likewise been already asserted, that the exercise of the diseased part is no obstacle to cicatrization; and that by suitable compression on the leg, to prevent the effects of its dependent situation, a wound in this part will in general heal by the same simple treatment we make use of in the cure of one situated in the upper parts of the body. We are not however to advise this method rashly and indiscriminately. The impropriety of recommending the free use of the limb where there is an excess of inflammation in wounds of the upper part of the body, has also been already noticed;

the same observations are of course equally applicable to those in the lower extremities: so that it would not be proper on any account to advise either the use of tight bandages, or exercise, in these cases, while the parts are in this state. If we attend not to these precautions, we shall increase the pain and inflammation, and run the hazard of bringing on more serious consequences.

The inflammation I allude to, is of the acute kind, and seldom continues long. It is therefore necessary to distinguish it from an inflammation of a chronic nature; where the plan of treatment so justly condemned in the acute inflammation, will be even a necessary part of the cure. But it must be apparent to every one, that this inflammation will not, in all cases, be of the same species, or of the same degree of violence. There will be

considerable variations in it in these respects, according to the age, habit, and other circumstances of the patient. Sometimes it will be of the phlegmonous; at other times of the erisipelatous kind; and in many cases of a mixed nature.

In the treatment of these inflammations, if the former prevail, and be accompanied with much tension, swelling, and pain, in the part, and with symptoms of general inflammation in the habit, the antiphlogistic and evacuant plan must be pursued in proportion to its violence. If the latter prevail, Peruvian bark, wine, opium, and other remedies of this kind, must be used; and in both these cases, the common emollient fomentations, and poultices, are the best external applications.

Emollient poultices are generally recommended to be renewed twice a

day; but as an eminent writer * has asserted, that he thinks they do *more harm than good*, unless they be applied every *three* hours, and as the decision of this point is of considerable importance in practice, I shall enquire further into it.

I do not know that there is any thing to be alledged by way of objection to the frequent renewal of poultices, but the difficulty which may often occur of getting it done. But inasmuch as from this circumstance, many practitioners, under the idea of doing harm, may be deterred from the use of so valuable an assistant in the practice of surgery; I think it right to observe, that experience warrants me to say, that poultices applied only twice a day, generally answer every purpose.

I cannot help differing from the same respectable author † in another of his

* See Bell on Ulcers, pages 67 and 204.

† See *ibid*, pages 67 and 204.

positions. Poultices, he considers, as producing their good effects “ more “ by the warmth they contain, than by “ their emollient relaxing properties ;” on the contrary, I have every reason to infer, that they do much more good by the latter, than by the former qualities. A moist heat indeed, is a desirable property in them, and it should always be our aim to keep up a due degree of it; but it does not often happen, that there is any difficulty in doing this, even where the poultices are removed only once in twenty-four hours. In many, I may say, in most of the cases where they are used, there is an increase of heat in the part, (from an excess of inflammation) which tends very much to keep up a proper degree of it in the poultice. And where there is not this increase of heat, as patients under these applications are generally confined to the

house, if not to the bed, it is extremely easy to apply as much warm covering to the limb, if the state of the weather require it, as will retain the necessary heat in the poultice. Where proper attention has been paid to these things, I have never found a poultice too cold when removed at the usual period of twelve hours, or longer; but if it be not renewed thus often, it is more apt to become dry and foul, than too cold. On these accounts it ought to be changed twice a day; and in some particular cases, where the discharge is extremely large or offensive, it is certainly better to renew it still oftener. But this frequent renewal is seldom necessary, merely from the poultice becoming too cold, as pointedly remarked in Mr. Bell's Treatise.*

* I have lately had a remarkable proof of the truth of these assertions, in the following case.

Mrs. WINCH, aged sixty-three, West Lane, Waltham, was attacked in the winter of 1797, with a

The emollient plan is to be continued, as in the treatment of similar states of inflammation in recent wounds of the superior parts of the body; and the limb must likewise be kept in a state of rest, and in a horizontal position, until a complete state of digestion has taken place. To bring on this state

mortification in one of her legs. In spite of the most powerful remedies, the disease increased for more than a month, and at the end of that time, had spread over the half of her leg; so that her dissolution was daily expected. It was so extremely difficult to cover the whole of the diseased surface with the dressings, and particularly with the poultice, that the nurse could not do it, and rather than permit it to be imperfectly dressed by her twice a day, I thought it better to do it myself every twenty-four hours only; and though in this case, there was no unusual heat in the part, yet when the poultice was taken off at each dressing, it was always of a proper degree of warmth, by using only an eighteen tailed flannel bandage, and applying a flannel petticoat over the whole leg. I dressed it daily in this way for more than a month, and during all that time, never found the poultice too cold. A perseverance in the remedies, at last happily put a stop to the disease, and the patient soon afterwards recovered.

will require in some cases a little more time than is requisite in others.

While the cataplasms * are used it is not perhaps of much moment, whether we apply any dressing to the surface of the wound; yet an emollient ointment, as the hogs lard, or the spermaceti ointment, spread upon lint, may be smoother and easier to it, than the poultice itself. But the digestion of the wound, and the secretion of pus, are

* In different parts of this work I have recommended emollient poultices as a very general application in affections which are not altogether similar; and I am more and more convinced of their having an efficacy in all these cases superior to any other application. They may be made of very different materials, and still possess nearly the same properties; but it is proper to remark, once for all, that though these relaxing applications are extremely proper for a certain period of time in these diseases, according to the abatement or continuance of the inflammatory state, yet if they be continued after they have produced their intended effects, their relaxing qualities may be prejudicial, and retard the remaining part of the cure. I have seen repeated instances of such effects from them.

the work of nature, and not of art. So that no particular virtues whatever, can be attributed to such applications for these purposes, but their soft innocent and relaxing qualities; by these properties they are useful in allaying irritation and inflammation, and in giving nature a more complete opportunity of bringing on this desirable state of the wound.

For scalds or burns in these parts, and indeed for those in other parts, there are many favourite external remedies even of an opposite quality, employed by different practitioners as first applications to them, and by their use many patients may do extremely well. This however, only points out still more clearly, the extensive powers of nature; and shews us how much is to be expected from them, even under contradictory treatment. But I am convinced by experience, that an emol-

lient poultice will be found in all these cases, eventually superior to any other remedy, as a first application: Nothing that I have met with in the course of my practice, more expeditiously allaying inflammation and irritation.

Having pointed out the most judicious way of treating wounds on the lower extremities at their commencement, let us now enquire, how they are to be managed when the inflammation is removed, and a complete digestion has succeeded.

When these effects have taken place, they are brought into a state, from which there can be no future danger, but that of their degenerating into troublesome and painful ulcers.

It has been before stated, that we cannot readily cure these complaints by the same simple treatment to which we have recourse when a wound is situated in the upper parts of the body,

unless the limb be placed in the horizontal posture, or (if it be kept in the erect position) an equable and general pressure be made upon it. Now as the latter method, under proper management, will in general be equally as efficacious as the former, it is unquestionably our duty to adopt it; inasmuch as thereby confinement is avoided: a thing not only irksome to the patient, but frequently injurious to his constitution.

To proceed; Before any pressure be applied, the wound should be properly dressed.

In those cases which require the least assistance from art, we shall find some applications preferable to others. We may aim only at keeping the surface of the wound moist; for this simple intention a proper dressing should be chosen. For example; a piece of lint dipped in sweet oil, and applied to the

wound, without any other dressing, might on some accounts be a very proper application; yet as the oil may dry up in a few hours, the lint may become a hard crust adhering to the edges of the wound, and thereby retard the commencement of cicatrization. If therefore over this lint, a pledget of the cerate of calamine, or spermaceti, be applied upon tow, the evaporation and dryness will be in a great measure prevented. These dressings, with the bandage, will be sufficient for the cure of many of these complaints. It is well known however, that hogs lard,* or spermaceti ointment, are preferable to oil; as much less liable to evaporate, and as being likewise on other accounts, the most eligible applications for the purposes of which

* I have for a long time used this animal oil as a common dressing in these cases; but it should be free from rancidity and salt.

we are now treating. The use of tow must also be very obvious, from its property of retaining, as well as absorbing moisture, and thereby preventing both too quick an evaporation, and too large an accumulation of pus: either of which, is extremely hurtful to the surface of a wound. For these reasons it is in most cases a substance much to be preferred to rag, as an external dressing. For unless the ointment which is spread upon the rag be very stiff, it is apt to evaporate, and to leave the rag at the end of a very few hours almost entirely dry. And if to prevent this evaporation, the ointment be made very stiff, it is apt thereby to become too irritating.

If there be inequalities in the surface of the wound, it is much better to fill them up with different pieces of the lint plaister, and afterwards to apply an entire pledget of the same, before

the tow plaister be laid on, than to put on one entire piece of lint alone. In some cases which were difficult to cicatrize, I have found it extremely serviceable, to raise the lint pledgets even above the level of the adjoining skin. Of so much importance is this mode of dressing some obstinate wounds on the legs, especially those which are situated in the hollow between the ancles and heel, that without having recourse to it, their cure will be a work of great difficulty where the erect position of the limb is chosen, even though a bandage and compresses be well applied; for these strata of lint make such a compression on the bottom of these wounds, as no common compress could effect. We have also sometimes another advantage attending this method; namely, the preventing an accumulation of matter, and a burrowing of it under the edges

of the new formed skin; circumstances which often happen where, from the use of one entire piece of lint, matter is confined. This occurrence is very common in the healing of wounds; and while it continues, cicatrization cannot go forward.

When a wound on the leg has been properly dressed, the application of pressure is the next business of the surgeon. This pressure should always be made by linen compresses over the wound; and a flannel roller applied neatly and equally tight over the whole limb. The former assist in making a due degree of pressure upon the wound; and with the latter added to them, the cure will be accelerated beyond all the ideas that could be formed of their effects without experience.*

* Mr. Else knew the advantages of compression in ulcers on the legs; as is plain from his recommending compresses of lead. These I have never tried; but I conceive that they cannot be so easy as those of linen.

In the application of this pressure the greatest attention and management will be necessary. The compresses should be made of old soft linen, without seams, hems, or darnings, and should vary in number and size, according to the part in which the wound is seated. If this be on any of the upper parts of the leg, two of them of two or three folds each, one about the size of the palm of the hand, and the other of half that size, will be sufficient. The small one should be applied first, and those sides of it which are doubled should be so placed as to make the least possible indenture on the skin by the pressure of the roller; without this precaution the skin will sometimes be raised in blisters.* The larger compress should be applied over

* Where any inconvenience of this kind arises from the use of linen compresses, it may be obviated by making them of folded pledgets of lint.

the small one with the same care. If the wound be situated in the small of the leg, or in any of the hollow parts about the ancles, it will be generally necessary to apply in the same manner, three or four compresses of different sizes; beginning with such, as are small enough to fill up the inequalities of the part, and to make at the same time a proper pressure on the wound.

When the compresses are adjusted, we must first apply the roller round the ancles, and from thence, about the foot, quite to the toes. In returning it to the leg, it should be so contrived, as to be brought over the lowest part of the ancles, as near as possible to the heel; and in some obstinate wounds on these parts, it is necessary to bring it from the instep over the heel itself, in order to make a proper and equable pressure on the wound.* The roller

* Compresses and a roller are as necessary in the cure of wounds on the foot, as in those on the leg.

must then be carried spirally as high as the knee, and brought down again to the small of the leg. If it be not of a sufficient length to admit of this, the skin is apt to bulge out between the windings, and thereby much pain is occasioned. In short, very much of the ease and advantage to be derived from a roller, depends on its equable application and its length: without attention to these circumstances it will not answer its design.*

* It is a very frequent practice among those who are directed to use rollers, to shorten and apply them differently to the manner in which the surgeon has instructed them. They generally assign as a reason for so doing, that in *their* opinion, it makes no difference. I find this practice so general, that it is proper to be as generally known, in order to its being guarded against.

For many years before Dr. Underwood's treatise appeared, I was in the habit of using linen or cotton rollers; in many respects they answer the purpose very well: yet I cannot but acknowledge myself much indebted to that gentleman, for the hint of using flannel ones, which are certainly preferable to them. From

It appears strange to some, that we should attempt to make a considerable pressure upon the wound itself; but from the reasons already assigned for the difficulty of healing in the erect position, it follows, that unless the pressure be made upon the vessels of the part affected, those obstacles will not be removed. Compresses afford us a further advantage, by rendering it unnecessary to apply the roller so tight over other parts of the leg, as would be re-

their greater softness and elasticity, they are much easier to the patient; they are not so apt to blister the skin; and they keep a more equable pressure under every motion of the limb. They should be made of fine thin flannel, six yards long, and four inches wide, to allow for shrinking in washing. And if torn of that length from the piece, they are much better upon the whole, although less elastic than if made the contrary way of the flannel; as the number of joinings is thus totally avoided. Rollers of this description, may be had at No. 5, Bull and Mouth Street.

If linen or cotton rollers be used, they should be made three inches wide, and eight or nine yards long.

quisite, were there no compresses under it. This tightness it is well known is sometimes an inconvenience to the patient in walking.

The wounds should generally be dressed every twenty-four hours; when however they are nearly cicatrized, they will sometimes heal very well, if this be done only every other day. In this stage of the process likewise a flannel roller is to be preferred to a linen one; as it will keep in its situation for two or three days, when well applied, which the other will not.

From the first application of the bandage we may freely allow the patient to follow the most laborious employment, and to walk or stand the whole day. I can with great truth say, that I have scarcely ever found any impediment to the healing of these wounds by such a constant motion, provided they

were dressed and bandaged in the manner just described.*

But though we may by this simple treatment cure many local wounds, or other recent accidents on the lower extremities; yet there are peculiar cases in which we shall be obliged to call in the aid of other remedies, internal as well as external.

If for example, there be a general debility of the habit, with a laxity of the solids, either from confinement in a

* I remember a singular exception to this practice. A man was bitten by a dog (supposed to be mad) upon the middle and anterior part of the leg. A strong caustic was applied, which wounded the trunk of a large lymphatic vessel. When the eschar was separated, a considerable quantity of pellucid lymph flowed daily from the opening. Indeed it might at any time be made to flow out by pressing the integuments upwards, in the course of the lymphatics. While a bandage and exercise were continued, this orifice remained open, and prevented a cure, by the continued flow of lymph from it. I therefore advised an emollient poultice, and rest. In a few days after which, the aperture closed, and the cure was completed.

close air, or from any other cause; or if there be an interruption in any other way to the general state of health, it must be apparent to every one, that wounds so circumstanced, will require the assistance of such remedies as are suitable to these indispositions. Among these, Peruvian Bark is often of great use, when joined with a generous diet. Sometimes also a change of air will do much towards bringing the constitution into a more healthy state.

Some wounds likewise will require more assistance from external remedies, than has yet been suggested in this treatise. This observation applies not only to those cases in which the habit is not in a perfect state of health, but to others also, where there is no evident impediment whatever from this cause. Sometimes the granulations although clean, will be lax and unhealthy; at other times they will be foul, but yet firm: In either

case, it will expedite the cicatrization, to destroy their surface. A single application of the nitrated silver, will generally effect this more speedily, more effectually, and with less pain, than any other remedy. It is decidedly preferable in all these respects to the red nitrated quicksilver in powder; an article which we often find must be repeatedly applied, before it will answer the purpose. Sometimes where these unhealthy granulations rise above the surface of the wound, it is of use, just to wash them occasionally with a saturated solution of vitriolated copper in water. But whenever any of these caustic applications are used, a dressing of the hogs lard should be immediately applied; this dressing by sheathing the parts from the acrimony of those substances, tends of course to lessen pain: And I have generally found it to be the best dressing for some days afterwards.

In many cases it is not necessary to use any other till the cure be completed.

When by these means the wound puts on a healthier appearance, but still will not cicatrize as speedily as could be wished, it is frequently found to be serviceable, to pour daily upon its surface, a few drops of a very diluted solution of vitriolated copper, previous to the application of the dressings. Four ounces of water added to ten drops of the saturated solution abovementioned will lower it sufficiently.

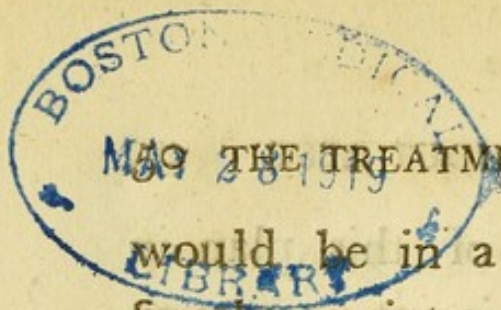
In some of these cases, a mixture of equal parts of hogslard, and cerate of calamine, is a useful dressing for this purpose. In others, a little of the calamine only mixed with olive oil will answer better. And sometimes, though rarely, a small quantity of the same powder, or of vitriolated zinc in water, applied upon lint, with a pledget of the tow plaister over it, is preferable to the

oily applications. Whenever wounds of these parts are cicatrized by this plan of treatment, it is advisable to continue the bandage for a few weeks afterwards; until the cicatrix be quite firm.

The mode of living which the patient should adopt, is the next point to which I shall direct my reader's attention: a point of great importance, and as necessary to be particularly attended to, as the external management of the wound. It has been before noticed, that the inflammation which at first comes on in these cases, will be of a different kind in different habits. Of course, a difference in the diet will be as necessary, as a difference in the internal remedies which it may be proper to use. If the true phlogistic diathesis with a phlegmonous inflammation prevail, evacuants, and a low diet, must certainly be directed; but I am persuaded, that much mischief arises from

the sudden adoption of this plan in those habits, where it is not necessary, and where moreover there is a predisposition to an inflammation of a more serious and troublesome kind. Some practitioners think it right to prohibit the use of animal food and of all kinds of strong liquors, from the moment in which a wound has been received. But due attention should be paid to the necessity or propriety of enforcing such an abstinence; for I have seen repeated instances of gangrene brought on, and life endangered by it. On the other hand I have been a witness of very favourable changes which have taken place in a short time, by having recourse to a more generous mode of living.

It is often very difficult to keep the human frame in perfect health. Our habits in eating and drinking are in general so different from what they



THE TREATMENT OF LOCAL WOUNDS

would be in a state of nature, that for the maintenance of health, it is necessary to keep up a certain degree of stimulus in the system; sophisticated nature must be indebted to art, for the performance of this office. Habits of this kind being acquired, the greatest caution and prudence must be used, when we attempt to oppose them: we may bring on worse diseases by refusing to gratify them, than those which might ensue from their indulgence. I do not mean to plead for the gratification of appetite; all that I have in view is to prevent the bad effects which may arise from a sudden disuse of those stimulants to which the patient has been accustomed. If he choose to abridge himself of such indulgences, it should not be when he is in the situation in which we now suppose him; it being necessary at this time to call forth all the

energies of the constitution. This caution is particularly necessary with respect to such patients as have lived in habits of excess for many years. If for instance, they have abused themselves by drinking large quantities of different strong liquors, they have thereby considerably weakened and enervated the body; and if in addition to this, they are advanced to the middle age of life, or have passed it, there is danger, should any violence happen to the lower extremities, that an erysipelatous inflammation of a very serious kind will ensue. And this effect is almost sure to take place, if the quantity of those pernicious stimulants in which they have indulged themselves be suddenly lessened. So that in all such cases it is the best and safest practice to continue the former indulgencies of every kind, as if no accident

had happened.* If they have been abstained from, and the inflammation above-mentioned begin to appear, we should have immediate recourse to them again; or to a suitable quantity of generous wine, with bark, opium, emollient cataplasms, and rest, until it be removed.

A similar erysipelatous inflammation is also apt to come on in recent accidents of these parts, where the habit is naturally weak delicate and relaxed, and where the blood is impoverished by living too low. In many of these cases, it is no uncommon thing, to find people add to the disease by still greater abstinence. The same plan of treatment must likewise be adopted here as in the former instance; and in both

* The late Dr. Alexander Monro has given three cases in which the indulgence of this vicious habit was successful. See vol. V. part II. of Edinb. Medical Essays and Observations, p. 491.

these cases, it is hurtful to apply stimulants of any kind to the wound; for as the mischief is brought on by a weakened action of the circulating system, it cannot be effectually removed but by internal remedies.

From what has been said, it is evidently of great importance in all kinds of recent wounds of the lower extremities, to pay particular attention to the mode of living, and to regulate the quantity and quality of the internal stimulants, according to the nature of the constitution, and the former habits of the patient. When by this mode of treatment such wounds are brought into a good state of digestion and granulation, we may finish the cure by bandages and exercise; as in other cases. While the system is vigorously supported by internal stimulants, there is but little danger of a relapse; and by changing the plan of cure at the proper

period of the disease, we avoid all the inconveniences of a long confinement.

Such is the great difference of constitution that exists in different persons, that the best surgeon may, at the commencement of a wound, be sometimes undecided, whether it be most proper to pursue the evacuant, or the supporting plan. In such cases, it will be of considerable use, to attend to the state of the pulse, and the skin, and to observe the appearance of the tongue; by the state of which, compared with the aspect of the wound and the parts around it, we may be much assisted in forming a judgment of the right mode of procedure. The pulse is generally weaker and quicker, the tongue more furred, dry, and oftentimes browner, and the heat of the skin more moderate, in those cases where there is a lurking disposition to erysipelas and gangrene, than where the phlegmonic diathesis prevails.

Although these observations have a particular reference to wounds, or other accidents on the lower extremities, yet it must be apparent, that many of them are equally applicable to those in any other part of the body.

CHAPTER IV.

OF THE TREATMENT AND CURE
OF LOCAL ULCERS ON THE LEGS,
WITHOUT REST.

LOCAL ulcers on the legs are very common at all ages, and in all constitutions, and arise from a variety of accidents, and other causes. Wounds are here very apt from neglect, or improper management, to degenerate into ulcers. In many cases, the latter differ from the former only in name: wounds acquiring the appellation of ulcers by continuing unhealed for a considerable length of time.

It has been before noticed, that wounds in these parts require for their cure, either the assistance of a bandage, or

the horizontal position. The labouring poor are particularly liable to injuries of the limbs; and as they can seldom either afford to pay for suitable advice, or give the necessary rest to the injured part, wounds in their case degenerate into ulcers much more frequently, than when they happen to people in more affluent circumstances. Again; when by proper management an ulcer is healed, the new-formed skin being of a delicate texture,* and

* Although the new formed cutis (if it may be now so called) be more vascular, and of course for some time of a more delicate texture, yet I have reason to believe, that in process of time it becomes firmer than the original skin. I have seen many instances in which it has been formed on a considerable surface, after the healing of very large ulcers; and when some years afterwards fresh ulcers have broken out on the same leg, I have almost always found that these have appeared on some other part of the leg, and not upon the old cicatrix. As the new skin becomes whiter and less vascular, it may also in process of time become more horny and insensible, and be really stronger, than the old skin.

For many ingenious observations on this subject, I beg leave to refer my reader to Mr. James Moore's dissertation.

an habit of inflammation having been acquired, the whole limb is to be considered as a weakened part of the body; and the longer or the oftener it has been ulcerated, the more reason have we to consider it in this light. Hence it is, that upon the attack of various complaints of the constitution, inflammation with all its consequences is much more apt to fall into it, than if it had not been previously ulcerated. This case is analogous to that of persons who have once had an ophthalmy, peripneumony, or any other topical inflammation; such persons, we well know, are from exposure to cold, or from any other exciting cause, much more liable to a return of their former complaints than they are to inflammations in any other part.

Local ulcers on the legs are extremely various in size, number, and situation. Sometimes we find the adjoin-

ing skin free from pimply or scaly eruptions; at other times, covered with them to a considerable extent. From these eruptions we are apt to form the idea of a constitutional affection. Ulcers of this class are likewise generally attended with swelling, inflammation, and pain. They assume, as was noticed in a former place, very different appearances in different habits; there are however certain appropriate marks, found on them, which will almost always enable us to determine on the first inspection, whether they be truly local or not.

The great obstacle to the cure of these ulcers, as in the healing of wounds, is the dependent situation of the limb. The method of obviating this difficulty must therefore be the same. But we are not even in these cases, to apply compresses, and bandages, indiscriminately. For there are

certain diseases to which these ulcers are liable, which, whenever they occur, it is absolutely necessary to remove before it is safe to adopt this plan of cure. These are of very different kinds; as temporary inflammations of a phlegmogenous nature, either with or without suppurations; considerable erysipelalous inflammations, with a tendency to sphacelus; a foul and sloughy state of the ulcers, attended with a daily enlargement and extreme pain. It would be the greatest absurdity in any of these cases, or in others of a similar kind, to apply tight bandages, and allow the free motion of the limb; however eligible these methods may be, where such excepted cases do not exist. When either of the two former diseases takes place, the mode of treatment already pointed out is to be adopted.* In the foul corroding ulcer, a horizontal

* See chap. iii. page 26.

position, and poultices, accompanied with the internal use of bark, opium, and wine, are as proper and necessary as they are in the erysipelatous inflammation tending to a gangrene. This disease is of a very singular kind;* it is evidently an ulcerative process of an acute nature. In some cases it assumes so much the appearance of the venereal ulcer, as to require a nice discernment, in order to decide whether it be of that kind or not. This distinction however is of no small importance, and shall therefore be more particularly noticed when we come to treat of the venereal ulcer.†

When temporary affections are removed, and the ulcers are brought into the usual state in which they are commonly met with in the erect position;

* Mr. Else has noticed this ulceration. See Medical Observations and Inquiries, vol. IV. page 347.

† See chap. V.

in a word, when they are deemed fit for the use of bandages, we must then apply them without delay; it is almost incredible to say how speedily the excruciating pains, and all the unfavorable symptoms will be alleviated by them. In the generality of cases, these good effects will take place so soon, that within a few hours after the first application of the bandage, the patient will be enabled to walk and stand better than he did before.

||| But although an equable and general pressure on the limb will alleviate all the unfavorable symptoms attending local ulcers on the legs, and will also eventually cure many of them with no other assistance than a common dressing; yet it should be our aim, in every case, to bring them as quickly as possible into a fit state for cicatrization. These ulcers being always more or less foul and unhealthy on their surface,

require the use of proper detergents, or stimulants, to bring them into a healthy granulated state; but as these remedies will in most cases give considerable pain, if applied while the ulcer is in an irritable and inflamed state, it is generally the best practice to use mild oily dressings, and an equable bandage, for some days previous to their application: By this treatment, the inflammation will be considerably abated, and less pain will of course ensue from the use of stimulating medicines. It is very well known, that parts are sensible to pain on the application of a stimulus, in proportion as their blood vessels are in a greater or less degree of excitement or action; and that the same quantity of a stimulating substance will give ten times more pain to an inflamed surface, than it will to one that is not inflamed. It is of great importance to attend to this fact; inasmuch

as by bearing it in mind in our practice, we may frequently lessen the sufferings of our patients.*

It must however be acknowledged, that some ulcers require the application of dressings which are gently stimulating, even from the first of our taking them in hand: there are cases in which pain will be sooner alleviated by these, than by the previous use of the milder dressings. Those ulcers in which it is proper to apply the mild substances, are in general such as are tolerably clean on the surface, such as are not of very long standing, and are withal in a very inflamed and irritable state. † Those in

* The sufferings of these unhappy people may be alleviated by taking one or two grains of opium, every night, during the painful state of an ulcer even when it is not affected by any particular disease.

† It will now and then happen, though but rarely, that in some of these cases, the calamine cerate or indeed any other mild ointment spread upon tow or

which the other treatment is proper, are such as are of a black or greenish hue at the bottom, have less inflammation around them than those of the former kind, and are of longer standing.

The red nitrated quicksilver has been much and very justly recommended, as an excellent detersive in these cases; but I am of opinion that it has been used too freely and oftentimes unnecessarily. On the use of this article, my experience obliges me to differ from Dr. Underwood.* Much

upon any other substance, will irritate and inflame the skin, in consequence of which, a watery fluid will be secreted and great pain will ensue. In such cases, I have found it serviceable, either to apply a pledget of dry lint to the skin, without a plaister of any kind over it, or where that proves too drying, to apply such a pledget under the tow plaister. In these cases it is often serviceable to apply daily to the skin, a *very small quantity* of the ointment of nitrated quicksilver before the application of the lint.

* See Surgical Tracts, p: 100, and elsewhere.

as I respect his judgement, I must assert, that such large and repeated applications of it as he recommends, are very rarely necessary. In many very old and foul ulcers indeed it may be used to greater advantage by sprinkling the dry powder upon them, than in any other form. But even in these cases, a *very* small quantity will almost invariably be sufficient for the purposes intended by it: and if it be applied in this way, only two or three times a week, with a milder dressing on the intermediate days, ulcers of this description may be brought into a state for cicatrization, and kept in such a state, much better than by loading them daily with large quantities of this substance. I must add likewise, that I have found by experience, that unless this application be used in *small* quantities, it is generally a very painful one; on this account it is obvious,

that it should be employed with great judgement and caution.

The nitrated silver is likewise a very useful article for destroying the unsound and diseased surface of these ulcers. Moreover, as has been already noticed, it is frequently found to be a more effectual, and a less painful application, than the red nitrated quicksilver; provided that the ulcers be not in a very irritable and inflamed state when it is used. It is impossible to say too much in praise of this excellent remedy, the good effects of which, I have so repeatedly seen in many ulcers, and especially in the small and obstinate ones situated between the ankles and heel. * I have observed, that it

* I have met with ulcers in this part in middle aged, or elderly women, more frequently than in men. When they first break out, they are apt to spread and ulcerate for ten days or a fortnight, before it is possible to bring them into a healthy state. At this time they are generally more painful and irritable than ulcers with a

is, upon the whole, more serviceable in the lesser ulcers, than in the larger ones: many of the former indeed will heal, with any common dressing, almost immediately after it has been once applied, notwithstanding they had resisted every other means which had been before used. It may be proper to remark, that it is rarely necessary to make a *very frequent* application of the nitrated silver, during the cure even of the worst and most obstinate ulcers. When a repetition is necessary,

similar disease in any other part of the leg. If any other than a mild dressing with a poultice be applied to them, while this ulceration is going on, the pain is almost insupportable. And even when this state is over, mild dressings with a bandage generally answer best. It is in foul stationary ulcers of long standing in this part, and which do not yield to the common treatment by bandages, &c. that the nitrated silver is of so much service. I have observed also that ulcers in this part are more apt to break out again, after having been perfectly well for some time, than those which are situated in any other part of the leg.

there should be almost always an interval of many days or even weeks between the times of using it; a quicker return of this application only serves to give unnecessary pain. I have observed likewise, that if no benefit be derived from it after it has been used two or three times, it seldom answers any purpose to repeat it.

After using either of these caustic applications, the ulcers should be immediately covered with a pledget of hogs lard, or the spermaceti ointment. As a common dressing upon the lint on the intermediate days of applying them, or indeed at any other time when a mildly stimulant dressing is required, a mixture of ten grains of the levigated red nitrated quicksilver, to one ounce of hogs lard, is the easiest and best I have ever used.* This answers much

* As the surface of many old ulcers on the legs is more or less foul, and in a more indolent state than

better than the strong basilicons, (as they have been called) or than any compositions of the like materials; which being hard and stiff, and containing substances of a very heating and stimulating nature, often retard more than they promote the cure. I have for many years past used no other dressing upon the lint in common cases of local ulcers on the legs, than fresh hogs lard, either alone, or mixed with

that of a recent wound, a detergent of a gentle nature is generally necessary as a common dressing, in order to keep it in a fit state for cicatrization. I have used the above mixture of red nitrated quicksilver and hogs lard, in so many cases, that I can with great confidence recommend it, as superior to any other dressing for this purpose. This ointment is also so mild, that most local ulcers will cicatrize quicker by its use than by any other application with which I am acquainted. In the generality of these cases, this dressing seldom gives pain; yet I have seen many instances, in which it has proved too stimulating, and excited considerable pain. This is another reason why the red nitrated quicksilver ought to be applied to ulcers with great judgement and caution.

small quantities of the powder above-mentioned.

A good surgeon will always keep in mind, that the healing even of an old ulcer on the leg is a process of nature; and where the great impediment arising from the dependent situation of the limb is removed by continued pressure, very little further assistance from art will in general be required to effectuate a complete cure. This consideration should lead us to distinguish between those cases, in which nature requires little or no assistance from dressings, and those in which such assistance may be properly given. I cannot but condemn the practice of indiscriminately using stiff, harsh, and irritating applications of resin, and other similar materials; for if the granulations be clean, healthy, and cicatrizing, the mild oily applications will certainly much better answer all the

intentions. I am well aware indeed that a complete cure may sometimes be obtained, by the use of those unnatural dressings abovementioned, when accompanied with the assistance of a bandage; but the merit in this case must be ascribed to the ascendancy of nature: such are its powers, that it will triumph over considerable impediments, and carry on its work in defiance of them all.

When ulcers on the legs are made perfectly clean, and have a healthy and sound bottom, we need not be afraid of cicatrizing them. It is not at all necessary to keep them open any longer for the sake of making a firmer cicatrix. It would not however be proper to dry them up, as the phrase is: we should be very careful not to heal them in an unsound manner. A surgeon of judgement will of course take care that the cicatrix is a firm

one. But we must not always expect to have a granulated surface; in many cases of long standing, where the subjects are debilitated or elderly people, the bottom of the ulcers may be made perfectly clean and florid, and yet no art whatever shall be able to produce granulations in them. In many even of these cases however, we find that ulcers will gradually contract, and heal firmly by the assistance of pressure and the common dressings. Hence it appears, that the powers of the constitution may be capable of producing a cicatrization, when they are inadequate to the regeneration of lost substance.

Callous ulcers are generally deemed obstinate and of difficult cure; but I have seldom found it of any use to destroy the edges even of the worst of them: I am convinced that it is not merely the callosity, but something in the very nature of the ulcer, that im-

pedes the cure. I have sometimes applied the nitrated silver around the root of the callosity, and have touched at the same time with it the adjoining parts of the ulcer. This method I have often found of great service in destroying a loose spongy and unhealthy surface, which though almost imperceptible, is a great impediment to the cure. This application however is seldom powerful enough to destroy the callous edge. I have found by experience, that merely by the aid of pressure, these ulcers will in general heal as readily as any others of a long standing; provided that their surface and edges be well deterged by the method already pointed out for that purpose. In dressing an ulcer of this class, I have found it of great advantage before the tow pledget be put on, to fill its cavity with different pieces of the lint plaister, not only till

they rise to a level with the callous edges, but higher still, even till they cover them. A well made compress should then be applied. This should be of such a size, as just to cover the callous edges. Upon this, others should be applied; each one being larger than the one immediately below it, as before described. A roller is then to be tightly bound over the whole. If this method be correctly followed, the size of these ulcers will soon be contracted. I use this language, because when the callous edges remain to the end of the cure, the diminution of the ulcer by the approximation of the external skin, can scarcely be called a cicatrization.

In the management of local ulcers on the legs which will not heal, or which heal but slowly, (whether callous or not) it is very frequently found to be of great service, to use the remedies before prescribed for the cure of a simi-

lar state of local wounds.* In addition to these, I have in a few instances experienced the Peruvian balsam to be of use. It should be applied daily to the surface of the ulcers, previous to the application of the other dressings. Peruvian bark, steel, lime-water, &c. internally used, are also frequently found serviceable in these tedious cases.† But should all these methods (after fair trial has been made of them) fail, we shall have ground to suspect, that the ulcer is not *merely* local,

* See p. 47.

† It is no uncommon thing after local ulcers have for some time healed kindly, to become stationary. We can make no further progress in the cicatrization of them, even though the same dressings continue to be applied, which at first produced that effect. In many of these cases, and in others which have proved difficult and obstinate, I have seen more benefit derived from the use of from four to ten grains of the extract of hemlock given twice a day than from any other remedy. In short, I have by this medicine repeatedly cured ulcers which had before resisted every other remedy.

but that it is connected with some disease of the constitution. The constitution therefore must be corrected, before we can expect to succeed in the cure of the ulcer.

There are however cases truly local, in which we are frequently defeated in our endeavours to produce cicatrization. There is no particular disease of the constitution to contend with, but the habit of the patient impedes the cure.* This may arise in some cases from a morbid affection of some of the viscera, which debilitates or diseases the general system. In other cases it may arise from a general weakness, or defect in the constitution, unaccompanied with a diseased affection of the viscera. This last state often occurs

* Sometimes the cure of local ulcers will be impeded by a stoppage of the menses. In these cases, it will be found necessary to remove this obstacle, before we can expect to succeed in the cure of the ulcers.

among the poor, from their living too low; and either of these states in other cases may arise from the improper use of spirituous liquors.

In cases of this obstinate nature, I have seen good effects result from persevering in the daily application of the calamine cerate upon lint, and the previous use of the diluted solution of vitriolated copper, already mentioned. Where we cannot make a complete cure, much may nevertheless be done to mitigate the sufferings of the patient; the constant use of a bandage, and proper dressings, will in general enable the poor man under such circumstances, to follow his employments with considerable ease; without this assistance he has to contend with two mighty evils; pain and poverty.

In some cases of difficult cicatrization, the hindrances are local; they arise from some adverse affection of the

adjoining parts. These for the most part are either diseases of the periosteum, communicating by an opening or sinus with the ulcers, (of which I have seen several instances;) or they are fistulous sinuses, running either into the adispose membrane, or among the interstices of the muscles. Sometimes also, although very rarely, there is a concealed ossification, to some extent, of the tendinous aponeurosis of the muscles, adjacent to the ulcer. I have also found a small schirrous-like body about the size of a pea, within the cellular substance, prove an obstacle to the cure.

Until these impediments be removed by their proper remedies, it is in vain to attempt the cure of the ulcer. The diseased periosteum must be laid bare, and destroyed by caustics. The fistulous sinuses must either be opened, where it can be safely done, or de-

terged and healed by stimulating injections. Ossifications in the aponeurosis must be extracted by the forceps. And schirrous substances, I have found by experience, may be destroyed much sooner and with less pain by a single application of a sharp caustic, than by repeated applications of a milder one.

In all the different cases of local ulcers on the legs, it is extremely necessary, that while we are endeavouring to cicatrize them by external remedies, we keep the general health of the patient in view; for if it sink much below its natural standard, considerable impediments to the cure of the ulcer will arise from that circumstance. To lower a patient therefore, by extreme abstinence, and the repeated use of purgatives, is certainly a very erroneous and improper practice. I am convinced that such a procedure

is utterly subversive of the intention of the practitioner. In many cases it brings on great debility, impoverishes the blood and weakens the energy and action of the whole system: hence a disposition to a further ulceration is often excited, instead of any tendency towards a cure. But as I have been particular on this subject, in speaking of the treatment of local wounds on the legs, and as most of those observations are applicable to the several states and constitutions, in which ulcers are to be met with, I beg leave, for the sake of avoiding repetitions, to refer the reader to what has been there advanced.*

Local ulcers on the legs are frequently attended with diseased affections of the skin; of these there are several kinds. In some cases, the skin

* See Page 48 and seq.

is dry and scaly; in others, it secretes a watery or purulent fluid.* These affections of the skin are in general confined to a small distance around the ulcer; but in some instances, we find them extended over the greater part of the limb. They are generally attended with a most troublesome itch-

* There is a particular affection and disease of the skin, which is sometimes met with around very old local ulcers of these parts. The skin has the appearance of being covered with granulations, or little warts, and secretes a thin purulent fluid. A single application of the nitrated silver will generally remove this affection with the aid of the bandage.

Amidst the variety of cutaneous affections to which the legs are subject, we must be careful, to distinguish those which are produced by the itch from all others. In some of these cases, there will be large scabs or blotches in the part, sometimes attended with little ulcers. This disease is not uncommon on the legs and feet. It is still more frequently met with on the feet, and about the toes of young children. In these instances it is not always attended with eruptions in other parts of the body. The best and most certain remedy for these complaints (as is well known) is the sulphur ointment.

ing. If the ulcers be local, we may reasonably infer, that the affections of the skin, however formidable and extensive they be, are local also. I am persuaded, that many of these diseases are to be attributed in a great measure to the dependent situation of the limb; inasmuch as they very seldom accompany local ulcers in the upper parts of the body. Compression is therefore essentially necessary to their cure. We shall however in general find it necessary to combine the application of topical dressings with the use of compression. One of the best and most powerful of these, is the tar ointment. This article has long been known as an useful application in cutaneous affections; but it is a strong and powerful application, and requires some caution and management in its use. The best mode of using it, is to spread it on the diseased skin, either every day,

or two or three times a week, and then to apply over it a piece of fine linen rag: it will sometimes indeed stimulate too much and even raise vesications; to guard against these inconveniences it must be used at first in *very* small quantities. Under this management the tar ointment will be found to remove many of these cutaneous affections very speedily.

Another very excellent remedy in these cases, is the ointment of nitrated quicksilver, or what has been usually called the citrine ointment; an article which, for various diseases of the skin, has been justly held by many in high estimation. I may here observe, that although in its composition, it differs much from the tar ointment, yet it is very generally of use in the same kind of topical affections of the skin, * for

* Mr. Bell has very properly noticed its great effects in these cases. See Treatise on Ulcers, p. 374.

which that substance has been recommended; it also acts in the same quick and powerful manner.

The ointment of nitrated quicksilver has been made of different degrees of strength, but that which is made up according to the directions of the London Dispensatory has been generally used. This preparation frequently answers very well.

Some years ago that benevolent man, the late reverend Mr. Clare, of Hoxton, used an ointment of this kind for various diseases of the eyes. † But though he distributed it gratis, he chose to keep the preparation of it a secret from the public. The following

† There are some chronic inflammations of the eyes and eyelids, in which this ointment has a more happy and speedy effect, than any other remedy; but it requires the judgement of a regular practitioner to distinguish the cases in which it is proper to apply it; an alarming increase of inflammation may be the consequence of its indiscriminate use.

is Mr. Clare's recipe; which he gave me under a promise, that I would not reveal it to any one during his life time.

Take of fresh butter, eight ounces.

Olive oil, two ounces by measure.

Quicksilver, one ounce.

Aqua fortis, one ounce by weight.

Camphor, two drams.

Dissolve the quicksilver in the aqua fortis, dissolve likewise the camphor in the olive oil, and whilst the former is yet hot, mix both of them with the fresh butter previously melted, but beginning to concrete by being exposed to the air.

I think this a neater and better composition than any I have seen of the kind. The addition of oil prevents that unpleasant hardness which the common citrine ointment is apt to acquire. I have now used it so long in cutaneous diseases, * that I can speak

* In the treatment of ulcers, and sometimes also of wounds on the legs, I have frequently met with a cuta-

of its excellence with the utmost confidence. But it is necessary to apprise

neous affection of a peculiar kind, a spreading erysipelatous ulceration on the surface of the cutis; this is entirely local, and comes on at any age, and in any kind of habit. It usually begins near the edge of the ulcer, and daily separates a fresh portion of the cuticle from the cutis; leaving the latter inflamed and generally (though not always) covered with a thin purulent matter secreted from its surface.

This disease when it is not checked at an early period, will sometimes extend itself over a considerable part of the leg. The common emollient ointments accelerate rather than retard its progress; but the ointment of nitrated quicksilver, seldom fails to make some amendment in the complaint, from its first application; and in many slight cases, it will entirely remove it in a few days.

When these affections occur in patients of an irritable habit, a *very small* quantity of this ointment should be spread on the part, and over this an emollient poultice should be applied, to prevent an excess of pain. But where the habit is not remarkably irritable, this precaution is unnecessary; I have invariably found that it is advisable to use this ointment more liberally in cutaneous affections of this class, than in those of any other. In the more obstinate cases of this kind, it is necessary to apply it spread upon lint twice a day. Considerable

the reader, that it is to be used with the same precaution that was enjoined with respect to the tar ointment, and that it is to be applied in the same manner; otherwise the same inconveniences are likely to arise.

The strong quicksilver ointment is another useful application in many of these diseases of the skin, and will always be found serviceable where a milder preparation is required. This also should be used in the same manner as the former.

service may likewise be rendered in all these cases, by removing the loose cuticle at each dressing; hereby the ointment will come more into contact with the disease, and the matter will be prevented from becoming acrimonious, by being retained between the cuticle and the cutis.

We frequently meet with a cutaneous affection upon the hands and fingers, of a very similar kind to that on the legs already described, in which the ointment of nitrated silver, (if used in the manner here recommended) is more serviceable than any other remedy with which I am acquainted.

In the cure of these topical complaints of the skin, and indeed of wounds or ulcers without them, we ought ever to remember, that it is of the utmost importance to keep the parts very clean. Let them therefore be occasionally washed with milk, or with oatmeal and water; or if these will not sufficiently cleanse them, let even soap and water be used. The want of cleanliness in a patient is a circumstance which tends to counteract the agency of the best applications: the practitioner should therefore bear this in mind, especially in his attendance on the lower classes, among whom the cure of a disease is frequently retarded from this cause.

CHAPTER V.

OF THE TREATMENT AND CURE OF
WOUNDS AND ULCERS ON THE LEGS,
CONNECTED WITH DISEASES OF THE
CONSTITUTION.

IF wounds be inflicted, or ulcers break out, on the legs of persons labouring under diseased constitutions, there can be little probability of our healing them, until the constitution be amended. One of the first objects of enquiry therefore with a practitioner should be, whether there be any such impediment to the cure existing in his patient's case. If there be reason to suspect that the constitution is in fault, we must then endeavour to ascertain the true nature of that disease which obstructs the cure.

The diseases of the constitution with which the subject of these papers is most concerned, are either of the venereal, the scrophulous, or the scorbutic kind. It is not, in general difficult to decide, which of these be the patient's disease; the circumstances and appearances attending each of these complaints being sufficiently appropriate. Yet we sometimes meet with cases where we do not find the usual marks of distinction: there is evidently a diseased affection of the constitution, but what name to give it, or of what particular kind to pronounce it, is not so clear.

Venereal ulcers on the legs are very common, and we shall in general be able by examining their appearance, by inquiring into all the particulars respecting them, to say decidedly whether they be of this kind or not. In some cases indeed, the nicest discernment will be requisite, and we should be

cautious of forming our prognosis too hastily ; for serious inconveniences may result from a wrong judgement of the case.

There is a kind of temporary ulceration* to which ulcers on the legs are liable, and which, though not venereal, bears such a resemblance in some cases to those which are of that kind, as to render it extremely difficult for some time to decide whether it be such or not. It may naturally be supposed, that

* In the greater number of these cases it will be readily discovered, that the disease is not of a venereal kind. In others, it will not be possible to form a true judgement of them, unless a minute inquiry be made into every circumstance relating to them. Among other things it will be found, that this ulcerative process occurs more frequently when the patient has past the middle period of life than at any other time. This circumstance, in addition to others, will often lead us to a knowledge of its true nature. But in the course of my experience I have found, that the true venereal ulcer on the leg occurs more frequently about the middle period of life than earlier. Sometimes I have seen it in persons who were in the decline of life.

the difficulty might be obviated, by inquiring, whether such patients have had the lues venerea or gonorrhœa some time before; in many instances, an answer to such an inquiry may enable us to speak with certainty; in others, the answer may still leave us in a state of indecision.

This ulceration happens to persons of apparently very different constitutions: with respect to its commencement, I have observed, that sometimes it comes on at the first breaking out of a local ulcer; at other times, not till a future period. It begins with pain, which is generally most severe in the night. Its progress is marked by a daily enlargement of the ulcer, which soon becomes foul and ichorous, and sometimes sloughy and irregular in its shape. The disease continues to increase in this manner for a certain length of time only. The term seldom exceeds twenty days, and in

most cases it is still shorter; a period generally takes place in twelve or fourteen days. The ulcerative process then ceases of its own accord, and a perfect digestion and incarnation of the ulcer for the most part follow.

Besides this particular species of ulceration attending local ulcers, I have likewise found them sometimes in such a foul corroding unequal and painful state, merely from the want of cleanliness, and a bandage, as to render it difficult, especially at first sight, to distinguish them from venereal ones; but unlike the former, this is a chronic affection, and will continue nearly the same for many months together, or at least until an alteration be made in the treatment.

The true venereal ulcer on the leg often has many of the appearances I have described in the ulcerative state of local ones; nevertheless, by taking all its circumstances together, we shall

generally be able to ascertain its true nature and origin. If the patient has lately had the lues venerea, and the ulcer be in a foul corroding state, eating the parts away irregularly, and discharging a thin sanies, sometimes mixed with blood; and if moreover it be attended with considerable pain, particularly in the night, and has continued in this situation for some time; or if there be more than one of these ulcers on the leg, or if there be similar ones on the thigh, or if there be hard tumors in the adjoining cellular membrane, or an affection of a syphilitic nature in any other part of the body, we may with a great deal of certainty pronounce the ulcer in question to be of the venereal kind.*

* In some of these cases, the nature of the ulcer is demonstrated to be venereal, by certain affections in other parts of the body, corresponding with those of the ulcer; but it often happens that this disease shews itself only in the ulcers.

■ We should commence a mercurial course the moment that we ascertain these ulcers to be venereal. And if with the introduction of mercury, either by frictions or internally taken, we apply the red nitrated quicksilver to the ulcer, either in powder, or mixed with any soft ointment, we shall generally be able to afford speedy relief.

The mode of destroying the venereal poison by mercury, is now so well known, that I need not enter into the particular management of it. I may also take it for granted, that every practitioner allows the necessity of continuing this remedy, in every case for some time after the cure is apparently complete, in order to prevent a relapse.

But where any doubt remains, whether the ulcer be venereal or not, we must be extremely cautious how we proceed in the cure. Should we treat one that is not venereal, as if it were of

that class, we shall not only increase the disease we attempt to cure, but in some cases endanger the life or limb of the patient, by bringing on a mortification of the parts. Mercury being a dangerous remedy in spreading ulcers of all other descriptions, it should never be used where there is any doubt respecting the nature of the complaint. During the suspension of our judgement, it will be the safest practice, to treat the ulcer as if its origin was not from the venereal poison. Let the limb be placed in a horizontal position, let poultices be applied to the ulcer, and bark, &c. be administered, according to the directions given in a former chapter.*

If the venereal virus be not the cause of the ulcer, a proper digestion of it will soon take place; and if it proceed from this cause, its true nature

* See chap. IV. p. 60.

will soon be discovered, and no material injury will be sustained by a short delay of the appropriate method of treatment.

The ulcers next to be considered as connected with a constitutional affection, are the scrophulous.*

In the treatment of these ulcers we must always keep in view, the correction and removal (if possible) of that particular disposition in the habit, which laid the foundation of them. To this we may strictly attend, without neglecting their external management, much of the cure unquestionably depending upon this part of our art.

It is generally agreed, that in scrophulous ulcers, there is a laxity, a want of tone and vigour, in every part

* Scrophulous ulcers being so commonly met with in every part of the body, it does not seem necessary to swell this work by the description of a complaint, which must be well known to every practitioner in surgery.

of the solids. Hence exercise, cold, or sea bathing, a good air, bark, steel, and other tonic and strengthening remedies, have been very properly recommended; by a perseverance in this plan, accompanied with such external applications as the case may require, many ulcers of this description have been cured, and the disease of the habit at length removed. In other cases, hemlock, burnt sponge, and other alteratives have been of use.

In the external management of scrophulous ulcers on the legs, the use of bandages and compresses will be equally as serviceable, and are as necessary, as they are in local ones: the free motion of the limb also is equally practicable. It must be admitted however, that there are cases, in which exceptions must be made to this general observation; whenever there is an excess of inflammation, a painful

suppuration, or any other temporary affection similar to those which have been already described in the chapter on local ulcers; * in these cases, we must for a time suspend the use both of pressure and internal tonics. Emollient poultices must be applied; and the limb must be placed in a horizontal position. But when the purpose intended by this mode of treatment is answered, we are by no means to countenance a continuation of this inactive plan. Rest will then be still more improper than it is in local cases, inasmuch as from its tendency to bring on a general weakness and laxity of the system, the tendency to scrophula must thereby be greatly increased. Our experience furnishes us with many proofs of the inconveniences attendant upon inaction, in the case of scrophulous ulcers; they are

* See chap. IV. p. 60.

often rendered worse by confinement to a bed. The complaint is still further aggravated, if the patient breathe an impure air. For it is a well known fact that where it has been necessary to adopt the inactive plan, in the case of accidents, &c. a scrophulous disposition has appeared, of which there had been no signs before, and which perhaps would still have lain dormant, had not an exciting cause occurred.

As soon therefore as scrophulous ulcers are in a fit state for the use of bandages, let the system of pressure be adopted; accompanying it with the use of such other external means as the particular state of the ulcer may require. For it should be remembered, that ulcers of every description must have a firm and sound bottom, before we can expect to heal them. It is therefore sometimes necessary to open a

sinus, or to touch the ulcer with nitrated silver; a substance which answers the purpose of destroying its diseased surface better than any other preparation. For common dressings, the cold and watery sedatives are preferable to any oily applications. Having for a long time observed, that the latter are a great obstacle to the cure of scrophulous ulcers, I have had recourse like some other practitioners, to the astringent and sedative applications in cold water; to their good effects in these cases I can bear testimony, having often seen how well they succeed in the cure of such ulcers, when assisted by bandages and internal remedies.

Any of the saturnine preparations properly diluted in water, will answer very well. I have however, for many years used equal parts of prepared calamine, vitriolated zink, and acetated ceruse, in the proportion

of about a dram of each * to a pint of water. A pledget of lint, and one or two compresses of soft linen rag, should be wetted in it, and applied cold. If the lint be found to occasion some trouble, by adhering to the edges of the ulcer, it may be omitted. The compresses alone in this case are to be preferred. This application should be renewed at least twice, in the twenty-four hours; in many cases indeed it will be advisable to repeat it four or five times within the same period. From the use of this mixture I have frequently seen so speedy an amendment, not only in scrophulous ulcers of the legs, but in those of every other part of the body, that I have no doubt

* In some cases the adjoining skin is so tender and irritable, that if this powder be not sufficiently diluted with water, excoriations will be produced by it: so that it is necessary to vary the quantities in different habits.

of its being much superior to any of the saturnine applications alone.

There is a third class of constitutional ulcers to be treated of. But as ulcers of this description are most frequently met with at sea, where I have never exercised my profession, I must refer those, who wish for information on this subject, to writers on the scurvy. Without the experience however of a naval practitioner, I may be permitted to observe, that both the origin and continuance of scorbutic ulcers appear evidently to arise from a putrid tendency in the system. This tendency must therefore be removed, before it would be safe to make use of tight pressure. I have indeed now and then seen ulcers on the legs, which from their appearance, and their disposition to bleed, have been evidently attended with an affection of this kind

in the habit; in these cases Peruvian bark and wine have been of great service.

Before I dismiss this subject I beg leave further to observe, that the ulcers which we frequently call scorbutic, are altogether different from those which arise from the *true* scurvy. They seem to have acquired their name merely from certain eruptions and affections of the skin around them,†

† We frequently meet with a very troublesome disease of the skin on the legs, resulting from some constitutional affection, which is sometimes though not always attended with an ulcer. It takes place about the middle and latter periods of life; and shews itself in a scaly separation of the cuticle, accompanied with a redness of the cutis. In some places the cutis is perfectly dry; in others it is moist.

The external applications already mentioned for the cure of local affections of the skin, joined with repeated ablutions of milk and water, generally produce an amendment, though they will not remove the complaint. For the cure of it, I have found that half a pint of a decoction of elm bark, with from four to ten drops of Dr. Fowler's solution of arsenic, taken twice a day, has been generally successful: But every other remedy which I have used has failed.

which bear a resemblance to some of the external effects of that dreadful disorder.

Besides the venereal, scrophulous, and scorbutic diseases, there are, as has been before observed, other disorders of the system, from which considerable hindrance to the cure of an ulcer on the leg may arise. To some of them it may be no easy thing to give a name; it may be a still greater difficulty to ascertain their particular nature. In some of these non-descript cases, I have seen a cure obtained by alterative doses of mercury, when there was not the least ground to suspect, that a venereal taint existed. In others, although small doses have had no effect, larger ones where the quantity has been great enough to affect the mouth, * have

* These cases are very few compared with the numbers afflicted with these diseases. I would therefore just observe, that it is extremely injudicious and

made a complete cure. In some, lime water and a decoction of the woods have been of use, and in others, the hemlock has been serviceable.

improper, to use large quantities of mercury, in order to bring on a salivation, for the cure of common or local ulcers on the legs; they being curable by local applications. It is a practice which tends not only to impair health for the present, but also to do some lasting injury to the general constitution.

CHAPTER VI.

OF THE TREATMENT OF AN ERYSIPE-
LATOUS INFLAMMATION ATTENDING
WOUNDS AND ULCERS ON THE LEGS.

AN inflammation of the erysipela-
tous kind has been noticed in the
former chapters, † but that of which I
am now going to treat, is of a very
different kind. The former originates
for the most part, either from a na-
tural debility of the habit, or a sudden
change from high living to abstemious-
ness. And though in some of these
cases the disease may be of an acute
nature, yet it may in general be easily
cured; the removal of the causes which

† See pages 26 and 51.

produced it being a work of no great difficulty. But the inflammation of which this chapter treats, is invariably an acute disease, and differs much, both in its commencement and progress, from that kind of erysipelatous affection before mentioned.

Its attack usually begins by a cold fit, the patient having been previously for the most part in perfect health, and the wound or ulcer in its usual state. It comes on in all habits, at all ages, and at all seasons of the year; but more frequently in the middle, and latter periods of life than earlier, and during the cold and wet weather of winter than in the warm and dry months of summer. I have also reason to believe, that those who have occasionally taken mercurials, or purgatives of any kind, are particularly liable to it. The shivering often lasts two or three hours, or longer, and is succeeded by a hot

fit, and the other febrile symptoms which usually accompany it. An inflammation then suddenly seizes on the cutis of the diseased leg; generally making its first appearance on that part of it which is adjacent to the ulcer or wound; but sometimes, on a sound part at a considerable distance from the sore. If the inflammation does not shew itself as soon as the cold fit is over (which it most frequently does,) it seldom fails of discovering itself within a few hours afterwards. In some cases however, it does not appear till twelve or twenty-four hours afterwards; and there are some rare instances, in which there will be an interval of two or three days, between the cold fit and the first appearance of the inflammation. As soon as the inflammation is completed, all the feverish symptoms abate, and at length disappear; but as long as this is delayed, the fever con-

tinues; nor does its violence in the least abate, till the inflammation takes place.

The fever, as well as the topical inflammation, have, as may be supposed, different degrees of violence, in different cases. Sometimes, they are so slight, that it is unnecessary to confine the patient to the house; at other times, so severe, that his life is endangered by them.

A considerable portion of the skin is inflamed generally on the first attack. The disease then spreads daily over it; and in many cases, the surface of the whole limb is at length affected. This inflammation is mostly confined to the leg and foot; but I have observed, that in some instances, it has extended itself to the thigh, and even to the groin, and scrotum. Like many other acute diseases, its continuance is limited to a certain period of time, within which it sets all the means of

opposition at defiance. In the slighter cases, it terminates in six or seven days; in the more violent ones, in ten or twelve; but it seldom continues more than a fortnight in any case: unless it be accompanied with such a phlegmonous inflammation as terminates in a suppuration.

The effects of this inflammation are very different. In some instances it will go off (after having continued its period) without doing any mischief whatever*; in others, watery vesications, sometimes attended with livid spots, and an actual sphacelus of the parts, will accompany its progress along the skin. Sometimes, the sore will ulcerate, and increase in size; at other times, it will remain stationary. In many cases, there will be a considerable inflammation along the course of

* In all the cases of this erysipelas as in most others, the cuticle peels off after the termination of the disease.

the lymphatics of the leg and thigh, quite up to the groin, where the lymphatic glands will inflame, and sometimes suppurate.

Although this disease be for the most part truly erysipelatous, yet there are some cases, in which a considerable degree of phlegmonous inflammation followed by suppurations, is joined with it. These suppurations however differ in some respects from common collections of matter. The partial tension, and tendency to suppuration, are in many cases, not distinctly marked, until the erysipelas begins to subside, or its period is nearly completed; in others, they will appear much earlier. Not long after these take place, a circumscribed fluctuation is visible. And when the pus has been discharged, and some progress is made in the cure, another abscess will sometimes appear in an adjoining part, which till then

did not shew itself. When this shall have suppurated, others in like manner will in some cases follow. The number and situation of these abscesses are very different. Sometimes there will be only one or two of them, and the disease will terminate without forming any more; at other times, though very rarely, there will be a succession of them for a month or two after the commencement of the erysipelas. Many of them appear to be suppurations of the lymphatics, their situation being often confined to the course of these vessels; in other instances they appear in a line one above another extending from the leg to the thigh.

In the treatment of this disease it will be found of considerable importance, to have a perfect knowledge of its natural progress and termination; this may prevent our falling into the error

of attempting too much, or of having recourse to improper means in order to hasten the removal of the complaint. From the observations I have made, I do not think it possible to stop its progress by any means whatever, without incurring the danger of transferring the inflammation to some other part, where its consequences may be more serious. The inflammation will continue, and proceed in a manner similar to what has been described, whether any steps be taken to prevent it or not. I do not mean by these assertions, that the disease should be left to pursue its own course. On the contrary, I am well convinced, that it will generally be in our power by judicious management, to prevent any dangerous consequences from it. But though it is certain that much may be done by the aid of medicine, we shall practice with very false views, if we suppose

that the complaint may be speedily removed by our remedies.

Considering the disease in this point of view, our best and safest treatment of it seems to be, to endeavour to moderate the inflammation; when it rises to too great an excess, we may lower it, but let us not attempt to hasten the removal of a disease which must have its natural course.*

* I beg leave here to introduce an observation or two with respect to the treatment of other diseases, in which, it is the business of the medical practitioner to wait upon nature; marking her track with a vigilant eye, ever ready to assist, but never rashly presuming to cross her in her course. There are for instance continued fevers which are well known to observe certain periods of time in their duration. Some of the typhus kind in particular, will go on in this manner, in defiance of every attempt to stop their progress. If the patient can be kept during this course free from danger from the violence of any particular symptom or affection, the disease will at length terminate in a favourable manner.

In all these cases, though it be proper at their commencement to attempt their entire removal by the use of every safe remedy, and though it be equally proper

If the first attack be very slight, it is scarcely necessary to do any thing; the inflammation will soon cease of itself. But if it be very severe, and especially if it be combined with phlegmon, we must use our utmost endeavours to moderate its violence. Even when the erysipelatous inflammation predo-

to remove or alleviate any of the more violent or dangerous symptoms at any period of the disease, yet we should ever keep in mind, that it may not be in the power of art to prevent them from going on to the end of their natural period. It is evident therefore, that in the treatment of these cases, great care should be taken, that the powers of nature be not exhausted by great evacuations, or debilitating medicines of any kind; lest it should not be in our power to support the strength of the patient, or counteract the putrid tendency at the latter end of this period.

I take the liberty of submitting these few hints to the candour of the medical part of the profession. I do not produce them as original ideas; yet as coming from one, who has formerly treated with some success, upon this plan, a considerable number of cases similar to those alluded to, they may serve to fix the opinions, and direct the steps of younger practitioners.

minates we may sometimes bleed, promote gentle evacuations, and enjoin a cooling and abstemious diet; but these means should never be recommended without keeping in view, that in every erysipelas, the utmost caution is required in the use of evacuants. Moreover, when the inflammation is more purely erysipelalous, and is accompanied with a tendency to sphacelus, and symptoms of great debility in the habit, we must pursue an utterly different method; wine, bark, and opium, must be given, as the necessity of the case may require; if the case be a violent one, these articles must be repeatedly administered, in large quantities.

As an external application, an emollient poultice of bread and milk, or linseed meal, is the easiest and the most serviceable that can be used. I know of no applications whatever that tend

so much to lessen an erysipelas or to prevent its excess, as external emollients. Even in that particular species of this complaint which we meet with when a gangrene takes place, I always prefer them to every other external remedy; for as this inflammation, in these cases especially, depends upon a certain state of the habit at large, its consequences are to be obviated by internal more than by external remedies.*

It must appear to every one, that tight bandages would be highly improper, during the continuance of this inflammation. If they have been used previous to the attack of the cold fit, they must be discontinued immediately upon the occurrence of that circumstance; otherwise, we shall keep the fever in the habit, and risque a de-

* There are gangrenes accompanied with an erysipelas of an indolent and more chronic kind, in which it is proper to use stimulants externally.

position of the inflammation on some part of the body of the utmost consequence in the system. But when the disease is completely over, we ought to finish the cure of the ulcers by the use of pressure as in any other case.

I have seen on other parts of the body as well as on the legs, an erysipelatous inflammation, very similar in its commencement, progress, and termination, to that which falls on the legs. The parts thus affected have been either weakened by previous diseases, or have been ulcerated at the time they were attacked with this complaint. The parts I allude to, are the perinæum, the breasts of women, the knee; I have also seen this inflammation fall upon an ulcerated bubo, and likewise upon an ulcer in the arm from a scald. Nor have I any doubt but that the other cases of acute erysipelas which we meet with, as those on the

head, &c. are very analagous to that of which this chapter particularly treats.

From a review of the rise, progress, and termination, of this inflammation, I am led to make a remark with respect to the erysipelatous fever, attending wounds or ulcers on the legs. As this fever continues until the inflammation be deposited on the skin, it may probably be of considerable service, in some continued fevers, and other complaints, to excite an artificial inflammation on any part of the skin, and particularly in the extremities; with the hope, that an inflammation may be deposited on a safe part, and thereby the fever be lessened, if not altogether removed.

We may further remark, that as an erysipelas on the legs is evidently a deposition of inflammation arising from a general fever in the habit, sometimes terminating in resolution, and at other

times in suppuration, or in gangrene; so in some fevers there may be depositions of inflammation on some of the internal parts, which are likely to terminate in the same way. Such depositions may fall on the brain, the lungs, the intestines, the peritonœum, * or on any other internal part. In all these cases, our plan of treatment should be, to bleed, and use evacuations, where a phlegmonous inflammation and a tendency to suppuration prevail; and to administer bark, and cordials, where the complaint is truly erysipelalous, and is accompanied with a disposition to gangrene.

It is remarkable, that when the erysipelas seizes a leg, it almost invariably falls upon the ulcerated limb. It generally spares the sound leg. This cir-

* I strongly suspect that the puerperal fever is a species of this kind.

cumstance, by serving to shew amongst many others, how apt fever is to fall upon the weakest part, suggests the most useful hints to us with respect to internal inflammations. But these must be so obvious to the profession, as to render it unnecessary to specify them.

CHAPTER VII.

OF THE TREATMENT OF CARIOUS
ULCERS ON THE LEGS.

CARIOUS ulcers, or ulcers of the bones,* generally proceed from the same causes as those in which ulcerations of the soft parts originate: the latter have been already described, I may therefore be the less particular in some parts of the subject of this chapter.

* When a bone has been for some time denuded, and attended with an ulcer in the adjoining integuments, it is usually denominated, a carious ulcer. A bone however may receive a fresh injury on its surface, though its substance be so hard as to resist a *deep* impression of this kind, without an absolute division of it. And granulations, with a subsequent cicatrization of the skin, may afterwards take place upon it, without any loss of its substance; as in wounds of the fleshy parts only. But as the texture, and the vascularity of a bone, are so different from those of the soft parts, an accidental wound

Ulcers of the bones, like those of the soft parts, may be either local or constitutional. Like those, they are also liable to the different species, and various degrees of inflammation and ulceration, which have already been described. Through these morbid affections, the bones may lose a part of their earthy substance, and become more vascular.

of it is apt to destroy the circulation between the vessels of the sound, and those of the injured parts; by which means the latter become separated from the living bone, and must of course be cast off like a slough, or dead part of the integuments—This is the process of exfoliation, and is entirely the work of nature.

But a wound of a bone, like one in the soft parts, may degenerate into an ulcer, and continue in this state for a length of time, without going on to a healthy granulation and cicatrization, and as long as the diseased part is supported, even by a morbid circulation, so long it may preserve a degree of life, and attachment to the adjoining parts; and thereby an exfoliation may be prevented.

I am much indebted for many ingenious hints and ideas on this subject, to the late Mr. John Hunter, whose first course of lectures I had the advantage of attending.

Carious ulcers are also liable to real gangrene, in all its different stages and processes. But here I must remark, that the external appearances of a gangrene in a bone, are not always similar to those which a gangrene in the soft parts assumes. I cannot agree with a late writer, who has asserted, that they resemble each other in colour* ; for as the composition of a bone is of an earthy and solid nature, it is not so subject to putrefaction, nor, of course, to that great alteration in colour when cut off from the circulation, as a fleshy part is, in a similar situation.

Nor can I at all agree with the same respectable writer, in the unqualified manner in which he describes a caries ; his words are these, “ the most clear
“ and simple idea that can be given of
“ a caries is, that it is a disorder of the
“ bones exactly of the same nature as

* See Bell on Ulcers, p. 267.

“ a sphacelus, or gangrene of the soft
 “ parts; a circumstance which we think
 “ is very clearly demonstrated, both
 “ from the symptoms, causes, and me-
 “ thod of cure.”* And in order to sup-
 port this idea, we have these words in
 the following pages, “ it (viz. the bone
 “ of a yellowish colour) sometimes
 “ remains however in this state for a
 “ good many days, and by degrees gets
 “ a more deep tallow-like appearance ;
 “ in which state it commonly con-
 “ tinues for a longer or shorter time
 “ according to the degree of violence
 “ with which the injury has been
 “ done; and afterwards goes through
 “ the different stages of brown and
 “ black, till it has acquired a black of
 “ the deepest dye : a period at which
 “ we may suppose this portion of the
 “ bone is arrived at, perhaps the
 “ highest degree of mortification.” †

* See *ibid.* p. 263.

† *Ibid.* p. 267.

These changes in colour do indeed sometimes take place exactly in this order, in a real gangrene of the more vascular bones; but it is by no means true, that such resemblances of a sphacelus of the soft parts invariably appear in every instance of a gangrene of the bones. When this disease happens to the more solid bones, the external signs are very different. It is well known that such bones when they come to be exfoliated, are commonly found to be *white* instead of *black*. Sometimes indeed they are found of a dark hue; but this is generally owing to their being stained in that putrid sanies, in which they have been long steeped, where the exfoliation proceeds slowly, or where these exfoliated bones have not been soon removed from their situation. To this cause, rather than to any regular putrefactive change in the bone itself, similar to that of a mor-

tified slough from the soft parts is the dark colour of some sphacelated bones to be attributed.

I do not think that it is at all agreeable to sound theory, to consider all caries of the bones as analagous to real gangrenes of the soft parts. † That there is a resemblance in some instances I have indeed already owned; but in the greatest number of caries which occur, the similarity to a gangrene of the soft parts, consists merely, in the separation of a portion of the bone from the rest by exfoliation.* This happens through its being of a solid nature, and its having but few

† See Bell on Ulcers, p. 279.

* The colour of most exfoliations proceeding even from a common caries of a hard bone, is likewise either white, or of a yellowish white; this is also accounted for from the solid texture of a bone. These exfoliations may likewise be of a dark colour on the surface from a stain; but they are very seldom of a black colour, as asserted in the passage already quoted.

blood vessels to resist the effects of an external injury or disease. And though, a slough may be formed in a soft part, by the sudden destruction of the life and circulation between it and the living part, as happens in the action of a caustic, yet this also is very different from a real gangrene, in which both the beginning and continuance of the disease, is in general, very much to be attributed to the habit at large.

On these distinctions some considerable enlargement might be made; but the design of this treatise does not require me to pursue the consideration of them any further.

Before we decide on the mode of treating carious ulcers on the legs, we should first inquire, whether they be local or constitutional; a question which may generally be determined without much difficulty. If we judge them to be of the former kind, the

method of cure must consist chiefly in their external management; but if it appear, that they are of the latter class, whether they be scrophulous, venereal, or scorbutic, we must of course accompany external management with such internal remedies, as are suited to the nature and degree of the disease in the constitution.

But carious ulcers, whether they be local, or constitutional, will under certain affections, require some things in the management of them, very dissimilar to our treatment of ulcers of the soft parts. Dead and irritating exfoliations must for instance be removed by manual operation, whenever they occur in situations from which they are not spontaneously extricated. But a diseased bone does not necessarily require in other respects, a method of cure different from that, which we

practise when the soft parts are affected with the same disease.

It has I think been already proved, that the chief obstacle to the cure of common ulcers of the lower extremities, arises from certain effects produced on the vessels, in consequence of their dependent situation. The like effects have we to guard against, in the treatment of carious ulcers on the legs. The vessels are similarly affected in these cases, by the erect position of the body. Hence it follows, that as the obstacles to the cure are in a great degree the same in both kinds of ulcer, we must in either case have recourse to the same means of contending with those obstacles. We must endeavour, for instance, to remove the morbid inflammation, and other effects of an erect position, in the case of a carious ulcer, by the measures which we pursue in the case of common

ulcers; the horizontal posture, or pressure, must be adopted, in order to effectuate a cure. And for the reasons assigned in a former chapter, we need not hesitate to pursue the latter plan, whenever the nature and state of the ulcer will admit of it. But it should be remembered, that this is not always the case; carious ulcers being subject to an excess of inflammation, to temporary ulcerations and gangrenes: during the continuance of such symptoms, we should on no account make use of pressure: the limb must be kept in a horizontal posture, and emollient poultices, &c. must be applied and persisted in, till these symptoms disappear.

In the treatment of carious ulcers on the legs, the attention of the surgeon is frequently called to the process of exfoliation. This process is greatly promoted by pressure, and the free

exercise of the limb. These should therefore be used, when they are not interdicted by particular circumstances; for however strange it may appear to some, there are no means more serviceable than these in assisting nature to get rid of an unsound part of a bone. In common ulcers of the legs it is not possible to bring on a good state of granulation and digestion, nor effectually to remove the sloughs and foulnesses to which many of them are liable, unless either the erect position of the body be forbidden, or its effects be obviated by pressure. It is exactly the same in carious ulcers of these parts; from the judicious application of pressure the powers of nature will derive considerable assistance, and if any diseased or dead parts of a bone are to be exfoliated, this desirable effect will be thereby greatly expedited. But if this treatment be neglected, and the dis-

eased inflammation and action of the vessels arising from the erect position of the body be permitted to continue, the separation of the affected bones will consequently be delayed.

In conformity to these ideas, I have in no case whatever made use of any other artificial means but those above mentioned, in order to promote an exfoliation. We may bore and mangle a diseased bone, or puncture and tear up a slough on the soft parts, but after all, the process of separation in both cases is altogether the work of nature; and if art attempt to force the effect by such harsh means, more harm than good may be the result; the gradual operations of nature may be interrupted, and the intended effect be retarded by violent treatment.

Carious bones are frequently covered by the diseased integuments, and of course they are not always visible; in

these cases, we must from time to time, introduce a probe into the ulcer, and press it firmly downwards against the bone, in order to ascertain whether an exfoliation has taken place. If there be any piece separated from the sound bone, a vascular granulated flesh will have intervened, and the exfoliated piece will give way to the pressure of the probe; * but if no exfoliation have taken place, the resistance from the bone will in general be such as to convince us, that no part of it has as yet separated from the rest.

There are however some instances of exfoliation, in which the separation cannot be so certainly ascertained. As for example, where the exfoliated

* In addition to this test of the exfoliation of a bone I would just observe, that the matter with which these ulcers are generally filled, sinks when the probe presses on the exfoliated bone, and rises again on withdrawing the instrument, through the elasticity of the granulations underneath.

piece is of an irregular and forked shape, and is so entangled with the processes of the sound part of the bone, as to be as it were linked with them.

When we have discovered that an exfoliation has taken place, the detached piece should be removed; and the sooner this is done, the sooner will the cure of the ulcer be completed: an event which I doubt not is frequently retarded for months, from the want of an early attention to this circumstance: for though an exfoliated bone may be justly compared to a separated slough from a soft part, yet it differs so much from it in its texture, and is so generally surrounded by the adjoining integuments, or muscles, that it is very frequently necessary to remove it from its situation. In many cases it may be extracted by the forceps, without an enlargement of the ulcer, inasmuch as the fleshy parts

will give way to the bone in its passage. But if it lie deep, and be much larger than the external ulcer, we cannot bring it away without increasing the size of the ulcer, either by the knife or by the application of a caustic.

In the case of forked exfoliations * mentioned in page 136, I have been obliged to recur to force. In some cases I have been enabled to disengage small portions of the tibia from the

* I would apprise my reader, that cases of this kind occur very frequently, and likewise that they are not always soon ascertained. If the exfoliation seem to be delayed longer than the usual time, (which when the ulcer is properly treated rarely exceeds two or three months,) we may conclude, that the separation of the diseased bone is completed, but that it is linked with the adjoining sound bone in such a manner, as to prevent its yielding to the pressure of the probe. The diseased bone being frequently covered by the integuments, I would in that case advise, (after the time abovementioned has elapsed,) their being destroyed by a caustic; in order to expose the bone, and to enable us to apply a levator to it: Hereby we shall ascertain its real situation.

sound bone, with very little force; but where considerable portions of bone were to be removed, greater force was necessary; for this purpose, I have been obliged to use a strong pair of pincers.*

It is indeed sometimes extremely difficult to remove even the external exfoliated pieces of the tibia, or fibula, by any of these methods: but of all the exfoliations which I have seen, there are none so difficult to extract, as those which occur within the cavity of the tibia. Some years ago I removed a piece of bone more than two inches long from its imprisonment in this situation, by means of the trephine; but it was done with great labour and trouble. † And within the last twelve

* See two cases of the former kind, (cases VI. and VII.) and two of the latter kind, (cases II. and III.) of carious ulcers.

† See Medical Communications, vol. II. p. 386.

months I have had the pleasure of performing a cure in another of these cases, by forcibly breaking the exfoliated piece with a pair of forceps, which previous to its being broken, was as firmly inclosed in the cavity of the bone, as that which was extracted by the trephine.* It is an easy matter to distinguish the internal exfoliations from the external ones, by the depth of the exfoliated pieces; the former may be felt by a probe passed through a hole in the tibia opening into its cavity.

There have been many carious ulcers on the legs of the scrophulous kind, in which by the use of internal remedies, joined with a cold saturnine wash, and a due degree of pressure, an exfoliation of the diseased parts has taken place, and a complete cure of the ulcer has happily followed. I have likewise seen repeated instances of the

* See further particulars in case V. of Carious Ulcers.

good effects of this treatment, in the more complicated and dangerous kinds of scrophulous ulcers. I mean those which break out about the ankle and the foot.

In carious ulcers of these parts arising from a venereal cause, (after the disease of the habit is remedied) we shall derive the same advantage from bandages in finishing the cure, which we experience in the more simple cases.

CHAPTER VIII.

OF THE SAFETY OR DANGER OF
CURING ULCERS ON THE LEGS.

IT is well known that many object to the healing of old ulcers on the legs, from an idea, that the cure of them would not improve the general health of the patient. We may indeed, say they, remove this complaint, but some other disease will come in its stead.

There are undoubtedly cases to which this objection will apply; but they are not numerous. I am well convinced that in some of the cases which have been adjudged to be of this desperate class, a mistaken idea

has been formed, and that great injury has been done to the constitution, by the continuance of the ulcer.

Let us attend to a few facts for the support of the latter part of this observation. Ulcers on the legs are for the most part extremely painful; they generally deprive the unhappy sufferers of much of their natural sleep: they prevent exercise, they beget anxiety, and loss of appetite follows. The effect of these combined circumstances with respect to the constitution, is at length too manifest; the general health is materially impaired. On the other hand, I have almost invariably found, that the consequence of healing an ulcer has been an amelioration of the whole system.

In support of these observations, I have the opinions of two of our best modern writers, to produce; namely, Dr. Underwood and Mr. Bell; each of

whom assert, that old ulcers in the legs may be healed with safety, under certain exceptions which will be obvious to every judicious practitioner. And as it will be no difficult matter to distinguish these cases, from others in which a cure ought not to be attempted, I shall only observe in general, that if the patient be afflicted with a visceral, or any other complaint, for which the drain from an ulcer evidently gives relief, we certainly ought not to cure the ulcer. Yet even in these cases we may lessen the pain, by suitable dressings, and a moderately tight bandage.

There are cases however, in which though the habit may require a discharge, the cure of an ulcer may be safely attempted; the ill consequences of healing it may be obviated by making an *artificial* drain. An issue will answer this purpose. Let it be inserted in the arm, or in the lower part of the inside

of the thigh. † It should not be made below the knee, as it is apt in that situation to occasion inflammations and even gangrene. This expedient has long been in practice, as a great assistant in the *cure* of these diseases, and for that purpose is forcibly recommended by Mr. Bell; but as is observed by Dr. Underwood, I have not discovered, that it has been of any use in *this* respect.

It may be proper to remark before this chapter is concluded, that circumstances sometimes occur, which seem to favor the notion, that the healing an old ulcer will inevitably be fatal. If a person happen to die soon after he has been cured of a sore leg, his death is attributed to the healing of the ulcer; upon a careful inquiry however into particulars, it might perhaps be proved

† It is a very good rule in all cases of old ulcers on the legs in both sexes, and especially in women about the middle age of life, to make an issue with one or two peas previous to the healing of the ulcers.

to a certainty, that his death was altogether unconnected with the cure of the ulcer. But without any such examination of circumstances the conclusion is drawn, and perhaps pertinaciously maintained, though it have nothing for its support, but the shortness of the time that intervened, between the cure of the ulcer, and the death of the patient.

I well remember the case of a man whom I cured of a very bad ulcer on his leg. After continuing well for many years, the ulcer broke out again, and from inattention to his cure, it became at length a large and very painful ulcer. While it was in this state, and before he applied again for advice to any one, he was suddenly taken ill, and died in a few minutes. It must appear to every one, that his sudden death was not owing to the ulcer; had it however been just healed (which

might have been the case had he applied for advice) his death no doubt would have been confidently ascribed to the drying up of the ulcer, as the phrase is. A case of this kind (and such there are) should make us cautious in drawing our conclusions.

Our business with respect to the subject of this chapter, is to weigh the good arising from the perfect cure of an ulcer, with the evil which may occasionally be the consequence of healing it. There is no doubt but where the health of one person is impaired by a cure, a hundred receive benefit by getting rid of such a malady. Let us endeavour clearly to ascertain the nature of the few particular cases, in which the healing art must be suspended; and apply ourselves, without fear, to the cure of those complaints, which are evidently the source of all the patient's sufferings.

CHAPTER IX.

A COMPARISON OF THE DIFFERENT METHODS OF CURING WOUNDS AND ULCERS ON THE LEGS; NAMELY, EITHER WITH OR WITHOUT REST.

AN impartial examination of this part of our subject, is I conceive, of very great consequence. Authors, as well as practitioners of the greatest eminence, differ on this point; some, advising rest, and a horizontal position of the limb, as absolutely necessary to the cure; others, contending for the use of bandages, and the free motion and exercise of the limb. The former method has not only the sanction of ancient practice, but still continues to be most generally recommended.

Heister, Turner, and Sharp, have spoken very decidedly on this side of the question; declaring, that it is not possible to cure ulcers on the legs, without a horizontal posture, and confinement. Mr. Bell also is a strong advocate for the same practice: his words are these, “in disorders of this kind too,” (alluding to every species of ulcer, and even to those of the most simple nature,) “occurring in the lower extremities, the affected limbs should *be always kept as much as possible in a horizontal position, as being the posture which proves most favourable for the circulation of the fluids.** After reasoning on the method of curing ulcers on the legs without confinement, the same author adds, “but notwithstanding all the arguments adduced in favour of the practice, I have not yet heard of any which

* See Bell on Ulcers, p. 210.

“ ought to set aside the opinion we
 “ have endeavoured to inculcate upon
 “ this point, and which has in all ages
 “ been allowed to be well founded,
 “ namely that *a horizontal posture is*
 “ *highly proper in the cure of every ulcer*
 “ *of the lower extremities,*” &c. * I
 must not however omit saying, that
 Mr. Bell acknowledges the great use of
 bandages in these cases, and likewise,
 that many ulcers are curable without
 confinement.

Among those who are advocates for
 a practice in direct opposition to this
 method, we are to rank Dr. Under-
 wood; who contends, that confinement
 and the *horizontal* position may *hinder*
 the cure. No man of experience can
 deny, that wounds and ulcers on the
 legs may be cured by a strict obser-
 vance of the horizontal posture; but
 the question is, which of the two me-

* See *ibid.* p. 213.

thods now under consideration is the most eligible. If in the generality of cases, a cure may be obtained as speedily and as completely, while the erect position, and the free motion of the limb are allowed, as when rest, and the horizontal posture are enjoined, the conveniences attending the former of these methods must give it a decided preference to the latter. And that this is the more eligible method of the two, independent of the conveniences which belong to it, there wants not the testimony of respectable and experienced writers.

Wiseman had singular success in curing ulcers on the legs by the assistance of the laced stocking.† It does not appear that he allowed his patients to walk about freely; it is evident however, that he did not keep them confined in so strict a manner as is the

† A flannel roller is decidedly preferable as a bandage, in all cases of ulcerated legs, to the laced stocking.

practice of those, who maintain the necessity of the horizontal posture.

Within the last thirty years, Mr. Else published a paper,* wherein he describes the singular success which he and others had, in curing ulcers on the legs by a compress of a thin plate of lead accompanied with bandages. His patients were not strictly confined to the horizontal position.

About ten years after his observations were published, Dr. Underwood's treatise appeared. In this work it is asserted, that ulcers on the legs may be cured more easily and speedily, by the use of bandages and exercise, than by the horizontal position of the limb, and rest. Dr. Underwood's conclusions are supported by the testimony of respectable surgeons.

To this authority, I beg leave to add

* See Medical Observations and Inquiries. vol. IV.

the result of my own experience. It has furnished me with a number of instances which warrant me to say, that the general positions of this treatise are unexceptionable. The cases hereafter to be recited will, I trust, prove that this is more than bare assertion.

In endeavouring to account for that opposition of sentiment which prevails on this subject, among practitioners of equal respectability, I am very much disposed to yield to the reason which Dr. Underwood has assigned for this extraordinary circumstance; namely, that the method without confinement does not succeed, for want of having that fair trial made of it, which it has when the surgeon dresses the patient with his own hands. What is done by deputation is sometimes imperfectly done; the imperfection occasions failure, and failure brings the system into discredit. But let it be remembered

that in such a case as this, the experiment is not fairly made. If a surgeon will be at the pains of dressing his patients with his own hands, and will apply the roller himself, he will then assuredly perceive such effects resulting from this method as he cannot reasonably expect, if the business be trusted to unskilful substitutes.

It must be clear to every one, that if the intention of a bandage be to counteract the natural tendency of a dependent state of the diseased limb, or an erect position of the body, it cannot perform its designed office, unless it be so applied, as to make that kind and degree of pressure in which its power of counteraction consists. It will not remove the impediments to a cure, if it be applied in a slovenly or injudicious manner. Its action must be equable. The roller must be of such a length and breadth, as to admit of

its making the necessary pressure, and to cover the whole limb from the knee to the toes. Rollers frequently fail of producing their intended effects for want of a sufficient length and breadth. I doubt not but that it is from this and other causes just hinted at, that the practice recommended in this work has been discredited.

All wounds and ulcers on the legs require, that the pressure on them be made with the greatest judgement: and the more obstinate the complaint, the more necessary is it to attend to this rule. To shew how much depends upon the correctness of this application, I beg leave to relate the following facts; I have dressed some obstinate ulcers every day for a considerable length of time, but have made the patients apply the compresses and roller under my own direction. Finding no progress towards a cure, I have then

taken the application of the bandages upon myself; and by so doing, without making any alteration whatever in the dressings, a cure has been obtained in a short time.

Experience having fixed my opinion on this important subject, I can speak with confidence of the eligibility of that mode of treating ulcers, which this work professes to recommend. I have no doubt that wounds and ulcers on the legs may almost always be cured without confinement. I make no difficulty however of acknowledging, that there have been some few cases among the numbers I have met with, in which a cicatrization could not by any means be produced, till the patient was confined to his bed. A regard to truth obliges me to relate this fact; but I would have it fully understood, that the number of such cases is very small, when

compared with the multitudes who might be cured without confinement. And in some of these excepted cases I suspect, that the being obliged to have recourse to rest, is principally owing to our not being able *perfectly* to counteract the effects of the erect position by bandages. Whether however it arise from this, or any other cause, it is our duty to adopt the plan of confinement, whenever the peculiar circumstances of the case are such, as clearly to point to us, the absolute necessity of rest.

CHAPTER X.

OF THE METHOD OF PREVENTING
RELAPSES AFTER THE CURE OF UL-
CERS ON THE LEGS.

TO render the good effects of the method of cure recommended in this treatise as permanent as possible, it is necessary to recollect, that the attention of the practitioner is not at an end, when the cure of an ulcer appears to be completed. Those who are cured of this complaint, may soon relapse into as bad a state as they were in before, if the proper means of preventing the return of their sufferings be not employed. The great importance of attending to this point will be obvious enough to those, who consider, how

different a newly cicatrized part is from one, which has never been injured.

When an ulcer is under the process of cicatrization, every part of it is much more vascular than the flesh would be were it in its natural state. And even when it is perfectly skinned over, the vessels collapse so very gradually, that the new formed parts are for a considerable time after the cure, of a much more tender and delicate texture, than they were before the disease took place. Of course they are less capable of making the necessary resistance to that column of blood, which from its weight and pressure, requires a vigorous reaction in the parts that have to sustain it.

Whenever an ulcer therefore has been cured by either of the methods already pointed out, it is almost impossible to keep it from breaking out again, unless an equable and tight pres-

sure be made on the parts for some time afterwards. When it is perfectly cicatrized, all the linen compresses except one may be left off; but the roller should be continued of the same length as before, and applied afresh every morning before the leg begins to enlarge. The daily reapplication of the roller should on no account be omitted. If it be not applied afresh every day, its pressure may be irregular; from that cause blisters may arise on the skin; and from these fresh ulcers may proceed.

It is impossible to lay down a general rule, for every case, respecting the length of time for which it may be necessary to continue the roller after the cure is completed. In ulcers of a recent date, or where the patients are young people, from three to six months will be long enough to restore the tone of the parts: but where the ulcers have

been of long standing, or have been repeatedly cured, it is absolutely necessary to continue it much longer: and in some cases indeed it must be continued during the remainder of life.

It is extremely necessary likewise after the cure of ulcers on the legs, to attend to the separation or exfoliation of the scale, or scab, which comes upon the cicatrix. This scab, after the cure of such ulcers as have not been of long standing has only a cuticular appearance; but after old ulcers, a much larger crust is formed upon the part, the thickness and size of which is greater or less, according to the previous duration and the size of the ulcer. It seems to be a natural process of the skin after cicatrization, and in some cases of very long standing has a formidable appearance: one scale of some size and thickness separating of its own accord, and another form-

ing afterwards, which also in time falls off, and is succeeded by others, which form and separate in like manner. At first their attachment to the cicatrix is firm; but by degrees a natural separation takes place, by which the edges are first set at liberty, and afterwards the middle. So that, if any force be used to take them off, the new skin would be torn up, and a fresh ulcer be produced. All that we have to do therefore in these cases, is to keep the parts from acquiring any foulness; for this purpose, let them be washed now and then with milk and water until the natural separation of the scale takes place. But if we soak or bathe the limb in any fluid (as is frequently done) with a view of separating the scale, we shall probably open the ulcer afresh.*

* Notwithstanding all our endeavours to make a firm cicatrix in the cure of an old ulcer on the leg, and although the utmost care be taken, that the scab which exfoliates from it after the cure is obtained be not torn

After the cure of most old ulcers on the legs, there are scaly foulnesses upon the adjoining skin, * which may always be removed, by washing the part once or twice a week, with oat-meal, or soap and water, and applying afterwards a *very small quantity* of any of the ointments mentioned in the fourth chapter of this work. A most trouble-

up or disturbed, it will nevertheless sometimes happen, that we shall find a little ulcer in the skin after the scab has fallen off. This appears to be owing to the long retention of a mucous secretion collected between the scab and the cuticle. If this ulcer be neglected, like most other small ulcers, it will soon spread to a larger size, and become painful. I have therefore touched these small ulcers with the nitrated silver, and have afterwards dressed them in the manner already described in the treatment of common ulcers, till they were cured. On the next exfoliation I have generally found the scab not so thick as the former one; nor has any return of the ulcer followed.

* It was no part of my design to enter into minute distinctions on the diseases of the skin. I beg leave however to refer my readers to an invaluable treatise on this subject, now publishing by Dr. Willan.

some itching is also in many cases a consequence we have to guard against, after the cure is completed. If the patient endeavour to allay it by scratching the parts, he may by so doing produce fresh ulcers. The sensation may generally be removed, by cleanliness, and the use of the above ointments.

I have seen so many instances of relapse from the want of a minute attention to these different circumstances, that I make it a rule to examine the cicatrix in every case of long standing once a week, for about two months after the cure is performed. Nor do I think it right to discharge my patient till I have some good reason to believe, from this continued inspection of the cicatrix, that he is in no danger of a relapse.

CASES

OF

Local Ulcers on the Legs.

CASES

OF

Local Ulcers on the Legs.

CASES, &c.

CASE I.

A Man from the country, aged fifty, applied in July 1781, for the cure of a large and callous ulcer of three years standing in the small of the left leg; it was so painful, that it was with difficulty he could do any business. By lying in bed five weeks in a public institution, he had received considerable benefit, but no radical cure; the ulcer broke out again in a month after the termination of his confinement. He was then received under the same care

again, and grew much better, but upon his returning into the country, his ulcer became worse than before.

Bandages were applied; and during the cure, which was completed in four months, he frequently walked four miles in a day; without any other inconvenience than blistering his feet.

CASE II.

Mr. Matthew Stuck, aged fifty, Upper Marylebone Street, applied in July, 1781, for the cure of ulcers of several years standing on both legs. From the violence of the pain they gave him, he was almost totally deprived of sleep, and it was with difficulty he followed his business.

He walked every day into the city to be dressed, was cured in less than a month, and remained well for many

years. He afterwards met with fresh accidents, which brought on a return of the disease two or three different times; but it was always readily cured.

CASE III.

In May 1781, Sarah Kitchen, No. 2, Charter House Street, aged seventy-two, applied for the cure of a large and very painful ulcer on the right leg. She had been afflicted with this complaint at different times for about twenty years, but it had been ulcerated the last time about half a year only. It was perfectly cured in about three months, and remained well for some years.

CASE IV.

In January 1782, Ann Stubbs, No. 16, Long Lane, Smithfield, aged forty-nine, applied for the cure of an ulcer

of three years standing on the right leg. It had been so painful for the two last years, as to deprive her almost entirely of sleep, and oblige her frequently to get up in the night, nor could she bear to stand upon it in the day.

She had been under the care of a surgeon for six weeks, and twice in a public institution, but without benefit. The surgeon of the latter told her it was in vain to attend any longer, and dismissed her as incurable, unless she would consent to lie in bed.

She was perfectly cured without confinement in three weeks, and continued well thirteen years; during that time she was in better health than before. This woman's case is known to Mr. Gardner, Linen Draper, in Cloth Fair.

CASE V.

Benjamin Pullen, No. 21, Lambeth Marsh, aged forty-six, an out-pensioner in Chelsea Hospital, but now employed at Mr. Savage's, comb-maker, Broad Wall, Christ Church, applied in November, 1782, for the cure of a very foul and callous ulcer, a little below the calf of the right leg; it was of the size of the palm of a hand, and of about five months standing.

He formerly had an ulcer in the same leg, for which he had been kept altogether in bed in a public institution for ten weeks; this brought on a contraction in the ham, and a lameness, which still continues. He had been a patient in another of these institutions for near three months before he applied to me, but received no benefit. He was cured without rest in about

seven months, and is *now* perfectly well, and resides in his former habitation.

CASE VI.

Robert Waters, No. 4, Bishop's Court, Aylesbury Street, Clerkenwell, aged forty, applied in October 1783, for the cure of an ulcer of four years standing on his right leg. It was very painful night and day, and almost entirely prevented him from following his employment. He had been under the care of a surgeon for nine months without receiving benefit. He was afterwards a patient for six months in a public institution, and then for six months more under a private surgeon; but with no better success.

The first dressing produced ease, and enabled him to work at his business with pleasure. In less than two months he was perfectly cured. He has several

times had trifling relapses of his complaint, from which he has been soon relieved; he is *now* perfectly well, and lives in his former habitation.

CASE VII.

John Ash, shopkeeper, No. 115, near Shoreditch Church, aged forty-one, applied in February, 1784, for the cure of three very bad sinuous ulcers near the inner angle of the left leg; they were of ten months standing. He had been a patient for five months in two public institutions, and likewise under two private surgeons, without benefit.

The ulcers were so extremely painful, and so unfavorable in their appearance, that he was told by a surgeon to one of the above institutions, that it would have been better for him, if he had submitted some months before to the amputation of the limb. Another

of the above surgeons gave also an unfavorable opinion of the case. The ulcers were sinuous in every direction. Many of them were opened where it could be done with safety. By this treatment, and the use of bandages, and common dressings, this patient was happily cured after some months. He is *now* perfectly well, and is employed in one of the India warehouses.

CASE VIII.

Wm. Picking, Parson's Yard, Shore-ditch, aged thirty-seven, applied in October 1783, for the cure of an old ulcer in his left leg, which was extremely painful in the night. He had been a patient in a public institution for thirteen weeks, just before he applied to me, but received no benefit. He was cured in about two months.

CASE IX.

Mrs. Brandon, at the Weaver's Arms, in Aldermanbury, applied in April 1783, for the cure of a large and foul ulcer in the small of the right leg. It was always in pain, but more so in the night. It rendered her unable either to walk or stand; her appetite was nearly gone, and her general health much impaired since the ulcer had broken out.

Her cure was obtained in five weeks; and as the cure advanced her health returned. Some years afterwards she had a return of the ulcer, but it was easily cured. She continued in a good state of health till January 1797, when she was again afflicted with it. While under cure she was seized with a kind of peripneumony, for which she was attended by Dr. Lettsom, but it proved fatal in a few days. During the time of

her illness, and at her death, the ulcer in the leg was larger, and discharged more than it did when it broke out.

CASE X.

Mr. Deeks, No. 8, Cross Keys Court, Little Britain, had a caustic applied to a wound on his left leg, which had been bitten by a dog supposed to be mad. The eschar separated, and the wound went on extremely well; one morning however he took off the roller and compresses, and continued without them for some hours, during which time he was in the erect position. I saw him the same evening, and was surprized to see the sudden alteration in the wound; from a state as healthy as can be described, it became perfectly black; the edges of the new formed skin were of the same colour, and the discharge was sanious though in the morning it

was quite purulent. In short, it had the appearance of a beginning gangrene. The bandage being reapplied, the wound looked much better the next day, and in two days more, without any change in the dressings, returned to its former healthy appearance, and was soon afterwards cured.

I have given this case as a striking illustration of the effects of pressure, and of the danger that may ensue from discontinuing it, even though it be only for a few hours.

CASE XI.

Mr. Wm. King, aged twenty-five, at Mr. Harrison's, banker, in Ironmonger Lane, applied in June, 1784, for the cure of an ulcer on the right leg, about the size of a sixpenny piece. It had been in the state in which I saw it about a month, in which time it had never shewn any disposition to heal.

I dressed it for a week without a roller, but no amendment followed. In two days after applying one, it looked much better; and in a fortnight more it was perfectly healed: though the patient walked ten or twelve miles every day, during the time that he was under cure.

CASE XII.

Mrs. Rilands, No. 53, Long Lane, Smithfield, applied in June 1784, for the cure of several large and painful ulcers on the right leg. They were of eighteen months standing. She had been kept in bed for a fortnight, by which they were much mended; but on walking about again were as bad as before. She was cured in about five weeks.

Since the above cure, she has had a return of the ulcers several times. She

is *now* living and well, and remarks that she has better health when her leg is well, than when it is ulcerated.

CASE XIII.

David Latham, aged fifty, a servant of Mr. Wright, Tobacconist, Newgate Street, living at No. 6, Bull and Mouth Street; applied in 1782 for the cure of a very painful ulcer on his right leg of about three months standing. He had been cured in a public institution by being kept in bed, but the ulcer broke out again in about a week after he was dismissed. He was cured in three weeks.

His leg has since been ulcerated two or three different times, from accidents happening to it, but it has been readily cured without confinement. He always enjoys better health when his leg is well, than when it is bad. He is *now* living.

CASE XIV.

I have the permission of Mr. Vines, No. 9, Furnival's Inn, to say, that in the year 1784, I attended him for the cure of a very large and deep ulcer, near the angle of the left leg, occasioned by a scald. It was extremely painful night and day, and rendered him unable to walk. He had been attended by a practitioner, who kept him very low, and purged him every day.

I ordered him to live as he did when in health, and to take the bark instead of purgatives. He was perfectly easy after the first dressing, and was cured in about a fortnight.

CASE XV.

I have the permission of Mr. Burton, of Hoxton, to say that he applied (at

the age of seventy) in July, 1785, for the cure of an obstinate ulcer on his right leg of several weeks standing. He was cured in a month; and was in better health afterwards, than while his leg was bad. He is *now* living and in good health.

CASE XVI.

Mr. Isherwood, of Hoxton, aged sixty-nine, applied in November, 1784, for the cure of two small but painful ulcers on his left leg of many months standing. He was cured in a month; after which, his general health was better than while his leg was bad.

CASE XVII.

Mr. William Kimpton, aged sixty-seven, clerk to Mr. Feast, brewer, in the City Road; living at No. 46, Old

Bethlem, applied in February, 1785, for the cure of a callous ulcer on the right leg, of the size of the palm of the hand, and of twelve months standing. The pain was so violent and constant, that it almost disabled him from walking; nor had he often slept more than three hours of a night, from the time it first appeared: his general health was much impaired by it. He had a better night after the first dressing, than for many months before, and in four months was perfectly cured. His health was at the same time restored.

He lived for about ten years after his cure, in London; and was greatly indebted for his support to the benevolence of Mr. Reyner in Duck's Foot Lane. He removed afterwards into the country, since which I have not heard of him.

CASE XVIII.

Mr. Caulton, aged forty-five, applied in July, 1785, for the cure of an ulcer on the upper part of his foot, of the size of a crown piece, which was very painful night and day: He had been accustomed to drink three pints of porter every day, but by the advice of a surgeon, he had abstained from this indulgence, and had lived very low. The same gentleman told him that the ulcer could not be cured without confinement to his bed. I ordered him to live as when in health, and permitted him to walk about as much as he pleased. The ulcer mended immediately, and in ten days it was perfectly cured. N.B. I omitted to take this man's address.

CASE XIX.

Mary Faint, a coachman's wife, of Stoke Newington, aged fifty, applied in January, 1786, for the cure of a callous ulcer about five inches long on the small of the left leg, and of five years standing; she had been nine months in a public institution, and afterwards under the care of two private surgeons, but without benefit. The pain was so violent, that for the last twelve months she had scarcely once had a good night's rest. Her appetite was almost entirely gone. She slept well after the first dressing, and in about two months, was perfectly cured. She has since enjoyed a better state of health than formerly and is *still* living.

CASE XX.

A niece of Mr. Buck, bricklayer of Hoxton, aged thirteen, applied in March, 1786, for the cure of two large foul and painful ulcers on the right leg, occasioned by a scratch during the very severe frost in the preceding winter. She had been under the care of a surgeon, but without benefit. After the first two or three times of being dressed at home, she walked daily to my house to be dressed, and was perfectly well in a month.

CASE XXI.

A boy of Mr. Jackson, in Coleman Street, aged seventeen, applied in March, 1786, for the cure of a large ulcer on each leg, occasioned by the frost. He had been for some time under a practitioner, but without benefit. He was cured in a month.

CASE XXII.

Catharine Storer, No. 24, New Street, Cloth Fair, aged fifty-eight, applied in March, 1786, for the cure of a foul and painful ulcer on the outer angle of the right leg, of the size of a crown piece, occasioned by the frost three months before. She had applied to a surgeon, who told her there was no cure for her, unless she would go into an hospital, or lie in bed at home. Her general health was worse after the ulcer broke out than it had been before. She was cured in two months.

CASE XXIII.

Sarah Watson, of Hackney Common, Stoke Newington, aged forty-five, applied in July, 1786, for the cure of three ulcers on the inside of the small of the right leg; they were of five

months standing. The pain of them was so severe that she was almost totally deprived of sleep, and her general health was greatly impaired. She had been under the care of a surgeon without receiving any benefit. After the first dressing she slept well, and was perfectly cured in three weeks; though she walked from Newington to be dressed.

CASE XXIV.

Sarah Turpin, of Old Street Road, aged twenty-seven, applied in August, 1786, for the cure of a large and callous ulcer on the outer angle of the right leg, of twelve months standing. It was always in pain, the violence of which generally obliged her to rise in the night in order to dress it. In two months she was perfectly cured; she is *now* living.

CASE XXV.

Ann Kelshaw, No. 2, Willow Street, Holloway Mount, aged thirty-six, applied in July, 1786, for the cure of a large ulcer on each ankle of the left leg. They were extremely painful night and day, and often prevented her from sleeping for three or four nights together. She was perfectly cured in six weeks.

By laying aside the bandage as soon as the sores were healed, they ulcerated in a short time to their former size; but were cured again in five weeks. While the ulcers were open, this poor woman was much thinner and weaker, and had worse spirits, than before her leg was bad. She is *still* living.

CASE XXVI.

Mrs. Walpole, at Mr. Bassino's, No. 1, Hamet Street, Minories, aged seventy-four, applied in June, 1786, for the cure of two large ulcers on the left leg, of six months standing. The pain they gave her almost entirely deprived her of sleep and exercise.

I dressed her at home a few times, after which, she walked daily to my house to be dressed, and was perfectly cured in two months.

CASE XXVII.

Ann Browne, at Mr. Jardin's, watchmaker, No. 7, Throgmorton Street, aged forty-nine, applied in January, 1787, for the cure of a large ulcer on the small of her left leg, of ten weeks standing, which was very painful night

and day. She slept well after the first dressing, and was cured in six weeks. She is *now* living, and perfectly well.

CASE XXVIII.

A person at Camberwell, aged forty, applied in January, 1787, for the cure of a great number of very painful ulcers all around the small of the right leg; her complaint was of three years standing.

She had been under three surgeons, but without benefit. She was perfectly cured in a month; during which time she frequently walked from Camberwell to London to be dressed.

CASE XXIX.

Mary Gorment, No. 2, Founder's Court, Lothbury, applied in March, 1787, for the cure of a deep and cal-

lous ulcer in the small of the right leg, of six years standing. It was very painful night and day. Sometimes she was obliged to keep her leg in a chair for three months together, and at other times to confine herself altogether to bed. She had been afflicted with a sore leg at different times for sixteen years; and in the course of that time always enjoyed better health when the ulcer was healed, than when it was open. She had applied the last time it was ulcerated to a public institution, but without benefit. I had the happiness of curing her in six weeks after she applied to me.

In 1798, this poor woman after remaining well about five years, again applied for the cure of another very painful ulcer on the same leg, which owing to an accident she had been afflicted with upwards of four years. It prevented her for the most part

either from sleeping or walking. During this period she applied to no one for relief. She at length however applied again to me, and was cured in twelve months. She has been in better health since her last cure, than she was while her leg was bad.

I neglected to take down this woman's present residence.

CASE XXX.

Ann Williams, Soap Yard, St. Saviour's College, Borough, aged fifty-four, applied in April, 1787, for the cure of several large and very painful ulcers on both legs, and of seven years standing. They nearly deprived her of sleep, and rendered her weaker and in worse health than before they broke out.

She had been a patient in two public institutions, and once under the care

of a private surgeon, but without any benefit. She was cured in three months.

CASE XXXI.

I have the permission of Mr. David Lewis, nurseryman of Kingsland, to say, that his mother, aged seventy-two, applied in May, 1787, for the cure of an ill-conditioned and painful ulcer of several months standing, in the small of the left leg. She was cured in about two months.

She remained free from her complaint, and in good health for five years, at the expiration of which time (from an accident) she had another painful ulcer in the same part. In a few months this ulcer likewise was perfectly cured without rest. Mrs. Lewis died at a good old age, about two years ago.

CASE XXXII.

Joseph Eagle, at the Crown and Seven Stars, Rosemary Lane, aged forty-four, applied in May, 1787, for the cure of an ulcer in the small of his left leg, of six years standing. It was so painful in the night, that it nearly deprived him of all sleep, and after he was afflicted with it, his general health was greatly impaired.

He had been under the care of a surgeon for seven months, and afterwards he was in a public institution for five months; but received no benefit from either. He was cured in ten weeks.

CASE XXXIII.

Mrs. Dorothy Lewis, Church Street, Stoke Newington, aged seventy-one, applied in April, 1787, for the cure of

two very large and foul ulcers on the inside of the small of the left leg, of twelve years standing. The pain was so violent, that she seldom slept half the night, nor could she stand or walk much in the day time. She had been under the care of three practitioners without benefit. She was cured in about eight months.

After having enjoyed upon the whole a much better state of health since her cure than before, she died at the advanced age of eighty-three. This information I had from one of Mr. Adderley's family of Stoke Newington, to whom Mrs. Lewis was much indebted for many kind attentions.

CASE XXXIV.

Ann Stacey, No. 4, King's Head Gardens, Holloway Mount, aged twenty-seven, applied in July, 1787, for the

cure of a sinuous ulcer upon the tibia, accompanied with a diseased periosteum. The complaint was of two years standing.

She had been under the care of a surgeon without benefit. After opening the fistulous cavity, and applying the nitrated silver to the periosteum, she was perfectly cured in two months.

CASE XXXV.

Rachael Sharp, Canterbury Head Gardens, Bethnal Green, aged forty-seven, applied in July, 1787, for the cure of several ulcers on the left leg; they were of eighteen months standing. The pain of them had almost totally deprived her of sleep for some months. Her appetite was nearly gone, and she was very much reduced in size since she had been afflicted with the ulcers.

She had been under the care of a surgeon for six months, and was afterwards a patient in a public institution for three months, but received no benefit from either. After being dressed three or four times she slept better than for some months before; and in one month was perfectly cured.

Her leg continued well about seven years, when a fresh accident happened to it. She again applied to me, but through extreme indigence her general habit had become so impoverished, that I advised her either to go into an hospital or the workhouse.

CASE XXXVI.

Mr. Thomas Palmer, of Stoke Newington, aged seventy-one, applied in September, 1787, for the cure of a very painful and foul ulcer of the size of a shilling, in the small of his right

leg, occasioned by the frost nine months before. He was much incapacitated both for walking and sleeping by his complaint. He was cured in three weeks.

He lived several years afterwards, and was in better health than when his leg was bad.

CASE XXXVII.

A servant of J. Harman, Esq. of Clapton, aged twenty, applied in October, 1788, for the cure of two ulcers on his left leg, of three months standing.

He had been under the care of a surgeon, for some time, but without benefit. He was cured in a fortnight.

CASE XXXVIII.

John Fisher, a coachman of Hampstead, aged thirty-seven, applied in November, 1787, for the cure of a

large and painful ulcer on the left leg, of eighteen months standing.

His leg had been pronounced incurable by a surgeon. He afterwards shewed it to another surgeon, who told him he must be confined for the cure of it. He was cured in two months. This is another case, in which the general health of the patient was worse after the breaking out of an ulcer, than it was before.

CASE XXXIX.

I have the permission of Lawrence Strange, Esq. No. 14, Finsbury Place, Moorfields, to say, that he applied in 1787, for the cure of a large and very painful ulcer on the right leg, of about three months standing. It was cured in about three weeks, and Mr. Strange is *now* perfectly well.

CASE XL.

A poor man at Haggerston, near Kingsland, aged forty-nine, applied in May, 1788, for the cure of a large and foul ulcer, on the outside of the small of the right leg, of about seven months standing. It was so painful in the night, that he scarcely slept at all, and was almost incapable of following his employment. He had been under the care of a surgeon for seven weeks without benefit.

He was cured in three months, and was in better health afterwards than before.

CASE XLI.

A person at Stoke Newington, aged thirty-three, applied in March, 1788, for the cure of a large ulcer on the left

leg, of twelve months standing. It had very much impaired her general health.

She was cured in a month. During the time she was under cure, she generally walked three miles to be dressed.

CASE XLII.

John Shillingford, butcher, of Stoke Newington, but now living at Mr. Parker's, gardener, in the City Road, aged twenty-three, applied in May, 1788, for the cure of a deep and foul ulcer upon the tibia, accompanied with a diseased periosteum. The complaint was of five years standing.

The ulcer by the repeated application of a caustic to its very bottom, was at length filled up with sound granulations, and a complete cure was obtained in ten months. This man remained well for several years, but

though he has twice met with accidents on the old cicatrix, yet he is *now* nearly well of the last of them.

CASE XLIII.

Hannah Westbrook, at No. 6, Nag's Head Court, Tower Hill, but now at Mrs. Howard's, No. 2, Ranelagh Walk, Chelsea, aged fifty-five, applied in September, 1788, for the cure of a very foul and painful ulcer on the right leg, of four years standing. She had twice received a cure from public institutions. But her complaint returning in a short time afterwards, she applied to me, and was cured in six weeks; after which, she was in better health than before.

She remained well several years, but has been again afflicted with this complaint, she is however *now* perfectly well.

CASE XLIV.

Mr. ————— in Meeting House Court, Old Jewry, aged nineteen, applied in September, 1788, for the cure of a large and painful ulcer on the heel, of many months standing.

He was cured in eighteen days, and after the cure, was in better health than when the ulcer existed.

CASE XLV.

Lydia Soles, No. 28, Britannia Row, Islington, aged sixty-three, applied in May, 1788, for the cure of a very foul ulcer on the left leg, of two years standing, and nearly as large as the palm of the hand. It was so painful that she had enjoyed but a few hours sleep during the last month. This

poor woman was almost worn out by poverty, pain, and want of rest.

She had been in two public institutions. From the first she received much benefit by the horizontal position, but the ulcer broke out again after her dismissal, before she got to her home. From the last she was turned out uncured. While she was under my care she regularly walked from Islington to my house to be dressed, and was cured in less than three months.

She is *now* living, and has been much better since her leg was healed than before.

CASE XLVI.

Susannah Barrington, No. 4, Christopher's Alley, Moorfields, aged thirty-five, applied in December, 1789, for the cure of numerous ulcers all around

the small of the left leg; they were of five years standing.

They were so painful, that she seldom slept more than two hours each night. After being dressed a few days, she slept as soundly as when in health, and in six weeks was perfectly cured. She is *still* living.

CASE XLVII.

William Rofe, near the Lamb, Kingsland, aged fourteen, applied in January, 1790, for the cure of a very large foul and painful ulcer, extending from the middle of the tibia to the middle of the foot; it was occasioned by a scald two months before. He was so lame, that it was with difficulty he could walk even with the assistance of crutches. In a fortnight after he was taken in hand he walked without them, and was perfectly well in six weeks.

CASE XLVIII.

Mary Wilson, aged forty-three, at Mr. Richards's, No. 3, Featherstone Street, Bunhill Row, applied in August, 1790, for the cure of an ulcer, on the upper part of the calf of the right leg, of eight months standing. It was occasioned by an issue made below the knee of the same leg.

The ulcer was so painful, that it was with difficulty she could either walk or stand; nor was she able to sleep much in the night. I ordered the issue to be dried up, and another to be made in the arm. The ulcer was afterwards cured in two months.

CASE XLIX.

Susannah Dodkin, of Newington Green, aged thirty-eight, applied in September, 1790, for the cure of a large ulcer on the right leg, of three years standing. The pain it gave her seldom allowed her an hour's sleep in a night. She always walked from Newington Green to town to be dressed, and was cured in six weeks. She is *now* living, and in good health.

CASE L.

Mrs. Covington formerly of Edmon-
ton, but now of Stoke Newington, (near
the brewhouse,) aged forty-four, applied
in December, 1790, for the cure of a
very painful ulcer on the right leg, of
two years standing. She was cured in
two months, and is *now* living.

CASE LI.

Mary Eusden, of Cheam, Surry, aged eighteen, applied in April, 1791, for the cure of an ulcer on the top of the foot of one leg and for two others in the small of the other. They were of ten months standing.

She had been a patient in a public institution where she was nearly cured, but the ulcers broke out afresh after she was dismissed. She was afterwards under the care of two private surgeons without benefit. She was cured in a month.

CASE LII.

Mary Romney, No. 50, Half-moon Alley, Bishopsgate Street, aged fifty-eight, applied in March, 1791, for the cure of seven or eight large callous and

painful ulcers on the right leg, of nine years standing. She was cured in about two months. After being dressed a few days, she was able to work as when in health. After this complaint was removed, her general health was better than when her leg was ulcerated.

CASE LIII.

Susannah Kirby, No. 11, King Street, Cloth Fair, aged forty, applied in July, 1791, for the cure of several very large ulcers on each leg, of eight months standing. The pain arising from them was so great, as to keep her awake during the greatest part of the night. She was cured in five weeks, after which she was in better health than before. She is *now* living and perfectly well.

CASE LIV.

A lady from the country, aged seventy-two, applied in June, 1791, for the cure of two large and foul ulcers, each of the size of a dollar, in the small of the left leg, and of eighteen months standing. They were so painful that according to her own account, she had seldom more than half an hour's sleep in a whole night, for several months.

She had been under the care of two surgeons without benefit. She was cured in ten weeks, after which she was in much better health than while the ulcers were open.

CASE LV.

Ralph Whitehorn, watchman, at Mess. Biddle and Co. Cuper's Bridge, Lambeth, aged fifty-six, applied in

August, 1791, for the cure of a very painful ulcer on the right leg, of five years standing. He had been admitted into a public institution, from which he received much benefit by the horizontal position, but the ulcer was not entirely healed. On returning to his employment, it became as bad as ever. He applied afterwards to two private surgeons but without benefit.

He was cured in two months, although he sat up as watchman every night during the time he was under my care, and walked to be dressed. He is *now* living in the same situation, and has been in better health since his leg was cured, than before.

CASE LVI.

Mary Wharf, at Mr. Faulkner's, No. 11, Huggin Lane, Thames Street, aged thirty, applied in December, 1791, for

the cure of two very foul and painful ulcers on the right leg, of six months standing, which nearly deprived her of sleep. She was perfectly cured in three months, and is *still* living.

CASE LVII.

Mary Dickenson, at Mr. Miller's, Castle Court, Budge Row, aged fifty, applied in October, 1791, for the cure of two very large and painful ulcers on each side the small of the left leg. They were of seven years standing. She had seldom more than two hours sleep each night; the violence of the pain frequently obliged her to get out of bed.

She was cured in three months, and has been in much better health and spirits, and more able to work, since the cure has been obtained than she was before. She is *still* living.

CASE LVIII.

I have the permission of Mr. Needham, No. 106, Shoreditch, to say, that his son, aged sixteen, applied in May, 1792, for the cure of a foul ulcer, about the middle of the tibia, occasioned by an accident some time before.

He had been attended by a surgeon for six weeks, who ordered him to keep his leg upon a pillow in the chair; he complied with this injunction, but found no benefit.

He was cured in a fortnight, by dressing it only six times; during his being under cure, he walked abroad so much as to blister his feet. He is *now* living.

CASE LIX.

Wm. Ingram, Meeting House Court, Old Jewry, aged sixty-five, applied in May, 1792, for the cure of a foul and

painful ulcer on the inner angle of the left leg, of two years standing, which almost deprived him of sleep. He had been twice a patient in a public institution, and though he was much benefited by the horizontal position, yet on returning to his employment, the ulcer soon became worse than it had before been. He was cured in three months.

CASE LX.

Elizabeth Griffiths, No. 5, Ward's Place, Islington, aged forty-three, applied in June, 1792, for the cure of several large ulcers about the inner angle of the left leg, of eighteen months standing, the pain of them was so great as to deprive her nearly of all sleep. She had been four times a patient in public institutions, and thrice received a cure; but the ulcer broke out again, and in a very short time after she was dismissed, was as bad as ever. She

walked constantly to be dressed, and was cured in two months. She is *still* living.

CASE LXI.

Mary Kirk, No. 48, Shoe Lane, Fleet Street, aged forty-nine, applied in September, 1792, for the cure of several ulcers on the right leg, of seven years standing, the pain of which frequently deprived her of sleep for many nights together.

She had been once under the care of a private surgeon, and thrice in public institutions. She received no benefit from the former, but was much better by the advice she received from the latter. As the ulcers however were not healed when she was dismissed, they became as bad as usual in a short time afterwards. She was cured in six weeks.

CASE LXII.

Mary Harrison, at Mr. Streatfield's, Basinghall Street, applied in May, 1792, for the cure of a small and deep ulcer of several months standing. It was situated about the middle of the tibia, and penetrated to the periosteum.

The mild caustics were repeatedly tried in vain. The periosteum being afterwards more fully exposed by stronger caustics, was found to be horny and unequal. The ulcer then granulated firmly from the bottom, and the patient was lately known to be perfectly well.

CASE LXIII.

William Lewis, tile-maker, Cambridge Heath, Hackney, aged thirty-one, applied in December, 1792, for

the cure of four or five ulcers on the right leg, of two years standing. He had received a cure from a surgeon by being kept in bed for five weeks, but the ulcer broke out again in a week after he was dismissed. The same gentleman then dressed it for six months and used a flannel roller. By this treatment the ulcers were again nearly cured, but in a week afterwards, they were as bad as before. This person walked from Hackney to be dressed, and was perfectly cured in a fortnight.

CASE LXIV.

Judith Vine, at the Punch Bowl, Turnmill Street, Clerkenwell Green, aged forty, applied in February, 1793, for the cure of a large and painful ulcer of the left leg, of sixteen months standing.

She had been under the care of three private surgeons without benefit, and had been in a public institution, where by being kept in bed for six weeks, the ulcer was perfectly cicatrized; but it broke out again the day after she came out of it, and was soon as bad as before. She was cured in about three months.

CASE LXV.

William Such, No. 12, Galloway's, or Harding's Rents, Snowfields, Borough, aged fifty-one, applied in April, 1793, for the cure of a large ulcer in the small of the left leg, of sixteen months standing. It was so painful, that he could not walk without crutches:

He had been in a public institution without receiving a cure. In nine weeks he was perfectly well. He is now living.

CASE LXVI.

John M'Donald, watchman to Mess. Greave and Cooke, dyers, Booth Street, Spitalfields, aged forty-five, applied in May, 1793, for the cure of several large and painful ulcers near the ancles of both legs; those on one leg were of six years standing, and those on the other of two years. He had been in two public institutions; from the one he received no benefit, but was nearly cured by the horizontal position in the other, yet by walking about again he was soon worse than before.

The ulcers on one leg were cured in two months; but it was eight months before those on the other could be perfectly cicatrized. During the cure he sat up as watchman almost every night, and was in better health after it was completed, than while he was af-

flicted with the complaint. Within the last twelve months he has met with fresh accidents on both legs, and is again under cure for the ulcers brought on in consequence of them.

CASE LXVII.

I have the permission of Mr. Hester, No. 8, Coleman Street Buildings, to say, that he applied in August, 1793, for the cure of a painful ulcer on the left leg, of ten weeks standing. He had been under the care of a surgeon for five weeks without benefit. He was cured in three weeks.

CASE LXVIII.

Frances Tizard, at Mr. Gun's, No. 6, Barbican, aged forty, applied in November, 1793, for the cure of a very painful ulcer on the right leg, of twenty

months standing. She was nearly well by being kept in bed for six weeks in a public institution; but on walking about again, the ulcer soon became as bad as before. She was afterwards a patient in two public institutions, but did not receive a cure. She was perfectly cured in two months, and is *now* well.

CASE LXIX.

George Ellis, No. 1, Cheesman's Court, George Street, Bethnal Green, aged twenty-two, applied in September, 1794, for the cure of a foul and painful ulcer on the left leg, of twelve months standing. He had been under the care of a surgeon for three months, and had received benefit, but not a cure. He was cured in a month, and is *now* living.

CASE LXX.

Thomas Hinton, a pauper, in the workhouse at Rotherithe, aged seventy-nine, applied in August, 1794, for the cure of a great number of foul and painful ulcers in almost every part of the right leg; they were of six years standing. He had made unsuccessful applications to several surgeons for relief. He was cured in less than five months, and always walked to my house to be dressed. He was in better health when the ulcer was cured than before.

CASE LXXI.

Ann Griffiths, No. 6, Bluit's Buildings, Fetter Lane, aged forty-one, applied in March, 1795, for the cure of seven or eight painful ulcers around the right leg, of four years standing.

She was cured in ten weeks, is *still* living, and has been since her cure in better health than while her leg was ulcerated.

CASE LXXII.

I have the permission of Mr. Edward Winter, Fleur de Luce, Houndsditch aged twenty-eight, to say, that he applied in July, 1795, for the cure of an ulcer on the right leg, of eight months standing. He had been under the care of a surgeon for four months without benefit. He was cured in a fortnight; and is *now* well.

CASE LXXIII.

Mary Parrot, No. 1, Benjamin Street, Clerkenwell, aged sixty-five, applied in August, 1795, for the cure of a large and very painful ulcer on the right leg, of three years standing, which nearly

deprived her of all sleep. She had been a patient in a public institution, and although the ulcer was nearly healed when she was dismissed, yet it soon became as bad as before. She was cured in two months. She is *now* living, and in good health.

CASE LXXIV.

I have the permission of Mrs. Crompton, of the Bell, the corner of Brick Lane, Whitechapel, to say, that she applied in October, 1795, for the cure of a very painful ulcer situated between the outer angle and the heel of the left leg. It was of thirteen months standing.

She had been attended for three months by two surgeons without benefit. The ulcer was so extremely painful, that she could not sleep an hour in a week. Sometimes she was obliged to walk with crutches for six

weeks together; and at other times was confined altogether to her room. After the first dressing she had a very good night. In less than a fortnight she was able to walk to be dressed; and was perfectly cured in a month. From this time her general health was greatly improved. Since then she has had a return of the ulcer, but it is *now* quite well.

CASE LXXV.

Mr. Armstrong, No. 216, Borough High Street, permits me to say, that he applied in 1795, for the cure of an obstinate ulcer on the left leg, of two months standing. He was cured by being dressed only seven times.

CASE LXXVI.

Mr. Izat, No. 18, King Street, Borough, permits me to say, that he applied in 1795, for the cure of a troublesome and very painful ulcer on his right leg, of two months standing. He was cured in a month.

CASE LXXVII.

Mary Ludlow, No. 3, Kingsland Road, aged forty-five, applied in November, 1795, for the cure of a very painful ulcer, near the inner angle of the left leg, of two years standing; from which she had in general very bad nights.

She had been under the care of a surgeon for twelve months without benefit. She was cured in two months,

and during the cure, she sometimes stood at the wash tub four days successively.

CASE LXXVIII.

Hannah Leaver, No. 87, Shoe Lane, Fleet Street, aged sixty-one, applied in November, 1795, for the cure of a foul ulcer as large as the palm of the hand, just above the outer ankle of the left leg, it was of twelve years standing, and was so extremely painful, that she had not slept more than an hour each night for several months together.

She had been thrice a patient in public institutions and had received much benefit in each of them. Soon after her dismissal however, the ulcer relapsed into as bad a state as before. She was afterwards under a private surgeon but without much benefit. She

was cured in about nine months. This patient *continues* well, and is in better health than when her leg was ulcerated.

CASE LXXIX.

Hannah Faulkener, aged twenty-five, at No. 59, Upper Thames Street, applied in 1795, for the cure of an ulcer on the right leg, of the size of a crown piece. It was so painful that she was nearly disabled from walking; nor was she able to sleep much.

She was cured in three months. She is *now* living, and in better health than while her leg was ulcerated.

CASE LXXX.

Mary Clark, No. 32, Pellam Street, Spitalfields, aged fifty-nine, applied in January, 1796, for the cure of several very painful ulcers about the ancles of

the left leg; they were of twelve months standing. She had been a patient in a public institution without benefit. She was cured in seven months.

This woman has been afflicted with an asthma for twenty years; but that complaint was not lessened while the leg was ulcerated. She is *now* living, and as well or better in health than usual.

CASE LXXXI.

Richard Allen, a servant of Mr. Thurgood's, timber merchant, City Road, but living at No. 90, Bunhill Row, aged forty-eight, applied in March, 1796, for the cure of a very foul and painful ulcer on the right leg; it was as large as the palm of the hand, and of eight years standing.

He had been four times a patient in public institutions, and was dismissed

at last as incurable. In seven months he was perfectly well, and is *now* living.

CASE LXXXII.

Elizabeth Stapleton, of the Ship public house, No. 23, Wheeler Street, Spitalfields, aged sixty, applied in April, 1796, for the cure of a large ulcer on each leg, of five years standing. The pain of them almost entirely deprived her of sleep.

A surgeon to whom she had applied for a cure would not undertake her case, unless she would consent to lie in bed. Not agreeing to this condition, she applied to a public institution, from which she received some benefit, but not a cure. She was cured in six months, and was in better health afterwards than she had been before. She is *now* living.

CASE LXXXIII.

Moses Levi, aged sixty-seven, No. 2, Blue Boar's Head Yard, Petticoat Lane, Whitechapel, applied in 1796, for the cure of an ulcer on the left leg, of four months standing. It gave him so much pain that he slept very little; the pain likewise nearly prevented him from walking.

He had been under the care of a surgeon without benefit. He was cured in a month, and is *still* living.

CASE LXXXIV.

Mary Humphreys, Boar's Head Court, Smithfield Bars, aged sixty, applied in August, 1796, for the cure of a very foul and painful ulcer on the inner ancle of the right leg, of three years standing, which continually broke her rest.

She had been under the care of a surgeon for eight weeks, who informed her he could not cure it, unless she would consent to lie altogether in bed. She was afterwards in a public institution, from which she received much benefit, but not a cure. She was perfectly well in two months, and is *still* living.

CASE LXXXV.

Mary Robinson, Boar's Head Court, Petticoat Lane, Whitechapel, aged fifty-four, applied in August, 1796, for the cure of numerous ulcers around the ancles of the left leg, of three years and a half standing. She had been a patient in two public institutions, and under the care of a private surgeon without benefit. She was cured in a month, and is *now* perfectly well.

CASE LXXXVI.

I have the permission of Mr. William Hall, No. 44, Red Lyon Street, Spitalfields, to say, that he applied in 1796, for the cure of two ulcers near the outer angle of the left leg, of eight months standing; they were very painful in the night and rendered him unable to attend to his business in the day time. He was cured in six weeks.

He has been at different times afflicted with ulcers on his leg, for the last twenty years, and for many years past, he has likewise been subject to a cough in the winter, but he does not perceive that either his cough or his general health is at all affected by the state of his leg.

CASE LXXXVII.

Joseph Devonshire, No. 2, Barber's Yard, Brown's Lane, Spitalfields, aged thirty-one, applied in June, 1796, for the cure of a large ulcer on the inner angle of the right leg, of two years standing. It was so painful that he could not sleep in the night, nor could he walk about without crutches. He was cured in seven months.

CASE LXXXVIII.

I have the permission of Mr. George Smith, No. 3, Mint Square, Borough, aged twenty-four, to say, that he applied in November, 1796, for the cure of several ulcers about the ancles of his left leg; they were nearly of two years standing. He had been attended for five months by a surgeon without much benefit. He was cured in two months, and is *now* living.

CASE LXXXIX.

Mrs. Lilly, No. 81, Cow Cross, Smithfield, had been afflicted with a very painful ulcer on the right leg, for nine years. It had been cured at different times, but never remained well longer than a few days or weeks. In the last instance the ulceration had existed about four months. She had been attended by a surgeon without benefit.

She was cured in a month; and remarks, that she is upon the whole in better health when her leg is well, than when it is ulcerated.

CASE XC.

Mr. Humphreys, late a linen draper, in Shoreditch, but now of Abergavenny, in Wales, aged eighty-one, applied in

November, 1796, for the cure of an ulcer, on the small of his right leg, of many months standing. He had been under the care of a surgeon without benefit. He was perfectly cured in three weeks.

CASE XCI.

William Spencer, No. 8, West Street, Globe Fields, Bethnal Green, aged forty-nine, applied in December, 1796, for the cure of a very painful ulcer on the right leg, of four years standing. He had been a patient in three public institutions, but although he received benefit from each of them, he did not obtain a cure. In two months he was quite well, and is *now* living.

CASE XCII.

Elizabeth Williams, aged forty-eight, widow of ——— Williams, labourer to St. Bartholomew's Hospital, living in Bartholomew Yard, applied in March, 1797, for the cure of a large and foul ulcer on the right leg, of three months standing. It was so painful, that it almost entirely prevented her walking, and deprived her of sleep. She was cured in three weeks, and is *now* well.

CASE XCIII.

Lucy Gurr, No. 10, Church Street, Blackfriars Road, aged thirty-one, applied in April, 1797, for the cure of several very painful ulcers, around the ancles of both legs. Those on one leg had existed about four years, and those

on the other a year and a half. Her complaints had almost deprived her of all sleep. She had been under the care of two surgeons without benefit.

She was cured in six months, and has been in much better health since her cure than before.

CASE XCIV.

Mrs. Jane Gelard, at Mr. Thomas Clarke's, pawnbroker, Hampstead, applied in June, 1797, for the cure of a very painful ulcer, on the small of the right leg, of about eight months standing. She had been under the care of two surgeons without benefit. She was cured in a fortnight.

CASE XCV.

James Orknie, aged forty-two, employed in the victualling office, Deptford, living at No. 6, Spring Court,

Rotherhithe, applied in June, 1797, for the cure of a painful ulcer, on the inner ankle of the left leg, of thirteen months standing.

He was cured in a fortnight. He walked from Deptford to be dressed, and followed his employment during the time of cure.

CASE XCVI.

John Box, No. 81, Hare Street, Bethnal Green, aged thirty-two, applied in June, 1797, for the cure of seven or eight very painful ulcers, in different parts of the left leg, of seven months standing. He had been a patient in a public institution without benefit. He was cured in six weeks, and has since been in better health than before. He is *still* living.

CASE XCVII.

Simon Nation, at Mr. Jacob's, Fishmonger, No. 25, Duke's Place, Aldgate, aged fourteen, applied in June, 1797, for the cure of a large ulcer, about the middle of the tibia, of nine months standing. He had been a patient for two months in a public institution without benefit. He was cured in six weeks.

CASE XCVIII.

George Bradshaw, at Mr. Joice's, box maker, Fountain Court, Minories, aged eighteen, applied in June, 1797, for the cure of two very foul and painful ulcers, about the middle of the right leg, of six months standing. He was cured in ten weeks, and has been since in better health than before. He is *still* living.

CASE XCIX.

Mr. Thomas Hurst, No. 7, Carter Lane, Tooley Street, aged thirty-nine, applied in June, 1797, for the cure of two very foul and painful ulcers, about the inner angle of the right leg, of four years standing. He had been a patient in a public institution, and had been also attended at his own house by a private surgeon, without benefit. He was cured in two months, and has been in better health since than he was before.

CASE C.

Susannah Dent, aged forty-five, No. 2, King Street, Old Street, applied in July, 1797, for the cure of a large and painful ulcer on the left leg, of two years standing. She was cured in five weeks, and is *now* living.

CASE CI.

Thomas Williams, aged thirty-five, employed in the manufactory of Mess. Mound's, Ray Street, Clerkenwell, but living at No. 45, in the same street, applied in June, 1797, for the cure of four foul ulcers on the right leg, of four years standing; the pain attending them was so great, that he seldom slept after midnight.

He had been a patient in a public institution, and under the care of a private surgeon without benefit. He was cured in two months, and his cure was obtained without interruption to his business. He was a smith, and stood to his employment, from six in the morning till eight at night, during the whole of the cure. This poor man is now under cure for a recent accident on the same leg.

CASE CII.

John Fenn, aged thirty-nine, at No. 19, Gloucester Street, Church Lane, Whitechapel, applied in June, 1797, for the cure of a large and painful ulcer on the calf of the left leg, of three years standing. He was cured in eight months, and is *still* living.

CASE CIII.

William Davenport, aged thirty-five, Coneyhall Lane, Deptford, employed in the brewery of the victualling office, Deptford, applied in July, 1797, for the cure of a large ulcer on one side of the left leg, of nine years standing; and for another on the other side, of nine months standing. About nine years since he had fourteen ulcers on the same leg, for which he was admitted

into a public institution, in which were all cured except one, which continued open till I saw him.

He was cured in two months, in which time he walked from Deptford to town, to be dressed, and is *now* well.

CASE CIV.

Lydia George, at Mrs. Cowie's, No. 33, East Lane, Walworth, aged forty-two, applied in July, 1797, for the cure of an ulcer on the right leg, of twelve months standing. It was so painful in the night that she was frequently obliged to get out of bed; and it was with great difficulty that she walked about in the day time. She was cured in a month.

CASE CV.

Joseph Baker, carpenter, High Street, Hampstead, aged fifteen, applied in July, 1797, for the cure of two ulcers on the left leg, of twelve months standing. He had applied to a surgeon who said it could be cured only by rest.

He was perfectly cured in about ten weeks, although he walked about, from six in the morning till ten at night, during the whole time. He is *now* living.

CASE CVI.

Mrs. Knight, No. 19, opposite the Waggon and Horses, Newington Butts, permits me to say, that she applied in 1797, for the cure of a very painful ulcer on the right leg. It was of six

months standing. She had been under the care of a surgeon without benefit. She was cured in three weeks, and is *now* well.

CASE CVII.

Hannah Fisher, aged 45, a coachman's wife, in Flask Walk, Hampstead, applied in June 1797, for the cure of a very large ulcer on the right leg, of fourteen years standing. It was so painful as almost totally to deprive her of sleep for several weeks together.

She had been a patient in a public institution without benefit. She was cured in four months, and is *still* living.

CASE CVIII.

Nathan Cohan, aged fifty-four, No. 2, Short Street, Spitalfields, applied in July 1797, for the cure of two large

ulcers on his right leg, of ten months standing. The pain attending them, rendered him scarcely capable of following his calling by day, or of obtaining rest by night. He slept well after the first dressing, and was cured in four months. He is *still* living.

CASE CIX.

Frances Rodway, No. 46, Long Alley, Moorfields, aged forty-one, applied in July, 1797, for the cure of a very painful ulcer on the inner angle of the left leg, of fifteen months standing; it deprived her almost entirely of sleep, obliged her frequently to get up in the night, and nearly disabled her from standing. She had applied to a practitioner without benefit. She was cured in about three months, and is *now* well.

CASE CX.

John Wade, aged fifty-four, a pauper of the parish of St. Olave, Old Jewry, in the workhouse at Hoxton, applied in December, 1797, through the recommendation of Mr. Whitley, overseer of the poor, for the cure of three ulcers on his left leg, of about eight months standing. He had been under the care of a surgeon for five months, from whom he received much benefit but not a cure.

He was cured in a month. In a short time after he was cured, he neglected the continuance of the roller, this occasioned his relapsing into as bad a state as before, but I believe he is now well.

CASE CXI.

James Harris, aged 28, Old Castle Street, Bethnal Green, applied in December 1797, for the cure of a very painful ulcer, between the ankle and heel of the left leg, of three months standing. He was cured in a fortnight, and is *now* well.

CASE CXII.

I have the permission of Augustus Floyer, Esq. captain of the 6th Regt. of Madras Cavalry, No. 36, Beaumont Street, Portland Place, to say, that in January 1798, he was perfectly cured in two months of painful ulcers with which in consequence of a fever he had been afflicted on both legs, for upwards of seven years.

During his cure he took a journey of several hundred miles. Capt. Floyer had applied to two surgeons of the first eminence in town without benefit.

CASE CXIII.

Catharine Hughes, aged fifty-eight, No. 3, Chatham Gardens, City Road, applied in December, 1797, for the cure of several ulcers on the right leg, of twelve months standing. They were in almost constant pain, and nearly prevented her from walking or standing.

She had been a patient in a public institution, but had received no benefit. She was cured in six weeks.

CASE CXIV.

I have the permission of Mr. John Hurst, clerk to Mess. Goodwin, Skinner

and Thornton, brewers, East Smithfield, to say, that he applied in December, 1797, for the cure of several large ulcers around the ancles of both legs, of six weeks standing. They were so painful that he was frequently unable to sleep more than two hours in the night, and he was nearly disabled from walking. After a short time he walked to be dressed, and was perfectly cured in a month. He is *now* well.

CASE CXV.

Francis Male, aged fifty-three, servant to Mess. Vials and Co. Prince's Street, Spital Fields, applied in December, 1797, for the cure of a bad ulcer on the right leg, of eighteen months standing. He had been a patient in a public institution without benefit. He was cured in a month, and is *still* living.

CASE CXVI.

Mary Chipperfield, aged thirty-four, No. 6, Ogle Mews, near the Middlesex Hospital, applied in December, 1797, for the cure of three ulcers on the right leg, of two years standing. They were so painful, that she had been almost totally deprived both of sleep and exercise, for the last six weeks. She was cured in a month.

CASE CXVII.

James Greig, aged thirty-nine, No. 9, Little Bell Alley, Coleman Street, applied in 1797, for the cure of several very painful and foul ulcers, about the ancles of his left leg, of twelve months standing. They deprived him almost incessantly of sleep, and prevented his walking. He was much re-

duced in flesh, since he was afflicted with the ulcers. He had been a patient in a public institution, for five months, and had been under a private surgeon for six months, but received little benefit from either.

He was cured in five weeks, and since his cure, has been in better health than before. He is *still* living.

CASE CXVIII.

I have the permission of Mr. Birch, at the Horse and Groom, Twickenham, to say, that in 1797, he applied for the cure of an ulcer on his right leg, of eighteen months standing. He had been under the care of three surgeons, two of whom ordered him to lie in bed. Not being able to comply with this injunction, and receiving no benefit, he applied to me, and was cured in five weeks. He is *now* well.

CASE CXIX.

Martha Chesterman, aged forty-two, No. 6, Orchard Street, Kingsland, applied in 1797, for the cure of a very large and painful ulcer, near the inner angle of the left leg, of twelve months standing. She was scarcely able either to stand or walk; and had slept very little for the last month. She was cured in four months, in the course of which she walked from Kingsland to town to be dressed. She has been in better health since, than while her leg was ulcerated.

CASE CXX.

John Bailey, aged twenty-one, cook at the Guildhall coffee house, applied in 1797, for the cure of a very large ulcer, on the inner angle of the left leg, of

eight months standing; the pain of which nearly deprived him of all sleep: He was cured in six weeks; during a great part of which time he followed his business, as he did when he was in health.

CASE CXXI.

Mary Simpson, wife of — Simpson, groom to Lord Loughborough, at Hampstead, applied in August, 1797, for the cure of an ulcer, on the left leg, of two years standing. It was so painful as frequently to oblige her to rise three or four times in the night. She had applied to a surgeon without benefit. She was cured in seven weeks, and was afterwards in better health than before.

CASE CXXII.

Mrs. Duplex, No. 6, Rope Maker Street, Little Moorfields, aged fifty, applied in 1798, for the cure of a most painful ulcer about the inner angle of the right leg, of six weeks standing. It nearly prevented her from walking or sleeping. She was cured in three weeks.

CASE CXXIII.

Soloman Nathan, aged forty-two, at Mr. Davis's, King Street, Duke's Place, Aldgate, applied in 1798, for the cure of a large ulcer, about the middle of the tibia, of eight years standing, attended with a diseased periosteum. He had been twice a patient in a public institution, but without benefit. He was cured in eight months.

CASE CXXIV.

Ann Woodward, aged thirty-three, No. 17, White Row, Spitalfields, applied in 1798, for the cure of a very painful ulcer, about the middle of the left leg, of nine months standing, which almost disabled her from going about. She was cured in a month.

CASE CXXV.

John Mackway, aged forty-seven, No. 23, Petticoat Lane, Whitechapel, applied in 1798, for the cure of four or five ulcers on the small of his left leg, of eighteen months duration. They had almost disabled him from standing or following his business; and were continually robbing him of sleep. He had received considerable benefit from

a surgeon under whose care he had been for six or seven months; but his complaint remained. He was cured in five weeks.

CASE CXXVI.

Mr. Henry Soames, of Cateaton Street, permits me to say, that he applied in 1798, for the cure of a troublesome ulcer on his left leg, of about a months standing. He had applied to a surgeon, who advised him to keep it for the most part in a chair. Under this treatment he was no better. He was cured in less than three weeks.

CASE CXXVII.

Ann Burrel, aged fifty-three, No. 7, St. Dunstan's Court, Fleet Street, applied in 1798, for the cure of a very painful ulcer on the right leg, of thir-

teen months standing, which almost prevented her sleeping, or walking. She had been a patient for seven months in a public institution without benefit. She was cured in three weeks. From a want of attention to the management of the roller, this woman is now under cure for another ulcer on the same leg.

CASE CXXVIII.

I have the permission of Mr. Loach, at the Black Boy and Camel, Leadenhall Street, to say, that he applied in 1798, for the cure of a painful ulcer on the small of the right leg, of eighteen months standing. He was cured in three weeks.

CASE CXXIX.

Ruth Ridgard, No. 8, Counter Street, Borough, aged forty-nine, applied in 1798, for the cure of a very painful ulcer under the calf of the left leg, of two years standing. She was cured in six weeks.

CASE CXXX.

I have the permission of Mrs. Jones, at Stockwell farm, to say, that she applied in 1798, for the cure of an ulcer on the left leg, of seven months standing, which was in continual pain, night and day. In two hours after it was first dressed, she was easier, and slept better the same night; in three weeks it was perfectly cured. She has been in better health since this cure was obtained than she was before.

CASE CXXXI.

Mr. William Lee, No. 12, Bishops-gate Street, permits me to say, that in the year 1798, he applied for the cure of several very painful ulcers near the ankle of the left leg, occasioned by a severe fever in the year 1796. He was attended by several very eminent men during the year 1797, but without any benefit. He was then recommended to try sea bathing, but it had no good effect on the ulcers. He was perfectly cured in less than five weeks.

CASE CXXXII.

Mary Gadesby, aged forty-six, No. 2, Clerkenwell Green, applied in 1798, for the cure of a very foul ulcer on the left leg; it was of five years stand-

ing, and as large as two crown pieces. During the last two years, she had been rendered incapable of standing; and for the last four months before she applied, was almost totally deprived of sleep. She had been under the care of a surgeon for the first three years, at the end of which time the ulcer was nearly cured, but in a short time it was as bad as before.

After the second time of being dressed she slept well; and at the end of the first week, she stood to wash, iron, &c. as when she was in health. In two months she was perfectly well, and was in better health after her ulcer was cured than before.

CASE CXXXIII.

I have the permission of Mr. Stephen Adams, corner of Shackelwell Lane, Kingsland, to say, that he applied in

1798, for the cure of a very troublesome ulcer on the left leg, of six weeks standing. He was cured in a week.

CASE CXXXIV.

Mary Brookes, No. 4, Denmark Street, St. George's, Radcliffe Highway, aged thirty-four, applied in 1798, for the cure of an ulcer on the small of the left leg, of four months standing, which was so painful as nearly to deprive her of all sleep; nor was she able to work, or even to stand. She had been a patient in a public institution without benefit. After the second dressing she walked very well, and used to come to my house to be dressed. In four months she was perfectly cured, and in better health than before.

CASE CXXXV.

I have the permission of William Freme, Esq. No. 2, Surry Place, Kent Road, to say, that he applied in 1798, for the cure of a very troublesome ulcer on his left leg, of near two months standing. He had been under the care of a surgeon during the greatest part of that time without benefit. He was cured in a fortnight.

CASE CXXXVI.

Mary Targison, aged thirty, No. 12, Dove Court, Old Jewry, applied in 1798, for the cure of a very painful ulcer, on the inner angle of the right leg, of four months standing, which almost prevented her sleeping or walking. She was cured in a fortnight.

CASE CXXXVII.

Mary Atkins, aged forty-six, No. 3, Bath Buildings, Hoxton, applied in 1798, for the cure of an ulcer, of the size of a crown piece, of many months standing. She was nearly disabled from walking, or standing; and had not had one good night's rest during the whole of the preceding winter. She had been a patient for four months without benefit in a public institution.

She was cured in three months, and has since enjoyed an improved state of health.

CASE CXXXVIII.

I have the permission of Mrs. Sarah Farthing, No. 109, Old Street Road, to say, that she applied in 1798, at the age of sixty-five, for the cure of a deep

and foul ulcer on the right leg, of more than five years standing. The pain of it disabled her from walking; from the same cause she was nearly deprived of all sleep. She was cured in about four months, and is *now* in better health than she has been for many years past.

CASE CXXXIX.

William Arrowdine, aged thirty, a poor man at Kingsland, recommended by Mr. Reyner, at Shackelwell, applied in 1798, for the cure of an ulcer on the right leg, and for three others about the ancles of the left leg, of four months standing. They were so painful as to oblige him to give up his work.

He was perfectly cured by being dressed every other day only for five times; he used to walk from Kingsland to town for that purpose.

CASE CXL.

Sarah Mosely, aged fifty, No. 12, Water Lane, Fleet Street, applied in 1798, for the cure of an ulcer on the right leg, of four years standing. During the last four months it had been so painful, that she had slept very little, and was rendered almost incapable of walking. She had been a patient in a public institution, and received a cure; but the ulcer broke out again the day after she was dismissed.

She was cured in six weeks; during which time she stood to the wash-tub, as she did when in health, and has been better since the cure, than she was before.

CASE CXLI.

David Rhodes, aged forty-one, a seaman, late on board His Majesty's ship, the Director, of sixty-four guns, but now at No. 17, Gibraltar Walk, Bethnal Green, applied in 1798, for the cure of a very large foul and painful ulcer, upon the middle of the tibia, of two years and a half standing. He had been dismissed as incurable from a public institution in the country, where he had been a patient for ten months. He was cured in four months.

CASE CXLII.

Sarah Woodridge, aged forty-five, No. 5, Magpie Court, Aldersgate Street, applied in 1798, for the cure of a painful ulcer, between the inner ankle and

heel of the right leg, of seven months standing. She had been under the care of a surgeon for about three months, at the end of which time she was worse than when she first applied. She was cured in a fortnight.

CASE CXLIII.

I have the permission of Mrs. Budd, No. 57, Bunhill Row, to say that she applied in 1798, for the cure of an ulcer on the left leg, of the size of a shilling, and of eight months standing. It was so painful, that she did not sleep more than two nights in a week; it likewise disabled her from walking about. She had been under the care of a practitioner for eight months without benefit. She was cured in two months.

CASE CXLIV.

I have the permission of Mr. Worth, of Gracechurch Street, to say, that he was cured in 1798, of a painful and troublesome ulcer, on the left leg, of six months standing. He had been successively under two practitioners during the greatest part of that time without benefit. He was six weeks under cure; during which time he took a journey of more than one hundred miles.

CASE CXLV.

Elizabeth Sandys, aged thirty-one, No. 5, Fishmonger Alley, Borough, applied in 1798, for the cure of an ulcer on the small of the right leg, of four months standing. It was almost a continual hindrance both to her sleeping and walking. She had been under the

care of a surgeon for three months without benefit. She was cured in six weeks.

CASE CXLVI.

I have the permission of Mr. John Alder, master of the Cock and Lion, Lower East Smithfield, to say, that he applied in 1798, for the cure of many very foul ulcers on both legs, of eight months standing. He was cured in a month.

CASE CXLVII.

Francis Wills, aged forty-three, No. 36, Barbican, applied in 1798, for the cure of a large foul and painful ulcer, on the left leg, of eighteen months standing. He had been a patient in a public institution without benefit. He was cured in two months.

CASE CXLVIII.

Jane Davis, aged forty-five, No. 10, Coppice Row, Spa Fields, applied in 1798, for the cure of two very painful ulcers on the left leg, of three months standing. She was cured in six weeks.

CASE CXLIX.

Mrs. Cobb, No. 11, Grocer's Hall Court, Poultry, permits me to insert her case. She applied in 1798, for the cure of an ulcer, on the small of the left leg, of eighteen months standing. It gave her almost continual pain, and nearly disabled her from walking. She had been under the care of a gentleman, who kept her for about three months partly in bed, and partly with her foot upon a stool; by this treatment

the ulcer was apparently cicatrized, but in a short time afterwards it broke out again.

She was cured in a month ; after the first fortnight, she often walked many miles in a day.

CASE CL.

I have the permission of Mr. Ward, at the White Lion, Shoe Lane, to say, that he applied in 1798, for the cure of an ulcer upon the tibia of the right leg, attended with a considerable erisipelatous inflammation, and a beginning gangrene. He had been accustomed to drink large quantities of spirituous liquors, by which his appetite was nearly gone, and his constitution considerably enervated.

I ordered him to apply an emollient poultice to his leg, and to drink every

day a bottle of red wine, instead of spirituous liquors. To this plan was added suitable doses of the bark and opium. The ulcer mended in a short time; bandages, &c. were afterwards applied, by which it was perfectly cured in about a month.

CASE CLI.

I have the permission of Mr. Brittain, No. 9, Margaret Street, Cavendish Square, to say, that he applied in 1798, for the cure of a painful ulcer on the hollow part of his right leg near to the outer angle; it was of six months standing. He had been under two gentlemen of the profession without benefit. He was cured in a month.

CASE CLII.

Mary Rice, formerly mistress of the Green Man, at Hampstead, but living since at No. 41, Cow Cross, aged forty-six, applied in 1798, for the cure of two large ulcers, on the small of the left leg, of three years standing. The pain attending them was so great as to prevent her standing in the day, and oblige her frequently to get up in the night. She had been under the care of a surgeon for twelve months without benefit.

She was easier in a few hours after the first dressing, slept well the same night, and was cured in four months.

CASE CLIII.

I have the permission of Mrs. Palmer, No. 58, Coleman Street, to say, that she applied in 1798, for the cure of an ulcer, on the small of the left leg, of four months standing. It nearly prevented her from standing or walking. She was cured in two months.

CASE CLIV.

John Edmunds, aged fifty-five, blacksmith, at Mr. Hull's, Twickenham, applied in 1798, for the cure of a large ulcer, on the inner angle of the right leg, of eighteen months standing. It was so painful in the night, as continually to interrupt his rest; and it was with much difficulty he could follow his calling, as he was obliged to lay his leg upon a block.

He was cured in about three months, during which time he worked at his business, as when in health.

CASE CLV.

James Rogers, aged thirty-five, coal porter, at No. 35, Joiner's Street, Borough, applied in 1798, for the cure of two large painful ulcers on one leg, and for three or four on the other; they were of eighteen months standing. He had been a patient in a public institution, and had received much benefit from it, but not a cure.

His pain began to lessen immediately after the first dressing; and in six weeks he was perfectly cured. This person likewise worked at his calling the whole of the time he was under cure.

CASE CLVI.

Thomas Hinde, aged thirty-six, employed by Mr. Bell, coal merchant, Stamford Hill, applied in 1798, for the cure of two large foul and painful ulcers, one on each ankle of the left leg. His complaint had almost totally deprived him of sleep; his appetite failed; and he was at length rendered incapable of working.

After being dressed eight days, he was able to return to work; and in four months and a half was perfectly cured; during this time, he walked from Stamford Hill to be dressed, and worked at his business as when in health.

CASE CLVII.

I have the permission of Mr. John Hussey, aged seventy-seven, No. 10, Batches Street, Charles Square, Hoxton, to say, that he applied in 1798, for the cure of an ulcer on his left leg, of the size of half a crown, of eight months standing. It was in a sphacelated state, apparently owing to his taking alterative mercurial pills, and living too low. The ulcer was so painful as nearly to deprive him of all sleep and exercise.

By the use of the bark, opium, poultices, and a more generous diet, he was in a short time able to bear a bandage; and without any confinement, was in ten weeks perfectly cured. He is *now* in better health than he was while his leg was ulcerated.

CASE CLVIII.

I have the permission of Mr. George Linnell, optician, No. 73, Snow Hill, to say, that he applied in 1798, for the cure of four or five large ulcers, tending to a sphacelated state, on the right leg, of four months standing. They were so painful, that he slept very little during the night, and was often obliged to get out of bed; nor was he able to walk about. Previous to the appearance of the ulcers on his legs, he had been accustomed to live very freely; but on the breaking out of his ulcers, he refrained from the use of every kind of strong liquor; this abstinence he continued to the time in which he came under my care.

He was ordered to take the bark, with small doses of opium, and to drink

a certain quantity of wine. He became easier almost immediately, and slept well the first night after he commenced this change in his plan. In three weeks he was able to walk to be dressed, and in four months was perfectly cured without confinement.

CASE CLIX.

Mrs. Thomas, No. 4, Charter House Street, applied in 1798, for the cure of several ulcers on the left leg, of twelve months standing. She had been under the care of several gentlemen of the faculty, without experiencing any relief. She was cured in about two months.

CASE CLX.

I have the permission of Mrs. Child, of Little Paternoster Row, Spitalfields, to say, that she applied in 1799, for the

cure of an ulcer on the left leg, which gave her much pain both by night and by day. She was first afflicted with this complaint about eight months before she applied to me, but it had been cured, and remained well about two months, after which a relapse took place. She was cured in a month.

CASE CLXI.

Robert Lincoln, aged thirty-seven, No. 16, Charlotte Street, Battle Bridge, applied in 1799, for the cure of an ulcer, of the size of a crown piece on the right leg. It was of five months standing, and was frequently very painful in the night, and nearly disabled him from working. In two months he was perfectly cured.

CASE CLXII.

John Nugent, No. 3, Butler's Buildings, East Smithfield, applied in 1799, for the cure of five large and foul ulcers on his left leg, of twelve months standing, which were at times very painful in the night, and disabled him from working. He had been twice a patient for about three months each time in a public institution. He received much benefit from the horizontal position; but although the sores were nearly healed when he was dismissed, they spread to a large size soon after he began to follow his employment. He applied afterwards to a private surgeon, but received no benefit.

After being dressed about a fortnight or three weeks, he was able to work as when in health, and in two months was perfectly cured.

CASE CLXIII.

Phœbe Emmington, aged sixteen, at Mrs. Dure's, No. 4, White Raven Row, Mile End, applied in 1799, for the cure of three ulcers on the left leg, of five months standing; the pain of them nearly disabled her from going about, and almost deprived her of sleep. She was cured in about three weeks.

CASE CLXIV.

The Rev. Mr. Greatheed, of Newport Pagnel, permits me to say, that his brother, Mr. John Greatheed, aged nineteen, applied in 1799, for the cure of a painful and troublesome ulcer on the small of the right leg, and likewise for another on the sole of the right foot. They were occasioned by a fall from a

ship in the West Indies, about three months before. He was cured in a fortnight, and walked from Shackelwell to town to be dressed.

CASE CLXV.

I have the permission of Miss H— at Miss Mallitratt's, Kingsland, to say, that she applied in 1799, for the cure of a very troublesome ulcer on the right leg, of eight months standing. She was cured in three weeks, and walked from Kingsland to town to be dressed.

CASE CLXVI.

Henry Taylor, aged forty-two, No. 33, Wilson Street, Moorfields, applied in 1799, for the cure of a very painful ulcer on the right leg, of twelve months standing. He was cured in a fortnight.

CASE CLXVII.

Richard Swift, aged forty-two, No. 17, Sharp's Alley, Cow Cross, applied in 1799, for the cure of two ulcers on the left leg, and one on the right leg, with which he had been afflicted for the last eighteen years. They were so painful that he was nearly disabled from following his employment. During the above time he had been a patient at three different times in a public institution, in which he each time received a cure by being kept in bed. The ulcers broke out again, and became very soon after each time that he was dismissed, as large and as painful as at any time before.

He was cured in about two months, and during his cure, he stood to a laborious employment, as when in perfect health.

NOTE.

I WISH it to be particularly observed, that all the patients whose cases are here related, were permitted during the whole time of their cure, to walk about, and to follow their respective callings; not excepting even those of the most laborious kind. To have mentioned this and other circumstances, in every case, would have swelled the work to an unnecessary size: A fault which I have endeavoured to avoid, by drawing up the cases as concisely as possible.

It may likewise not be improper to remark, that about *one hundred and twenty* of these patients are *now* living,

and perfectly well. About twenty of the remaining number are dead; and twenty-seven are removed to fresh places of abode.

IT has been hinted to me by one who knew that these papers were in the press, that he should attentively notice on reading the book, the composition of the salve which I used for the tow plaister. It will be found by referring to page 35, that either the calamine, or the spermaceti cerate, is recommended for that purpose. As however I have generally used a calamine cerate, not made according to the London Dispensatory, I think it right to give the formula of it, in order to prevent the possibility of a suspicion, that I have withheld any thing from the public relative

to the cure of these complaints. I would further observe, that this cerate is more apt to grow rancid than the common calamine cerate, and on that account is not so eligible for a plaister; but with this exception, it is a better composition, and less liable to evaporate than the common calamine cerate. The following is the formula alluded to.

Take of fresh hogslard, three pounds.

fresh litharge plaister, one pound and a half.

calamine prepared, one pound.

mix them together according to art, into a calamine cerate.

To this formula I shall add another for making a cerate, which nearly resembles the unguentum tripharmacum of the old dispensatory, but being less oily, it makes a much more adhesive plaister. It should be spread on rag, or silk, as an external covering to the dressing on lint, where a tow plaister

cannot be conveniently used; as in wounds of the face or hands, a bubo, or any other sore, where an external plaister cannot be readily retained in its situation by a bandage. This plaister is likewise so mild that it never irritates the skin. I have found it also a very useful plaister in fractures. The following is the formula;

Take of fresh litharge plaister, one pound.
fresh hogslard, six ounces.
vinegar, four ounces.

mix them together according to art into an ointment.

CASES

OF

Carious Ulcers on the Legs.

CASES

Curious Cases on the Stage

CASES, &c.

CASE I.

I Have the permission of Mr. Robert Hollingshead, of Derby, but now of Liverpool, to say, that I attended him many years ago, for the cure of a caries of nearly the whole surface of the tibia, extending from a little below the knee to the ankle; it was accompanied with numerous ulcerations in the integuments, leading to the different parts of the diseased bone. The disease was occasioned by the sudden attack of an inflammation on the bone, which had been injured by a fall. This patient had been under the care of a surgeon for many months without receiving any benefit.

The common dressings were applied to the ulcers, and an equable compression made on the whole limb; by these means the inflammation and swelling were much abated, and he was enabled to walk much better than before. After some time, exfoliations of the diseased bone took place in every affected part of it. The pieces were then removed by the forceps through the different ulcers in the integuments. It was sometimes necessary to enlarge the openings by a caustic; at other times the exfoliated pieces might be extracted without it. It was however with the greatest difficulty that some of those were removed, which came from the sides of the tibia.

In the course of some months, upwards of thirty pieces of bone were taken out; after which the patient recovered the complete use of his leg, and is *now* perfectly well.

CASE II.

The following case is submitted to the public not for its novelty, but as an instance of the extent to which the powers of nature are capable of operating, and as a caution not to determine too hastily on the amputation of a limb.

William Olave, No. 7, Parson's Yard, near Shoreditch Church, aged forty-one, of a healthy constitution, was attacked on the 18th of March, 1783, with a violent pain situated near the inner angle of the left leg. The pain continued day and night with unremitting violence; and his complaint rendered him incapable of walking, and deprived him of sleep. An external inflammation soon appeared upon the lower part of the tibia, which in ten days suppurated and broke.

Though the pain was then less severe, the disease confined him almost continually to his bed for nine months. He applied at different times to different surgeons for relief; one of them advised him to have his limb taken off without delay. Being unwilling to undergo the operation, he applied to a public institution; was twice visited by the surgeon, who each time pressed him to consent to an amputation of his leg; but being still averse to it, he was dismissed without having obtained any relief. At this time I first saw him, and found the disease to extend more than six inches along the tibia, just above the inner angle. The bone was bare in several places. There were also many ulcerated holes in the integuments. He had much pain and inflammation; there was a fluctuation of matter just above the outer angle; and he was greatly emaciated.

[Having opened the abscess formed by the side of the fibula, (which was found to communicate by a sinus with the diseased tibia,) I tried whether the diseased bone was loose, but could not move it, till a strong sharp pointed instrument was fixed upon it; and even then, the motion was barely perceptible. I then destroyed by caustics all the fungous flesh and integuments, which covered those parts of the affected bone that were not bare; this gave me a good view of the whole disease.* As the exfoliation was very

* A large portion of the tibia was already bare; but it was absolutely necessary to destroy by caustics the fungous granulations and integuments which covered, but did not adhere to the other parts of the diseased bone, and those likewise which hung over the edges of it; for while this impediment remained, neither the new formed bone could have been removed, nor the exfoliated piece taken out. This treatment occasioned no want of integuments at the close of the cure; for as the wound contracted, the old integuments approached and met, so as perfectly to cover the place where the chasm had been made.

large, I found nature had been active in repairing the defect, but the presence of the dead bone preventing a deposition of bony matter in its place, a considerable layer was added to the outer edge of the tibia, (being the only part of the substance of that bone unexfoliated,) by which it became nearly as strong as before. The same process was continued from the upper edge of the tibia, and it was extended so low as to cover a large part of the exfoliated piece, with a layer of bony matter, a quarter of an inch in thickness. This portion of the layer I removed piecemeal, by means of a levator, in order to make a passage for the exfoliated piece, which in one place, being nearly divided, I completely separated, by applying a trephine. The upper part, which was two inches in length and one in breadth, * was easily removed.

* See plate, Figure 2.

The lower portion of the exfoliated bone could now be moved more easily. Having made several unsuccessful efforts both to extract it whole, by the forceps, and to divide it, by the trephine, I at length procured a pair of large and strong pincers, † with which I gradually attempted the extraction in all directions. It seemed jammed in on every side, but by a little perseverance, that part next the ankle gave way; and shortly afterwards, I extracted the whole; leaving a large chasm six inches in length, three in breadth, and in the part next the ankle, three in depth. This piece which was about two thirds of the substance of the tibia and cancelli weighed an ounce and a half, and was nearly four inches long. *

† These pincers I procured at a blacksmith's. They were larger and stronger than the stone forceps.

* See Figure 1.

Dry lint, and an emollient poultice were applied to the leg. The first night the patient was very restless, but the next he slept more than he had done for many preceding months. On the third day, an erysipelatous inflammation began to spread upon the leg, but it soon ceased by the use of the bark and wine. When the first dressings were digested from the wound, I extracted a considerable piece of the cancelli, * and afterwards, several other pieces of bone. But the fistulous sore on the opposite side of the leg remained open, till a large loose part of the external side of the tibia was removed from the bottom of the wound; || after which it healed up.

Six weeks after the first operation, he was able to walk two miles to be dressed; but a loose piece of exfoliated

* See Figure 4.

|| See Figure 5.

bone still remained at the upper part of the wound, which I could not extract. Having destroyed the granulations surrounding it, by caustics, I found that it passed upwards, under an arch of the tibia, within the cavity of the bone.

To set this piece at liberty, I expected that I should have been obliged to work with the trephine through the sound part of the tibia, which in this place was near an inch thick; but happily I divided the piece into two parts, by forcibly applying a levator to it. The two pieces were then extracted with the forceps. They were part of the internal lamina of the tibia, and measured each an inch in length.† This large cavity soon filled up with granulations; in a few months every part of the wound was perfectly healed; and the patient now maintains a wife and large family by hard labour.

† See Figure 3.

This disease (which I could not trace to any peculiar virus,) seems to have arisen from the violence of a suppurative inflammation, which occasioned a mortification of a large portion of the tibia, the dead part of which being of an irregular form, and firmly linked within the sound bone, was necessarily prevented from having a free motion. Although this dead part was perfectly separated from the sound part, the ordinary powers of nature were unable to cast it off; force alone could produce this desirable effect.

N.B. This case has already been submitted to the public, in the first volume of Medical Memoirs. At the time of printing the present work, this man was *perfectly well*, and resided in the same habitation which he occupied at the time of the operation.

CASE III.

Jane Bantam, of Edensor, in Derbyshire, aged about twenty, was afflicted with a caries in the upper part of the tibia, occasioned by a sudden inflammation.

The dead piece consisted of a very large portion of the substance of the bone, and was six or seven inches long; but it was so locked in with the sound part of the bone, by the irregularity of its figure, that no time could have disengaged it. It had been in this state several years; by using very great force with a levator, it was extracted. The patient afterwards recovered the perfect use of her leg, and the ulcer (though deemed incurable) was perfectly healed.

CASE IV.

Thomas Sole, No. 28, Britannia Row, Islington, but now coachman to Mrs. Price, No. 33, South Street, Park Lane, applied in June 1788, for the cure of six large ulcers, extending along the fibula, from a little below the knee to within three or four inches of the ankle. They penetrated to the bone, and were so painful as nearly to deprive him of all sleep, and the use of his leg.

About five years before he came to me, he was frost bitten, while attending his duty on a cold night; after suffering occasional pain for two years, a gathering began to appear in his leg, but it was two years more before it came to a fair suppuration. He had been under two different surgeons in a public institution, for many months, but was dismissed as incurable.

The ulcers were dressed in the common manner, and a gentle and equable pressure was made on every part of the leg, by a bandage. After some time the exfoliation of the diseased parts of the bone took place. To enlarge the openings for their extraction, caustics and gentian root were applied; and at length, upwards of twenty pieces were at different times removed by the forceps. Many of them indeed from the depth of their situation, were taken out with very great difficulty. In about ten weeks this person was perfectly cured. He is *now* living.

CASE V.

George Ross, chief distiller at Mr. Bockett's, Bridge Street, Blackfriars, aged thirty-one, applied in September, 1796, for the cure of two very large carious ulcers, about the middle of the

tibia of the right leg, occasioned by a fall from the warehouse into the cellar, about nine months before. The affection of the bone was evidently extensive, and within its cavity. It caused him to be so lame, that he was scarcely able to walk even with crutches. He had been a patient in a public institution, for seven months. An operation was proposed to him, but being told, that it was uncertain whether his limb or even his life could be saved, he was unwilling to submit to it.

By the application of mild dressings, and an equable and moderate compression on the whole limb, the ulcers in the soft parts were soon brought into a better state, and after some time, exfoliations from the bone had evidently taken place. Numerous pieces from the surface of the tibia were extracted without much difficulty. But there still remained an exfoliation, situated within

the cavity of the bone. There were two small holes about three inches apart, continued through the substance of the tibia into that part of its cavity in which the exfoliated piece was situated. At the lower hole it could be moved upwards and downwards by a pair of fine forceps; but from its being much too long for the aperture, I was not able to extract it.

Firmly persuaded that he could not be cured while this detached piece remained in this situation, and that it could only be removed by art; knowing likewise by the experience of a former case, * that cutting through the substance of the tibia by the trephine, in order to make a sufficient opening for the extraction of a long exfoliated piece of bone, was a very tedious and difficult operation, and from the necessity of laying the bone bare by

* See Case IX.

caustics, a very painful one also ; I determined to try, whether I could not break the imprisoned piece and thereby set it at liberty. Accordingly I took a very firm hold of it with as large a pair of forceps as I could pass through the lower aperture in the tibia, and using all the force I could exert for some minutes, I endeavoured to effect my purpose : but the instrument, and not the bone gave way. In a subsequent trial however, I succeeded ; by twisting the forceps with all my strength, the exfoliated piece was fortunately broken in two ; but not until the instrument was much bent. The nerves of my thumb were also so much injured by the exertion, that the feeling was not perfectly restored for some months. The pieces were then easily extracted, and when put together measured rather more than two inches. * They were as thick

* See Figure 6.

as a very large goose quill, and so hard and strong, that I could not again break the longest of them, (though an inch and a half in length,) with the united powers of both hands.

After the extraction of this bone, several smaller pieces lodged within the cavity of the tibia were discovered, and easily taken out of it; among which were two pieces of the cancelli. † These, with the exfoliations removed from the surface of the tibia, amounted to forty pieces. After these operations, the ulcers soon filled up with granulations. In four months the patient laid aside his crutches, and went to his usual employment. In about two months more, the ulcers, by the assistance of a bandage, were cicatrized; and he is *now* perfectly well, and lives in his former situation.

† See Figures 7 and 8.

CASE VI.

William Best, No. 3, Fleet Row, Eyre Street Hill, Hatton Garden, aged forty, applied in December, 1797, for the cure of a carious ulcer, about the middle of the tibia, occasioned by a fall nine months before.

The tibia for the last seven months had been perfectly bare, to the extent of an inch in length, and half an inch in breadth. This person had been a patient for four months each time, in two public institutions. At the end of the last period, he was advised by the surgeon to go out of the house, and to wait nature's time for the exfoliation of the bone, which it was said would take place in about six months. I saw him about two months after this period, at which time he was so lame, as to be obliged to use crutches.

On examining the diseased bone it was *apparently* unexfoliated, and very firm in its attachment to the sound bone. A flannel roller moderately bound, and compresses, were applied to the limb, by which in three weeks his pain was mitigated, and he was enabled to walk much better. On examining the bone again, I found it in the same situation as it appeared on the former trial. It occurred to me, that from the length of time this bone had been denuded, there certainly must be an exfoliation, but that by being linked within the sound parts of the bone, it was so confined, that its detachment from them could not be ascertained by any pressure made upon it. Under these impressions I put a thin pair of forceps under one side of it, and raising it up at one end, it was extracted without much force.

On examining the piece, I perceived

a narrow neck at each end of it deprived of the external lamina of the bone; * it was curiously inserted at these ends under a bony arch of considerable thickness, which appeared to be chiefly composed of adventitious or new formed bone. From the firmness and the strength of these ends, I think it probable, that nature could not have set the exfoliation at liberty. While it was in this position it appeared, from every trial I made on it, as firmly attached to its place, as if it had been a part of the solid bone; yet it is worthy of remark, that it lay upon a bed of granulated flesh, interposed between it and the substance of the tibia underneath. I have no doubt, that this piece had been exfoliated for some months. It may be also proper to remark, that it was owing to the shortness of one of the necks of this exfoliated piece, that

* See Figure 9.

it was raised from its situation without much force.

In a few weeks after the extraction of this bone, the patient laid aside his crutches and returned to his employment. In about three months, the wound was perfectly cicatrized by the assistance of a bandage, and he is *now* quite well.

CASE VII.

Samuel Leaver, No. 87, Shoe Lane, applied in September, 1797, for the cure of a carious ulcer, upon the middle of the tibia of the right leg, occasioned by a fall. There was a depression in this part of the tibia, from a former disease. After a trial of many months continuance by bandages and the common dressings, the denuded bone shewed no signs of exfoliation by

the pressure of a probe upon it. A gentle caustic was therefore applied in order to expose it. After more time was elapsed, there were still no signs of a separation of the diseased bone.

By the length of time this bone had been exposed, I concluded, it must be exfoliated, but that it was locked in the sound bone by some irregularity of form. Upon introducing a narrow pointed spatula under this exposed part of the bone, I perceived that it was actually so circumstanced. I raised it up readily, and found a bed of granulated flesh under it. After it was removed, the ulcer mended, and soon afterwards it was perfectly cicatrized. This patient is *now* quite well.

CASE VIII.

John Crowder, No. 163, at the Horse Ferry, Rotherhithe, aged forty-eight, applied in 1798, for the cure of a carious ulcer, near the inner angle of the right leg, occasioned by a compound fracture and dislocation, which had happened about three years and a half before he applied to me. He had been three times in a public institution. To this charity he was indebted for the cure of the fracture and dislocation, and for the removal likewise of several pieces of bone from an ulcer that remained after the cure of these complaints. The ulcer itself however was not healed.

On examination by the probe, I found there were some exfoliated pieces within the cavity of the tibia, at the depth of about *two inches* from the ex-

ternal skin. Finding that these could not be removed by the forceps, on account of the smallness of the opening leading to them, I enlarged it by a caustic; * and then with some difficulty extracted three pieces of the cancelli, the largest of which was about the size of a French bean. † His lameness went off afterwards gradually; the ulcer filled up with sound granulations; and in about two months it was perfectly cicatrized. He is *now* quite well, and has returned to his employment which is that of a shipwright.

* In this, as in the other cases of exfoliation, within the cavity of the tibia, the hole which opened into that cavity was small. The integuments around it were much thickened, and the sides of the hole lined with granulated flesh to a greater extent than usual. The hole in the bone was of course considerably enlarged by the destruction of these fleshy parts by the caustic. It now happily became large enough to extract the exfoliated pieces without any further operation.

† See Figure 10.

CASE IX.

Mr. ———, jeweller, at Derby, aged twenty-eight, and of a strong muscular habit, was attacked in June, 1779, with a swelling on his right leg. This swelling, which in two days almost entirely subsided, leaving only a slight inflammation upon the skin over the middle of the tibia, was not attended with pain. Eight or nine days afterwards, he was seized with acute pain, in a part of the leg opposite to that part which was inflamed. This afflicted him during four or five months, and much more severely in the night, than in the day. At length there appeared a small ulcer in the discoloured part. It was at this time I first saw him. I introduced a probe, and found it would pass to a considerable depth within the cavity of the bone.

A venereal taint was suspected; an idea that was strengthened by finding that he actually had the lues venerea some time before. I therefore put him under a mercurial course, in the expectation that the active powers of the body would be exerted, to restore the limb, whenever the virus that occasioned the disease, should be destroyed. Under this course the pain soon ceased, and on examining the ulcer some time afterwards, I felt a loose piece of bone lying in a bed of granulations within the cavity of the tibia. Concluding that it was an exfoliation of its internal surface, and that the separated piece was larger than the opening in the bone, I applied a caustic to the skin around the ulcer. On the separation of the slough, the tibia was laid bare to the size of a half crown, the ulcerated hole in the bone being in the center. With a pair of fine forceps

passed through this hole, (for it would not admit a larger pair) I took hold of the exfoliated piece, and moved it upwards and downwards, but I could not extract it. In order to effect the extraction of it, I wished to enlarge the opening which the disease had made in the bone with the trephine, but it could not yet be applied, because there was no hold for the center pin to enable me to fix the saw. I therefore first bored a number of small holes, in a circular course with a common gimblet, and then working the trephine as nearly as I could guess, to the depth of the cancelli, I attempted to separate the encircled piece. But though the space from the circular groove to the edge of the ulcerated hole, was not in some places the fourth part of an inch, yet I could not force it off with any instrument that I could put into the groove. I was therefore obliged to

weaken its adhesion by boring many holes in it with the gimblet, and then with levators and nippers, I separated it piecemeal. This was done without pain to the patient, though not without much difficulty from its great hardness. The exfoliated piece being now exposed more to view, I again attempted to extract it; but though it had a free motion, it was too long to be brought out at the opening made in the bone.

Being desirous to avoid repeating the operation with the trephine, I attempted to force it out with a strong levator; and afterwards, by endeavouring to pass under it a bended wire tied to a piece of catgut. These methods however failed. In this situation, (ten days having elapsed since the first application,) I again had recourse to the caustic; and when the slough was separated, applied the trephine above the former opening on the tibia, but

so as not to take in more than three fourths of its circle, on account of the difficulty I had before experienced in separating the encircled piece. In working the saw, I found the bone so soft, that it was easily penetrated to as great a depth as at the former operation; but I was much interrupted by the appearance of blood in the furrow, and by the pain the patient suffered, neither of which circumstances had happened at the first operation.

Having finished this operation, I found the encircled piece quite separated; it was little more than a thin rough shell, the part under which was a pulpy tender flesh. Through this enlarged opening I again attempted to extract the exfoliated bone, but was still disappointed, by reason of its length. I was therefore obliged to clear away the granulations, and a small portion of the integuments by caustic,

from the same part of the tibia as before; when the sloughs were separated, the trephine was applied a third time, and took in a complete circle. I found the surface of the bone on sawing somewhat softer, and the pain much greater, than at the second operation. The shell which came away with the saw was rather thicker than that before mentioned, but the same pulpy vascular mass lay under it. Having again taken away all the prominent parts of the tibia, so as to make a complete and uninterrupted opening for the exfoliated piece, I took it out with a pair of forceps without much pain, though on all sides surrounded by granulations. It was two inches long, as thick as a common goose quill, and very hard. *

In a short time the wound filled with granulations, which as it healed were

* See Figure 11.

gradually formed into bone; and in about two months, (some small pieces of the disturbed sound bone having been exfoliated,) the whole wound was perfectly healed.

Mr. Cheselden, speaking of an internal exfoliation of the tibia; (p. 40 of his anatomy,) says, “ in one case
“ where the matter had sufficient discharge by an external caries formed
“ together with the internal one, all
“ the internal hard part of the bone,
“ which contains the medulla, was
“ separated from the rest, and being
“ drawn out through the place where
“ the external caries made a vent, the
“ patient received a perfect cure. In
“ another case of this kind, where the
“ internal part which contains the medulla was also separated from the
“ rest; and there being holes through
“ which the matter was discharged,
“ but none sufficient to take out the

“ exfoliated bone, the matter contin-
“ ued to flow in great quantities till it
“ destroyed the patient; and possibly
“ if this case had been rightly known,
“ the internal exfoliated piece might
“ have been taken out and the patient
“ cured.”

From a review of the treatment of my patient's case, it appears, that at the first operation, the tibia was of its usual hardness; but when fresh violence was offered, and a part of its substance was removed, nature seemed active to repair the injury, and in a few days its texture was considerably altered, inflammation took place, and parts which were hard and insensible, and apparently impervious to blood vessels became extremely vascular and nervous. The bony earth was then gradually absorbed; * but when the irritating

* The deservedly eminent and ingenious Mr. J. Hunter, first suggested the idea that bone may be absorbed by the lymphatics.

bone was removed from the midst of the tender granulations, new depositions of bony matter were made, and the cure was easily effected.

Perhaps it would have been better to have made as many perforations with the trephine at the first operation, as were necessary to the removal of the exfoliated piece; by which, the pain of repeating the operation, when the parts became more sensible, would have been avoided. The only objection to this, is the difficulty of getting away the circular pieces of bone, from the parts adjoining, where the saw had not completed a separation of them. But if these pieces cannot be removed by force, after the circular grooves are made by the saw, the event of this case shews, (from the soft nature of the tibia after the first operation,) that the inflammation excited by working the trephine, would soon have produced

a separation of them, by the natural process of exfoliation, at that part where the communication with the circulation was cut off by the saw. Upon the whole, the advantage of removing the exfoliated piece from within the cavity of the bone is evident; for had it remained, the patient would probably have had a perpetual ulcer, the continued discharge from which might, (as in the case recorded by Cheselden,) have terminated fatally.

Since the preceding case occurred, two works relative to this disease have been published in France; one of them entitled, "Observations sur la Maladie d'os, connue sous le nom de Necrose," by M. David; and the other. "Observations sur le Necrose," by M. Bousselin. Abstracts of these works are given in the London Medical Journal.* In both we meet with much judicious prac-

* Vol. III. p. 369, and Vol. VII. p. 263.

tical information; but I am of opinion, that neither of these authors has marked the disease in question with sufficient accuracy. If the attack be made only on the external surface of a bone, the exfoliated or deadened part will of course be merely external; if on the substance of a bone, the separated part will be to the extent of that affection; and if on the internal lamina, or surface only, the separated piece will of course be confined within the cavity of the bone.

From a careful perusal of these cases given by the authors abovementioned, it appears, that the first case recorded by Mons. Bousselin, is the only one, which describes an exfoliation of the internal surface of a cylindrical bone; the other cases being instances either of exfoliations of the external surface, or of the substance of a bone; some with, and some without the adventitious

supply of regenerated bone. The first of these is a disease well known, though not very common; the two latter very frequently occur. An *internal* exfoliation is very difficult to remove; an exfoliation of the *external lamina*, or of the *substance of a bone*, creates much less difficulty. As it is of consequence that we notice these varieties, I cannot but think that the French authors referred to, are deficient in not distinguishing these several cases from each other, by mentioning the circumstances peculiar to each of them.

The cases related by Mr. Cheselden, and to which I have already referred, were exfoliations of the *internal lamina* of the tibia; but the operation for their extraction had not at that time been attempted. As I do not intend in this place to enter into a minute account of these diseases, or the method of treating them, I would only with due

deference just hint, that it is of some importance in our views of cure, to ascertain as nearly as possible, the situation and extent of an exfoliated piece of the tibia. If it be a portion of the external surface only, without any adventitious bone surrounding, or binding it down, (which is by far the most common case,) the forceps will in general enable us to extract the piece, through the external ulcerated hole, either with or without dilatation or the caustic. If a portion of the substance of the bone be separated, and bound down by that adventitious bone, which nature generates in this case to supply the defect, we must first apply the caustic to the diseased integuments, and then remove as much of the adventitious bone, by any common instrument, as prevents the extraction of the exfoliated piece: this is in general a work of no great difficulty, inasmuch

as the adventitious bone has not much firmness. But if the external surface of the tibia be not diseased, and there be an ulcerated hole opening from its surface into the cavity of the bone, within which, a loose exfoliated piece is felt, of larger extent than the external opening, we must work steadily with the trephine, (after having prepared the part by the caustic, or the knife,) through the sound and natural substance of the bone, by making as many perforations as are sufficient to produce an opening equal to what we may judge to be the size of the exfoliated piece.

The observations which Mons. Bous-selin makes on his first case, relative to the natural hardness of the sound bone, corresponds very much, with what has been related in the case I have reported; but the perseverance necessary to complete the opening, and of course the

difficulty of removing the irritating bone from within the cavity of the tibia, is so much greater than what we experience in the case of an *external* exfoliation, that it can be known only to those, who have performed the operation.

N.B. This case has been already submitted to the public, in the second volume of Medical Communications.

difficulty of removing the interlocking bone from within the cavity of the tibia, is somewhat greater than what we experience in the case of an external exostosis, that it can be known only to those who have performed the operation. This case has been already submitted to the public in the second volume of Medical Communications.

The observations which Mr. Jones has made on his first case, relative to the nature of the interlocking bone, and the manner in which it is removed, are very curious, and will be found in the second volume of Medical Communications.



Fig. 1.

Fig. 10.

Fig. 13.

Fig. 6.

Fig. 11.

Fig. 12.



Explanation of the Plate.

Fig. 1, 2, 3, 4, 5, are representations of the principal bones taken from the leg of William Olave. See his case, page 295.

1. Represents the exfoliation of about three-fourths of the substance of the tibia with the cancelli. At the lower end it will be seen how near the separation took place to the ankle joint. At the upper end it was united to figure 2, and by this, and the pieces 3 and 5, with various lesser ones, it was so entangled with the processes of the sound bone, as to be incapable of being removed from its situation with-

out force. On the external surface of this bone, is a representation of the groove made by the trephine, in an attempt to cut it into two pieces before the pincers were applied to it.

2. Shews the piece taken out at the first operation, by first separating it from fig. 1 with the trephine.
3. Represents the piece of bone broken off from fig. 1, and found *within the cavity of the tibia*, after the removal of that piece. The greater part of this bone lay concealed under an arch of the substance of the tibia, from which situation it could only be taken out by an operation. This bone is represented in that divided state it was in after it was broken into two pieces with a levator.

4. Shews the piece of the *cancelli*, which was found at the bottom of the wound at the first dressing, after the removal of the large piece, fig. 1.
 5. Shews the piece of that side of the tibia next to the fibula, which was found at a great depth in the wound. The irritation of this piece, brought on the abscess on the opposite side of the leg near to the fibula.
- Fig. 6. Represents the exfoliated bone broken into two pieces, and taken from the cavity of the tibia, of Mr. Bocket's man. See the case, page 305.
- 7 & 8. Are representations of the two pieces of the *cancelli*, taken out of the cavity of the tibia of this patient, after the extraction of the bone last mentioned.

Fig. 9. Represents the singular piece of exfoliated bone taken from the tibia of William Best; see his case, page 310. The surface of this bone is of a dark colour, merely from being stained by the putrid sanies of the ulcer. This is proved by the line in the middle which is almost perfectly white. It was made by scraping the stained part with a knife. The two ends represent the strong extremities of this bone deprived of its external lamina. By these ends it was curiously tied down by solid arches formed apparently of adventitious bone. From this situation force alone could remove it.

Fig. 10. Represents the three pieces of the cancelli taken out of the lower part of the cavity of the

tibia of John Crowder, (see his case, page 315) at the depth of about two inches from the surface of the skin.

Fig. 11. Represents the exfoliated bone taken from the cavity of the tibia of Mr. _____ (See his case, page 317) It was extracted by means of the repeated application of the trephine.

Fig. 12. Represents seven pieces of ossifications of the aponeurosis of the leg. They were taken from an ulcer on the upper part of it, in a middle aged woman. These ossifications obstructed the healing of the ulcer. They adhered strongly to the aponeurosis, and were removed by the forceps at several operations; after which the ulcer healed.

Fig. 13. Represents a curious circular exfoliation from a hole in the

tibia opening into its cavity. It was lately taken from a boy at Mr. Farrer's, at the Chequer, in Saffron Street, Saffron Hill, who is *now* under cure for an exfoliation within the cavity of the tibia. The exfoliated piece could be taken hold of by a pair of fine forceps, and moved upwards and downwards in its bony case, but being larger than the external hole in the tibia, it could not be extracted. A caustic of *pure kali* was applied to the ulcer, in order to clear away the granulations, and to expose more fully the exfoliated bone. The caustic performed its office very well; but in passing through the aperture of the bone it destroyed the circulation and life of its surface. This application produced the exfoliated piece

represented in the plate, which came away spontaneously in about three weeks. The exfoliation of this piece of bone *considerably enlarged the circular hole*, which may prove a useful hint in the treatment of future cases of this kind. The difficulty of cure in these cases, chiefly arises from the exfoliated bone within the cavity of the tibia being larger than the hole opening into it. As it in general proves very difficult either to break the exfoliated piece by force, or to cut through the substance of the tibia, in order to extract the imprisoned piece, it may be extremely serviceable in some of these cases, to enlarge this opening, by applying either the actual or potential cautery to the surface of the circular hole, in

order to produce an exfoliation of it. The *internal* surface of this little exfoliation was from the action of the caustic, *perfectly black*; but the border at the top of it, and its *external* surface was *quite white*. All the other exfoliated bones represented in this plate, excepting such as were *stained* by the pus or blood, were for the most part either *white*, or *of a yellowish white*. The pieces of the cancelli were not steeped in water after they were extracted; and from that cause they retained a deeper stain from the insinuation of blood into their pores, than the other discoloured bones.

POSTSCRIPT.

ALTHOUGH there are many observations made in the body of the foregoing work respecting the proper method of applying the roller and compresses, it perhaps may not be unacceptable to the younger part of the profession to add a few more particulars on so important a matter.

I have said that the flannel rollers should be four inches wide to allow for shrinking in washing; by which I would have it understood, that when they are made of that width they are a little too wide; especially for those whose legs are small. The best width for a flannel roller designed for those who have slender legs, is three inches;

but for those whose legs are of a large size, they should be always three inches and a half in width. They must therefore be torn at first a little wider, that they may be of their proper width when repeatedly washed. It will likewise be found, that rollers made of fine soft and open flannel, will answer much better, than those made of coarse or hard flannel.

For those who have full sized legs, the length of six yards is but just sufficient to answer all the purposes intended by a roller; but in those who have very small legs, five yards is a sufficient length. Care should be taken that the rollers be washed in very hot water; and they should be hung up to dry immediately on being washed: If these precautions be not attended to, repeated washing them, will in some kinds of flannel, make them as narrow as tape, by which they will be

rendered almost useless. They should be often washed, as they are much softer, and of course sit easier, when quite clean than when they are soiled.

In applying a roller, the first circle should be made *round* the *lowest* part of the ancles as near as possible to the heel; the second, should be formed from thence round the foot; the third should be passed again round the foot quite to the toes. The roller should then be passed from the foot round the ancles and instep a second time, to make the fourth circle. In doing this, it should be brought nearer (but not over) the point of the heel than it was at the *first time* of going round this part. The fifth circle should pass over the ancles again, and not more than half an inch higher up the leg than the fourth circle. The sixth, seventh, eighth, and ninth circles should ascend spirally along the small of the leg, at the *exact distance*

of three fourths of an inch from each other. Having proceeded thus far up the leg, we may begin to increase the distances of the circles from each other. They may succeed each other upward to the knee at the distance of from one to two inches, according to the size and shape of the leg. At that part where the calf of the leg commences, it is generally necessary to let the upper edge of the roller be once, twice, or thrice, turned downwards for about half the circumference of the leg; in order to make the roller lay smooth between the middle of the calf, and the small of the leg. When the roller has been thus applied as far as the knee, there will be a portion of it to spare, of perhaps a yard or more in length. This remainder should be brought down by spiral windings, at greater distances from each other than those which were made on the ascent of the

roller. The windings should in general be completed in the small of the leg, where the roller should be pinned.

In *many* cases it is necessary to apply the roller *over the heel*. Where this is done, the first circle should be made as low as possible round the ancles; as in the former description. From thence, the second circle of the roller should pass from the instep over one side of the heel, and be brought over the other side of the heel to the instep again. The third circle should be passed round the ancles a second time, but still nearer to the heel than the first circle was. The roller should after this, be brought back to the foot, and passed round it to make the fourth circle. A fifth circle should be again made (though it is not in all cases absolutely necessary,) round the foot to the toes. To make the sixth circle the roller should be brought back and

passed round the ancles again. The seventh, eighth, ninth, tenth, and eleventh circles should ascend spirally at the *exact distance* of three fourths of an inch from each other; these distances commencing at the sixth circle. The roller should then be carried to the knee, and be brought down again to the small of the leg, as described in the former instruction.

In applying the compresses, it is necessary in every instance to put them on one by one, and not all in a mass, though they be of a proper size and number. They should be crossed in different directions; the largest of them should in no case be longer than just to meet on the opposite side of the leg to which they are applied. I have in many instances seen the compresses applied by patients of such a length, as to go round the leg like a roller, and be fastened together with pins.

This method generally wrinkles, and blisters the skin, and by no means answers the purpose of making a compression on the part where it is most wanted. I never suffer a pin to be used to the compresses. If the same compresses in any case be applied two days together, they should be always turned on the contrary side at each reapplication, in order to prevent wrinkles on the skin.

I must now reply to two objections made by Mr. Baynton in the 39th page of the second edition of his work. The first is, that it is difficult to retain the roller on the parts to which it is applied; the second is, that it gives pain to the patient. In answer to the first of these objections, my experience warrants me to say, that a flannel roller will in almost every instance keep the exact position it was first placed in, for a much longer time than is neces-

sary. I have seen these rollers many hundred times, keep their situations without any variation whatever for two days; and that too without the least restraint upon exercise. This has happened in those cases, where from the distance of the patient, or from the circumstance of his being nearly cured, I have wished to dress the leg only every forty-eight hours. I must go a step further, and observe, that I have seen repeated instances in which these rollers have remained in their situation for three or four days, and even nearly for a week, without being applied afresh. In short, it is one of the best properties of a flannel roller, that it is easily retained in its situation, when well applied. In *every* instance in which it is necessary to use one, I could pledge myself to apply it in such a manner, as should prevent its altering its position for two days.

The method I should use I have already described; in addition to which nothing more would be necessary, even in those cases where the shape of the leg is peculiarly unfavourable to the retention of a bandage, than the insertion of a few pins.

In answer to the second objection, I observe that I have invariably found, that when a flannel roller has been applied in the manner here described, and has not been drawn unnecessarily tight, it gives no pain. It sits nearly as easy as a common stocking, and allows a very free motion and exercise of the limb. It has been stated in this work, that the application of the compresses makes the necessary degree of pressure on the ulcer, and thereby prevents the necessity of drawing the roller so tight over the other parts of the leg, as would have been necessary were the compresses not used.

There is another circumstance which Mr. Baynton considers as giving his method a great advantage over the roller; which is, that by means of the plaster, the edges of the sore may be made to approximate in such a manner, that the cicatrix or new formed skin will be less after a cure performed by this method, than by any other. In almost all these cases, before the cure is attempted, the leg is more or less enlarged by swelling; and as this swelling is entirely removed by compression, it readily allows the skin to approximate on the healing of an ulcer. Added to this, there is a process of nature always going on in the healing of an ulcer or wound in any part of the body, (whether there be a loss of substance or not,) by which a cicatrix is always considerably less than the previous size of the sore. This effect occurs in all cases, whether the patient

be cured by the horizontal position, by a roller, or by strips of adhesive plaster. The size of this cicatrix will likewise vary in different cases, where the ulcers have been of the same size, by which ever of these three methods they be cured. It will be larger in those ulcers which are accompanied with strong adhesions of the adjoining parts, than in those where such adhesions have not been produced; and this effect will take place to the greatest degree, where the ulcers are situated over the tibia, and by long continuance, have produced immoveable adhesions of the cellular substance to the adjoining periosteum. The adhesive plaster when applied as a bandage, will, without doubt, leave as small a cicatrix as any other method of cure; but for the reasons already assigned, I do not believe, that the cicatrix will in any case be *smaller* than that produced by

a roller. In every case cured by the latter method, I have found the cicatrix very small, when compared with the previous size of the ulcer.

FINIS.

