A treatise on the asthma : to which are added cases and observations, in which the asthma is complicated with the following diseases: catarrhs., humoral asthmas, ... general convulsions / by Thomas Withers.

## Contributors

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## Publication/Creation

London : Printed and sold by G. G. J. and J. Robinson, and W. Richardson, London ; Mess. Fletchers, Oxford ; J. and J. Merrill, Cambridge ; C. Elliot and W. Creech, Edinburgh ; and by all the booksellers in York, 1786.

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## TREATISE

## O N THE <br> A S T H M A.

TO WHICH ARE ADDED

## CASES and OBSERVATIONS,

In which the ASTHMA is complicated with the following Difeafes :

Catarrhs.
Humoral Afthmas.
Tubercles in the Lungs. Confumptions.
Univerfal dropfical Swellings.
A Dropfy of the Breaft.
Jaundice.
Gout.
Rheumatifm.
Chronic Weaknefs.
Intermittent Fevers.
Inflammations of the Lungs.

Abfceffes and Ulcers in the Lunge: The Falfe Peripneumony. Spittings of Blood.
Exceffive Corpulency.
Severe Headachs.
Teething.
Cutaneou: Eruptions.
Obftruction of the Menfes.
A Venereal Ulcer of the Nofe.
Sparmodic Affections of the Throat. Hyfteric Fits.
General Convulfions.

> By THOMAS WITHERS, M. D. Phyfician to the York County-Hospital.

## L O N D O N:

Printed and fold by G. G. J. and J. Robinson, Pater-nofferRow, and W. Richardson, Royal Exchange, London; Meff. Fletchers, Oxford; J. and J. Merrille, Cambridge; C. Elliot and W. Creech, Edinburgh; and by all the Bookfellers in York.

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IN TESTIMONY OF THE GREATEST RE. SPECT FOR THAT LEARNED BODY
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# T R EATISE I S 

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## To the R E A D ER.

THE following Treatife, having been many years in hand, and coft me much labor and ftudy, will, I hope, be of fervice to my fellow-countrymen, who are particularly fubject to ASTHMATICAI and consumptive complaints. This end being attained, I hall have my reward. To relieve the miferies of the afflicted is one of the nobleft employments of man, and gives the higheft fatisfaction to the mind.

Altho' this Treatife receives its title from the Asthma, and particularly from the Convulsive Asthma, yet Winter Coughs, Humoral Aftbmas and Confumptions are all fully confidered, along with their fymptoms, caufes, and methods of cure. Indeed it would be impoffible to treat accurately of the former, without including the latter; for they are fo blended and interwoven in nature, that it is a very rare occurrence
vi To the READER.
to find one perfectly diftinct from all the reft. But thefe facts will appear more fully in the enfuing Treatife.

The reader will find that I differ in opinion from thofe who affert, that the Afthma is not a curable difeafe. I can affirm with truth, founded on experience, that it may often be cured, fo as very feldom or never to return again, unlefs the perfon is expofed to the fame occafonal caufes which firft brought it on. Venientioccurrere morbo is one of the fhorteft and beft rules for preferving health and prolonging life. It is the neglect of the Afthma at its firft rife, if not perhaps for many years after, which renders it incurable; and this is a fact concerning many other difeafes as well as the Afthma.

The Flowers or rather the Calx of Zinc, which, when unadulterated and given in a fufficient dofe, I have frequently ufed with great fuccefs in the Afthma, is a remedy well
To the READER. vì well known and often given in other cafes of fpafms and convulfions. Zinc is a mineral fubftance found in the bowels of the earth, in like manner as mercury, antimony, and many other valuable medicines of the mineral kingdom. As its natural hiftory is fo fully given by all chymical and materia medica writers, it is unneceffary here to detain the reader with an account of it.

In this Treatife I have endeavored to include every thing which may be ufeful to thofe who labor under the Afthma, by way of regimen as well as medicine, and by way of prevention as well as cure. Floyer's treatife, tho full of falfe theory, vague hypothefes, contradictory opinions, and ridiculous practice, is neverthelefs one of the beft on the fubject, and contains facts which, being drawn from nature, will ftand the teft of time. Millar is very fhort and imperfect. Boerhaave feems to have had no diftinet notion of the difeafe; and all the old authors, fuch as Hippocrates,
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crates, Galen, \&c. are very confufed and unintelligible. From thefe, neverthelefs, and other authors I have felected what is ufeful, and particularly from Floyer, who (as I fhall afterwards fhew) had a true notion of the convulfive Afthma, but fo obfcured with falfe facts and falfe reafoning, as not to be eafily difcovered.

The public Lectures of Dr. Cullen, who has with admirable fuccefs made the nervous fyftem his particular ftudy, have afforded me the greateft light on this mort important fubject. The fame remark is alfo true with regard to a former publication of mine on Chronic Weaknefs, which contains many ufeful facts and obfervations fimilar to thofe which are delivered by him in his moft excellent Lectures on indigeftion, weaknefs of the ftomach and bowels, and relaxation of the folids. I mention this here, becaufe in the hurry of publication I forgot to mention it formerly - an omiffion which I am very happy in having this opportunity of publickly

> To the R E A D ER. ix lickly acknowledging.-I muft likewife, for the fame reafons, confefs with gratitude, my many and great obligations to the late Dr. Gregory and to Dr. George Fordyce, from an attendance on whofe public Lectures I have treafured up many ufeful and important obfervations on the Afthma, as well as on Chronic Weaknefs.

With regard to ftile, I have endeavored to render mine fo eafy and intelligible, that it may be underftood, not only by the Faculty, but by others who have not made medicine their ftudy. Thofe parts is particular concerning diet, regimen, caufes, \&cc. which are the moft ufeful for afthmatics to know, are written in the plaineft language, all hard words and terms of fcience being carefully avoided.

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## A

## TREATISE

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THE ASTHMA being a frequent diforder, the hiftory and cure of it have of late greatly engaged the attention of the medical faculty. While the laws and facts relative to the nervous fyftem were, as in former times, not much regarded, nor well underftood, it will not appear furprizing that the diforder, which is the prefent object of our enquiry, was fo little known to the antient practitioners of medicine. We can indeed find fome traces of it, interfperfed throughout their writings, but thofe traces are $\mathrm{fo}_{0}$ obfcure and imperfect, that they yield no fatisfaction to the enquiring mind. No doubt this difeafe is more frequent in the prefent æra, than it formerly were, yet it cer-

## A TREATISE

tainly has exifted time immemorial. The greater irritability and weaknefs of the conttitution in thefe days, may, in fome meafure, account for the greater frequency of the Afthma, efpecially if we add the inventive genius, and the rapid progrefs of mankind in all the various arts of modern luxury and refinement. An advanced fate of knowledge concerning the laws and doctrines of the nervous fyftem, grounded on facts and confirmed by anatomical inveftigations, is the real caufe of the improvements which have been made in the hiftory and treatment of the Afthma. Now as the late ufeful difcoveries, relative to the nature and cure of this difeafe, are no where fully and clearly fet forth, it will not appear an uninterefting labour in us to endeavour to render the knowledge of them more univerfal, efpecially as we hope fomething ufeful may be added concerning the cure.

Before we proceed to the hiftory of this difeafe, it may not be improper to hint at the ambiguity of the term Asthma. Some authors have made ufe of this word in a moft vague manner, to exprefs indifcriminately every fpecies of difficult breathing. But we Shall employ it in this treatife, in the fame
fenfe in which it is employed by Dr. Cullen, in his moft correct and ufeful Synopfis on the definitions of difeafes; and therefore, ftrictly fpeaking, it will, when ufed alone, fignify the nervous, convulfive, or spafmodic Afthma. But as the term nervous is fo inaccurate and undefined, we fhall make ufe only of the term sonvulfive, becaufe it is the moft familiar. The other fpecies of the Afthma, which is a very different diforder from the convulfive, and which we fhall have occafion to treat of, is properly named the bumoural or Spitting Aftbma, becaufe the patient generally expectorates a quantity of an humour or phlegm. This fpecies of the Afthma is alfo termed bumid for the fame reafon, and fenile, becaufe it is common to old people. By fome too it is ftiled the peripneumonia notba, or Spurious peripneumony; but to this name the generality of practitioners affix a very different idea. We thall fpeak of it under the title of the bumoural Afthma, and as we fhall fully explain hereafter what we mean by it, no body, it is hoped, will quarrel with us about a word. The great variety of fynonymous terms employed in the healing art, have ferved only to perplex it, and to render it more confufed and unintelligible, not only

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to the world in general, but often to medical practitioners themfelves.

## Hiftory of the ASTHMA.

The attack of the convulfive Afthma is fudden, and, at its firft appearance, the duration of the fit is for the moft part fhort. The fymptoms, which ufually precede it, are languor, flatulency, head-ach, ficknefs, pale urine, difturbed fleep, a fenfe of ftraitnefs and fulnefs about the pit of the ftomach. In fome cafes there is an uncommon ftupor, drowfinefs, and heavinefs. The fit is frequently obferved to come on about one or two o'clock in the morning, or at any hour after the firft fleep. The patient wakes fuddenly, and feels a great tightnefs and conftriction around the cheft, with a difficulty of breathing and an impediment to the free admifion of air into the lungs. Both infpiration and expiration are now, laborious, and accompanied with conftant wheezing, particularly the latter. Great bodily anxiety always attends this diforder. As the lungs cannot be fufficiently dilated with air, the paffage of the blood through the pulmonary veffels is not free. Hence the face, in full and plethoric habits,

## ON THE ASTHMA.

habits, appears red and bloated, and the veffels of the eyes are unnaturally turgid with blood: The action of the heart is greatly difturbed, as is evident by the weaknefs, irregularity, and encreafed quicknefs of the pulfe. During the fit the patient has generally a longing inftinctive defire for cool frefh air, which always revives him, A fmall clofe room with a fire in it is extremely offenfive to him, and all warm things, given internally, encreafe the flatulency in the ftomach and bowels, which is always the moft troublefome after a full meal. When the fit has continued a few minutes, half an hour, or an hour, it leaves the patient; his refpiration becomes free and natural ; his pulfe flow and regular; his complexion puts on its ufual appearance; and the bodily anxiety goes off. The urine is generally pale, and the fkin fomewhat dry before the fit, and during its progrefs; but at the termination of it, the urine, for a day or two, is high coloured and depofits a fediment*, and the fkin feels foft and moift.

This is the defcription of a firlt and moderate attack of the diforder. In fome cafes it appears in a more violent form, even at its

[^0]A TREATISE
commencement, and continues for feveral days before the fit terminates. Sometimes the patient will have one fit, and then remain free from a relapfe for many months*. At other times I have feen fits come on for feveral nights together, the patient appearing almoft perfectly well during the day, with his appetite and pulfe both natural.

When the Afthma once makes its attack, it feldom or never fails to recur, though the intervals between the fits are very uncertain $\dagger$. Relapfes are commonly attended with an encreafe of the fymptoms, and the vigour of the conftitution is gradually impaired, till, by length of time, general or chronic weaknefs

* Floyer obferved, that longer fits in his own cafe had, in general, longer intervals.
$\dagger$ When the Afthma is rooted in the conflitution, it of eren makes its attack in the fpring and autumn. In many cafes it attacks periodically, once in ten days or a fortnight. Sometimes it occurs regularly at the full and change of the moon. Floyer mentions a cafe where the fits occurred for feven weeks together, and the patient was obliged to fleep in a chair. But from the ftrictelt obfervations it is found upon the whole, that there is no certainty or regularity obfervable in the attacks of the Althma. The reafon why the fits fo often occur firlt in the night, is thought to be owing to the heat of the bed, and the horizontal pofture in which the patient lies.
nefs is induced. The difficulty of breathing in the fits arifes to a much higher degree, and the fenfation of tightnefs over the breaft is fo great and diftreffing, that the patient feels as if he were bound with cords*. His anxiety at this period is inexpreffible, and he labours in refpiration, as if every moment would be his laft. Severe vomiting frequently occurs, and the matter difcharged is nimy and frothy, or of a greenifh or yellow colour. The hands and feet are cold, and the patient is fubject to palpitations and faintings. Cool frefh air becomes abfolutely neceffary. The eyes are prominent; the face is fometimes pale, and fometimes high-coloured, bloated, or livid; the pulfe is extremely weak, irregular, and even intermitting; there is a difficulty of fwallowing; the patient can fcarce fpeak, cough, or expectorate during the fit, and the fomach and bowels are violently diftended with wind.


## While

[^1]While thus laboring for breath, he is obliged to rife from his bed, not being in the leaft able to continue in an horizontal pofture, nor to bear even the weight of the bed-cloaths upon him. His fhoulders are conifantly elevated, to give the mufcles of the cheft their greateft power of action, in raifing the ribs in infpiration. At this time too the patient, though before coftive, will frequently have a loofe ftool.

When the violence of the fit abates, and refpiration becomes free*, the cough returns, and the patient begins to expectorate phlegm, which is fometimes intermixed with blood $\dagger$. As foon as an eafy copious expectoration takes place, it affords great relief, for the evacuation is made immediately from the parts affected,

* Floyer very properly obferves, that the difficulty of breathing frequently goes off before any quantity of phlegm is fpit up, which is a fatt of importance, for it clearly denotes the exiftence of a fpafmodic conftriction in the air-veffels, as we fhall afterwards have occafion to mention.
+Floyer very accurately obferves, that the fpit is white, greenifh, or yellow, and in old cafes, putrid, faltifh, or acid, and bloody. He obferves in another place, that the fpit is fometimes full of black ftreaks, which appearance I have feen in many cafes.


## ON THE ASTHMA.

feeted,-ffom the very veffels which have been contracted with fpafm. This expectoration is one of the moft certain figns of the abatement of the complaint, as it denotes the folition of the fpafmodic contraction of the airveffels, which Anatomifts call the bronchial veffels. Along with this expectoration of mucous matter, intermixt fometimes with blood, the othef fymptoms alfo of the folution of Spafm occur, which have beefi before-mentioned; I mean a moifure and foftnefs of the fkin, and a fediment in the urine.

The blood which is fpit up in this complaint, proceeds generally from a rupture or dilatation of blood veffels in the lungs; a fymptom which may eafily be accounted for, from the great obftruction of the circulation of the blood through the pulinonary veffels, during the continuance of the fit. In fome cafes, indeed, the quantity of blood which is fpit up, is in full habits very confiderable, and at the fame time critical, being accompanied with an abatement of the fymptoms. But all free difcharges of blood from the lungs, though they afford relief, yet they are unfavourable figns, as they denote greater violence of the difeafe, during the courfe of which the very efforts of nature
to relieve are in themfelves fo alarming. The nofe too will fometimes gufh out with blood during the feverity of the fit, from the obftruction given to the return of the blood through the pulmonary veffels, into the left auricle of the heart.

Thus in a fhort time the fit of the convulfive Afthma goes off, leaving the patient free from complaint, but continually fubject to a relapfe. This induces him to be exceedingly cautious to avoid catching cold. But excefs of care tenders his conftitution to a high degree, and is, as we fhall afterwards prove, a very erroneous method of proceeding. In a courfe of years one fit fucceeds another, and the diforder in the mean-time increafes in the violence and duration of the fits, as well as in the frequency of their returns. The expectoration from the mucous glands of the lungs, which ftill continues to relieve at the termination of the fits, becomes itfelf a very troublefome fymptom. The mucous glands are relaxed, and the difcharge of mucus greater than natural. Hence the bronchial or air-veffels are frequently obftructed with phlegm, and from this caufe the freedom of refpiration is difturbed. The patient breathes with unufual difficulty, although his

- his convulfive fit be not upon him. When he firft wakes in the morning, he has generally a fevere fit of coughing, which continues till he has got up the phlegm that provoked the cough, by preventing the free admiflion of air into the air-veffels. Through the day, at different times, the cough ftill recurs, but with lefs violence, and in the evening it is often very teafing and diftrefing, efpecially on any fudden motion of the body, or in cold dainp foggy weather, which obftructs the exhalation of the perfpirable matter from the lungs.

Thus the bumoral Aftbma is united with the convulfive, and both together exift in the fame patient. The humoral Afthma is a diforder of the mucous glands of the lungs, in confequence of which they are relaxed, and the difcharge of mucus, being unnaturally copious, obftruets the freedom of refpiration. This part of the diforder is more conftant; the convulfive Afthma is more violent and of fhorter duration. The humoral Afthma is more fevere both with refpect to the cough and difficulty of breathing in winter; but in fummer, when the weather is warm, and perfpiration free, it often difappears totally between the intervals of the fits of the convulfive Afthma. The convulfive

Afthma

Afthma too is fometimes feverer in winter than in fummer, efpecially when combined with the humoral, or with a catarrh. But it often happens that the warm weather affords little or no relief, nay even in many cafes it is obferved, that the irritability of the conftitution and the rarefaction of the blood is fo mycla encreafed by the warmth of the weather, that the frequency and feverity of the fits are greater in the warm and fultry, than in the cold featons of the year*. In this cafe the humoral Afthma is continued on during the fummer months by the convulfive Afthma, as a fymptom of the natural and critical folution of the fits. But even in this fituation of the patient, the fymp, toms of the humoral Afthma are greatly alleviated by the warmth of the weather, which is by no means conftantly the fact with refpect to the convulfive Afthma,

Along with or after the convulfive Afthma, either when pure or when complicated with the humoral, there is often a great forenefs in the breaft, partly from the obftructed circulation, partly from the fpafmodic contraction of the

* Floyer takes notice of this fact, and Dr. Cullen alfo remarks it in his public lectures, and explains it from the rarefaction of the fluids. I have feen many patients who had their fevereft aithmatic fits in the dog days.
the mufcular fibres of the air-veffels, and partly from the frequency and feverity of the cough *. Sometimes too there are rheumatic ftitches in the fides, which are extremely painful and alarming to the patient; but the judicions practicioner will eafily diftinguifh them from internal affections of the breaft, by the external forenefs, and the acutenefs of the pain in con. fequence of motion.

> The frequent returns of fits fometimes caufe pbftructions in the lungs, which, as the dif-

fection

* We cannot help remarking here that fome people, efpecially thofe who are young and ftrong, cough more frequently, and with greater violence, than they are under the abfolute neceflity of doing. The old and weak learn to be more cautious. The act of coughing is partly voluntary, and partly involuntary. It is often out of our power to prevent it, but it is likewife often in our power to encreafe it. It is this additional part of coughing which I am fpeaking againft, and not that which is involuntary. The lalt is unavoidable, but the firlt, when riolent, is not only unnatural, but prejudicial to the patient, as it injures the lungs, and affilts greatly in exciting pain, inflammation, tubercles, and rupture of blood-veffels. The brute creatures feldom or never cough with greater violence than they can help. It is abfurd to ftrain the lungs and cough very forcibly, with an intention to get up a little phlegm that fticks in the throat. The phlegm remaining awhile where it is, would do infinitely lefs hurt than the violent coughing. It may give fome fenfe of uneafinefs for the time, but it would foon come up more eafily of itfelf by that degree of the cough, which is chiefly involuntary, and therefore unavoidable,

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fection of dead bodies clearly afcertains, appear full of knots or tubercles. Thefe tubercles are moft liable to occur in thofe who have naturally a narrow contracted cheft, in which the lungs have not a free and eafy motion. They render the diforder very obftinate; they caufe a long continuance of the cough after the afthmatic fit, and frequently end in fmall inflammations of the lungs, attended with internal pains, difficulty of breathing, feverifhnefs, profufe fweats, and wafting of the flefh.

I have already obferved that the humoral Afthma often fupervenes on the convulfive. It is neceffary alfo to obferve, that the convulfive often attacks thofe who have long been previounly afflicted with the humoral Afthma, Patients fubject to catarrhs and winter coughs, during which they expectorate a confiderable quantity of thick or frothy phlegm, are fometimes fuddenly feized with violent difficulty of breathing, and great tightnefs over the breaft, fo as to dread even inftant fuffocation. This new complaint, after having tormented them for fome hours, or perhaps a day or two, leaves them almoft as fuddenly as it at firft attacked them, and they look back with furprize at their happy deliverance from fo formidable and
and unexpected an enemy. Their old habitual cough and afthma, with forenefs and ftuffing in the breaft, ftill remains upon them, but after what they have lately fuffered, they bear it without repining. In this manner they continue for fome time, till the convulfive Afthma attacks them again, and perhaps with additional violence. Thus, by frequent returns of the fits, the convulfive Afthma becomes habitual to the patient, and he has the misfortune to find himfelf laboring under a complication of two difeafes; the one aggravating the other, and both growing worfe.

The convulfive Afthma fometimes attacks perfons of a thin fpare habit, whofe conftitutions have been greatly emaciated by a long expofure to caufes of general or chronic weaknefs. In fome cafes it feizes patients who are robuft and full of blood. At other times it occurs in thofe who are grofs, phlegmatic, corpulent; and in fuch habits it is often very diftreffing. It is frequently connected likewife with hyfterical and hypochondriacal complaints, in irritable and relaxed conftitutions. But it will be needlefs here to enumerate at large the fymptoms of general weaknefs, which may exift along with the convulfive Afthma,

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Afthma, or be evidently induced by it. That fubject we have already carefully difcuffed in a pamphlet on Chronic Weaknefs, which will enable us to avoid many unneceffary repetitions.

It will be fufficient to obferve in this place, that the convulfive Afthma, recurring for many years, is capable of reducing the ftrongeft conftitutions, and of bringing on the fymptoms of general debility. But if it attack a conftitution already weakened and exhaufted, it is obvious that it will neceffarily weaken and exhauft it more. The patient will lofe weight, fink from his cloaths, and appear emaciated, efpecially if the veffels of the lungs are fo relaxed that a confiderable quantity of mucous matter is expectorated. The ftomach and bowels are more particularly liable to be affected in the convulfive Afthma. They are often feized with colic pains, diftended with wind, tormented with burning heats*, and agitated with tremulous motions, which give a fenfation to the patient of fomething moving

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## ON THE ASTHMA:

and fluttering within him*. The appetite is greatly impaired. Sleep is often prevented; or it is difturbed ahid unrefrefhing. The menfes are fometimes obftruicted; and fometimes they are brought on before the ufual period; and when plethora prevails, that difcharge is accompanied with relief. The patient is fometimes coftive, though fometimes he will have loofe ftools. The extremities, particularly the arms, fhoulders, and upper parts of the body, are often affected with great anxiety and uneafinefs. Symptoms of fever are not effential to the difeafe, though they frequently occur, efpecially when the humoral Afthina or a catarrh is complicated with the

C convulfive.

* Dr. Cullen has taken much pains to inveftigate the nature of atony, or debility in the nervous fyftem. He proves, from a variety of fatts, that atony is transferable from one vifcus to another, as is very evident in the gout, hyiterical and hypochondriacal affections, and many other difeafes. The Afthma too affords us a ftriking example of the fame. We fhall fhew afterwards that it often continues to recur from weaknefs and irritability of the lungs. If at the fame time the ftomach and bowels are weak, the atony will fometimes affect the alimentary canal, and fometimes the air-veffels. Floyer has taken notice of the fact here alluded to, and has obferved, that flight fits of the Althma often affect the ftomach and bowels, and not the lungs. I have, in feveral inftances, obferved the atony, in afthmatical cafes, to have been transfered to the flomach and bowels, and when thofe parts were ruluch difeafed, the breathing has been better, and vice verfa.


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convulfive. A hectic fever, with a colliquative diarrhoea, faintings, palpitations, violent vomitings, coldnefs of the extremities, fwelled legs, and other dropfical fymptoms, arifing from weaknefs, relaxation, and obitruction to the circulation of the blood through the lungs, is common in the laft ftage of the difeafe*. But a hectic fever indeed will fometimes occur in very irritable and relaxed habits, when no immediate danger is threatened.

## Difinction of the ASTHMA.

From the preceding account of the fymptoms of the convulfive Afthma, it will appear obvious that the difinction of it from every other difeafe cannot be difficult. The fudden attack of the fits, the fhort time of their duration, the violence of their fymptoms, the ftate of eafe and good health between them,

* Old Althmas, efpecially when improperly treated or negJected, caufe tubercles and confumptions in lean habits; and in thofe who are fat and corpulent, dropfies, head-ach, vertigo, apoplexy, palfy, lethargy, and inflammations of the lungs, which prove fatal. Floyer.

Dr. Millar too obferves the fame, and particularly mentioris ruptures of vefiels, abfceffes, extravafation of ferum, fitting of blood and hydrops pectoris, all of which are afcertained by diffection, Vid, Millar on the Athma,
them, and their returning at intervals, will fufficiently characterize the complaint.

We have obferved that the convulfive Afthma is often combined with the bumoral; but when this combination of the two diforders does not take place, the fuddennefs and violence of the attack of the convulfive Afthma will fufficiently diftinguifh it. Should, however, any practitioner, from the inaccuracy of the patient's defcription of his difeafe, be in the leaft doubtful with regard to the firft fit, the fucceeding one will, in all probability, render the cafe indifputably clear. At any rate the diftinction of thofe two diforders, though it be matter of moment, yet it is lefs fo than at firft fight one would fuppofe, for, like the different fhades of colors, they run almoft imperceptibly into each other in all poffible degrees, and the cure muft be regulated by the general conftitution of the patient, and an accurate view of the fymptoms of both difeafes taken collectively.

With regard to the pleurify and true peripneumony, the diftinction of them from the Afthma is of the utmoft confequence; but when the diforders are pure and unmixt, it is feldom or $\mathrm{C}_{2}$ never
never attended with much difficulty. Great pain in the breaft, fides, or between the fhoul ${ }_{7}$ ders, a painful, hot, laborious refpiration, along with a cough and general fever, will fufficiently denore the prefence of a local inflammation *. The inflammation of the lungs or pleura does not attack fo fuddenly, nor return at intervals like the convulfive Afthma , which, at firft, is generally of much fhorter duration, and attended with little or no fever. If the convulfive Afthma be combined with a pleurify or inflammation of the lungs (a cafe which fometimes occurs) the difeafe truly puts on a moft alarming afpect; for the feverity of pain and violent difficulty of breathing, with general fever and a miferable depreffion of countenance, render the patient a melancholy object of compaffion. In this cafe, as the inflammation is far more immediately dangerous than the Afthma, it is common to give it our firft and greateft attention; but the Afthma muft not be overloaked or neglected, as it will tend to throw great light upon the general nature and cure of the whole difeafe, viewed in its complicated form.

The

[^3]The falle pleurijy, which is the rheumatifm in the mulcles of the cheft, is eafily diftinguifhable from the convulfive Afthma, by an acute pain in the fide, encreafed by motion and external preffure. Other rheumatic pains in the joints often occur along with it, and difcover its nature more fully. The characteriftic fymptoms too of the althmatic fit, which have been before mentioned, will put the matter out of difpute. We have obferved in the enumeration of the fymptoms of the Afthma, that the falfe pleurify is frequently united with it.

The peripneumonia notba, or falfe peripneumony, is another diforder, which is fometimes confounded with the Afthma. But Sydenham very properly obferves, that the fever, which attends the falfe peripneumony, is fufficient to diftinguifh it. The mode of its attack, likewife, is very different from that of the Afthma. It begins often with fymptoms which are mild, and apparently without danger; but afterwards it encreafes gradually, though rapidly, to a very alarming height, and the patient, if he has neglected himfelf or been improperly treated, is quickly hurried out of life*. But this
\# Vid. Boerhave Aphorifm, § 867 , de peripneumonia notha,
this attack, though apparently fudden, is not near fo fudden as that of the Afthma, nor does it come on in a fimilar manner after fleeping. There is too, for the moft part, a dull deepfeated pain in the breaft, encreafed by infpiration and coughing, which does not commonly occur in the Afthma. Thofe laboring under this fpecies of the peripneumony are generally of a phlegmatic habit, fubject to catarrhs, winter-coughs, and humoral Afthmas, and their blood is poor, containing a fuperabundant quantity of ferum. The falfe peripneumony moreover does not recur at intervals like the Afthma, nor does the cheft and midriff feem to the patient to be fo fixt and immoveable; but, on the contrary, the lungs are choaked up with phlegm and ferous effufions*. In the Afthma the difficulty of breathing often abates confiderably, if it do not entirely ceafe, before much expectoration takes place. In the falfe peripneumony, a copious expectoration coming on affords great relief, though without any very fudden abatement of the fymptoms. Another mark of diftinction, which we mult mention, is that the firft fits of the Althma are frequently very fhort, and the fucceeding ones gradually encreafe in duration;

[^4]ration; whereas the firlt attack of the falfe peripneumony generally continues many days, and the recovery from it is much more flow and difficult. If a perfon, fubject to the convulfive and humoral Afthma, fhould be feized with a falfe peripneumony, when his convulfive Afthma is not upon him, and afterwards the convulfive Afthma fhould fupervene, the patient is generally carried off in a very fudden manner, by a death fometimes refembling inftant fuffocation. But fo terrible a complication of maladies feldom takes place.

In the Hydrothorax, or dropy of the breaff, there is often great difficulty of breathing, not unlike an afthmatical complaint, but any one converfant with the diforder will eafily know it*. The learned and judicious Dr. Cullen has given the following accurate definition of it. Dyfpnoea, faciei pallor, pedum redemata, urina parca, decubitus difficilis, fubita \&\% fponte ex fomno cum palpitatione excitatio, aqua in pectore fluctuans. Thefe fymptoms come on gradually, accompanied with great weaknefs of the conftitution and inability to motion, and the patient has no intermiffions, during which he is free from his difeafes

[^5]difeafe. The Afthma attacks fuddenly, but afterwards often leaves the patient found. The firft is a tedious, continual complaint, and generally a fatal one; the laft has frequent and often long intermiffions. The afthmatic patient, when his fit is off, can, in many cafes, ufe hard exercife and labor ; but the patient, who is afflicted with a dropfy of the breaft, can never undergo any confiderable degree of mufcular motion, without the greateft anxiety and oppreffion. Befides, the cheft and midriff do not feel bound and fixt, as in the Afthma; the mufcles, belonging to them, being able to act with confiderable freedom. The fudden wakings from neep, with fear and palpitation, (which occur in the dropfy of the breaft, and are thought by fome to be characteriftic of it) are very different from the attacks of the Afthma; for the patient, though troubled with a difficulty of breathing, has yet a much freer admiffion of air into the lungs. Afterwards, as the diforder advances, fwelled legs, a fmall quantity of urine, a dropfical phlegmatic countenance, a wafting of the flefh, and a fluctuation of water in the breaft, along with the above-mentioned fymptoms, will fufficiently diftinguifh it. The droply of the breaft too is not near fo much affected
affected by changes of the weather, as the Afthma. If a droply of the breaft fupervene on an afthmatical diforder, it is generally fatal.

With regard to catarrbal and confumptive complaints, if they be complicated with the convulfive Afthma, the complication muft be diligently attended to, as it will confiderably influence the cure ; but if they occur feparately, the diftinction of them will be fufficiently evident. The difficulty of breathing in a catarrh or a confumption, is not to be compared with that which occurs in the convulfive Afthma. In the catarrh, attended with a fever, cough, and expectoration of mucus, the cheft, if not fully, is yet capable of being very confiderably dilated in infpiration; but in the convulfive Afthma, the patient is unable to dilate the cheft, and feels as if a great weight was conftantly preffing upon him. The pulmonary confumption, which is an ulcer of the lungs, is eafily diftinguifhed by the gradual rife and progrefs of the fymptoms, by the cough, purulent expectoration, he etic fever, and emaciated habit.

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So much for the diftinction of the convulfive Afthma. If any one fhould think that this fubject deferves a fuller difcuffion than is here given, the fureft way to be perfect in it, is an accurate ftudy of the refpective hiftories of all the different complaints, which bear any, even the fmalleft refemblance to the convulfive Afthma, along with a fteady attention to the general appearance of thofe diforders, as they occur in nature. Words can never make thofe minute diftinetions, which are very obvious to the eye and other fenfes. In all afthmatical complaints and other difeafes of the lungs, it is very effential to attend moft minutely to the manner in which the patient breathes. We fhould not depend intirely on his reprefentation of the fact. We ought to liften to the frequency of refpiration, as well as to the wheezing of the patient, and obferve accurately the freedom with which the air can pafs into the lungs. We fhould defire him to make as full an infpiration as he is able, and then take notice of the manner in which the air is expired. We muft alfo attend to the elevation of the fhoulders, the labor of refpiration, the quick articulation of words, the color and anxiety of the countenance, and the difficulty of bearing a lying pofture. Obfervations,
fervations, like thefe, made with accuracy and circumpection, will greatly facilitate the diftinction of the different difeafes of the lungs. Joined to thofe we have already advanced on each particular malady, they will clearly fhew, when the air-veffels are fuddenly contracted with fpafm, or gradually obftructed with phlegm and ferous effufions, or when refpiration is impeded by the rheumatifm in the fide, or by an inflammation of the lungs, and an extravafation of red blood into the cellular membrane of that organ.

## Coufes of the ASTHMA.

Having diftinguifhed the complaint, we muft next inquire into the cunfes of it ; an inquiry of the utmoft importance.

With regard to the proximate caufe, phyficians feem perfectly agreed that it is a fudden contraction of the mufcular coats of the airveffels of the lungs, which, they generally term convulfive or fpafmodic*. That the air-veffels have mufcular fibres, capable of mufcular contraction, anatomifts fufficiently demonftrate. In the convulfive Afthma, the

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\mathrm{D}_{2} \quad \text { fuddennefs. }
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[^6]fuddennefs of the attack, the fhort duration of the fit, and the recovery of the patient, before any confiderable evacuation of phlegm has taken place, prove clearly the nature of the difeafe. There can be no fixt obftruction at its commencement, for in that cafe the termination of the fit would not be fo fpeedy and fo perfect. But if it be once admitted, that a fpafmodic contraction of the air-veffels is the proximate caufe, then every idea of difficulty in the explanation of the chief fymptoms of the Afthma is removed. All convul. five diforders are fudden in their attack, and they are often as fudden in their termination. When the mufcular fibres of the air-veffels are contracted, along with the midriff and the mufcles of the cheft, (the contraction of which laft fometimes occurs) the free admiffion of air into the lungs is prevented, and the patient labors for breath. Expiration and infpiration are now, becaufe the parts, performing the function of refpiration, are not able to act, but with the utmoft difficulty. When this fpafm is removed by proper remedies, the patient, after the expectoration of a little phlegm, feels himfelf almoft reftored to perfect health; for the caufe being obvir ated, and there being no fixt obftruction in
the lungs, the fymptoms of the difeafe totally difappear.

With regard to the habitual cough, fhortnefs of breath, and expectoration of phlegm, which fometimes continue to difturb the patient in the intervals of the fits, they arife from a complication of the humoral Afthma, along with the convulfive. Thofe fymptoms, though they often precede the convulfive Afthma, yet they feldom occur as a confequence of it, till the difeafe be of confiderable ftanding. They denote a great relaxation of the mucous glands of the lungs, which, together with an encreafed fecretion of mucus, may be confidered as their proximate caufe.

Hence the proximate caufe of the convulfive Afthma, when complicated with the humoral, (which, as we have obferved, is the moft common ftate in which it appears) is a Spafmodic contracion of the air-veffels of the lungs, preceded and followed by a relaxation of the mucous glands, with an encreafed fecretion of mucus. Tubercles in the lungs are frequently a concomitant fymptom, or a confequence of fevere and repeated attacks of the convulfive Afthma; and whenever they occur;
they render the difeafe of a more obftinate nature; but they are by no means effential to it, and therefore canhot be viewed as forming any part of the proximate caufe.

The remote coufes, which comprehend both the predijpofing and the occafional, are next to be confidered. Thefe, operating together, produce the proximate caufe, with which the difeafe neceffarily exitts. The occafional caufes feldom or never praduce the complaint, unlefs there be a predifpofition in the conftitntion, either natural or acquired. And where there is a predifpofition there, will be no dif? order, if the body be not expofed to the action of the occafional or exciting caufes. This is a fact, often mentioned and well eftablifhed among Phyficians, and the knowledge of it is of great confequence to fociety. Hence we are taught not to induce a predifpofition, where one exifts not in the conftitution ; and where one exifts, the greateft caution is requifite to avoid the occafional caufes, and thenthe predifpofition will be attended with much lefs, if any, inconvenience.

The chief predifpofing caufes of the convulfive Afthma, are a narrow contracted cheft,

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morbid irritability of the lungs, and pulmonary ob: frructions in confequence of tubercles, either fcrophulous or formed by repeated catarrhs, winter coughs, plurifies, and peripneumonies.

A mal-conformation of the cheft may either be natural, or occafioned by fome accident, or by mifmanagement. If it be natural, every one ought to endeavor to fubmit willingly, if not cheerfully, to the difpenfations of providence. If it be accidental, we may reflect that it is not always within the reach of human wifdom, either to forefee or to prevent it. But if it be brought on by mifmanagement, experience ought to give us knowledge, and knowledge will naturally point out to us the means of preventing the like future inconveniencies.

In our earlieft infancy, the bones of the thorax or cheft, being very griftly and compreffible, are frequently injured by the ignorance or careleffeess of nurfes. The ribs have often been preffed inward, and the marks of . fingers have, on diffection, been difcovered. A nurfe fhould never take hold of an infant by the breaft, and throw it very forward upon the hand, for in this cafe the weight of it is fupported

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fupported principally by its ribs, which being in a great meafure formed of griftle, are confequently unfit to bear any compreffion. Nurfes, in holding infants, fhould be cautious to place the hand below the ribs or cheft, and then they will eafily avoid the inconvenience here mentioned.

Another caufe of bad conformation of the cheft in children, is the too early ufe of fiiff Jays, which, if drawn tight, prevent the free dilatation of the cheft in infpiration, alter in time the fhape of the body, and greatly impede its natural growth.

A third caufe of deformity in thofe parts, is the want of a Jufficient quantity of mother's milk, along with bad nurfing, which weakens the infant and brings on the rickets. In this cafe the bones lofe their wonted firmnefs, and unable to fupport the weight of the body and the action of the mufcles, bend from their natural pofition, and render the cheft too ftrait for the ordinary functions of refpiration.

The fecond predifpofing caufe, is great irritability of the lungs, which is either natural
or acquired. The lungs, generally fpeaking, are not a very irritable part of the body, but on the contrary are much lefs fo than many other of the internal organs, as, for example, the heart, the ftomach, or the bowels. Yet, notwithftanding the truth of this obfervation, there are feveral exceptions, in which the lungs are uncommonly irritable in their natural ftate; and whenever this fault takes place in the conftitution, the patient is more prone to afthmatical complaints.

But the cafes of great natural irritability in the lungs are few, in comparifon of the vaft number of cafes, in which the lungs acquire a high degree of irritability.-Pletbora, or a fuperabindance of blood, often lays the foundation, not only of a general irritability of the nervous fyftem, but of a particular one in the organs of refpiration. The whole mafs of blood circulates through the pulmonary veffels, as often as it circulates through the other parts of the body. An unnatural quantity of blood, therefore, muft frequently be found very opprefive to the lungs, in which the veffels are fo large and numerous.

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But the chief caufe of this acquired irritability is artificial external beat, accumulated about the body by means of fires, cloathing, and boufes; and as it is fo powerful and fo frequent a caufe, it is requifite that the reader's mind fhould be impreffed with a juft notion of its importance.

The power of heat in exciting irritability, is a fact well eftablifhed in the fchools of phyfic. Cold diminifhes the fenfibility of the nervous fyltem, and heat encreafes it *. The heat of beds $t$, fires, ftoves, hot rooms, too many cloaths, \&cc, is more pernicious in its effects, than the natural heat of the climate. The nerves, blood-veffels, and mufcular fibres of the lungs, are very much relaxed by breathing a warm air, and this relaxation is neceffarily productive of irritability. A warm artificial atmofphere caufes a copious perfpiration, from the exhalant arteries of the lungs. If in this condition of the body cold be

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be applied, that perfpiration is fuddenly checked, the relaxed orifices of the exhalant arteries are contracted, and a general conftriction of the veffels of the lungs is induced. There are fome, whofe robult conftitutions can bear changes like thefe with impunity, but many will be moft effentially injured by them, and feverely afflicted with the convulfive Afthma, complicated with the humoral. Their lungs will become fuddenly contracted with fpafm, and afterwards obftructed with phlegm, which will impede refpiration, and bring on a troublefome cough. Hence the danger of breathing a warm air, either by day or night, in fmall rooms with large fires, which is fo frequently productive of afthmatical complaints.

The lungs are more affected by fuddea changes from heat to cold, than almoft any other part of the body. Hot air enters into the air-veffels of the lungs, which are defended only by their natual mucus, and cold air has free accefs into the very fame parts. There is nothing, which art can interpofe, to prevent the pernicious effects of both heat and cold, thus alternately applied. It is not fo with the furface of the body. The cloaths
which we commonly wear, defend the external parts both from excefs of heat and from excefs of cold. The huriful influence therefore of fudden changes is not fo great upon them, as upon the airsvefiels of the lungs.

Now, in order to confirm this argument ftill more fully, it may not be improper to quote fome of the moft refpectable authorities. in medicine, in proof of the pernicious effects of artificial hear.

The learned Gaubius, when fpeaking of the hurtful qualities of the atmofphere, points out in a mafterly manner this important truth. He obferves, that warm air is not only very injurious to the nervous fyftem, the fomach and bowels, and the organs fecreting the bile, but alfo to the lungs, whofe functions it difturbs in various refpects*. Van Sweiten, the able commentator of the great Boerhaave, labors to convince mankind of the fame important fact. The late eminent Dr. Gregory, (whofe name I fhall always mention with the deepeft fentiments of efteem and refpect) fpoke warmly, in his public lectures, on this fubject. I have often heard him argue againft the

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the abufe of heat in a manner which carried the ftrongef conviction along with it ; for when the mind is thoroughly convinced by facts and obfervations, it generally imparts its fentiments to another with energy and perfpicuity. Dr. Whytt, a late eminent profeffor of medicine at the Univerfity of Edinburgh, was fully of this opinion. Dr. Cullen likewife, whofe moft extenfive genius, long experience, and unwearied induftry, juftly entitle him to the highet honors of his profeffion, is of the fame way of thinking, and confiders artificial heat, when applied too freely to the body, as being very injurious to the lungs, as well as to the whole conftitution.

But there is no need to dwell longer on authorities, when facts evidently ftand forth in proof of the doctrine here advanced. It having been obferved by many eminent phyficians, that rione were fo liable to catarrhs, winter coughs, Afthmas, and confumptions, as thofe whofe conititutions were become tender by an imprudent expofure to heat*; I was refolved to examine accurately into this fubject, and had the fatisfaction of finding that they had truth indifputably on their

[^9]their fide. Let us appeal to the knowledge and experience of the world, and, as a matter of fact, let us afk who are moft liable to be affected with cold, and confequently troubled with coughs and afthmatical complaints? The anzi fwer is obvious-they who are moft confined to clofe warm rooms, and whofe conftitutions are made tender by excefs of heat. In my attendance at the Royal Infirmary at Edin!! burgh, and at St. Thomas's Hofpital in London, and in my private practice, as well as that in the York County Hofpital, I have met with many afthmatical patients, and as an undifputable fact I affert it, that far the greateft number of them confeffed, that they were always fond of a good fire, a warm room, much cloathing, and a warm bed, in confequence of which, cold, damp, and changeable weather affected them moft feverely.

Befides, if we reflect on the different occupations of the lower clafs of mankind, we fhall find none fo frequently and heavily afflicted with the Afthma, as thofe who are expofed to the greateft heat. What fet of people are more fubject to coughs and Afthmas, than cooks, bakers, and blackfmiths? Who is ignorant of

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the danger of boiling foap, brewing ftrong liquors*, making malt, working in forges $\dagger$, purifying fugars, and fuch like employments, in which the laborer is neceffarily expofed to heat in excefs? This clafs of men, pale, fallow, and often emaciated, is more fubject to the Afthma than any other.

Knots or tuberdes in the lungs, we have mentioned as the third predifpofing caufe of the convulfive Afthma. They frequently arife from a fcrofulous habit. They are principally feated in the lymphatic glands of the lungs, and are often accompanied with glandular fwellings in the neck and other parts of the body. Sometimes they are occafioned by inflammations of the lungs and obftinate catarrhs. Obftructions of this nature induce great irritability of the parts affected, and are a powerful predifpofing caufe of afthmatical complaints, which, in this cafe, end often in ulcers of the lungs.

The

* I was fome time ago in converfation with a man, who had been a brewer for thirty years. I afked him how that bulinefs agreed with his health, and he faid very well. Then I afked him if he thought it a healthful bufiness, and he faid it was not, for though he had efcaped an Afthma, yet that was the complaint which killed molt of them.

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The frequency and danger of thefe pulmonary obftructions; lead me again to remind my reader of the pernicious confequences of excefs of heat. Weak ferofulous habits fhould not be rafh in expofing themfelves to an unaccuftomed and dangerous degree of cold. But I will venture to affirm, that if their conftitutions are relaxed and made tender, by wearing a load of eloaths; by living in fmall warm rooms, fitting near large fires, lying very warm in bed, with the curtains drawn clofe*, \&cc. they will never be able to bear the changeable and uncertain atmofphere of this climate, without running great hazard of being feverely, if not dangeroufly, afflicted with complaints of the lungs, either catarrhal, afthmatical, or confumptive.

With regard to thofe cafes of tubercles, difperfed through the fubftance of the lungs, proceeding from catarrhs and inflammations, they alfo frequently owe their origin to a heated atmofphere. Many cafes of the catarrh and peripneumony arife from the lungs having
been

* Nihil autem magis laxat corpora, quam tepor leeti, dum fomno largiori indulgent ægri. Herent enim fic in proprio vaporum de corpore exhalantium balneo. Van Sweiten, rol. It page 45.


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been made irritable by heat, and then being futdenly atted upon by cold. But cold alone would generally have nọ fuch effeet, unlefs heat had been previoufly applied. When I fpeak of cold as having no fuch pernicious effect, I mean a cautious, not a rafh application of it.

It is an undoubted fact, that man in his hatural fate, ahd in a ftate of health, is one of the moft hardy of all living creatures, and capable of bearing the greateft feverities of weather with impunity*. An illuftration of this fact is obfervable in the Highlards of Scotland, where the peafant, furrounded by his Scotch plaid, lays himfelf down in the winter feafon under the edge of a rock, neeps found through the night in the midft of his herds, and wakes in the morning chearful and refrefhed. Not only uncultivated riature, but times of war afford numerous examples of the fame kind. How often, alas, have the Britifh and American troops, during the late unhappy difturbarices, undergone the greateft hardfhips of weather. If neeping in wet cloaths on the cold ground in mifty nights, was, as fome imagine, to be always attended F with

[^11]with bad effects, there would fcarce be a veteran foldier capable of bearing arms. As facts like thefe, in the hiftory of mankind, are infinite in number, it is unneceffary to dwell longer on the enumeration of particular inftances.

But if this be a true ftate of the cafe, (which will not be denied) can any one be fo abfurd as to fuppofe, that becaufe the fhepherd and the foldier are able to bear, with chearfulnefs and fafety, the cold rain of a winter's day, others likewife, in a different fituation of life, whofe nerves are made tender and irritable by excefs of heat, will take no harm from undergoing the fame feverity of weather? The firt have cuftom, which is juftly termed our fecond nature, on their fide; the latter, as well in the middling as in the higher ftations of life, have the greateft delicacy of conftitution.

Though we wifh to inculcate an ufeful maxim on the world, yet we would cautioufly avoid extremes, confidering them as highly dangerous. Extremes, neverthelefs, are relative terms, and difficult to be defined. A degree of cold, which is dangerous to one perfon, is perfectly harmlefs to another. Every body,
body, therefore, fhould be guided by his previous habits, as well as by the natural vigor of his conftitution; and endeavour to be able to bear the unavoidable hardfhips of his occupation, that he may, if poffible, follow it with fafety.

So much for the predifpofition of the body, as favoring afthmatical complaints. Some may, at firft fight, think that one or two predifpofing caufes are overlooked, viz. corpulency and an bereditary difpofition.-With regard to the firt we anfwer, that corpulency is connected with plethora, of which we have fpoken as powerfully creating irritability of the lungs. A corpulent perfon is always full of blood. With regard to hereditary difpofition, we admit the fact, that the Afthma is often an hereditary difeafe; but at the fame time muft obferve, that we have already fully confidered it under mal-conformation of the cheft, fcrofulous tubercles in the lungs, and a peculiar natural irritability of them, all of which de. feets in the conffitution are hereditary.

Having confidered fully the principal predifpoling caufes of the convulfive Afthma, we proceed to enumerate the occafional. Thefe
are cold, moifture, fudden changes of weather, duft, metallic fumes, lmoke and otber particular fmells, mephitic vapors, evacuations, great fatigue, neglect of exercife, Jouting and all frong exertions of the voice, certain dijorders in the conftitution, anger, joy, furprize, fear, grief and other depreffing paffions, excefs in venery, and intemperance in diet.

Concerning the effects of cold, we have not much to add. It is evident that an unaccuftomed degree of cold will bring on a fit of the Afthma, as is clearly proved by daily experience. Moijfure, joined to cold, will ftill more certainly produce that effect. For this reafon, cold foggy weather is found very unfavorable to the afthmatical. In Afthmas arifing from this caufe, perpiration is obftructed, and fymptoms of a catarrhal affection often precede the fit, fuch as feverifhnefs, a quick pulfe, pain and ftuffing in the head, hoarfenefs, a mucous difcharge from the noftrils, and a cough with little or no expectoration. Wet feet, damp linen, damp cloaths, houfes, the walls of which are not perfectly dry, wet floors, cold rooms to thofe who are accuftomed to warm ones, an unufual ftream of air againft any particular part of the body, fenny

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fenny countries, all fudden changes of weather*, cold eafterly and notherly winds, riding or walking in the rain, have all been obferved to induce afthmatical complaints in habits, where the predifpofition exifted.

But cold and moifture, as we have before obferved, have a much greater effect on the weak,

* Floyer obferves, that though bis fits recurred at no certain times, yet he generally had (to ufe his own expreffion) an inclination to one before rain, fnow, or froft. When he had an unexpected fit, a change of weather immediately fucceeded. If there had been a froft for fome time, a thaw often accafioned a fit. A fudden change too of the wind into the Ealt, had the fame effect. Sudden changes of the air in the fpring and fall, are very often productive of fits, efpecially when people make alterations in their cloaths. Althmatics generally breathe with more difficulty in mountainous fituations, where the air is light ; and for this reafon likewife a fit will frequently come on either juft before, or during a florm of thunder and lightening. Floyer jultly obferves, that the moift fate of the air, which for two or three days precedes rain, affects the althmatic patient more feverely than the rain itfelf when it falls. Changes of the weather from a dry ftate of the air to a wet one, at the changes of the moon, have confiderable influence on afthmatics; and fometimes fits will occur at the full and change of the moon, when we can affign no particular reafon. Thofe winds likewife, which come to us loaded with yapors, particularly the souih and Eaft, are often very prejudicial ; and alfo great winds and ftorms, though without rain, will frequently bring on a fit. Very hot weather 200 agrees ill with althmatics, and, though clear, will often induce a fevere attack of the complaint. We have already remarked in the hiltory of the difeafe, that the moft violent fits of the pure conyulfive Afthma occur in the dog-days.

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weak, the delicate, and tender, than on others who are more hardy, of robufter conftitutions, and not become irritable by excefs of heat. The extreme of caution to avoid cold and moifture, is almoft as fatal to the human frame, as no caution at all; for every imaginable caution, in the imperfect ftate in which we are placed, will not be fufficient to defend us from the injuries we ftrive to avoid. Cold and moifture will penetrate into the very inmoft receffes of our houfes, and in fpite of walls, hangings, curtains, cloaths, and fire, will gain admittance, and act powerfully againft us. Moderate caution is better than exceffive caution, and we fhould learn to bear what we cannot fhun.

Duft, metallic fumes, fmoke*, particular ऽmells, and mephitic vapors, are often occafional caufes of the Afthma. For this reafon millers, flaxdreffers, maltiters, purifiers of ores, chymifts, who prepare remedies of a metallic nature, which

* This may be one reafon why London and other large cities, in which there is a great deal of fmoke conftantly in the furrounding air, are fo very offenfive to many afthmatical patients. I have known feveral, living a mile out of town, who told me that in the winter, when they approached the city and came into its fmoke, they were immediately feized with fhortnefs of breath and a fit of coughing.
which fubject the operator to metallic fumes, whether of mercury, lead, arfenic, antimony, \&cc. are very fubject to afthmatical complaints. Certain fmells too are particularly difagreeable to fome. Hence it has been frequently remarked, that the fmoke of greafe, of candles, and tobacco, is very noxious in the Anthma; as alfo the fumes of fermenting liquors and of burning charcoal, partly from their fmell, and partly from their poifonous mephitic quality. Many ftrong-fcented and fweet odors, arifing from effential oils and odoriferous plants, are very offenfive to fome. Sulphureous fmells likewife are found prejudicial. A gentleman of my acquaintance was drying a little gunpowder in a brafs pan, over a ftove in the kitchen. There were prefent an old woman and a cook-maid, both fubject to afthmatical complaints. The fmell, emitted from the gunpowder, was fo ftrong, that they were both of them affected with ftraitnefs in the breaft, and difficulty of breathing, particularly the old woman, who afterwards was troubled with a fevere fit of coughing, and had a very bad night. The gentleman himfelf felt little or no inconvenience. I am intimately acquainted too with a patient, who is at times roubled with the pure convulfive Afthma, from


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from heeping in ftrange beds, in which the feathers are new and emit a peculiar fmell, though often in fo flight a degree as foarcely to be perceived by anothef perfoh. This genflemant confulted me fome years ago, and from accurate oblervation and repeeted fits, the fact was proved beyond a doubt. The beds; whicli brought on the Afthma, were perfectly dry, and in conitant ufe. If the bed was changed the fit did not come on, though the patient continued to fleep in the fame room, and with the fame bed-cloaths.

Evacuations, great fatigue, fuddeh and violent exertions of ftrengtli, and alfo the negleat of exercife, are to be conffdered as exciting caufes. The convulfive Afthma is a nervous complaint; and nervous irritable habits are apt to be much affected by evacuations, whether fweating, purging, of blood-letting, but particularly the laft. Hence the ague, convulfions, hyfterical affections and epilepfy, which are evidently difeafes of the nervous fyltem, are fometimes brought on, like the convulfive Afthma, by fudden depletions of the veffels, which weaken the fyftem. Great fatigue too, all quick and violent exertions of ftrength, induce weaknefs and depreffion

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of the nervous power, and confequently act as occafional caufes. Violent running, of ftagedancing, is juftly thought by many to induce afthmatical complaints, as it ftrains and oppreffes not only the air-veffels of the lungs, but alfo the blood-veffels, in confequence of overpowering them with too quick a return of the blood. It feems highly probable that fuch violent mufcular motion may greatly injure refpiration and induce afthmatical diforders, particularly in thofe who have full habits or weak lungs*.Neglect of exercife, though nower in its operation, is as deftructive a caufe as too great fatigue, for it is a very frequent caule of bodily weaknefs. Thofe who neither walk, nor ride, nor ufe any other regular exercife, are often-troubled with great irritability of the nervous fyftem, which renders them fub-

* Horfes indeed are offen obferved to become afthmatical, or broken-winded, in confequence of quick running or violent ftrains. Floyer mentions a broken-winded horfe which was diffected, and the lungs were found bigger than, natural, and the air-veffels on their external furface were fo much weakened and enlarged, as to refemble, when inflated, finall tumours, which did not readily fubfide.-Bonetus, in bis Sepulchreturn, mentions a cafe of dyfpnæa in a patient, " a pulmone maxinıo," and another of an Afthma, "ab enormi pulmonum magnitudine, lutulento bumori infarforum." Lib, ii. fec. I. page 508.
ject to more frequent and violent returns of the Afthma.

Sbouting, vebement speaking, finging, and all frong exertions of the voice, are very hurtful in atthmatical diforders, and have frequently acted as occafional caufes! For this reafon, all thofe profeffions which require public fpeaking, fuch as the law, divinity, \&cc. are injurious in the Afthma, efpecially when it is accompanied with tubercles and obftructions in the lungs. I may add too cryers in courts, bellmen, auctioneers, \&c. who are all fufferers from the fame caufe; and the more vehement their fhouting, the more dangerous and deftructive it is to the lungs. Afthmas in people of fuch low occupations, in whom they are often neglected, are very liable to end in confumptions. - Singing and all ftrong exertions of the voice frain the lungs, and where there are tubercles and obftructions, they frequently induce partial fuppurations *, which are increafed to a fatal degree by the fame caufe continuing to act.

Various difeafes of the body affect the lungs, and act in predifpofed habits as exciting caufes.

Catarrhs,

* Vid. Mudge's ingenious Treatife on the Catarrh:


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Catarrhs, winter coughs, pleurifies, and inflammations of the lungs, often leave that organ in fo weak and irritable a ftate, that the convulfive Afthma fupervenes. Cutaneous eruptions, itch, eryfipelas, gout, \&xc. when repelled by improper treatment, will fometimes throw the lungs into violent convulfive affections. Obitruction of the menfes, fuppreffion of the hemorrhoids, drying up of old iffues or ulcers of any kind, are frequently obferved to have the fame effect. Small fones or calculous concretions, which the lungs, as well as every other part of the body, are liable to be affected with, have been found exciting caufes of the Afthma*: But it would be both endlefs and unneceffary to enumerate every complaint which the Afthma has been obferved to follow, fuch as fevers, intermittentst, fmall-pox, meanes, dropfies of the breaft, polypufes in the heart, the angina pectoris, and a variety of others; and more efpecially as the Afthma, G 2 fo

* Vid. Morgagni de Cauf. \& Sed. Morb, Tom. I. lib, ii, page 129.
$\dagger$ Floyer thinks that intermitting fevers often occafion the Afthma, and produce fixt periods. He has the following words. "About eight years fince I had an intermitting fever, with fivooning fits every afternoon. To this I impute the fettled periods of the Althma."
fo induced, is often fymptomatic only of thofe difeafes which require a particular treatment, and one very different from that which is proper in the Afthma itfelf, when confidered as an original and primary affection.

Anger, immoderate joy, furprife, too clofe application of mind, fear, grief, anxiety, and other deprefing pafions, have frequently been exciting caufes of the afthmatic fit. They weaken and diforder the nervous fyftem, increafe its irritability, and render it more fufceptible of nervous affections.

Excefs of venery, and intemperance in diet, are the laft accalional caufes which we fhall mention. Too much venery exhaufts the nervous power in a very high degree; it is often accompanied with nocturnal watchings, and is. found, in weak and relaxed habits, to be a frequent caule of the afthmatic fit.-Intemperance in diet comprehends gluttony and drunkennefs, both of which are very hurtful to the afthmatical patient, and often excite fits, which otherwife would not, in all probability, have come on at that time. Intemperance injures the conftitution two ways. Firf, It creates plethora or fullnefs of blood, which,
as we have obferved, is a common and very powerful caufe of irritability of the lungs. Patients of this order feem to be of full habits, corpulent, or inclining to corpulency, with a red and often a bloated complexion. Secondly, Excefs in eating or drinking loads and oppreffes the flomach, prevents the free defcent of the midriff in infpiration, occafions flatulency, indigeftion, and ficknefs, and thus favors greatly the returns of afthmatical complaints. Heavy fuppers in particular have always been found very hurtful to people who are fubject to the Afthma, and have often been the exciting caufe of the fit. Excefs in the ufe of ale, wine, or fpirits is a very common and powerful occafional caufe of the Afthma, for it weakens the whole conftitution, deftroys the ftomach, and induces a high degree of irritability. As the ftomach is one of the moft irritable organs of the whole fyftern, and more intimately connected with the brain and nerves than almoft any other; it cannot be in the leaft furprifing, that whatever diforders the ftomach, fhould in fome meafure diforder the whole fyftem, and be fo often obferved to induce the afthmatic fit.

Prognofic

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## Prognofic in the A S THMA.

With regard to the prognofic in the Afthma, there is no occafion to fay much. Every body knows that an Afthma is a very obftinate complaint, and one which it is difficult to cure ; but yet, perhaps, not altogether fo dificult as fome have reprefented it. It is true indeed that to compleat a cure is a work of time, and requires the greatelt fteadinefs and perfeverance in the patient, both with refpect to remedies and regimen. But who is there fo infenfible to the troublefome and highly-diftreffing fymptoms of an Afthma, as not willingly to undergo many reftraints in their pleafurable purfuits, as well as adhere fteadily to a proper courfe of remedies for a fufficient length of time, in order to be reftored to a ftate of health ? When one fit is removed, the cure is not to be expected without relapfes; but if thofe relapfes be lefs frequent, and the fits lefs violent, the practice proves itfelf to be fuccefsful; and doubtlefs, a cure, in feveral cafes, may by time and perfeverance be compleated.

The obftinacy of the difeafe is to be eftimated from the violence and duration of the fymptoms,

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fymptoms, the age of the patient, the condition of his conftitution, the nature of the predifpofition, and the power of the exciting caufes. If the fymptoms of the fpafmodic affection in the lungs run high; if the diforder be of long ftanding, and, when once excited, continue for feveral days; if the returns of it be frequent; if the lungs be greatly obftrueted with phlegm at the termination of the convullive fit, and an obftinate cough remain during the intervals, with a laborious refpiration, and a copious expectoration of mucous matter, the cure is difficult, tedious, and uncertain. Tubercles and obftructions in the lungs, and a mal-conformation of the cheft, joined to a debilitated conftitution, in a patient whofe conduct has always been irregular, and whofe habit of body is ferofulous and confumptive, are fymptoms of a moft unfavorable nature.

If, on the contrary, the diforder be recent ; if the patient's conftitution be not greatly impaired; if there be no natural deformity in the cheft; if refpiration after the termination of the fit be free, and the cough with expectoration of phlegm not violent, nor ubftinate in its duration; if the occupation of the per-
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fon be not injurious to the lungs, or, if fo, can be eafily relinquifhed; and if the lungs be not obftructed with tubercles, either in confet quence of a fcrofulous liabit, or repeated inflammatory affections, the cafe bears a favors able afpect, and may in all human probability be frequently treated with fuccefs.

A critical evacuations, as a diarrhea, ulcerns or copious urine, has been fometimes oliferved to prevent a fit of the Afthma. A dyfury, or fwelled legs; relieve fome. With regard to a diarrhæa, if it be moderate, and the contitution not too low to bear the evacuation, it may be allowed to continue awhile ; but if the patient be thin and weak; it is fafer to check it by the tife of opiates and gentle aftrint gents.

Floyer obferves that old afthmatics are fubject to the jaundice, ftone and gravel, rheumatifm, and diabetes, which laft, when it Itops, is frequently followed by a dropfy in the breaft. The other difeafes to which old afthmatics are particularly liable, were mentioned when we were giving the hiftory of the Afthma. It is obvious to common fenfe, that if an old afthmatic become confumptive, dropfical,

Hropfical, or apoplectic, the cafe is defperate. A peripneumony too, combined with an Afthma, is generally fatal. When infants are feized with the Afthma, it often ends in fuffocation, efpecially if powerful means for the removal of it be not applied at its commencement. Old afthmatics, it is well known, are very liable to fevere complaints in the ftomach and bowels, from weaknefs and irritability, fuch as a bad digeftion, flatulenty, pains, burning heats, difagreeable prickling fenfations in the abdomen, with lownefs of fpirits and difturbed fleep. We have before obferved; that when thofe complaints in the inteftinal tube are the fevereft, the Anthma is frequently in its mildeft ftate; and, on the contrary, when the Afthma is the moft troublefome, the ftomach and bowels are lefs violently affected. Old obitinate cafes of the Afthma, which cannot be cured, may often be relieved by the application of proper means, and life not only be prolonged, but (what is of greater importance) rendered much more comfortable.

## The Metbod of CURE.

The method of cure falls next under our confideration; in fpeaking of which we thall endeavor to be concife, without, at the fame time, omitting any thing which may be of confequence to the fuccersful treatment of the difeafe. As truth and fidelity in the relation of faets ought always to be attended to above every thing elfe, the reader will not be furprized to find me recommending fome means of cure which are not commonly attended to, and omitting others as ufelefs or pernicious, which have been long known and employed as fafhionable remedies in the routine of practice.

From the hitory of the Afthma which we have already given, it will appear evident that the method of cure divides itfelf into two diftinct parts;
Firt, During the prefence of the fit ; and Secondly, During the interval, with a view to prevent relapfes.
Part I.

During the prefence of the fit, the curative indications which moft naturally occur without any ftudied refinement, are

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"To take off the fpafm from the air-veffels of she lungs;

To promote the expectoration of mucus; and

To mitigate urgent fymptoms.
Having laid down thofe three general indicasions of cure, we thall proceed to the examination of particular remedies, which, by their proper qualities, are capable of fulfilling them; and point out their mode of operation as diftinctly and intelligibly as the nature of the fubject will admit of. We fhall not firt mark the indication, and then fubjoin each remedy which might properly be employed to anfwer that indication, becaufe, by this mode of procedure, there would be a great repetition of remedies, as one remedy will fometimes be found to anfwer two or more indications of cure; but we fhall enter immediately into the confideration of particular remedies, and point out, in one comprehenfive view, the mode of operation, by which they fulfil the indications above laid down,

Before we proceed to particular remedies, it may not be improper to fay a word or
two on the regimen of athmatical patients. when in the fit.

It is agreed on all hands that the greateft abfinence is neceffary, particularly from aliment which is flatulent, vifcid, and difficult of digeftion, fuch as peas, beans, jellies, butter, feverat young meuts, \&c. Floyer indeed forbids all fle $/ \mathrm{b}$ meat on pain of fuffocation, or a continuance of the fit. He adviles fafing, except a little toaft, or an egg with vinegar, at, noon or night, and very properly condemns the ufe of fermenting wines, mead, fweet ptijanes, frontiviac, bottled ale, and fuch like flatulent liquors. Toaft and water alone, or with acids, or with a fmall quantity of falprunell, nitre, or fal-ammoniac, is recommended by him. Milk and seater, or boney and water, agree with fome. If the patient be low and require a cordial, a little of any good old wine, as port, madeira, Sherry, \&zc. may be given. If all wines turn four on the ftomach, a jimall quantity of Spirits in that cafe may now and then be ufed along with the toaft and water. Good cold finall beer may be allowed to fome, though it will not agree with all, Floyer mentions vinegar, or verjuice and water, as a convenient liquor for afthmatics. But in all thofe cafes the patient's age, conftitution, and former habits
habits fhould be confidered, and the practice regulated accordingly. Toaft and water, cold and acidulated, is certainly a very proper lis quor for the young and ftrong, whofe conftítutions are full and inflammatory; but the infirm and aged muft be allowed the moderate ure of wine or fpirits diluted. In like manner acids fometimes difagree with the fomach, and in thofe cafes (however ferviceable they may be found in others) it would be highly abfurd to make ufe of them. But we fhall fpeak more particularly on the fubject of diet in the fecond part, which treats of the cure during the intervals of the difeafe.

With regard to air, as fubfervient to the pur, pofes of refpiration, we may obferve that the fits are generally much worfe in a town than in the country, where the air is purer and not fo thick. There are, however, exceptions to this, for fome patients are better in London than in the country, and fome are better in Holland than in a clearer air. In large towns patients are lefs expofed to changes of weather than in the country, and this may be one reafon why the country difagrees with a few athmatics, whofe conftitutions are tender and unable to bear the fmalleft changes of weather. All exercije in
the fit is dangerous, and therefore muft be avoided. A cool room, at that time, is abfolutely neceffary; and there fhould be a free circulation of fre/b air. Floyer is particularly ftrong in his recommendation of this, as a matter of the greateft confequence. He found that a warm room, as well as a warm bed or warm drinks, encreafed the violence of the fit. He further adds, that "althmatics can bear with " impunity much cold, on account of the ex"panfion of fpirits." I believe the fact, becaufe he fpoke from great experience both in himfelf and others, and becaufe it coincides with daily obfervations, but his reafon for it I do not underftand. Patients, neverthelefs, whofe conftitutions are tender, fhould not expofe themfelves fuddenly to an unaccuftomed degree of cold; for all changes of this nature fhould be gradual,

In the afthmatic fit, the difficulty of breathing is often fo great, that the patient cannot bear an horizontal pofture, and therefore he is obliged to fit up all night on his bed or in an armed chair, where he finds eafe by leaning forward. This laft was Floyer's method, particularly for the firft night, and in the fummer feafon. The wearing apparel at this dif-
treffing
treffing juncture fhould not be ftrait and confining, but loofe and eafy. The fecond night Floyer advifes, the patient to endeavor to lie down to fleep, with his head and fhoulders raifed high. He fhould not be loaded with bed-clothes, for they would opprefs him, and obftruct refpiration. Some months ago I vifited a patient whofe breathing had long been fo laborious, that he had not lain down at nights for fifteen years fucceffively, but refted in an arm'd chair, leaning forward on a ftick.

Having premifed thefe few remarks on regimen, we proceed to fpeak of the particular remedies which are ufed during the fit.

When firft called to the afthmatic patient, the practitioner fhould confider the ftate of his conftitution refpecting plethora or fuluefs of blood; for in full habits the moderate ufe of the lancet is abfolutely neceffary, and the more fo, the nearer we are to the commencement of the complaint. For this purpofe the pulfe fhould be carefully examined refpecting its ftrength, frequency, and hardnefs. Strength, without frequency, that is, a pulfe ftrong and flow, does not indicate bleeding in the fame degree, as if it were frong and frequent.

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But if in a ftrong and frequent pulfe there be alfo an evident hardnefs, the indication for blood-letting becomes more urgent. The pulfe, however, is not a fteady guide in this difeafe, for it is fubject to great irregularities in confequence of the contraction of the lungs, and the difficult paffage of the blood through the pulmonary veffels. From this caufe it often happens that the pulfe is fmall, frequent, irregolar, and intermitting in full and plethoric habits, in which blood-letting is abfolutely requifite *:

To diftinguith, therefore, rightly in this cafe, other circumftances muft be taken into confideration to direct the prudent practitioner. The former ftate of the patient's conftitution muft be attentively enquired into, refpecting the condition of his digeftive organs, and the quantity of food that he ufually confumes. Add to this the degree of exercife and bodily labor to which he is accuftomed. For if a man have a good appetite and a found digeftion, fupported by mode-

* It need hardly be obferved, that in fome people the artery at the wrift, which runs along the radius, and which is ufually examined when we feel the pulfe, is uncommonly fmall, and Farce to be felt, even in very full habits.
pate exercife or labor, the fibres are commonly firm, and the veffels more vigorous, elaftic, and well filled with blood. At the fame time the phyfician, for further fecurity, fhould obferve the patient's countenance and general habit of body refpecting fulnefs and corpulency, as well as the natural heat and firmnefs of the mufcular flefh. With regard to the countenance, however, I muft remark, that it is a fallacious fign during the exiftence of the Afthmatic fit; for the circulation through the pulmonary veffels being impeded, the courfe of the blood to the left ventricle of the heart, as we have before faid, is greatly obftructed, which fometimes caufes the countenance to appear bloated, or even blackifh, in people who are naturally of a pale complexion. To avoid being deceived by this appearance, a prior knowledge of the patient is of great fervice, and where that knowledge is wanting, an enquiry from intelligent friends concerning his ufual complexion, and the difference which takes place, will afford proper and ufeful information.

Befides the countenance, the external heat, and the firmnefs and elafticity of the fibres, the practitioner muft weigh, with fcrupulous exactnefs, the fymptoms of the difeafe, both
as to number and violence, and more efpecially examine whether there be a difpofition to any inflammatory affection of the lungs or pleura. For this reafon particular obfervation is requifite to the fever, cough, difficulty of breathing, fuffufion of the countenance, and fulnefs of the veins about the head, along with ftitches and fixt internal pains of the breaft, as thefe fymptoms indicate an inflammatory fate of the lungs, and demand a free and immediate ufe of the lancet.

From the confideration of thofe particulars; it is eafy to regulate the- practice of blood-letting in the treatment of the Afthma. Bloodletting is more urgently required in the firft violent attacks of the difeafe, than in the fucceeding ones; though in thefe alfo it may be highly requifite, efpecially in people who, paffed the meridian of life, are full and corpulent, prone to indolence, fond of ftrong liquors and high living.

The utility of blood-letting in the Afthma, when plethora prevails, and the fymptoms are fufficiently urgent to demand it, is great and obvious. It is, with refpect to the firft indication,
tion, highly antifpafmodic, and contributes much towards the folution of the fit. With refpect to the fecond indication, it acts powerfully as an expectorant, which might indeed have naturally been fuppofed from its antifpafmodic effects; for whatever takes off the fpafm from the air veffels of the lungs, muft evidently promote a difcharge of mucus from the mucous ducts. As to the third indication, it obviates moft immediately and effectually every particular fymptom arifing from plethora; fuch as great tenfion of the veffels of the head, fevere head-achs, peripneumonic affections, violent heat and other fymptoms of an inflammatory fever, rupture of blood-veffels, hemorrhages from the nofe, fpittings of blood, \&c.

But although bleeding, for the reafons above-mentioned, is, when plethora prevails, fo very beneficial in the Afthma; yet in patients, whofe conftitutions are weak and relaxed, and in which there is no appearance of fulnefs and inflammation, any confiderable evacuation of blood is very hurtful*, even though the difficulty of breathing and fpafmodic affection of the

[^12]lungs take place in a violent degree. In all fuch cafes blood-letting encreafes the weaknefs of the conftitution, and whatever encreafes weaknefs gives irritability; which is well known to lay the foundation in relaxed habits, of the moft fevere and dangerous Afthmatic fits. - The general appearance of the conftitution, the weaknefs of the pulfe, the relaxation and want of tone in the mufcular fibres, and the previous ftate of debility in the digeftive organs, as denoted by want of appetite and the ufual fymptoms of indigeftion, will fufficiently point out the impropriety and danger of bloodletting, and more efpecially when the fits have frequently recurred, and when the patient occafionally has had recourfe to the lancet without relief.

Emetics are often very ferviceable in the Afthma, but confiderable caution is required in the management of them. When the ftomach is loaded at the firft approach of a fit, before any violent fymptoms have made their appearance, a gentle vomit is of great ufe, as it clears away acid, putrid, or vifcid matters, diminifhes the oppreffion at the ftomach, and renders the enfuing fit lefs violent and diftreffing. A load of undigefted food, attended with
with flatulency, diftends the ftomach, and prevents the free defcent of the midriff; and, if it pafs from the ftomach into the bowels, it ftill continues to diftrefs the patient with fulnefs, pain, and uneafinefs. In the hiftory of the difeafe, we mentioned the fymptoms which ufually preceded the fit*; and when thofe occur, and a return of the Afthma is expected, a vomit of Ipecacuan, with a fmall proportion of Tiertar Emetic, of Antimonial Wine, or Vinegar of Squills, is given with fafety and advantage.

If an emetic has not been ufed at the approach of the fit, and the patient is laboring under a fevere attack, with great anxiety and difficulty of breathing, a vomit is very dangerous. But when the difeafe has continued fome time, and there is an evident abatement of the fymptoms, a vomit, if the ftomach be foul, may then be prefcribed with the utmoft propriety.

In like manner towards the conclufion of a fit, when the feverity of the fymptoms is removed, and the patient ftill complains of tightnefs and ftuffing in his breaft, it is extremely neceffary to order a gentle vomit to promote 2 difcharge of phlegm from the lungs. Emetics
at the fame time tend to take off any feveriff fymptoms, to open the pores of the fkin, remove fpafm, and caufe a gentle perfpiration*. In cafes too where we do not wifh to produce full vomiting, antimonial medicines, particularly Tartar Emetic and Fames's Powder, are often given in fmall divided dofes with much fuccefs, even in very obftinate fits of the Afthma $\dagger$.

The next thing to be enquired into is the ftate of the body refpecting coftivenefs, which is very pernicious to the afthmatic patient, and aggravates the fymptoms of the fit. When the bowels are loaded, and particularly when the large ones are diftended with flatulencies and hardened faces, the free defcent of the midriff


#### Abstract

* Sometimes violent vomiting precedes or accompanies a fit of the Atthma, and Floyer has obferved that cold water has afforded the, moft relief. I mention this fact, becaufe I have in feveral cafes of obftinate vomiting, from different caufes and in different diforders, found cold water the molt grateful and bepeficial to the patient; and all warm liquors evidently detrimental by exciting pain and encrealing the ficknefs. But if the ftomach is inflamed cold liquors are very hurful. $\dagger$ The Lady of an eminent Phyfician of my acquaintance labored under this Althma, and during the fit he gave her tartar emetic, and gradually encreafed the dofe until fhe took four or five grains at once, which greatly relieved her afthmatical complaint, but produced no fenfible eqvacuation.


in infpiration is prevented, which, during the exiftence of the difeafe, is very prejudicial. For this reafon laxative and purgative remedies, either taken by the mouth, or given in the form of glyfters, with a view to empty the alimentary canal, have always been found ufeful in the Afthma.

With this intention the common laxative and purgative remedies are employed, viz, rbubarb, aloes, jalap, fena, oleum ricini, manna, neutral falts, cream of tartar, and various preparations formed from thefe and other laxatives, as lenitive electuary and the laxative tinctures*. The warm opening medicines, fuch as the tincture of rbubarb, tinctura Jacra, Rufus's Pill, are frequently recommended in this difeafe, in cold conftitutions, and where the ftomach and bowels are weak, irritable, and fubject to be inflated with wind. But in full and plethoric habits, the faline purgatives, the bitter purging falt, Glauber's falt, foluble tartar, cream of tar-
tar,

* It is remarked by Floyer, that afthmatics are not very fubject to coftivenefs, that at the begining of the fit they have often a loofe ftool, and that they are eafily purged. This remark is not without fome foundation in truth, though there are many exceptions to it. The knowledge of it therefore may prevent fome from giving ftrong purgatives in the fit, which are by no means advifeable, or eren fafe.


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tar, and otbers of a cooling nature are the fafeft and moft ufeful. In this cafe a gentle purgative is given in preference to a laxative, and it is more efficacious, as it produces a more copious evacuation, contributes fomewhat towards diminifhing the fulners of the veffers, and at the fame time caufes a revulfion of the fluids to the abdominal vifcera.

But when the patient is weak, of advanceã in years, and his ftomach and bowels are in a relaxed and irritable ftate, neither laxatives nor purgatives can be given with propriety. In thefe cafes the laxative glifters, made warm oceafionally with aromatics, anfwer the purpofe of emptying the bowels and bringing away hardened froces, without exhaufting the patient's ftrength by caufing too large an evacuation, which even a mild laxative would fometimes do. Glifters likewife are frequently ufeful in the fit to empty the bowels, even in more robuft conftitutions, when the ftomach is fo irritable. as probably to reject medicines by the mouth, or when a medicine of a different nature is ftrongly indicated, which cannot be conveniently joined with a laxative.

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As foon as the fulnefs of the veffels and the - flate of the ftomach and bowels have been carefully attended to, antijpafmodics, tonics, pectorals and expectorants come into ufe, with a view to take off the fpafmodic conftriction of the air-veffels, and to promote a difcharge of mucus from the lungs. A great variety of thefe are recommended by different practitioners. The antifpafmodics, which are principally employed during the fit, are mufk, camphor, cafor, afafotida, opium, blifters; the tonics are the Peruvian bark, bitters, and (we fhall beg leave to add from a thorough conviction of their utility) the Flowers or Calx of Zinc; the pectorals and expectorants, are oils, mucilages, fquills, garlic, gum ammoniac, and the volatile alkali. Of thefe we fhall fpeak in order, and begin with the ufe of antifpafmodic remedies.

Mufk, camphor *, cafor, and afafotida, are often ufed with advantage as antifpafmodics in the fits of the Afthma, when pure and not complicated with inflammation. They are preK fcribed

[^13]fcribed either in a folid or liquid form, as occafion may require. The reafon why they do not relieve the patient, fo much as one might expect, is becaufe the dofe of them is often too fmall. Ten, fifteen, or twenty grains of good mufk or caftor would act as an ufeful antifpafmodic, when one or two grains have no fenfible operation. In confequence of the antifpafmodic power of thofe remedies, they evidently become expectorants, and promote the difcharge of phlegm from the lungs. As $M u / k$ and Caftor are expenfive remedies, and often adulterated, their operation is lefs to be depended upon than that of afafoetida and camphor. Afafæetida* is frequently prefcribed in large quantity in the fit. Camphor fhould not be given at firft in a full dofe $t$, left its effects on the conftitution fhould be too violent. $\ddagger$

But

* I muft not omit to obferve, that afafretida, though it is an ufeful medicine in the Althma, yet fometimes difagrees with the patient and increafes his diforder. Its tafte and fmell are agreeable to fome, but very offenfive to others.
+ Vide Dr. Alexander's Experimental Effays.
$\pm$ Under the head of antifpafmodics, I mult not forget to mention, that the late Dr. Gregory, in his public lectures, recommended ftrongly the bathing of the feet in warm water, as an ufeful remedy in the pure convulfive Althma, unconnected with plethora. Some too have fpoken well of the effects of ether; it is, however, very uncertain in its operation, and often difagrees in the Afthma.

But opium, as an antifpafmodic, is the moft powerful, and one from the ufe of which we are able to procure the mof immediate and evident relief, both in abating the fits and procuring reft. We give generally fifteen or twenty drops of the tinctura thebaica, or, if a milder opiate be required, one or two tea-fpoonfuls of the paregoric elixir, in a draught, particularly at bed-time, and find that mode of ufing opium preferable to pills or bolufes, for the operation of the remedy is more immediate and certain. Pills are often how of folution in the fomach, and fometimes are never diffolved at all, but pafs whole through the alimentary tube. For this reafon, one feldom ufes opium in pills, or in any other folid form, except where the patient cannot keep a liquid medicine on the ftomach. When pills are indicated, we ufe fimple opium, the pilule Seponacea, or pilula e fyrace; fo that one dofe may contain about a grain, or a grain and a half of opium. The confectio Damocratis and the theriaca Andromaci are ufed by fome as opiates; but there is fuch a farago of ingredients in their compofition, and fome of them of fo inflammatory a nature, that I feldom or never prefcribe them. In fmall divided dofes, opium fometimes anfiwers very well; but, in general, it is found

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\mathrm{K}_{2} \text { more }
$$

more effectual when given in a full dofe, and its operation is more certainly to be depended upon. When we give opium freely, we fhould be particularly attentive to the fate of the lungs; for if the patient be very much ftuffed in his breaft, fmall dofes only are admiffible, as large ones might dangeroufy increafe the accumulation of phlegm in the air-veffels ${ }^{*}$.Opium cannot be ufed with fafety in ful! habits, where there is any inflammatory tendency; till the patient has been bled. But after bloodletting, twenty drops of tinctura thebaica at bed-time is frequently given with great advaintage $t$. When opium is ufed, the flate of the bowels mult be cautioufly attended to, otherwife coftivenefs may be brought on, which is prejudicial in the Afthma. Opium may be fuccefsfully joined to caftor, volatile alkali, and other antifpafmodics.

Blifers are often ferviceable in afthmatical complaints. They may be applied between the fhoulders, upon the arms, fides, or forepart

* Vid. Morgagni, de caus. \& fed, Morb. tom. I. p. 130, lib. II. De Refpiratione Læła - a tenui plumarum pulvere-in which the pernicious effects of opium were manifeft.
$\dagger$ Floyer is very fond of uniting opium with acids, and thinks fach a preparation would be very beneficial in the Althme.


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part of the cheft. In dangerous and obftinate fits of the Afthma they are found of fingular benefit *. We endeavour to prevent ftrangury by the liberal ufe of diluent mucilaginous liquors, by camphor rubbed on the plaifter $t$, or by the interpofition of a little mullin between the plaifter and the fkin. The blifter fhould be removed as foon as it has operated, which is generally within the face of ten, fifteen, or twenty hours, and the water being let out, the cuticle fhould not be taken off, but the dreffings put over it, which will be much lefs painful. The chief ufe of blifters is not for much by their evacuating as by their antifpafmodic power, which is now fo current in medical language, and fo univerfally agreed to by Phyficians, that it is unneceffary here to enter into a difcuffion of the fubject $\ddagger$. In full and plethoric habits, we generally bleed the patient before the application of the blifter. Bliftering is not only ufeful in the pure convulfive Afth-
ma,

* If the Afthma occur in confequence of repelled gout, the late Dr. Gregory, in his public lectares, ufed to recommend blifters or finapifms to the feet.
+ Camphor, ufed in this mannet, is but little to be depended upon. The free ufe of diluents is the beft method of preventing ftrangury.
$\ddagger$ Vid. Obfervations on the Abufe of Medicine. with the humoral, the catarrh, the inflammation of the lungs, of the pleura or mufcles of the cheft.

The next fet of remedies to be employed to take off the fpafm of the lungs, are tonics of the vegetable and mineral kind. The vegetable tonies, here alluded to, are the bark and bitters, which have long been employed; and the mineral tonic is the Flowers or Calx of Zinc, which $I$ have given in many cafes with fuccefs, and, as they are not yet in common ufe in the Afthma, flall beg leave to take this opportunity of recommending them to a more general trial, as being the fureft teft of the real value of any remedy, which may be deemed to merit the attention of the public.

In the fits of the pure convulifive Afthma, when plethora is not prefent, the bark is fometimes given with great advantage. It acts as a ftrengthener, fupports the tone of the fyftem, diminifhes irritability, and obviates the fpafmodic conftriction of the lungs. In many cafes, inftead of caufing a greater tightnefs of the breaft and difficulty of breathing, it tends

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to take off both thofe fymptoms*. The bark is very ufeful in thofe fpecies of the Afthma, which are periodical, returning nearly at ftated intervals, and efpecially when they are ufhered in with any evident figns of an intermitting fever. In thefe it often cures the diforder; but it muft be remembered, that the quantity to be given is confiderable, not lefs than fix drams, or an ounce, when the intervals of the fits are fhort, and four or five ounces or more, when the intervals are fufficiently long. Here too I would recommend Dr. Cullen's method of ufing the bark in intermittents, which is to give the medicine the ofteneft, and in the largeft dofes, juft before the time when the return of the fit is expected + . In other cafes, where the fits do not

## occur

* Floyer mentions a cafe of a Lady who, after many other medicines had failed, was greatly relieved in a long fit by the bark. Her own words are the following: "At lalt I took a.dram of the Jefuir's powder in a cordial-water, and that firft dofe relieved me fo fenfibly, that it feemed to prefs down the ftoppage of my breath, and by repeating that, morning and evening, I perfectly recovered."
$\dagger$ If the fit recur periodically every day, or every other day, fix drams or an ounce of bark in the firft cafe may be given in the interval, and twice that quantity in the laft. -If the fit recur once in eight or ten days, the patient may take balf an ounce or fix drams of bark in the fpace of every awenty-four

> hours;

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occur at any ftated intervals, and the bark is judged a proper remedy, we may, when the ftomach will not bear it in fubftance, or when large and ftrong dofes are not neceffary, give is either in decoction, infufion, or tincture. Bitters likewife are ferviceable as well as the bark; they are given in fimilar cafes, and their ufe is . regulated on the fame general principles. $\dagger$

The other tonic or ftrengthening remedy that we have to mention is the Flowers of Zinc, which, when plethora or fulnefs of blood is not prefent, I have found to fucceed where others have failed. The Flowers of Zinc I firft
gave
hours ; and two or three dofes extraordinary the day before that in which the attack of the fit is expected -I am fpeaking noiv of cafes where the ftomach can bear the medicine, and where there is no extreme irritability in that organ, no fixt obftruction in the langs, nor any other evident caufe which forbids the ufe of the bark.

+ In fome afthmatic fits the ftomach is fo much out of order, that neither the bark nor bitters can be ufed during the prefence: of the fit, on account of the difagreeablenefs of their talte. Other patients can take them, not only with eafe but pleafure. The fame indeed may be faid of almolt all other remedies; for there are many afthmatics who cannot bear ether, volatile faits, acrid aromatic foetid plants, fpirituous waters, (which endanger fuffocation) gum ammoniac, caltor, \&cc. and on account of fhortnefs of breath and general irritability, fome patients can hear no medicine in the fulid form of either pills, bolufes, nor efeetuaries.
gave in the year 1776 ; and I had not heard of any practitioner who had ufed them before that time.

It occurred to me that fince the Flowers of Zinc had been given with fuccefs in other convulfive and fpafmodic diforders, it was highly probable they would be found ufeful in the convullive Afthma. I was certain at leaft that the trial was perfectly fafe. Accordingly in the year 1776 , I prefcribed the Flowers of Zinc in feveral afthmatical cafes in private practice; and in the beginning of the year 1777, I made ufe of the fame remedy in the York County Hofpital; and the utility of it exceeded my expectations. I found it to be a powerfuf antifpafmodic, and at the fame time beneficial in ftrengthening the conftitution. This difcovery I immediately fuggefted to a few friends, and particularly to my worthy and learned friends Mr. Cappe, a Diffenting Minifter in this city, and Dr. Fowler, Phyfician at Stafford. The dofe of the Flowers of Zinc , which I ufually give, is from four grains to half a fcruple, twice or thrice a day. Some ftomachs can bear ten, or even fifteen grains with great eafe, and others cannot bear above two or three grains without naufea. Since my
firft trials of the ufe of Zinc in the convulfive Afthma, I found in the Medical Commentaries chefter, in confequence of the recommendation of his friend Dr. Dobfon of Liverpool, has given this remedy in a difeafe, fimilar in fome refpects to the one above-mentioned; and I read with fingular pleafure (as 1 have done every thing which has come from fo able a pen) two or three cafes, fetting forth the advantages of Zinc in obftinate coughs of the convulfive kind *. I was happy to obferve that the practice : * " Mrs. P. aged 28, a Lady whofe conftitution had been much impaired by frequent child-bearing, was attacked with a fevere Althma of the nervous kind, in the winter of the year 1776. The Althnaa was cured by the ufual methods of treatment, but left behind it a deep convulfive cough, the fucceffions of which were no lefs frequent than violent. Gum ammoniacum, paregoric elixir, fp. nitri dulcis, and other remedies, were fucceffively tried. Little or no relief being obtained, I had recourfe to the Flowers of Zinc, beginning with half a grain twice in the day, and gradually increafing the dofe to a grain and a half. The beneficial effects of this antifpafmodic were foon vifible, and in eight or ten days the patient was freed from her cough. A relapfe afterwards occurred from cold. The fame medicine was repeated, and the cough again yielded to it as before.
"T. B. P. a youth about ten years of age, had a deep hoarfe cough, without any expectoration. The found of it was very unufual, and not to be defcribed; and it was attended with a quick, feeble pulfe, flufhings in the face, and pain in the breaff.

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practice of fo accurate and learned a phyfician, coincided with my own.-I have fubjoined fome cafes of the Afthma at the end of this Treatife, in which I have ufed the Flowers of Zinc with fuccefs.

The laft remedies, which we have to mention in the practice during the fit, are pectorals and expectorants.

Oils, mucilages, and Spermaceti, are mild and ufeful pectorals, and are prefcribed with advantage in many cafes of the Afthma. They are not of a heating inflammatory nature, and therefore are frequently given in this diforder in dry bilious conftitutions, in plethoric habits, $\mathrm{L}_{2}$ or

Every morning, about two o'clock, the cough recurred with great violence, and continued almolt without intermiffion till four or five. There was reafon to fufpect worms, and I had been careful to cleanfe the primae viae on the firft attack of the diforder. A folution of fperma ceti and gum ammoniac, with a few drops of tinct. thebaic. having no effect, I had recourfe to the flowers of zinc. Half a grain was given at noon, and the fame dofe repeated at bed-time. The night paffed with only a flight return of the cough ; and, by continuing the ufe of this remedy, the youth perfectly recovered in a few days."
In the firlt of thefe cafes, related by Dr. Percival, the cough followed the afthma, and was cured by Zinc. After curing the afthma with Zinc, I have likewife often cured the cough with the fame medicine.

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or where there is fome degree of local inflammation in the breaft. For this purpofe they are joined with faline medicines of the antifpafmodic kind, fuch as nitre, fal ammoniac, the faline mixture, the fpirit of Mindererus, and the diuretic falt, which determine to the furface and promote perfpiration *. In fome cafes, however, when the patient is loaded with phlegm and troubled with fymptoms of indigeftion, oils and mucilages are found to clog and diforder the ftomach.

Squills, garlic, gum ammoniac, and the volatile alkali are ufeful expectorants; but as they are of a more active, as well as heating nature, they cannot be given in the Afthma, when plethora and inflammatory fymptoms prevail. But when thofe are removed by proper evacuations, and particularly towards the decline of a fit, when

* " As to fweat, in a fevere fit it is very great fometimes, and in bed very hot, and without any benefit to the althmatic. 1 have often taken fpirit of hartfhorn to produce fweat, and to put by the fit, but it had not that effect, but made the following fit more violent." - This opinion of Floyer feems well founded, and he has, therefore, done well to exprefs it in direct terms. I have often feen profufe fweating very pernicious in the Althma, but never beneficial. It renders the coniltitution tender, relaxed, irritable, and more fubject to take cold.
when nature is endeavoring to relieve herfelf by an expectoration of phlegm, fquills, garlic, gum ammoniac, and the volatile alkali are ufeful remedies. For when the difcharge of mucus is in fmall quantity, they are thought to encreafe it, and, when it is thick and vifcid, to render it thinner and more eafily to be expectorated. Thefe medicines are likewife very beneficial in phlegmatic conftitutions, and where the humoral Afthma is complicated with the convulfive. In thefe cafes, it is highly requifite to promote expectoration, and the relief obtained by it is confiderable. To thofe who cannot bear the tafte of fquills, gum ammoniac, \&c. wafer paper is very convenient for concealing it, either in pills or bolufes. The acetum foilliticum, the oxymel fcilliticum, and the tac ammonicoum, are very ufeful preparations of thofe remedies, where the palate and fomach of the patient can bear them with eare *.

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We proceed now to the laft part of this treatife, which confiders the means of prevent-

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## Part II.

We proceed now to the laft part of this treatife, which confiders the means of preventing

* Foyer is particularly fond of the vinegar and oxymel of Squills, which he recommends as excellent remedies. He calls the vinegar of quills Galen's bitter acid, and fays that " taken at bedtime, it often puts by the fit."
ing relapfes in afthmatical complaints, and a moft effential part it is, Many of the rules and obfervations, which tend to prevent the returns of the difeafe, will tend alfo to prevent the firft attacks of it. The practice in the intervals of the afthmatic fits comprehends regimen as well as remedies, both are very important, and neither of them alone fufficiently to be depended upon. We fhall begin with pointing out a proper regimen.

The firft thing to be mentioned is the fate of the atmofpherical air, ferving the purpofes of refpiration, with regard both to purity and temperature.

Pure air is highly requifte to the health of the human conftitution; but it is particularly grateful and refrefhing to the afthmatic patient, His lungs are often obitructed, there is not a free paffage for the air, a lefs quantity of it is infpired, and confequently that quantity ought to be as pure as poffible, that it may fupport properly the functions of life. Hence the country is found far preferable to large towoms, in which the fmoke, duft, putrid exhalations, and other impurities of the air are very offenfive to
the afthmatical: For though the air of towns, from fome peculiarities of conftitution, may agree better with a few, than country air, yet this is no argument againft the general fact. The inhabitants of towns, as we before obferved, are lefs expofed to changes of weather, than thofe who live in the country, and this may be one principal reafon why the country is fometimes faid to difagree. A dry ftate of the air, which by its heavy preffure makes the Barometer rife, is obferved to be the moft favorable to thofe who are afflicted with this difeafe. Hence the intervals are longeft in a dry feafon, and particularly in calm frofty weather, when the mercury ftands high. The Weft and North winds are in this country found the leaft prejudicial*.

To preferve the purity of the air, we ought frequently to have recourfe to ventilation. If we negiect this moft neceffary practice of ventilating houfes, the air within doors will certainly be impregnated with noxious vapors, exhaling partly from our own bodies, and partly from thofe around us. In vain any one will hope to enjoy the benefit of the country, M if

> *loyer,
if he conftantly lives in a fonall clofe room, from which he excludes, with all poffible caution, the admiffion of freft air. Doors and windows ought frequently to be opened, that the air in all the different apartments of the houfe may be changed. This is not mentioned as matter of indifference, but of abfolute neceffity. For this reafon too, a conftant ventilator in fmall rooms is very falutary. Afthmatics are ftrangely deceived if they imagine that pure frefh air is injurious to them. Are they not often obliged to fly to it for the fupport of life? Wher the fit attacks them, do they not often rưh out of bed into the cool air? Is that likely to be pernicious at the commencement of the Afthma, which is abfolutely neceffary for the exiftence of the patient, when the diforder has gained ftrength and is become worfe by duration?-It is an excellent practice for a perfon generally to leave the door or window of his room open when he goes out of it, that he may find a pure freffr air within when he returns. If this practice is conftantly attended to, the patient will find great benefit from it ; and the neglect of it, as daily obfervation proves, is very detrimental to health

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## ON THE ASTHMA.

With regard to the temperature of the air, I have already obferved that external beat is a powerful caufe of the Afthma; that it produces weaknefs and irritability of the lungs, predifpofes them to convulive affections, makes the conftitution tender, and very liable to be injured by cold, and fudden changes of weather; in confequence of which the patient is fubject to catarrhs, winter coughs, peripneumonies, tubercles, and obftructions; which alfo weaken the lungs, encreafe their irritability, and lay the foundation for afthmatical complaints,

Nothing can, in my opinion, be more contrary to the true plan of preferving health, than that which is followed by the bulk of mankind. In the firft inftance, thoughtleffnefs, ignorance, or an abfurd compliance with cuftom, leads many to fit in clofe rooms, near large fres, and to lie bot in the nigbt. If they perfire very much in bed, they do not give themfelves the trouble to reflect upon the caufe, but continue on in the fame way, although, in confequence of too much covering, they are fo hot, that they cannot fleep with any degree of comfort. By this method of proceeding, their conftitutions become tender, and they take cold from change of weather, or fome
other nlight caufe, which terminates in a cough or catarrh. To remove this indifpofition, (which a little common prudence would do much more effectually and in a fhorter time than great care) the patients confine themfelves to their room, are kept ftill warmer in the day, and by lying with more covering in the night, and drinking plentifully of warm diluting things, endeavor to fweat profufely, under an idea of obtaining relief. After much relaxation of the conftitution, with encreafed irritability of the lungs, they find themfelves, perhaps, in four or five weeks, free from their difeafe, and again venture abroad. In this fituation it frequently happens, that they get another cold, blame fome trifling circumftance, are vexed at themfelves, refolve to be more cautious for the future, and again enter upon their former plan of cure. This ftate of the conftitution and mode of treatment, is particularly unfavorable in the autumnal feafon, when winter, and perhaps a cold changeable fpring, prefent before their eyes a dreary melancholy profpect. Thus one cold fucceeds another,-the cough, with expectoration at times, continues all winter, goes off in the fummer, returns again in the autumn, changes into what is termed a winter cough or the

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humoral Afthma,--ftuffing and fhortnefs of breath fuperyene, with fudden tightnefs over the breaft, and difficulty of breathing. In this way the convulfive Afthma in irritable habits is added to the humoral-both difeafes encreafe together-obitructions in the lungs form, and the malady is frequently rendered incurable, An unnatural degree of heat is often the principal caufe of the complaint, though, unhappily for the diftreffed patients, it is, perhaps, confidered by them as effentially requifite to the cure,

Now to prevent thofe evils is matter of the utmoft importance. The eafe, the comfort, and welfare of thoufands depend greatly upon it. This diforder robs us daily of many ufeful and valuable members of fociety.

The method of prevention, which, I believe, would commonly be fuccefsful, is comprehended in few words; and it will not only anfwer that important end, but alfo contribute much to preferye the whole conftitution from nervous irritability, general weaknefs, and many other complaints. It requires that we caft off the effeminacy of the prefent times, abandon the deftructive luxury of heat, and compelled
by
by unanfwerable reafons and long experience, return to follow that line of conduct, whicla Providence originally intended for us, and swich alone is fuited to the nature and flructure of our conftitutions,

One of the moft ufeful maxims which can be advanced on this fubject, is To aroid much artificial external warmith, and to breatbe always a cold or temperate air, but never a beated one; a maxim, which if univerfally known and adopted, would contribute greatly both to reftore and to preferve the health of the human fpecies.

We are not here recommending cold in the extreme; for a practice, founded on fuch a principle, ought certainly to be deemed rafh and abfurd. The medium is fafe, but all extremes are dangerous. If the room be fmall; let the fire be fmall; if the room be large, let the fire be large in proportion; but in neither cafe fhould the patient be fo near it, as to breathe a heated air. In very fmall clofe rooms, whether ufed as parlours or bed-chambers, the air flould be frequently changed by ventilation,

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ventilation, with 2 view to moderate its temperature ${ }^{*}$.

At nights the curtains fhould always be undrawn at the feet of the bed; and partly at the fides, both in winter and in fummer. To have the curtains drawn clofe is very unwholefome. The covering of the body fhould be fuch as will maintain a moderate, but a fufficient degree of warmth, without inducing a copious perfpiration, or a burning heat. It fhould be greater upon the feet, than upon the breaft; for if any part of the body be cold, it is generally the lower extremities, which are moft diftant from the beart, and is which the circulation of the blood is the moft languid. Part of the covering of the bed may confift of loofe things, as a coat, furtout, \&c. The blankets and counterpane fhould come fingle up to the chin, and not, as is commonly the cafe, lie double over the breaft, for if they, do, they often load the patient, impede refpiration, and towards morning heat the body to an unnatural

* We juft before obferved, when fpeaking of the purity of the air, that a ventilator in fmall rooms was very ufeful, and that a door or window fhould at proper times be frequently fet open. The fame, practice is highly requifte to render the air cool and cemperate, and to prevent the bad effeets of the excefs of heat,
unnatural and unwholefome degree. The loofe part of the covering at nights fhould be more or lefs, not only according to the feafon of the year, but alfo according to the prefent ftate of the weather at that time. Nothing can be more unnatural, than to have the fame quantity of bed-cloaths in winter and in fummer, or in the depth of winter and in the middle of fpring, or even in foft mild winter weather, and an intenfe froft*. Such conduct, though too common, cannot be defended on the principles of the prefervation of health. The brute creation, in this inftance, fet us a better example; they feek fhelter, more or lefs perfect, according to the feverity or mildnefs of the weather, and thus follow that courfe through inftinct alone, which both reafon and inftinet recommend to us. One advantage of having fome loofe cloaths upon the bed, is the eafe with which they may be caft off in the morning, when we feel ourfelves growing too warm and difpofed to fweat; for morning fweats are very hurtful, and fometimes even dangerous

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in this diforder. The feather-beds, on which we lie, fhould be fufficiently hard, or covered with a mattrefs to make them fo. A foft bed is yery heating and unwholefome.

With regard to the drefs of the patient through the day, it fhould be various according to his age and conftitution, to the duration and violence of the difeafe, and to the feafon of the year. A young man of an active turn of mind, in whom the difeafe is juft commencing, ought not to clothe himfelf like an old inactive man, borne down with the infirmities of age and long illneffes. A ftrong conftitution requires lefs covering than a weak one. But in cold weather, it is very proper in general for all afthmatic patients to be well clothed, that perfpiration may not be fuddenly checked. Yet a load of fuperfluous clothing is extremely hurtful, in confequence of its power of relaxing and weakening the conftitution, and of inducing a difpofition to profufe fweats, by deftroying the tone of the exhalant veffels, which open upon the furface of the fkin. It is, however, far better to have the body kept warm by proper clotbing, than by fitting in warm rooms near large fires, and breathing a hot air, for the pernicious inN
fluence
fluence of the laft is more immediately fele upon the lungs. A flannel waifcoat, warnn flockings, and a pair of warm frong fooes with cork Soles, cannot be improper for one of advanced years, laboring under this difeafe, whofe exetcifes are always moderate and regular. But with regard to the young and ftrong, who delight in more active exercifes, it is not fo clear whether a flannel waiftcoat be advifeable or no. If they be fond of fhooting, hunting, and fuch like diverfions, a flannel waiftcoat will often be found very heating. To patients of this turn one would rather advife the ordinary drefs of the country, and inftead of a flannel waiftcoat, recommend the occafional ufe of a furtout in very cold weather, when their exercife is moderate. But if a flannel waiftcoat be worn, it fhould be above the fhirt and frequently changed *. The difficulty lies in cafting any additional clothing, as the warm weather comes on, and particularly to the thoughtlefs and inexperienced. But when

* If the patient be extremely tender, or fo weak as to be fubject to fiveat profufely, it may not be imptopet in this cafe to wear the flannel wailfcoat next to the ffin -In fome cafes too, under fimilar circumftances, a calico wailtcoat is worn with advantage, when a flannel waiftcoat is too warm. The calico waittooat fiould be next to the fk in , and frequently changed.


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a young man, reduced by the difeafe, is unable to engage in any active exercifes, and is become as regular in his motions and conduct, as thofe of a more advanced age,-to fuch a one a flannel waittcoat in the cold months of the year, is often comfortable and falutary.

The afthmatic patient fhould avoid large parties in finall rooms, and all croovded public places, in which the air is hot and impure. A few hours fent at a place of that kind, efpecially on a crowded night, may deftroy all the good effects of twelve months prudent conduct.

Now if it fhould be afked whether or no the afthmatic patient, who has always run into the extreme of heat, as well by fitting in very clofe rooms, as by lying very hot in the night, and loading his body with fuperfluous flannels in the day, fhould endeavor to alter that manner of living, to which he has been fo long accuftomed, -the anfwer is given in the affirmative. But the change here recommended, is not to originate from a fudden hafty thought to be executed in a moment; it is a cautious gradual cbange, from a pernicious unnatural mode of living, to one which is agreeable to the laws of nature, confiftent with the frame of the

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human
human confticution, and, I will be bold to: add, founded on juft principles and fuccefsful experience. I fay a cautious and gradual change, for any other change would be dangerous in the higheft degree. Fortunate are we, if we have never acquired thofe pernicious habits; but when they are once acquired time and care alone can extricate us from them. Firft one little error fhould be corrected, and then a fecond. The feafon of the year, and the ftate of the weather fhould be taken into confideration. Spring and fummer is a moré favorable time, than autumn and winter. But proper changes may be ventured upon at any feafon of the year, for it is abfurd to continue on in that plan, which is fixing the diforder and ruining the conftitution. To make the change which is here propofed, will require often a confiderable length of time, not lefs than years, if the habits are bad, and have been long eftablifhed. The fmalleft alterations are to be made at once; and when made, they ought to be fteadily continued. If during the change, which is begun deliberately, and fixt upon with judgment, a relapfe of a fir fhould take place, the patient fhould not return to his former habits, but he fhould confider how many fevere relapfes he has already
bad-confole himfelf with the idea of more mild and lefs frequent returns of dhe fits,-and adhere with firmnefs to what experience has proved to be right. Relapfes are to be expected, and the more tender we are, the greater probability there is, that relapfes fhould occur. But thefe are to be borne with patience, under the pleafing profpect of better times, for they would have occurred had no changes at all been made. I am fpeaking now to thofe patients in whom there is a chance of recovery. But with regard to thofe who are old, decrepit, and paft all hopes of a cure, or where the vital power's are dangerounly exhaufted at an early period; to them the prefent advice, in its full extent, is not directed. A plan of treatment that would be proper for a perfon of thirty or forty, of a found habit of body, would ill agree with one of feventy or eighty. Eafe in the laft cafe is all that can be expected, but a cure, in my opinion, ought to be attempted in the firft. We know the tafk is arduous, but the bleffing of health will amply repay the trouble, even tho' it fhould require feveral years to eftablifh the cure.

With regard to diet, as the ftomach is often weak and relaxed, much care and attention is neceffary.
neceffary. Symptoms of wind, indigeftion, colic pains, heart-burn, coftivenefs, want of appetite, and many others, which are attendant on chronic or general weaknefs, occur frequently in afthmatical cafes, This fubject has been very fully and carefully confidered in a pamphlet, which I lately publifhed on Chronic Weaknefs, and therefore it would be improper here to enter again into a full difcuffion of it *. The caufes and nature of chronic or general weaknefs of the whole conftitution, ought to be minutely inveftigated and well underftood by every one, who wifhes to practice with fuccefs in the healing art.

The diet of afthmatical patients fhould be mild, eafy of digeftion, and without any high feafoning. Plain meats, without fat or grealy fauces, are the moft proper, along with a moderate quantity of vegetables, when the fomach can digeft them. The ftomach fhould never be over-loaded at any one meal, for that prevents the free action of the midriff, creates a great impediment to refpiration, and gives much

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much uneafinefs in the Afthma. We know that afthmatics are often fond of high-feafoned difhes, and eat them with pleafure; but moderate feafoning, which may be allowed, is certainly lefs heating and much fafer. Any kind of $f / \sqrt{3}$ which is not too rich and glutinous, is by no means improper in this diforder, when eaten with relifh, and digefted with eafe ; but affords, on the contrary, a mild wholefome nourifhment to the conftitution *.

Whatever creates wind, flatulencies, and acidities, ought to be carefully avoided by thofe whofe ftomachs are weak and delicate. Vegetables, in fome cafes, difagree, partieufarly cabbages, cucumbers, cold fallads, and fuch like. Every one, in thefe inftances, muft judge for himfelf, and his own experience muft direct him $\dagger$. Vegetables, where they agree
> * Some are of opinion that all firh is unwholefome in the Afthma, and affert that it creates much phlegm ; but this opinion is not well founded.

+ Floyer (as well as many other Afthmatics) found the following things to difagree with him, viz. pyes, cakes, heavy pudding, flour meats unfermented, jellies, crude flimy flatulent meats, as herbs, fallads, mufhrooms, peas and beans; but good bread, well fermented, well baked, with the bran not too much dreffed out, is very wholefome food in the Althma, along with plain meats.
agree with the flomach, are very wholefome in themfelves, and it rarely, if ever happens, that all vegetables difagree. Bread, rice, potatoes, afparagus, artichoaks, or fome others of the ligbteft kind, will be found of eafy digef-tion.- Fruits fhould never be eaten on a full ftomach, for which reafon, deferts after dinner are very improper for the Afthmatical. Ripe fruits, either frefh or dried, taken on an empty ftomach, are not to be forbidden, when they do not difturb digeftion; for they are cooling, highly antifcorbutic, fomewhat opening, and therefore very ufeful in inflammatory conftitutions. If the ftomach be fo weak, that fruits create wind, acidities, or pain, they fhould be avoided, and the diet fhould confift of mild meats, and be of a more folid reftorative kind.

Cows' milk, affes' milk, and goats' whey are wholefome food, and are often very proper in afthmatical cafes; but the fromach fhould never be loaded with too large a quantity at once *. Some people, neverthelefs, cannot ufe

* Dr. Millar is a ftrong advocate for milk.-Goats' whey is drunk to great advantage in the Highlands of Scotland; and as a long journey is often very ferviceable to the afthmatical, an excurfion


## ON THE ASTHMA. IO5

ufe milk in any form, not even in a diluted ftate; they find that it clogs and oppreffes the ftomach, or induces coftivenefs.

Malt liquors, if the digeftive organs be fufficiently ftrong to bear them with eafe, are not improper, when moderately ufed; and many afthmatics efteem them highly. Small beer of a proper age, well fermented, and drunk out of the cafk, may generally be ailowed. Good found ale too, of the fame qualities, is fometimes very proper. But when the flomach is weak, all malt liquors are apt to create wind and acidities; in which cafe they are pernicious, Tonft and water by irfelf, or with a little wine of a good body, is to be advifed. If wine turn four on the ftomach, water alone is very proper, and it may occafionally be mixt with a fmall proportion of rum or brandy. The moderate ufe of fermented liquors is neceffary in afthmatical diforders, when there is any gout in the 0 conflitution,
excurfion of that kind in the fpring or fummer months, is fometimes attended with the happieft effects, efpecially if it fuit the patient's tafte, and be conducted with proper care and judgment. Confumptive cafes, likewife, have often been greatly benefited by fuch a journey, where change of air and exercife are united, along with a mild cooling diet, confifting chiefly of goats' whey, milk, and regetables.

## so6 A TREATISE

conftitution, or in people reduced by the difeafe, or far advanced in years. In the young and plethoric, a spare diet, confifting chiefly of milk and vegetables, without any frong liquors *, is found, by experience, to be the fafeft and beft. But thefe things muft be determined by the attending practitioner, from a careful inveftigation, and an accurate knowledge of the patient's conftitution. - Tea and coffee, as they not only relax the nerves, but encreafe irritability, and diforder the ftomach, are for the moft part improper.-Acids, particularly the juice of lemons and oranges, are ferviceable in fcorbutic, inflammatory conftitutions, and when moderately ufed, agree often with the afthmatic patient. They may be mixed with water alone, or fometime's with a little wine and water as occafion may require. But in cafes of weak ftomachs, they often create acidities, and diforder the patient to a great degree $\dagger$.

Exercije

* Floyer advifes a pint of water to be drunk in a morning, and a gill at noon and at night; and afferts that if fermented liquors were not ufed, the afthmatic fits would be rare. Water with a toalt in it, agreed beft with him, and frequently put off his fits.
+ Floyer recommends the ufe of acids and acefeents very ftrongly in the Afthma, and affirms that no Afthma can either be cured or prevented without them, They are particularly
axercije in the interval of the afthmatic fit is extremely beneficial. The good effects of it on the conftitution, as well in diminifhing plethora, as in removing irritability, and ftrengthening the whole frame, we have hadoccafion to flew in former publications. It is hardly neceffary to add, that too much can never be faid in praife of it, when proportioned $\mathrm{O}_{2}$
proper in fummer, at which time too he thinks the more cooling remedies are to be advifed, fuch as vitriolated falts, fal ammoniac, fal prunel, fal fuccini. The acids and acefcents which he recommends are, the tartarous acid,-verjuice,-vinegar,-mineral acids,-acid vegetables and fruits, as forrel, barberries, grapes, lemonade, lemon-poffet-drink, butter-milk, decoetions of pippins, conferve of forrel and hyps, rob of barberries. Floyer further advifes the patient to acidulate his meats and drinks. But all thefe things flould be ufed with proper reltrictions, as fometimes they ferment, diforder the ftomach, and occafion griping pains and acidities, particularly in hypochondriac people. Floyer thinks acids are the beft correctors of opium, bitters, gum ammoniac, \&c. and greatly improve thofe remédies in althmatical cafes ; for he properly confiders all very hot medicines as hurtful. He ufed very much what he ftiles his bitter: Acid, of which the following is the recipe. R. Rad. zedoarix ${ }_{3}$ i. coq. in Aq. Font. 战 ij. ad fib ifs. Colature adde aceti, $\frac{3}{3}$ iv. in quibus diffolvatur ammoniaci $\frac{3}{3}$. Colaturæ adde mellis $\overline{3}$ iv. Coq. \& defpumatur \& coletur. When he found his Afthma coming on he took three fpoonfuls of that bitter acid, and drank after it toaft and water, which, he fays, allayed the inflations of his ftomach, and put off the fit. He continued this remedy fometimes for fourteen nights together; and fometimes he ufed to take the fame dofe morning and evening for feverak months.
to the flrength of the conftitution, and to the degree of the complaint. Young people, in whom the diforder is commencing, may, if they have no natural deformity of body which render's it unadvifeable, ufe exercife freely, on foot or horfeback *, efpecially if they are fond of rural diverfions, fuch as farming, botanizing, fhooting, hunting, \&c. Thafe who are in years, of a grofs corpulent habit, or of an emaciated conftitution and deformed perfon, who have been long and heavily afficted with the difeafe in its complicated ftate, cannot bear ftrong exercifes, To fuch, gentle motion in a carriage, on horfeback, or by failing, is preferable to bodily exercife or labor, which, by quickening the circulation too fuddenly, is found to opprefs the lungs, to difturb the freedom of refpiration, to fatigue and exhauft the patient. When joined with moderate exercife, the advantages likewife of cool frefh air in afthmatical cafes, are rendered ftill greater. I would not wifh to be underftood to condemn waiking, as improper, where it can be borne with tolerable eafe; fince it is the only exercife that many patients are able to make ufe of, and I have feen

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feen it prove remarkably ferviceable. Floyer very juftly obferves, "That they who ufe no "exercife in the intervals of the fits, foon fall " into cachexies, lethargies, dropfies through "too much ferum, lofs of appetite and com"fumption, for want of perfpiration and ex $X_{-}$ "pectoration."

The occafional caufes, which bring on the fits, ought to be clofely attended to by the patient himfelf, as well as the practitioner. In this refpect, the convulfive Afthma refembles the epilepfy, hyiferics, intermittents, and other nervous diforders, which return by fits. The avoiding of occafional caufes is of the utmoft confequence in the Afthma; for the more frequent the returns of the diforder are, the difpofition to them in the conftitution becomes ftronger and the cure more difficult. If unaccultomed cold, moifture, or fudden changes of weather, bring on the fits, the patient fhould endeavor prudently to guard againtt the effects of thofe; but fhould not, at the fame time, run into the oppofite extreme. Duft, metallic fumes, fmokes, and all particular fmells, ought to be carefully avoided. I mentioned the cafe of a gentleman, in which the fmell of new feather-beds bring on his fits. Nothing, furely,
furely, would be more abfurd, than for him to continue to fleep in fuch a bed, which in time would fo diforder the lungs, as to render them liable to convulfive affections from other flight caufes. Any trade or bufinefs, if it difagree with a patient, fhould, if poffible, be changed, otherwife it will be extremely difficult, if not totally out of the reach of art, to cure the difeafe. For if dutt, fmoke, metallic fumes, \&cc. firft induced the Afthma, they will, if applied to the lungs, continue to encreafe it. All great evacuations by fweating, bleeding, or purging, as well as exceffive fatigue, and violent motion, fhould be avoided; becaufe they weaken and exhauft the conftitution, and bring on the fits. Shouting, public fpeaking, finging, and all other ftrong exertions of the voice are very pernicious, efpecially if the lungs be weak, and the patient be of a fcrofulous habit. All afthmatics fhould endeavor fo to govern their tempers, that fmall caufes of offence may not excite the paffion of anger, and, along with it, a fit of the Afthma. Exceffive ftudy and very clofe application of mind is hurtful, as well as all furfeits, debauches, exceffes in venery. The depreffing paffions, fuch as grief, fadmefs, \&cc. are to be moderated as much as pof.
fible;
fible; for they diforder the nervous fyftem, impede the circulation of the blood, check perfpiration, and often induce a fit.

Having faid thus much concerning regimen, we proceed to confider the remedies which are to be employed in the intervals of the Athma.

With a view to practice fuccefsfully during the intervals of the difeafe, it is neceffary to attend carefully to the patient's conftitution, and to the accuitomed frequency of relapfes. If the fits be fhort and frequent, recurring (for example) once or twice in twenty-four hours, and lafting only about half an hour or an hour; the remedies, whether of the ftrengthening or antifparmodic kind, are generally given in the intervals of the diforder. If, on the contrary, the fits be long, with great intervals, the remedies, which have been already mentioned, are, during the time of the fits, to be employed; and we muft now proceed to point out, what particular practice is found to be the moft fuccelsful in the intervals, for preventing relapfes.

In all cafes of the Afthma we ought to confider whether the patient be of a full and pletboric,

## A TREATISE

or of a weak and relaxed conffitution; -whether the lungs be found, or obftructed with tubercles;whether the Afthma be purely convulfive, or, what is much more frequent, complicated with a wointer cough. From the confideration of thofe particulars, joined to others, which will naturally arife in the difcuffion of the fubject, we fhall endeavor to draw the neceffary diftinctions, and to lay down the ufeful rules of practice, without entering into theoretical difquifitions, unfupported by facts.

1. If the patient, who is fubject to the Afthma, be of a full and corpulent hábit, we ought, in this cafe, to regulate our practice, under the general principle of diminibing corpulency and fulnefs of the veffels. For this purpofe, befides a low diet * and regular exercife, or rather gentle labor, (which are of the utmoft importance) it may not be improper, occafionally to advife blood-letting, when previous habits, with a fenfe of fulnefs and pain in the breaft and head,
feem

* "The lefs Althmatics are nourifhed, the longer are the " intervals of the fit, and the clearer is the breath; for if we "eat moderately we fubtract the quantity of our chyle, and we " better digeft what we take, but any excefs raifes a tumul" tuous fermentation in the ftomach and blood, which produces "a rarefaction in the fpirits. So true is Hippocrates's obfer"s vation, If a man eats and drinks little be Jball have no dif"eafe." Floyer.


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feem to indicate it. But the unneceffary ufe of the lancet ought cautioufly to be avoided, for it would encreafe the difpofition to plethora in the conftitution, and fo tend to quicken the return, and aggravate the fymptoms of the difeafe. When laxatives and purgatives are indicated by coftivenefs and plethora, there are, befides thofe kept in the fhops which we have already mentioned *, Sea water, Harrowegate water, and the water at Thorpe-Arch, which are found in fome cafes to anfwer well. The virtues of the laft, as a laxative, are of a much weaker and milder nature than thofe of the two firft. Saline and nitrous mixtures, the mineral acids, fuch as the marine and vitriolic, decootions of cbina, of farfaparilla, छ̇c. may be employed with fafety and advantage. Antifpafmodics, camphor, afafatida, mufk, caftor, valerian, may be occafionally ufed. Ifues and fetons, in this cafe, are often very ferviceable. When, likewife, by time and proper means the fulnefs of the veffels is removed, and a general irritability remains, bark, bitters, cbalybeatest, Bath P water, * Vide p. 71.
$\dagger$ Chalybeates, fuch as rubigo \& limature ferri, fal martis, and chalybeate-waters, can only be ufed, when chronic weaknefs is combined with the Althma; for in other cafes, particuharly
water*, Sea batbing and the cold bath $\uparrow$, may often be advantageoully prefcribed; and if the difeafe be fufficiently urgent to require them, I muft recommend ftrongly large dofes of the flowers of zinc, from the cautious ufe of which, in the intervals of the Atthma,
larly when plethora prevails, they are very hurtful. Neither will they, in all cafes of weaknefs, agree with the conffitution. They did not agree with Floyer. But a few exceptions are not a fufficient objection againtt their ufe in the interval of the fits. Floyer himfelf has prefcribed them to others with advantage; he mentions patients who were relieved at the German Spa; and Dr. Nillar, in his Obfervations on the Afthma, recommends them. Dr. Fowler, Phyfician at Litchfield, thinks the falt of fteel more Itrengthening, in bodily weaknefs, than the bark; a fact afcertained by his own experience and repeated obfervations, which therefore may be relied upon with the greatelt confidence. The dofe of the fal martis (he properly obferves) mult be adapted with exactnefs to the ftomach of the patient.

* Floyer drank the bath waters and recommends them, particularly in cold, corpulent, fluggifh conltitutions; but he fpeaks againft bathing in them, as it opens the pores and fubjects the patient to take cold. Yet he candidly mentions (p. 180) fome cafes communicated to him by Dr. Tyfon, in which bathing in the bath waters was ufed with great advantage. Dr. Falconer, in his Treatife on Bath-Waters, p. 385 , obferves, that they "are often of great ufe in the intervals of " the paroxifms, in preventing their returns."
$\dagger$ Dr. Millar is of opinion that the cold bath in the intervals is extremely ufeful, and preferable to all other tonics. He mentions feveral cafes of its fafety and fuccefs in preventing relapies.


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I have feen the happieft effects in preventing relapfes. Thus, by the judicious employment of tonics, the fixt local weaknefs and irritability of the lungs is moft fuccefsfully obviated. All hot ftimulating medicines in this, as well as in all other diforders accompanied with plethora, are highly dangerous and improper.
2. But if, inftead of being full and plethoric, the patient be of a weeak, relaxed, and irritable conftitution, fubject to the common fymptoms of indigeftion, then he muft be confidered as laboring under chronic or general weaknefs, and the practice, in the intervals of the Afthma, mult be regulated on the fame general principles, as the practice in that difeafe ${ }^{*}$. Pure cool air, regular gentle exercije, a spare, but reforative diet, joined to the proper ufe of emetic, laxative, Atrengtbening, and antijpa/modic remedies, are to be advifed, as promifing the faireft to be fuccefsful. The moderate ufe too of cordials is by no means to be prohibited. The antifpafmodics and tonics, which may be employed, we have juft mentioned + . The cold bath and fea batbing, at a proper time of the year, are particularly ferviceable in this

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\mathrm{P}_{2} \quad \text { cafe, }
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* Vid. Treatife on Chronic Weaknefs. †Vide p. y_3.

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cafe, when the patient is not too weak, when the lungs are free from obftructions, and there is no obftinate complication of the humoral Afthma. This practice will ftrengthen the whole conftitution, diminifh irritability, and obviate the unnatural delicacy and tendernefs, which is acquired by imprudent expofure to heat. But if the conftitution be fo weak, as not to be able to bear cold-bathing, temperate batbing will be requifite, and, for this purpofe, the patient may refort to Buxton* or Matlock Wells.
3. If fcrofulous obffructions or tubercles of the lungs occur along with the convulfive Afthma, they will require great attention in the intervals, left, by neglect, the patient fhould fall into a deep confumption. Knots or tubercles in the lymphatic glands of the lungs, are a very common difeafe; but the diftinguifhing or diagnoftic marks are of an ambiguous nature. This affection is often confounded with

* Dr. Hunter, who is ever attentive to the public good, has not only been one of the firlt and principal promoters of a moft excellent inftitution for the reception of Lunatics near the city of York, but has, at a great expence, provided Medicated Baths, one of whiclr he has proved, by many well-grounded facts, to poffefs every quality of the Buxton Wells. Thofe in this neighbourhood, therefore, to whom it is not convenient to vifit Buxton, may have the benefit of this Medicated Bath,


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the catarrh. Hence practitioners have frequently confidered a cafe as a common cold; when, in a few months, the patient has died of a pulmonary confumption. The reverfe likewife is true; for many, laboring under a fimple catarrh, have been thought deeply confumptive, who, neverthelefs, were perfectly cured in a few weeks, by the very fame perfon who had pronounced their diforder fatal.

A cough may be fufpected to arife from tubercles, when it does not occur from evident cold ; when it does not begin with ftuffing in the head, hoarfenefs, or any difcharge of mucus from the nofe and throat; when it not only occurs in the fpring, autumn, or winter, but alfo in the fummer; when it is attended with fhortnefs of breath, particularly on motion; when it is not full and violent, but often trifling, fo as even to be denied by the patient; and when it does not go off in a few weeks, but continues many months. Our fufpicions are rendered much ftronger, if the lungs have been feverely injured by the mealles, local inflammations, or other complaints; and they are altogether confirmed, if, with the above circumftances, the patient be of a thin fcrofulous habit, of a fine delicate complexion, with fivelled

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fwelled lips, glandular fwellings in the neck, and a hectic fever. We may add too fymptoms of a fcrofulous affection in the mefentery, fuch as a tumid body, frequent diarrheas, griping pains, emaciation, \&c. which will fill render our fufpicion of tubercles in the lungs ftronger, and more indifputable *.

The cafe above ftated is one of great nicety and difficulty as well as importance. But when an Afthma has continued long, recurring frequently with great violence, and is compli-. cated alfo with the humoral, tubercles are always to be fufpected, from the great injuries the lungs have fuftained by the difeale, independent of any conftitutional fcrofulous taint. No part of the body can be long and violently affected with a diforder, without being very fenfibly injured; and diffections, in the cafes of old afthmatics, have generaliy proved the exiftence of tubercles. The writings of Bonetus and Morgagai afford us numerous. examples of what is here afferted; as well as the daily obfervations of feveral modern practitioners,

[^18]titioners, who contribute much to the improvement of their art by an accurate relation of the morbid appearances obferved on diffection. The tubercles, therefore, of elderly people, being the effect merely of the difeafe, will require, for the removal of them, the neceffary treatment of the Atthma, both in the fit and during the interval; for unlefs the caufe be taken away, the effect muft continue *.

But the tubercles, before-mentioned, are chiefly of the fcrofulous kind, depending on the conftitution, accompanied with fymptoms of an inflammatory nature, and often occur prior to the Afthma, or immediately appear to exitt along with it. They are particularly dangerous to the young, whofe chefts are narrow, and where there is a confumptive tendency in the family. In this cafe, there is often great danger of a confumption, and therefore an early and cautious treatment in the intervals of the Afthma is highly requifite, to avert the impending evil. As this fubject is too extenfive

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five to admit here of a full difcuffion, we muft content ourfelves with the mention only of the moft important parts of the cure.

The firft and principal requifites in the treatment, are to obviate and remove the inflammatory ftate of the conftitution, left the tubercles fhould inflame, and end in fmall ulcers of the lungs, which would foon degenerate into a deep pulmonary confumption. A diet, confifting chiefly of milk and vegetables, is of the utmoft confequence, and fhould be fteadily perfevered in. High living, much animal food, all feafoned meats, and frong liquors, are very pernicious, as they encreafe the natural tendency to inflammation, by inducing plethora, and ftimulating the action of the heart and arteries. Regular, gentle exercije is of the greateft importance, and affords moft evident relief, fuch as riding, walking, $\Xi^{\circ}$. The eafy motion too of failing or travelling in a carriage is very ferviceable. Country air is ftrongly to be recommended, both in winter and in fummer, and along with it, the utmoft caution in avoiding excefs of artificial external beat. If the conftitution be full of blood, and there be a ftrong hard pulfe, with pains in the breaft, repeated bleedings, according to the patient's strength

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ftrength and the urgency of the fymptoms, are requifite and highly beneficial. Mild cooling laxatives, fuch as the neutral falts, cream of tartar, rbubarb, lenitive electuary, caftor oil, tamarinds, $\xi^{c} c$. are advifable, to obviate coftivenefs and keep the body open. Gentle emetics are fafe and ufeful ; and likewife antimonial medicines, fuch as tartar emetic and Fames's powder, may be very advantageoufly prefcribed in fmall dofes as alteratives. Oily and mucilaginous medecines are given, along with nitre, the diuretic falt, and the faline mixture. Acids, both vegetable and mineral, are cooling and ufeful, but particularly the firft. Blifters and Iffues have often been found productive of good effects in thefe cafes. When the cough is troublefome in the night, and prevents the patient from refting, a gentle opiate is very ferviceable; and if there be any feverifhnefs, a frall dofe of tartar emetic or Fames's powder may be added to it, which will determine to the furface, and tend to remove any conftriction of the cutaneous veffels. Other antifpafmodics, after the removal of plethora, may be prefcribed, and if the cough be violent and of the convulfive kind, the Flowers of Zinc have been found very ferviceable*.

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4. Another

[^20]4. Another cafe to be confidered is, when the convulfive Afthma is complicated with the bumoral, and when, the convulfive being removed, the humoral ftill continues. I have obferved, that this is a common occurrence, and gives a moft diftreffing difeafe, diftinguifhed by fudden difficulties of breathing, fupervening on continual ftuffing of the breaft, and expectoration of thick phlegm. In the interval of the convulfive Afthma, when the humoral remains, a gentle vomit is proper, with a view to cleanfe the ftomach and to promote expectoration. Ipecacuan and tartar emetic anfwer this purpofe. The ufe of expectorants and demulcents is recommended, as fquills, garlic, gum ammoniac, volatile alkali, baljam of Peru, and oily micilaginous medicines. The firft are ftimulating, and therefore ferviceable in cafes of tough vifcid phlegm. The laft are not heating, and are beneficial when there is a thin acrid defluxion on the lungs, and a complication of any inflammatory affection of thofe parts. Blifters and iffues are often very ferviceable in the humoral Afthma. When the cough is teafing in the night, and difturbs the patient's reft, a dofe of tinctura thebaica, paregoric elixir, or pure opium, is indicated, provided the patient be not too weak, nor the air-
air-veffels too much loaded with phlegm, fo as to render the operation of thofe remedies hazardous. Other antifpafmodics may be employed, as camphor, afafoutida, caftor, E®c. efpecially when nervous and hyfterical fymptoms are complicated with the humoral Afth. ma , in which cafe oils and mucilages often ferment, turn rancid or four, and diforder the ftomach. The Flowers of Zinc likewife, I have frequently given with fuccefs, as a more powerful antifpafmodic, in the interyals of the convulfive Afthma, when, after the fit, a violent cough and ftuffing in the breaft has continued to harafs the patient. The occafional employment of the warmer laxatives is very neceffary, in grofs phlegmatic habits and in obftinate cof. tivenefs,

Some phyficians, in this cafe, recommend, in the ftrongeft terms, the removal into a warm climate, as highly ufeful and neceffary, efpecially when the humoral Afthma precedes the convulfive, and the latter feems to be a confequence only of the former. One may often form a good judgment concerning this matter, by attending to the effects of warm and temperate weather on the patient's conftitution. If he is much better in fummer than he
$Q_{2}$ is

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is in winter, it is very probable that a cloange of climate may prove bighly beneficial to him. But in the pure convulfive Afthma, we have already had occafion to obferve, that very hot weather is pernicious.
5. But if, in the intervals of the afthmatic fits, the patient enjoy a good ftate of health, if his conftitution be neither full and corpulent, nor relaxed and irritable, and there be no re, maining fymptoms of the humoral Afthma, the free ufe of medicines is by no means to be advifed. It will not, however, be improper, in this cafe, to attend to the ftate of the body, and to obviate coftivenefs, when prefent, by a gentle laxative; or if the ftomach be affected with flatulency, or any other flight fymptom of indigeftion, to prefcribe a ftrengthening medicine, fuch as a light preparation of Ateel, bark, or bitters, made cordial with the aromatic tincture, along with regular living, cool pure air, moderate exercife, and the cold bath.

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OBSERVATIONS.






Hippocrat.

Lougumz iter per precepta; breve et efficax per exempla.

Seneca.

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\begin{gathered}
\text { CASS E S } \\
\text { AND } \\
\text { OBSERVATIONS. }
\end{gathered}
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THE following cases of the Afthma, which are here prefented to the public, have been collected together with great care and attention, and will, I doubt not, be found a true and faithful reprefentation of nature.

I have not contented myfelf with giving thofe cafes only, which were eafily and quickly cured, but I have carefully collected many, in which the relapfes were frequent and violent, the prognoftic long doubtful, and the cure tedious and difficult.

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In fome of the following cafes, the Afthma is not the principal difeafe, but complicated with another, far more dangerous. If any one fhould object to fuch a cafe, as not being proper to be admitted here, it is anfwered, That the intention of the following cafes is to give a tolerably compleat account of the Afthma, not only in its more pure ftate, but in that in which it is highly complicated with the moft dangerous, and fometimes fatal, difeafes.

Several cafes of infants likewife have a place in this collection, which may, perhaps, be objected to by fome; but, in my opinion, without any juft foundation, as their lungs are very irritable, and they are certainly liable to this difeafe, to a moft alarming and dangerous height. Some, not accuftomed to the difeafes of children, may very eafily miftake the Afthma for another complaint, as infants are unable to exprefs their fufferings, and parents often at a lofs to give an exact account of them. In our inquiries into the fymptoms of the Afthma in a child, we fhould afk concerning the frequency and violence of the cough, and defire to know. whether it be preceded or attended with a wheezing and laborious refpiration, which comes on fuddenly by fits. We fhould obferve whether
whether any phlegm be raifed into the throat by means of the cough, for that will fhew the lungs to be affected. We may inquire if the child be able to fwallow well when the fit is off, which, anfwered in the affirmative, will prove that the primary complaint is not an inflammation in the throat. It will likewife be proper to examine into the ftate of the abdomen, to know whether it be foft and natural, or full and inflated with wind, or obftructed with any hard tumors, impeding refpiration.

Such were the cafes of the Afthma, which I had to treat, and fuch, under the bleffing of providence, I have often been able to cure. The Flowers of Zinc, I mult honeitly confefs, have affifted me in my greateft difficulties; and as this is a remedy in common ufe among phyficians for other convulfive complaints, and one which may be given with the moft perfect fafety, I have had frequent recourfe to it, and (I may truly add) with fuccefs. At the fame time, I would recommend it to practitioners to examine carefully the preparation of the Flowers of Zinc which they employ, left the calcination of them fhould be imperfect, and the medicine confequently lefs active and lefs efficacious. Some perhaps may R
be ready to object to this remedy, that it does not fucceed in the difeafe for which it was firft introduced into practice, that is, the Epilepfy or Falling Sicknefs. To this we may anfwer, That no other remedy, hitherto known, has fucceeded in curing, with the leaft degree of certainty, that moft dreadful malady. This objection, therefore, if it be allowed to have any weight, is equally ftrong to prove that the bark, opium, venefection, \&cc. are remedies of no value.

But I fhould much rather wifh the reader to judge for himfelf from the real effects of the remedy, than from any thing I can fay in its favor. I fhall only beg leave to call his attention to one or two particulars. Firlt, The dofe, in which I give the Flowers of Zinc, is much greater than has commonly been employed. Two or three grains, though as much as fome very delicate ftomachs can bear, yet is far too fmall a dofe in general to have any good effect in the cafes of adults. Secondly, I was never called at the firft attack of an Afthma to any patient, where the Flowers of Zinc, which have a tonic as well as antifpafmodic power, were neceffary. Indeed moft of the patients, whofe cafes were treated with that remedy, had labored under
under their diforders for fome time before I faw them, and many indeed for a very long time.

But though the Flowers of Zinc, Vinegar of Squills, or any other remedy, is particularly fpecified under a general head, the reader is not to expect in all cafes that it is employed alone. The affiftance of other remedies is often abfolutely neceffary. For example; if Zinc, Camphor, Afafetida, or the Peruvian Bark were employed, a laxative, blood-letting, or an opiate, or even all stbree, may be fo ftrongly indicated, as to render the practice very imperfect and unfuccefsful without then. Too great fimplicity in the practice of phyfic is certainly an error, as well as too great a variety of medicines given at one and the fame time. The practice which I have adopted through the whole of thefe cafes, was not directed by a partiality to any one particular remedy, but was fuch as appeared to me the moft likely to cure my patient in the fafeft and fpeedieft manner.

The observations follow the cafe; and if the Afthma be complicated with any other difeafe, I am obliged to fay fomething on that difeafe with which it is complicated. This leads to a R 2 variety

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variety of remarks on different difeafes, as well as on the Afthma, which remarks, it is hoped, the reader will not confider as digreffions, when he reflects that they are not made on the Afthma alone, but on the Cafe in its complicated ftate. Thefe cafes, therefore, will fhew the diforder as it occurs in real practice, and not as the imagination may paint it. I have only one requeft to make to the young reader, and that is, not to run haftily over the difficult and complicated cafes; but, after having read the obfervations, to re-examine each cafe, and to reflect awhile upon it, otherwife he will not reap any lafting advantage, fo as to convert the knowledge of it to his own ufe, whenever he may meet with a fimilar cafe in practice.

The order, in which the following cafes are placed, is not that in which they were firtt taken, but that which I hope will prove the molt eafy and agreeable to the reader. Many of the obfervations upon the cafes likewife were written, when the cafes ftood in their firft order, namely, that in which they were firft taken. For this reafon, fome of the obfervations, that were made early, will occur later than they were intended. But I flatter myfelf the reader will find no inconvenience from
this alteration of place; and if there were any, the advantages gained will more than compenfate for it. Had the cafes ftood in the order of time, as I firft had them under my care, fome of the moft tedious, difficult, and complex, would have occurred at the beginning, which would have been particularly unpleafant to young ftudents, and to fuch as have not given minute attention to this difeafe, and therefore are not perfectly acquainted with the great variety of its appearances, under different complications with other complaints.

Many of thefe cafes were taken at the York County Hofpital, with a view only to do juftice to the patients, that, through hurry of bufinefs, I might not overlook or neglect any thing of confequence in the cure. My Difpenfary likewife, (at which the poor attend) as well as private Practice, have furnifhed me with fome. But the whole contained in this publication are only a few examples, felected out of a great number of others.

The Zinc cafes ftand firft in order, and are divided into two parts; and the reft of the cafes which follow, and were treated by a variety of different remedies, are divided into
three
three parts *, and under each of them the principal remedies employed are enumerated, which will in fome degree fhew the reader what he is to expect, and likewife aflift the memory in referring to particular cafes. Befides, as the difeafes, which are treated by the fame remedy, are placed one after another, the remarks made on the firft will apply, in a great meafure, to thofe which follow, and fo prevent repetitions.

With regard to the regimen made ufe of in thefe cafes, it is according to the directions already delivered in the preceding part of this treatife. To patients in general, when they attend upon me, they are cautioned to eat nothing but very light food, and fuch as they find by experience to be eafy of digeftion; and of that even to take only a little at a time, left their ftomachs fhould be diftended, and the difficulty of breathing increafed. The drink, which is recommended, is toaft and water, milk and water, whey, lemonade, \&c. which ever agrees beft, and occafionally a little good wine or fpirits are added, whenever the fymptoms of the difeafe require them. The patient is defired to avoid excefs of heat from large fires, fmall hot rooms, clofe curtains, too many bedclothes,

[^21]clothes, \&rc. all which are particularly hurtful and diftreffing to Afthmatics. If a patient live in a very fmall low damp room, the abfolute neceffity is pointed out to him of changing his habitation for one more dry and airy. Or if he be engaged in an unwholefome employment, he is made fenfible of the danger of continuing it, and advifed, if poffible, to follow another. A little gentle exercife in the open air, either by walking or riding, according to the patient's habits and inclination, is generally approved of in the abfence of the fits, with a caution to him at the fame time to be very much upon his guard againft catching cold, from any imprudent expufure to it, particularly when heated. This hint is of great confequence towards preventing relapfes, and fhould be the moft attended to by the patient at thofe feafons of the year, be they hot or cold, when relapfes are the moft apt to come on. After thefe general remarks, it will be needlefs to repeat directions concerning regimen in the cafe of every patient; but when regimen is not mentioned, the reader muft not fuppofe it is neglected; for I have great confidence in a good regimen, and in the avoiding of the occafional caufes of difeafes. If any thing occur in a cafe, which requires a particular regimen, then proper notice will be taken of it. With

With regard to feveral of the common forms of prefriptions employed at the York County Hofpital, it will be needlefs to trouble the reader with inferting them at large among the cafes, as they differ very little from thofe which are in ufe at other Hofpitals, and which are publifhed every day for the benefit of fudents. But left any one, if thofe prefcriptions are not fpecified at all, fhould think me guilty of an omiffion, the different formula employed are thrown together at the end of the book, which method feems preferable to the infertion of them fingly among the notes, as the reader can in other cafes turn to them more readily without any further reference. It muft at the fame time be obferved, that any other prefcriptions of importance will be given at large in their proper places, and the dofes of active medicinss exactly afcertained. - With refpect to a Patient's continuing the ufe of any remedy preferibed, it feems unneceffary to fubjoin the repetition of that remedy at the end of every report in a cafe; but we would wihh the reader to underftand, that every remedy is fuppofed to be continued, till the intermifion of it is particularly mentioned.

CASES

## PARTI.

CASES of ASTHMA,

Treated fucce/sfuly with the

## FLOWERS of ZINC,

After feveral otber remedies had failed.
C A S E I.
the Convulfive Aftbma, complicated with a Senile Catarrh, of Several years ftanding, cured by the ufe of the Flowers of Zinc.

POBERT SMITH, aged 5 t , admitted a patient at the York County-Hofpital, Fe ruary 3, 1777, has been fubject, for many ears paft, to an Afthma, particularly in the vinter feafon, which has greatly weakened and
impaired his conftitution. Along with a cough, he is attacked in the night with a difficulty of breathing, which comes on fuddenly, and continues with great violence for feveral hours. He complains too of want of fleep, conftant thirft, head-ach, and forenefs in his breaft. His body is regular, pulfe low, tongue clean, appetite bad, expectoration difficult.

Miftura mucilaginofa*. Dofis uncie due ter die.
Hauftus Anodynus cum Tinetura T'bebaica guttis quindecim, bora fomni. $\dagger$

Pilularum Rufi dua vel tres pro re nata, quando alvus aftricta fit.

The 6th. The fymptoms are nearly the fame as before. His body is open with the pills; but he ftill continues to have very reftlefs nights, in confequence of his cough and difficulty of breathing.

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* This, and other common forms of prefcriptions, fuch as the Mittura ad Althmaticos, Julepum Commune, \&c. will, for the reafon before mentioned, be found each under its proper title at the end of the cafes.
+ The common form of the Anodyne Draught is made up with twenty drops of Tinctura Thebaica; but when a fmaller or a larger dofe is given, it will always be taken notice of as abore.

The 13th. The fymptoms continue. Headach troublefome.

Repetatur Haufus Anodynus, addendo Tincture Thebaica guttas quinque.

The 17th. He thinks himfelf a little better to-day, but complains more of forenefs and uneafinefs in his breaft.
Applicetur Emplaftrum Veficatorium inter fcapulas.
The 20th. The blifter anfwered well, and he is fomewhat better.

The ${ }_{23}$ d. His cough, ftuffing and forenefs in his breaft, are rather worfe, attended with a very fcanty expectoration. He finds a little relief from the opening pills and the anodyne draught, but complains to-day of great languor and weaknefs. Omittatur Miftura Mucilaginofa.

Sumat Mifurce'ad Aftbmaticos unciam unam ter die.

Repetatur Hauftus Anodynus § Pilule Laxantes.
The 27th. Early this morning he was feized on a fudden with greater difficulty of breathing, and more violent ftricture over his breaft than

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\mathrm{S}_{2} \quad \text { ufual, }
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ufual, fo that he was fearce able to fpeak. He wheezes and coughs much at times, but gets up little or no phlegm. His weaknefs and langour are increafed, and he has a pain in his head. Omittatur Miffura ad Aftbmaticos.

Sumat Florum vel Calcis Zinci grana duodecim bis die in fulepi communis unciis duabus.

Repetantur Hauftus Anodynus \& Pilula Laxantes.
March ${ }_{3}$ d. He was not fick with the powder. His breathing is more free, his cough is eafier, expectoration more copious, and he finds himfelf ftronger.

The 8 th. He continues much better in his cough and difficulty of breathing, and feels no ftricture or forenefs acrofs his breaft, but complains of head-ach and ficknefs at times, and fays that he has been accuftomed to be bled every fpring for feveral years paft.

Fiat Venefectio ad uncias quatuor.
The 13 th. He ftill breathes better, coughs but little, refts well, and is ftronger. Pulfe regular and not quick. The bleeding relieved his head-ach and ficknefs.

Sumat Flarum Zinci grana viginti omni dofi.

The 17 th. He is not fick with the increafed dofe of his powder. He has had no return of his difficulty of breathing, and his cough has almoft left him, although the weather is very unfettled, fometimes foft and wet, and fometimes frofty, along with high winds.

The 2oth. He is free from complaint, Let him be difmiffed.

In this cafe, which is a complication of the Senile Cararrh and the Convulfive Afthma, feveral powerful remedies, whofe virtues are well known, were tried before we made ufe of the Fiowers of Zinc. The fuccefs of this laft remedy was very evident and ftriking, Its operation was that of removing the fpafm of the lungs, obviating the difficulty of breathing, promoting expectoration, and ftrengthening the conftitution,

This man was of a weak habit of body, and had been fubject to his diforder for many years; on which account it was proper to avoid copious bleeding, purging, and other ftrong evacuations. Profufe fweating (altho' it fometimes afford a temporary relief) is a practice which I never recommend in the Afthma, as it weakens
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weakens and relaxes the conftitution, renders the patient very fufceptible of cold, and confequently more fubject to relapfes. For the fame reafon, too much external warmth and confinement, at the commencement of this diforder, has fometimes a very unhappy effect. The Patient's body was kept gently open with the Pilule Ruff, and his nights were rendered eafier with the Tindura Tbebaica.

As I had frequently given the Flowers of Zine in other afthmatical cafes before this, and was tolerably well acquainted with their operation and medical virtues, I began here with a dofe of twelve grains, and afterwards increafed it to twenty, which laft (if the medicine be in good condition) few ftomachs can bear without ficknefs or vomiting. The Flowers of Zinc haying fucceeded in feveral cafes fimilar to this, in which other mredicines had failed, I was gradually led to form a good opinion of their efficacy, and further experience has ftill confirmed me more ftrongly in their favour,

## C A S E II.

The Convulfive Aftbma, complicated weith the Humoral, of many years ftanding, in wobich the Flowers of Zinc were given with Succefs.

ELIZABETH WHITELEX, aged 30 , admitted at the York County Hofpital, February 3, 1777, is fubject to a cough and difficulty of Breathing, with forenefs and ftuffing in her breaft. She has had an Afthma for feveral years, which at prefent is very fevere. She complains of head-ach, thirft, lofs of appetite, and difficult expectoration. Her fleep is very much difturbed in confequence of her afthmatical complaint, which is often fo great in the night, that the is unable to lie down. Her body is regular. She had a child fix months ago, to which fhe now gives fuck, and fhe has had no return of her menfes fince her delivery. Her pulfe is fmall, weak, and quick, and her general habit of body much reduced. She attributes her complaint to frequent and fudden expofures to heat and cold.

Sumat Mifture Mucilaginofe uncias duas ter die 3 E Hauftum Anodynum cum Tinōnure' Tbebaice guttis duodecim omni nooite bora Jomni.

The 6 th. The fymptoms continue. She ftill expectorates with difficulty, is feverifh, and complains of head-ach.
Houftus Emeticus vefpere fumendus.
The 13th. Her Afthma continues as before; but fhe finds herfelf fomewhat lefs feverifh. The Emetic operated well, and her expectoration is a little freer. Omittatur Miffura Mucilaginofa.

Capiat Mifurce ad Aftbmaticos unciam unam bis die.-Repetatur Hauffus Anodynus.

The 17 th. The fymptoms are nearly the fame. She was not fick with her Mixture.

The 2oth. Her cough is increafed; and the is more ftuffed in her breaft. Her afthmatic mixture difagrees with her. Omittatur Miffura ad Affibmaticos.

Sumat Miffure Salina uncias duas bis die.
Repetatur Haufus Anodynus, addendo Tincture T'bebaica guttas octo.

The ${ }_{23}$ d. She complains much at prefent of her cough and fhortnefs of breath, with ftraitnefs and forenefs at the pit of her ftomach. Her body is regular, appetite bad, head-ach revere, ftomach foul, and the fleeps very ill at nights.

Houffus Emeticus vefpere fumatur.
The 27 th. She vomited freely with the emetic on the 23 d , and threw up a confiderable quantity of vifcid phlegm. On the 25 th and 26 th the had a very fevere return of her Afthma, which, as ufual, came fuddenly upon her, and was attended with wheezing, anxiety, and great difficulty of breathing. Her respiration is fill laborious. When the moves fuddenly, fie finds the anxiety and oppreffion at her breaft much increafed; but when the fit is off, and fie is at reft, her breathing is tolerably free and natural. Omittatur Mijfura Salina.

Capiat Florum Vinci grana duodecimo ex Juleps Cardiaci unciis dues bis die._Repetatur Hauffus Anodynus ad cubitum eundum.

March 3d. She is fick at times with the powder. She fays that fie has got a little frefh T cold,
cold, which has increafed her afthmatical complaint.

Continuentur remedia.
The 6th. She finds her cough and difficulty of breathing much diminifhed. She is ftill fick at times with the powder, but her expectoration is more free and eafy. She has no thirft, head-ach, or any other feverifh fymptom, and her appetite begins to return.

The $13^{\text {th }}$ and 17 th. She continues to recover.
The 20th. The air is damp, the weather rainy and changeable. She has got a little cold which has increafed her cough; but fhe has had no return of her Afthina.

The 24 th and 3 rft. Her cough is much better, her countenance clearer, appetite improved, pulfe fuller, and fhe gains ftrength every day.

April 7 th. She is free from complaint. Let her be difmiffed.

In this cafe the Flowers of Zinc fometimes created a light degree of ficknefs, which is a common effect of them when given in a full dofe. I did not, however, change the mode of exhibition on that account, as few things promote expectoration better than naufeating dofes of emetics, and as I had fometimes found the Flowers of Zinc to operate in that way very powerfully. But if that medicine had often occafioned ficknefs, then it would have been neceffary to have diminifhed the dofe of it, till the ftomach could have borne it with eafe.

## C A S E III.

The Convulife Aftbma complicated with the Humoral Aftbma, Rbeumatijm, Cbronic. Weaknefs, and Obftruction of the Menjes, in wbich the Flowers of Zinc weere very fuccelsfully employed.
$\mathcal{F}^{L I Z A B E T H} P A R K E R$, aged 18 , admitted into the York County Hofpital, June 12, ${ }^{17777}$, complains of a cough, fpitting, and difficulty of breathing, which laft fymptom frequently comes on in a very fudden manner, particularly when fhe firft wakes in the night, T 2 and

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and continues very fevere for fome hours. She has had a pain in her breaft for three weeks paft, which is increafed by motion and coughing. Her countenance is pale, pulfe weak and quick, body regular, appetite bad, fleep much difturbed. She had her menfes a fortnight ago, but they are not regular ; for fometimes they do not appear in lefs than fix or feven weeks; and fometimes they return in two or three weeks. She affigns no caufe for her complaint.
Sumat Julepi ex Spiritu Nitri dulci uncias duas Sexte quaque bora;

Balfami Glyyrrbize Sefquidrachmam bis die ex quovis vebiculo; et

Houffum Anodynum cum Fincture Thebaica guttis quïndecims omni noote bora decubitus.

Applicetur Emplaftrum Veficatorium inter fcopulas.
The 16th. The blifter anfwered well; her nights are rather eafier with the draught at bedtime; the julep and balfam of liquorice agree with her fomach. The pain in her breaft iș much abated, and the breathes a little better. Her body is bound, pulfe flower.

Continuentur remedia छ injiciatur Enema commune pro re nata.

The 19 th and 26 th. She continues to recover. Her fits of difficult breathing ftill recur at times, but are lefs violent. She has an eafy ftool every day with the glifter.

July 3 d and 7 th. The pain in her breaft is entirely removed, and the other fymptoms are eafier; but the has no expectoration. She has many blifters of confiderable fize on her lower extremities, which firft began to appear a day or two ago, and are now very fore and painful. They were preceded with a fight degree of low fever, which ftill continues.

Repetantur remedia.
The 1oth. The blifters on her legs and thighs are dying away. Her cough is better; but fhe is much difturbed in her breathing. Let her be made an Out-patient at her own defire.

The 15 th. She has fome return of pain in her right fide, and is much ftuffed in her breaft.

Linimento Volatili pars dolens inungatur.,
The 2 Ift. The pain in her fide is relieved by the liniment, but fhe has an increafe of her cough,
cough, ftuffing, and fhortnefs of breath, with a very fcanty expectoration.

Capiat vefpere Haufum Emeticum.
The 24th. The emetic operated well. She complains ftill of ftuffing in her breaft, and is much troubled with fhortnefs of breath, $h_{2}$ wind, and fulnefs at her ftomach. The air is damp and the weather rainy. Let her be again made an In-patient.

Repetantur remedia,
The 28th. The pain in her right fide is very. fevere. Her other complaints are the fame.
Applicetur Emplaftrum Veficatorium lateri dolenti.
Sumat Miftura Pectoralis uncias duas ter die, et omittantur alia remedia.

The 3 Ift. The pain in her fide is relieved by the blifter. Other complaints the fame.

Auguft 4th. She was attacked fuddenly laft night with a violent difficulty of breathing and fenfe of ftraitnefs acrofs her ftomach, which ftill continues, altho' at prefent with lefs feverity. Her legs fwell towards evening .

Sumat bolum bis die ex Florum Zinci granis quinque, छ conferve cynobati scrupulis duobus.

The

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The 7 th. Her difficulty of breathing was confiderably diminifhed with the fecond dofe of the Flowers of Zinc, and has continued better ever fince. She has a fmall tumor on her neck, which gives her pain. Let Mr. Favell be defired to fee it.

The inth. Mr. Favell has ordered the application of the Emplaftrum Mercuriale to the tumor on her neck, which has relieved her. She has had no return of her afthmatical complaint, and the fwelling of her legs is better.

The 14th, 18 th, and 30 th. No cough, ftuffing, or difficulty of breathing.

September 4th. No complaint. Let her be difmiffed.

Here the humoral and convulfive Afthma, rheumatifm, chronic weaknefs, and irregularity in the menftrual difcharge, all occurred in one and the fame patient. I tried firft to remove her Afthma by the common methods of practice. She had the tinctura thebaica, balfam of liquorice, dulcified fpirit of nitre, and a blifter on her back. As fhe was of a weak and
delicate conftitution, her body was kept regular by the ufe of glifters. The volatile liniment and a gentle emetic was likewife tried, but without any lafting good effect. Afterwards another blifter was put on, and fhe took the pectoral mixture, but ftill her Afthma grew worfe, notwithftanding that the feafon of the year might be thought favorabie. On the 4th of Auguft, after having tried thofe remedies without fuccefs for near two months, theFlowers of Zinc were prefcribed in a dofe of five grains; which was as much as her weak ftomach could bear with eafe, and the effect of it was fuch as exceeded my expectation, for the found immediate relief in the fpafms of her lungs, and all her other complaints were afterwards speedily removed.

It appears to $\mathrm{me}^{\text {; }}$ on a review of the cafes of Afthma which have occurred to me in practice, that the volatile liniment, which was made ufe of in this cafe, (and which is daily recommended by Phyficians in fimilar ones) had a bad effect. It is true, indeed, that it removed the rheumatic pain in her fide, for which it was prefcribed; but in the fame report of the 2 ift of July, her cough, ftuffing, and difficulty

## O B S ERVATIONS.

difficulty of breathing were all increafed. The application too of the laft blifter (for which likewife common practice may be pleaded) was attended with relief of the pain in her fide; but in a few days after fhe had a very fevere attack of her Afthma. **

The tumor on her neck, in all probability, had its feat in a lymphatic gland, and was a very unfavorable appearance, as it denoted ftrongly that fhe was afflicted with tubercles in the lungs; and indeed her age, general habit, and the obftinacy of the fymptoms concurred in proof of the fame.

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* Nothing is more common than for the rheumatifm to leave the external parts, and to fall upon the internal, particularly the throat, lungs, Itomach or bowels. I know a Lady, in whom the rheumatifm has very often changed places, paffing from her fide to her throat, from her throat to her eyes, and from her eyes to her lungs, where it was attended with cough, forenefs in the breaft, and fome degree of fhortnefs of breathing. But thefe pulmonary complaints difappeared as foon as any inflammation returned into her eyes, or any external pain became fixt in a mufcular part. I have feen feveral other cafes of the fame kind, both in men and women; from which it appears to me, that the practice (which is a very common one, and often fucceffful) of driving the rheumatifm, away from an external part by means of external applications, is fometimes attended with bad confequences, particularly in weak conftitutions. Several Itriking examples of a fiumita; pature will be found among the following cafes,

The veficular eruption, the blebs or pemphigus (as Dr. Cullen terms it) which this patient had on her legs and thighs is a very uncommon difeafe. Dr. Cullen, notwithftanding his very long and moft extenfive practice, affirms that he never faw an intance of it *. He has, however, given an accurate definition of this complaint, collected with great judgment from thofe authors who have feen it. Typbus contagiofa. Primo, fecundo, aut tertio morbe die, in variis partibus veficule, avellane magnitudine, per plures dies manentes, tanden ichorem tenuem effundentes $\dagger$. In the cafe of Elizabeth Parker, the veficular eruption, which was very fore and painful, was preceded and accompanied with fome feverifh fymptoms evidently of the low kind. It continued only for a few days, and then gradually went off. As it was fo mild, it did not require

* Vide Firlt Lines of the Practice of Phyfic, p. 116.
$\dagger$ The following are the definitions of the fame difeafe, as given by (r.) Sauvage. (2.) Linnæus, and (3.) Vogel.
x. Eruptió Phlyctænarum Avellanæ circiter magnitudine fero dilure flavo turgidarum.

2. Pblyctenæ aliquot in abdomine five artubus, magnitudine avellanæ. Febris Diaria, maligniffima, funeftifima.
3. Maligna, (Bullofa) veficule fero fublimpido repletæ, magnitudine nucis avellanx \& majores, in variis corporis partibus, facie non excepta, citra cutis inflammationem eram* pentes.

Vide Syuop. Nof. Method,

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any particular treatment; but had it been violent, and attended with a malignant nervous, or putrid fever, the bark, elixir of vitriol, red wine, and ftimulants, would have been highly neceffary. By that method of treatment, not entered upon too haftily, nor delayed too long, I cured two patients a few years ago of the Pemphigus or veficular diforder, in which the fever was extremely putrid, and a great many gangrenous Houghs, of a foetid fmell and moft dreadful appearance, followed the eruption of the blifters, attended with a low delirium for many nights, and the greateft dejection of countenance and proftration of ftrength.

## C A S E IV.

The Convulfive Aftbma complicated with an obfinate cough of three years Atanding, on which a recent catarrb fupervened, cured by Blood-letting, Flowers of Zinc, Ejc.
NN SHAW, aged 50, admitted at the
York County Hofpital, December 5,1782 , complains of feverifhnefs, pain in her ftomach and left fide, difficulty of breathing, and a violent cough of three years ftanding, which $\mathrm{U}_{2}$ increafes
increafes her pain, and leaves a forenefs in her breaft, but is attended at prefent with little or no expectoration. Her difficulty of breathing is very fevere, and comes at times fuddenly upon her, particularly when the walks acrofs a room, or goes up ftairs, fo that fhe is then almoft afraid of fuffocation. She has had no menfes for twelve months paft, except three very flight appearances, which continued only for an hour or two. Her pulfe is moderate, and her conftitution not weak. Her diforder has been gradually growing worfe this laft year; but the fymptoms of it have greatly increafed in violence for five weeks paft. She was bled ten days ago, but without any fenfible relief. Her body is bound. She has a great weaknefs in her knees and ancles, fo that fhe can fcarce walk. Her belly is much fwelled at times, but the fwelling goes off in an hour or two. She has a very troublefome itching and prickling all over her fkin , both when in bed and up. Her conftitution can neither bear much heat nor cold.

Mittatur Sanguis ad uncias decem.
Capiat Miffura ex Spermate Ceti Sefquiunciam ter die; छ Pilularum Rufi duas vefpere © unam mane, pro re nata.

The feverifhnefs being abated, but the fymptoms of the Afthma continuing violent, I ordered her on the gth to take Florum Zinci grana fex ter die ex thea Mentbe vulgaris, and to make ufe of the opening pills occafionally, three of which every other day anfwered very well. The feermaceti mixture made her fick, and therefore was omitted.

On the 23 d the pain in her ftomach was almoft gone; fhe breathed with much more eafe; her fpitting was freer and lefs glutinous; her joints ftronger, and fhe was able to walk better. Her cough, however, continued troublefome, attended with a pain in her fide, and fhe was fometimes fick with the powders.

On the 22d of January, by continuing the fame remedies, fhe was free from all her afthmatical complaints, except her cough, which was ftill fevere at times, and brought on a pain in her breaft. We afterwards gradually diminifhed the dofe of the Zinc, as it excited ficknefs, till fhe took only three grains at a time ; and on the 24th of February her cough and fpitting were entirely removed, and fhe had no complaint remaining.

In this cafe, the pain of her fide and the violence of her cough required bleeding, and more efpecially as her conftitution was not weak, and the menfes were leaving her. The firlt bleeding gave no fenfible relief, and the good effect of the fecond was not immediately vifible, though I doubt not but they were both conducive to the cure. I have often obferved in cafes where this remedy was evidently indicated, that a firlt bleeding has been of no apparent benefit, when a fecond has proved very ferviceable.

The violence of the cough increafed the pain and forenefs of her breaft, which (one would think) fhould naturally make her cautious, when coughing, not to exert herfelf too ftrongly. I throw out this bint the more particularly, becaufe I fee every day many Afthmatics, who injure their lungs materially by exerting themfelves too violently when coughing, and who confequently affitt the difeafe in bringing on partial inflammations, effufions, and obftructions, ruptures of blood-vefiels, fpittings of blood, \&xc.

This cafe affords a very remarkable inftance of the good effects of the Flowers of $Z$ inc, which
(though

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(though given but in a fmall dofe) not only took off the fpafmodic affection of the lungs, but alfo removed an old obftinate cough of three years ftanding. Indeed, I was afraid, we fhould not have fucceeded fo well in this laft part of the cure; for fometimes coughs are extremely inveterate and difficult to overcome, refifting every attempt which we can make, and that even in cafes where we hoped to have been able to have removed them without much difficulty.

The itching and prickling of her fkin which fhe complained of, feemed to arife from an acrimiony or impurity of the blood, commonly called Scorbutic, which probably had its origin from poor diet, bad health, and want of exercife, that great fweetener of the blood and corrector of acrimony. A fedentary life often produces foulnefs of the blood, itching of the fkin, cutaneous eruptions, inflammation of the eye-lids, and other fymptoms of the fcurvy.

## CASESAND.

## C A S E V.

q'be Convulfive Aftbma, complicated with the Humo: ral, in a patient of fixty years of age, who bad labored under this diforder from cbildbood, and was become violently affected with anajarcous or dropfical fwellings in the cellular membrane, particularly of the lower extremities, relieved by $\mathrm{Bli}_{-}$ fters, Laxatives, Diuretics, and the Flowers of Zinc.

$R$ACHEL ATKINSON, aged 60 , admitted into the York County Hofpital, May 25, 1780, of a thin emaciated habit, and always accuftomed to an abftemious manner of living, has been afflicted with an Afthma from her childhood, which is at prefent fo very fevere, both with refpect to the cough and difficulty of breathing, that fhe is extremely weak and unable to lie down in bed. It generally attacks her about two or three o'clock in the morning, and lafts for eight, ten, or twelve hours. She has likewife dropfical fwellings in both her legs and thighs, which are the worlt towards night, and pit much on preffure. Thefe fwellings came on laft March, and have now diftended
diffended the fkin fo violently, as to produce univerfal rednefs and inflammation on the lower extremities. Her body is bound. She has had no return of the menfes for many years palt. She fays that her Afthma is always the worft in thick damp cloudy weather, in all fudden changes of the air, in rain and thunder, and likewife in the feverity of the winter feafon; and that fhe is the beft at all times of the year in mild clear fettled weather. Her difficulty of breathing, after having continued a while, is followed by a violent cough, but fhe expectorates little or nothing. Her appetite is bad, pulfe low, nights reftlefs, urine highcolored and in fimall quantity.

Applicetur duo parva Emplafira Veficatoria cruribus.

Sumat Oxymellis Scillitici dracbmam unam ex Fulepo Menthe ter die二 $\mathcal{\text { R }}$ Rei Pulveris grana viginti name vel vefpere, quando alvi conftipatio adfit.

The 30th. The blifters (four inches long and three broad) which were put on the calves of her legs anfwered very well; her body is regular with the rhubarb; and fhe makes water rather more plentifully, but the oxymel of fquills does not fit eafy on her ftomach.

Continuentur remedia.
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Her afthmatical complaint continues nearly as ufual; though, if any thing, it is rather better.

Omittatur Oxymel Scilliticum © capiat Miffure Diuretica cocblearia tres vel quatuor ter die.

June 5 th. Her legs and thighs are lefs fwelled, and her afthmatical complaint is a little eafier; but the difcharge from the bliters is almoft ftopped.

The 8th. The fwelling of her legs and thighs ftill continues to diminifh; her urine is rather paler and increafed in quantity ; and the fymptoms of her Afthma are lefs violent.

Applicetur duo parva Emplaftra Veficatoria cruribus, E repetantur alia medicamenta.

The 12th. Her blifters anfwered, and difcharged tolerably well. Her cough and afthma are rather better.

The 15 th. Her blifters continue to difcharge. Her Afthma is lefs troublefome in the night, fo that fhe fleeps fomewhat eafier, though fhe is ftill unable to lie down in bed. Her weaknefs is very great, but her appetite begins to improve.

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The 19 th. The fymptoms are nearly the fame.
The 25 th. She finds herfelf better in her dropfical fwellings; but her difficulty of breathing, though upon the whole lefs violent, is yet very troublefome at times, particularly in the night.

Capiat Pilularum ex Floribus Zinci duas mane E vefpere *. -Continuentur Pulvis Rbei pro re nath, § Mijfura Diuretica ut antea.

July 3d. The fwellings of her legs and thighs are much better. Her Afthma comes on every morning at four or five o'clock, and lafts about an hour, though fometimes it is more fevere and lafts for feveral hours. Her pills agree well with her ftomach, and her body is regular with the rhubarb.

The 6th. Her Afthma is better, bur fhe is ftill much affected by all fudden changes of weather.

Sumat Pilulas Zinci tres bis die.
The 13 th. Her Afthma ftill continues eafier, though fometimes the fit will laft for an hour

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very fevere, and end in a troublefome cough, but which, however, is now followed by a more copious expectoration. Her appetite is better, pulfe more regular, the circulation freer, her feep lefs difturbed, and the fwelling and rednefs of the lower extremities almoft entirely gone.

Continuentur remedia.
The ifth. Some nights fhe is not at all troubled with her Afthma, but had a feverer fit laft night than fhe has had for fome time paft.

The 2oth. Her Afthma, upon the whole, is much better. She has had two good nights, and finds herfelf confiderably ftronger. Her appetite continues to improve, and fhe has little or no fwelling of her legs and thighs. .

The 28th. Her dropfical fwellings are entirely removed. Her Afthma continues much eafier, and her breathing freer; the looks better in the face, and has recovered her ftrength very confiderably. Let her be difmiffed at her own requeft.

When

When we confider the age of this patient, and the duration of the difeafe, together with the violence of the fymptoms, it will appear obvious, at firtt fight, that her cafe was truly deplorable. The violent dropfical fwellings of her legs and thighs (which were very alarming at her time of life) were fymptomatic, arifing from the great obftruction of her lungs, and the difficult circulation of the blood thro' the pulmonary veffels, in confequence of which the yena caya muft neceffarily be loaded with blood, and the general circulation dangeroufly interrupted. I fhall be honeft enough to confefs that I hardly expected to relieve her; but as the feafon of the year was favorable, I was refolved to try the power of a few remedies, ho. ping, that, as fhe had ftood up againft the repeated attacks of her prefent malady for near fixty years, fhe might even yet be able once more to ftruggle thro' it, The ftamina of her conftitution had been originally good, otherwife fhe would not, in all probability, have been at that time numbered among the living. This confideration qught to make one cautious not to give up old people too haftily ; for, with a little well-timed affiftance, they often recover beyond all expectation from very defperate difeafes.

The

The indications of cure in this cafe were obvious. The application of blifters to her legs was to make an outlet for the watery effufrons in the cellular membrane; and they had the defired effect. Scarifications in the ancles, with a lancet, might have been ftill more effeetual as a drain, but the danger of a gangrene deterred me from that operation. As I found that blifters were evidently of fervice, I ordered a repetition of them when the firft were dried up. Thofe difcharges relieved her conititution from one load which oppreffed it, and gave the powers of nature a fairer opportunity of exerting themfelves for her relief; and accordingly we obferved, that her Afthma grew better as the fwellings of her legs and thighs diminifhed.

Her complaint was of a complicated nature; for the convulfive Afthma was combined with the humoral, in which ferous effufions in the cellular membrane of the lungs evidently took place, and, along with the obftructed circulation of the blood thro the pulmonary veffels, conftituted fome degree of the peripneumonia notha. It was this combination which rendered her diforder fo very alarming in its appearance, and caufed fuch a conftant violent ftuffing and laborious

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1aborious refpiration, that fhe was not able to lie down, but by means of a bed-chair fat up for many nights together. In confequence of the humoral Afthma and great ftuffing in her breaf, opiates, notwithftanding her reflefs nights, could not have been given with fafety. A common full dofe of opium, in cafes like this, has been obferved to prove fatal to weak old people. The oxymel of fquills did not agree with her fo well as the diuretic mixture. Rhubarb anfwered the purpofe of keeping her body regular, and the Flowers of Zinc were ufeful in diminifhing the fpafmodic affection of her lungs, and increafing the tone of her fomach.

## C A S E VI.

In which the Flowers of Zinc were given with fuccefs in the Convulfive Aftbma, following the removal of a complaint in the urinary pafjages, of three years flending, which arofe from the foone and gravel, and was attended with bloody urine.
A. ARX BRAMLE 1 , aged 33, weak and low-fpirited, was admitted a patient at the York County-Hofpital, November 4,1782 , for
for a complaint in the urinary paffages, in which there was a difcharge of gravel, with great pain and frequency in making water. Her urine was often very bloody, and came from her when fhe walked. She was fubject to a pain in her back, with wind and fulnefs at her ftomachy and fevere colic pains in her bowels. She parted with feveral fmall ftones laft week. She often had grumous coagulated blood in her urine. She found great uneafurefs and difficulty in walking. Her nights were very reftlefs and much difturbed with her frequent inclination to make water. Her complaint was of three years ftanding. She had had no return of the menfes fince her laft child, which was weaned the other day, being then one year old.

In a month's time, by the ufe of laxatives, tinctura thebaica, oily mucilaginous medicines, mild alkaline falts, \&c. along with a low diet, thofe complaints in the urinary paffages were removed, her urine was of a natural color and came away eafily, and fhe made water about five or fix times only in 24 hours. She grew fironger and could walk very well.

On the 19th of December, fhe complained of a ftuffing in her breaft and a bad cough;
which fhe had had for five days. Her cough forced away her water, but fhe had little or no expectoration.
Hauftus Anodynus bora fomni.
Pulveris Rbei, Magnefie Albe, fingulorum grana viginti pro re nata.
Mifture ad Affbmaticos uncia una ter indies.
On the 26 th, notwithftanding the ufe of thofe remedies, her cough continued very bad, and along with it fhe had a difficulty of breathing which came fuddenly upon her, and lafted fometimes for an hour and a half or two hours. She has had no return of her complaint in the urinary paffages. The remedies were continued as above.

On the 2d of January, as thofe fymptoms were not abated, as her cough was very clofe without any expectoration, and her difficuity of breathing fo very fevere in the evening, that fhe was almoft choaked for want of breath, and equally fevere when fhe firtt waked in the morning, followed by ficknefs and vomiting, I ordered Pulveris Florum Zinci grana. Septem ex Julepi cardiaci Sefquiuncia ter indies, along with Y draught with thirty drops of tinctura thebaica.

On the 6th fhe obferved that the above dofe of tinctura thebaica relieved the pain in her fide, but did not procure her any more reft at nights: She was fick now and then with her medicines, but her cough and difficulty of breathing were much lefs violent.

On the 13th of February, by continuing regularly the ufe of the above remedies, her cough and other afthmatical fymptoms were entirely removed, and fhe was difmiffed cured.

In the treatment of this cafe, bleeding was avoided on account of her weaknefs and lownefs of fpirits: and bliftering would have been improper on account of the complaint which fhe had had in the urinary paffages; for the cantharides, taken up by abforption, might have ftimulated the neck of the bladder, and have induced inflammation.

## C A S E VII.

The Afthma, complicated with general courulfions and Jpitting of blood, cured by the Flowers of Zinc.
$\mathbf{M}^{\text {RS. }}$, aged 35, May 16, 1780 , has a troublefome cough, and is at times attacked with great fhortnefs of breath, which comes on fuddenly by fits and lafts for feveral hours, particularly on any motion, fuch as getting into bed, going up fairs, or walking too quick. Her Afthma does not come on every day, though its returns are frequent, efpecially againtt any fudden change of weather.

Befides the above-mentioned complaint, fhe is generally feized once or twice a day with Atrong convulfions, which fometimes attack her along with the Afthma, and render her fituation moft deplorable. She then lies infenfible; her cheft feems quite bound down; the action of the mufcles of refpiration is fufpended; her breathing is almoft ftopt; and blood and froth are difcharged from her mouth.

She has had an Afthma at times for feveral years paft. The convulfion-fits have continued fix weeks, but they are not equally frequent or violent every day. Sometimes the will remain infenfible for feveral hours after they have left her. She attributes the prefent increafe of her complaint in great meafure to uneafinefs of mind.

She had her menfes three weeks ago, but they are not regular, for fometimes they return in a fortnight, and fometimes in a month or fix weeks. She is of middle fize, pale and thin, pulfe moderate, fpirits low and dejected, body bound, appetite bad. She had been bled twice, taken bark and laxatives, tinelura thebaica, caftor, and other antifpafmodics with little effect. A blifter likewife had given her no relief. For the above-mentioned complaints, fhe had an iffue fet in her thigh, and the following: remedies were prefcribed.
R. Aque fontance uncias fepterm, Aq. cinn. Spirit. unciam unam cum Semiffa, Tincture aromatice Semunciam, Florum Zinci drachmam unam, Confectionis cardiace drachmas duas, Fiat miftura, in bauffus fex dividenda, quorums capiat unum ter die.

Sumat Infufl Rbei cocblearia tres vel quatior mene vel bora fomni, quando alvus aftriita $\sqrt{\text { it. }}$. *'

She continued the Zinc draughts with confectio cardiaca for a fortnight; and, during that time, her fits of the Afthma and Convulfions gradually diminifhed in frequency and violence, till they had entirely left her. The laxative fometimes difappointed her, and was thereforechanged for a common glifter, an ounce of caftor oil, hauftus fenæ purganst, pilulæ Rufi, \&cc. all of which occafionally anfwered very well. She had afterwards two ounces of the following ftrengthening mixture three times a day.

* R. Rhei femunciam,

Aquæ bullientis uncias octo,
Aquæ cinnamomi fpirituofe unciam unam.
Macera rheum cum aqua bulliente in vafe claufo per noctem; deinde, addita aqua cinnamomi, cola. Edinb. Pharm.

This laxative, which is an excellent form of giving rhubarb, was fomerimes rather heavy on her ftomach, and therefore was occafionally made a fittle warmer, with the addition of a double quantity of the aqua cinnamomi fpirituofa, or of an ounce of the tinctura aromatica. It is well known, that rhubarb yields its virtues very perfectly to aqueous menftrua.
$\dagger$ R. Infufi fenæ communis uncias tres,
Mannæ optimæ drachmas fex,
Salis de Rochelle drachmas tres,
Tincturx fenx femunciam. Mifee.

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R. Infufi corticis Peruviani uncias Sex, $\ddagger$ Salis abfintbii dracbmas duas, Succi limonum q. f. ad plenam faturationem, Aque cinnamomi spirituofe unciam unam, Tineture corticis Peruviani dracbmas fex, Syr. cort, aurant. dracbmas fex. Mijce.

This medicine, along with country air, gentle riding exercife, and a mild nourifhing diet, foon reftored her to a good appetite and perfect health. The fpitting of blood entirely difappeared as foon as the convulfive and afthmatic fits were removed.

This cafe was a complication of convulfions and afthma, which was very terrible in its appearance. When I firft faw her, the fymptoms feemed to have continued with fuch unremitting violence for fo many weeks, and her conftitution was fo much emaciated, that I defpaired of her recovery, efpecially when I confidered
$\pm$ R. Cort. Peruv. craffe pulv. unc. unam cum femiffe, Corticis aurantiorum incifi drachmas fex, Aquæ fontanæ libram unam, Aquæ cinnamomi fpirituof uncias duas.
Mifce \& infunde fine calore per noctem, deinde filtra. Vide Percival's Effays, p. 74, where there is a very elegant and ufeful formula of a cold infufion of the bark.
confidered what ufeful remedies had been already employed in vain. I was determined, however, to try the Flowers of Zinc, as I had often found them efficacious in the Afthma, and they had fometimes removed even obftinate difeafes of the epileptic* and convulfive kind $\dagger$. Nothing but a powerful antifpafmodic could have taken off the complaint, and nothing could have anfwered better than the abovementioned remedy had done. In this cafe, not only the fpafmodic Afthma, but the general convulfions were removed; and the fpitting of blood, which was a confequence only of the other complaints, difappeared along with them, as foon as a free paffage was reftored to the circulation of the blood through the lungs. Glifters and laxatives were abfolutely neceffary to obviate coftivenefs, and, when one laxative difagreed, another was ordered. The tonic as well as antifpafmodic effects of the Flowers of Zinc were very ferviceable to this patient, in whom the tone of the fyftem was fo greatly injured by the violence and duration of the convulfions and afthmatic fits. The cordial draught was

* Vide Hume's Clinical Experiments, p. 219 .
$\dagger$ I had lately two cafes of convullions after delivery, both of which were cured by the Flowers of Zinc given in a dofe of ten grains three times a day.

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was-added to the Zinc, on account of her great lownefs of fpirits and general depreffion of ftrength. In this cafe the convulfions feemed to be a fymptom of the hyfteria, and not to partake of the nature of epilepfy.

Sorne years ago I had anothet cafe of the fame dreadful appearance in a young woman of twenty years of age, being a complication of the Althma and Hyfterical Convulfions, together with violent vomitings and cramps in the ftomach, fwellings and hardnefs of the abdomen, fpitting and vomiting of blood. Her pulfe was finall and her conftitution delicate. She had had no menfes for three months paft. Her fits would fometimes be followed with lofs of fpeech and infenfibility, which continued for feveral days and nights. Small bleedings, glifters, laxatives, caftor, tinctura thebaica, blifters, and other antifpafmodics, along with gentle cordials, relieved her in time, and fhe has fince emjoyed a good fate of health. Thofe obitinate vomitings and fpafmodic pains in her fomach were very alarming and diftreffing fymptoms, and greatly interrupted the medical treatment; nay, fometimes obliged us to fufpend it altogether, as fhe threw up every thing, even a mixture of barley water
and gum Arabic. Her food too, though taken in very fmall quantities, was often rejected by vomiting. At one time this cafe likewife appeared fo obftinate and defperate, that I left my patient without any hopes of fuccefs. Gentle laxatiyes, which kept her body in a regular ftate, were highly beneficial in preventing the returns of thofe violent vomitings and fpafmodic pains in her ftomach and bowels.

## C A S E VIII.

T'be Convulfive Aftbma, complicated witb the Humoral Aftbma and Excefive Corpulency, relieved by the Flowers of Zinc.

MR S. $\longrightarrow$, aged 49, April $1,177 \sigma_{\text {, }}$ is of low ftature, but fat and corpulent, weighing fifteen ftone. She is much troubled with flatulency and diftention of her ftomach. She has had no appearance of the menfes for three years paft. Her knees and ancles are weak and painful, which makes her walk lame. Her head often aches and feels heavy and dizzy, and her nerves are in a very irritable relaxed ftate. She is much ftuffed in her breaft, and has a bad cough. She is frequently attacked on a fudden with a ftoppage in her breaft, attended with wheezing and great difficulty of breath-

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ing, fo that the is afraid even of inftant fuffocation. This fit comes on at different times, both in the day and night, and lafts about an hour, or fometimes longer. She is often feverifh, and makes but little water. Her belly is fwelled, pulfe low, ftools coftive, expectoration difficult, and her nights very uneafy and difturbed. She is at times likewife fubject to what fhe calls her nervous complaint, in which her head trembles, and her mouth is drawn to one fide.

Mittatur fanguis ad uncias decem.
Applicetur emplaftrum veficatorium nucba.
Capiat pilularum Rufi duas vel tres pro re nata.
R. Aque fontance uncias quatuor cum Semiff, Confeexionis cardiace drachmas duas,
Aque cinn. Spirit. unciam unam cum Jemife,
Spiritus corn. cerv. vol. gutt. quadraginta.
Fiat miftura. Dofis cocblearia duo vel tres quinta quaque bora.

The 5 th. Her blood is not fizy; her body is open with the pills; the blifter difcharged freely; her mixture agrees very well with her ftomach*. The complaints in her head and fomach

* She is frequently troubled with a coldnefs of her ftomach when fhe takes any thing which is not of a warming nature; for which reafon any cold medicine creates a load and uneafinefs at the Procordia.


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mach continue. Her cough is bad, her Afthma ftill fevere, and her nights reftlefs and uneafy.

The 12 th. The fwelling of her belly is lefs, but fhe ftill has the cough, ftuffing, and difficulty of breathing as before. Her eyes are inflamed and painful. Her urine is highcolored and in fmall quantity.

Repetantur pilule Rufi $\mathcal{E}$ miftura cardiaca.
R. Aque Rofarum uncias octo,

Sacchari faturni forupulum unum,
Tincture Thebaice dracbmam unam;
Spiritus vinofitenuioris drachmam unam.
Subinde agitans, folve; deinde per chartam cola.
Fiat collyrium, Sope in diem utendum.
R. Spermatis ceti in pulverem triti,

Gummi Arab. pulv. Singulorum dracbmas tres,
Conjerve rofarum rubrarum,
Conferva Cynofati, fingulorum dracbmas fex,
Syrupi balfamici uncias tres cum femife,
Elix. vitrioli acidi q. f. ad grat. aciditatem. Mifce. Fiat Loboch. Sumat cocblearium
unum parvum Sepe in diem.
The 1gth. Her ftools are regular, belly fofter, other fymptoms continue.
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The 22d. She is lefs ftuffed in her breaft, and her pulfe is ftronger, but the is feverifh every other day.

The 2gth. She is fomewhat better in the complaints of her head, ftomach, and bowels, but the ftuffing of her breaft and difficulty of breathing continue. Her ftools are eafy, her eyes better, and her fever gone. Her legs fwell towards evening, and fhe makes but little water.

Continuentur remedia, छु repetatur miftura ut antea, addendo

Aceti fcillitici dracbmas tres,
Spiritus nitri dulcis dracbmam unaĭ.
May 3d. The fwelling of her body is lefs, and fhe continues better in all refpects, except her cough and fudden difficulties of refpiration, which are as frequent and fevere as ufual, but ftill come on at no regular times.

Contiwuentur Löboch, Pilule Rufi छ Collyrium,
R. Florum Zinci grana decem,

Confeectionis cardiace Scrupulum unum,
Conferve rofarum rubrarum dracbmam dimidian,

OBSERVATIONS. IBI
Spermatis ceti grana Septem.
Syrupo corticum aurantiorum fiat bolus.
Sumat bis die $\mathcal{J}$ fuperbibat cocblearia duo vel tres julepi menthre.

The 6th. Her cough and difficulty of breathing are fenfibly better, and the expectorates pith more eafe.

The 9 th and 13 th. She continues to recover, and has no fwelling of her legs.

The 17 th. She is materially relieved in her afthmatical complaint, and finds herfelf well in all other refpects.

The Afthma of Mrs. - is one which affords a fair inftance of fuccefs from the Flowers of Zinc, when bleeding, bliftering; laxatives, and the volatile cordial mixture had been tried without effect. It muft at the fame time be admitted, that the medicines, which were firft ordered, relieved feveral diftreffing fymptoms, efpecially thofe in her head and fomach, and that, without thofe medicines, the Flowers of Zinc could not have been given with fo much propriẹty and advantage.

What rendered her diforder more particularly diftreffing, was her exceffive corpulency, which is juftly to be confidered as a difeafe, and certainly a very bad one too, as well as the forerunner of many others. This cafe indeed affords a friking example of the pernicious effects of corpulency in afthmatical diforders, and therefore well deferves to be attentively confidered.

Mrs. _ was 49 years of age, of low fature, and yet weighed fifteen ftone, a load which reafon forbid, and nature never intended her to carry. If fhe had not been fo very corpulent fhe could not, from her fize and make, have weighed more than ten ftone; fo that fhe had an additional weight of about five ftone, or feventy pound of folids and fluids, a weight which, if any thing but her own felf-indulgence in eating and drinking could have brought upon her, would have been infupportable. By this excefs of corpulency, fhe has in a great meafure deprived herfelf of the power of ufing - wholefome exercife in the open air, and has thus precluded herfelf from the enjoyment of that pleafure and recreation, which neceffarily tefult from the faculty of moving eafily from place to place.

If we examine a little into the effects of corpulency on her conftitution, we fhall find them very pernicious and alarming.

The bones and joints of corpulent people remain nearly in the fame ftate, however prepofterounly the other parts may be increafed in fize. But if Providence made the bones and joints ftrong enough to bear with eafe the weight of ten ftone, they are feldom fufficient to bear well the addition of fixty-three pound more, but fooner or later they will fink under their burden, and become weak and painful. This patient was very lame and weak in her ancles and knees. The time required to affect the joints is different in different people, according to the natural ftrength and foundnefs of the bones; on which account fome will be lame much earlier in life than others, though of the fame degree of corpulency. This lamenefs and weaknefs in the joints renders all motion and exercife painful and troublefome, and fo contributes greatly to increafe the evil.

But as the bones of adults can admit of little or no addition to their fize, we muift have recourfe to the other parts of the body to eftimate the jncreafe of weight in corpulency; and we find that

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that the chief increafe of weight is in the additional quantity of blood, and of oily matter or fat which is depofited in the cellular membrane. The mufcular fibres, it is agreed among anatomifts, have fixed limitations both in fize and number. They may, perhaps, be better filled up with the ultimate particles of matter in a ftate of corpulency than in a ftate of leannefs; but this will make very little increafe of bulk. Whereas the great increafe of blood and fat in corpulent people, is evident to the fenfes. Morgagni mentions a cafe in which the fat on the mufcles of the belly was above fix inches in thicknefs, and it was in a proportionate quantity in other parts of the body *. The increafed quantity of blood too, in fuch cafes, is likewife very manifeft. But the confequence of fuch an increafed quantity of fat and blood muft be very terrible indeed to the animal frame + .

Now if we examine the fymptoms which this patient complained of, we fhall find that the
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* Vide Morgagni de cauf. \& fed. morb.
+ " The greatelt healthy flandard the body is capable of, differs from the leaft, as it more haftens old age : Suppofe one enjoys health at two bundred, equally with another of five pound more: The excefs of the latter has been obferved to. Faften old age five times as faft." 2uincy's Sanct. Aphor.
caufe or increafe of them may evidently be attributed in great meafure to her corpulent ftate.
"Her head often akes, and feels heavy and dizzy." Thefe are very common effects of corpulency and fulnefs of blood; and whenever pain, heavinefs, and giddinefs of the head arife from that caufe, they ought never to be neglected, but always confidered in the moft ferious light by every one who wifhes to enjoy health and life. From inattention to thofe fymptoms, many dangerous complaints occur, fuch as palfy, apoplexy, epilepfy, inflammation of the brain, \&cc.
"Her nerves are in a very irritable and relaxed ftate." Corpulency and great tenfion of the blood-veffels generally increafe irritability; and the want of bodily exercife along with confinement within doors, favors general relaxation. Hence the danger of the cafe is greater; for a fuperabundant quantity of blood will certainly be more hurtful in an irritable. and relaxed, than in a firm and vigorous ftate of the veffels.
"She is very much ftuffed in her breaft, and has a bad cough." How feldom do we, fee a

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very corpulent perfon, who can breathe with eafe and freedom? Shortnefs of breath and ftuffing in the breaft, greatly increafed by motion, are almoft conftant attendants on exceffive fatnefs. The veffels of the lungs are greatly over-loaded with blood, and a more frequent refpiration is neceffary for the circulation of it. The heart, the midriff, mediaftinum, and large veffels are often loaded with an unnatural quantity of fat, which diminifhes the capacity of the cheft, confidered with a view to the dilatation of the lungs and the admiffion of air into the air-veffels. Her cough too, which is a very troublefome fymptom of the Afthma, is greatly increafed by the fame caufe.

Hence, as the cafe proceeds, "She is often attacked fuddenly with a foppage in her breaft, with wheezing and great difficulty of breathing, fo that the is afraid even of inftant fuffocation." This is a very dreadful fymptom of the Afthma, and one which is particularly frequent and fatal to corpulent people.
"Her body is much fwelled with wind. Her nights are uneafy and difturbed." Corpulent people, from indulgence in eating or drinking, are very liable to be troubled with wind in the
ftomach

## O BSERVATIONS. ${ }^{187}$

fomach and bowels. Their fleep too is feldom natural and compofed. Many very corpulent people, when afleep, breathe with fo much noife and difficulty, ftart fo violently, and have fo many ftoppages and interruptions of refpiration, that one, not accuftomed to fee them in that ftate, would fuppofe that they were not feeping, but threatèned with immediate fuffocation.
"She is at times fubject to a nervous complaint, in which her head trembles and her mouth is drawn to one fide." This is evidently a dangerous paralytic affection, arifing in all probability from her corpulent fate and the fulnefs of the veffels of the brain.

Thus we have, in a curfory manner, run through the melancholy catalogue of fymptoms, which, along with too great corpulency, diftreffed this unhappy fufferer. Her diet, by my directions, was regulated in fuch manner, that it might not be reduced on a fudden too low, nor yet continued by indulgence to an excefs, which might increafe her difeafe, and foon render it fatal. Very corpulens people, who have long been in the habits of gratifying their appetite, like nothing lefs than to be reftrained in what they eat and drink. The idea,
however, of a natural, or, as it is called, a conftitutional fatnefs, which (we are taught to believe) comes on and is continued through life, independent of the quantity of nutriment with which the body is daily fupplied, is a chimera too ridiculous to be feriounly refuted; and indeed no body was ever fo abfurd as to fuppofe, that the fame thing could take place in any other living creature. Yet it is readily admitted on all hands, that fome people will grow fat with a moderate diet, and that others will continue lean though they feem to eat immoderately. But this difference arifes from a better and more perfect digeftion in the one cafe than in the other. Yet the matter remains equally certain, that the perfon, who grows very fat, takes in more nourifhment than he ought to do; while the other only follows nature, and prudently endeavors, as far as he is able, to fupply her daily wants. It is not the quantity that we eat and drink, but the effects of it on our bodies, which, with a view to the prefervation of health, ought to be chiefly regarded. The juft proportion of the ingefted and egefted, fhould be ftrictly preferved.-But if what we take in exceeds what paffes from us by the different outlets of the body, it is manifeft that we take in more than nature requires. Corpulent people
people have no chance to diminifh their corpulency, but by moderating their diet; for they are feldom able to ufe exercife fufficient for that purpofe. At the fame time gentle exercije of all kinds, when it can be admitted, is very advifable, and it ought to be increafed, as they lofe weight and become ftronger and more active.

But I beg pardon for enlarging on a fubject, likely to do fo little good; for the reduction of exceffive corpulency is to moft people an Herculean labor, entered upon with great doubts and difficulties, but eafily defifted from, and the evil left to remain as it was. It would however be well, if thofe, who are beginning to grow very fat and corpulent, would reflect a little on the fatal confequences of fuch a ftate of body, viz. the miferies, difeafes, and untimely deaths to which they are liable to be foon expofed. By this means they might be perfuaded to moderate their diet; or, if that be imporfible, to ufe exercife in proportion to it while they are able, that the fize and weight of the body may be continued at a proper and healthful ftandard. *

Before

* Dr. Cullen, in his public Lectures on the Practice of Phyfic, makes many excellent obfervations on the removal of corpulency, which he very juftly ftiles a difeafe, under the title of Polyfarcia.

Before I conclude thefe remarks, I muft not forget to mention that Mrs. $\quad$ had an inflammation in her eyes, which was cured by 7the common applications; and as my own:eyes Have peen long weak in confequence of inflammation, I may be allowed to add, that without great temperance in diet, I never found any external applications which could procure me any lafting relief, If the veffels of the eyes and eye-lids are relaxed by long previous inflaminations, a fuperabundance of blood in the general habit will always have the greateft effect on the weakeft part; and, furely, our fight is a bleffing of fo valuable a nature, that if temperance in eating and drinking will preferve it, we cannot think it too dearly purchafed. Moderate exercife too, properly continued, in which there is no violence or ftraining, will, if the weather is not too cold or windy, be found very ferviceable in the fame complaint.

## C A S E IX.

The Convulfive Afthma complicated with the Goundice, cured by: the Flowers of Zinc.

MR. has been fubject to an Afthma at times for near two years, along with flatulency, diItenfion and pain in his ftomach, a bad cough and little or no expectoration. His afthmatic fits will frequently come on in a moment, fo that he can neither walk nor fpeak. His breathing at prefent is very laborious, but it is the worft about three or four $0^{9}$ clock in the afternoon, and continues fevere till two or three in the morning, after which time he senerally becomes eafier, and refts tolerably well.

He is fubject likewife to a pain in his right ide which extends acrofs his ftomach, and he as at prefent a very bad jaundice. His face and eyes are very yellow, his ftools white, urine hick and high-colored. He has been accufomed to high living, and, for many years paft, ias been very free in the ufe of ftrong liquors. He has had the jaundice above three months. His conftitution is weak and impoverifhed, fpirits

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fpirits dejected, pulfe low, body bound, appetite bad, and he is frequently troubled with ficknefs.
R. Infufi anzari fimpticis uncias duas cum femiffe, Aque Cort. aurant. Spirit. Semunciam, Salis diuretici fcrupulos duos.
Fiat bauffus, ter diesfomendius.
R. Saponis duri femunciam, Lenitivi Electarii dracbmas fex, Tartari Solubilis drachmas duas, Rbabarbari Pulveris dracbmaim unam, Syrupi Rofarum Solutivi q. f.
Fiat Electarium, cujus capiat drachman unams mane E vefpere, donec alvus refponderit, Es repe tatur eadem: dofis pro re nata.

The 8th. He ftill continues to be troubled at times with ficknefs and reaching, the pain in the region of his ftomach is eafier, his body is open, his ftools are of a more natural color, and the yellownefs of his face is fomewhat abated. His afthmatical complaints are nearly as ufual.

Sumat emeticum vefpere.
Continuetur electarium; छ repetatur ut antea bouftus amarus, addendo

Florum Zinci grana octo.
The

The izth and 14 th. The emetic anfwered well. He was not fick with the draught. The yellownefs of his face and eyes is lefs; his ftools are more natural and of a yellower color; pains eafier; appetite better; body loofe; cough, difficulty of breathing, and other afthmatical fymptoms rather abated.

The 1gth. His cough and difficulty of breathing fill continue to grow better, the fymptoms of the jaundice feem gradually to diminifh, and he has little or no pain in his fide and breaft. His expectoration is eafier and his fleep lefs difturbed.
 rus, fed confent fingula dofes ex Florum Zinci granis duodecim.

The 24th. The fymptoms of the jaundice are almoft removed, ftools natural, urine clearer, appetite good. He is not fick with his medicines; his breathing is eafier; and he gets up alittle phlegm with his cough.

The 2gth. He finds himfelf materially better in his cough and difficulty of breathing, and can bear to ufe exercife with much more eafe.
B b The
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The pain in his right fide is entirely gone, and he has no fymptoms of his jaundice remaining.

February $4^{\text {th }}$ and 8 th. He has had no return of the Afthma, and continues free from the jaundice.

After the obfervations already made on the preceding cafes, the indications and method of cure in this will require little or no comment. The complication of the Afthma and Jaundice is not unfrequent. I have feen feveral cafes of the fame kind. This Gentleman had been accuftomed to eat high-feafoned meats, and to drink freely, which method of living induces plethora and over-diftenfion of the blood-veffels, and confequently want of tone and internal obftructions and inflammations in the different vifcera, and in none more readily than in the lungs and liver.

As a further proof of what is here afferted, I fhall beg leave briefly to relate the cafe of a patient, whom I had fome years ago in the York County-Hofpital, gardener to Sir JofephPennington, who had a moft dreadful complication of a pulmonary confumption and jaundice,
in which the Afthma occurred as a fymptom. The whole right fide of the cheft was very much fwelled and enlarged, as was evident to the eye. His cough was troublefome; his breathing at times fuddenly and dreadfully laborious; and he expectorated a yellow bitter fætid matter, in which there appeared to be a mixture of bile, pus, and phlegm. He complained likewife of fwelling and hardnefs in the abdomen, and of fevere pains in his breaft, ftomach, and bowels, with conftant vomitings. His pulfe was extremely weak, and he had no appetite. His diforder had been preceded by a fever nine months before. He could lie no way but on his right fide, and then was obliged to have his head and breatt raifed high with pillows. Extreme debility. A hectic fever, with morning fweats. No reft at nights. Great flatulency and dry brown ftools. He lingered on a few weeks, and then was happily releafed from his unfpeakable miferies.

On opening his body, his bowels were mortified in feveral places. His liver was of a pale color, and forced down three inches lower than natural. The gall-bladder was diftended to twice its common fize, and there were three gall-ftones contained within it, but

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\text { B b } 2 \text { no }
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no paffage remained by the ductus communis into the duodenum. The right lobe of his lungs was entirely confumed except a very fmall portion little bigger than a hen's egg; and the right fide of the cheit contained feven quarts of a yellow bilious matter, fimilar to what he ufually expectorated. I then examined the midriff, and found on the right fide of it a large opening into the right lobe of the liver, A little more to the left, and near to the mediaftinum, but ftill within the right cavity of the cheft, there was another opening through the midriff, which led into the fmall lobe of the liver. On cutting into the lobes of the liver, there were two very large ulcers, which had nearly confuned the whole fubftance of that gland. The left lohe of the lungs was not much difeafed, and the heart was found.

During my attendance at St. Thomas's Hofpital in London, there was a patient in a jaundice, pulmonary confumption, and fymptomatic Afthma, who expectorated purulent matter mixed with bile, leaving no doubt, from its color and tafte, of a communication between the lungs and liver through the diaphragm. This man alfo died, but I do not remember that his body was opened.

Ulcers in the lungs and liver frequently arife at firft from obftructions and inflammations, which, perhaps, early and plentiful bleedings might have cured. But the lower clafs of people are often patient under their complaints, until they have got a foundation which nothing can remove. There are many cafes of jaundice, which begin with fymptoms of inflammation in the liver, in which repeated bleedings, according to the urgency of the fymptoms, are of the greateft fervice. In the cafe of Mr . - there wyere gall-ftones in the gall-bladder, which, by creating obffructions, might probably be one principal caufe of his moft complicated malady. The inflammation of the lungs and liver was communicated to the diaphragm, and induced adhefions and ulcerations. In confequence of this communication between the thorax and abdomen, the bilious purulent matter of the liver was mixed with the mucous purulent matter of the lungs, and caufed that mixed bitter foetid difcharge by expectoration, which we have before mentioned. It was evident, from the fymptoms of the difeafe, as well as from the diffection, that there was no paffage from the ulcers of the liver by the ductus communis into the duodenum, otherwife there would have been a drain for the matter downwards, which was nof the cafe.

PART

PART II.

## CASES OF ASTHMA,

IN WHICH THE

FLOWERS of ZINC

Were employed with fuccefs from the firtt of my Attendance.

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The Convulfive Aftbma, complicated with the Humoral, cured by the Flowers of Zinc.

D IL L IAM LAWSON, a brewer by trade, aged 33, admitted at the York County-Hofpital on the 29th of January, 1781 , has drunk hard, and been frequently expofed to cold; to both which caufes he attributes his prefent afthmatical complaint, which he has had for three years paft, but fays it is worfe this
this winter than ever it was before. The fits of his Afthma fometimes laft for three days, fometimes for a lingle night, and fometimes for only two or three hours; but at all times the difficulty of breathing in the fit is fo violent that he cannot bear to lie down. His face is high-colored, and his habit of body inclining to fulnefs; his pulfe is ftrong and rather quick; his expectoration difficult and fcanty; his left eye is confiderably inflamed; and his feet and ancles are fwelled and painful, which laft fymptom he has had for fome time pait. He has taken lately by my direction fome aloetic pills, which have kept his body open, and he thinks that they have been of fervice to him.

Mittatur fanguis ad uncias duodecim,
Sumat Florum vel Calcis Zinci grana decem ins conferve rofarum drachma una;
Mifture $\int$ alinne uncias duas ter die;
Pilularum Rufi tres vel quatuor pro re nata; § Houffum anodynum bora decubitus.

February 1. He finds himfelf fomewhat better to-day. The firft and fecond night fince the report of the 29 th, he was fo very bad in his Afthma, that he was forced to rife at one o'clock, and fit up all night. The third night he was fomewhat eafier, and lay in bed till
near fix o'clock. He coughs lefs and expectorates freely. His blood is not fizy, and, fince he begarr with the pil. Ruf, he has generally one or two ftools a day. He fays that he finds relief at night from his drops, and he is not frck with his bolus.
Repetontur remedia; $\xi$ continuctur bolus addendo Florum Zinci grana quinque.

Sumat cras mane Mift. Purg. uncias quatuor.
The 5th. The ftuffing in his breaft and difficulty of breathing are better He wakes now at one o'clock, and has his fit, which lafts only for an hour, and he can bear to lie down in bed all the time. His cough is eafier and loofer, and he fpits freely a whitifh, yellowifh, well-digefted phlegm, of an uniform color and confiftence. His phyfic anfwered well, and gave him feveral ftools. He has no ficknefs with his bolufes, and his appetie is much improved. His left eye ftill continues to be inflamed; but the pain and fwelling of his feet and ancles are eafier.

Repetantur remedia; $\delta$ continuetur bolus, fedconflent fingula dofes ex Florum Zinci granis viginti.

Sunat baufum anodynum cum tincture thebaice gutlis triginta.

Collyriunn commuse Sepe in diem utendum.
The

## OBSERVATIONS.

The 8th. He has eafy nights and refts well, little or no cough,' a free expectoration, and a good appetite. He has two or three ftools every day. His eye is much better, and the eye-water did not make it fmart.

The 12th. He has had no return of his afthmatical complaint, and his eye is well.

The 15 th. He has no difficulty of breathing, and his cough is almoft entirely gone. His appetite is good; his pulfe is natural; he fleeps well; has no rheumatic pains in his feet and ancles; and finds himfelf much ftronger.-Let him be difmiffed.

William Lawfon was a brewer, which is a very unwholefome employment. I have had many patients, following that bufinefs, who were afflicted with fevere complaints in their lungs, either afthmatical, confumptive, or both. Brewers are expofed to great heats and colds, nocturnal watchings, and hard drinking, all which we have fully fhewn to be frequent and powerful caufes of the afthma and pulmonary confumption. The convulfive afthma in this cafe was complicated with the humoral; for his

C c cough
cough was violent, with a foul copious expectoration. A laudable expectoration generally relieves in thefe cafes, but any expectoration, however laudable, denotes, if in large quantity, a fevere complaint. The pain and fwelling of his legs appeared to be rheumatic.

As he was plethoric, blood-letting and laxatives were advifed, and indeed both his pulfe and general habit of body feemed to indicate them. He then took the Flowers of Zinc, the faline mixture, and tinctura thebaica. As I had found the Flowers of Zinc evidently ufeful in the Afthma; and had in many inftances feen them fucceed when other medicines had failed, I prefcribed them immediately in this cafe, without having tried other remedies before them. The Flowers of Zinc are by no means to be claffed among powerful heating ftimulants, and therefore I had no fear of ufing them after bleeding and laxatives, though the patient was rather of a full habit.

The matter expectorated and accurately defcribed by this patient is different from the common appearances of phlegm. He called it "a whitifh yellowifh rotten ftuff," which had a difagreeable faint tafte and fmell, and was of an uniform
color and confiftence. I faw fome of it, and I have feen a fimilar kind of matter fpit up by feveral Afthmatics. It is not pus, but a yellowifh uniform well-digefted mucus. Indeed, phlegm, with the fame appearance, is fometimes expectorated in a common catarrh, where there has not been the leaft foundation, from the attendant fymptoms and the fequel of the difeafe, to fufpect even any the fmalleft ulcerations in the lungs. In confumptive cafes with tubercles and ulcerations of the lungs, the matter fpit up is generally of a mixt nature and variegated color, partly opaque and partly tranfparent, confifting of pus and mucus, more or lefs intimately blended together, and yery rarely (if ever in the beginning of thofe complaints) puts on an uniform appearance in color and confiftence. By a careful examination, the experienced practitioner can readily diftinguifh in general the clearer, more tranfparent, and more vifcid particles of phlegm, from the yellower, lefs tranfparent, and lefs coherent particles of purulent matter, and a feparation of the two may be made in many cafes, by the help of a fmall probe or any other fit inftrument.

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William

William Lawfon had been ill three years, the feafon of the year was againft him, and his diforder was very violent. He begun with ten grains of the Flowers of Zinc, and gradually increafed the dofe to twenty grains three times a day, and he took his drops in the laft dofe of his mixture. He was admitted at the Hofpital on the 29th of January, and he was difmiffed cured on the 15 th of February.

## C A S E XI.

The Convulfive Afthma, complicated with the Humoral, cured by the Flowers of Zinc.

ELIZ ABETH STEVENSON, aged 62, March 13, 1776, of a pale ematiated habit, has been fubject to an Afthma from her infancy of the convulfive kind, complicated with the humoral. The fits return frequently, and are very fevere, particularly in thick foggy weather. Her fpirits are low, body bound, pulfe weak, appetite but yery indifferent, and fhe is fubject to the piles. She has ufed at different times a variety of medicines, fome of which the thought gave her a little relief. She has had no appearance of the menfes for many years paft.
R. Con-

## OBSERVATIONS.

R. Confectionis cardiace dracbmam dimidiam,

Conferve Cynofbati fcrupulum unum,
Caftorei pulveris,
Florum Zinci, utriusque, grana quinque.
Syrupo balfamico fiat bolus. Sumat unum bis die,
E fuperbibat julepi cardiaci uncias duas.
R. Lenitivi Electarii unciam vnam,

Florum Sulpburis Semiunciam,
Tartari Solubilis dracbmas duas,
Rbei Pulveris, drachmam unam,
Syrupi Balfamici q. f.
Fiat Electarium, cujus capiat mane pro re nata cocblearium unum parvum.

The 18th. The electuary procured her one ftool, and the bolus agrees well with her ftomach; but her breathing continues very laborious, attended with much wheefing.

Repetatur electarium, etiamque bolus, addendo Florum Zinci grana tria.

The $25^{\text {th }}$. Her fpirits are ftill low, and fhe has a bad cough. Foggy weather and the fmoke of the city encreafe the violence of her afthmatic fits, but a dry clear ftate of the air, renders them milder.

The 29th. She finds herfelf confiderably better.

April 3. She continues to recover. The bolufes fit eafy on her ftomach, and the electuary keeps her body regular.

The 6th. She feels herfelf very well this morning, her afthma and cough are very much relieved.
Repetatur electarium; © continuetur bolus, Sed confent finsule dofes ex Florum Zinci granis decem.

The 12th. The medicines continue to agree with her, and fhe finds no ficknefs after taking thẹm. Her appetite is improved; the neeps well, and feels herfelf ftronger every day.

The 19th. She has no cough ; but at times is yet troubled with a flight difficulty of breath ing.

The 26 th. She has no complaint.

## C A S E XII.

The Convulfive Aftbma, complicated with the Humoral Aftbma, general Weakness, Relaxation of the fomach and bowels, Indigeftion, dropfical Swellings and Rbeumatijm, cured by the Flowers of Zinc, Purgatives, gentle Labor, $E^{\circ}$ c.

AIARXSIEVENSON, aged 23, April I , complains of a pain in her breaft, a violent cough, and difficulty of breathing, which come on very fuddenly both in the day and in the night, and continue for feveral hours at a time. Any quick motion will frequently induce a fit of her afthmatical complaint, but it frequently attacks when fhe is ufing no exercife at all, attended with a fwelling of her ftomach and palpitation of her heart.

She is fubject to dropfical fwellings of her legs, and fometimes fhe has a like puffy fwelling univerfally over her whole body, and at thofe times fhe can hardly get her breath. She is of a low ftature and a full grofs phlegmatic habit, but her face is rather pale, and her flefh relaxed and unwholefome. She is not regular in her menfes; for fometimes they return once in three weeks?
weeks, and fometimes they do not appear for two or three months. Her ftomach often fwells violently, and fhe has frequent fainting fits. She got cold when her menfes were upon her about two years ago, which firtt brought on her fhortnefs of breath. About that time, likewife, fhe firft began to be loaded with unwholefome fat. She is frequently troubled with dizzinefs, ficknefs, and a rifing of infipid water from her ftomach, which the common people in this part of the country call black-water, and in Edinburgh waterbrafh. After thefe fits of dizzinefs and ficknefs, fhe fometimes feels a coldnefs, and then immediately breaks out into a fweat. Her fkin often prickles and itches violently. She is fubject to fevere pains in her legs, ftomach, and bowels. Her pulfe is low and not quick, expectoration difficult, tongue clean, fkin cool, body regular.

Florum Zinci grana octo in confervae rofarums dracbma una bis die.
Nijfure mucilaginofe uncia $\mathcal{E O}^{3}$ dimidia ter die.
Houftus fence purgans c pulveris jalapii granis olto cras mane.

The 5 th. She ftill complains of a pain in her breaft, a troublefome cough and great fhortnefs of breath, with general dropfical fwell-

## OBSERVATIONS.

ings: She has a very troublefome itching in her kin. Other fymptoms are nearly as before. The-phyfic anfwered well; and the bolus did not make her fick.

Mittatur fanguis ad uncias olIo; EJ repetantur remedia, fed augeatur dofis Florum Vinci ad grana duodecim.

The roth. Her afthmatic fits do not return fo frequently, nor are they fo long or violent as they were. She feels no ficknefs from her medicines. Her appetite is better, and the black-water is left troublefome. Her legs and whole body fill fwell at times, but in a lefs degree, and fie finds herfelf growing ftronger.

Houftus fence purgans cras fumatur.
The 13 th. She continues to recover. Her appetite is good. Expectoration free. The pains in her legs are much better, but her breaft feels fore, and her ftomach is both fore and fuelled. She fays that her phyfic always relieves her.

The 18 th. Her ftomach fells much, and the often has, as usual, a violent palpitation of her heart. In other respects fie continues to recover.

Repetatur bolus, imifura, E baufus purgans. Dd

The

The 22 d . She is weak and languid to-day. The purging phyfic relieves her materially.
-Haufus Jene purgans cras.
The 25th. She has her menfes at prefent, and continues better.

May 3. She fays that the bolus makes her fick. She has ftill fome returns of her difficulty of breathing, but they are very trifling. The general dropfical fwellings of her legs and whole body are almoft entirely removed.

Hauftus Sence purgans cras.
Sumat pilulas Florum Zinci duas mane Ev vefpere, E' Juperbibat julepi menthe uncias duas.

The 6th. She is better, and makes no complaint of ficknefs; but has a pain in her thighs. Sumat pilulas tres mane \&o vefpere.

The roth. She recovers faft, and fays fhe finds much relief from the pills. Her fhortnefs of breath and pain in her thighs are much better. Her fick fits do not come on near fo frequently, her ftomach is ftronger, and her dropfical fwellings are entirely gone.

The

O B SERVATIONS. 2IF
The 16 th and 24 th. She has had no return of her afthmatical complaint except once when the walked quick. Her ftrength encreafes daily. Let her go into the country.
R. Aqua Fontane uncias quatuor, Mucilaginis Gummi Arabici. Tinct. Cort. Peruv. utriufque unciam unam. Mifce. Dofis uncia duce ter die.

The 3 rift. She has got a little cold fince fhe left York. Her tongue and throat are fore, which difturbs her reft, and fhe is coftive. The country agrees very well with her, and for fome days paft fhe has been gathering weeds in the fields. She has walked eight miles to-day, and returns home to-morrow. She does not take milk becaufe it ftuffs her.

Repetatur miftura corticis E fumantur pilula Ruff tres pro re nata bora Jomni.

June 7 . She is ftill in the country, and has walked eight miles to-day. Has had no return of her Afthma, but complains of a little frefh cold attended with a night cough, fore mouth and fpitting. She has loft a good deal of that unwholefome fat with which fhe was burdened.

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The 24th. She has no complaint, except a little roughnefs in her throat, with a few fmall pimples in her mouth. She is ftrong and well in all other refpects; her appetite is perfectly reftored; her complexion is clearer and more healthful; and the is much fmaller in her perfon, but itronger and more active.

## July 8. No complaint of any kind.

This Afthma is complicated with a high degree of chronic or general weaknefs, along with great relaxation of the ftomach, and univerfal puffy dropfical fwellings. Her habit of body was very grofs and phlegmatic, and fhe had a pafty unwholefome look, with great languor and fluggifinefs of conftitution, all which were very unfavorable circumftances. She attributed the rife of her complaint to cold when her menfes were prefent, which is a very frequent caufe of difeafes among women. Particular caution is required at that time, for their conftitutions are then more readily acted upon by cold. Afterwards, when her illnefs confined her, fhe was, in confequence of her relaxed fibre, not only troubled with general œedematous or dropfical fwellings, but alfo with
an unwholefome fatnefs, which of itfelf would certainly tend to encreafe her difficulty of breathing and afthmatical complaints. Thus fhe was in a fair way of rendering her diforder worfe, if not incurable.

When fhe firtt came to me, as her pulfe was low and her habit relaxed, I wifhed to avoid bleeding, and ordered the Flowers of Zinc as 2 tonic and antifpafmodic, along with a dofe of phyfic and a mucilaginous decoction. The fecond time I faw her, her cough and difficulty of breathing, with a rheumatic pain in her fide and legs, were ftill very troublefome, and therefore bleeding, notwithftanding the relaxed fate of her conftitution, was advifed. Indeed it is a fact well confirmed by experience, that we are fometimes under the neceffity of bleeding in fevere attacks of the Afthma, when even the weaknefs of the patient is very great. This operation however, in order to render it fuccefsful, muft in fuch dubious cafes be performed with great caution and judgment, otherwife much mifchief may certainly enfue from it.

Gentle purgatives, thro' the whole of this cafe, were of great ufe; and indeed from the general appearance of the patient and the nature
ture of her conftitution, it was highly probable they would be fo. Her habit was grofs, and the fometimes eat more than fhe could digeft, which would of courfe fwell and diforder her fomach and bowels. Purgatives, therefore, affording immediate temporary relief to the firft paffages, and unloading the blood veffels by inducing a difcharge of ferous fluids, were evidently indicated. When her menfes were upon her fhe did not take her purgative; but I did not judge is neceffary to intermit the other remedies, as they would rather favor than check that natural evacuation.

The Flowers of Zinc were prefcribed at the beginning of her attendance, and continued till the afthmatic fits were removed. They were firft given in the form of a bolus, but when fhe grew tired of that, they were prefcribed in pills, beginning with a fmaller dofe and gradually increafing it. The remedy then agreed very well with her, and fhe gladly acknowledged that fhe continued to receive benefit from it. Her diet in the mean-time confifted chiefly of bread, water-gruel, light puddings, a little frefh meat now and then, and fuch like mild nourifh. ing things.

Afterwards

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Afterwards the tincture of bark and the pil. Rufi, along with country air and exercife, were recommended to compleat the cure. As fhe grew better, fhe was obliged to work in the fields: for a livelihood, and fhe had eight miles to walk whenever fhe attended on me at my Difpenfary. Eight miles were at firft more than in ftrict propriety fhe ought to have walked; but neceffity has no law; and had I begun to raife objections, fhe might, thro fear of overfatiguing herfelf, have defifted from her attendance, and fo have loft the opportunity of being cured.

This example, I hope, may be ufeful to others; for fhe certainly received very great benefit from walking and gentle labor. Her appetite and digeftion were reftored; fhe looked clear and well in the face; loft all her unwholefome fat; and with regard to activity and bodily ftrength, became quite a new creature. Such examples, as this, are rare ; for the natural fluggifhnefs of conftitution in thefe cafes forbids exercife, and when people are in eafy. circumftances, trouble of all things is what they moft dinike. This poor woman was obliged to work for her bread; and therefore my advice, concerning exercife and gentle labor,
were followed with fteadinefs and alacrity. Such relaxed watery exuberant conftitutions as hers, will always receive very great benefit from following her example, both in ufing exercife and in avoiding indulgences.

## C A S E XIII.

IThe Convulfive Afbma, complicated with Cbronic Weaknefs, cured by the Flowers of Zinc.

ALICEWILSON, aged 53, September 13,1782 , has an Aithina of the nervous kind. It attacks her at four o'clock in the morning with great violence, fo that, not being able to lie down, fhe is obliged to fit up in bed. The fit lafts three or four hours. Her complaint has been growing worfe ever fince laft May, and has conftantly returned every night. She gets her livelihood by wafling, and confequently has often been expofed to great heats and colds. She has had no appearance of her menfes for feven years paft, and when they were leaving her, fhe was very ill for four years, troubled with frequent vomitings and great weaknefs, but after a fever fhe gradually recovered her health and ftrength. Her ftomach
mach is often very fore, particularly in an afternoon, and fhe frequently fits up a bitter froth in which there is a mixture of bile. She is at times feized with ficknefs and vomiting. She complains of flatulency and a conftant working in her bowels at night when fhe wakes, which fymptoms fhe has had many months; and alfo of great tightnefs over her breaft both before and during her afthmatic fits. Her body is bound. Expectoration difficult. Skin cool. Pulfe moderate. Nights very reftlefs and difturbed.

Capiat bis die bolum ex Florum Zinci granis feex छ conferve cynoßbati dracbma una; छ fuperbibat julepi mentbe uncies duas.

The 20th. She is rather eafier. Had a little ficknefs from the bolus for two or three of the firf dofes, but is not fick with it now.

Repetantur remedia; necnon fumatur emeticum hora Septima vefpertina.

October 3 d. The vomit operated well, and her other medicines fit eafy on her ftomach. She finds herfelf confiderably better both in her cough, expectoration, and difficulty of breathing. Her afthmatic fits are but trifling at E e prefent,
prefent, and the fleeps well. The forenefs of her ftomach is greatly diminifhed, and fhe feldom fits up any bitter froth.

The i2th. Her cough is better, and fhe can breathe nuch more eafily. Her bolus creates little or no ficknefs. The tightnefs and ftricture acrofs her flomach is almoft gone. She has good nights, and is very eafy when the wakes. The flatulency and conftant working in her bowels at nights is diminifhed.

The 18th. She has had a return of her Afthma for feveral nights, but with much lefs violence than before. Her cough continues better, her expectoration is freer, and the has no vomiting. She refts in the night tolerably well.

The 25 th. She continues much better; has little or no wheezing in the night; and breathes freely without any return of her afthmatic fits.

November ift. She has no complaint.

This woman's cafe affords another friking example of the good effects of the Flowers of Zinc. Her Afthma too was complicated with a great degree of general weaknefs, and relaxation. The forenefs of her fomach, vomitings and rifing of bitter froth, with flatulency and frequent working in her bowels, were very troublefome fymptoms. The tonic and antifpafmodic effects of the Zinc proved ufeful in the removal of thofe complaints, as well as of the Afthma. It is fomewhat fingular, that when the menfes had left her, fhe continued ill for the fpace of four years, and after a fever recovered her health and ftrength again. It is difficult to account for this fact; but there are many of a fimilar nature, fufficient to fupport and confirm the truth of it; for we frequently fee valetudinarians become ftronger and more healthful after a fever.

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CASE

## C A S E XIV.

T'be Convulive Aftbma, complicated with the $H u_{3}$ moral Aftbma, Spitting of Blood, Bleeding of the nofe, Rheumatijn, and Weakness of the foomach, cured by the Flowers of Zinc.

IWas defired to vifit at his houfe in the country Mr. - , aged 47, April 12, 1783 , who is violently afflicted with an Afthma attended with a fevere cough and ftuffing in hiṣ breaft. He is commonly attacked in the daytime with three or four fits, in which his difficulty of breathing is on a fudden fo violent as almoft to threaten fuffocation. He has likewife feveral fits in the night, and then wakes from his fleep in fo diftrefsful a fituation, as if unable to recover his breath. Thefe complaints, are followed by a fevere cough, from which he finds eafe when he fpits up a little phlegm of a grayifl or bluifh caft. His difficulty of breathing is always the greatelt when he is the leaft able to cough, but fometimes coughing gives him a violent pain in his head. He has been fubject to this afthmatical diforder for feveral years paft, and has always found great difficulty in ufing exercife of any kind. About eight weeks ago he frequently fpit blood in, confiderable quancities attended with a fit of coughing. His conftitution is rather full and tolerably

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tolerably good; and he is fubject at times to a bleeding at his nofe. He complains of thirft, but has no appetite for food. His ftools are natural, but he is much troubled with wind in his ftomach, which at times makes it fwell yolently. His pulfe is fmall, and rather hard. He is low-fpirited, has a dizzinefs in his head, and a frequent refleffnefs and uneafinefs in his limbs, with rheumatic pains in his fide, hips, fhoulders, \&c. moving from one place to another.

Fiat venefectio ad uncias octo.
Sumat baufus fene purgantis uncias quatuor cras mane.

Capiat ter die bauftum ex julepi e camphora uncia et dimidia; nee non bolum bis die ex Florum Zinci granis ocio.

On the 16 th I faw him again, and took the following report. His blood is rather fizy, the phyfic operated well, he is not fick with his bolus, and finds himfelf fomewhat eafier. He is ftill very much ftuffed in his breaft, and has a troublefome cough; but the attacks of fudden difficulty of breathing, which he calls his neryous Afthma, have neither been fo frequent nor

* This purging draught is the fame as the one preferibed p. 173, with this difference only, that the tartarum folubile is ufed inftead of the fal de Rochelle.
nor fevere. He is ftill thirlty and has no appetite. His pulfe is fmall, but neither hard nor frequent, and his rheumatic pains are much as ufual.


## Repetantur remedia.

On the 20th I paid him another vifit in the country, and had the fatisfaction of finding him materially better. His afthmatic fits were lefs frequent and lefs fevere, and his cough was not fo violent and ftraining as it had been. He complained ftill of ftuffing in his breaft, thirft, want of appetite, and pains in his joints. His pulfe was fofter and not quick. His fomach was lefs loaded and lefs fwelled. The dizzinefs in his head and lownefs of fpirits were fomewhat better. The phyfic anfwered well. The bolus fat eafy on his ftomach, but he was fick with his draught.

Repetatur bolus, $\delta$ fumantur ter quaterve in die decoent mucilaginof uncice duo. *

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In a few days after the laft report I received a letter from him, informing me that his afthmatic fits had entirely left him, and that his cough and ftuffing in his breaft were much better and attended with a free expectoration. His fpirits were good, his digeftion ftronger, his pains much lefs troublefome, and he had had no return of his fitting of blood. His medicines agreed well with his ftomach.

On the 4th of May I received another letter from him, by which I learnt that he continued to recover, but that his cough had not entirely left him, and now and then he had a flight return of his afthmatic fits. He had begun, by my defire, to ride out on horfeback every day when the weather was favorable, and found much benefit from it.-In little more than a fortnight after the receipt of my laft letter, I faw him in York perfectly well and free from complaint. He then told me of his own accord, that he had continued the ufe of the bolufes to the very laft, as he had found great relief from them.

The cafe of this Gentleman affords an accurate hiftory of that fpecies of the convulfive Afthma,

Anhma, in which the fits are fhort, but frequent, recurring feveral times in twenty-four hours. The humoral Afthma is here complicated with the convulfive, along with a confiderable degree of rheumatifm-a complication which is not unfrequent. But in the cafe of Mr : we find likewife that he is fubject to a fpitting of blood and a bleeding at his nofe; partly from an obitructed circulation through the lungs, and partly from too much blood in the veffels. It is highly probable from the hiftory of the difeare, that this patient had tubercles in his lungs. **

When his difficulty of breathing was the wort, he was fcarce able to cough, but as the fit abated, his cough returned, and he found eafe when he could expectorate a little phlegm. This however he, like other afthmatics, could not always accomplifh; for he would often cough violently for a confiderable time, and at laft be unable to fpit up any thing at all. Such coughing fits as thefe harraffed him much. Sometimes after two or three fevere fits of coughing he would expectorate a little phlegm of a grayifh or bluifh caft, which afforded

- evident

[^24]evident relief. Some Phyficians are of opinion, that the phlegm, which is fpit up of that color, comes from mucous glands in the bronchia, which are nearly of the fame color. However that may be, I am fully convinced that it often gives an irritation to the lungs and provokes a cough, when it is not compleatly in the courfe of the air thro' the air-veffels ; for during the time of a fit of coughing, I have feen afthmatics, when the fpafm of the lungs was not prefent, take a clear and tolerably full infpiration, without the leaft found or rattling of phlegm in the air-veffels, and yet the irritation exciting the cough, has continued till, by further repetitions of the cough, a little dark-colored or bluifh phlegm has gradually got into the courfe of the air in the air-veffels, occafioning a kind of rattling found, and at laft has come eafily up mixt with a fmall quantity of common white phlegm. *

This fact has frequently fallen under my own obfervation, and many afthmatics have Ff confirmed

* In this cafe it appears as if the phlegm was either lodged partly at the orrifice of a mucous duct, and partly in a fmall air-veffel ; or elfe, collected more together, blocked up a fmall air-veffel, and part of it hung into another of a larger fize, and produced an irritation there, till by coughing or hemming the phlegm was forced into the larger air-vefiel and then came eafily up, or elfe flew out of the patient's mouth to fome diftance.
confirmed it. It is worth attention, for probably it may be hereafter found, that iome fpecies of the Afthma may originate from a difeafe in thofe mucous glands of the bronchia which fecrete that bluifh or grey-colored mucus, and be afterwards communicated more or lefs to the fubftance of the lungs themfelves. Nothing but frequent diffections of dead bodies can clear up this point, nor indeed many others in the fcience of medicine, which are ftill involved in darknefs and uncertainty. And it is to be hoped, that in this improving age the prejudices of mankind, againft fo ufeful and neceffary a practice as that of examining the budies of the dead, have at length fubfided and given way to found fenfe and public utility, By withholding no opportunity of advancement of medical knowledge from the induftrious part of medical men, mankind will beft confult the good of themfelves and of their pofterity. By this means, the ignorant will be inftracted; the rafh checked in their buld career; the timid convinced of the danger of timidity ; the carelefs, through confcience, become active and induftrious; and the moft fenfible confirmed in what they already knew, and daily add great and folid improvements to the healing art. And how often, alas, does it happen thro'


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the great uncertainty of human life, that, while we are afflicted with one difeafe in its infancy, another in a different part and of a different nature, puts a period to our lives: Diffections in fuch cafes would not only fhew the effects of the fatal difeafe, but likewife what vifible changes, however fmall, were then made by the former which was juft beginning. Thus the minutix of medical knowledge would be illuftrated, and that part of diforders better underftood, which at firft admits of the greateft relief, but afterwards lays the fure and folid foundation of deftruction.

The medical practice, in the above cafe is eafily explained. Bleeding and laxatives were ordered to obviate plethora, and along with them was enjoined a fpare diet, which is of great confequence. Animal food was not totally forbidden; becaufe this Gentleman's ftomach was weak, but a very moderate portion of it only was admitted, and the reft of his food confifted of the prudent ufe of milk and vegetables. The whole of his diet, taken together, was fuch, as evidently tended to diminifh the fulnefs of the veffels. Exercife at firft could not be ufed, but afterwards riding was of great fervice to him, The ficknefs which he complained of from his
Ff: medicines
medicines arofe evidently from the camphor julep; for, by omitting that, the ficknefs was removed, although he ftill continued as before the Z inc bolus.

## C A S E XV.

## The Convulive Aftbma, following the Hooping Cougb, cured by the Flowers of Zinc.

MAfter $\mathcal{F} . B$-, three years and ten months old, September 22, of a relaxed phlegmatic habit, inclining to fatnefs, labors at prefent under a violent difficulty of breathing, attended with a conftant wheezing, a fhort cough, and a confiderable difcharge of phlegm from the lungs, which evidently rifes into his throat, and is afterwards fwallowed. Sometimes the difficulty of breathing comes on in a moment, either during exercife or after fleep, and is fo fevere as to threaten fuffocation. In this alarming ftate, he continues for an hour, and fometimes longer. He has generally five or fix fits of his Afthma in twenty-four hours. He has labored under his prefent complaint for above four months. He had the hooping cough 'about a year ago, but has always been fubject to a cough and ftuffing in his breaft, with now
now and then violent fits of his Afthma. His pulfe is quick and not weak, and he fleeps tolerably well, except when his cough and difficulty of breathing difturb him. The longer he fleeps at once, the worfe he is when he wakes. His body is rather bound, fkin cool, tongue clean, appetite indifferent, and he has no thirft. About a week ago he was bled with three leeches.
R. Florum Zinci grana duo, Gummi Arabici grana tres.
Mifce, fiat pulvis, ter die fumendus, ex mifure sequentis uncia dimidia.
R. Emulfionis communis uncias duas cum femiffe, Spiritus Mindereri unciam unom, Aque cinnamomii fpirituofe unciam dimidiam. Syrupi balJamici fefquidracbmam.

Capiat, ex quovis vebiculo, manne optime unciam dimidiam pro re nata, quando alvus aftrizta fit. Hirudines tres cruribus applicentur.

The 28 th. He is heavy and feverifh in an evening. His cough and difficulty of breathing are fomewhat better. The leéches bled freely, the manna anfwered well, and his powder agrees with him.

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October 6th. His cough is rather encreafed, parcicularly in a morning, at which time he gets up a little phlegm; but his difficulty of breathing and ftuffing in his breaft are much better. His body is open and he is livelier; he has good nights and fleeps more compofedly; he has a better appetite for food; is lefs feverih in an afternoon, and can walk ftronger.

The 14th. His body is regular with the occafional ufe of the manna. His cough and difficulty of breathing are much better; but he is rather more feverifly in an afternoon than he was, and his appetite is not fo good.

Repetantar remedia, fed augeatur dofis Floruni Zinci ad grana tres.

The 22d. He has mo returns of his afthmatical complaint, and his cough is but very trifling. He looks much better in the face, is ftronger and more lively; has good nights and breathes well. His appetite is much improved; but he is bound in his body.

Sumat cras mane baujfus fene pro infantibus uncias duas. *

The

* The following is the prefcription, to which, when necef-
fary, two feruples or a dram of the tinctura jalapii may be
occafionally added;
R. Infufi


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The 27th. The phyfic anfwered well and he is free from complaint, except fome return of pain in his breaft, fimilar to that which preceded the laft violent attack of his afthmatic diforder.

Cruribus applicentur birudines quatuor.
Repetantur cras mane baufus Jeno pro infantibus uncier duo.

November 4th. He has no pain in his breaft, but complains of a little pain in his right knee. His breathing is quite natural, and the phyfic, which he took on the 28 th, gave him four ftools.

The gth. He has no returns of his Afthma, his cough has entirely left him, and he has no pain either in his breaft or limbs.

This cafe affords a ftriking example of the Afthma in a very young child. As the palenefs of his face and his grofs relaxed phlegmatic conftitution evidently denoted, he had been much

[^25]much confined within doors, and prevented from ufing that exercife in the open air, which is abfolutely requifite for the health of children. Too grofs a diet and too much heat had likewife contributed in this cafe to encreafe the malady. A common proportion of food even without neceffary exercife, conftitutes grofs feeding; and when children are confined to the houfe, it is difficult to keep them from being too near the firse. When afleep too in the daytime, his mother often laid the full quantity of bed-clothes upon him, along with all his wearing apparel, which heated him immoderately, and was very pernicious.

The hooping cough, which he had had about a year ago, and which in many cafes proves a long and obftinate difeafe, contributed much towards rendering his Afthma more violent and dangerous. Sydenham has called the hooping cough, pene infuperabile malum, an expreffion, which, in all probability, has done mifchief in the world, by inducing both parents and practitioners of medicine to confider the diforder as incurable, and therefore to neglect it. Tho' medicine cannot haftily remove it, I have no doubt, from the fuccersful practice of others, and from what I have feen myfelf, that
much may be done towards fhortening its duration, mitigating the violence of its fymptoms, and preventing pulmonary confumptions and other dreadful confequences. In the prefent cafe, the hooping cough had been neglected, which was a very unfortunate circumitance, and might, in many inftances, have proved fatal; but this child had naturally a wide cheft, which without doube contributed greatly towards his prefervation.

The practice in this cafe needs little or no comment. The reafon why opiates were not made ufe of, was that the child refted tolerably well at nights, except when his althmatic fits difturbed him, and then the longer he had flept the worfe was the enfuing fit. In his phlegmatic habit, therefore, an opiate, by caufing too great a collection of phlegm, would have been attended with danger of fuffocation, and might indeed have proved fuddenly fatal.

When he was almoft free from his afthmatical complaint, he was feized with a pain in his fide, fimilar to that which he had felt at the beginning of the laft violent attack. This pain, therefore, required particular attention, efpecially as the child had lately gained flefh, Gg and
and was fuller of blood. Accordingly he was bled immediately with four leeches, and had a gentle dofe of phyfic the next morning; which relieved the pain in his breaft, and prevented any inflammatory affection.

Afterwards he had a pain in his right knee, which continued a few days and then difappeared. Pains in the extremities, as was before obferved, often fucceed complaints of the breaft, and whether mild or fevere, powerful means in fuch cafes fhould not be haftily ufed to remove them, left the difeafe, not yet fubdued, fhould be driven to the lungs, or to fome other internal part. Poultices, fomentations, ftrong volatile liniments, \&c. fhould not be immediately applied, but the pain in the joints, like a regular fit of the gout, fhould be viewed in a more favorable light. This child, through the whole courfe of his difeafe, took his medicines without any difficulty, which was a very pleafing circumftance; and indeed the medicines prefcribed for him were always made as palatable as they could be.

As a further recommendation of the abovementioned method of cure, I may juft hint that the only fon of the late Mr. N—of Skelton,

## OBSERVATIONS.

was attacked with fevere fpafms of the lungs after the hooping cough, accompanied with fudden and violent difficulties of breathing, a very alarming convulfive cough, a copious and fomewhat yellowifh difcharge from the lungs, great weaknefs and emaciation, a hectic fever, and all the ufual fymptoms of an approaching confumption. By the ufe of theFlowers of Zinc and a proper regimen, along with the anxious care of moft tender and affectionate parents, he was happily reftored to health.

## C A S E XVI.

The Convulive Aftbma, complicated with the Humoral Aftbma and Cbronic Weakness, cured by the Flowers of Zinc.

7ANE HARRISON, aged 60, November 18, has been fubject to an Afthma for twelve or thirteen years paft. It attacks her three or four times a day and continues about an hour. When the fit is upon her, fhe complains of a ftraitnefs in her breaft, conftant wheezing, fcanty expectoration, and great difficulty of breathing, but at that time fhe is fcarce able to cough. Her afthmatical complaint is the worft in winter, but it continues

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\mathrm{Gg}_{2} \quad \text { all }
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all fummer, and fhe is never clear of it, Pulfe moderate. Body regular. She has had no appearance of the menfes for the laft ten years, Her.habit of body is weak, thin, and relaxed ${ }_{2}$ and fhe is much troubled with lownefs of fpirits.

Capiat bolum bis die ex Florum Zinci granis fex छ conferve abfinibii forupulis duobus; छ fuperbibat decooti lignorum uncias tres.

Sumat bora Septima vefpertina pulveris ipecacoanhe grana decem pro emetico.

The 25 th. Her Afthma is rather better. The emetic operated well and brought away much phlegm and undigefted matter. Her medicines agree with her, and her appetite is improved. Her cough is troublefome, and without any expectoration. Her afthmatic fits are not fo frequent, nor fo violent as they were. She has a large room to live in, which is well ventilated. She often walks out in the open air, and finds herfelf better for it. She breathes the freeft when fhe has the leaft on her ftomach ${ }_{3}$

[^26]fromach, on which account fhe always makes light meals, and eats little or no fupper.

Repetantur remedia, fed confent fingula dofes ex Florum Zinci granis decem.

December ift: She continues to recover. Has been rather fickifh thefe two laft mornings, when fhe waked. The weather at prefent is very changeable, fometimes rainy, fometimes clofe and warm, and fometimes frofty. She can walk with more eafe and ftrength than fhe did; her appetite is better, and her digeftion ftronger.

The 8th and 16 th. She has for five days palt had a regular return of her Afthma every afternoon at three o'clock, and the fit lafts about an hour. She is ftill fick at times with her medicines. The weather in general is thick, damp, and mild, though now and then there is a froft.

Repetatur bolus, fed conftent fingule dofes ex Florum Zinci granis octo.

Omittatur decootum lignorum, et vice ejus capiantur ter die decoosi mucilaginofi uncire duo.

The 23 d. She finds herfelf better. Her medicines caufe no ficknefs, and her breathing
is eafier. The weather is very cold, and there is a hard froft.

January ift and 9th. She is very feverifh; and durft not come out to-day as the froft is intenfe. Her cough and ftuffing in her breaft are increafed; and fhe has bad nights.

Continuentur remedia, छ Jumatur omni nocte bara fomni bauftus anodynus.

The 15 th. She is rather better than fhe was, Thinks her medicines have relieved her greatly in her afthmatic fits; but fhe is ftill ftuffed in her breaft, and at times very low-fpirited. Her nights are eafier fince fhe took her draught at bed-time.

February ift. She continued the ufe of the remedies above prefcribed for about a month longer, and her cough, ftuffing in her breaft, and afthmatic fits, gradually left her. She was difmiffed from her attendance at the Difpenfary on the fecond of March, at which time her breathing was free and natural, her complexion clearer, her pulfe fuller, and her appetite much improved. She had recovered her ftrength very confiderably, llept well at nights, and was in good fpirits. During the courfe of her difeafe, fhe now and then was troubled with a little
little ficknefs at her ftomach, which a few harthorn drops removed. - In this cafe the Flowers of Zinc feemed evidently to take off the fafm of the lungs and to ftrengthen her weak and relaxed conftitution; and confidering her age and the long continuance of her complaint, the cure was performed in a fhorter time than one could have expected. During her recovery fhe had her better and worfe days, and, like all old Afthmatics, was very fenfible of the influence of the weather.

## C A S E XVII.

The Convulive Aftbma, with an enlargement of the abdomen, following the Meafles, cured by the Flowers of Zinc and Calomel.
I Was defired, December 14 , to attend Mafter $B$ - three years of age, of a tolerably good conftitution, who had had the meafles fome weeks ago, which had left a violent ftuffing in his breaft, with a cough and difficulty of breathing. His difficulty of breathing now comes on fuddenly in an evening, and is followed by a troublefome cough. The fit lafts five or fix hours, and the little fleep which he gets in the night is very, troublefome, attended with mourning and conftant wheezing. His appetite
appetite is bad, belly bound and confiderably: fwelled, puife quick and irregular, but not very weak. Yefterday I advifed three leeches to be fet on the calf of his leg, and they bled freely for an hour.

Sumat mane $\mathcal{E}^{3}$ vefpere pulverem ex Florum Zinci granis duobus, छ gummi Arabici granis tres, छ' fuperbibat mifture faline unciam dimidiam.

Capiat pro re nata manne optime dracbmas tres.
The 18th. The powder agreed well with his ftomach, though now and then it occafioned a little ficknefs. His cough, ftuffing in his breaft, and difficulty of breathing are materially better, but the manna, given in a little tea, did not open his body till he took it three times a day. His belly ftill continues large and fwelled.

Repetantur remedia, छ fumantur bis die manne dracbmie tres.

The 2 Ift. His cough, ftuffing in his breaft, and difficulty of breathing are almoft well, and he fleeps found in the night without any mourning or wheezing. His pulfe is flower and more
> * R. Salis abfinthii fcrupulos duos, Succi limonum quantum fatis,
> Emulfionis communis uncias duas cum femiffe, Aque cinnamomi firituofæ unciam dimidiam, Syrupi balfamici drachmam unam. M.

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more regular ; his appetite is fomewhat better; but the largenefs and fwelling of his belly continues.

The $25^{\text {th. The ftuffing in his breaft and }}$ afthmatic fits are entirely removed, but his belly continues large and hard.
R. Mercurii dulcis, fexies fublimati, granum unum, faccbarri albi grana quinque. Mifce fat pulvis omni nocte bora fomni fumendus.
R. Olei olivarum optimi,

Syrupi e meconio, fingulorum, unciam dimidian. Mifce fumat omni mane cacblearia duo parva.

## Omittantur alia remedia.

The 3oth. The powder agrees well with him. His belly is neither fo hard, nor fo much fwelled, as it was; and he complains of no pain or griping in his bowels. He takes a little of his oil and fyrup occafionally, and, along with his powder, it anfwers the purpofe of procuring him an eafy ftool.

January 3 d and 6 th. He has taken the powder regularly, with now and then a little of his oil and fyrup, and the fwelling and Hh

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hardnels of his belly is entirely removed, and he has no return of his cough and difficulty of breathing. He looks much better in the face, his appetite is improved, and he is more active and lively.

It is evident in this cafe, that the meafles had injured the lungs in a high degree. It frequently happens among different ranks of people, that the meafles are much neglected, and the inflammatory ftate of the lungs is fuffered to take its natural courfe, which caufes pulmonary obftructions, and lays the foundation for Afthmas and confumptions. Timely bleeding, along with the cool regimen, it is well known, would in a great meafure prevent thofe dangerous confequences of the meafles, and fave many valuable lives. In this child's diforder, proper bleedings had, through the mother's timidity and the child's apparent weaknefs, been omitted; and therefore his lungs were become very much obftructed and difeafed, which had laid the foundation for the above complaint. To remove his Afthma, leeches, manna, and the Flowers of Zinc were prefcribed, and they had the defired effect. The time of bleeding after the leeches dropt off, was limited to one hour, which was proportioned
portioned to the child's ftrength, and is in thefe cafes the fafett and moft certain way of proceeding. It is in general very wrong in the diforders of children to allow them to bleed till the difcharge of blood ftops of itfelf. I have feen much mifchief arife from this inaccurate mode of practice, by taking away a greater quantity of blood than was requifite, fo as to induce a dangerous weaknefs from too great emptinefs of the blood-veffels.

The Flowers of Zinc agreed well with this child. The manna was repeated twice or thrice a day till it had procured a few eafy ftools, which is in general the beft way of giving opening phyfic to children; for fome will require a double quantity to move them, and others not above one quarter of the ufual dofe.

When the Afthma was cured, the body of the child ftill remained hard and fwelled, which feemed probably to arife from fome internal obftruction, along with a quantity of flime and wind in the bowels; for the removal of which a few powders were ordered, each of them containing a grain of calomel. During the time of ufing this excellent deobftruent medicine, the child was kept in as pure an air as poffible, and

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his
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his diet was carefully regulated by his mother according to my directions. The oil and fyrup was given with a view to prevent pains in the bowels, which, in fome cafes, attend the ufe of calomel.

## C A S E XVIII.

The Convulive Aftbma, in a cbild eigbt months old, following the Meafles, cured by the Flowers of Zinc and Tinctura Thebaica.

AChild of Mr. -, eight months old ${ }_{2}$ February 6th, appears full in the face, high colored, bloated, and fwelled; but her limbs and other mufcular parts are confiderably wafted and fmaller than they were. She had the meafles about three monchs ago, and has been troubled with a cough and afthmatical complaint ever fince. The fits are fhort, lafting only a quarter of an hour, but they recur frequently, particularly in the night, and her difficulty of breathing is then very fevere, attended with much wheezing and rattling of phlegm in her throat. Her body is bound, fkin foft, pulfe quick, and fhe is feverifh in an evening. In confequence of the frequency of her fits, her nights are extremely reftlefs and difturbed, and

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the is obliged to have her head laid very high. She did not fuck above fix or feven weeks. She was then weaned and brought up with the fpoon. Her mother finds that fie breathes the wort when kept clofe and warm.

Hirudo cruri applicetur.
> R. Florum Vinci granum unum,

> Saccbarri albi grana quinque.
> Mijce, fiat pulvis, bis die fumendus,

## R. Ole Ricini,

Syrupi Violarum, utriufque, unciam dimidium, Mijce, Jumat dracbmam nam bis terve in diem.

The roth. She was bled with the leech as directed, and the difcharge of blood was contineed for an hour. The oil and fyrup keep her body open. Her fits of difficult breathing are fill very violent. She was fick and vomited the firft dole of her powder, but the reft have agreed well with her. Her ftomach was foul, and the threw up much vifcid matter. Her fleep and appetite are very bad.-Her face is not quite fo full and florid as it was,

Hirudo cruri applicetur.
Contimuentur remedial, ante prafcripta.
R.
R. Aque fontance drachmas quinque, Syrupi Mororum drachmas duas, Aque cinnamomi fpirituofe dracbmam unams. Tinctura thebaica guttas sex.
Fiat miftura, cujus capiat drachmas duas, omni noote, bora decubitus.

The 14th. Her breathing is fomewhat eafier, and her afthmatic fits lefs violent. Her pulfe is 162 , her face red and fwelled, and her cough troublefome at times. The leech bled freely; and her body continues open with the laxative fyrup, but fhe begins naw to refufe it.

Omni nocte fumat pro dofi miffure anodyne drachmas tres.

Omittatur miftura oleofa, छ fumantur pro re nata. manne optime dracbme duo.

The 18 th. Her afthmatic fits are bath lefs frequent and lefs violent, fo that her difficulty of breathing and rattling of phlegm in her throat are confiderably abated. She took two tea-fpoonfuls of the anodyne mixture, and refted better in the night. Her cough ftill continues troublefome, but it is eafier than it was. Her appetite is improved, and the is fomewhat ftronger. Her body is regular with the manna, and fhe is not fick with her powder,

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The ${ }_{23}$ d. She continued the ufe of the medicines above-mentioned for about fix weeks longer, and found great relief from them. The dofe of the anodyne was increafed gradually to four drams; half a grain of the Flowers of Zinc was added to the powder; and the laxative was continued regularly as directed. In confequence of a fteady perfeverance in thofe remedies, the cough, wheezing, ftuffing in her breaft, and frequent fudden returns of difficult and laborious refpiration, along with that red fwelled bloated appearance in her face, gradually went off. Her legs, thighs, arms, and body grew more firm and flefhy. She flept well in the night ; her appetite was good; and the recovered her ftrength, activity, and livelinefs.About a year after I faw her again. She had continued well, and was a ftrong healthy girl.

The appearance of this child was very much againft her. Her face was fwelled, her cheeks bloated and high-colored, altho' the mufcular flefh of her limbs and body was wafted, and felt extremely loofe. Such an appearance as this evidently fhewed, that the general circulation of the blood was not free, and
that the return of the blood from the head was greatly interrupted, in confequence of the difeafe of the lungs. At the fame time the diftribution of the blood to the extremities and trunk of the body was imperfect, and of courfe the nourifhment of thofe parts defective. This child had had the meafles fome months ago, which had left obftructions in the lungs, attended frequently with feverifh fymptoms in the night. On thofe complaints, the fpafins of the lungs fupervened. For the treatment of the difeafe, we refer to the cafe, and fhall only juft obferve, that heat was particularly hurtful to this child, that fhe was always the eafieft in the cool air, and that her ftays and bandages were found very tight about her, fo as greatly to obftruct refpiration.' How far this laft caufe, and the early weaning of the child, may, have contributed to bring on the diforder of her lungs, it is not eafy to determine. As The grew better, the fwelling and fulnefs of her face fubfided, her color became much lefs florid, and her extremities grew firmer and more flefhy.

## C A S E XIX.

The Convulfive Afthma, complicated with the Humoral Aftbma and Cbronic Weaknefs, cured by the Flowers of Zinc.

MRS. aged 40, November 19, of a dark complexion, and thin habit of body, is troubled with a cough, ftuffing in her breaft, and fudden difficulty of breathing, particularly when fhe wakes in the night, at which time, being very much oppreffed, fhe is obliged to fit up in bed, and gets no eafe till fhe fpits up fome phlegm. Thirft. Bad appetite. Copious but difficult expectoration. She has had four mifcarriages and feven children, the laft of which was born four months ago, and the has never been well fince. She has had no return of the menfes after her delivery. Let the child be weaned.
R. Florum Zinci dracbmam unam,

Speciei aromatice forupulos duos,
Syrupi BalJamici q. /.
Fiat maffa, in pilulas xxx dividenda, quarum fumat duas mane $\mathcal{E}$ vefpere, छร fuperbibat cacblearia tres Mifurce Cardiaca. *

> I i

Capiat

[^27]Capiat bora fomni bauftum anodynum cum tincture thebaice guttis viginti; nechon mane pro re nata, quando confipatio alvi adjit, rbei pulveris grana decem.

On the 26 th fhe was much better, and in three weeks after the was perfectly free from her afthmatical complaint. Her bodily frength too, and the complexion of her flkin were much improved.

I thall only juit take notice here of the number of children and mifcarriages which this Lady had had, and the fubfequent reduced fate of her conftitution. I found likewife on inquiry, that, contrary to the prefent improved practice in midwifery, fhe had been accuftomed to be kept very hot during her lyings-in, and to be very liberal in the ufe of cordials and fpirits, and by thofe means was expofed to two very powerful caufes of the Afthma, exceffive heat and ftrong liquors. She was likewife in the habit of giving fuck to her own children, which, befides having the bad effect of injuring their health and of rendering them weak and fretful, is very fatiguing and diftreffing to a Lady of a delicate relaxed conftitution. When I faw her, it was neceffary for her immediately

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mediately to wean the child or to provide a wet nurfe for it, otherwife that fingle caufe of general debility continuing to act, would probably have defeated all our beft efforts to cure her. The cordial mixture, tinctura thebaica, Zinc pills, and rhubarb, had a very good effect, in remoying the fpafms of her lungs, and in ftrengthening her general habit of body. *

## C A S E XX.

The Convulive Affoma, complicated with Cbronic Weaknefs and Rheumatifin in the Heed, cured by the Flowers of Zinc.

FAMEES KIT SO N, aged 28, admitted at the York County Hofpital, December 3x, 1781 , is fubject to violent pains and fudden ftoppages in his breaft, fo that he ean hardly get his breath, followed by a cough and fitting. This complaint is of fix months ftanding. He is pale, thin, and troubled with fevere head-achs. His fhortnefs of breath is the worft when in bed, though it now and then attacks him feverely in the day-time. He has a rafh about his fomach which itches much. Pulfe

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$$ weak.

[^28]weak. Thirft. Coftivenefs. Cold fweats in the night. The pain in his head (which feems to be rheumatic) is fometimes very violent, extending to his ears, and renders him unable to move his head. His appetite is bad, watergruel and broth forming the chief part of his diet.-For thofe complaints he had uncie quatuor mifture purgantis, pilula ex Floribus Zinci tres mane ac ve/pere, EJ uncia duo ter die decootit mucilaginof cum julepo e camphora.

January 3d. His head-ach is very fevere, but his cough and afthma are rather better. He had five flools with the phyfic.

Sumat bis die Florum Zinci grana duodecim in conferve abfintbii dracbma una, छउ fuperbibat mifture Jpiritus Mindereri cum jultepo e camphora uncias duas.
Capiat mane bauftus fence purgantis uncias quatuor.
The 7 th. The pain in his head and ears is eafier, his Afthma much better, appetite improved, good nights, no ftool with the phyfic.

Continuentur bolus छ mifura, छ repetatur cras mane bauftus fence purgans, addendo

Mercurii dulcis fublimati grana quatuor, Rbei radicis pulverate grana fex.

The 1oth. The phyfic anfwered well. He has no cough or difficulty of breathing, but ftill has an eruption on his ftomach, and likewife on his arms, neck, and head.-For thofe complaints, as well as for fome continuance of the head-ach, he had an emetic, the folutive electuary with rhubarb, and a warm decoction of the bark; and on the 15 th of February he was free from complaint, except fome remains of languor and weaknefs. Let him be difmiffed.
C A S E XXI,

The Convulfive Aftbma, in a child five montbs old, cured by the Flowers of Zinc and an Antimonial Vomit.
\% $A M E S C U D D \Upsilon$, aged five months, admitted at the York County-Hofpital, November 4,1782 , has had a troublefome cough for three weeks pait, and breathes very ill, particularly in the night. His difficulty of breathing is fo violent whenever he wakes, that he throws his head back as if he were going to expire in a fit. He was bled with a leech yefterday. His body is loofe; his pulfe cannot pe felt; his cough ftrains him and forces away his ftools. He is fick and fometimes reaches with
with his cough, but generally fwallows the phlegm which he gets up. His cough is frequently fo violent that it refembles the hoapingcough, and makes him tumis black in the face. His nights are very reftlefs, for he never Aleeps above 15 or 20 minutes at a time. He is very hoarfe, and fearce able to cry fo as to be heard.

Sumat bis die pulverem ex Florman Zinci granias duobus $\varepsilon^{3}$ faccharri albi granis quinque.
R. Syrupi batfamici,

Syrupi limonum, fingulorum, dracbmas fex, Mucilaginis gummi Arabici Cefquiunciam.
Mifce. Dofis cacbleaxia dua parva fape in diems fumenda.

The 7 th. The medicines agree, and the child is confiderably better.

Repetantur remedia.
The 11th. He continues to recover. He is not fick with his medicines. The fits of difficult breathing, or (to ufe his mather's phrafe) his choking fits, are entirely removed. His cough ftill continues fevere, and he gets up fome phlegm, but fwallows it. Body regular. Nights eafier. Hoarfenefs continues.

Repetatur Pulvis \& Syrupus mucilaginofus.
R. Tartar:
R. Fartari Emetici granum unam,

Aque fontance drachmas decem,
Syrupi mororum unciam dimidiam,
Aque Cinnamomi Jpirituofe drachmas duas.
Fiat mifura, cujus capiat cacblearium unum paroum ormi fennibora ad quartam vicén, nifi prius vomitus ciatur vel alvus foluta fit.

The 18th. Two tea-fpoonfuls of the tartar emetic mixture made him very fick, and he vomited freely, and was much relieved by it. He has very little cough or fhortnefs of breath, fucks well, but was reftefs in the night, and is sather hot and feverifh to-day. He has been much lefs troubled with phlegm fince he took the antimonial vomit. His pulfe is moderate, and diftinctly to be felt. He has two or three fools a-day, is afleep now, and breathes well.

Contivuetur Pulvis $\delta^{3}$ Syrupus mucilaginofus, $\xi^{3}$ repetatur cras mane Miffura Antimonialis.

The $25^{\text {th }}$. He vomited freely with three teafpoonfuls of the tartar emetic mixture. No feverifhnefs, appetite good, hleep natural, he can breathe well, has no return of his afthmatic fits, looks clear and lively in the face and eyes. He thas a trifling cough remaining, but it is almoft entirely gone. Let him be difmiffed.

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## C A S E XXII.

Tthe Convulfive Aftbma, following the Influenza, cured by the Flowers of Zinc.

MR. -, aged 40, October I, had lately the influenza, and the cough continues with a ftuffing and difficulty of breathing, fo violent at times, that he frequently cannot bear to lye down in bed at nights, but is obliged to rife and fit up. His afthmatic fit comes on fuddenly about two or thee o'clock in the morning, and continues for an hour or two; then leaves him, and he falls afleep. When he wakes again in the morning he has a return of his difficulty of breathing, equally fevere ; and fometimes he is attacked with it during the courfe of the day. In the fit, his cough is troublefome, and, towards the end of it, he difcharges a good deal of phlegm. At other times his breathing, as at prefent, is tolerably free and eafy. His face has a livid blackifh appearance, and his lips are of a deeper red than natural. His pulfe is not week but rather quick. His voice is not fo clear as ufual. Belly regular. Legs fwell towards evening. Habit of body neither thin nor corpulent. His complaint is of three months ftanding, and

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at firft arofe chiefly from the influenza, but he had before been fubject to flight attacks of the Afthma from cold.

Mittatur Sanguis ad uncias decem:
Sumat alterno mane electarii folutivi dracbmams unam *.
R. Florum Zinci drachmann unam cum femiffe,

Extracti glycyrrbiza dracbmam unam,
Syrupi ballamici q. f.
Mijce, fiant pilule triginta, quarum ager fumat duas vel tres ter die, $\mathcal{E}$ fuperbibat julepi menthe uncias duas.

The 8th. The fymptoms are rather eafier. His laxative did not anfwer.

Sumat pilulas quatuor Zinci ter die.
Capiat omni mane vel nocte olei olivarum unciam dimidiam.

Repetatur electarium folutivum, addendo Rbei pulveris,
Pulveris jalapii, fingulorum, femidracbmam.
The 12th. He was much better laft night than he has been for feveral weeks paft. He was fick with his powder but did not vomit. The fwelling of his legs is diminifhed. His K k face

* Vide page zos.
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face has lefs of that dark livid appearance. His cough and fpitting-Atuffing, oppreffion at his breaft, and difficulty of breathing-are confiderably better. His body is open with the oil and electuary, pulfe 65 , voice clearer, appetite good.

Repetantur remedia, Sed capiantur Solummodo pilule tres pro dof.

The 22d. He continues to recover.

The 28 th. He is materially better fince the laft report. He coughs fometimes, but his ftuffing and afthmatic fits are almoft gone, returning but feldom, and continuing only a few minutes, or at moft a quarter of an hour. His fpitting is lefs, and the phlegm comes up eafily. He has no pain in his breaft, his appetite is good, and he has one or two ftools every day.

Omittantur pilula Zinci.
Repetatur electarium Solutivum.
> R. Infufi Corticis Peruviani uncias duas, *

> Pulveris Corticis Peruviani Jcrupuium unum. Fiat baufus ter die fumendus.

November

Vide note at page 174.

November 24 th. He continued thofe medicines regularly for fome weeks, and they agreed well with him, except that now and then they caufed a little ficknefs. He takes a tea-fpoonful of his opening electuary once in two or three days and his oil every day, which keep his body regular. He had, within this laft month, a few flight returns of his Afthma, but they grew lefs and lefs, and on the 18 th of December he had no complaint except a trifling cough. He is able to ufe exercife freely, and feels himfelf ftronger. He has recovered his natural com-, plexion, has a good appetite and eafy nights.

The afthma of this Gentleman originated chiefly from the influenza in the fummer of the year 1781. At York and its environs, the influenza for the moft part was a mild difeafe, requiring little more by way of medical treatment than pectorals, demulcents, or gentle ftimulants. In fome cafes, however, it was very violent, and was attended with fymptoms of pulmonary inflammation, fuch as an acute inflammatory fever, a violent inceffant cough, fevere pains in the head and breaft, great ftuffing and conftant difficulty of breathing. In thofe cafes a proper medical treatment was of

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the higheft importance, and, from the want of it, many dreadful confequences enfued, particularly tubercles of the lungs, and pulmonary confumptions. Thofe bad effects were moft frequent to fuch as had narrow chefts, weak, lungs and a delicate fibre, or had been formerly fubject to frequent catarrhs or any other pulmonary complaint; but fometimes they took place in ftrong, robuft, plethoric conftitutions. The remedies which I found the moft fuccefsful in thofe fevere cafes of this highly infectious diforder, were blood-letcing, emetics, laxatives, blifters, antimonials, particularly tartar emetic, along with a low diet, fmall diluents, and other articles of the cooling regimen. Thofe remedies, timely and judicioully employed, took off the inflammatory ftate of the difeafe, prevented pulmonary obftructions, afthmas, and other dreadful maladies. Afterwards the bark, along with country air and exercife, reftored the tone of the fyttem, and compleated the cure.

Mr . - having been formerly fubjest to an afthma in a flight degree, and afterwards neglecting proper medical affiftance in the influenza, was feized with a return of his afthma in a very alarming manner, in confequence of which the circulation of the blood through the lungs

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was greatly interrupted, as was evident from the difficult lying, the livid blackifh appearance of his face, and deep unnatural rednefs of his lips. It is a melancholy reflection, and can never be too frequently or too ftrongly inforced, that notwithftanding fuch incredible numbers die every day of afthmas and pulmonary confumptions *, many flould ftill be fo inattentive to diforders of the lungs at their commencement, when, by proper remedies and a fuitable plan of life, a radical cure might eafily be obtained. Nothing is more common than for an influenza, or a fevere catarrh, in confequence of the neglect of proper treatment, to lay the foundation of the moft obitinate pulmonary complaints. Afterwards the fame perfons, when they are harraffed day and night with violent incurable afthmas, would fpare no labor or expence nor murmur at any kind of reftraint, under the hopes of obtaining relief; but then unfortunately it is too late, and nothing but vain hopes remain to comfort them for a while, till the flattering delufion is over, and they find it neceffary to fit down as contentedly as they can with their diforder for life, reflecting often with fegret on thofe errors of their conduct, by which

[^29]which fo much real mifery has been brought upon themfelves.-This gentleman's cafe, tho ${ }^{2}$ a very alarming one, was fuccefsfully cured by the plan of treatment which was adopted.

With this remark I conclude the Zinc Cafes, after the perufal of which every unprejudiced reader will, I hope, agree with me in thinking, that the Calx or Flowers of Zinc is an ufeful and efficacious remedy in the afthma. As this remedy is not yet in general practice, and as fome, but little acquainted with its operation, have not allowed it the virtues which it undoubtedly poffeffes, it will not, I flatter myfelf, be thought that I have given too many cafes in proof of its utility, or made too many obfervations on its effects. I find indeed, among my notes, many other dangerous and critical cafes of the afthma, in which the Flowers of Zinc have been employed with fuccefs, but I fhould not wifh to encroach too much on the patience of my readers. If I have only related a fufficient number to procure the medicine a fair trial, it will need no further recommendation from me; for it will often be found to fucceed in fevere and obitinate cafes of the Afthma, which will not yield either fo certainly

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or fo fpeedily to other medicines now in practice:

As Zinc is perfectly fafe, and at the fame time fufficiently powerful in its operation, its value is greatly increafed. Its action upon the ftomach is very confiderable. Sometimes indeed a moderate dofe of it excites naufea, or even vomiting. We have feen in the above cafes, that a very few grains have produced that effect on fome, and that others could bear a large quantity.

If any Gentleman, from one or two unfuccefsful trials of it in epilepfy, is, after what has been faid, ftill doubtful of the power of its operation in afthmatical diforders, I fhould only requeft of that Gentleman to attend to the following particulars; -firft, that his Zinc be pure and free from adventitious admixtures; ;and fecondly, that the calcination of it be perfect, and there be none of the Zinc in its metalline form;-and then I doubt not but he will very foon have caufe to change his opinion. Indeed I have more than once found this remedy fo active in its operation, that fome very irritable ftomachs, even in adults, could not bear above two grains of it in any form. Ablution, or wathing
wafhing in water, will eafly feparate the uncalcined from the calcined Zinc; and the latter, being lighter, may be poured off among the water as foon as the other is funk to the bottom. Afterwards the calcined part or flowers, being fpecifically heavier than water, will gradually fubfide, and, the water being poured off, they may be dried for ufe. This operation is neceffary where the Zinc is imperfeetly calcined, otherwife a very dirty metalline fediment will, if the medicine be given in a liquid form, feparate and fall to the bottom.

We have feen in the foregoing cafes, that fome patients, who were very ill of the Afthma, were fpeedily cured by the Flowers of Zinc , and that others required a longer time before the difeafe was fubdued. My rule of practice, in all old and obftinate cafes, was this,-If I gained ground, although it was but nowly, I was content to perfevere in the ufe of the remedy, till I had either entirely, or in great meafure removed the difeafe.-But if, after a fair trial, I found no benefit accrue from it, as muft fometimes happen to all remedies given in this diforder, I then endeavored to fatisfy myfelf, as well as my patient, with the employment of athers.

- OBSERVATIONS.

We have frequently had occafion to mention in the foregoing cafes, that $\mathrm{Zinc}_{2}$ in its effects, is antifpafmodic, expectorant, and ftrengthening, With regard to the mode of its operation, it may not be improper here to remark, that as it is readily foluble in acids, both vegetable and mineral ${ }_{2}^{*}$ the acid of the ftomach will frequently act upon it, as it does upon James's powder, liver of antimony, and feveral other remedies of a metalline nature, This too may be one reafon why the operation of Zinc is fo much more active and powerful in fome conftitutions than in others, in proportion as the acid of the ftomach is ftronger or in greater quantity. Hence too we fee the neceffity of beginning with fmall dofes in weak irritable habits, and efpecially where we have reafon to expect acidities in the firft paffages. Without attention to this particular, the action of the remedy will fometimes be too ftrong. Experience alone can afcertain this point; and, in all dubious cafes, we fhould begin with a dofe of two or three grains, and gradually increafe it according to its effects. Sometimes a firft dofe of Zinc will create ficknefs or even vomiting, and the fucceeding ones, after the ftomach is cleared, will ftay very eafily and give great
L1 relief.

[^30]relief. But if Zinc fhould conftantly create ficknefs, we muft diminifh the dofe, otherwife the patient will foon be obliged to defift from the ufe of it. The form of pills, when they can be fwallowed without difficulty, is in general the moft agreeable to the palate, and fits lighteft upon the ftomach, efpecially if a dofe of a cordia! ftomachic medicine is taken immediately. after them, which is grateful to the patient, and correfpondent in its operation to that of Zinc. But when pills any more than bolufes or eleetuaries) cannot be fwallowed with eafe, which is fometimes the cafe in afthmatical diforders? the remedy muft be given in a liquid form.

## P A R T III.

## C A S E S of A S TH M A,

## CURED or RELIEVED

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BY THEUSEOF
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SQUILLS, CREAM of TARTAR, MERCURY, and BLOOD-LETTING.

## C A S E XXIII.

The Convulfive Aftbma, complicated with a Dropfy of the breaft, following an inflammation of the lungs, in which dried Squills were employed with fucce/s.

IJILLIAM SILVER, of middle age and an emaciated habit of body, admitted at the York County-Hofpital on the 20th day of January, 1777, has had a violent inflammation of his lungs fome months ago, followed by a dropfy of the breaft, in which L 12 he
he felt the water diftinctly move within him. He complains at prefent of a cough with great oppreffion and difficulty of breathing, which fymptoms attack him on a fudden, particularly after his firt neep and after exercife or any quick motion, and continue frequently for an hour or longer. He complains too of rheumatic ftitches in different parts of his body. His urine is in fmaller quantity than natural. Pulfe quick, weak and irregular; expectoration difficult and feanty; thirft great; appetite but indifferent; body not bound. His complaints are of ten months ftanding.

Capiat ter die Pilulas Scilliticas tres, $\underbrace{3}$ fuper: bibat mifure faline uncias duas.

The 27 th. His medicines caufe no ficknefs. He makes water more plentifully. His cough, load and anxiety in his breaft, and fudden attacks of laborious refpiration, are rather lefs violent, and he fpits more freely.

February 6th. His afthmatic fits are Iefs frequent and lefs fevere. His thirft is moderate; appetite better; pulfe ftronger; body open; and rheumatic pains much eafier.

The $13^{\text {th }}$ and 27 th. He continues to recover.

March 6th. No complaint. Let him be difmiffed.

This man had a complicated diforder of an afthma and dropfy in his breaft, after an inflammation of his lungs. Diffections have fully proved, that water in the cavity of the cheft is a frequent confequence of inflammation*. He had not only the ufual fymptoms of the hydrothorax or dropfy of the breaft, but he had a diftinct fenfation of a fluctuation of water within him $\dagger$. Dr. Cullen, in his definition of the hydrothorax, has, with his ufual accuracy, taken particular notice of this fymptom-aqua in pectore fuctuans. $\ddagger$

Rheumatic ftitches, in different parts of his body, fucceeded the inflammation of his lungs, which I confidered as a favorable circumftance, for nothing is more common than for a firft inflammation to fubfide after the commencement of a fecond. This man had been in the utmoft danger of his life from the inflammation of his lungs, but had juft had ftrength enough to ftruggle

* Morgagn. de Cauf. \& Sed. Morb.
+ Vide page $2_{3}$, where we have given the diltinetion between the afthma and the dropfy of the breatt.
$\ddagger$ Vide Cullen's Synopfis.
ftruggle through it. When I faw him, his conftitution was very much reduced, and nothing then remained but to affift the operations of nature in promoting a gentle difcharge by urine and expectoration; for which purpofe the dried fquills, along with a faline mixture, feemed evidently indicated, and their operation did not difappoint me. Any of the more violent evacuations, fuch as bleeding, purging, or fweating, would have greatly interrupted the falutary efforts of nature, and in all probability have funk his ftrength, and confequently have been very pernicious to him.


## C A S E XXIV.

The Convulive Aftbma, complicated with the Humoral Aftbma, Cbronic Weaknefs and univerfat Dropfical Swellings, relieved by the Vinegar and Oxymel of Squills; - togetber with an account of the dijeaje of Fobn Strickney, who died and was opened.

EASTER SMIT H, aged 50, admitted at the York County-Hofpital, May 21, 178 I, of low ftature and florid complexion, appearing rather full in the face, complains of a cough and fitting, attended with great difficulty.
culty of breathing, which comes on fuddenly, particularly in the night about twelve or one o'clock. Her afthmatic fit is preceded by a working in her bowels that continues for an hour or longer. She has been troubled with her prefent complaint at different times for nine years, but has been very ill of it fince laft December. She is often feverifh, and has a pain in her back, with hot fits in the night, during which fhe fweats confiderably. Her body fwells in a morning. Her legs and thighs are fomewhat wafted but fwell towards evening. Her pulfe is low and weak ; body coftive; menfes regular, but in fmall quantities. By my direction, at the Difpenfary, fhe took at twice a powder confitting of Florum Zinci grana decem $\varepsilon$ \&bei pulveris grana quindecim, which gave her feveral ftools without any ficknefs, and relieved the uneafinefs both in her breaft and fomach.

## R. Aceti Scillitici uncias tres,

Oxymellis Scillitici uncias duas. Mifce.
Sumat ex quovis vebiculo unciam dimidiam ter die.

## Capiat, $\sqrt{2}$ opus fit, pilularum Rufi tres vel quatuor.

The 24th. She complains that her medicines are too four and fharp for her, and produce ficknefs and griping. Her face to-day looks pale
pale and phlegmatic. Her body is open without taking any of her laxative pills. Her difficulty of breathing and other afthmatical fymptoms are eafier.

Repetatur mifura, fed capiantur folummodo dracbmee due pro dof.

The 28th. The weather is warm, the thermometer $6_{5}$ in the fhade. She is ftill fick in a morning with her mixture, and fometimes throws up much phlegm, but can bear it in an evening without ficknefs. Her pulfe is weak, and fhe has generally one or two ftools a day.

The 3 uft. She complains of being very hot and fubject to fweating both day and night. Her cough and difficulty of breathing are better, fhe fpits lefs and with greater eafe, The thermometer is 70 in the fhade,

June 7 th. She can take four drams of her medicine at night without ficknefs, but twa drams of it makes her fick in a morning fafting; and by coughing and reaching, fhe gets up a confiderable quantity of frothy yellowifh welldigefted phlegm, which is intermixed with fome of a bluifh dark color. Her body continues. open.

The IIth. Her pulfe is weaker, and, for the laft two or three days, ffe has had each day feveral feverifh attacks, preceded by coldnefss and followed by heat and fweating. She was yerg faint and low laft night. Her cough is troublefome; the weather rainy and cloudy ; thermometer 58 .

Continuentur remedia.
Capiat julepi-mentbe cum confectione rardiaca uncias duas in languoribus.

The 18th and 25 th. Her cough is better, but ffrill and clofe. Her cordial julep relieves her. The watery fwellings of her body, legs, and thighs are greatly diminifhed. She refts better in the night, and is not fo feverifh and languid as fhe was.

July 2 d and 12 th. She has little or no return of her cough and afthma ; looks well; appetite good; pulfe natural ; body regular. Half an ounce of her fquill mixture in the mint julep agrees well with her in a morning fafting, and produces no ficknefs. Let her be difmiffed.

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This is a cafe of the convulfive afthma, complicated with the humoral. Her florid complexion, and the appearance of fulnefs in her face, might at firft fight have feemed to have indicated bleeding; but her pulfe being very fmall and weak, forbid the ufe of the lancet, and more efpecially as her diforder had troubled her at times for nine years paft. The young and unwary practitioner may eafily be deceived by the appearances of the face in afthmatical diforders; in which, the circulation of the blood being much obftructed, the cheeks often look red and bloated, particularly after any hurry or exercife, when there is no real fulnefs of blood in the conftitution. Without attention to this fact, he will be furprized to find his patient the next morning appear in the face pale, thin, and fallen, when he had concluded her the day before to be full, high-colored, and plethoric. Hence when the pulfe and general habit of body does not correfpond with the appearances of the face, and the prefent fymptoms are not very urgent, it is often prudent in dubious cafes to wait a day or two, or at leaft to fee the patient a fecond time before blood-letting or any other evacuation is advifed, left the falutary
falutary operations of nature fhould be counteracted, which in many cafes would be highly dangerous.

This patient attended me at firft at my Difpenfary, and I gave her the Flowers of Zinc as an antifpafmodic, along with a laxative. Afterwards the took the vinegar and oxymel of fquills. As that remedy feemed perfectly adapted to the cafe, I was refolved to give it in a full dofe; and accordingly the patient was ordered to take half an ounce of the mixture three times a day. That quantity made her vomit before breakfaft, but not in an evening, which is the cafe with moft medicines which have that tendency. Vomiting for a few mornings, before fhe got up, was of fervice to her *, and afterwards I diminifhed the morning dofe. By thefe means we kept her ftomach clear and her body open, promoted expectoration, obviated fpafinodic conftrictions of the lungs, and relieved all her afthmatical fymptoms.

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M_{2}
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When

[^31]When fhe was very low, fhe had a cordial julep, which not only revived her fpirits, but proved a convenient vehicle for her fquillmixture, by means of which fhe could take in a morning, without ficknefs, the full dofe which was at firft prefcribed. The opening pills were not ufed, as the fquill-mixture rendered them unneceffary. Fhis patient made heavy complaints againtt her medicine, but, as The was recovering, I recommended to her perfeverance in the ufe of it, and fhe could have no juit excufe for not following my advice. On the 12th of July fhe thaught herfelf fufficiently recovered to enter upon her ufial employments, and therefore was at her own requeft difiniffed before the cure was quite compleated; although the was much relieved, and by frefh air, gentle exercife, and a regular diet, would in all probability be very foon reftored to perfect health.

As the cafe of John Striekney refembled the foregoing in feveral particulars, both in the fymptoms and method of treatment, it may not be unacceptable to the reader to have a fhort account of it here, along with the appearances of his body after death.

JOHNSTRICKNEY, aged 60, admitted into the York County-Hofpital, July 6, 1780, has an Afthma, attended with continual ftuffing in his breaft, fudden difficulties of breathing, a bad cough, a copious vifcid expectoration, fevere pain in the fmall of his back, and dropfical fwellings of his legs, thighs, body, penis, and fcrotum. There appears too, by an unufual fulnefs and obfcure fluctuation, to be a little water contained in the cavity of the abdomen, His body is regular, pulfe low, urine in very fimall quantity. He has no appetite, and feels himfelf very weak and heavily oppreffed with his complaint. His nights are reftlefs and difturbed, but he can bear to lie down in bed. He has been long in a very difeafed fate of body, but lately the fymptoms are much worfe and more alarming. His flefh is watted; his eyes are funk and heavy; his fkin dry, foul and fourfy; his face fallow, deprefled, and melancholy *.- roth. His dropfical fwellings and difficulty of breathing are worfe, and he grows weaker. Frequent ficknefs at times. No appetite. Little urine. Body regular, 17th. The fymptoms increafe. -27 th. He is weaker, and appears to be finking faft.—

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3 1ft. He has been feverifh for the laft two or three nights. No appetite. No pain. Cough but trifling. Breathing very laborious. Dropfical fwellings increafed, and the wrifts of his hands fwell and pit on preffure.-Auguft 3 d . He is lethargic, and appears to be almoft dead.

He died in a few hours after I left him. On the next day I defired his body might be opened, and was prefent at the operation. In the abdomen there was a fmall quantity of water, but all the abdominal vifcera were found. There was too a little water in the cheft, and about three ounces in the pericardium. The lungs fubfided as foon as the cheft was opened, and appeared to be not much difeafed ; and I did not perceive any obftruction about the heart. We cut into the fubftance of the lungs, liver, \&c. but found no ulcer, no internal obftructions from effufions of blood, nor any fcirrhous hardneffes*. As the head was not opened, we can fay nothing with certainty of the appearances within the cranium; but from the

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the lethargy before death, and from diffections in fimilar cafes, think it highly probable that the brain would at laft partake of the fame general dropfical ftate, and have fomewhat more water than ufual within its ventricles.

The diforder of John Strickney, as both Dr. Swainfton and myfelf expected, ended fatalfy. He had delayed too long before he applied for advice, fo that his conftitution was intirely fuined, and the time elapfed in which medicine might have afforded relief. At his own requeft he was put on milk-diet, and by little additions of wine and light animal food, we endeavored to make it gently nourifhing and reftorative. As he voided but a fmall quantity of water, the miftura foillitica $\mathcal{B}$ electarium cremoris tartari were ordered as diuretics; but as the laft might prove opening, he took only two or three drams of it twice a week, fo that it feldom gave him more than an eafy ftool each day. Afterwards we tried bliters to the calves of his legs, and a cordial mixture, along with bitters and the falt of tartar ; but all was to no purpofe.

Concerning the prognoftic in this cafe, the following particulars are to be remarked, as
denoting
denoting a fatal termination. - The age of the patient, ard the duration of his diforder -his great and conftant obftruction to refpiration; as well as fudden difficulties of breathingfevere pain in the fmall of his back and fcanty fecretion of urine-general dropfical anafarcous fwellings of his feet, legs, thighs, body, membra virilia, and wrifts of his hands, all which parts pit on preffure - the fulnefs and obfcure fluctuation within the abdomen - bad nights, total want of appetite, vomiting, waft ing of flefh and bodily weaknefs, foul dry fkin, and pale fallow countenance, with a dull heavy melancholy appearance in his eyes. His cough had formerly been very troublefome, attended with a copious vifcid expectoration ; but it grew weaker as his ftrength failed him, and intirely left him a fhort time before his death. Neither had he any pain for many days before he expired; alchough it was evident that his ftrengeth was finking faft, and that the general bediby anxiety, which accompanies thofe complaints, was daily increafing. Jutt before his departure he became feverifh, and fell into an apoplectic ftate.

There is nothing to add concerning the diffection, but that one might have expected a greater and more manifett defruction of fome
one or other of the internal vifcera. The brain, when I firft faw him, could not be very much affected with aqueous effufions, as his fenfes were clear and perfect, and he had no pain, weight, or giddinefs in his head. Neither was there fufficient evidence of any fixed obftruction about the heart or great veffels; for tho' his pulfe was low, yet it was diftinct and regular. On diffection the fame obfervation was found true, when applied to the lungs and abdominal vifcera. As, therefore, there was no ulcer, no fixed obftruction from effufions of blood, nor internal hardnefs or fcirrhofity in any of the vifcera, his death muft be attributed in part to his afthmatical complaint, and in part to a general want of tone, or (as it is commonly called at his time of life) a breaking up of the conftitution, in confequence of which an unive rfal dropfy or anafarca took place, or (in other words) a fuperabundant quantity of water was exhaled into all the internal cavities, and into the cellular membrane in almoft every part of the body. The contitution of this man gives one as perfect an idea of what fome phyficians have called a Cachexy, as almoft any I ever attended.

## C A S E XXV.

The Convulfive Aftoma, complicated with Severe Head-achs, and violent dropfical Swellings of the loweer extremities, cured by Cream of Tartar, and the Peruvian Bark.

FLLEN COOPER, aged 53, admitted at the York County-Hofpital, June 7 th, 1779, has a fwelling of her feet, legs, and thighs, which feel very hard, and pit much on preffure. The fkin is not difcolored, but it is tenfe and fhining. She has had dropfical fwellings of her lower extremities for five weeks. She complains heavily of head-ach and ficknefs at her ftomach. Her head indeed is fometimes in fuch extreme pain, that (to ufe her own expreffion) fhe thinks it will fplit, and that the fhall leave part of it on the pillow. She wakes too every morning about four or five o'clock with a violent difficulty of breathing, which continues for an hour or two, and then leaves her. She has had no return of her menfes for fome years paft. Her belly is not fwelled, cough moderate, expectoration fcanty. Shie has frequently
quently a rifing of froth and water from her ftomach, and is much troubled with wind. She has for fome time paft had a conftant ftuffing in her breaft; but her afthmatic fit, or fudden fhortnefs of breath, which comes upon her when fhe wakes in a morning, began about the latter end of April, and has continued ever fince. Pulfe natural, fkin cool, body regular, and her conftitution, though confiderably reduced, is yet in tolerable condition.

Capiat ter die miffurce nitrofe uncias tres.
Sumat bis Jeptimana Electarii Cremoris Tartarl dracbmam unam omni bora ad tertiam vicem.

June soth. Three tea-fpoonfuls of the electuary gave her many watery ftools. She is fomewhat better of her head-ach and afthmatical complaint, and her legs and thighs are rather lefs fwelled.

Repetatur ut antea mifura E' electarium, Fed rapiatur Jolummodo eleetarii dracbma una ad $\sqrt{ }$ e. cundam vicem.

The 14 th and 17 th. The fwellings of her legs continue, but are rather lefs than they were. There is to-day a night rednefs on her ancles, attended with an uneafy prickling fenfation. Her legs fill fhine and pit, and her difficulty

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of breathing is very troublefome in a morning ${ }_{2}$ but it is not fo fevere as it was. She took only two tea-fpoonfuls of the electuary, and they gave her feveral ftools. The pain in her head is lefs violent; and the expectorates a little phlegm with tolerable eafe.

The 24th. The fymptoms are evidently abated. The fwellings of her legs are much lefs, though her ancles ftill continue fomewhat redder than natural. The rifing of froth and water from her ftomach is at times very troublefome to her.

Continuentur remedia, हร capiantur bis die Jpiritus lavendule compofiti gutte quadraginta.

The 28th. Her afthmatical complaint and fwelling of her legs abate. The right leg is redder than the left; but the left is more fwelled than the right. She complains of ficknefs from her electuary.

Repetantur remedia.
July 5 th. She continues to recover. Says her complaints are always fenfibly relieved by the electuary.

The 8th. The ftuffing in her breaft and afthmatic fits in a morning ftill continue, though
lefs

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lefs feverely. She expectorates more freely with her cough. The pain in her head, tho better upon the whole, is fometimes very bad.

The $15^{\text {th }}$. The weather is remarkably hot. She complains more to-day of head-ach and difficulty of breathing. Her legs are much better, and the rednefs of the fkin abated.

The 18th. Her head-ach continues bad at nights. She is feverifh and vomits her electuary. Her Afthma, upon the whole, is much better, although at prefent it is troublefome and the fwelling and rednefs of her legs is almoft gone.

Sumat ter die Decooti Corticis Peruviani uncias duas vel tres; छ pro re nata, quando alvus aftricta fit, pilularum Rufi duas.

The 25 th. Her fhortnefs of breath has been gradually diminifhing fince fhe began to take the decoction of bark, and is now materiaily better. Her appetite is improved, her ftomach ftronger, head-ach almoft well, and the fwelling of her legs fcarcely perceptible.

Auguft 2d. She continues to recover.

The 12th. She has no complaint except a little ftiffnefs in her ancles, Let her be dif. miffed.

This is a cafe of the Afthma, complicated with violent dropfical fwellings of the feet, legs, and thighs, in which the fkin was very tenfe and fhining, and afterwards became inflamed in feveral parts, from the great diftenfion which it underwent. A moft fevere headach, attended with ficknefs and foulnefs at her ftomach, was alfo added to her affictions, along with a total ceffation of the menftrual difcharge; the whole forming a combination of fymptoms, which frequently prefents itfelf to the medical practitioner. Her conftitution, however, was not greatly reduced by long continuance of her difeafe, nor by improper treatment.

I thought it, therefore, advifeable to make trial of the cream of tartar electuary, which is ftrongly recommended by very able phyficians in dropfical cafes, as being both laxative and diuretic. At firft fhe took three tea-fpoonfuls of it, allowing an hour between each teafpoonful; but as that quantity operated too brifkly, fhe afterwards took only two thirds of

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it, which feemed to procure a few eafy ftools and anfwered very fuccefsfully. By this medicine, along with a nitrous mixture, the fuperabundant quanticy of ferous fluids in her confitution was gently evacuated, and her dropfical fymptoms intirely removed, which evidently afforded relief to the complaint of her lungs, in which the cellular membrane in all probability was confiderably diftended with ferum. The above opinion is confirmed by this confideration, that the afthma and continual ftuffing in her breaft were very trouble fome, although fhe had but little cough or expectoration of phlegm.

When the dropfical fwellings were removed, and the electuary was become difagreeable to her, but fome afthmatical fymptoms ftill remained obftinate, owing probably to the heat of fummer, I gave her a decoction of the bark with the pil. Rufi,-the laft to keep her body regular, and the firft to take off the fpafm and irritability of the lungs, and to reftore tone and vigor to her relaxed conftitution, by which means the cure was foon compleated.

I need not add that the ceffation of the menftrual difcharge, or what is commonly
called the change of times, is a very critical period in a woman's life, or that fome women are very ill at the firt part of that change, and others not till the menfes have left them for two or three years. The complicated difeafe of this patient began at the latter end of April; I faw her firft on the feventh of June; and fhe was difmiffed from her attendance at the Hofpital on the twelfth of Auguft. I call the above facts to remembrance for the fake of obferving, that this diforder began in a mild feafon of the year, and increafed as the warm weather advanced, which is not fo common an occurrence as the reverfe, and fhews the Afthma to have been more purely of the nervous kind, although attended with dropfical fymptoms.
C A S XXVI.

Thbe Convulifive Aftbma, complicated with a venereal ulcer in the nofe, cured by Mercury and the Peruvian Bark.

MRS. - , aged 33, May 25th, complains of a cough and difficulty of breathing, which fymptoms attack her in a fudden and violent manner. The convulfive affection
affection of her lungs abates generally in an hour or two, but leaves behind it a wheezing, ftuffing, and conftant obftruction to refpiration. Her face is pale and rather fwelled. Her nofe on the right fide is very red and inflamed externally; and there is a painful ulcer within, which difcharges a thin matter, and has continued nearly in the fame fate for many months. Her menfes and body are regular, appetite but indifferent, expectoration fcanty, pulfe and heat both natural.

Fiat fonticulus in bracbio finjftro.
R. Corticis Peruciani pulveris unciam dimidiam, Aque fontane libram unam.
Coque ad colature uncias ofto.
R. Hujufce decocti uncias duas, Aqua cinnamomi spirituofe dracbmas duas.
Fiat bauftus ter die Jumendus.
June if and 9th. Symptoms continue the fame.

Repetatur bouftus ut antea.
R. Mercurii crudi dracbmas duas,

Terebintbine argentoratenfis drachmam unam. Optime terantur fimul donec nullum argenti vivi veftigium appareat; addendo, pro re nata, guttas aliquot olei terebintbina. Dein adde,

O O Extradti Pulveris glycyrrbize forupulos octo.
Aqua fontana, $\mathfrak{f}$ opus Ift, mifce, छ fiat maffa, in pilulas nonaginta dividenda. Sumat unam mane छv vejpere.

The 22d. The pills agree well with her, and fhe finds that her cough and difficulty of breathing are lefs troublefome, and the ulcer of her nofe fomewhat better.

The 2gth. Her cough and other afthmatical fymptoms are removed. The rednefs, pain, and ulcer of her nofe are diminifhed. Body regular. She has a little forenefs of her gums, Let the pills be omitted for a day or $\mathrm{twO}_{2}$ and then repeated as before,

July 4th. She has no forenefs of her gums, Her nofe continues to heal. She complains that fhe is loofe in her body, and has griping pains in her bowels.

Omittatur bauffus roberans.
Continuentur pilula mercuriales.
R. $7 u l e p i$ e creta unciam unam $\mathcal{E}$ dimidiam,

Tinctu a tbebaica guttas feptem,
Aque cinnamomi Jpirituofe fefquidracbmam.
Fiat bauftus ter die Jumendus.
The

# O B SERNATIONS. 

The 1oth. She ftill continues to be griped and purged, altho' fhe has taken the aftringent draught fix times in twenty-four hours. She complains of cold and chill fits.

Omittantur pilule $\xi^{8}$ bauffus.
Alternis noctibus Unguenti Carulei Fortis dracbma una E dimidia diligentifime fricetur fuper femur vel crus per borce spasium.
R. Aque menthe vulgaris fimplicis,

Aque menthe piperitidis fimplicis, utriufque, uncias tres,
Confectionis cardiace drachmas duas, Aque cinnamomi fpixituofa dracbmas fex, Spiritus lavendule compofiti dracbmas duas.
F. miftura. Sumat ager unciam unam © dimidzam ter die, precipue in languoribus $E$ frigoribus.

The 24th. She has rubbed herfelf carefully with the ointment as directed. She has no loofenefs or griping. Her appetite is improved. Her gums are rather fore. The complaint of her lungs has never returned, and her nofe is almoft well.

Auguft 12th. She has no complaint.

In this cafe the Afthma was complicated with an ulcer of the nofe, which I fufpected to be venereal. After having ordered the bark as a tonic, and examined fufficiently into the ftate of her conflitution and the nature of her complaints, I was foon refolved, by the obłtinacy of the fymptoms, to have recourfe to a mercurial pill. This I gave in a mild but moft effectual form *, by which means the atthmatical fymptoms were foon removed, and the venereal ones much leffened.

After having continued the mercurial pill for fome time, it began to produce griping pains and loofe ftools, which in weak bowels is a common effect of even the mildeft mercurial, taken internally. To obviate this pernicious tendency, the tinctura thebaica was prefcribed, and its dofe gradually increafed to a confiderable length, but without any lafting good effect.

Not wifhing to continue the tinctura thebaica any longer, I ordered the mercurial unction to be ufed, which is an excellent fubftitute in fuch cafes, when complicated with weaknefs of the ftomach and bowels. This had the defired effect; and,

* Vide Fordyce's Elements of Practice.


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and, as foon as the pills were omitted, the griping and purging immediately left her. The ufe of the mercurial ointment requires great attention, and indeed much of its efficacy depends on the induftry of the patient;-for if it be imperfectly rubbed in, it has little or no effeet;-and if it be rubbed in with more force than is requifite, its operation may be too ftrong and a falivation excited. For this reafon punctual directions ought to be given to the patient how it is to be ufed, and what time and attention is requifite for performing the friction, together with the parts of the body which from time to time are to be rubbed. I own I ath deffrous of having the breath tainted and the gums rather fore, altho', if we be certain of the quantity and goodnefs of the medicines employed, the venereal fymptoms will often give way, and the diforder cure well without thofe fenfible effects of the action of mercury, *

It muft be confeffed that I fhould not have ordered mercurial medicines fo early to this patient, if the venereal ulcer in the nofe had not indicated them. I find feveral cafes among

> my

* Vide the Author's Treatife on the Ufe and Abufe of Medicine, where the ufe of mercury in the venereal difeafe is particularly confidered.
my notes very fimilar to this, which were treated fuccefsfully in nearly the fame way. The employment of mercury in the atthma was mentioned before in a former part of this treatife*, and its fuccefs in this inftance is very obvious, for the afthma foon difappeared after it was ufed.


## C A S E XXVII.

The Convulfive Aftbma, of feven montbs fanding, complicated with teetbing and inflammatory obfiructions of the lungs, in a cbild fourteen montbs old, cured by the Mercurius dulcis, Anodyne Syrup, and Flowers of Zinc.

HOMAS MORLEX, aged fourteen months, admitted a patient at the York County-Hofpital, January 4, 1781, has a cough, conftant wheezing and fhortnefs of breath, and alfo fudden attacks of difficult refpiration. His face is pale, but does not look very thin. He ftill continues at the breaft, although he fucks at times with great difficulty on account of the fhortnes of his breath. He has been ill of his prefent complaints above feven menths. They began with a bad fever,

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swhich arofe from cold. His flefh is wafted, body regular, fkin cool, and he feems now to have little or no fever, His belly is fwelled and bigger than natural, and he has only got four teeth.

- Sumat omni mane pulverem ex mercurii dulcis fexies.fublimati grano uno, $\mathcal{F}$ faccharri albi granis quinque,
> R. Syrupi altbee,

> Syrupi mororum, utriufque, Semunciam.
> Tincture thebaice guttas oito. Mijce.
> Dofis dracbma una omni noठte ad cubitum eundum,

The 8th. He is more chearful and lively, breathes eafier, wheezes lefs, and refts better in the night. His pulfe is weak, but not quicker than natural. His fools come from him more freely, and there is among them an appearance of nime and fkins of worms, but he has no pain in his bowels,

The rith. His voice is clearer, ftronger, and more natural; breathing eafier; ftools moderately loofe.

Repetatur pulvis, Sed capiat tontum unum alternis noctibus.

Sumat fyrupi anodyni dracbmam unam $\mathcal{\text { G dimi- }}$ diam, vel, $\sqrt{2}$ opus $\sqrt{2} t$, drachmas duas.

The

The I ${ }^{\text {th }}$ th. His mother fufpeets that he is getting a tooth, as he bites hard at the nipple, and has an increafed flow of faliva. His medicines agree well with him, and occafion no griping pains. He breathes much better, and with lefs wheezing and rattling of phlegm; his voice continues clearer and ftronger; body regular and lefs fwelled; appetite good; eyes more bright and lively, and he begins to look clearer in his complexion.

Continuetur fyrupus anodynus, हु omittatur mercurius dulcis.

The 22d. He is evidently getting a tooth. He breathes fomewhat fhorter to-day and with greater difficulty, coughs more, and is loofe in his body.

Capiat bis die pulverem ex Florum Zinci grana uno \& faccharri albi granis tribus,

Omittatur fyrupus anodynus.
The 26th. His body continues loofe. He breathes a little better, wheezes lefs, and is more chearful and lively. The fyrup has been omitted, but he has taken the powder regularly, and it has agreed well with him.

Reperatur pulvis ex Flore Zinci.
Sumat

Sumat miftura Fartari Emetici cochlearia duo parva omni femibora ad tertiam vicem, nifs prius vomitio vel alvi-fluxus fupervenerit.

February oft. He did not vomit with three dofes of the tartar emetic mixture, but it gave him a few loofe ftools. His belly continues fomewhat bigger than natural. He ftill wheezes, has a rattling of phlegm in his throat, and breathes with difficulty.

Continuetur Pulvis Florum Zinci.
The 4th. He breathes with more eafe; has little or no cough; wheezes lefs. His medicines agree well with him, he has better nights, and takes his food with an appetite.

The roth. He continues to recover; is Atronger upon his legs, and looks better in the face.

The 19th. He has no complaint, except How and then a little -fhortnefs of breath againft any material change of weather. Let him be difmified,

This child began to have a diforder of his lungs at a very early period, for he was not then above fix months old; and when I faw him, $P_{P}$
it was become fo violent, that his life was in the greateft danger. A natural queftion here arifes,-From what caufes does the complaint proceed? The diet and regimen of children ought to be fo fimple, that one fhould hardly fuppofe an Afthma to be a frequent difeafe among them ; and yet it is an undoubted fact, that it not only does take place in infancy* but much oftener than one would imagine. The caufes which I have obferved to operate moft frequently and moft powerfully in bringing on afthmatical complaints in infancy, are tight ftays or bandages around the body, exceffive heat, imprudent expofure to cold, and grofs feeding.

It is a melancholy obfervation, that the firft of thofe caufes proves fatal to many. I have feen pulmonary obftructions, afthmas, inflammations of the lungs, and even convullions arife from it.-Excefs of heat likewife is often very pernicious to infants, for unikilful nurfes frequently hold them on their knees expofed to a hot fire, where they are compelled to breathe an air heated to a dangerous excefs. This foon Atupifies a child and throws it aileep, efpecially if its veffels be too full of blood; and then

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## OBSERVATIONS.

then the injury is may afterwards receive, is very great, -With regard to imprudent expofure to cold, nurfes are apt to forget that the conftitution of an infant is very tender, and that a night degree of unaccuftomed cold will act powerfully upon it, particularly after having been previounfy heated. -As to the laftmentioned caufe, grofs feeding, fome parents, as well as nurfes, fondly imagine that art can provide a more wholefome diet for children than nature. Led away by this erroneous opinion, they not only allow the tender infant to fuck plentifully, but afterwards compel it to fwallow a quantity of fpoon-meat, by which means the child, if it be not fuddenly carried off by colic pains or convulfions, becomes fat and grofs, and in confequence of being toa much filled with blood, its weak veffels are over-diffended. This ftate of fulnefs is particularly hurfful to the lungs of infants, and lays a foundation for pulmonary obftructions; afthmas, and inflammations. *

Thomas Morley had evidently obftructions in his lungs, and thofe, as his complaint at its

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[^35]commencement was fevere and attended with a fever, had in all probability been the confequence of previous inflammation. At the time when I firlt faw him, his conftant wheezing and fhortnefs of breath, along with a cough and fudden attacks of difficult refpiration for near eight months, was a very fufficient proof of obftructions and fpafmodic affections of the lungs. By this long difeafe, his conftitution was greatly injured, his body was become large, color pale, flefh walted, limbs fmall and emaciated, but his face did not look proportionably thin and fallen. He had been flow in getting his teeth, and therefore had many more ftill to cut. Whether or no he had worms, was not certain, becaufe he had not parted with any which had been obferved. As his body was large and harder than natural, the mefentery probably was fomewhat obftructed, a complaint which diffections have proved to be very common among children.

With this view of the difeare, a few dofes of a gentle mercurial were indicated, as deobftruent, laxative, and antifpafmodic, and they had the defired effect; for they kept his body regular without producing any griping pains in the bowels, and difcharged a quantity of matter, which
which had the appearance of nime and fkins of worms. He had likewife an anodyne fyrup at night. By the ufe of thofe two remedies his cough, wheezing, and difficulty of breathing were abated, and the child grew more chearful and lively. His nights were eafier and his voice became clearer, fhriller, and more natural, which is a fymptom worthy of obfervacion, as it is of great weight in the prognoftic of all pulmonary complaints, and particularly in thofe of children who are unable to exprefs their feelings. His appetite likewife was improved, which fhewed that the mercurius dulcis agreed well with him. After he had taken thofe medicines for about ten days, he cut a tooth, which was evidently accompanied with an increafe of the complaint in his breaft.

If a child have a difeafe in his breaft, the cutting of a tooth, as it often excites pain, fever, and general irritability, will, as in the prefent cafe, be found commonly to increafe it. But this affords no proof why a cough and fhortnefs of breath, with pulmonary obftructions in the lungs, fhould be thought a neceffary attendant on teething. According to the beit of my obfervations, it is an indifputable fact,
fact, that healthful children cut their teeth without a cough, and, when in others a cough attends teething, it is in general an accidental circumftance, proceeding from a local complaint in the breaft, and is not merely fymptomatic of the cutting of a tooth. The violence of the cough, -the rifing of phlegm from the lungs, - inflammations, pulmenary obftructions, and ulcerations, which have followed, and been proved by diffection, -_have fully convinced me of the truth of the above affertion. I fhould not have dwelt at all on this fact, if I had not obferved that the notion, which I am endeavoring to refute is pernicions to fociety, and productive of fatal confequences. For when we fay that a cough with fhortnefs of breath, is a common fymptom of teething, we unite the two complaints together under one idea; and as we confider teething as natural and neceffary, the other being united with it and regarded only as an effect, falls in under the fame general idea, and confequently is too often fuppofed to require no particular treatment, by which means it is neglected, and in many inftances proves fatal.

After this patient had taken the mercurius dulcis, as above directed, for ten or twelve days,

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days, that remedy was omitted, and the flowers of Zinc prefcribed, which had a happy effect in ftill further diminifhing the cough, wheezing, and difficulty of breathing. Thofe remedies were given to him regularly, till on the $19^{\text {th }}$ of February he was free from complaint.

After he had taken the flowers of Zinc for about eight days, I prefcribed the tartar emetic mixture, with a view to promote a gentle vomit-' ing, and difcharge of phlegm both from the lungs and ftomach; but it did not anfwer that intention. It procured him, however, a few loofe ftools, which were of fervice to him. The above dofe of the tartar emetic mixture is in general fufficiently ftrong to occafion vomiting. Sometimes one dofe of it even will vomit a child of that age, and now and then a fecond in irritable habits will operate violently.

## C A $S$ EXVIII.

The Convulfive Aftbma, complicated with an Ins: flammation of the Lungs, cured by Blood-letting, Blifters, Laxatives, $\vartheta^{c} c$.

MARY ROBINSON, in the 45 th year of her age, admitted at the York CountyHofpital, on the 16 th of October, 1777 , complains of head-ach, colic pains in her bowels, wind at her fomach, and rheumatic pains in her legs and feet, which are fomewhat fwelled. She is coftive; but her menfes are regular, fkif cool, pulfe natural. She has fhort but frequent fits of difficult breathing along with a dry cough, which complaint flie has been often troubled with for fome years paft. Her employment is that of a wafherwoman, in confequence of which fhe has been much expofed to viciffitudes of heat and cold. Her general habit of body appears to be moderately full, but fomewhat relaxed.

Sumat miftura pectoralis unciam unam et dimidiams bis die,-haufum Solutivum cras mane-छ loboch fanans fope in diem.

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The 20th. The phyfic operated well, and gave her feveral ftools, which relieved the pain in her bowels. Other fymptoms are nearly as before.

Continuentur remedia, $\mathcal{E}$ repetatur cras mane bouftus fence purgans.

The ${ }_{23} \mathrm{~d}$. There is little or no alteration in her complaints fince the laft report, except that her countenance is heavy, tongue fomewhat furred; and fhe appears languid and fatigued. She took the folutive draught as directed, and it anfwered well.

The 27 th. On Saturday the 25 th, fhe was feized fuddenly with a fevere pain at the lower part of the fternum and acrofs the pit of her ftomach, attended with a violent cough and difficulty of breathing, and an obftinate vomiting of every thing fhe took. This morning I called upon her at her own houfe, and found her confined to her bed in the fituation abovementioned, with the fymptoms all increafed. She was very feverifh. The vomiting continued. Her pulfe was quicker and fuller than natural; urine high-colored; tongue foul; fkin hot and dry ; thirft great. The pain acrofs the pit of her ftomach was fevere, her breathing very Qq difficult

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difficult and laborious, and fhe had a troublefome cough which greatly increafed the pain. She afterwards made no further complaint of the pain and fwelling in her legs and feet. She was ordered to be bled immediately to the quantity of ten ounces; and in twelve hours the operation was to be repeated. A blifter likewife was applied acrols the pit of her fomach; glifters adniniftered occafionally ; and the following mixture prefcribed.

Stenat mifture faline unciam unam \& dimidiam quarta quaque bora.

The 28th. She has been bled twice, and her blood is tolerably firm, with fome appearance of the buff-coat. The blifter anfwered well, and the has had two ftools with the glifter. The fymptoms are rather eafier than they were yefterday. Her pulfe is fofter but ftill quick. The vomiting is very fevere. Cold water ftays on her fomach when nothing elfe will, and gives her no pain. She has taken the faline mixture at times when her fomach could bear it. Her Breathing continues very laborious with confiderable wheezing and great tightnefs acrofs her breaft, fo that fhe is obliged to have her head and body raifed high with pillows. Her tongue is foul and her flkin hot, but they are not fo dry

## OBSERVATIONS.

as they were. Her urine is high-colored, and fhe has conftant thirft, but can take no folid food of any kind.

The 2gth. The pain acrofs the pit of her tomach is much eafier, but her cough is more troublefome, and the has a feverre pain on the left fide a little above the fhort ribs, which is increafed on motion and preffure. Her ficknefs and vomiting continue. Her difficulty of breathing is very great, altho' fle expectorates a little more phlegm. Cold water is fill the moft grateful and refrefhing to her, and fhe drinks plentifully of it. Her pulfe is tolerably regular, and not fo quick as it was. Her tongue is foul, and her countenance continues heavy, funk, and diftreffed. She eats nothing, fleeps very little, and that in a moft confufed manner. She had a ftool with the glifter.

Repetatur mifura, छ applicetur cmplaftrum vefzcatorium parti dolenti.

The 3oth. She had a bliter on her fide laft night, and it has difcharged well. She continues to take the faline mixture at times. Her pulfe is weak and confiderably quicker than natural, but tolerably free. The pain in her left fide is eafier, but her breathing is laborious,
Qq2 and
and fhe ftill feels a great tightnefs acrofs her breaft. She has been able to eat a little light pudding to-day, which the has not thrown up. Her cough is very troublefome and violent, particularly after eating or drinking any thing, and her expectoration fcanty and difficult.

Repetatur mifura $\mathcal{E}^{\circ}$ enema.
R. Fulepi cardiaci unciam unam $\mathcal{\text { dimidiam, }}$

Tincturc T'bebaice guttas quindecim,
Florum Zinci grana quinque.
Fiat bauftus, bora fomni fumendus.
The 3 Ift. Her draught at bed-time agrees well with her, and fince fhe took it, fhe has coughed lefs, fpit more freely, and flept better at nights. She is extremely weak, but has no pain, ficknefs, or vomiting. Her breathing is ftill very difficult. Her thirft is abated; fhe has fome little return of appetite; her pulfe is rather flower; her urine depofites a lateritious fediment; her fkin feels cooler and moifter ${ }_{2}$ and her tongue is lefs furred.

Repetantur medicamenta.
November ift, 2 d , and 3 d . She continues to recover. Her pulfe is low, and not above 68. Her medicines agree well with her.

Omittatur

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Omittatur miftura falina, Sed continuetur boufus E enema, EJ fumatur julepi cardiaci uncia una \& dimidia bis terve in diem.

The roth. She has not been able to attend as an out-patient fince the 23 d of laft month, at which time this fevere illnefs firft attacked her. She gains ftrength daily, and feems in a fair way of recovery.

The 17th. She is able to attend at the Hofpital to-day. Her cough and difficulty of breathing are much better, though now and then fhe has night returns of them. She fays, her draught at night has made her reft better, and afforded her much relief; but by my direction fhe begins now to omit if,

The 20th. She was continued an out-patient a few weeks longer, during which time fhe was ordered mifurce aftbmatica uncia una bis die; but as that medicine came up again into her mouth and caufed a ficknefs and fpitting, it was changed for the volatile cordial julep, which feemed to agree well with her. On the 29 th of December her cough and difficulty of breathing had intirely left her, and the was difmiffed from

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from her attendance at the Hofpital, free from complaint.

This proved a cafe of great danger, and feemed, from her previpus general indifpofition, to have been hanging upon her for fome time. Her lungs were in a very irritable ftate, and fubject to convulfive affections. Her pulfe at firft was natural ; fhe had no fever; and was able to attend at the Hofpital as an out-patient.

On the 25 th of December (which was the ninth day after her admiffion at the Hofpital) The was feized with a fevere pain at the lower part of the fternum and acrofs the pit of her ftomach, attended with violent difficulty of breathing, great tightnefs over her breaft, and a painful cough, along with a fevere fever and an obitinate vamiting of every thing fhe took,

On the 27 th in the morning I faw her for the fift time after this alarming attack. She was bled plentifully twice that day, and had a blifter applied in the evening. It would have been better if the had been bled on the firlt day of the inflammation, but I did not know of her fituation till the third. She had taken two gentle dofes

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dofes of phyfic during the firft nine days of her attendance at the Hofpital, which 1 confidered as a favorable circumftance; for, as her ftomach afterwards was fo extremely irritable and the vomiting fo conftant, it would, if the had been coftive and her bowels loaded with fæces, have been extremely difficult, if not impoffible, to have procured her a free paffage; and then certainly it would have proved very alarming, if not fatal, to have had a fit of the colic with coftivenefs complicated with the above difeafe. But as things were, a gentle glifter, occafionally repeated, was fufficient to keep her bowels in an eafy flate. The faline mixture was given to promote perfpiration, diminifh the fever, and allay the vomiting; but it did not fucceed well in this cafe.

On the 2 d day of my attendance, which was the 28 th, her pulfe was fofter, breathing eafier, pains fomew hat diminifhed, and therefore bleeding was not repeated.

On the 2gth the pain acrofs her breaft was eafier, but her cough, difficulty of breathing, ficknefs and vomiting continued fevere. Her puife at the fame time became flower, and was rolerably regular, and her fever was much abated.
abated. It then appeared to me that the convulfive affection of her lungs, with great general irritability of habit, conftituted the chief part of the remaining difeafe; along with a rheumatic pain in the left fide: As fhe was too weak and relaxed to bear bleeding a third time, another blifter was ordered, which caufed a plentiful difcharge, and gave great relief to the vomiting and pain of her fide.

As her difficulty of breathing and tightnefs acrofs her breaft was ftill troublefome, and at the fame time her ftomach began to bear a little food without vomiting, I prefcribed on the 30th an anodyne draught with five grains of the flowers of Zinc , which, as an antifpafmodic, had evidently a powerful effect in procuring reft, quieting the cough, and relieving the difficulty of breathing. Afterwards by the ufe of a volatile cordial mixture, along with proper nourifhment, frefh air, gentle exercife, \&cc. fhe gradually recovered from the very weak ftate to which fhe had been reduced.

The above combination of fymptoms appeared to arife chiefly from a chronic catarrh and fpafmodic affection of the lungs, on which an inflammation of that organ had fupervened,
pervened, which rendered the cafe extremely critical and dangerous. Floyer very juftly obferves that this complication of diforders is generally fatal; and indeed that was the termination which I was afraid of in the above cafe for feveral days fucceffively. The vomiting, which continued inceffantly for fo long a time, of every thing but cold water, was, together with the reft of her complaints, a very alarming fymptom. Cold water in this cafe feemed evidently to be ferviceable, and as nature at firft had pointed it out to her, I did not think proper to forbid it. It was cooling, diluting, antifpafmodic, and as it excited no pain in the ftomach, but evidently leffened the vomiting, I knew of nothing which could with equal propriety have been fubftituted in its place. Many emirient phyficians, and particularly the late Dr. Gregory, have recommended cold water in inflammations of the lungs, and Floyer obferves that the convulfive Afthma is generally relieved by it. There was in this cafe evidently no inflammation of the fomach to contraindicate the ufe of cold water; for the action of vomiting produced no great increafe of pain, and cold water fat perfectly eafy on the flomach, which certainly would not have been the cafe had that moft fenfible and irritable organ been infla-

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med. The vomiting feemed to arife from that general law of the animal œconomy, which is founded on (what Phyficians term) the confent of parts, and more efpecially when the parts affected are as near to the ftomach, as in the prefent cafe.

> C A S E XXIX.

The Convulfive Aftbma, complicated with an Inflammation of the Lungs of four days Atanding, cured by Blood-letting, Blifters, Laxatives, $\mathcal{E}^{\circ}$ c. to which is added an account of the cafes of Gane Beeforth and Mrs. -, both treated fucceefsfully by the fame remedies.

YOHN BOTERILL, 28 years of age, March 28th, 1782 , had, when I firft faw him, all the fymptoms of a moft violent inflammation and fpafm of the lungs - fever, bad cough, bloody expectoration, fevere pains in the breaft, difficult lying, along with a difficulty of breathing fo violent, that he had all the appearance of a man ftruggling for breath in the very laft moments of life. His pulfe at the fame time was quick and full, with great heat and thirft. Thofe complaints having continued with uncommon violence for four days before my firlt vifit, I ordered him to lofe fixteen ounces

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ounces of blood that morning; and as his blood was firm and fizy, his pulfe high, and the fymptoms a little relieved, the operation was repeated in the evening to the fame quantity. On the morning following, - his pulfe being ftill quick, full, and ftrong, and the fymptoms, though fomewhat abated, yet violent,-he was bled again to the quantity of fixteen ounces. The next morning, for the fame reafons, he was bled to ten ounces more. He had in the mean-time diluents, faline mixtures, oily emulfions, linctufes acidulated with fpirit of vitriol, blifters, gentle laxatives, along with pure air and the cool regimen; by which means he recovered, and had no complaints remaining on the 9 th of April, except a cough, ftuffing in his breaft, and weaknefs, which were in a few weeks removed at the York County-Hofpital by the miffura aftbmatica, loboch fanans, bouffus Sence purgans, mifura Jpermatis ceti cum effentice antimonii dracbina una omni doff. A mild, low, regular diet, and gentle exercife in the open air, greatly forwarded his fpeedy and perfect recovery.

On my firft vifit to this patient, there never was, to all appearance, a more miferable object. The anxiety which attended the difeafe
was inexprefible, fo that his whole body was in a dreadful agitation, with no other profpect but that of immediate fuffocation. On a ftrict examination into his cafe, no fymptom gave me the fmalleft hopes of recovery till on feeling his pulfe I found it quick, full, and ferong, -and no remedy was fo likely to relieve him as bleeding. Without bleeding he muft have expired in a very few hours, as nothing elfe could have had any chance to have removed the inflammation and fpafm of his lungs. As the firft bleeding relieved him, and as the fymptoms feemed to require it, the operation was repeated four times, fo that fifty-eight ounces of blood were taken from him in the fpace of forty-eight hours, and with the happieft effect *. Blifters, laxatives, \&rc. were employed with advantage. If the bleedings had been made more fparingly, he might perhaps have recovered, but his recovery would have been attended with greater difficulty + . Larger effufions into the cellular membrane of the lungs, and more inveterate obftructions would probably have taken place, and have required a longer time to have removed them. We mult, however, obferve, that it would have been much better, had this patient been bled fooner,

> * Cleghorn and Sydenham. - Cleghorn.

OBSERVATIONS.
fooner, becaufe his complaint is one of thofe which often ends fuddenly in fuffocation, in confequence of the fafm of the lungs, the obftrueted circulation and accumulation of blood, and effufions into the cellular membrane of that organ.

I have had feveral dreadful cafes of this kind; treated nearly in the fame manner; fome of which, however, required bleeding more copiounly than others, according to the age, pulfe, bodily vigor, urgency of fymptoms, appearance of the blood, \&c.

The cafe of Jane. Beeforth, of this city, a girl about nineteen years old, was another ftriking example of the fame terrible difeafe, cured by blood-letting. She was bled to forty ounces of blood in eight-and-forty hours. She fainted after the fecond bleeding, but not after the third. Her difeafe, which was a complication of fpafm and inflammation of the lungs with a very bloody expectoration, had continued for feveral days before I faw her.

Mrs. $\longrightarrow$, of this city, recovered too from a like terrible difeafe, of the fame ftanding, and attended with a fpitting of blood, but fhe could

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could only bear bleeding twice in three days; becaufe her complaint was complicated with a fevere fever, towards the end of which there was a delirium with confiderable depreffion of ftrength. When her difeafe began to abate, the alarming fymptoms arifing from the fpafm of the lungs, after having continued for feveral days with the utmoft violence, fo far difappeared fuddenly in one night, as to remove every idea of danger.

I find thofe two cafes are fully taken in my notes, but it would be needlefs to trouble my reader with a longer account of them. The fudden abatement of the fymptoms is clearly owing to the folution of fpafm; and is in fome meafure characteriftic of the difeafe. In thofe cafes the feverity of the complaint did not continue uniformly in the fame degree; but was fometimes a little eafier, and then returned with the moft violent exacerbations, fo that the attendants defpaired of recovery, and expected inftant death. Such exacerbations are often the moft fevere and alarming in the night. Though blood-letting is the chief remedy, and the reft of the treatment, no doubt, much inferior to it in efficacy; yet the patient, from the fudden and unexpected eafe,

## OBSERVATIONS.

eafe, which he finds on the folution of the fpafm of his lungs, will often afcribe his cure intirely to fome new linctus or different medicine laft prefcribed, which perhaps has evidently had the leaft part in the cure. It is worth remarking, that the pulfe in this dreadful complication of maladies is fuller and ftronger and the circulation freer, than when an equal difficulty of breathing occurs in a peripneumony from effufions of blood into the cellular membrane without any fpafmodic affection of the air-veffels; and the reafon of it is this, becaufe the fmall blood-veffels in the lungs are not fo much compreffed in the firft cafe, as in the laft,

## PARTIV.

## C A SES of ASTHMA,

## IN WHICH THE

## TINCTURA THEBAICA, MUSK, CASTOR, CAMPHOR, ETHER, ASAFCETIDA, \&cc.

## Were employed with Succefs.

## C A S E XXX.

A Caje of the Convoulfive Aftbina, complicated with a Spitting of Blood, cured by Tinctura Thebaica, Oleum Ricini, Emetics, Milk Diet, $\mathcal{E}^{c}$.
₹OHNLITTLE, aged 52 , of a weak habit of body, admitted at the York County-Hofpital, April 28, 1777, has been troubled with a cough and afthma for feveral years.

## OBSERVATIONS.

years. He has at prefent a great difficulty of breathing and fenfe of ftraitnefs acrofs his ftomach, with a pain in his breaft. His pulfe is low and weak but not quick, and he has no feverifh fymptoms. He has twice vomited up eight ounces of blood fince Tuefday the 22 d of this month, and coughed after it each time confiderably. Expectoration difficult and fometimes bloody, appetite bad, fleep difturbed, body coftive. Let him live on a milk and vegetable diet.

Sumat mifture ex tinotura rofarum uncias duas. quater die; - olei ricini unciam unam pro re nata quando alvus aftriס7a fit; -balfami glycyrrbize cachlearia duo parva bis vel ter in die; - § baufum anodynum ex TinEture Tbebaice guttis sedecim omni nocte bora fomni,

May ift. The cough, difficulty of breathing, and pain in his breaft are eafier. He has fpit: no more blood. Expectoration freer; pulfe rather ftronger ; body open; he refts better at nights, and gains ftrength.

Continuentur remedia, Ej repetatur bauftus ano dynus ex Tincture Tibebaica guttis viginti.

The 5th. He continues to recover.

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The sth. He complains of foulnefs at his ftomach; but in other refpeots continues better, Repetantur remedia, छ fumatur vefpere baufus ometicus.

The 15th. The yomit anfwered well, and brought away much phlegm and undigefted matter. His throat is fore, but he has no pain in his breaft, and all his other fymptoms are eafier.

Continuentur remedia, $\mathcal{E}$ repetatur baufus anodynus ex Tinctura Thebaica guttis viginti ot fex,

The 26 th. He has a load and oppreffion ats his ftomach. The forenefs in his throat is removed, his cough is almoft gone, and he has no return of difficulty of breathing or pain in his breaft.

Continuentur remedid, ©f repetatur velpere baufus emetious.

June 2d. The yomit anfwered well, and relieved the oppreffion at his ftomach; and he is free from complaint, except a little forenefs in his breaft and throat.

The gth. He has no complaint. Let him be difmiffed.

This

This is a cafe of the Afthma complicated with a fpitting of blood, in a patient whofe conftitution was weak and relaxed. He had, in the laft fix days before he came to the Hofpital, vomited fixteen ounces of blood, which had alarmed him very much. When blood comes fuddenly from the lungs, it excites a fenfation in the throat as if the patient were vomiting it ; but in this man's cafe the cough, difficulty of breathing, pain in the breaft and bloody expectoration, fhewed clearly from whence the blood proceeded. Befides it came up free from any mixture with the contents of the ftomach, and was inftantly followed by a fevere fit of coughing.

As he had lately loft fo much blood, and his pulfe and general conftitution were very weals, I did not think it right to advife bleeding, but recommended a milk and vegetable diet, by way of preventing afterwards any fulnefs in the veffels or general fitimulus to the conftitution. This pradtice may appear fomewhat contradictory to thofe who have not well confidered the fubject ; for it is natural to conclude, that if a patient be fo weak as to render bleeding im-

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proper, his diet fhould be more nourifhing and reftorative to obviate that weaknefs. But this reafoning is not founded on juft principles. For tho' one durft not bleed, yet milder means of guarding againft any fulnefs in the veffels with a view to prevent too great an accumulation of blood in the lungs, may be abfolutely neceffary.

Regulations of diet, therefore, are highly proper in fuch a cafe as this; and if directed with judgment will, as daily experience fully evinces, contribute much to the fafety of the patient and the cure of the difeafe. For when any one is weak, a night error in diet is capable of doing great mifchief, by giving an irritation to the fyltem, and difordering the circulation of the blood; and any aliment which affords too much nourifhment in proportion to the ftrength of the conftitution, is difficult of digeftion and oppreffive to the ftomach. A diet, therefore, which confifts of the mildeft things, taken in fmall quantity, fuch as milk, ripe fruits, farinaceous and other vegetables, which are light and ealy of digeftion, are the moft proper in this diforder, being fufficiently nutritive and yet not too much fo. By regulations of diet, fuch as thefe, thoufands are daily fnatched from the grave, who in all probability would otherwife
otherwife have died of an Afthma, followed by a confumption. Proper regulations of diet are far more important in preferving a juit balance between the quantity of blood and the tone of the veffels, than any temporary evacuations by bleeding or purging. None can poffibly comprehend the full power and importance of fuch a plan of diet, but thofe who have fteadily tried it; and few have refolution enough for the experiment, efpecially when perfeverance for any length of time is required.

The tinctura thebaica in this cafe feemed doubly indicated, both as an antifpafinodic and a fedative, by which operation it relieved the convulfive Afthma, quieted the cough, promoted expectoration, and diminifhed the irritation of the lungs, which laft effect is of very great moment in fuch complicated cafes as thefe.

The emetic draught, which confifted of ipecacuanha, was a very mild one, and given when his fpitting of blood was intirely ftopped, and his difficulty of breathing and other pulmonary fymptoms greatly relieved. The foulnefs of his ftomach indicated the ufe of it, and there was then nothing to fear from its operation.
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operation. As the firft emetic afforded confiderable relief, another was given on the 26 th with equal fuccefs. Perhaps the load on his ftomach, if it had been fuffered to have remainect there, would have brought on a return of his difficulty of breathing, which might again have obfructed the courfe of the circulation fo much, as to have occafioned a difcharge of blood from the langs.

With regard to the free ufe of emetics in the pure hrmoptyfis, in which there is a frequent difcharge of biood from the rupture of fome confiderable veffel, I am totally averfe to the practice, as I think it a very dangerous one. But in many afthmatical and confumptive cafes, where a little blood comes up pure or mixed with phlegm, a gentle vomit, if indicated either by foulnefs of the ftomach or want of expectoration, may in general be very fafely and advantageoufly prefcribed; and indeed we have daily experience, together with the authority of the moft able phyficians, in favor of the practice. *

There are, however, cafes of this kind int which I fhould be afraid of ufing even a gentle emetic;

* Cullen's public Leelures on the Practice of Phyfic.
emetic; as, for example, where there is any fixt great obftruction in the lungs, of where the fibres of the body are remarkably fmall, delicate, and relaxed; for, in fuch a ftate, it is difficult to anfwer for the confequences of the excitement of yomiting by an emetic, however mild. But even in fuch cafes as thefe, if the patient fhould at any time be fick and vomit, there can be no hazard in giving a little warm water or chamomile tea to facilitate the operation and clear the ftomach of impurities.

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\text { C } A \text { E XXXI. }
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The Convulfive Aptoma, of thrie montbs fanding, in a cbild eleven months old, complicated with a Catarrb, cured by Tinctura Thebaica, Leeches, Laxatives, ®c $^{c}$,

WILLIAM DIBB, eleven months old, admitted an out-patient at the York County-Hofpital on the ift of May, 177\%, has been troubled with a fevere cough and ftuffing in his breaft for three months paft. He coughs very much in thie night. His breathing on a fudden is often fo difficult that he appears as if he were choking. He is weak, languid, and reftlefs.
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reftlefs. His pule is quick and irregular; body bound, and he has very bad nights.

Hirudo cruri applicetur.
Sumat baufus fence pro infantibus unciam unarm छ dimidiam.
R. Mucilaginis gummi Arabici, Syrupi violarum, fingulorum, unciam unam. Doffs cocbleaxium unum parvum Jape in diem.

The fth. He bled freely with the leech, Took his phyfic yefterday, and it operated both as an emetic and purgative. The fymptoms continue the fame, and he has fill very bad nights.

Repetatur mifura, $\Xi^{3}$ fumantur Tincture Thee barca gutta due bora Joni,

The eth. His cough, fluffing, and difficulty of breathing are rather eafier, and his nights better.

The 15 th. He has a loofenefs along with his other complaints; and his mother fufpects that he is cutting a tooth.

Sumat Tincture Thebaica guttas dias mane ac vefpere.
Capias julepi e creta cocblearium unum vel duo quarta quaque bora.

The 1gth. His loofenefs is abated. The tough and other afthmatical fymptoms, particularly the choking fits at night, grow lefs and lefs.

The 26 th and 3 rif. He continues to recover.
Omittatur Tinctura Thebaica, et continuetur julepum e creta.

June gth. He has the meafles, accompanied with an increafe of cough and ftuffing in his breaft, but without any of thofe fudden choking fits as before. Body regular.

Cruri applicentur birudines duc.
Capiat mifturce ex Spiritu nitri dulci unciam dimidiam ter die, छ Tinctura Thebaica guttas tres bora Jomni.

The 12 th. He bled freely with the leeches. The fymptoms of the meanles are favorable. His body is open. Cough and ftuffing are lefs troublefome.

The 16 th. The meafles have intirely difappeared; the cough and ftuffing in his breaft are abating every day.

The 26 th. He has no complaint except a little feverifhnefs at times.

Sumat bis die julepi cardiaci unciam dimidiam.
Capiat mane bauffus fene unciam unam \& dimidiam, E repetatur eadem dofis die menfis trigefino.

July 7 th. The phyfic operated well, and he has no complaint. Let him be difmiffed.

The tender age of this child, the feverity of the difeafe, and its duration, are particulars worthy of attention; for his cafe appeared fo very alarming, that one could fcarce entertain any hopes of his recovery. A great degree of fever and catarrh accompanied the afthma, with a continual ftuffing in the breaft, even when the fit was not upon him. Whatever phlegm came up from his lungs, it was generally fwallowed; for he never got quit of any, unlefs now and then by the affiftance of his mother. The leech and opening phyfic at firft were ftrongly indicated by the violence of the difeafe. Afterwards it was neceffary to have recourfe to antifpafmodics, and with this view the Tinctura Thebaica was prefcribed, which had a happy effect in leffening the afthmatic fits, and procuring better nights.

On the 15 th, the child had a loofenefs added to his other complaints, on which ac-
count he took a fpoonful of the julepum e cretp frequently, and two dofes of the tinctura thebaica in twenty-four hours. It is highly requifite to increafe the dofe of the tinctura thebaica in the diforders of children, as well as in thofe of adults; but this mult be done with much caution, and then it will often be productive of great benefit. If the dofe be increafed rafhly, the effects of it may be very alarming, particularly in afthmatical diforders. For this reafon too, the utmoft care is requifite in preparing and mixing up fuch an active medicine as that for the ufe of children. The loofenefs foon abated with the above treatment, and his Afthma was almoft cured on the fecond day of June, when the tinctura thebaica was omitted, as being too powerful a remedy to be continued without neceffity.

On the gth of June the child had the meafles, attended with a cough and ftuffing in his breaft, but without any return of his afthmatic fits. To moderate the fever and to prevent any injury of the lungs from inflammation, he was, although the eruption appeared to be much out, bled immediately with two leeches, and the tinctura thebaica was again prefcribed, along with the miftura Spiritus nitri dulcis. Had I T t 2 known
known of his fituation earlier, bleeding would have been advifed during the eruptive fever of the mealles. As his body was open, a laxative was not then neceffary; but after the meanles were over, the child took two gentle dofes of phyfic along with a cordial julep. With this treatment he had no return of his Afthma, and was difmiffed cured on the 7 th of July.

## C A S E XXXII.

Thbe Convulfive Aftbma, complicated with a Spitting of blood, a pulmonary confumption, and an abfcefs in the lungs, which laft broke and difcbarged a confiderable quantity of blood, purulent matter, and Jkinny membranous fubftances, treated fuccefsfully by Tinctura Thebaica, milk diet, gentle riding exercife, \&c.

〒OHN MOOR, of Huby, aged 40, admitted at the York County-Hofpital, March 16,1778 , has for fome time paft labored under a complaint in his breaft, in which his lungs are very weak, and his refpiration at times is greatly obftructed. His fits of difficult breathing at prefent are fudden, frequent, and fevere, particularly on quick motion or when he firft wakes from fleep, but they are not of long duration.
duration. He is troubled too with a violent deep-founding cough; great ftuffing and pain in his breaft; and he cannot lie on his right fide without an increafe both of his cough and pain. He frequently fpits up blood mixed with matter, which evidently appears to be purulent; and he is very fubject to cold and hot fits and other fymptoms of hectic fever. The quantity of pure blood, difcharged at once, amounts often to about eight ounces. His legs fwell and fometimes his hands. His pulfe is quick and weak; fleep difturbed; body rather open ; complexion very unwholefome, fomewhat florid, but confiderably tinged with yellownefs. He is of middle fize and of a ftrong make. I defired him to live principally on a milk and vegetable diet, and ordered the following medicines.

Sumat emulfionis oleofe nitrata uncias duas ter die, छ bauftum anodynum bora fomni,

The rgth. His ftuffing and difficulty of breathing are fomewhat eafier. He refts better at nights. Other fymptoms remain as before.

The 23d. He is rather better, and has eafier nights. The medicines agree well with him.

The

The 26th. Laft night he had a feverer cold fit than ufual, which was fucceeded by heat and fweating. The pain in his breaft is fomewhat abated, Other fymptoms nearly the fame.

The 3oth. He fpits blood again and is worfe. He feels himfelf languid and oppreffed. Pulfe very weak and quick. Body regular.

Apsil 6th. The fpitting of blood ftill continues, and alfo his other complaints, along with great and fudden difficulties of breathing. Let him be made an out-patient.

The gth. He leaves the Hofpital to-day, The fymptoms continue the fame.

Sumantur decoifi mucilaginof uncia dua ter die $\bigoplus_{7}$ E repetatur baufus anodynus bora fomni.

The 13th. He rode on horfeback laft Thurfday to Huby, which is nine miles from York, and he fpit blood on Friday. He has rode nine miles to-day, has coughed much, and fpit frefh blood. The medicines relieve him, and he has better nights.

The 20th. He fpit blood yefterday, and is always eafier after fpitting blood. He rode nine

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nine miles this morning and has fit no blood, but complains to-day of great forenefs in his breaft and difficulty of breathing. Pulfe 120. His body is bound at times. He feels himfelf fo weak that he can fcarce walk.

Repetantur remedia; छ capiatur elettarii folutivi cocblearium unum parvum pro re nata, quando corsJtipatio alvi adfit.

The 27 th. He has fpit little or no blood this laft week; is ftronger; his appetite is better; and his pains are diminifhed. He complains of great fhortnefs of breath to-day. Pulfe 112. He rode nine miles this morning, which has not made him fpit blood, but he has coughed more after it; and he returns home as ufual in the afternoon. His hectic fever is abated; fwellings of his legs and hands much diminifhed; countenance clearer, and he looks better in the face.

May 4th. He has fpit no blood to-day after his journey. His body is loofe.

The 14th. His loofenefs is better. He complains of pain and fulnefs in his breaft. Pulfe ftill quick, but rather ftronger.

Mittatur Janguis ad unicias oito.
Repetantur remedia, $\Xi$ fumantur Sape in diems balfami glyyrrbize nitrati dracbme duc.

The

The ${ }^{25}$ th. He continues to recover.
June 4 th. His face is florid, but not near fo yellow as it was. He fill fpits blood at times, but in lefs quantity. His pulfe is nower and ftronger. He lives principally on milk, and ufes regular exercife on horfeback.

Continuentur remedia, छ bauftus anodynus, Jed conflent bora fomni fingula dofes ex Tinctura The baice guttis viginti E $^{\text {quinque. }}$

The 15th. His appetite is good ; the medicines agree well, particularly the Tinctura Thebaica. His cough and ftuffing in his breaft are much better. He fpits blood in fo fmall a quantity, that he fays it is fcarce worth mentioning; and he can lie with lefs difficulty on his right fide.

The ${ }^{2} 5^{\text {th }}$. He ftill fpits a little blood at times, but is in all refpects much better. Bears his journey well and recovers ftrength. His body is regular with the electuary, which he takes occafionally.

July 6th. He continues better, but complains to-day of lofs of appetite.

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The 20th. Of late he has again fpit up fome blood with his cough, which he had not done for fome time paft.-A few days ago an abfcefs broke in his lungs, and he vomited a large quantity of corruption, which was mixed with blood, and had a very foetid fmell. He has likewife forced up by coughing a very confiderable quantity of fkinny membranous fubftances, with part of which he has filled an eight ounce phial, and brought it along with him for my infpection. He feels himfelf materially better, and his appetite is greatly im. proved.

The 3oth. His cough and fpitting have left him. He has had no pain in his breaft fince he got up the blood, purulent matter, and membranous fubftances above-mentioned. He can eat and fleep well, and can bear to work in his farm. Pulfe 82, regular and tolerably full. He looks clear and well in the face; has no returns of his Afthma; no fwelling of his legs, nor any fymptoms of hectic fever; and he can lie with equal eafe on either fide.

He was then difmiffed cured, and returned to me again in a few weeks: to inform me that he continued well. About a year after I

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met him riding to York; and upon inquiry after his health, he told me that he had been free from complaint ever fince, except now and then a little cough and flortnefs of breath from taking frefh cold.

In the cafe of John Moor of Huby, there was a complication of an afthma, a fpitting of blood, and a confirmed pulmionary confumption, in which there was an expectoration of purulent matter, a violent hectic fever, great emaciation, difficulty in lying down, anafarcous fwellings of his legs and hands, and a very fallow unwholefome appearance in his face, with a circumfcribed rednefs in his cheeks, The only circumftances in his favor were, that he had no natural ftraitnefs or deformity in his cheft, that his mind was tolerably firm, and his fpirits not much dejected. During his Itay in the Hofpital, I gave particular attention to him, that I might know accurately the fate of his cafe. But as he was only admitted an in-patient on neceflity, and as the houfe was evidently too clofe for him, I advifed him to be made an out-patient, and directed him to attend upon me at the Hofpital as often as his ftrength would permit and he could make it convenient.

Here

Here a critical cafe prefented itfelf, in which the effects of exercife on horfeback were to be carefully attended to. Accordingly I have every day mentioned the effect which his journey of nine miles had upon him. At firft it made him fpit more blood; then it excited his cough without any Ipitting of blood; and afterwards it agreed very well with him,

His uneafinefs, anxiety, fhortnefs of breath, and difficulty of breathing were always the worft before a difcharge of blood; but after it had taken place, he found immediate eafe, which is a common occurrence in thefe cafes, and fhews a previous congeftion of blood in the lungs.

His pulfe was always quick from the begin. sing; but on the 20th of April it rofe to $\mathbf{1 2 O}_{2}$ which was very alarming.

On the 4th of May a diarrhǽa came on, which feemed to relieve him; and, as the anodyne draught was fufficiently aftringent, no alteration was made in his medicines.

From this time he recovered faft; and whenfever I faw him he generally gave a good account

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of
of himfelf, much better of ten than I was willing to credit, for my prognoftic concerning the event of hiṣ cafe was very unfavorable. In about three weeks after, an abfcefs broke fuddenly in his lungs, whence iffued forth a confiderable quantity of blood and matter of a foetid fmell, which were followed by the difcharge of a great number of flins, fuch as frequently line the internal furfaces of the airyeffels after inflammation. This difcharge proved critical, and he continued afterwards to recover faft every day, and was foon difmiffed perfectly cured. I fay he continued to recover after that difcharge; for it was evident that the beginning of his recovery was many weeks before the breaking of the abfcefs, as the return of appetite and ftrength, and the diminution of many alarming fymptoms fufficiently evinced. During this time nature in all probability was happily employed in making a feparation of the difeafed parts from the found, and in ripening and preparing them for the expulfion which was foon after to take place.

I believe the exercife, which he was obliged to ufe, was upon the whole of benefit to him, and contributed towards his recovery. The blood evidently proceeded latterly from fmall veffels,

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veffels, which encouraged me to permit him to continue his riding; but had any large veffel been ruptured, that ftep could not have been taken with fafety until the parts had been healed.

Exercife in fuch cafes as thefe is much recommended by fome phyficians of eminence, and its utility or even fafety is doubted of by others. The late Dr. Gregory was an advocate for it, and Dr. Cullen (in his public Lectures) ftill recommends a cautious trial of it in many cafes of Hæmoptyfis. Such great authorities gave me encouragement, and more particularly as I had feen gentle exercife of fervice in fpittings of blood. Indeed the lower kind of people, when under this calamity, are often obliged to ufe exercife both walking and riding, or even to follow fome kind of bodily labor.

But exercife in thofe diforders fhould always be tried with great caution, and, where it can be afforded, an eafy carriage on a fmooth road fhould be firlt made ufe of, and then gentle riding on a quiet eafy horfe. If a little more blood is at firlt fpit up after exercife, that is not to be regarded; becaufe blood, lodged
$34^{2} \quad$ CASES AND
in the air-veffels, is by this means brought up; which rather relieves than injures. If the patient after a fhort trial of exercife feels refrefhed and ftronger, with a little increafe of appetite and a diminution of the hectic fever, things are in a favorable way with him, and he is fufficiently encouraged to proceed. This part of practice is attended with much nicety and difficulty, and requires great caution and difcernment to purfue it with fuccefs; for as it may, if properly applied, do much good, fo, if improperly applied, it may do much mifchief.*.

With regard to the reft of the treatment, we need only juft add, that the tinctura thebaica, as an antifpafmodic and a fedative, diminifhed the convulfive contractions of the lungs, leffened the cough, took off irritation, and appeared to be very beneficial. He followed directions concerning regimen, \&c. with punc $\boldsymbol{c}_{7}$ tuality, and found great benefit in fo doing.

[^36]CASE

## C A S E XXXIII.

Thbe Convulfive Affbma in a cbild feven weeks old, complicated with a Spafmodic Affection of the throat, treated fuccesfully with Tinctura Thebaica, Laxatives, Cool Regimen, $\mathcal{J}^{\circ}$. During the cure of the above complaints, be bad the Meafles and Small-pox.

ROBERT WATSON, feven weeks old, admitted October 13th, 1777, to be an out-patient at the York County-Hofpital, has been ill five weeks of his prefent complaints, which have within thefe laft few days been much worfe. He began with feverifhnefs, cough, and ftoppage in his breaft, fucceeded by a difficulty of fwallowing and a crowing noife in infpiration, and he has been growing thinner every day. The child now gets his breath at times with the utmoft difficulty and anxiety, and crows conftantly and violently in infpiration both day and night. His cough is troublefome, and he is not able to fuck but with the greateft uneafinefs. He has two ftools every day. His pulfe cannot be felt. The cafe appearing defperate, the following remedies were ordered in confultation.

Applicetur emplafirum veficatorium nuche.
R. TinEture fuliginis,

Elixiris paregorici, fingulorum, dracbmam unam.

## Mifce. Dofis gutta fex bis die.

The 16 th. His cough is bad. The crowing is fhrill, and continues nearly as before, but not quite fo conftant and fevere. Sometimes the crowing is accompanied with a hoarfe found. Sometimes the child fucks eafily, and fometimes very ill, according as he is more or lefs ftuffed in his breaft. Body regular. The blifter anfwered well but was very painful, and his drops occafion ficknefs and vomiting.
R. Mucilaginis cydoniorum dracbmam dimidiam; Syrupi mororum dracbmas duas, Tìncture Thbebaica guttas quinque.
Mifce. Dofis cocblearium unum parvum bis die.
The zoth. He is at times better and worfe: Coughs and crows much at prefent, and the found which is made in infpiration is fometimes fhrill and fometimes hoarfe. He eats fpoon-meat with more eafe than he fucks, as he has done all along when his difficulty of
breathing was fevere. The anodyne medicine agrees well with him, he fleeps better, but is coftive.
Continuetur mifura antifpafinodica, EJ fumatur. snifure oleofe laxantis $\dagger$ cocbleariums parvum unum vel duo pro re nata.

The 23 d . The child is very weak and thin. His pulfe cannot be felt. His crowing is much lefs; it fometimes ftops for half a day, and then returns again. He had an eafy ftool with the laxative.

November 27 th. He eats and fucks better; crows lefs; fleeps moderately; breathes eafier; and his cough is loofer. He takes a tea-fpoonful and a half of the antifpafmodic mixture twice a day, and one tea-fpoonful of the laxative. mixture every day.

On the 3 d of November he had another fevere and dangerous relapfe of the fame complaint. The fame medicines were continued, increafing the dofe of the anodyne occafionally; and the fymptoms were much relieved on the 26 th. On the 4th of December his diforder returned again, but with lefs violence; and in a few

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days,
f Vide p. 245 .
days he began to recover.-On the ift of January the anodyne was omitted for three nights, and he flept much worfe, was weaker, coughed more, and breathed with greater difficulty.Afterwards he continued to recover faft, until on the 26th the meafles began to appear. The fame remedies were given with fuccefs.-On the 12 th of February, the dofe of the anodyne was increafed to three tea-fpoonfuls at night and two in the morning. His mother obferved that during the cure the operation of the anodyne was not fo fuccefsful when he was very feverifh, as when he was lefs fo. The laxative anfwered well. -On the 25 th of May, the child had the fmall-pox of a diftinet kind, and, by the affiftance of the fame remedies, he got well through them. He had afterwards twa gentle dofes of phyfic*, and was difmiffed free from complaint on the 18 th of June.

This child was only feven weeks old when I firt faw him, and he had been ill five weeks. The fymptoms of his difeafe were extremely fevere, and the cafe appeared defperate. Here was a manifeft complication of an Afthma, with a fpafmodic affection of the larynx. That

* Hauftus Senæ pro infantibus.
the lungs were difeafed was evident from the cough, fudden difficulties of breathing, ftuffing in the breaft and rifing of phlegm into the throat. During the cure likewife, his breathing was fometimes very difficult and laborious, when he made no crowing noife in infpiration, nor had any figns of fpafm in the larynx. And that the larynx was affected is equally evident from the changes which took place in the found of his voice, being fometimes hoarfe and fometimes fhrill, attended with a crowing noife in infpiration. The fever and great anxiety, under which he labored, were fymptoms common to both complaints.

How far previous inflammation of the lungs and larynx had laid the foundation for the above complicated difeafe, is difficult to determine. But it is highly probable that an obftruction had taken place in the air-veffels, in confequence of an inflammation of thofe parts, which had been at firft overlooked and neglected. The efforts of infants in many cafes are very weak and languid, and their greateft figns of diftrefs are often rather negative than pofitive. Whenever an infant is awake, and yet inattentive to objects around it; when it refufes the breaft ; when its eyes move heavily; when its

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$348 \quad$ C A SES AND
countenance is languid; and it neither cries nor ftirs its limbs in its ufual manner, the cafe, be it what it may, is attended with danger. But if, to the above feverifh fymptoms, we add a troublefome cough and quick difficuit refpiration, the lungs, as diffections have fully convinced me, are inflamed.

Now the above fymptoms, though alarming in themfelves, may not demonftrate the feat and nature of the difeafe, nor the neceffity of early and repeated bleedings to friends and attendants; and confequently bleeding, which is the beft remedy, may be neglected, and the poor infant left to ftruggle on by the mere efforts of nature, through the great miferies of a highly inflammatory difeafe.

With regard to the feat of the complaint we may further add, that it is no uncommon thing, for inflammation to affect both the lungs and larynx at the fame time. I once was prefent with a Phyfician at the examination of the body of a woman, who died of an atthma and confumption three weeks after delivery, whofe breathing, both before and after the birth of the child, was extremely difficult, attended with a violent wheezing; and we found not

## OBSERVATIONS.

only feveral large ulcers in the lungs, but a very confiderable ulcer at the bottom of the larynx. Other diffections, likewife, of a fimilar nature are related by authors.

Having given this conjecture concerning the firlt rife of the obftruction in the lungs and larynx, I mult now obferve that that obftruction was evidently accompanied with a fafmodic affection of thofe parts, which conftituted the difeafe in that ftate in which I firft faw it. Bleeding then was out of the queftion; for the child was very pale, weak, and emaciated, and his pulfe could not be felt. Defperate, however, as the cafe appeared, it was highly probable that nothing but antifpafmodics could afford relief. Accordingly a blifter and an antifpafmodic mixture was ordered; but as the laft occafioned ficknefs, it was altered for another of a fimilar nature, ftill preferving the fame indication of cure. As the child was afterwards coftive, a laxative pectoral fyrup was given, in which there was caftor oil.

By thofe two medicines, and thofe two alone, - increafed in their dofes as circumftances required, and aided by frefh air and a proper regimen, this poor infant ftruggled through, nof only
only its firft very alarming complaint, but likewife the mealles and fmall-pox. Thofe remedies fuited each of the above-mentioned diforders, and, by the continuance of them, the fpafms of the lungs and larynx were gradually leffened and removed, and the violent irritation, neceffarily attendant on the meafles and fmallpox, was happily diminifhed.

The cool regimen during thofe complaints was enjoined and ftrictly followed. But I am forry to fay froin experience, that thoufands of children, even in the prefent improved ftate of phyfic, are loft both in the meafles and fmallpox, from the ignorance of parents and inattention of fervants. The cool regimen is often ordered where it is never applied, and the unhappy patient falls a facrifice to the neglect of it. To have the cool regimen applied fuccefsfully in thofe cafes, the children fhould be very clofely attended to both day and night. By a proper management of fires, doors, and windows, the room fhould always be kept cool and the air pure. In the night, the ftate of the bed fhould be carefully obferved; for if it be too foft, and there be too much covering, the confequences may be dangerous. Indeed if a child be too hot at nights during the eruptive
fever

## OBSERVATIONS

fever of the fmall-pox, that fingle error may bring out a very copious eruption of the confluent kind, and afterwards defeat every falutary end of the cool regimen. Whenever the practitioner does not, during the eruptive fever, attend both morning and evening to fee the proper execution of his own directions, parents and friends are feldom able to find out a proper medium between the two extremes of heat and cold, both of which are found fo very pernicious. A ftrong plethoric child, in which the fever runs high, is much fooner heated to excefs than a pale thin weakly child. A greater degree of cold therefore is advifeable in the firft cafe than in the laft; and this is one principal reafon why the moft healthful children often die in the fmall-pox and meafles, when the weak and delicate, in whom it is more difficult to excite an inflammatory fever, recover well,

In fhort, children, particularly at the beginning of thofe difeafes, fhould have a mattrefs above the feather-bed, and only that quantity of bedclothes fhould be made ufe of, which is fuitable to the feafon, be it a fingle fheet, a blanket, two blankets, \&c. juft fufficient to maintain a moderate uniform degree ot warmth
in the body and limbs. If indeed, during this regimen, the feet of the child fhould feel a little cooler than the other parts, I think it of no confequence, having never obferved any ill to arife from it, although I have in many cafes permitted it to pafs without alteration. On the contrary, an anxious attempt to keep the feet warm, has frequently done hurt, by over-heating the face and the reft of the body.

With regard to the internal obftructions which took place in the lungs and larynx of this child, it was the bufinefs of Nature to remove them; and her operations, cautioully affifted by art, were fuccefsful. Neither of the medicines ordered could have been omitted; but the antifpafmodic mixture, tho' rather aftringent, was of the higheft utility, for when the child was without it a few nights, it was evidently worfe, and this happened feveral times during the cure. The dofe was gradually increafed till he took the whole mixture in a day, confifting of five drops of tinctura thebaica. This child was admitted a patient on the 13 th of October, and he was difmiffed free from complaint on the 18th of June, during which time he had gone thro' fuch a feries of fufferings as few children are expofed to, or when expofect to, have ftrength to furvive.

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I mult at the fame time take notice of the great care and tendernefs of her mother, and her readinefs to follow directions, fuch as avoiding tight bandages, impure air, too greas heat, fpirituous liquors, improper food, \&\%c. without which all our endeavors to relieve himn would have been fruitlefs, and death the inevitable confequence. Let the event of this cafe afford encouragement to thofe parents and practitioners, who are apt to defpond and give up children too haftily; for with proper affiftance they will often recover from the mort violent diforders of the lungs, although it muft in general be admitted that none are more fatal.

This complicated malady did not leave the ahild on a fudden, but was repeatedly better and worfe, till by perfeverance it was gradually and intirely removed. Sometimes the fpafm was more in the lungs and lefs in the throat, and then he feemed very much fuffed in his breaft, but made little or no crowing noife in infpiration. Several times I had given up all hopes of his recovery, and expected daily to hear of his death; and as often I had the fatisfaction of being difappointed in that expectation. It was a very fortunate circumftance that the anodyne
Y y agreed
agreed fo well with him; and we began the ufe of it cautioully, that we might not have any prejudices raifed againft it, in confequence of too fevere an operation at firft.

It is worth remarking, that the child fometimes could eat better than he could fuck, and fometimes would fuck when he would not eat. The reafon of this is obvious; for when the fpafm of the lungs and larynx was mott violent, the child could not fuck, and then the ftuffing in his breaft was always fevere. At thofe times, therefore, fpoon-meat made very light and thin, and given in fmall quantities, became neceffary. But when the child found that his refpiration was freer, and that he was able to fuck (for fucking requires a confiderable exertion to make a fufficient vacuum within the mouth) he always preferred his mother's milk to every other kind of nutriment, and particularly whenever he was afflicted with any feverifh fymptoms.

We fhall conclude this cafe with obferving; that the blifter on his back gave great uneafinefs, a circumftance worthy of attention. The imminent danger in the prefent cafe, and. the obitinacy and duration of the fymptoms
perfectly,
perfectly juftified the practice which was adopted; but as I have many times feen them for feveral days together produce violent pain and anxiety, great caution is requifite, not to apply them too early in the difeafe, nor when fymptoms of irritation run high, which are eafily difcoverable by frequent crying, great anxiety and reftleffnefs.

## C A S E XXXIV.

The Convulfive Aftbma, complicated with a pulmonary confumption, fucceeding an inflammation of the lungs, treated fuccefsfully by Tinctura Thebaica, Cordial Mixtures, Laxatives, Country Air, छ'c. *
CHRISTOPHER NOBLE, aged $4 \mathrm{I}_{2}$
a gardener by trade, a free liver, of an inflammatory habit, admitted a patient at the York County-Hofpital, January 4,1781 , has

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* The following note contains a brief but interefting account of a preceding illnefs which Chriftopher Noble had early io the fring of 1780 .
About twelve months ago this man had an inflammation of his lungs and great difficulty of breathing, with a moft violent painful cough.- When the fever and inflammation of the lungs was abated, a cough, ftuffing in his breaft, and fudden attacks
been feverely afflicted with a diforder in his lungs for feven weeks pait. He has at prefent a violent cough, with a moft obftinate ftuffing in his brealt and difficulty of breathing, which at times are fo fevere that he is fcarce able to fpeak. His fpirits are extremely low and depreffed; his body greatly emaciated. He is very weak and feverifh, fubject to cold and hot fits; his face looks thin and black; his pulfe is fmall and feeble; body regular; appetite bad; fleep much difturbed by his cough and difficulty of breathing; and what he fpits
attacks of difficult breathing remained very obftinate and violent, fo that, when he endeavored to walk a Jittle, he was often obliged to ftop for want of breath, and (to ufe his own expreffion) felt as if he were going to drop down.

He had, during the fame illnefs, frequent returns of violent pain in his ftomach and bowels, and blood often came away in his ftools. If he took any thing that was warm, it always increafed the pain in his belly. Sometimes he was sroubled with a violent pain in his back, and made bloody urine, fuppofed to arife from the gravel. He frequently had too a gnawing pain and trembling at the pit of his ftomach, which came upon him feveral times in a day. Towards the latter end of his diforder, his legs fwelled in an evening and he was reduced to extreme weaknefs.

Thofe complaints were preceded by a dry fcabby itching cruption on both his hands a little above the thumb, which gradually difappeared, as foon as he was attacked with the inflammation of his lungs and althmatical diforder.
up has all the evident marks of purulent matter.

Capiat Tincture Thebaicre guttas quindecim omini noote bora fomni.
R. Emulf. comm. fine faccharro libram unam, Manne optime unciam unam $\mathcal{~ d i m i d i a m . ~}$
Sumat uncias tres vel quatuor ter die.
The 8th. He has had four ftools with the opening emulfion, and his nights are rather eafier.
Capiat TinEtura Thebaica guttas viginti omni noite hora fomni;-mifurce cardiace unciam unanm § dimidiam ter die; - $\$$ emulfonis folutive uncias pres.pro re nata.

The
During the courfe of this illnefs he was bled three times; and his body was kept open with caltor oil, infufions of fena, Epfom falts, \&ec. He had likewife two blifters, mucilaginous decoctions, tinctura thebaica, glifters, emetics, flowers of zinc, aloetic pills, decoetions of the woods, and an iffue in his arm, along with a milk and vegetable diet, pure air and exercife on horfeback; by which means he recovered from a very tedious and dangerous illnefs.

When he began to grow better in his internal complaints, the eruption returned again upon the fame part of his, hands, which was fcabbed, fwelled, and pit when preffed upon. When he was warm in bed too, his $\mathrm{Ikin}^{\text {frequently itched }}$ much and fmall hardifh red tumours (which he called lumps) came out, but difappeared again in the morning. By means of regular exercife, pure air, a decoction of the woods and gentle laxatives, thofe fymptoms gradually left him in a few weeks, and he was afterwards difinited free from complaint.

The rith. He complains that his cough and difficulty of breathing are ftill very fevere, and attended with pain in his breaft. His pulfe is fmall, weak, and quick. Other fymptoms nearly as before. His body is regular, and his nights fomewhat eafier with the anodyne draught.

Repetatur ut antea mijtura cardiaca छร Tindura I'bebaica.

Sumat tincture laxantis* uncias duas, vel tres pro re nata.

The 15 th. His difficulty of breathing ftill continues, with pain in his breaft, which is increafed by his cough.

- Repetantur remedia, Jed confent Singulce dofes Tincture Thebaice ex guttis viginti \&o quinque vel triginta.

The 18th. The cough, expectoration of purulent matter $\dagger$, difficulty of breathing, hectic fever, \&c. are all very bad, with greater bodily weaknefs and wafting of his flefh.

The

> * R. Tincturæ facræ,
> Tincturæ Rhei vino $\neq$, utriufque, uncias tres.
$\mp \mathrm{I}$ fhewed the matter fpit up to two or three Gentlemen of the Faculty, of great experience and obfervation, who were clearly of the fame opinion.

- The 22 d . The fymptoms continue to increafe.

The 29 th. The fymptoms continue to increafe; and he is now fo extremely weak, that he is obliged almoft conftantly to keep his bed, or elfe to lie down on a fquab.

February ift. All the fymptoms in his breaft are as bad as ever. He complains too at prefent of a pain in his legs and thighs, and a fitch in his fide.

Repetantur renedia; © applicetur emplaftrums veficatorium lateri dolenti.

The 5th. The fymptoms continue very fevere.

The $13^{\text {th. }}$ He fays that a little fmall rum and milk relieves him. His appetite is rather improved; the leeps better, and goes out intoshe air every day. Body regular.

The rgth. He has a violent weaknefs in his hands, 2 pain in his wrifts, and a ftitch in his Gide.

The

The 26th. What he fpits is ftill in large quantity, and has evidently the appearance of pus. He walks frequently in the open air, and thinks himfelf rather ftronger, though he complains of a pain in his ankles and knees, and frequently falls down. Appetite better; body regular; but he is much troubled with wind in his ftomach and bowels.

March oft. He is very weak, and greatly diftreffed with pains in his limbs.

The 8th. He has fevere pains in his ankles, and in feveral other parts.

The 12 th. He fpits lefs. Cough and difficulty of breathing fomewhat abated. He is a little ftronger, but ftill totters when he walks.

The 22 d . He fpits lefs purulent matter, and is materially better in his difficulty of breathing and other complaints of his breaft. He has fevere pains in his ankles.

April 2 d . He has fevere pains in his thighs, knees, and ankles, which the coldnefs of the weather increafes. He has been in the country five days; looks better; and what he fpits is
in lefs quantity, and has only the appearance of common phlegm, white, tranfparent, and vifcid.

The gth. His fpitting continues, and he gets up fome phlegm, but little or no purulent inatter. Body regular.-Let him omit gradually the ufe of the Tinctura Thebaica.

The 12th. He has ftill pains in his joints.
The 23 d . His health is much better, appe= tite improved, pulfe ftronger, and he looks confiderably fuller in the face. He has beent in the country a week, and will return again tomorrow. He has a pain in his ankles, fingers; and thumbs.

May 7. The weather is cold and unfeafonable. Thermometer 42 . He has got fome frefh cold. His fever, pain in his breaft, and difficulty of breathing are much increafed, and his cough is very troublefome both day and night.

Mittatur Janguis ad uncias oclo.
Repetatur bora fomni bauffus anodynus, \& fiumatur mane bouffus fence purgans.

The roth. He is not able to attend at the Hofpital to-day. He has had, fince the laft report, a violent pain in his breaft, ftomach, and bowels, which the bleeding relieved. The opening draught gave him feveral ftools,

Mittatur fanguis ad uncias oEto.
Repetatur bauftus anodynus, $छ$ fumatur mane bauftus fence purgans.

The 14th. He finds himfelf materially better, and is able to attend at the Hofpital this morning, which he has not done for fix days paft, being obliged to keep his bed. His cough and difficulty of breathing are abated, and expectoration eafier. The phyfic anfwered well. Pulfe moderate.

Continuetur baufus anodynus.
R. Oxymellis foillitici uncias duas, Aceti fcillitici uncias tres. Mifce. Sumat ex quovis vebiculo dracbmas tres ter die.

The 2 ift and 24 th. He vomited his fquill medicine once. His cough and difficulty of breathing are better. He has ftill a pain in his right finger and thumb.

## O B S ERVATIONS.

The 3 rif. He has at prefent a pain in his ankles and feet. He walked three miles the other day, but was much fatigued with it. His difficulty of breathing is better, and he has little or no cough or fpitting.

June inth. He finds himfelf much recovered. His pulfe is good; he is ftronger, and looks fuller in the face.-As he grew fuller and more plethoric about the 7 th of May before the laft relapfe, I defired him to lower his diet, and particularly to be very moderate in the ufe of fpirituous liquors.

The 18th. He has fome pain and fwelling in his ankles, and is feverifh.

Continuentur remedia, $\delta$ repetatur cras mane bauftus sence purgans.

The 28th. The phyfic anfwered well; the pain and fwelling of his legs are much better; and he is not feverifh. The country agrees with him.

July 2d. He looks well, eats well, and fleeps well. His cough and fpitting are intirely removed, except that in a morning he gets up a frmall quantity of clear phlegm. Pulfe natural.

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Body regular. He weeded in his garden yefterday for four hours, and felt no inconvenience from it, but a little pain and ftiffnefs in his hams and ankles.-In a few days after he was difmiffed sured.

The care of Chriftopher Noble is one, which prefents to us a ftriking example of a diforder of the lungs, that carries thoufands every day to the grave-an afthma complicated with a pulmonary confumption in which there was an ulcer of the lungs *. His fudden fits of difficult breathing at times were fo fevere, that he was fcarce able to fpeak; and he had an obftinate cough, with a continual ftuffing in his breaft. His fpirits were low and funk; his fleth very greatly wafted; his face thin and black; pulfe quick and weak; appetite bad; along with reftlefs nights, a ftrong hectic fever, and an expectoration of purulent matter. The matter fpit up was in very great quantity, and of a very bad color,-fome parts of it opaque, yellow, and confiderably lefs tenacious than the reft, - having all the evident external marks of purulency. This fact is ftill further confirmed, when we confider that his diforder was
preceded

> *Vide Morgagni de Capf. et Sed. Morb.
preceded by a violent inflammation of his lungs, in which early bleedings had been neglected. An abfcefs and ulcer of the difeafed part was therefore a natural confequence of the inflammation; for it is well known that in this diforder the neglect of bleeding for two or three days, is often immediately fatal by gangrene or an effufion of red blood into the cellular membrane of the lungs, or elfe ends in an abfcefs and pulmonary confumption, complicated fometimes with an afthma, as happened in the cafe before us.

When I faw him, the moft proper time for adminiftering relief was evidently paft, and therefore I will be honeft enough to confefs, that I had little or no hopes of doing any thing more for him than palliating particular fymptoms, and rendering his departure out of life fomewhat more eafy and compofed. For this purpofe I had recourfe to the Tinctura Thebaica, as being, if it agreed with his conftitution, the moft likely remedy to give him eafe; and more particularly, as I had feen fome wery defperate cafes recoverduring the ufe of it *. Fortunately

[^37]Fortunately the medicine (which is not always the cafe) agreed well with him, quieted his cough, procured him better nights, leffened the fpafms of his lungs, and gave him immediate eafe. At the fame time, as he was extremely low, weak, and emaciated, he had a cordial mixture of which he was occafionally to take a few fpoonfuls when fick or faint: To obviate coftiveneis which the tinctura thebaica might induce, he always had by him a gentle laxative. I recommended to him likewife a pure air, a temperate room, a milk and vegetable diet, and permitted him now and then to take a fmall quantity of frefh animal food when his ftomach could bear it; for this appeared to me to be one of thofe cafes of afthma and confumption which required a little better fupport, and in which a very low diet would have been hurtful. I was well acquainted too with his conftitution, and recollected the extraordinary relief obtained in a preceding illnefs by a critical eruption on his hands *, and therefore was not altogether without expectation of fome other falutary effort of nature to relieve him. He had likewife taken at times a little weak rum and milk, and as it agreed with him and he thought it of ferr to him, I did not forbid it.

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The diforder in the mean-time made rapid advances, and whenever his wife attended at the Hofpital, or I faw him at his own houfe, he was worfe and worfe, weaker and more emaciated, till at laft he appeared to be in the very laft ftage of a deep confumption, and, not able to fupport his own weight, he was continually laid in an horizontal pofture. Notwithftanding this deplorable ftate, he found eafe and temporary relief from his medicines, and was very defirous of continuing them; and as I knew of no better, I readily complied with his requeft.

On the firt of February, at a moment when nothing but death was daily expected, he began to complain much of pains in his legs and thighs, and a fevere ftitch in his fide. His wife afterwards told me, that "he was better in his breaft and in himfelf", meaning by the laft phrafe, that he had fome return of appetite, and that the hectic fever was lefs. Thofe pains continued, and moved from place to place, and nothing was done, either by fomentation or poultice, to divert the courfe of nature, or to difturb her falutary operations. The fame mild refforative diet, cordial mixture, and anodyne draught (the dofe of the laft being gradually increafed)
increafed) were continued, hoping ftill to fupport the patient at this critical juncture; for nothing could be more favorable than an attack upon the joints, and a tranflation of the difeafe to the extreme parts.

From this time he began to recover, and alf the fymptoms of his afthma and confumption gradually diminifhed. His ftrength returned, he could eat a little food with an appetite, his countenance improved, his blood-veffels filled and he gained flefh.-During his recovery he often walked in the open air, from which he found great relief. He afterwards went into the country by my direction, and now and then attended at the Hofpital. When he did not attend, his wife came for his medicines, which were forwarded to him. About this time I advifed him to leave off by degrees the rinctura thebaica and cordial mixture, as there was then no occafion for the conftant ufe of them.

Thus he continued to recover till the 9 th of May; when, contrary to my exprefs directions, he had lived too freely, and either from plethora, from cold, or from both, he complained again of a fever, cough, and difficulty of breathings

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breathing, which fymptoms were foon followed by a violent pain in his breaft, and in the region of his ftomach, along with colic pains in his bowels. In this manner the inflammation of his lungs returned feverely upon him; but it did not come unexpectedly; for I had forewarned him of it, and defired that, if he had any frefh attack of inflammation, I might be fent for immediately. From obfervation in other cafes, I had remarked, that it was very unfafe to fill the blood-veffels too quickly after an afthma and confumption, or any other violent complaint of the lungs, as nothing favors relapfes more than plethora, and efpecially when there is a ftrong tendency in the conftitution to local inflammation. I have feen many cafes of pulmonary complaints of an inflammatory nature, into which patients have relapfed, as foon as they began to recover their former good looks and to fhew figns of plethora.

To remove this frefh attack of inflammation, Chriftopher Noble was immediately bled, and the bleeding was afterwards repeated. His body at the fame time was kept open by gentle laxatives; for as he was fubject to coftivenefs, colic pains, and bloody ftools, the utmoft caution was requifite to the fate of his bowels.

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By thofe remedies thus timely applied, along with a proper regimen, the violence of the internal inflammation was foon removed. Nature freed from her oppreffive load, made another effort to relieve him; the pains and fwellings of his joints returned; and, with a more moderate diet ${ }^{*}$ and the treatment mentioned in the cafe, he was foon after reftored to perfect health.

From this man's recovery we are taught never to defpair in afthmatical and confumptive diforders, but to believe that while there is life there is hope; and tho' medicine alone cannot effect a cure, yet nature, affifted by proper means, may do great things for us, even in cafes apparently defperate.

We learn too that great caution is requifite in the removal of pains in the joints, which are often critical and of the greateft fervice to the conftitution, freeing it from fevere internal complaints. Daily experience convinces us of the

* When he was very low and weak, I recommended a reftorative diet ; but when he grew better, he carried my advice to excefs, began to be plethoric, and to look red in the face and full of blood. At this period of his diforder, therefore, I was obliged to alter my firt directions, and to defire him to lower his diet.


## OBSERVATIONS.

the truth of this affertion, and too often we fee phrenfies, inflammations of the lungs, violent pains and palpitations of the heart, and excruciating torments in the bowels, brought on from the hafty repulfion of pain and inflammation in the joints and external parts *. In thefe cafes great attention fhould be had to the ftrength and condition of the patient's conftitution, and to the previous diforders to which he may have been fubject; and, if any fever or internal chronical complaint be eafier fince the commencement of the external pains $\dagger$, time

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* We are likewife taught by his former illnefs, (vide note page 355 at the beginning of this cafe) how very cautious we fhould be in ufing externally any repellent applications in cutaneous eruptions, at leaft till we are perfectly fure of their pature and tendency, and, by an efficacious courfe of medicine, have got the conflitution into a proper itate. I have in feveral inltances feen the moft dreadful confequences arife from the imprudent repulfion of cutaneous eruptions, fuch as fevers, palfies, apoplexies, inflammations of the lungs, and dyfenteries with fevere pain and bloody ftools.

[^38]fhould be allowed, and all repelling applications ftudiounly avoided, as being of a moft dangerous tendency.

## C A S E XXXV.

The Convulive Aftbma, complicated with a spitting of blood, cured by Mulk, Blood-letting, $\xi^{\circ}$ c.

MR. - aged 30, February 6, 1784, fubject to an afthma, has a bad cough, hoarfenefs, difficulty of breathing, and pain in his breaft. He fpits up much phlegm, particularly at nights, and it is mixt with blood. He has been ill about a month of his prefent complaint, which was preceded by a violent pain in his head. His difficulty of breathing, for about ten days paft, has been more fevere than ufual, efpecially in the afternoon and the beginning of the night, fo that he was then fcarce able to fpeak. The quantity of blood fpit up is fometimes confiderable, attended with a troublefome cough. His body fwells with wind, and he is coftive. His pulfe is quick, weak, and irregular, and he is feverifh at times. A milk-diet was advifed along with the following remedies.

Mittatur

Mittatur Janguis ad uncias octo.
Miffure Jpermatis ceti cocblearia duo vel tria ter die; - bauffus anodynus bora fomni; -छ mijfura falis catbartici amari cras mane fumatur.

The gth. His blood is fizy. The phyfic operated gently. The fpitting of blood is much abated. Other fymptoms continue as before, and his afthmatic fits are fevere.

Omiltatur mifura fpermatis ceti छ baufus asodynus.
R. Mofcbi puri pulverati grana octo, Mucilaginis gummi Arabici femi-dracbmam, Aque fontane dracbmas decem,
Aque cinnamomi fpirituofe fefqui-dracbmamo Sacchari albi grana quindecim.
Mijce fecundum artem, $\mathcal{E}$ fiat bauflus ter die fumendus.

The ith. He coughed much laft night, and was fick with his mufk-draught. Body bound; appetite moderate; pulfe not weak. He has little or no fever. Other fymptoms as before.

Repetatur baufus antifpafmodicus, छכ fumatur pro re nata electarii folutivi drachma una bora fomni.

The 16 th. His cough is better, expectoration eafier and without any mixture of blood, and his afthmatic fits much abated. He is not fick with his medicine. His body is regular with the electuary, a tea-fpoonful of which taken every night gives him an eafy ftool.

Repetatur bauftus antijpafmodicus, fed conftent fingule dofes ex mojchi puri granis duodecim.

The 20th. A few days ago he was bled again for a pain in his brealt, and had a large iffue fet in the back of his neck. He afterwards continued to take the remedies for three weeks longer, during which time he had feveral returns of his Afthma, but they were graduaily lefs and lefs, and on the 9 th of March he was perfectly free from complaint.

There is no doubt but that mufk, when it is obtained pure and unadulterated, and the patient is able to take it, is an ufeful antifpafmodic in the convulfive Afthma. But as it is fold at a very high price, it is often much adulterated, and is with difficulty procured gemuine. The tafte and fmell of it likewife is very offenfive to many afthmatic patients, in whom

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whom the nervous fyftem is irritable. From chefe caufes we are frequently difappointed in our expectations concerning its efficacy. In order to render it the moft ufeful, it fhould be given in a dofe of ten, fifteen, or twenty grains. In the cafe before us we could not increafe the quantity of the mufk materially, as the patient was fick with the dofe that was at firft prefcribed.

## C A S E XXXVI.

The Convulfive Aftbma, cured by Mufk, Laxatives, छ่c.

MRS. - aged 31, March 10, 1784, has been at times afflicted with an Afthma for near three years. She has had a bad cold for a month paft, and her Afthma for feveral nights has been very fevere. The fit comes on about twelve or one o'clock at night, and continues violent for two or three hours, attended with wheezing and difficulty in lying down. When the fit abates fhe gets up fome tough, thick, yellow phlegm, and then her breathing becomes free. She looks pale and thin. Body bound, Pulfe low. Great thirft, parti-
particularly at nights. She has had no menfes for feven weeks paft, but was regular before. She is much troubled with wind and fwelling of her ftomach and bowels. Her complaint often comes on before rain, and is worfe in cold weather than warm.

Applicetur emplaftrum veficatorium nucha.
Capiat Fulepi Mofchi uncias duas ter die; छכ pro re nata bora fomni pilulas aloeticas duas vel tres, cum olei olivarum uncia dimidia.

The 17th. She has one or two ftools a day. Her cough and breathing are fomewhat better. Let her have an iffue fet in her thigh.

Continuentur medicamenta, Sed augeatur gradation dofis julepi molchi.

The 22d. She takes three ounces and a half of her mufk julep three times a day, and it makes her very fick in a morning fafting. She has little or no return of her difficulty of breathing at nights, and fhe can now bear to walk out and ufe exercife better than fhe did; but quick walking is ftill too much for her. She expectorates freely with her cough, and the phlegm is clearer and thinner.

Sumat hauftum emeticum vefpere.

April 6. The vomit relieved her. Her body is regular. Menfes prefent. Medicines agree, and the finds herfelf much better. Her cough and rpitting is almoft gone; her breathing is eafy, and fhe feeps well at nights. She recovers ftrength, and her looks are much improved.

Haufus ex decooti corticis Perviviani unciis dua; bus, © aque cinnamomi spirituofe dracbmis duabus ter die fumatur.

## The iith. She has no complaint.

## C A S E XXXVII.

T'be Convulfive Aftbme, complicated with Hyfteric Fits and ObfruEtion of the menfes, cured by Caftor, Tinctura Thebaica, Blood-letting, $\mathcal{V}^{c}$.
$A^{N N W O O D}$, a fervant, aged 25 , admitted at the York County-Hofpital, February 12, 1781, had the mealles laft fummer, and has never recovered her health fince. She complains of a cough and difficulty of breathing, 3 B
but
but the laft is far the worft and moft troublefome fymptom. It comes on by fits two or three times a day, and then fhe is unable to ftir. She breathes with tolerable eafe at prefent, but her afthma was very bad yefterday. Her complexion is florid, habit rather full, and fhe is fubject to hyfteric fits. At times too fhe has an univerfal puffy fwelling of her flefh, particularly of her hands and feet towards night. Her fomach is often painful and much diftended with wind. Her body is bound, her nights difturbed, and fhe has only had her menfes twice fince fhe had the meafles.

## R. Caftorei optimi pulveris grana decem,

 Conferve cynofbati fcrupulos duos. Syrupo balfamico fiat bolus ter die fumendus.Decooti- mucilaginof cocblearia tres ter die,bauftus anodynus hora fomni, - $\underbrace{3}$ mifture purgantis uncia qyatuox cras mane fumantur.

The 15 th. She had two ftools with her phyfic; was fiek with her bolus; and has a pain at her ftomach to-day. Since the latt report, fhe has had a difficulty of breathing every night from twelve $g^{\prime}$ clock till two, at which time it began to abate, and the was quite free from it at four.

Her cough is better, and fhe gets up a little phlegm, particularly in a morning. She had an hyfteric fit yefterday, in which fhe breathed very fhort and with great difficulty.

Fiat venejectio ad uncias oito.
Repetantur miftura mucilaginofa, baufus purgans, छ bauftus anodynus ut antea,-E' bolus e caftoreo ex pulveris caforei granis feptem pro dof.

The 19th. Her cough and difficulty of breathing are fomewhat better; fhe is not fick with her medicines; her phyfic anfwered, and the bleeding relieved her. She has had no more hyfteric fits, and has much better nights, but is troubled with a bad head-ach.

Continuentur miffura छठ bauftus anodynus,-૯छ repetatur bolus, fed conftent fingule dofes ex puiveris caftorei granis decem.

The 22d. Her difficulty of breathing is much better, and fhe feeps well in the night. She has now and then a flight fit of het afthma in the day-time. Her head-ach continues, and fhe is fick with the bolus, but has no return of her hytteric fits. Her body is regular, and the fivellings of her hands and feet, \&ce are much diminifhed.

Capiat decooti Corticis Peruviani uncias daas ter die.-Omittantur alia remedia.

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The

The 26 th. She is much troubled with headach and ficknefs; but has no ftuffing at her breaft nor difficulty of breathing; and her medicines agree well with her:

March ift. Her head ach and ficknefs are better.

The 12th. No complaint. Let her be difmiffed.

The fymptoms, which this patient labored under in her complicated fate of an afthma, hyiteric fits, obftruction of the menfes, and ftomach complaints, with puffy fwellings at times in moft parts of her body, conftitute a difeafe, the appearance of which is not unfrequent among young women of relaxed irritable habits. The meafles in this cafe had, from the neglect of bleeding, left the lungs very much obftructed, which had probably laid the foundation of her diforder.

It is obfervable in the cafe of Ann Wood, that fhe had a cough, but that the difficulty of breathing was far the moft troublefome and diftreffing fymptom, which is a very common occurrence in this complaint. The fits of her afthma recurred

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curred feveral times in twenty-four hours, and, though fhort, were very fevere. I gave this woman two antifpafmodic remedies, the pow: der of Caftor and Tinctura Thebaica, which feemed to have a good effect, not only in taking off the complaint of the lungs, but alfo in removing the pain of her ftomach and hyfterical fymptoms. The univerfal fwellings, which were cedematous, arofe from the obftructed refpiration, and irregularity of the menfes; but indeed either caufe alone is often fufficient to induce it. As foon as fhe began to recover, that fymptom difappeared along with the reft. She grew at laft very tired of the caftor bolus; and as fhe had given it a fair trial and it feemed to have had a good effect, I ordered a decoction of bark to ftrengthen her conftitu* tion and compleat the cure. Caftor, though it was of fervice to this patient, is not a favorite medicine of mine in the afthma; for it has often difappointed me, and patients are apt to naufeate the tafte and fmell of it fo much, that they are with difficuley perfuaded to continue it for a fufficient length of time. Befides, on account of the great price it bears, it is equally as liable as mufk to undergo every poffible degree of adultetation.

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## C A S E XXXVIII.

The Convulfive Aftbma, complicated with the Gout, cured by Camphor Julep, Laxatives, \&ce.

MICHAEL BLADES, aged 52, admitted a patient at the York CountyHofpital, January 13, 1783, has a very bad cough, which is preceded by a fevere fit of difficult breathing, particularly when he firf wakes in a morning. He has been a hard drinker. His complexion is pale and dark. He had the gout in his hands and feet about a week ago, but as that left him, his cough and other pulmonary complaints grew worfe. He has been fubject to the gout for many years, which generally attacks his great toes and writs of his hands, producing pain, fwelling, and rednefs. Pulfe moderate, body regular, appetite but indifferent. He has frequently rubbed his joints, when in the gout, with a mixture of feveral oils, This laft time that the gout was in his hands and feet, he rubbed the parts affected with thofe oils before his lungs became difeafed.

- Loboch Sanantis cocblearium unum Sape in diem, $\rightarrow$ thei pulveris छ magnefice albse, utriufque, firupulus znus pro re nata, - E Fulepi e Camphora uncia ußa $\mathcal{F}$ dimidia bis die capiatur.

The

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The 16 th. His difficulty of breathing is fomewhat eafier; cough lefs violent; and he fpits up more phlegm. The powder anfwered very well in opening his body, and he was not fick with his Camphor Julep. He has had no return of the gouty pains in his joints.
 e Camphora ad uncias duas bis die.

The 19th. He continues to recover.
Augeatur dofis Fulepi e Camphora ad uncias tres vel quatuor.

February 3 d: He is free from complaint. He has latterly taken four ounces of the camphor julep twice a day, and found it had a betzer effect in a larger dofe.

This is a cafe which one frequently meets with in practice,-the gout leaving the extremities, falling upon the lungs, and producing fpafms in the air-veffels with pulmonary obftructions. Being a hard drinker, he was confequently expofed to one powerful caufe of the gout, efpecially in fuch a conftitution as his, which has feveral ftriking marks of the gouty. temperament. He is of a warm paffionate temper,
temper, with a coarfe-grained $f k$ in and dark complexion. He had by him a favorite pre= fcription of five different oils; with which he was accuftomed to rub his hands when they. were fwelled and inflamed-a practice capable of inducing the very worft effects. During this Laft attack, when the gout was in his feet, he had recourfe to his oils, which drove it immediately to his lungs, and produced the above-mentioned dangerous fymptoms. Being too weak to bear bleeding, I prefcribed for him the Camphor Julep and an occafional laxative. As the gout had left his extremities, and he was fubject to wiolent fpafms and colic pains in his ftomach and bowels, it became very neceffary to keep his body open with a view to prevent any attack of the gout upon thofe parts. The Camphor Julep, particularly when given in a larger dofe, had in this cafe a better effect than I ever remiember to have obferved before. It is a very naufous thedicine, and few patients can be perfuaded to take it in proper quantity for a fufficient length of time. For this reafon many prefcribe camphor in the form of pills in preference to any other form; being cautious only to make them of a nature readily foluble in the tomach, that they may not pais undiffolved through the alimentary catal. Given in too large á dofe,

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dofe, it is well known that camphor is poffeffed of deleterious powers, which have been productive of dangerous confequences.

## C A S E XXXIX.

T'be Convulfive Aftbma, cured by Ether, E'c.

MRS. - , aged 53, December 24, 1777, has had a violent pain in her ftomach and bowels, which are often much diftended with wind. Her conftitution is weak, pulfe low, and her flefh confiderably wafted. Thofe complaints were foon relieved by gentle laxatives, tinctura thebaica, and a decoction of bark. Afterwards fhe was gradually feized with a cough and fitting, along with a ftitch in her fide and fudden attacks of fhortnefs of breath, which laft fymptom continued for an hour or longer, and was accompanied with the fenfation of a great weight laid upon her breaft. For the removal of thofe complaints, fhe took gentle laxatives, tinctura thebaica, and camphor julep. Thefe remedies not relieving her afthmatic fits, they were changed on the 24 th of January for the Vitriolic Ether, eighty or ninety drops of which were taken in a little water three times a day.

February

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February 4th. Her difficulty of breathing is much relieved; body regular; cough ftill troublefome, but rather lefs fo than it was; expectoration eafier.

The 7 th. Her cough is better as well as all the other fymptoms.

The 15 th. Her difficulty of breathing is entirely removed, and fhe has little or no cough remaining.

Ether is one of thofe medicines that fometimes gives fudden and unexpected relief in night and recent cafes of the afthma, but often difagrees with patients, and difappoints us 'in long and dangerous cafes, for which reafon it is not much to be depended upon.

## C A S E XL.

T'be Convulfive Aftbma, cured by Afafetida, छ'c.
MR. - , aged 23 , January 5,1782 , has an Afthma attended with a troublefome cough, and a copious expectoration of thick vifcid phlegm. She is thin and pale; her body is either loofe or bound, but feldom regular ;

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gular ; and fhe is fubject to fevere attacks of the colic which bring on fainting fits. Her pulfe is weak and fmall; her legs fwell towards evening; her breathing during the afthmatic fit (which comes on fuddenly, but at no ftated times) is very difficult, and continues fo for feveral hours.

Capiat ineture rbei aquofe uncias duas vel tres pro re nata.
R. Afe fotide forupulos duos,

Aque fontance uncias tres cum Semifle,
Aque cinnamomi fpirituofe unciam dimidiam; Saccharri albi dracbmam unam.
Mifce. Dofis uncia una ter die.

The gth. Her breathing is freer; expectoration eafier; pulfe moderate; body regular; and fhe has no return of the colic. She is fometimes very fick with her mixture.
R. Afe fotide drachmam unam $\mathcal{E}$ dimidiam,

Saponis duri femidrachmam,
Olei anifi quantum fatis.
Mifce, fiant pilule, fingule granorum quinque. Gapiat ager duas vel tres ter die.

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3 \mathrm{C}_{2} \text { The }
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The 15 th. The pills agree with her and fhe continues to recover. The phlegm which the gets up is clearer and thinner, and fhe looks better in the face. She took a fmall dofe of the tincture of rhubarb yefterday, which anfwered very well.

The 25th. She has no returns of her afthma nor fwelling of her legs, fhe looks clear and well in her complexion, and can now bear to walk out and ufe gentle exercife.

Afafetida, when it agrees with the ftomach, is fometimes an ufeful remedy in the Afthma; but if it does not give immediate relief, it is foon apt to become offenfive to the patient both from its tafte and fmell, and likewife to rife up with wind from the ftomach, and caufe a continual difagreeable tafte in the mouth. When it agrees, it is antifpafmodic, ftimulant, and rather opening.

## C A S E XLI.

Thbe Convulfive Aftbma, of Jeven years Jtanding, relieved by Flowers of $\mathrm{Zinc}, \mathrm{Mufk}$, and Valerian.
$\mathcal{Y} S E P H B E A L$, aged 16 , thin, pale, and narrow in the cheft, admitted an out-patient at the York County-Hofpital, November 19, 1781, has had an Afthma for feven years, which returns once in two, three, or four weeks, and continues violent for two or three days, and fometimes for fix or feven. The fit of the althma is often preceded by a head-ach. He has a troublefome cough, particularly when the fit is abating, and he then fpits up much phlegm of a yellowifh color, mixt with a great deal of froth. His cough at prefent is very violent. He has a pain in his breaft under the fternum when the fit is upon him, along with great difficulty of breathing, and conftant wheezing. Body regular. Little or no thirft. Pulfe fmall, weak, quick, and irregular. When the fit goes off, his breathing becomes free and natural, and his cough gradually abates. Sometimes his afthmatic fit is the moft fevere about noon, and
sather remits of its violence in the night. During the fit he has no appetite, but takes a little tea or any other light thing in fmall quantity. His nights are very reftlefs and uneafy. His cough is often the worft in a morning, and continues fevere for above an hour. The aet of infpiration and expiration is flow, when the afthmatic fit is upon him, but the number of infpirations and expirations in a minute is at that time greater than natural.

Sumat ter die pulverem ex Florum Zinci granis octo © Gummi Arabici granis quinque, - § julepi sardiaci uncias duas.

Capiat pro re nata electarii folutivi dracbmanz wnam.

The 22 d . He is not fick with his powder. His breathing is free. He has no pain in his breaft, and little or no cough. A fmall teafpoonful of his electuary at night gives him aftool or two.

Repetantur remredia, fed augeatur dofis Florumr Zinci ad grana duodecim.

Sumat alternis nodibus electarii folutivi drachmann unam.

The 26 th. He continues better, but is rather fick with his medicine.

December

December 23 d. He has had a fit of his althma which lafted near a week, and he is ftill fomewhat ftuffed in his breathing. He took his powders in the fit and they agreed with him very well.

The 27 th. He has continued the powders regularly, which fometimes make him fick. He had a return of his afthma on the 23 d , but it lafted only two days, and was much milder than ufual.

January 7 th. He has had no return of his afthma.

Continuentur remedia ut antea, fed augeatur dofis Florum Zinci ad grana quindecim.

The 22d. He has had a fit of his Afthma which continued for three days, and his cough was very fevere. He was then made an inpatient on the 3 Ift , and had no return of his diforder till the i8th of February. Afterwards he had another fit of his Afthma, in which he breathed with great difficulty; coughed at times confiderably; wheezed much; fpit up a thick frothy phlegm; had no appetite, and but very little fleep; and his pulfe was quick, weak, fmall, and irregular. He was fick with his powder
powder this morning, and vomited a confiderable quantity of phlegm which relieved him. The paroxifm as ufual was preceded by headach.

February 2d. His fit began to abate the day after I faw him, but it is not entirely gone yet. He ftill fpits up much phlegm. He fays this fit was fhorter than the laft. His nights are greatly difturbed in the fit; but he fleeps a little. Appetite fomewhat better; body regular.

March 24th. During the whole of this time, which is above feven weeks, he continued free from his afthma, had a good appetite, and began to look fuller and better in the face. His powders in general agreed well with him, tho' now and then they made him fick, for which reafon the dofe of the flowers of Zinc was reduced to twelve grains. To-day he is ftuffed in his breaft, and has a tickling cough.

Fiat venafectio ad uncias ofto.
Cras mane capiat, ex proprio vebiculo, tartari folubilis drachmas decem.

Continuentur remedia antea prafcripta.
The 25th. His blood is fizy. He had five ftools with the foluble tattar. He had a fit yefterday,

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yefterday, but it has almoft left him, and he expectorates freely a white frothy phlegm with his cough.-On the 22d of April he had a flight return of ftuffing in his breaft attended with an irregular pulfe, which was a prelude to a fit on the 25 th ${ }^{*}$, that continued only for a fhort time and was ftill milder than ufual.

On the 5 th of May, his breathing being eafy and his cough moderate, I omitted the Flowers of Zinc , and ordered him the following bolus.

Sumat bis die bolum ex mofoci puri granis decems छ conferve rofarum drachma una.

Omittatur pulvis ex Floribus Zinci, Sed repetatur ut antea julepum cardiacum \& electarium folutivum.

The 9th. He was fometimes fick with his bolus, and vomited once with it. His breathing continues free and his cough better.

The ${ }_{2} 3$ d. He has vomited the bolus feveral times. His breathing ftill continues free, but his cough is rather worfe.

Capiat, ex quovis vebiculo, pulveris radicis valeriance fylveftris dracbmam unam ter die.

Omittatur bolus, fed repetantur alia remedia.
3 D
June

* Applicetur emplaftrum veficatorium parti dolenti.


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June roth. He had a flight return of his Afthma on the 6 th, but his breathing is now free and natural, and he has no complaint except fome remains of his cough, which is however attended with an eafy expectoration. He was then difmiffed much relieved, and returned home into the country with full directions concerning regimen. In fix months after he, along with his father, called upon me at York, and told me that he had continued free from his complaint ever fince he left the Hofpital. His brother afterwards brought me a letter in which is the following paffage.

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\text { Hackne } \sqrt{5} \text {, Эune } 18,1783 .
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$\qquad$ " Pray give my humble refpects to " Dr Withers, unto whom I owe fo many obli"gations, and let him know that I have had " fome little return of my diforder, but nothing " of any confequence as I had before I came " to him. But I could wifh that I had but the " opportunity, I would come to York and fhow " myfelf to him, as it would only be my duty "to do, as I am informed he has afked feveral " times concerning me. I defire therefore that: " you will let him know as foon as poffible."

## PAR TV.

CASES of ASTHMA,<br>CURED 5 Y<br>JAMES'S POWDER<br>AND THE<br>PERUVIAN BARK.

C A S E XLII.

The Convulfive Aftbma, complicated with a Fever, Catarrh, and Rbeumatijm, cured by James's Powder, Tinctura Thebaica, $\mathrm{E}^{\mathrm{c} c}$.
R. of a weak constitution, has labored under his prefent complaint for a month pat ; the fymptoms of which are feverifhnefs, headasch, thirst, loss of appetite, cough, pain in

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3 \mathrm{D}_{2} \quad \text { his }
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$$
39^{6} \text { C A SES A N D }
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his breaff, ftraitnefs about the pit of his ftomach and difficulty of breathing. The difficulty of breathing is not conftant, but fometimes increafes fuddenly to a violent degree, and continues in that ftate for feveral hours, then leaves him again, and his refpiration becomes free and natural. His pulfe is quick and low; body bound ; he expectorates but little; and has fevere rheumatic pains in his fhoulders, elbows, \&xc. Let him live chiefly on a milk and vegetable diet.
R. Olei olivarum optimi drachmas Sex, Aque fontance mollis uncias tres,
Aque cinnamomi Spirituofa unciam dimidiam, Syrupi balfamici dracbmas tres,
Spiritus cornu cervi optimi guttas triginta.
Mijce fecundum artem. Sumat ager unciam unams quinta quaque bora.

Capiat omni noite bora Jomni bauffum anodynum ex Tincture Thebaica guttis viginti, छ Pulveris Facobi granis Septem.

The 19th. The phyfic operated well. His cough and difficulty of breathing are eafier, but his rheumatic pains are ftill fevere. He is not fick with his draught at bedrtime, and his feverifhnefs is much abated.

The

## OBSERVATIONS. <br> 397

The 23 d. He continues much better in his afthmatical complaints, but his rheumatic pains are ftill troublefome.

Repetantur remedia; $\mathcal{B}$ cras mane fumantur baufius fence purgantis uncie quatuor.

The 27th. He has had no return of his Afthma; and is lefs feverely afflicted with his rheumatic pains. His appetite is improved, body regular.

March 3d. After this time he had no more returns of his afthma, but his rheumatifm continued for fome weeks longer, affecting feveral different joints and mufcular parts, and once it fixed feverely on his eyes, occafioning a violent inflammation; but by a continuance of the remediês above-mentioned, along with leeches, laxatives, blifters, fomentations, \&c. the rheumatic pains were removed; and by the bark, country air, and cold bathing, his conftitution was afterwards ftrengthened, and the cure compleated.

This patient was afflicted with a catarrh, afthma, and rheumatifm, accompanied with feveral feverifh fymptoms, His conftitution
was weak and relaxed, and yet he was troubled with inflammatory difeafes - a cafe which frequently occurs in practice. With a complication of maladies like this, Dr. James's Powder and the Tinctura Thebaica occurred to me as proper remedies, and the event proved their utility. The fever, catarrh, and afthma were foon cured; but we found more difficulty in removing the rheumatic pains. Thefe, however, were at length overcome by a continuance of the fame remedies.

It is difficult to account for the various attacks made by the rheumatifm in this cafe; for it appeared even in the inflammation of his eves. But though we cannot fully explain the fact, yet it is certain that no diforder of the human body fhews itfelf in a greater variety of parts than the rheumatifm; for there is fcarce any part, whether internal or external, on which it has not been obferved to fix.

This fate of body, in which the rheumatifm moves from place to place, is generally attributed at its firft rife to an inflammatory ftate of the veffels or (in other words) to an increafed tone of the arterial fyitem; and perhaps there is ne more probable folution of the difficulty.

Some add a fcorbutic humour in the blood; but this, comparatively feaking, is only evident in few cafes, and totally abfent in many; whereas an inflammatory ftate of the arterial fyftem is always prefent. Atony or want of tone in the veffels of the difeafed parts is frequently obferved afterwards to prolong the complaint, when, by the cool regimen, proper remedies, and the duration of the difeafe, the inflammatory ftate is removed. Hence we have the atonic rheumatifm as well as the atonic gout, in which the veffels of the parts affected are weaker and more relaxed than natural, and, in confequence of a languid circulation of the blood, the parts themfelves feel cold to the touch *. Bleeding in the cafe of Mr. could not, on account of his bodily weakners, be advifed, but gentle laxatives, a faline oily emulfion, and proper regulations of diet were ufeful.

[^39]CASE

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## C A S E S A ND

## C A S E XLIII.

The Convulfive Altbma, along with a Fever and general adematous Swellings, cured by James's Powder, Tinctura Thebaica, $E^{\circ}$.

MR S. $\longrightarrow$, aged 28, November 12 , 1784, complained fome time ago of a violent pain in her head, with pain and tenfion of her belly, and fwelling of her legs. After the removal of thofe fymptoms, fhe had a weight and fwelling at the pit of her ftomach, fhortnefs of breath, head-ach, feverifhnefs, bad nights, univerfal œdematous fwellings, and a quick weak pulfe; and on the 24th, fhe was fuddenly feized with a violent wheezing and difficulty of refpiration, attended with fever, cough, fcanty expectoration, head-ach, thirf, painful infpiration, \&rc. Thefe fymptoms had continued near three days before I faw her. She had had no return of the menfes for fix months paft. Yefterday fhe loft eight ounces of blood from the arm.

Capiat mifture Spermatis ceti unciam unam छร dimidiam ter die; etiamque baufum anodynum ex tincture thebaice guttis viginti, $\mathcal{F}$ Pulveris Facobz granis Septem, omni noite bora Somni.

The 23 d. She breathes much better. Her draughts have agreed well with her. She has perfpired freely, her feverifhnefs is diminifhed, and her fkin feels foft and moift. She has eafy nights, her pains are abated, body regular.

On the third of December, five grains of James's Powder in a bolus were ordered to be taken in a morning, and the other remedies continued as before.-Her menfes foon after returned; and by means of the bark, country air, and gentle exercife, fhe recovered her ftrength, and was freed from her pains, œdematous fwellings, cough, and difficulty of breathing.

## C A S E XLIV.

The Convulfive Aftbma, along with a Catarrb, cured by James's Powder, $\underbrace{〔}$ c.

MRS. - , aged 31, December 28, 1783, has a fevere cough, hoarfenefs, and ftuffing in her breaft, of five weeks ftanding, attended with fudden attacks of difficult breathing, which continue for feveral hours at a time, till fhe is quite fpent, and almoft at the point of fainting. She has been bled with3 E
out relief. Her face is pale, and fwelled in a morning after her afthmatic fit. She can fcarce bear to lie down in bed, and her nights are greatly difturbed; her appetite is but indifferent; pulfe fimall; body regular; and fhe has little or no expectoration. - For thofe complaints fhe had a vomit and fpermaceti-mixture; but as the fymptoms were found to continue, fhe took on the fecond of January a bolus twice a day, in which there were feven grains of James's Powder.

January $5^{\text {th. She was fick with her bolus }}$ and fometimes vomited. Her difficulty of breathing is eafier, but her cough is ftill fevere. She had her menfes laft week.

Repetatur miffura fpermatis ceti; छ continuetur bolus, fed conftent fingula dofes ex Pulveris Facobi granis quinque.

Sumat cras mane bauffus fence purgantis uncias tres.

The 19th. She has no cough, her breathing is natural, countenance clearer, appetite improved.

## C A S X XLV.

The Convulfive Aftbma, complicated with an $A b \int c e \sqrt{s}$ in the Lungs and a Spitting of Blood, alöng with a Symptomatic Fever, cured by James's Powder, छંc.
yOHN MILLS, a bricklayer, aged 54, admitted an out-patient at the York County Hofpital, April 4, 1785, got a hurt fome time ago on his left fide, after which he had a very bad cough, a violent pain in his breaft, and a large and fudden difcharge from his lungs of blood and purulent matter; which fymptoms ftill continue, along with feverifhnefs and conftant forenefs inwardly. His cough at prefent is very troublefome in the night, and his breathing fuddenly fhort and laborious, particularly about five or fix o'clock in an evening, at which time too the pain and uneafinefs in his breaft is the worft.

Before his late accident, which was followed by the difcharge of blood and purulent matter, his breathing was conftantiy fo difficult that, when walking, he was often obliged to ftop for breath, and felt within himfelf as if he weregoing to fall down. Since that difcharge he can 3 E 2 walk

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walk a little better, but all exercife is ftill performed with the greateft difficulty. His body is regular; face pale and fallow; voice weak; pulfe quick, fmall, and feeble. He has a fevere pain in his left fide about the hypochondriac region, which is increafed by ftooping, and by lying down upon it, on which account he refts chiefly on his back or right fide. The pain of his left fide is much increafed when he coughs, fo that he is obliged to fupport the part with his hand.-Let him live principally on a milk and vegetable diet, and in mild clear weather go out a little into the open air.

Sumatur mifure ad aftbmaticos uncia una $\mathcal{F}^{2}$ dimidia ter die; E applicetur emplaftrum veficatorium lateri dolenti.

The $\eta$ th. His expectoration is ftill in large quantity, very bloody and purulent, and his breathing at times fhort and laborious; but it is now rather eafier than it was, and his cough lefs violent. His pulfe is quick and weak, and he is fometimes feverifh. Body regular. The cough ftill increafes the pain and forenefs of his breaft. His blifter anfwered well.

Repetatur miftura ad aftbmaticos, छ fumatur bora Jomni bauftus ex Pulveris facobi granis feptemz E Tinctura Thebaica guttis decem.

The

The rith. He finds himfelf confiderably better. His expectoration contains much lefs blood fince he took James's Powder. His difficulty of breathing, pain, and uneafinefs in his breaft ftill comes on the moft violently about fix o'clock in an evening, after which he can bear to lie down with eafe, and refts tolerably well in the night. A milk and vegetable diet and gentle walking exercife agrees well with him. He thinks his evening draught has been of great fervice. His body is regular. Feverifhnefs abated. The pain of his left fide continues, but is eafier.

Repetantur remedia, fed augeatur dofis Pulveris Facobi ad grana decem omni nocte.

The 14th. His expectoration is ftill bloody and foul, but in lefs quantity, and comes up without much coughing. He can ftoop and lie down with greater eafe. The difficulty of breathing, pain and anxiety in his breaft continue to return about five or fix o'clock in an evening. Body regular.

The 18th. His cough is better, but is moit troublefome at night; his breathing is free and eafy; and he expectorates little or no blood. The quantity of purulent matter which he fpits

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is lefs, tho' it is ftill thick and of a dark color. Pulfe frequent, but not fo weak as it was, and he can now bear to walk half a mile without refting.

The 2 Ift. The matter which he expectorates is ftill of a dark color, rather bloody and puruIent, but in lefs quantity. He can lie better on his left fide, having a little pajn only when he firft turns upon it. His breathing is free, body regular.

Continuentur medicamenta, fed conftent hora fomni fingula dofes ex Pulveris Jacobi granis quindecim.

The 25 th. He is confiderably better; looks clearer in the face; walks frequently in the open air; does not follow any bufinefs to fatigue himfelf. He is rather fick with his draught, but never vomits it. His expectoration is lefs in quantity, lefs tough, comes up ftill more eafily and without any mixture of blood, and he can lie well on his left fide. His pulfe is ftronger and not more than 90. Appetite good.

The 28 th. He continues to recover. His ftrength is much improved, fo that he can now walk two miles without refting himfelf. His diet confifts chiefly of pudding, milk, a little fifh, and other light things.

May gth. He walked too much feven days ago, which has rather increafed his cough, fpitting, and pain of his left fide.

Mittatur fanguis ad uncias octo.
Repetantur medicamenta; $\mathcal{E}$ capiantur cras mane rbei pulverati grana viginti et quinque.

The 16 th. He finds himfelf almoft well and able to return to his bufinefs; his voice is clear and natural ; he fpits no blood, but coughs up a little white tranfparent phlegm, fuch as he is generally accuftomed to do when in health. At this time I cautioned him to lift no heavy weights; to make no long days work; to guard againft fudden heats and colds; and ftill to be cautious in his diet, avoiding full meals, ftrong liquors, and ftimulating food.

The 3oth. He is free from complaint. Let him be difmiffed.

This was a very dangerous and alarming illnefs, and, along with his pale fallow countenance, weak quick pulfe, and hectic fever, feemed to threaten a fpeedy and fatal termination. Before he got the hurt upon his fide, the obftruction in his lungs and difficulty of breathing
breathing were the moft violent, along with a total inability to ufe exercife. After his accident, the difcharge of blood and purulent matter (which he called corruption) came on fuddenly, and was attended with fome relief of the complaint in his breaft; but ftill the fymptoms in a lefs degree continued, there being fevere pains, fudden and violent fpafmodic affections of the lungs, and a large difcharge of blood and purulent matter.

The Afthma, in this cafe, is rather to be confidered as a fymptomatic than a primary affection. The ftroke which he got upon his breaft did not occafion his difeafe, but only haftened the rupture of an abfcefs in his lungs, and the confequent difcharge of blood and purulent matter. When I faw him, there was no mark of any external violence to be found where the hurt was received.

With regard to the treatment, he was too weak to bear bleeding; and emetics would have been dangerous. The remedies and regimen ordered were fo effectual, even beyond my expectation, that I had fcarce any occafion to have recourfe to other means. James's Powder in this cafe aeted chiefly as a powerful antìfpafmodic
fpafmodic, took off the fever, and promoted per. fpiration by caufing a determination of blood to the furface of the body. The tinctura thebaica affifted its falutary action by diminifhing irritation, quieting the cough, allaying pain, and abating the fpafmodic affection of the airveffels. Thefe effects were fuccefffully obtained without any heating ftimulating remedies, which would have been very dangerous in the cafe before us.

In confequence of a frefh cold got on the $2 d$ of May, I ordered him (as foon as I knew of it) to be immediately bled, for he had then recovered his ftrength, and was able to bear that evacuation. A gentle laxative was alfo prefcribed with the fame intention. In all cafes of frefh pulmonic inflammation, we regularly obferve that the greateft fuccefs is found to follow a cautious, but vigorous method of cure at its firft rife; for after it has got ftrong hold of the conftitution, the treatment is much weaker, and confequently lefs effectual.

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## C A S E XLVI.

The Convulfive Afthma, complicated with a Fever, Spitting of Blood, and Ulceration of the Lungs, cured by James's Powder and Tinctura Thebaica.

CHARLES DUNCOMBE, aged 36, admitted at the York County-Hofpital, September 22,1785 , has a very bad cough, with a purulent bloody expectoration and great difficulty of breathing, particularly on motion. His difficulty of breathing comes on fuddenly at five or fix o'clock in a morning, and continues for an hour or longer. His body is regular, pulfe low and quick, and he is thin and pale in the face. The greateft fenfe of oppref. fion and uneafinefs arifing from his complaint feems, according to his own account, to lie chiefly at the pit of his ftomach. The week before laft, he difcharged from his lungs at different times above forty ounces of blood, but that difcharge is now much abated. His appetite is bad, legs ake, nights very indifferent, expectoration yellow and in large quantity. He has often a fevere pain under the breaft-bone, which is increafed by his cough. Laft April he got a ftrain with piling deal boards, which firt
firft brought on his complaint, and he has never been free from it fince, but he has been much worfe for thefe laft five weeks.

- Sumatur miffure ad aftbmaticos Sequiuncia ter die-E' baufus anodynus ex Pulveris facobi granis novem © tincture thebaice guttis viginti omni nocte bora fommi.

The 26 th. He finds himfelf much better. He ftill fpits a confiderable quantity of thick yellow matter, but with little or no mixture of blood. His cough and difficulty of breathing are much diminifhed; appetite improved; nights tolerably eafy; body regular.

The 2gth. He finds himfelf very much recovered. The matter which he expectorates is ftill thick, yellow, and opaque, but not near fo much in quantity as before. His breathing is eafy and natural, and he is free from the pain of his breaft. His fits of difficult breathing, which came on in a morning, are now entirely removed; body regular ; appetite good; pulfe low, but foft and natural; and he refts well at nights.

October 3 d . He is free from complaint. Let him be difmiffed.

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C A S E XVII.

The Convulfive Aftbma, complicated with an Intermittent Fever, followed by purple Jpots on the Jkin, and bleedings from the nofe and gums, cured by the Peruvian Bark and Flowers of Zinc.

ISABEL T $A Y L O R$, agêd 35, admitted a patient at the York County-Hofpital, March 16,1780 , of a middle fize and fpare habit, has had an Afthma nine weeks, which ufed to attack her every night about twelve o'clock, and continue without any mitigation of its fymptoms till fhe rofe in the morning. Her difficulty of breathing during the fit was fo violent, that fhe was forced to fit up in bed, not being able to bear a recumbent pofture. Her pulfe was fmall, but rather hard, and her expectoration difficult.-For thofe complaints fle attended fome days at my Difpenfary, and, at different times, was ordered to keep her body regular with a mixture of foluble tartarto lofe eight ounces of blood-to take an emetic, the Zinc pills *, and an anodyne draught at bed-time with twenty drops of tinctura thebaica.

From

* Vide p. 2 小g.

From thofe remedies fhe found great relief, fo that her Afthma now does not come on till two o'clock in the morning, and lafts only about an hour or 'two, but with this material difference, that it is attended with a regular attack of the ague, which begins with coldne's and trembling, followed by a hot and fweating fit. This complicated malady of the afthma and quotidian intermitting fever has come on every night for five nights paft, which has greatly weakened and harraffed her conftitution, and made her appear thin and emaciated, with pale lips and a pale fallow complexion. Her body is not bound, fkin dry, expectoration difficult, appetite bad. She had her menfes about a fortnight ago, which are regular as to time, but generally in fmall quantity. Her pulfe is ftill rather hard, but fmall and quick. She is fubject at times to a pain in her breafts, which fhoors from one fide to the other. She thinks her diforder arofe at firft from cold in confequence of having her feet wet, to which the is not accuftomed.
R. Corticis Peruviani Pulveris unciam unam, Syrupi faccharri quantum fatis.
Mifce, fiat electarium, omne inter paroxifmos, parsitis vicibus, fumendum.
Capiat julepi cardiaci unciam $j$. in langroribus.

The-2oth. She continues to look very ill and yellow in the face. She has only had one attack of her ague fince the 16 th inftant, with which her afthma came on as ufual during the cold fit. She has taken an ounce of the Bark every twenty-four hours, and it has agreed well with her ftomach. Since her afthma and intermitting fever were flopped, fhe coughs confiderably, and is fick in a morning, but gets up little or no phlegm. She has had, for three days paft, a return of the pain in her breafts, fhooting as before from one fide to the other. Her body is regular, pulfe quick, fkin foft, and the has lefs thirft upon her.

Repetatur julepum cardiacum; Ө fumatur, altern̄is diebus, electarium Corticis Peruviani.

The 23d. Her medicines agree well with her, and fhe finds herfelf much better. Her breafts feel fore, but the pain in them is greatly abated. Her cough, though at times ftill troublefome, is attended with a free expectoration. She has had no returns of her afthma and fever, but complains of being coftive.

Continuetur ut antea julepumi cardiacum, छ fumatur, tertio quoque die, electarium Corticis.

Capiat bora fomni pilulas Rufitres quando alvus afrieta fit.

The 27th. She has taken her medicines regulardy as ordered, and upon the whole finds herfelf confiderably better. She complains today of a pain at her ftomach, which is increafed by her cough. She has had no return of her fever; but, for thefe two nights paft, has had a light attack of her afthina at one o'clock in the morning, which lafted about a quarter of an hour, and then terminated with the expectoration of a little phlegm of a bluifh caft. Her body is open with the pills, pulfe natural, tongue clean, fkin cool.

Applicetur emplaftrum veficatorium fcrobiculo cordis.

Repetatur ut antea julepum cordiacum, $\mathcal{J}$ fumatur electarium Carticis quarto quoque die.

The 3oth. Since the application of the blifter, the pain is removed from her ftomach to her right fide juft about the fhort ribs. She has had no return of her fever or afthma, but has been affected with ficknefs for thefe two or three laft days. Her electuary, however, agrees well with her, and fhe was never fick with it except after the firtt dofe. She has a tickling troublefome cough, which fometimes excites a pain in her left fide.

April 3d. She had a return of her fever three days ago, and it lafted twenty-fix hours. It came on without any fenfrble cold fit; but after the hot fit, fhe fweat confiderably, which evacuation (to ufe her own words) had a difagreeable fmoky fmell. This fit of the ague was not accompanied with any afthmatical fymptoms. Her throat felt fore from'a cold, which the had got the day before this laft attack of her fever. When the fever abated, fhe had a copious fediment in fier urine, fince which her appetite has been improving, herpulfe is ftronger, and her lips of a better color. The weather is wet and ftormy, and her cough is fomewhat increafed by cold. Her body is kept regular by the occafional ufe of two or three opening pills.

Repetatur, ut antea, julepum cardiacum © $\sqrt{ } \mathrm{u}$ matur electarium Corticis tertio quoque die. *

The 6th. The weather is very cold, and there is fnow on the ground. She has had no return of her ague or althma, but her cough continues. She obferves at times a fmall red eruption difperfed over her body, which itches confiderably, but foon difappears again. She has

* As the Ague returned, I was obliged to order the Bark to be again taken every third day, and omitted only two inrermediate ones.


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has had no menftrual difcharge for feven weeks paft, tho' fhe was before regular as to time, but not in fufficient quantity. Her body is open with the pills. She has had fome return of pain in her breafts. Her medicines agree well with her.

The roth. The weather at prefent is fevere and frofty, and the has got a frefh cold, which has increafed her cough and expectoration. She has no afthma or intermittent fever. Three pills every other night keep her body open.

Omittatur electarium Corticis.
Sumantur ter die uncie duo decoeti mucilaginof, $\mathcal{E}$ continuentur pilula Rufi duo vel tres alternis nocitibus.

Afterwards fhe had no more returns of the ague, but had now and then a flight fit of the afthma, fometimes every night, and fometimes every fecond or third night, which was eafily removed by having recourfe again to the $\mathbf{Z i n c}$ pills。 - On the 27 th, when her pulmonary complaints were entirely gone except a little tickling cough, a rafh appeared, chiefly on her arms, thoulders, and back, confifting of fmall red fpots, hot and burning, a little raifed above the fkin, and fpread almoft univerfally over her body, which itched confiderably, and, after

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having continued fome hours, difappeared, but foon returned again.-On the firt of May, fhe complained of ficknefs, head-ach, and bleeding at the nofe and gums. The rafh above-mentioned continued, but with an evident mixture of purple fpots, called by Phyficians petecbie. They were fmall, of a dark livid color, moft numerous on her breaft, not rifing above the fkin, nor changing their color on preffure. Pulfe natural. Great proftration of ftrength. For thofe fymptoms fhe took a ftrong decoction of Bark; and her body was kept regular with the pil. Rufi.

She had formerly lived chiefly on tea, broth, bread with frefh butter, and a little frefh meat at noon, but had eat no falted provifions. Potatoes and milk difagreed with her, and ale and beer made her feverifh.

The rafh, bleedings at her nofe and gums, and purple petechial fpots continued to recur for many weeks, but at laft were cured by a fteady perfeverance in the remedies above mentioned, along with pure air, great cleanlinefs, gentle exercife, and an antiputrefcent diet. Towards the latter end of the complaint, as her ftomach could not bear the decoction of Bark,

## OBSERVATIONS.

Bark, I ordered in the place of it Huxham's tincture. All this time fhe had no return of her ague, and her breathing was perfectly free and natural, but fhe had feveral attacks of the rheumatifm in her fides, fhoulders, legs, thighs, \&cc. without any fwelling or rednefs of the parts affected.

Ifabel Taylor firft attended upon me at my Difpenfary for fome days before fhe was admitted a patient at the York Hofpital. Her afthmatic fits then began at twelve o'clock at night, and continued till morning with great violence. As her pulfe was not weak, and fhe had had no aguifh fymptoms, one bleeding was thought advifeable, and it was of ufe to her in diminifhing the feverity of the fits. The flowers of Zinc likewife were very efficacious in obviating the fafms of the lungs.

Afterwards a quotidian intermitting fever fupervened on the afthma, which foon altered her complexion, rendering it pale and yellow, and weakened her conftitution in a very rapid manner. I then made her an out-patient at the Hofpital, where, as fhe was already well prepared for it, fhe was immediately ordered to

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take an ounce of the Bark in the intervals of the fits, which, as her diforder returned every twenty-four hours *, was as much as her ftomach could bear. As the afthmatic fit came on with the intermittent, I was in hopes by; this method to cure effectually both diforders at once, and more efpecially as it is well known, that, if the Afthma recur periodically without a fever, the Bark, when given in fufficient quantity, will fometimes put a ftop ta it. As the Bark agreed well with her ftomach, and had a good effect, I never altered the mode of its exhibition, but (as appears from the prefcriptions) omitted it day after day, till it became unneceffary to continue it any longer.

It is a great error for a patient in an ague to omit the Bark too foon, efpecially if he lives in the fame low fituation, where the difeafe was firft contracted; for in that cafe the fame caufe, marfh effluvia, (which are vapors arifing from marfhy grounds) continues to act; and if the conftitution be not properly fupported by diet and tonics, the ague will often return, But if the

[^41]the patient have an opportunity of changing the air, and living in a dry elevated part of the country, much lefs Bark will generally be fufficient; a fact of great confequence to thofe with whom that remedy, when given in large quantity, is found to difagree.

In the cure of intermittents, it is neceffary to caution patients againft keeping themfelves too clofe and hot, when the cold fit is going off; for by this means the fweating fit is much diminifhed, the ftrength of the conftitution preferved, and confequently internal obftructions prevented. Ifabel Taylor found that, when fhe lay cool during the hot fit, fhe avoided profufe fweats, which otherwife came upon her and weakened her much.

After the intermittent was entirely flopt, there were ftill fome remains of her Afthma; for the more fpeedy removal of which I again prefcribed the Zinc pills. Thefe produced a flight degree of naufea, tho' given in a dofe of a few grains only, and had a very good effect.

Some time after, a violent rafh came out, confifting of fmall red pimples, difperfed in different places over her body, followed by a great number of purple fpots, which were evidently petechial,
petechial, attended with bleedings at the nofe and gums,-certain fymptoms of a diffolutiors of the blood. The firft eruption was critical and falutary, and followed by an alleviation of other complaints; but the latter was fymptomatic of the putrid tendency of the fluids. As there was little or no fever along with the petechial fpots, and as all her other complaints were nearly removed, I was lefs alarmed at this new difeafe. Fevers of different forts, and intermittents among the reft, are often obferved to injure the texture of the blood in this way *, tho' fometimes indeed petechial fpots, as I have-feen in feveral inftances, will appear without any evident fever having preceded + . I had an example of this a few months ago in a young Lady about eleven years of age, in whom there were hundreds of purple fpots, which all came out nearly in one night. Her nofe too at times bled profufely. Mrs. -, in the neighbourhood of York, had likewife a great number of petechiz of a very obftinate nature, when fhe was pregnant of her laft child, along with a moft fevere pain

* Vide Pringle's Obfervations, page 289 . - Monro on the Difeafes of Military Hofpitals, p. x. -Cleghorn on the Difeafes of Minorca, p. 147 .

[^42]
## OBSERVATIONS.

in one fide of her upper jaw*. She had too 2 very dangerous difcharge of blood from her nofe; and at another time a great quantity of the lochia after delivery. Thofe hemorrhages and petechial fpots arofe from a diffoived ftate of her blood.

For this complaint of Ifabel Taylor, I prefcribed a ftrong decoction of Bark, and recommended chiefly a vegetable diet $t$, along with the moderate ufe of cordial antiputrefcent liquors. She could not take the Bark again in fubstance, otherwife I fhould have prefcribed the powder in preference to the decoction. The decoction being at laft too ftrong for her, I was obliged to have recourfe to the tincture, which was given till the cure was compleated. She found great benefit in this difeafe from being much in the open air. Many of the poorer fort of people injure their health very materially

> This pain returned every four or five minutes both day and night without intermiffion, although every tooth in the difeafed part had been drawn before I faw her.
> t As her flomach was very weak and fhe was accuftomed to have a little frefh meat at noon, and as it was evident the diffolved flate of her blood did not arife from her diet, but from the fever and diminifhed tone of her fibres, I was not fric in forbidding it, nor perhaps could fhe have followed my advice if I had.
rially by living in a clofe confined atmofphere. They err even in this refpect much more than they are obliged to from neceffity; for they abfurdly think it dangerous to have a door or window open during any illnefs; and thus to fhun a lefs evil, they fall into a greater, and in no complaints more certainly, than in thofe in which the blood is in a diffolved and putrid ftate.

It is worth obferving that on the 18 th of May fhe was feverifh, and had a lax upon her, after which there was a frefh appearance of purple fpots, fo great was the effect even of that fhort return of fever. It was near two months from firit to laft, before thofe purple fpots were entirely removed; for as fome died away, others appeared. The young Lady above mentioned of eleven years of age was cured in lefs than a week. I have feen feveral cafes in which they have continued three or four weeks. In Mrs. -'s cafe the petechiæ have continued to come and go for years, altho' fhe has lived in the country, and ufed the moft antiputrefcent diet, along with cool frefh air, regular exercife on horfeback, the Bark in fubftance, elixir of vitriol, and many other powerful antifcorbutic remedies.

The fweat mentioned in the cafe of Ifabel Taylor, which followed the intermittent fever on the firft of April, had a very particular difagreeable fmell, which probably arofe from the impure ftate of her blood. This fymptom is worthy of attention, with a view to difcover how far it may occur in fimilar cafes of putrefcency. It preceded the appearance of the purple fpots about a month.

The different types too, which the Afthma aflumed after the intermittent fever was ftopt, afford matter of curious obfervation; for fomecimes it came on every night, fometimes every other night, and fometimes it miffed two whole nights before it returned, and thus was, at different periods, a quotidian, a tertian, and a quartan. Her complaint was faid at firft to have arifen from cold, in confequence of having her feet wet, which is a common exciting caufe both of afthmas and intermittents, and efpecially in fuch as have weak and delicate conftitutions, who fhould always be very attentive to keep their feet dry.

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## C A S E XLVIII.

T'be Convulfive Aftbma, complicated with a Spitting of Blood, and a Quotidian Intermittent Fever of tbree months ftanding, cured by the Peruvian Bark.

THOMAS SMITH, aged 34, admitted at the York County Hofpital, May if, 1780, is troubled with a violent cough, tuffing in his breaft and difficulty of breathing, which laft fymptom comes on fuddenly, and is at times very fevere. His cough is attended with an expectoration of phlegm, mixed with blood. This complaint in his lungs is complicated with a quotidian ague of three months ftanding, but which is not quite regular as to the time of its attack. His pulfe is weak -his countenance pale, yellow and depreffed-and his legs and feet much fwelled, particularly in an evening. He is a farlor, and has been formerly addicted to the free ufe of Atrong liquors. After taking a dofe of rhubarb to open his body, he began with the following remedy.
> R. Corticis Peruviani Pulveris dracbmas decem, Syrupi pectoralis quantum fatis.

Fuat electarium omni die inter paroxifmos fumendum.

## O B SERVATIONS. 427.

The 15th. He has had no return of his ague; his difficulty of breathing is fomewhat eafier; his cough lefs violent; and his fpitting of blood diminifhed.

Repetatur ut antea Electarium Corticis, alternis diebus fumendum.

The 18th. He has had no return of his ague, and all his afthmatical fymptoms continue eafier, except his cough, which is ftill violent. His body is regular, and his legs are lefs fwelled in an evening.

The 22d. His cough continues fevere, and his pulfe is low. He has had no return of his ague; fpits no blood; appetite better; ftrength improved.
Repetatur electarium tertio quoque die.
The 25th and 30 th. He continues to recover. His cough is better, and the fwelling of his logs much abated.

June 5 th. He has had no return of his ague, but the fwelling of his legs is not yet entirely gone.

Repetatur elestarium quarto quoque die. Sumat ter die miftura diuretice uncias duas. *

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* Since the difcovery and publication of the ufe of Tobacco
in dropfical cafes, by my worthy and learned friend Dr. Fowler,
of Stafford, I have given an infulion of that remedy as a dis-
retic, in fuch cafes as this, with great fuccefs.

The 16th. He has no complaint, looks fatter and clearer in the face, his legs do not fwell, and his cough has entirely left him. He was then difmiffed cured, being advifed to continue his electuary a little longer by way of preventing a relapfe.

The difeafe of Thomas Smith is one which affords a ftriking example of the good effects of the Peruvian Bark, given in large quantity, in a very critical and dangerous cafe; but there was no other chance for the fafety and recovery of the patient. Had the diforder been properly treated in its early fage, the cure in all human probability would have been eafy and certain. But when I faw him, he had a very bad catarrh and fpitting of blood, along with evident fymptoms of a convulfive affection of the lungs, which was particularly troublefome during the cold ftage of the fever. His intermittent attacked him every day, and was of three months ftanding, which had greatly reduced his conftitution, rendered his countenance pale and yellow, and brought on dropfical fwellings of his legs and feet.

In this dangerous and melancholy ftate, as there was no time to be loft, the Peruvian Bark was given in fubftance and in large quantity during the intervals of the difeafe; for if the intermittent had not been cured, inevitable death muft in a fort time have been the confequence. It was impoffible, when I firf faw him, to relieve the complaint at his breaft. unlefs I could put a ftop to the fever; and no remedy appeared to me fo likely to perform a cure in this cafe as the Peruvian Bark, which therefore was ordered in large dofes, frequently repeated, notwithftanding the catarrh, the fitting of blood, difficulty of breathing, and other afthmatical fymptoms. Had the Bark been given in finall dofes, or in decoction or infufion, it might have done the patient harm, without the moft diftant probability of curing the intermitting fever. He had ten drams of the powder of Bark made into an electuary, and he was ordered to take two or three teaipoonfuls to a dofe, and repeat it as often as his ftomach could bear it, till the whole was confumed in the interval of the difeafe. The manner of continuing the remedy at firlt till the ague was ftopped, and the gradual method of leaving it off, was fimilar to that which was adopted in the preceding cafe. The largeft and moft fre-
quent dofes of the Bark in both inftances were advifed to be taken as near as poffible to the return of the fever. Through the whole of the cure the patient was directed to be well fupported with proper nourifhment. By this treatment, his ague was ftopped in two or three days, and a relapfe likewife prevented. The Bark at the fame time proved an excellent antifpafinodic, relieved the convulfive affection of the air-veffels of the lungs, and gave tone and vigor to the whole conftitution. The cough, and fwelling of his legs, were the laft fymptoms which left him. He was then difmiffed, and had along with him four pots of his Bark-electuary, which he was ordered to take at proper intervals. On this occafion it will only be doing juftice to our Hofpital to add, that the Bark (as well as every other remedy) is always the beft that can be procured, and that thofe Gentiemen, who provide us with it, never difappoint us in its genuine goodnefs. We have had a great many intermittents at the Hofpital of late years, and the beft Bark, whether of the common or red fort, feldom or never fails to remove them, unlefs there is fome incurable chronic difeafe, as a dropfy or confumption, complicated with them. Withour medical aid, this patient, provided his conftitu-

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tion could havefupported his complaints a while longer, would mot probably have fallen into an incurable confumption; for his cough and difficulty of breathing were very violent, and the phlegm which he got up was mixed with blood, if not with purulent matter. I have often obferved agues to be accompanied with very bad coughs and confumptive fymptoms, which, although not at firtt brought on, were certainly increafed greatly by the patient's being kept very clofe and warm, and his whole frame weakened and relaxed by profufe fweats after the cold fit of the ague.

## C A S E XLIX.

The Convulifive Aftbma, complicated with a Fiertian Ague, and followed by the Infuenza, cured by the Peruvian Bark.

VIILIAM PRESTON, aged r 6 , admitted at the York County Hofpital, May 23, 1782, has had a tertian ague for a fortnight paft, which came on after bathing in cold water, when he was previounly heated with exercife. He has likewife a violent difficulty of breathing, which attacks him fuddenly,

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432 \quad \text { CASES AND }
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denly, and produces a fenfation of great preffure over his breaft, as if (to ufe his own expreffion) he had a tun weight upon him, fo that he can then fearee breathe. Along with thefe complaints he has a fevere cough, by means of which he gets up a confiderable quantity of phlegm, tinged with blood. He is of a chin fpare habit, his face pale and of a leaden color, pulfe weak, appetite impaired, body bound.

His ague generally comes on at eleven. o' clock at night. His oppreffion at his breaft and difficulty of breathing, attended fometimes with ficknefs and vomiting, is the worft in the hot fit, after which he fweats profufely. He is very heavy and lethargic in the cold fit, having his eye-lids moftly clofed. He was defired to keep himfelf cool during the hot fage of the fever, and to be extremely cautious to avoid profufe fweats. - For the abovementioned complaints he took an ounce of bitter purging falts, a pectoral decoction, and the following draught every night at bed-time.
> R. Fulepi cardiaci unciam unam © dimidiam, Tinclure Thbebaice guttas viginti, Tertari Enetici Seni-granum.

June 6th. His ague continues to return every other day. He had it to-day at feven o'clock in the evening, and his oppreffion at his breaft and difficulty of breathing were very violent, accompanied with ficknefs and vomiting, but did not laft quite fo long as ufual. His cough is rather better, fpitting fomewhat abated, body regular, and he does not fweat much after the hot fit.

Sumat, in julepo mentha, pulveris Corticis Peruviani dracbmani unam tertia quaque bora.

The roth. His powders have agreed very well with him, except the firft dofe, which he vomited. He has had no return of his ague fince the 6th inftant, nor of the oppreffion at his breaft. His appetite is good; body regular. He was feized the other day with the Influenza along with all his family. His cough is increafed by it, but he fpits freely.

The 24 th. He continued the Bark till the ${ }^{1}$ th, gradually diminifing the quantity, and then took an ounce and a half of the fpermacetimixture three or four times a day. He has at prefent no ague, cough, or difficulty of breathing, and his lethargic fymptoms have entirely left him.-Let him be difmiffed.

We muft take notice here of the mode in which the Afthma came on, giving a fénfation of great preffure on his breaft, as if a heavy weight were laid upon him. This is no uncommon fymptom in Afthmas, and, when violent and continuing for fome hours, is not without danger, efpecially in old, weak, lowfpirited patients, or in fuch as have lived faft, and are grofs and plethoric, having their veffels overloaded with blood.

Another thing to be remarked is, that this man had the Influenza, which, in the city and neighbourhood of York in the fummer of 1782 , was epidemic in the higheft degree poffible. It fpread by a very active contagion; and generally, tho' not always, ran thro' whole families. The feafon and particular ftate of the air, no doubt, favored its progrefs, which was uncommonly rapid. It came on like a catarrh, and was attended in its courfe with nearly the fame fymptoms. A very frequent exciting caufe was the imprudent application of cold, which ofter happens in hot weather, when people grow carelefs of themfelves. The method of cure differed little

## OBSERVATIONS.

little or nothing at this place from that of a common catarrh. As I had feldom fewer at a time than thirty or forty patients in the influenza, I had frequent opportunities of obferving the effects of the medicines employed. In the cafe of William Prefton there was no fymptom of any confequence, except a cough, and that was attended with no pain, and fearce any fever. For this reafon I did not omit the Bark, which he was then taking, and which feemed to anfwer fo well, and more particularly as that medicine was ufeful in fome cafes of the influenza, when the conftitution was relaxed and there were no inflammatory fymptoms. In thefe laft, bloodletting and other confiderable evacuations were hurtful. Gentle anodynes at bed-time to quiet the irritation which excited the cough, were fometimes employed with advantage. *

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C A S E.

The Convulfive Aftbma, complicated with a fow fever of an intermitting kind of twelve weeks ftanding, cured by the Bark.

MR. $\longrightarrow$, aged 60 , November 20 , 1785, has had a flow fever hanging upon him for ten weeks paft, which is of the intermitting kind, and returns every day, but not at any ftated period. His pulfe is quick and weak, and his legs fwell much in an even. ing. He has likewife a violent difficulty of breathing which comes on fuddenly along with his ague, and is the moft fevere juft after the cold fit. It is followed by a bad cough and an expectoration of phlegm.

His breathing is generally fhort, particularly on motion, but it is very laborious when the afthmatic fit is upon him. He has great thirft during the time of the fever, and complains of a pain in his breaft. Sometimes his difficulty of breathing is very fevere, when he has little or no cough. His abdomen is fwelled, feels harder than natural, and is painful on preffure. Appetite bad. Coftivenefs.-For thofe fymp-
toms he took at firft an emetic, a gentle dofe of rhubarb and magnefia, and a pectoral decoction with the volatile alkali.

On the $5^{\text {th }}$ of December, as his pulfe grew weaker and quicker, and his ague, though not regular, continued obftinately to return once in twenty-four hours, attended with a violent difficulty of breathing, I ordered him in the intervals of the fits a bolus, confilting of a dram of the Bark, to be taken every third hour, and wathed down with a cordial draught.

By this treatment his ague was ftopped in three days, and by continuing a dram of the Bark four times in twenty-four hours, he had afterwards no return of it ; and his difficulty of breathing, cough and fpitting, fwelling and hardnefs of the abdomen, flying pains, \&cc. were entirely removed. He left off the Bark about the middle of January. During the time of his taking it, he had two or three dofes of gentle phyfic, which gave him a few loofe ftools, and relieved the pain, tenfion, and fwelling of his belly.

It appears from this, as well as the three preceding cafes, that the Afthma, when com-
plicated with a fit of the ague, conftitutes a very formidable difeafe. During the cold and hot fits of an intermittent, the breathing is always fhort, but this is trifling in comparifon of the other. In one cafe, the breathing, tho fhort, is tolerably free, but in the other it is laborious. As the hot fit abates, a moderate fweat breaks out, the fpafmodic affection of the lungs diminifhes, expectoration becomes eafier, the breathing natural, and the urine depofits a lateritious fediment. The quantity of phlegm which in general is fpit up in this diforder, will by no means account for the violent difficulty of breathing which occurs, nor for the fudden manner in which it goes off. During the fit of an ague, fpafms in different parts of the body are very apt to take place. Spafmodic conftrictions of the fkin always occur in the cold and hot fits. I have feen regular fits of the colic begin and end with thofe of an intermittent, which were all cured by the Bark. Even general convulfions have made their attack *. The nervous fyftem feems at that time to be very fubject to fpafmodic affections. Hence it is not furprizing that the lungs, efpecially when previoully difeafed, fhould be affected in a fimilar manner.

The

[^44]The cafe of Mr. - had all the characterittic marks of the convulfive Afthma. His difficulty of breathing came on by fits, which returned at certain intervals, and, from their violence and the fhortnefs of their duration, could poffibly be attributed to no other caufe but fpafm. I mention thefe facts here more particularly, becaufe this is a difeafe which is apt to be overlooked, unlefs the practitioner is very pointed in his inquiries concerning the mode of its attack and of its termination. Every one muft obferve that the lungs are much affected, but the nature of the affection is not always fo clearly underftood. I have had many cafes of this kind under my care, and have always found the Bark very fuccefsful. The vulgar notion, that the Bark increafes all difficulties of breathing by occafioning ftrictures on the brealt, is perfectly groundlefs; for in thefe cafes it is not only fafe, but is the molt effectual means of curing the difeafe, and of preferving life.

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## A N

## ALPHABETICAL INDEX

Of the Prefcriptions ufed in the preceding Treatife, as well thofe which are extempoAiry, as thofe of the York County-Hofpital.

IT was the intention of the Author to have publifhed thofe prefcriptions out of the Difpenfatory of the York County-Hofpital, which are mentioned in the foregoing cafes; but this he now finds would be a needlefs addition to his work, as there are already publifhed among the cafes fo many extemporary preferiptions, which either are the fame as thofe of the York CountyHofpital, or fo very nearly refemble them, that the difference is not worth notice. For the convenience, however, of the Reader, there is fubjoined an Alphabetical Index of the prefcriptions which are already publifhed in this Treatife, and likewife of thofe out of the York Hofpital Difpenfatory, with an occafional explanatory note where neceffary, or with a reference to a fimilar prefcription among the cafes.

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* The firft, which are warmer, were ufed in cold and weak conflitutions, where a ftimulus was neceffary. In other cafes, the latter were preferred, which were of a lefs ftimulating nature.
$\dagger R$. Decocti mucilaginofi uncias duodecim,
Julepi e camphora uncias quatuor.
$\ddagger R$. Cremoris tartari unciam unam, Mellis optimi vel fyrupi communis quantum fatis.
§ This draught contains twenty drops of Tinctura Thebaica.
** This draught contains fifteen grains of Ipecacuan,
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- R. Salis diureticæ drachmas tres,
Aquæ fontanæ uncias feptem, Spiritus vini Gallici unciam unam, Syrupi fimplicis quantum fatis. Mifce.
$\dagger$ This mixture is made up in the common way with the infuffex of fena, manna, and falts.
$\ddagger R$. Tartari emetici grana duo, Aquæ fontanæ uncias feptem, Tincturx aromaticæ drachmas fex, Syrupi facchari drachmas tres. Mifee.


## Lately publifbed by the fame Autbor,

i. Obfervations on the Ufe and Abufe of Medicine. Price 4s. fewed.

> "It is with pleafure we can fay, in refpect to the execution of the work before us, that it exhibits undoubted proofs of an accurate and extenfive acquaintance with the fcience of medicine, efpecially in the improved ftate in which it is now taught in the Univerfity of Edinburgh. It may indeed be thought, that it is too exclufively calculated for the meridian of that place, the greateft part of its authorities being derived from thence, and its language fpeaking the peculiar tenets of the Cullenian School. The Writer has, however, in general, kept fufficiently clear from hypothetical reafoning, and has delivered himfelf in a ftile, not only correct but elegant. His obfervations are claffed under the following heads of inquiry. x. Of Blood-letting. 2. Of Emetics and Purgatives. 3. Of Sudorifics. 4. Of Blifters. 5. Of Stimulants. 6. Of Sedatives. 7. Of Tonics or Strengtheners. All thefe afford 2 variety of remarks, which may prove inflructive not only to the tyro, but to thofe who are far advanced in the fudy and practice of medicine."

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\text { Montbly Review for April, } 1777 .
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## 2. Obfervations on Chronic Weaknefs, which

 comprehends Indigeftion, Weaknefs of the Stomach and Bowels, and general Relaxation. Price 2s. 6d." Though Chronic Weaknefs is confeffedly the origin of a great variety of diforders, it has hitherto never been treated by medical writers with that degree of attention and accuracy which the importance of the fubject requires. An attempt, therefore, to inveltigate the nature of this indifpofition, fo prolific of numerous and ftubborn complaints, cannot fail of being highly acceptable to thofe who wifh the advancement of phyfical
phyfical knowledge, efpecially when it is executed by one who has had great experience in the hiltory and cure of the difeafe. Our Author's observations, relative to the therapeutic management of the difeafe, though not new, are judicious and well founded; and from the prefent, as well as a former fpecimen of his medical difcernment, we entertain no doubt, that what he propofes to write hereafter on other chronic complaints, to which this treatife is a prelude, will afford equal fatisfaction, if not additional information to the faculty."

Critical Review for July, 1777.
"Senfible and judicious remarks on the proximate caufes, fymptoms, and method of cure, of a general debility of the nervous fyltem, written, as it feems, by way of introduction to future tracts on particular chronic complaints."

London Review for October, 1777.

## ER R AT A.

P. $4^{6,1 .} 4$ of the note, for town, read York.
P. 145, 1. 21, for duis, r. duabus.
P. $173,1.1$, for tres, r. trial.
P. $259,1.16$, for 1781 , r. 1782 .





[^0]:    *Floyer, p. 30.

[^1]:    *It is very probable both the lobes of the lungs are not in all cafes equally affected with the fpafmodic conftriction. Floyer remarks this of his own cafe, that the conftriction was chiefly on his right fide, on which he could lie with the molt eafe. This fact we may account for, by obferving that the left lobe of the lungs was moft at liberty to perform the office of refpiration when he lay on his right fide; for when he lay on the left fide, the weight of the right lobe, prefling on the left, would naturally obftruet his breathing.

[^2]:    * This fenfation was fo ftrong in the cafe of Floyer, that he attributed his Allhma to an inward burning heat.

[^3]:    * Sir John Pringle on the difeafes of the army.

[^4]:    * Vid. Morgagni de fedibus \&e caufis morborum, tom, I. lib, ii.

[^5]:    * Vid. Van Sweiten, Comm, de Aghorifm, I2rg.

[^6]:    * Floyer, p. 43.

[^7]:    * Vid. Gaub. Inftitut. Pathol. Med. de nocivis atmofpherre poteftatibus. §424. 5 .
    $\dagger$ Hippocrates fays, Longiores vero fomni calefacientes colliquant carnem, \& corpus diffundendo refolvent et imbecillum reddunt. De vietus ratione fanorum Lib ii. cap. 10 , tom, wi, page 474 .

[^8]:    * Vid. Inflitut. Pathol. Gaub. $\$ 422$.

[^9]:    * Dr. G. Fordyce, in his moft excellent public lectures on the practice of phyfic, gives his opinion fully on this head.

[^10]:    $\dagger$ Bonet. Sepulchretum, Lib. ii. fec, I, fage 502.

[^11]:    * The late Dr. Gregory's public lectures on the inftitutions of medicinc.

[^12]:    * Vid. Obfervations on the Abufe of Medicine, in which the bad effects of the improper and unneceffary ufe of blood-letting on the conftitution are fully fhews.

[^13]:    * Dr. Millar recommends much the julepum e camphora in the fit of the Althma. His dofe is one or two fpoonfuls every three or four hours. He thinks folid camphor lies undiffolved in the ftomach. Before he gives the julepum e camphora, he ufually prefcribes a gentle emetic, and then a dofe of the tincture of Rhubarb, or of the tinctura facra,

[^14]:    * Floyer is particularly fond of the vinegar and oxymel of £quills, which he recommends as excellent remedies. He calls the vinegar of fquills Galcn's bitter acid, and fays that " taken at bed-time, it often puts by the fit."

[^15]:    * In mild winter weather the Thermometer will frequently Be at 50 , and in an intenfe froft it will be at 15 . The difference is 35 degrees. Summer heat is 75 , which is only 25 degrees above 50 ; fo that the difference of heat between mild winter weather and an intenfe froft is greater, than that between mild winter weather and fummer heat.

[^16]:    * As Chronic Weaknefs comprehends a weak fomach and a bad digettion, as well as' general weaknefs and relaxation of the nerves and whole conllitution, it was neceffary for me, in the above-mentioned pamphlet, to be very full on the article of diet $;$ to which therefore I muft beg leave to refer my reader.

[^17]:    * After a fit, riding is obferved to promote expectoration, and is therefore very ferviceable.

[^18]:    * Dr. Cullen, in a clynical lecture on a cafe of tubercles in the lungs, was very learned and accurate in the diltinction and treatment of that difeafe.

[^19]:    * I muit here obferve that mercury, given in fmall dofes as 2n alterative, has been frequently prefcribed by phyficians of eminence, for the removal of tubercles of this nature; and not without fuccefs in feveral inftances, when the patient was not too weak to bear it. Floyer recommends it, and the late Dr. Gregory was an advocate for it.

[^20]:    * Vidé Dr. Percival's Obfervations, P. 223.

[^21]:    * Vide table of contents.

[^22]:    * See Prefcriptions at the end of the Cafes.

[^23]:    * R. Radicis Althææ incifæ unciam unam cum femiffe,

    Gummi Arabici drachmas duas,
    Aquæ fontanæ libram unam,
    Coque ad Colature uncias fex, \& adde
    Nitri puri drachmam unam,
    Syrupi balfamici,
    Syrupi limonum, utriufque, drachmas quinque, Aceti diftillati unciam unam vel quantum fatis ad gratam aciditatem.

[^24]:    * Vide page 156 , where the fymptoms of tubercles are enumerated.

[^25]:    R. Infufi fenæ communis fefquiunciam,

    Mannæ optimæ unciam dimidiam,
    -Amygdalas dulces tres,
    Tincturæ fenæ drachmas duas, M. S. A.

[^26]:    * R. Ligni Guaiaci rafurx,

    Ligni Saffafras rafuræ, fingulorum, unciam unam, Radicis Sarfaparillæ femunciam, Radicis Glycyrrhizx, (fub finem coctionis addend.). femunciam, Aquæ fontanæ libras tres.
    Coque ad colaturæ libras duas ; \& adde Aquæ cinnamomi fpirituofæ uncias tres.

[^27]:    * Vide page $\mathbf{3 7 8}$.

[^28]:    * Vide Treatife on Chronic Weaknefs, where the regimen of lying-in women is fully confidered.

[^29]:    * Vide the Bills of Mortality.

[^30]:    * Vid. Dictionaire de Chymie.

[^31]:    * We frequently find, in aftlmatical diforders, that a gentle puke given in a morning, an hour or two before the patient rifes, and repeated occafionally, is very ufeful, This practice is now much in ufe.

[^32]:    * The remedies which were given as palliatives, are mentioned among the remarks upon the cafe.

[^33]:    * My judicious and worthy Colleague, Dr. Swainftor, informed me, that in feveral cahectic patients which he had feen in the courfe of his practice, the appearances on diffection were fimilar to thofe of the above-mentioned patient, and that there was no particular organic fault which he coutd obferve.

[^34]:    * Floyer.

[^35]:    * I have feen many cafes of inflammation of the lungs in infants; and was prefent at the opening of the bodies of feveral who died, which put the diforder out of all difpute.

[^36]:    * Dr. George Fordyce's public Lectures on the practice of Phylic.

[^37]:    * An eminent Sur en informed me that opium is given with great fuccefs in the cure of external ulcers, which fact tends to confirm the opinion here adopted of its extraordinary ntility in fome cafes of pulmonary confumptions.

[^38]:    $\dagger$ In the cafe of Chriltopher Noble, the pains in the joints and mufcular parts feemed to be what Phyficians have called a rheumatic gout, (vide Sauvages Nofol. vol. 2. page 21.) or a complication of gout and rheumatifm. Practitioners in medicine have generally been much more upon their guard in the firt than in the latter difeafe; but I am fully convinced from many cafes diftinetly marked, that equal caution is fometimes requifite in the rheumatifm, which by improper treatment may eafily be driven from external and fixt on internal parts.

[^39]:    * Cullen's Public Lectures on the Practice of PhyGc.

[^40]:    *Vide Page ${ }^{114}$, Cafe XXIX.

[^41]:    * The Bark is often given in Agues with as good, if not a better effect in the night than in the day, as there are then no meals to interfere with the ufe of it. The patient fhould drink fome thin diluting liquor afier each dofe.

[^42]:    $\dagger$ Vide Duncan's Cafes and Obfervations, p. go.

[^43]:    * Vide page $\mathbf{~} 59$, where the treatment of the Influenza is further confidered.

[^44]:    * Vide Boerhaave's Aphorifns and Van Sweiten's Comnentaries.

