

An inquiry into the medicinal value of the excreta of reptiles, in phthisis and some other diseases / by John Hastings.

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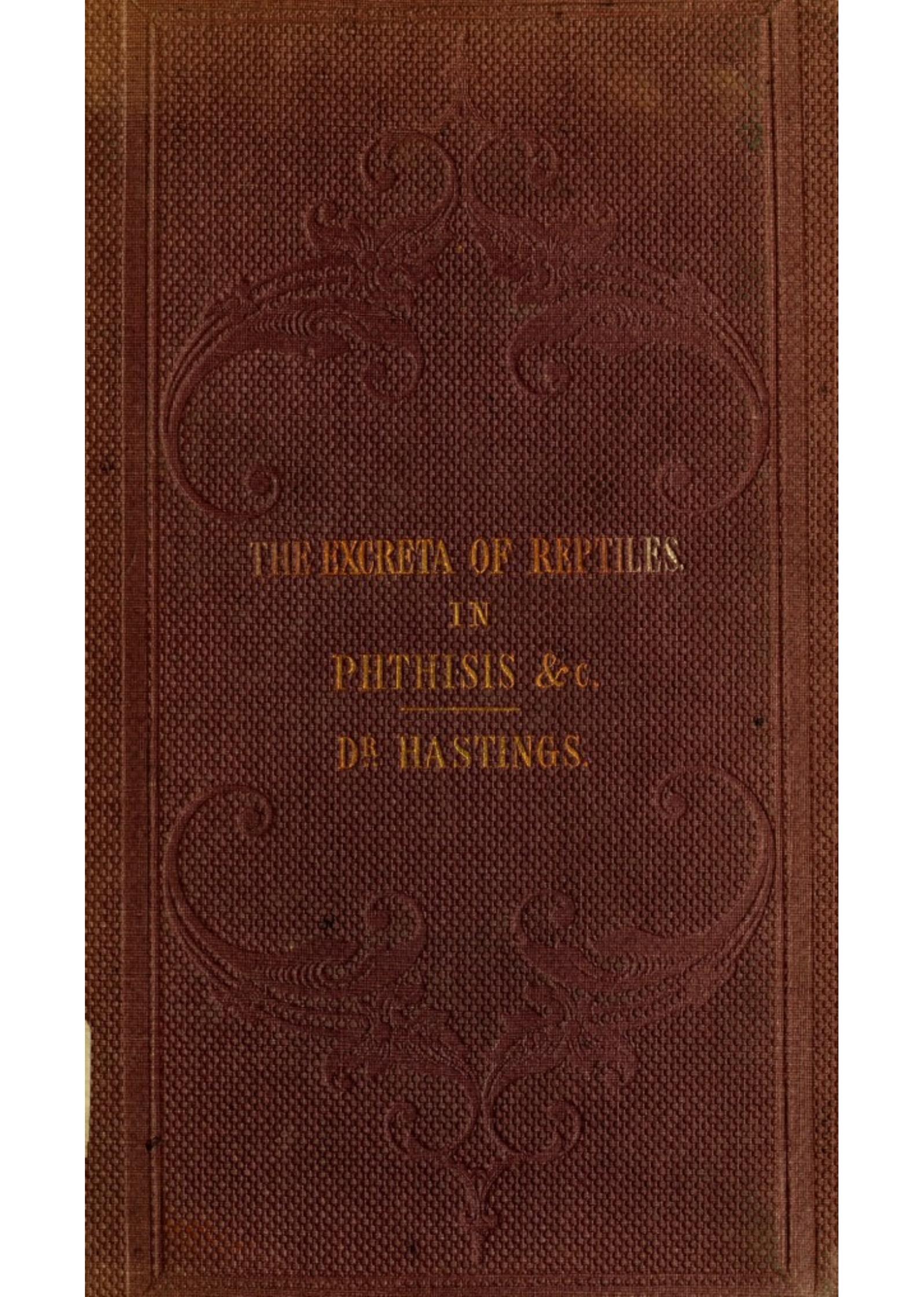
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THE EXCRETA OF REPTILES.

IN

PHTHISIS &c.

DR. HASTINGS.

160
cf

22. Lo. 1

63 Tremont Street, cor. of Beacon, Boston.

APOTHECARY,

(GRADUATE IN PHARMACY)

W. R. HIGINBOTHAM,

*Makes water
Sweeten the King of Diamonds
Keep some material on one side to
and all other pieces with "Copper 2 1/2"
the quantity of water - the same amount*

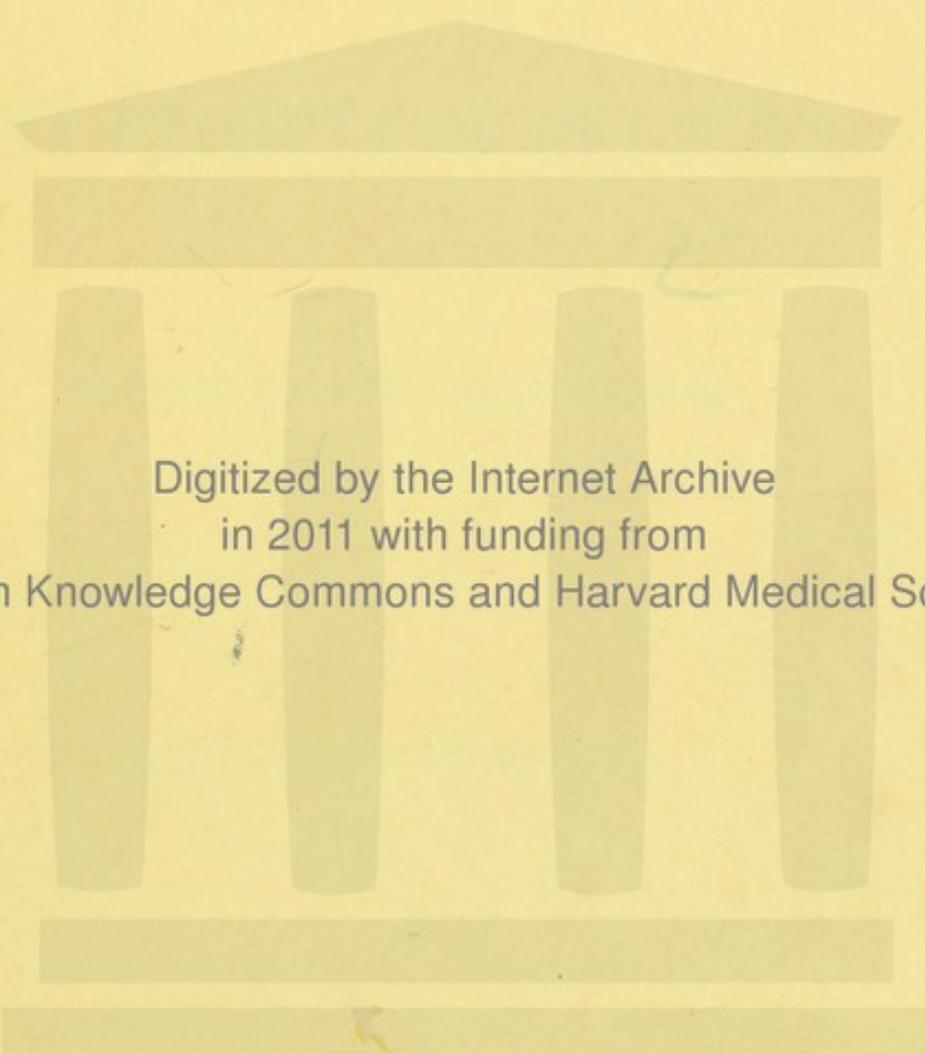
W



old Professor Salmon in his
quarto volume dedicated to King Charks, beat
this Hastings all hollows, — He cured Consumption
and all other Diseases with "Eagles Pills" —
though some materialists now are ready to
swear that ~~the~~ King of Birds never
makes water —

R

C. D. Horner



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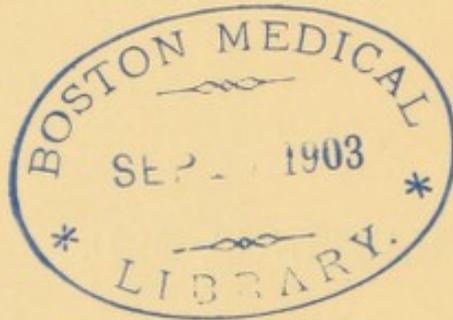
AN INQUIRY
INTO THE MEDICINAL VALUE
OF
THE EXCRETA OF REPTILES,
IN
PHTHISIS AND SOME OTHER DISEASES.

BY
JOHN HASTINGS, M.D.

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ERRATUM.

PAGE 81.—For the heading of Chapter IV., read—"Scrofula, Chronic Eczema, Acne Rosacea, Acne Punctata, and Herpes Zona."

PREFACE.

It was my intention not to have published this little volume until I had completed my investigation into the nature of the agents now, for the first time, brought under the notice of the profession. I was desirous no less of speaking with greater authority as to their ultimate effects in those diseases in which they had been tried, than of giving an account of their action in certain maladies, and more especially in cancer, upon which their power has not yet been tested. Nor was I unmindful how, on a previous occasion, it was made a subject of reproach to me, that I had prematurely published the results of certain expe-

riments, without waiting to ascertain whether those results were temporary or permanent. But I have been compelled to deviate from the course I had hoped to follow out by circumstances to which I will briefly allude.

The brother of a patient of mine, to whom I had given a solution of one of these new agents, misled by the analysis of a chemist who had failed to detect in the solution anything but "a little lime," brought a charge against me, before the College of Physicians, of having administered to his brother simple water as a pretended new remedy. The Censors, who were compelled by law to inquire into the complaint, were so convinced of the groundless nature of the charge that they unanimously acquitted me, without proceeding to the examination of my witnesses; but the course of the inquiry led to an explanation by me of the nature of the new remedies I was experimenting with, and my mode of using them. It will, therefore, be obvious that, as the action of these agents is so instantaneous

in allaying pain and irritation, I had no alternative but at once to give to the profession the results at which I had already arrived.

It has been suggested that the peculiar character of these agents may possibly prove a bar to their employment for medicinal purposes. Now, without pausing to observe how improbable it appears, that a patient labouring under such a disease as phthisis or asthma would object to the administration of any medicine, however nauseous, which afforded him a prospect of relief or cure, such an objection is, I believe, sufficiently answered by the statement that all the solutions of the excreta which I have hitherto employed are tasteless, colourless, and without odour. Moreover, I may remind my medical brethren that in our pharmacopœia there already exist remedies which I can scarcely think are less offensive in the source from which they are obtained than those to which I now invite attention.

It may be useful to add that these new agents may chiefly be procured from the Zoo-

logical Gardens of London, Edinburgh, Leeds, Paris, and other large towns. They may also be obtained from the dealers in reptiles, two of whom—Jamrach and Rice—reside in Rattcliffe-highway, whilst two or three others are to be found in Liverpool.

ALBEMARLE STREET,

February, 1862.

INTRODUCTION.



IN the summer of 1854 I published a small volume on the special treatment of phthisis and hooping-cough, in which I gave an account of the medicinal value of five hundred and forty-eight different agents employed by me in the local treatment of hooping-cough, and embodied the results of an inquiry which had been carried on through a period of several years. Since the date of that publication I have unceasingly pursued the inquiry, until I had, as I believed, completely exhausted every substance within my reach which the vegetable and mineral kingdom afforded. The conviction was at length forced upon me, from what I had observed of the occasional effects of some of these agents in rapidly curing this disease, that there existed among the unexplored products

of nature remedies more powerful than those we possessed for removing this and other diseases with which the human race were afflicted, and I resolved not to relinquish the inquiry so long as new agents remained for investigation.

The grand scheme of the Creation which the Almighty has developed, and in which man plays so important a part, could not, I conceived, from all we see around us, involve his premature decay from specific diseases which do not admit of cure. A century ago the ravages of the small-pox were regarded with much the same feeling as cancer is at the present day, but, at length, the searching powers of man brought to light a preventive against that loathsome disorder; and I firmly believe that a diligent and patient investigation will show that every specific disease which afflicts mankind can be rendered amenable to the remedies which the bounty of nature has supplied.

To the physician the Almighty has said, as He has said to all, "Seek, and ye shall find;" but the history of medical science only too faithfully testifies how unwillingly the physician has answered to the summons. It is not my purpose to speculate upon the causes of this inert-

ness, but it not improbably arises from the training to which he is subjected whilst he is preparing himself for the practice of his profession. Compare for a moment the physician of the present day with the engineer. With the latter, to recognise a difficulty is to leave no stone unturned—no means untried—to surmount it, and the engineering triumphs of our countrymen faithfully record how all but invariably their efforts are crowned with success. Can we say as much for the physician? Is it not notorious that, with the scanty amount of knowledge he has acquired at the hospital and medical school, he is too frequently content to pass through life unshaken, and, it may sometimes be, unwilling to be shaken in the faith that certain diseases are incurable, and, strong in that faith, making no single effort at discovery. It must have often struck the minds of medical men how few amongst the specific diseases admit of cure, and how lamentably deficient we are in curative agents; and, when such a thought has occurred, it must surely engender a feeling of wonder, not unmixed with humiliation, that in the middle of the nineteenth century there should yet remain for

investigation substances likely, in however remote a degree, to be useful in medicine. When we have taught the student that bark is a specific for ague, colchicum for gout, and mercury for syphilis, we are driven to confess that this class of remedies is exhausted. Indeed, so uncertain and unsettled is the treatment of the vast mass of diseases to which the human body is exposed, that legitimate medicine has not sufficient authority in itself to crush any of those heretical doctrines, such as homœopathy, &c., which from time to time have been brought under public notice. Nor in truth, as our experience of human nature teaches us, can it well be otherwise so long as the successful treatment of disease remains—as it does in too many instances—a matter of uncertainty. The farther we advance in our discovery of agents which act as specific remedies in the treatment of disease, the greater will be our authority in repelling those heresies which have invaded the domain of legitimate medicine.

Impressed with these ideas, which I have never lost sight of during my professional career, I passed, as I have stated, from the vegetable and mineral kingdom to the exploration of animal

substances, and endeavoured to ascertain if in this field any agents had been overlooked which seemed worthy of investigation. Although our pharmacopœa is crowded with medicines derived from the vegetable and mineral world, with those obtained from animals it is but scantily furnished, and, if we except the blistering fly, it may be safely asserted that medical science would suffer no great loss, were these last all swept away. It occurred to me—and if the idea is not a new one I am at a loss to imagine why it has not been worked out before now—that here there was an unexplored and interesting field for inquiry.

It would be foreign to my purpose to detail here the various animals I put in requisition in the course of this investigation, or the animal products I examined during a prolonged inquiry. It is enough to state that I found in the excreta of reptiles agents of great medicinal value in numerous diseases where much help was needed. Although not wholly unprepared for some useful results, I must confess to a feeling of profound astonishment that these secrets of nature should have remained so long hidden from man, although they were at all

times before his eyes, and always within his reach. My earliest trials were made with the excreta of the boa constrictor, which I employed in the first instance dissolved simply in water. A gallon of water will not dissolve two grains, and yet, strange as the statement may appear, half a teaspoonful of this solution rubbed over the chest of a consumptive patient will give instantaneous relief to his breathing. I have, to some extent, investigated the properties of the excreta from the following reptiles :—

Chilabothrus inornatus—(yellow snake of Jamaica).

Naja haje—(African cobra).

Coryphodon blumenbachii—(Indian rat snake).

Hoplocephalus superbis—(yellow bellied Australian snake).

Tropidonotus viperinus—(viperine snake, North Africa).

Pseudechis porphyriacus—(black Australian viper).

Coluber guttatus—(corn snake, North America).

Tropidonotus quincunciatus—(common river snake of India).

Cenchrus piscivorus—(the water viper, North America).

LIZARDS.

Monitor niloticus—(warning lizard of the Nile).

Trachydosaurus rugosus—(stump tail lizard, Australia).

Cyclodus gigas—(Australian lizard).

Lacerta ocellata—(the eyed lizard, Portugal).

Chameleo vulgaris—(common chameleon).

TORTOISES.

Testudo Indica—(the Indian tortoise).

Cistudo blandingii—(the box tortoise).

Although some of these are more powerful in one class of diseases than they are in others, all of them possess great medicinal virtues and are extremely useful in phthisis, and their beneficial action I have found to result from singularly small doses. The excreta of the boa constrictor is the only substance of this nature which has, I believe, undergone chemical investigation. It is an impure urate of ammonia, and, in fact, is the chief source from which that chemical body is obtained. Urate of ammonia is unknown in medicine, although some few years ago I employed it experimentally as a local agent in the treatment of hooping-cough, but with no beneficial results. I believe the excreta of all reptiles contain a considerable quantity of the urate of ammonia, with the addition of some other animal matter which has not yet been separated from it; and, I have reason to believe, from the varying powers of the different specimens I have hitherto employed in medicine, that this animal matter differs in a greater or less degree, both in quantity and quality, according to the characteristics of the animal by which it has been excreted. The quantity of this substance which

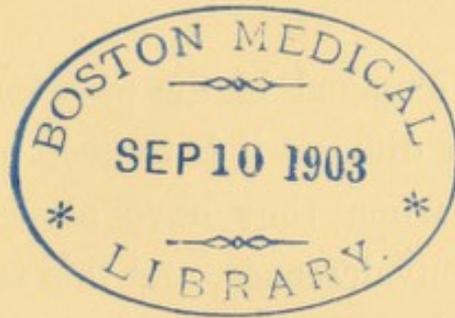
water dissolves is so exceedingly small, that I was desirous of finding some more efficient solvent, with the object of concentrating the dose of these agents, without, at the same time, impairing their medicinal qualities. For this purpose I tried, in succession, rectified spirits, solution of ammonia, and a saturated solution of pure oxalid acid, but in each instance without success. I found that the substance was soluble in a solution of caustic potash, but on the addition of water the animal matter was rapidly precipitated. I also dissolved it in nitric acid, but, by the combination of the substance with the acid, nitrous acid was evolved, and the remedial powers of the agent appeared to me to be weakened. It is insoluble in solutions of the chloride of lime and sulphate of ammonia, and very slightly soluble in solutions of the bromide and iodide of potash, and in glycerine. I was, at length, brought to the conviction that bromine answered my purpose better than any other solvent I could find, more particularly as I was unable to detect that it impaired the efficacy of the medicine in any marked degree. In many of the cases I

prepared the new agent of the following strength:—

℞. Excretor. gr. viij.
 Aq. Dest. ʒj.
 Bromine gutt. xx.
 Aq. Dest. ʒviiij. ℥.

I usually prescribed of this mixture a teaspoonful to a tablespoonful three times a day. I may add that I generally used the same strength when I was desirous of employing the agent externally. Notwithstanding my experiments with the solvents, I did not altogether neglect the watery solution, more particularly in phthisis; and, indeed, I have often found it difficult to decide which of the solutions was the most valuable in the treatment of that disease. If, as I believe it will be admitted, the uric acid in the excreta undergoes some change on the addition of the bromine, there must be in this new agent something independent of the urate of ammonia which produces the effects detailed in the following pages. But a still stronger argument in support of this theory is derived from the fact that I have lately employed the urate of ammonia in several cases of phthisis and asthma, and, as I shall show, without success. The urate of ammonia,

which was, as I have every reason to believe, chemically pure, was prepared for me by a well known pharmaceutical chemist in this country—Mr. Morson, of London. In three cases of phthisis I employed it both externally and internally at the same time. In two out of the three the patients were made considerably worse on the third day of its use, whilst in the third—a little girl of eleven years of age—the unfavourable symptoms, after an apparent improvement which lasted for a week, rapidly returned under its continued employment. I then substituted for this treatment an external application of the excreta of the boa constrictor, and the three patients quickly recovered their lost ground. My employment of the pure urate of ammonia was attended with the same unsatisfactory results in asthma. In every case it caused the respiration to be more difficult and made the cough harder, and I was, consequently, compelled to discontinue its use. I may add that the urate of ammonia is about as insoluble as the excreta of reptiles, and that in all my trials I employed a watery solution of it which was not stronger than the 200th part of a grain to a tablespoonful of water.



CHAPTER I.

PHTHISIS.

IN this disease I commenced my experiments with the excreta of reptiles, beginning, as I have stated, with the boa constrictor. I have employed on consumptive patients all the other species previously enumerated, and, without exception, they manifest an extraordinary power over the disease. I do not, of course, pretend to state that when large cavities have destroyed a considerable portion of the spongy tissue of the lung, when the patient is wasted almost to a skeleton, and when every organ of the body is more or less impaired, the new agent will restore such a person to health. But I entertain a strong conviction that, if the disease is attacked at a reasonably early stage, it will certainly be arrested, and I believe that, in many cases, an apparent cure will be realised.

Everyone engaged in the practice of medicine knows how difficult it is to keep patients under treatment when they have almost reached a state of convalescence, and this remark I have found applies more particularly to those who are suffering from the disease under consideration. The disappearance of night perspirations, cough, and expectoration, the return of appetite, and strength, and the freedom of breathing, induce the only too credulous patient to believe that the disease has succumbed to the physician's art. Confident in his cure, he eagerly escapes from the trammels of treatment only to discover that his over-hasty confidence has enabled the disease to recruit its strength, and to marshal the old symptoms in an array as formidable as ever. I may refer to a case in point of a lady (still under my care) who has abandoned this medicine three times within the last few months under the belief that she was well. My employment of these agents was, in the first instance, confined to their external application only, and it is difficult, without the evidence of one's own senses, to credit the amount of relief experienced by the patient when the walls of the chest have been rubbed

with the solution. In early cases I have generally found it sufficient to apply the agent to the diseased surface three times a day for a period of five minutes at a time, but in very advanced and hopeless cases it may be used as frequently as the patient desires, as, from the relief it affords, a repetition of the rubbing is frequently requested. Whether the agent acts primarily on the nerves of the skin, and through them upon the absorbents or capillaries, or whether these circulatory systems are themselves immediately affected without the intervention of nervous agency, are questions difficult to answer, but I have ascertained, beyond a doubt, that an external application to the chest, besides relieving the breathing, lessens the cough and expectoration, and improves the general health. In fact, I do not hesitate to assert, although the statement may seem a bold one, that I have seen two or three cases of phthisis apparently cured by this external treatment aided only by citrate of iron.

But when the external treatment is combined with the administration of the agent internally the effects are more striking, because they are generally more rapid. In the majority

of the cases treated both externally and internally with the new agent the cough and expectoration are soon observed to lessen, the breathing becomes more free, the night perspirations disappear, sleep becomes good, and the appetite, if previously defective, returns in its full vigour, whilst the physical indications show the same progressive amendment. At the same time, although this is the ordinary progress of phthisical patients under the treatment, I am free to admit that I have now and then met with cases in which the agent appeared unable to benefit the patient in the slightest degree. Such cases, however, have been by no means common. I have also met with other patients who experienced greater relief from the external treatment in combination with the use of iron, than from the combined use of the agents both externally and internally. It is worthy of remark that, in several cases where cavities healed up under the treatment, they invariably became dry, as the first step towards their filling up. In two cases of this kind occurring in females, the catamenia reappeared after it had ceased—in the one instance for several months, and in the other for more than a year.

The only untoward symptoms I have known to follow the use of the new agents have been, in some few cases, headache and nausea, which, in two instances, ended in vomiting, whilst diarrhœa is an accident of more frequent occurrence. These unfavourable symptoms, however, disappeared as soon as the medicine was withheld. I have at this moment under my care a patient in a very far advanced stage, whom I was anxious to treat internally with this new remedy. With this object I have made three attempts, at distinct intervals, to get this medicine tolerated internally. I purposely employed a very small dose (the last time only the 500th part of a grain), and gave it only once a day, but on each occasion of its administration it invariably produced diarrhœa. In another case the employment of the excreta of serpents invariably brought on headache, whilst the administration of the excreta of lizards was borne with impunity. The question will, in all probability, be asked, are the tubercles in these cases resolved, or does the relief depend upon the mere removal of the congestion of the lung tissue, by which they are surrounded, only to reappear as soon as the treat-

ment is withheld. My experience in these agents does not permit me to answer this question satisfactorily, and it was in the hope of being able to do so that I was desirous of withholding the publication of this volume until I had accumulated sufficient data to authorise me in giving a positive answer to the question above suggested. I trust, however, that I have here stated enough to insure a further and more complete investigation of the subject, and to produce the belief that, if only a portion of my convictions are established, legitimate medicine has made a great stride in the right direction.

The following cases are selected from my note book as affording a fair sample of the stages of phthisis in which this new class of remedies appears to be beneficial. By the side of the successful and more interesting cases I have, purposely, placed those in which the disease had made considerable progress and the remedies exerted but a palliative influence, because I do not wish it to go forth that I have met with unvarying success in this new plan of treatment. I only seek to prove that the excreta are the most powerful auxiliaries in resisting the ravages of consumption that we have yet discovered.

CASE I.

Tubercular deposit in the left lung—Apparent recovery.

Mr. P——, ætat. 28 years, a musician and a temperate man, lost his father from consumption. He first consulted me on Sept. 20th, 1861, for a troublesome cough, which he had laboured under for some months, attended with a little frothy expectoration. He had lately become thinner, and suffered from occasional night perspirations; his appetite had diminished, and his bowels were either constipated, or he suffered from diarrhœa. His chest, on examination, was slightly defective in expansion on the left side, where some dulness existed on percussion, and sibilant and sonorous râles were heard immediately below the left clavicle. I prescribed the 200th part of a grain of the excreta of the monitor niloticus (warning lizard of the Nile) in a tablespoonful of water, to be taken three times a day, and directed an external application of the same solution to the diseased side. He was much better at the end of a week, and after a further week's treatment I lost sight of him in consequence of his

believing himself cured. On the 8th of Nov. he again applied to me for assistance, as he was suffering from a return of the cough, and I at once put him under the same course of treatment which had proved beneficial to him before. When I examined his chest on the 29th of Dec. I could detect no sign of disease in the lungs.

CASE II.

*Tuberculous disease of the left lung—Severe hæmoptysis—
Arrest of the disease.*

The Rev. C. Q——, ætat. 29 years, born of healthy parents, consulted me in January, 1861, in consequence of his suffering from cough and expectoration, attended with night perspirations and wasting. He informed me that he had had a slight attack of hæmoptysis about a fortnight before seeing me. I found, on examining his chest, that the right side expanded much more freely than the left. Both before and behind, the superior portion of the chest was dull, and over the same region the respiratory murmur was accompanied with moist sounds, whilst the voice and cough were bronchophonic.

The other side of the chest was healthy. During the first fourteen days he was under my care he had several severe attacks of hæmoptysis (losing from two to eight or ten ounces at a time) which were, to a considerable extent, checked by gallic acid, lead, and opium, &c., although they did not finally yield to treatment, until I had applied to the walls of the left chest a lotion composed of the excreta of the boa constrictor of the strength of the ninety-sixth part of a grain to half an ounce of water. I commenced treating him with this in the early part of February, and finding that he manifestly improved I directed him to take a teaspoonful of the same mixture internally three times a day, and subsequently increased the dose to a dessertspoonful. Under this treatment his amendment made rapid progress, until the month of May, when I prescribed for him a solution of the excreta of the monitor niloticus (warning lizard of the Nile) of the strength of the 200th part of a grain in two teaspoonfuls of water three times a day, and directed him to use the same mixture externally. On the 8th of October the patient weighed, within two or three pounds, as much as he ever did in his life;

his appetite was good ; his cough had left him for several months ; and he could walk eight or ten miles with ease. The physical signs also had undergone great improvement. At the back of the lung a healthy breath sound now occupied the place of the subcrepitating râle which I had heard on his first visit to me, whilst, anteriorly, about the clavicular region, the moist sound had disappeared, though below this I still heard, here and there, a mucous râle. Both before and behind, the dulness had sensibly diminished. On the 12th of November, and again on the 25th of the same month, he wrote to me from the country, that he was daily growing stronger and better, and the only change he had made in the treatment was to have his chest rubbed twice instead of three times a-day. On the 8th of January, 1862, he called upon me and informed me that he had taken cold about three weeks before, at Southampton, and since then had felt a weight and uneasiness about the anterior part of the left chest, although he had no cough. On examining his chest I found that the posterior part was in a healthy condition, but in front the respiratory murmur was generally harsh,

and percussion appeared to me to yield a duller sound than it had done when I last saw him. I prescribed for him the 200th part of a grain of the excreta of the boa constrictor in a table-spoonful of water three times a day, and also directed his chest to be rubbed three times a day with the same mixture.

CASE III.

Cavity in left lung—Cavity healed—Great improvement.

Miss M——, ætat. 28 years, born of healthy parents, had, however, lost a sister from consumption. She first consulted me more than two years ago, as she was then suffering from a severe cough, attended with considerable expectoration and night perspirations, whilst her appetite was bad, and she had lost flesh. For several months she had been in the habit of taking cod-liver oil, and at first, as she thought, with some benefit, but latterly had been unable to retain it on her stomach. On exploring her chest I detected dulness on the left side, with deficient expansion, and over the same space gurgling râles and pectoriloquy were present.

She was subjected to a variety of treatment, almost entirely external. I prescribed for her, on different occasions, the excreta of the sixteen different reptiles I had investigated, and under their beneficial influence she rapidly improved. The cavity slowly healed, whilst the cough and expectoration have, for several months past, been of a very trifling character. Dulness is still perceptible over that part of the left lung where the cavity formerly existed, and there the respiratory murmur has a tubular character. The breathing also soon becomes hurried on ascending a staircase, but her appetite is good, though not for animal food.

CASE IV.

*Tubercular deposit in left lung—Treated externally—
Apparent recovery.*

Mrs. S——, ætat. 30 years, the wife of an hotel-keeper, first consulted me early in October, 1861. She had lost her father from consumption, and had been annoyed for the past three months by a troublesome cough, which had latterly been attended

with expectoration, occasionally streaked with blood. She also suffered from night sweats, had lost considerably in flesh, and her appetite was defective. On examining the chest I found a slight deficiency of expansion, as well as dullness of the upper part of the left chest, where the respiratory murmur was harsh, and subcrepitating râles were audible. I prescribed for her a gallic acid mixture, and the external application three times a day to the left side of the chest of a lotion composed of the 200th part of a grain of the excreta of the boa-constrictor, dissolved in half an ounce of water. She was much improved after a week's treatment, and spoke warmly of the relief which she had experienced from the rubbing in of the lotion on the skin. I then ordered her to take a tablespoonful of the lotion three times a day, and at the same time to persevere with its local application. When I saw her at the expiration of another week she was not so well, and complained of headache, nausea, and slight increase of cough; and, as these symptoms still continued to manifest themselves, after another week's perseverance with the internal treatment I ordered it to be suspended, and pre-

scribed five grains of the citrate of iron twice a day, at the same time continuing the use of the lotion. When I last saw her on the 10th of December, 1861, she scarcely retained a vestige of her cough, expansion of the chest had become equal on both sides, there was no longer any dulness, and the character of the respiratory murmur scarcely differed from that of breath. Although she continued thin she was in every way well, and had laid aside the citrate of iron for the last fortnight, without, however, discontinuing the use of the lotion.

CASE V.

Cavity in right lung—Apparent recovery—External treatment chiefly.

Miss T——, ætat. 36 years, was born of a consumptive family, having lost her father and a sister from phthisis. She first consulted me more than two years ago in consequence of a cough which she had been troubled with for the previous six months, and also for a hoarseness of a few weeks' standing. On examining her chest, expansion was deficient at the upper part of the right side, where auscultation and

percussion gave the ordinary signs of tubercular excavation, dulness, gurgling râles, and pectoriloquy, and she complained of occasional pain at the same spot. The expectoration was of a greenish yellow colour, occasionally streaked with blood. She suffered from night perspirations, and her appetite was impaired. I gave her a lotion composed of the excreta of the cobra, and prescribed cod liver oil, and a mixture chiefly containing pyroxilie spirit. Under this plan of treatment she continued for several months slowly to improve. She was then induced by one of her medical relatives, to consult another physician in town, who prescribed cod liver oil, a mixture containing citrate of iron, and a liniment of croton oil to be rubbed over the seat of the cavity. She continued under this treatment for about two months, at the end of which period she had retrograded considerably, the cough and expectoration having become very troublesome, and her breathing more hurried. She then perceived she was rapidly losing all the advantage she had previously derived from her former treatment, and this determined her at once to place herself again under my care. On this

occasion I again treated her externally, only substituting the excreta of the warning lizard of the Nile for that of the cobra, whilst the internal treatment was occasionally discontinued, at times for a month or two. I prescribed for her, in succession, cod liver oil, a mixture containing gallic acid and the chloride of strontian, but for the last eight months she has discontinued the use of internal medicine. She rapidly improved, and on examining her chest in August last, the expansion of its walls was equal, whilst percussion did not elicit any difference of sound between the two sides, and all the unhealthy sounds which had previously occupied the top of the right lung had disappeared. She had scarcely any cough or expectoration; her appetite was good, and she slept well. In a letter I received from her, dated November the 30th, she informed me that her cough and expectoration had entirely ceased, and that the only thing she had to complain of was a slight hoarseness.

CASE VI.

Cavity in right lung—Nearly closed.

Maria M——, ætat. 26 years, one of my gratuitous patients in the spring of last year, was born of a consumptive family, having lost both her parents from phthisis. She had previously, for several months, laboured under cough and expectoration, accompanied with night perspirations; had wasted considerably, and her appetite was bad. The menstrual secretion, scanty for several periods, had been altogether absent for the last two months, and her breathing was short and difficult. On examining her chest I found unmistakable signs of the existence of a cavity situated in the upper part of the right lung. I prescribed a solution of the excreta of the boa-constrictor, containing the 200th part of a grain in a table-spoonful of water, to be taken three times a day, and the same mixture to be used as a solution over the seat of the disease thrice daily. Considerable headache having followed the use of this medicine, even after the dose was considerably diminished, I put her under the influence of the excreta of the cobra of the same

strength. Under this latter treatment she greatly improved, and continued its use until July, by which time the function of the uterus was restored, the cavity had nearly filled up, and the cough and expectoration had disappeared. In October, in consequence of a slight return of cough and expectoration, she applied to me again; I prescribed the excreta of the cobra, as before, but, as its usual beneficial action had not manifested itself at the end of a week, I determined to have recourse to the *coryphodon blumenbachii* (Indian rat snake), under the use of which she soon improved. On the 6th of January of the present year she told me that, finding herself so well, she had been induced to get married about three weeks previously; she still coughs and expectorates a little, but her appetite is good, and she feels strong.

CASE VII.

Cavity in right lung—Restoration of the uterine function—Very marked improvement.

Miss V——, ætat. 30, assistant to a dressmaker in Regent-street, was born of a consumptive family, and first consulted me on the 11th of March, 1861. She had then, for the past two

years, laboured under a cough, which was attended with considerable expectoration, occasionally streaked with blood. She was also much reduced in flesh and strength, and the catamenia had been absent for seven months. Part of her duties consisted in waiting upon ladies to try on their dresses, and this she found very distressing, from the difficulty of breathing which the exertion entailed upon her. Her appetite was bad, and she was frequently troubled with diarrhœa. On examining her chest, the right side was deficient in expansion, where dulness as well as gurgling râles and pectoriloquy existed. The left lung was healthy. I gave her the following mixture, of which she took a table-spoonful three times a day, the same to be applied as a lotion to the walls of the thorax.

℞. Excretorum boa constrict. gr. j.
 Aq. Dest. ʒj.
 Bromine gutt. iii. ℥

On the 15th of March the pulmonary symptoms as well as the appetite had improved, but as she complained of severe headache which, from its growing more intense after each additional dose, she attributed to the medicine, I directed

her to substitute for the future a dessert-spoonful of the mixture for a tablespoonful. On the 20th of March she was in every way better, though the headache, in a much less degree, was still a subject of complaint. I therefore directed her to take only a teaspoonful of the medicine twice daily. On the 13th of April her improvement was yet more marked, but, as the headache had not quite disappeared, I gave her the 200th part of a grain of the excreta of the *chilabothrus inornatus* (the yellow snake of Jamaica) dissolved in a tablespoonful of water. On the 17th of April the headache had altogether left her, and menstruation had returned, whilst the cough and expectoration had almost disappeared. On the 4th of July the cough and expectoration had been absent for six weeks past; the uterine function was regularly and fully established; where the cavity had existed, a respiratory murmur of a tubular character now occupied its place, and but slight dulness and depression were perceptible over the same space. She could attend to her duties with comfort, and said that she never remembered being so well in her life.

CASE VIII.

Cavity in right lung—Frequent relapses from discontinuance of treatment—Great improvement.

Mrs. H——, ætat. 43, an intelligent woman, first consulted me on the 29th of March, 1861, as she was suffering from severe cough and expectoration, night sweats, great difficulty of breathing, and wasting. On examining her chest I found the expansion deficient on the right side, where much dulness existed, together with gurgling râles and pectoriloquy, whilst the left lung appeared to be healthy. I prescribed the 200th part of a grain of the excreta of the boa constrictor, dissolved in a tablespoonful of water, to be taken three times a day, and directed her to apply the same mixture over the surface of the chest. She experienced considerable relief from this treatment in the course of a week, and at the end of April she thought herself so well, in consequence of the cough and expectoration having disappeared, and her strength and freedom of breathing being restored, that, without consulting me, she discontinued the treatment. Towards the end of May, having experienced a renewal of the pulmonary symptoms, she re-

turned to me, and I then gave her the 200th part of a grain of the excreta of the coryphodon blumenbachii (Indian rat snake), dissolved in a tablespoonful of water, and directed her to use the same mixture as a lotion to the walls of the chest. She rapidly improved, and in the course of a month the cavity became dry, the cough and expectoration again disappeared, when she, for the second time without consulting me, discontinued the medicine. In August last, after a month's absence, she paid me another visit, in consequence of her cough having returned, accompanied by expectoration and difficulty of breathing. On this occasion I treated her with a solution of the excreta of the chilabothrus inornatus (yellow snake of Jamaica), under which she speedily improved, for the cough and expectoration rapidly subsided, and her breathing became free. For the third time I lost sight of her until the 6th of November last, on which day, pressed by the old unfavourable symptoms, she again sought for relief. I told her plainly that, unless she allowed me to decide when she might with safety discontinue the treatment, I must decline further attendance on her. I prescribed

the excreta of the *boa constrictor* of the strength of the 200th part of a grain, three times a day, in a tablespoonful of water, and ordered the surface of the chest to be rubbed with the same mixture. Her symptoms quickly again underwent a favourable change, and on the 29th of December she looked better and stronger than she had done at any period whilst she had been under my care. Her appetite was excellent, she slept well, and found herself equal to all her domestic duties. On a careful examination of the chest I found that elevation was deficient at the upper part of the right side, where there was some dulness, and over this spot the respiratory murmur had a tubular character. The voice was bronchophonic, she rarely coughed, and the expectoration was very trifling.

CASE IX.

*Tubercular deposit in left lung—Severe hæmoptysis—
Arrest of the disease.*

Miss R——, ætat. 35 years, a public vocalist, lost both her parents from consumption. She first sent for me more than two years ago, in con-

sequence of a severe attack of hæmoptysis, but she had, for several months previously, been suffering from cough, expectoration, and night perspirations, which had compelled her to relinquish her profession. On examining the chest I found expansion deficient on the left side, where some dulness existed, and subcrepitating râles were heard. While under my care she was, for the second time, seized with a severe attack of hæmoptysis, about six months after the first attack, since which period she has considerably improved in health. On December 17th, 1861, I again examined her chest. There was scarcely any difference in the expansion of the two sides, whilst the dulness on the left side no longer existed, although here and there on the same side I could detect a moist sound. Her cough and expectoration were trifling, the breathing was free, and her strength equal to a walk of three or four miles. This case is interesting, from the fact that I gave her the excreta of every serpent I have yet examined, and they all, without exception, after a few days' use, occasioned headache or sickness, with diarrhœa to such an extent that I was obliged to relinquish their use. From

the excreta of the lizards she experienced no inconvenience. She is now taking the excreta of the *chameleo vulgaris* (common chameleon) with great advantage, and is better than she has been at any one period during the last three years.

CASE X.

Cavity in left lung—Undergoing the process of healing.

Mr. G——, ætat. 28, a photographic artist, lost his father from consumption. His health began to fail in the early part of the summer of 1861, from the combined influences of cough, expectoration, difficulty of breathing, severe night perspirations, and loss of appetite. He was wasting rapidly, and so great was his difficulty of breathing on ascending a staircase, that he absolutely dreaded the time of going to bed. On the 5th of September last he consulted me for the first time. He was a tall man, upwards of six feet in height, and presented an emaciated appearance. On examining his chest, expansion was deficient on the left side, where dulness, gurgling râles, and pectoriloquy

also existed, but the right side of the chest was healthy. I ordered him to take internally the 200th part of a grain of the excreta of the monitor niloticus (warning lizard of the Nile), dissolved in half-an-ounce of water, three times a day, and to apply the same three times a day to the left chest. On the 13th of September he told me that he had experienced immediate relief from the treatment, his appetite had returned, and he was in every way better. On the 8th of November he informed me that he had gained both flesh and strength, and that his cough and expectoration had considerably diminished. When I saw him on the 27th of December he had returned to his employment during the past month. His appearance was then that of a tolerably vigorous man, his cough and expectoration were of rare occurrence, the breathing was free, he could mount a staircase with ease, and walk three or four miles without distress; his appetite was excellent, and he had not suffered from night perspirations for the last two months. I carefully explored his chest, and found that the cavity still existed, but it was dry, and decidedly smaller, consequently no moist sounds or gurgling râles

could be detected. He perseveres with the treatment, both externally and internally, and observes that, when he is without his medicine, he "misses the dose as much as he does a meal."

CASE XI.

Cavity in right lung—Abscess connected with the lower jaw—Restoration of the uterine function—Arrest of the disease.

Miss D——, ætat. 18 years, the daughter of a clergyman, had recently lost her mother from consumption, when she first consulted me, in the beginning of the year 1860. She had then a considerable cavity in the upper part of the right lung, as well as an abscess connected with the lower jaw, discharging from the right cheek. Her general symptoms comprised severe cough and expectoration, difficulty of breathing, night perspirations, hurried pulse, capricious appetite, and an inability to sleep on the right side, whilst the catamenia had ceased for some months. She was one of the earliest cases I treated with these new remedies, and I commenced with an external application of the excreta of the boa constrictor, applied over the

seat of the disease, of the strength of the 200th part of a grain to half an ounce of water. In the course of a fortnight she was so much improved that I gave her the same solution three times a day internally, and from witnessing the good effects of the excreta of the lizard tribe in this disease, I, three months afterwards, prescribed for her the 200th part of a grain of the excreta of the *cyclodus gigas* (Australian lizard) in a tablespoonful of water, and eventually she took a solution of the same strength of the excreta of the *monitor niloticus* (warning lizard of the Nile), which she is still using. She gradually but steadily improved. The cough and expectoration decreased, the cavity became at first dry, and then less evident, and the abscess connected with the jaw sensibly contracted. In April last the catamenia returned, after having disappeared for nearly two years, and they have been present subsequently on several occasions up to the 20th of November, at which period the cough and expectoration had nearly disappeared, her breathing was free, enabling her to take gentle exercise, she slept well on the right side, and the abscess on the cheek had been healed for several months.

The chest was much flattened below the collar bone of the right side, but hardly any dulness was perceptible, and the respiratory murmur was of a tubular character. On the 10th of January, 1862, she called at my house, and presented a most wretched appearance. I then learned that her youngest brother had been recently killed by a railway accident, and that her eldest brother had a very narrow escape at the same time. The shock occasioned by this intelligence had so completely prostrated her that the cough and expectoration had returned, and her appetite had disappeared. On examining her chest I detected a moist sound over the supra-clavicular space, though elsewhere the lungs were healthy. I prescribed a gallic acid mixture, and ordered the external application to be continued.

CASE XII.

*Large cavity in right lung—In process of healing—
Hooping-cough.*

Edward R——, ætat. 6, was brought to my house on the 6th of July, 1861, by the recom-

mendation of a surgeon, who regarded the case as one that was likely soon to have a fatal termination. The patient's mother informed me that, although she and her husband were healthy persons, this boy was the last of four children, all of whom had died from consumption. The child was then labouring under whooping-cough, but he had suffered from a cough, accompanied by expectoration, for many months previously. He was extremely weak and emaciated, and could scarcely totter into the room. On examining his chest, the right side was singularly deficient in expansion and very dull; gurgling râles and pectoriloquy were extensively heard over that side, whilst over the left lung sibilant and sonorous râles were audible. I commenced the treatment by the administration of the 500th part of a grain of the excreta of the naja haje (African cobra), in a dessertspoonful of water, three times a day, and applied the same mixture as a lotion to the walls of his chest. Although he gradually improved, the whooping cough did not leave him before the end of September. On the 11th of October I gave him the 400th part of a grain of the excreta of the boa constrictor, in a dessert-

spoonful of water, three times a day, and also applied the same mixture as a lotion to his chest. This treatment he has steadily persevered with, and on the 7th of January, 1862, he presented the appearance of a healthy, active child, having scarcely any cough or expectoration, and enjoying an excellent appetite. On exploring his chest I found the left side perfectly healthy, whilst the cavity on the right side was dry, and sensibly smaller.

CASE XIII.

Tubercular deposit in left lung—Apparent recovery.

Miss A——, ætat. 26, first consulted me on the 29th of August, 1861. During the last few years she had lost several members of her family from consumption, and had herself, for a period of six months, been troubled with a severe cough, which was at first unattended with expectoration, but was subsequently accompanied by the ejection of a considerable quantity of greenish yellow matter. She complained of severe night perspirations, difficulty of breathing, deficient appetite, and occasionally of

severe pains below the right clavicle, shooting round the back, which she was accustomed to relieve by applying, from time to time, a mustard poultice to the seat of the pain. On examining her chest, expansion was deficient on the upper part of the left side, where also dulness, with sibilant and sonorous râles, existed. I gave her the 200th part of a grain of the excreta of the boa constrictor in half-ounce of water three times a day, and ordered her to apply the same mixture as a lotion to the walls of her chest. On the 23rd of August she told me that she had been relieved, but that, for the last two days, the cough had become more troublesome, and the expectoration streaked with blood. She was deriving great benefit from the external application, as it always removed the pain from the chest, and gave freedom to her breathing; but she said that the medicine, when taken internally, occasioned headache, and sometimes a little nausea. I prescribed a mixture containing gallic acid, and directed her to persevere in the use of the lotion. On the 6th of September she was much better in every way, but was still suffering from a little pain about the chest. On the

30th of September her cough had become rather more troublesome, and I therefore prescribed for her the 200th part of a grain of the excreta of the chameleo vulgaris (common chameleon), in a tablespoonful of water three times a day, and directed her to rub this mixture over her chest. On the 7th of November she was greatly improved, as the cough, expectoration, and pain in the side had almost disappeared, and on the 2nd of December she reported herself well, having lost all symptoms of the pulmonary disorder. On examining her chest, the expansion was equal on both sides; I was unable to detect any dulness, and the sibilant and sonorous râles had disappeared.

CASE XIV.

*Extensive tuberculous deposit in both lungs—Albuminuria—
No benefit from treatment.*

Mr. P——, ætat. 18 years, an undergraduate of the University of Oxford, was brought up from Cornwall on the 11th of July, 1861, and placed under my care in consequence of his labouring under a severe cough, attended by expectoration. He suffered from drenching night perspirations, his appetite had deserted

him, and he was feeble and emaciated: I was also informed that he laboured under disease of the kidneys. On examining his chest expansion was equal, but not free. Percussion elicited a dull sound over all parts of the thorax except the inferior scapular region of the left side, where the respiratory murmur was natural; but over every other part of the chest it was coarse and bronchial, with here and there moist sounds. Nitric acid and heat threw down a considerable deposit in the urine. He remained in town between two and three weeks, during which period my treatment comprised the use—both internal and external—of the excreta of the boa constrictor, the naja haje (African cobra), and the tachydosaurus rugosus (stump tailed lizard of Australia), but, as he derived no benefit from any of them, I recommended that he should at once return to his home in the country, which he accordingly did.

CASE XV.

Cavity in right lung—Tubercular deposit in left—Palliation of the symptoms—Death.

Mrs. B——, ætat. 46 years, born of a consumptive family, consulted me for the first

time about three years ago, for a cough. She paid me two visits, and then went away into the country. At that time dulness and moist sounds were perceptible about the clavicular region of the right side of the chest. I did not see her again until I was requested to visit her in the country, on the 30th of October, 1861. She then complained of severe cough and great expectoration, was very weak and emaciated, and quite unable to rise from the sofa or bed. On examining her chest, gurgling râles were heard over a large portion of the right lung, and moist sounds in the upper part of the left. I prescribed the 200th part of a grain of the excreta of the boa constrictor in a tablespoonful of water, to be rubbed over the chest three times a day. She derived so much comfort from this mixture that she had it frequently applied. I was induced, as it afforded her so much relief externally, to try it internally, and gave her a teaspoonful three times a day. Her friends, however, imagined that it gave rise to sickness, and it was, therefore, discontinued after the second dose, but the lotion was persevered with, as I was informed, up to within a few hours of her death.

CHAPTER II.



ASTHMA, BRONCHITIS, HOOPING-COUGH, AND CATARRH.

USEFUL as I have found the excreta of serpents in phthisis, the same agents not unfrequently fail to be beneficial in the diseases mentioned at the head of this chapter. In many cases, however, these remedies have been employed with great advantage, and among them I may especially instance the excreta from the cobra as being of the greatest use, although it cannot be relied on with certainty. Indeed, I have sometimes seen a solution of this agent cause mischief by increasing the disease. Hence in this class of disorders I have placed my chief dependence on the excreta of the tortoise and lizard tribe, which bears a general resemblance to that of serpents. Whatever may be the essential difference between the

two, it is clear that both products alike exercise a most beneficial influence either in dissipating or counteracting the effects of tubercles in the lungs. When the excreta of the tortoise or lizard is used medicinally, it must be treated in the same manner as that procured from serpents, either by dissolving it in water alone, or by combining bromine with the solution, and thus causing a greater volume of the excreta to be taken up. I have lately employed this agent in these diseases for the most part externally, and, great as its utility appears to be, its curative powers are considerably increased when it is combined with citric acid. That this effect is produced by the greater absorption of the excreta arising from the irritation caused by the acid on the skin, I cannot venture to assert, but the fact may be ascertained by any one who will use the solution combined, or uncombined, with the acid in both asthma and hooping cough. The solution may be made from the excreta either of the tortoise or the lizard, though I prefer the latter, and of this class give the preference to the chameleon. From half to three quarters of an ounce of pure citric acid should be added to a

pint of the solution, and this lotion must, in cases of asthma and hooping cough, be rubbed over the laryngeal region and upper part of the chest five or six times a day, for at least five minutes at a time, and in bronchitis it must be applied over the seat of the disease. The application, in the great majority of these affections, indeed, in asthma and hooping-cough I may say almost without fail, affords immediate relief. At the same time, care must be taken that too much irritation is not produced on the skin, lest it should become necessary to suspend the use of the lotion. Should such an event occur, the rubbing must be confined to the neighbourhood of the inflamed part, or the application may be persisted in through the medium of a piece of lint moistened with the lotion and applied constantly to the throat, or the same result may be attained by means of spongio-piline. In asthma and bronchitis this lotion must be freely and frequently employed, and it will be found very efficacious in the bronchitis accompanying hooping-cough. Its utility is more marked in the chronic forms of bronchitic disease than in the more acute stages of the complaint.

There is another affection allied to these, which is more or less the torment of every household, namely, the common cold in the head. This disorder, if attended to sufficiently early, is checked by rubbing a little of the lotion over the root of the nose, eyebrow, and upper part of the throat, until the complaint has disappeared.

I believe asthma to be essentially a disease of the nerves of the air passages leading to the lungs, produced by irritation of some kind or other affecting the laryngeal nerves which supply the mucous membrane lining the larger tubes, and which irritation is frequently set up by congestion and subsequent inflammation of the membrane arising from ordinary catarrh. If, therefore, this state of inflammation is allowed to continue, which it frequently is through the disregard of the practitioner, who rarely examines the region of the throat with a stethoscope, and scarcely ever discovers that the distressing cough and difficulty of breathing he is called upon to treat have their origin, not as he imagines, in the smaller bronchial tubes, but in these passages, unless his attention is arrested by hoarseness, arising

from a turgid state of the membrane covering the vocal chords. Now many cases of asthma are unattended with hoarseness, because a patch of sluggish inflammation exists *below* the vocal chords, and there it is allowed to remain, causing incessant irritation till it gives rise to spasm of the muscular fibres of the bronchial tubes. When this condition is once thoroughly established it is difficult to cure, and I believe that in some cases, even after the exciting cause has been removed, there yet remains so great a disposition for the renewal of the spasm, that but a very slight matter—indeed, a much slighter one than what originally developed the disease—is required for its reproduction. If this view of asthma be correct, it will to some extent explain the various and singular causes which different authors, who have written on asthma, have suggested as occasioning this disease.

Asthma, although not unfrequently associated with bronchitis, is more commonly accompanied by laryngitis, which, though a fertile source of asthma, would never terminate in this disease if treated with sufficient promptitude and such local remedies as I have

indicated. I have repeatedly seen very intelligent medical men treating cases of this kind as bronchitis, when the latter disease did not exist. The chest of a patient labouring under asthma frequently gives forth, at its upper part, sonorous and sibilant râles, indicative of bronchitis, but which are no more than simply conveyed sounds from the larynx and trachea, and their true character may be detected by tracking them to their source, where they are heard in the greatest intensity.

Whatever treatment relieves or removes the irritation of which I have spoken will be found to relieve or cure the asthma. Numerous and various as are the remedies which, with more or less success, have been employed to attain this object, none, in my opinion, will be found attended with such beneficial results as the external treatment with a solution of the excreta of the lizards of which I have already spoken, combined with the local application of remedies of a caustic nature to the mucous surface of the larynx and trachea by means of a probang. I may add that I adopt this mode of treatment in all cases of asthma, and for the most part with the greatest advantage.

In whooping-cough I believe that the seat of the disease—so soon as the whooping is established—will be found in the windpipe, and my justification for this belief is the fact that, under purely local treatment, the disease rarely lasts longer than three weeks. In treating this disorder, therefore, as a general rule, I employ the same combined form of treatment, which I have just mentioned, as being useful in asthma. If, however, the patients were carefully kept in the same temperature, so as to guard against further complications with it of bronchitis or other inflammatory affections of the lungs, I feel persuaded that, in most cases, no other treatment would be necessary than the external application of the solution to the throat. When, however, the sufferers are taken out of doors, either with the view of visiting their medical attendant or for other objects, sponging the larynx at once, in my opinion, becomes necessary; and if any serious complications should arise, additional treatment will, of course, be required.

The deaths from whooping-cough registered in the metropolis during the year amount, on

an average, to from 2,500 to 3,000, and in addition to these there are probably as many more victims to the same disorder who, though escaping the fatal effects of the primary disease, eventually succumb to phthisis, to which, no less than to chronic bronchitis and asthma, it not unfrequently leads. This high rate of mortality might, I believe, be considerably reduced if parents could be made sensible of the pernicious consequences of taking their children into the open air during the existence of this disease. I am aware that many people entertain the opinion that change of air is the most valuable part of the treatment, and no doubt it would be very useful could you insure the patients against the effects of sudden changes of temperature. I am convinced that, with the exception of the period when a child is suffering from measles, there is no time when the system is so susceptible of bronchitis and congestion of the lungs as during an attack of hooping-cough ; indeed, mild forms of this disease, which would, without any treatment, run their course to a favourable termination, become from exposure to the external air complicated with bronchitis ; and I have known cases in

which the hooping had all but ceased, and the disease was thoroughly under subjection, when, from some unlucky exposure, congestion of the lungs has reproduced the disease with great violence, and with fatal results. It cannot, I think, be too strongly impressed upon the minds of those who are entrusted with the charge of young children that, while suffering from hooping-cough, the patient should be carefully preserved in the same temperature until the hooping has entirely disappeared, and then—and not till then—change of air may with advantage be resorted to.

CASE I.

Asthma—Apparent cure.

Mrs. M——, ætat. 45 years, the wife of a general in her Majesty's service, had, when she first consulted me on October the 2nd, 1861, been labouring under asthma for several years. She had spent the last two winters in Italy, without much benefit to her health, having, during her residence there, experienced two severe attacks, accompanied by considerable bronchitis, one of which compelled her to keep her bed for three weeks. She told me that she

suffered from cough and difficulty of breathing, attended, in the morning, with expectoration, that she got better during the day, and, after a tolerable night's rest, awoke with a repetition of the same symptoms. On examining her chest expansion was free ; no dulness existed, but sibilant and sonorous râles were audible below both clavicles, and were yet more distinct in the trachea. Her general health was good. I sponged the interior of the windpipe with a weak solution of iodine, which afforded her great relief, and on re-examining the chest the sonorous and sibilant râles had entirely disappeared. I prescribed a lotion composed of the 200th part of a grain of the excreta of the *chameleo vulgaris* (common chameleon) in half an ounce of water, and directed her to rub it into the throat several times a day. This plan was pursued until the 29th of October, though the asthmatic symptoms had subsided after a week's treatment ; the cough and expectoration soon afterwards entirely disappeared, and the patient went into the country for the winter. I heard from this lady in December last that she was in the enjoyment of good health.

CASE II.

Asthma—Apparent cure.

Mrs. P—— first consulted me in July, 1860. This lady resided in Ireland, and had laboured under the disease for about fifteen years. During the winter she confined herself to the house, and was quite unable to mix in society at that season. Her cough was generally troublesome in the morning, and the breathing became of a suffocating character after a paroxysm of the cough, or much exertion. On examining her chest, sonorous and sibilant râles were perceptible at the superior parts of both lungs, increasing in force towards the bifurcation of the bronchi, and arriving at their greatest point of intensity in the trachea. After sponging the windpipe with a weak solution of the nitrate of silver the sounds were no longer audible in the lungs, and in the windpipe their intensity was very much diminished. She expressed herself greatly relieved, and this plan of treatment was followed for about three weeks, in combination with a lotion, composed of the 200th part of a grain of the excreta of the trachydosaurus rugosus (stump tailed lizard

of Australia), in half-an-ounce of water, which was applied to her throat three times a day. During this period she was confined to the house, to obviate the risk of taking cold, and at the expiration of that time, the asthmatic symptoms having disappeared and feeling herself generally better, she returned to her home in Ireland. In July, 1861, she was again in London, and, having taken cold, requested my attendance. I then learned that she had been quite well since she left me in the previous summer, and that her friends had been astonished to find that she was able to take her usual exercise in the open air during the winter without suffering any inconvenience.

CASE III.

Asthma and bronchitis—Apparent cure.

Mrs. G——, ætat. 12 years, the daughter of a clergyman residing in the country, had laboured under frequent attacks of asthma from her childhood, but for several years the disease failed to manifest itself during the summer. In the last four years, however,

the seasons appeared to have no influence over the malady, since she suffered as much in summer as in winter. The cough and difficulty of breathing were most distressing, particularly after a few hours' sleep, and emetics were the only medicine which afforded any relief. She came to London at the end of March, 1861, to be placed under my care. On examining her chest, it expanded equally, and percussion elicited a tolerably clear and equal sound over both sides of the thorax, although sibilant and sonorous râles were audible over the whole chest. I requested that she should be confined to the house during the treatment. I afforded her immediate relief by sponging her windpipe with a weak solution of iodine, at first on every other day, and subsequently less frequently for a period of six weeks, and I also directed a lotion of the excreta of the *chameleo vulgaris* (common chameleon), of the strength of the 200th part of a grain to half-an-ounce of water, to be rubbed over the throat and chest three times a day. After this treatment had been continued for a fortnight, all the symptoms of asthma and bronchitis had disappeared, and before she left town

she had gained both in flesh and strength, and was able to take her rest undisturbed, an event which had not happened to her for a long period. I have heard twice from this young lady's mother since my attendance, and she stated, on both occasions, that her daughter had met with no return of the disease.

CASE IV.

Asthma—Great improvement.

Miss W—— ætat. 17 years, belonged to an asthmatic family, and had laboured under the disease since she was three years old, nor had any of the various modes of treatment to which she had been subjected, succeeded in affording her relief. I was requested to see her in the latter part of December, 1859. On examining the chest sibilant and sonorous râles were heard at the upper part, and became more intense in the trachea, from which spot the sounds appeared to radiate. The attacks of asthma were almost of daily occurrence, coming on early in the morning, at two, three, or four a.m., and during the paroxysm she was

obliged to sit up in bed, being unable to preserve the recumbent position. After coughing and bringing up some frothy mucus for two or three hours, she would feel slight relief, and then enjoyed an hour or two of sleep. During the rest of the day she was enabled to pursue her ordinary avocations, going out if the weather permitted. Her appetite was deficient, but in all other respects she was in tolerable health. After a week's treatment, finding but little improvement, and believing that her habit of going out into the open air kept up the mischief in the windpipe, I proposed that she should confine herself entirely to the house for a month. This was readily assented to, and I sponged her throat alternately with a weak solution of the nitrate of silver and a weak solution of iodine two and three times a week, whilst she used externally a lotion composed, in the first instance, of the excreta of the *cyclodus gigas* (Australian lizard), and afterwards of the *monitor niloticus* (warning lizard of the Nile), both of the strength of the 200th part of a grain, dissolved in half an ounce of water. She rapidly recovered, and at the end of the month the treat-

ment was discontinued, as she was quite free from the disease. This young lady continued in excellent health, and quite free from asthma, until September, 1861, a period of more than eighteen months, when she took cold, and the asthma returned. She again consulted me, and I several times sponged her throat with great advantage, and used a lotion of the excreta of the chameleo vulgaris (common chameleon) in the same manner and of the same strength as before. Although I cannot say she is yet quite well, she is very much better.

CASE V.

Asthma—Apparent cure.

Mrs. —, ætat. 20 years, the wife of an officer in her Majesty's service, first consulted me at Christmas, 1859. She told me that she was born in India, and had resided there for several years, and that her mother and several members of her family had suffered from asthma. She had been labouring under this disease for about nine months, during which period she had rarely been well for more than

two or three weeks at a time, as the attacks succeeded each other in rapid succession. Her breathing was very difficult and distressing, and the cough often ended by inducing vomiting. The chest sounded well on percussion, but sonorous and sibilant râles were heard over its upper parts, though, on tracing these sounds to their source, it was evident that they all emanated from the trachea, for on again examining the chest, after the interior of the windpipe had been sponged with a solution of the nitrate of silver, scarcely a vestige of these sounds could be heard. The sponging was continued for about three weeks, and a lotion composed of the 200th part of a grain of the excreta of the *lacerta ocellata* (the eyed lizard), dissolved in a tablespoonful of water, was applied several times a day to the throat and chest. At the end of this period, all the asthmatic symptoms having disappeared, she discontinued the treatment, and went to Ireland. On the 11th of January, 1862, this lady having returned to London after an absence of two years, sent for me in consequence of the illness of her youngest child. She informed me that, shortly after she left London, she had had a

slight attack of asthma in Ireland, but that she had been perfectly well for nearly two years.

CASE VI.

Asthma—Apparent cure.

Miss T——, ætat. 35 years, born of an asthmatic family, consulted me in June, 1861. She had suffered for several years from this disease, but it rarely attacked her except in the summer. Although her general health was good, she complained of cough and difficulty of breathing, and brought up a considerable quantity of frothy expectoration, chiefly in the morning. I sponged her throat three times a week for a month with a weak solution of the nitrate of silver, and prescribed the 200th part of a grain of the excreta of the testudo Indica (the Indian tortoise), in a tablespoonful of water, to be taken three times a day, and directed her to apply it also as a lotion to the throat, and upper part of the chest. She rapidly improved, and at the end of the month was remarkably well. I lately heard that she had had no return of the asthma.

CASE VII.

Hooping-cough—Cured by external treatment.

F. D——, a healthy child, ætat. 8 months, had a slight cough in November last, and a few days afterwards he was observed to hoop. I was consulted, and ordered him at once to be kept entirely in the nursery. On examining his chest no sound of bronchitis could be detected, and, with the exception of the hooping-cough, he was perfectly well. I prescribed a lotion of the excreta of the chameleo vulgaris (common chameleon), of the strength of the 200th part of a grain to half an ounce of water, and directed his throat and chest to be rubbed with it six times a day. Although this evidently controlled the disease, yet, as he still continued to hoop a little at the end of the week's treatment, a little citric acid was added to the lotion. The disease now rapidly disappeared, and the child was quite well in less than a fortnight. The only medicine taken during that period was a single dose of castor oil.

CASE VIII.

Hooping-cough—Cured by external treatment only.

Mrs. H—— was nurse to the foregoing case, and evidently caught the disease from the child. The same plan of treatment was adopted with her which had been employed in the little boy's case, and her recovery was equally rapid. No internal treatment was used in this instance.

CASE IX.

Hooping-cough—Cured by external treatment.

A female child, 7 months old, had had a troublesome cough for a few days when I was requested to see her, and, from its paroxysmal character, I at once suspected it would turn out to be hooping-cough. On examining the chest I found that no bronchitis existed. Expectorants and other medicines had been given before I was called in, and these were continued, with the addition of a lotion of the excreta of the chameleo vulgaris (common chameleon), of the strength of the 200th part of a grain, and ten

grains of citric acid to half an ounce of water, applied to the throat and upper part of the chest. The violent character of the cough in no degree abated for two or three days, at the end of which time the child hooped several times during the night. I then discontinued the use of the internal medicine, but directed the lotion to be persevered with, and the child quickly recovered in about ten days.

CASE X.

Hooping-cough—Treated externally, and by sponging the windpipe.

Mrs. S—— brought her infant, 5 months old, to my house on Nov. 27th, 1861, labouring under hooping-cough. The child had first been observed to cough about twenty days previously, and had hooped for the past week, and for the last day or two it had not taken the breast well. On examining the chest sonorous and sibilant râles were heard in both lungs. I prescribed a lotion, to be rubbed over the throat and chest every two hours, composed of the 200th part of a grain of the

excreta of the chameleo vulgaris (common chameleon) and ten grains of citric acid in half an ounce of water, and sponged the windpipe with the same lotion. On the 30th of Nov. the child was much better, the hooping having been less frequent and violent, and it now sucked as well as usual. On the 20th of December the child was quite well, having had its windpipe sponged seven times. The mother told me that the child always seemed greatly benefitted by the sponging, and that it scarcely coughed on the day on which it was done.

CASE XI.

Hooping-cough—Treated externally, and by sponging the windpipe.

F. B——, a little boy, ætat. 7 years, was brought to my house on the 18th of December, 1861, labouring under hooping-cough of fourteen days' standing. He complained of great pain on the left side of the chest, the cough was very distressing, and generally ended in sickness, and he brought up a considerable amount of

expectoration. His appetite also was bad, and he presented an emaciated appearance. On examining the chest, sonorous and sibilant râles were audible throughout the left lung, and the heart's action was very hurried. I prescribed a lotion composed of the 200th part of a grain of the excreta of the chameleo vulgaris (common chameleon) and ten grains of citric acid, in half an ounce of water, to be applied to the throat and left side of the chest every two hours, and I also sponged the interior of the windpipe with the same lotion, and in the course of a minute or two afterwards he told his mother that he felt better. On the 21st of December there was marked improvement; he hooped at longer intervals and with less violence, and on the 26th the pain of the side and bronchitis had entirely disappeared, together with the hooping. His appetite was excellent, and the stomach retained its food. On the 1st of January, 1862, his mother told me that he seldom coughed, and, except being thinner, was in excellent health, and she thought he would have been well sooner if his throat could have been sponged oftener, as his cough was always so much

better on the day it was done, but she lived too far from me to bring him more frequently to my house.

CASES XII. AND XIII.

Hooping-cough—Treated externally, and by sponging the windpipe.

Mrs. R——, on the 24th of November, 1861, brought to my house two of her children labouring under hooping-cough. Jane, the eldest, who was 4 years old, had hooped for the last month, and had suffered more or less from cough from her birth. On examining her chest, sonorous and sibilant râles were audible over the entire surface of the thorax. I ordered her chest and throat to be rubbed every two hours with a lotion composed of the 200th part of a grain of the excreta of the chameleo vulgaris (common chameleon) and ten grains of citric acid, in a tablespoonful of water, and sponged the interior of her windpipe with the same lotion. She rapidly improved under this treatment, having been sponged in all four times, and on the 6th of December

her mother was accompanied by her youngest child only, as she considered Jane quite well. This little boy was 14 months old, and on Nov. 24th had suffered from cough during a fortnight, and hooped for two days. The same treatment was applied to him which had been successful in his sister's case; but, when nearly well, in the early part of December, he took cold, and hooping returned with considerable violence. On January 3rd, 1862, the cough had entirely disappeared, and the child was quite well.

CASE XIV.

Hooping-cough—Cured by external treatment only.

Charles S——, ætat. 11 months. The mother of this little boy called upon me on the 25th of November, 1861, and stated that her son began to cough about sixteen days previously; that although the hooping had lasted only four days, yet the paroxysms had become so violent and so frequent (having recurred during the previous night at intervals of every half hour) that she was afraid of bringing him to my

house, lest she should give him cold, and aggravate the disease. She hoped, therefore, that I might be able to relieve him from her description of his case. I ordered the child's throat and chest to be rubbed every two hours with a lotion composed of the 200th part of a grain of the excreta of the chameleo vulgaris (common chameleon) and ten grains of citric acid, in a tablespoonful of water. On the 29th of November the mother reported that the paroxysms of the cough had diminished both in violence and frequency. On the 4th of December she informed me that, notwithstanding all her care, the child had taken cold, and that, although it was not worse, it was certainly not better than it had been the previous week. On the 10th of December, which was the date of her last visit to me, she reported that the hooping had entirely subsided, and that, with the exception of a slight cough, the child was quite well. I recommended her to persevere with the use of the lotion three times a day, and to keep the child within doors until every vestige of the cough had disappeared.

CHAPTER III.

MENORRHAGIA AND LEUCORRHŒA.

THESE disorders are extremely common in every rank of life. They not only weaken and distress the female constitution, but are the source of much mental suffering, and, by their debilitating effects, pave the way for more serious diseases. Leucorrhœa, though frequently yielding to judicious treatment, sometimes defies the management of the most experienced and skilful, whilst the successful treatment of menorrhagia and profuse menstruation is attended with the greatest difficulty and uncertainty. Every medical man has met with cases where the uterine discharge has been both too frequent and too profuse. His patient will mention the names of several eminent physicians whom she has consulted for relief in vain ;

she will tell him how homœopathy and other irregular practice have proved useless, and if she has wandered abroad in search of health, she will narrate how Paris physicians and German waters have alike failed to benefit her, whilst she becomes more and more feeble every month. It is in cases such as these that I have found this new class of remedies, and especially the lizard tribe, to be most valuable. They act upon the disease with singular rapidity, as I have invariably had occasion to observe that the catamenial period, which followed next after the administration of the medicine, was not only defined, but the duration of the discharge was very distinctly abridged. At the same time the general condition of the patient is manifestly improved, and in no great length of time a vigorous feeling of health is experienced. It was in a case of menorrhagia, where leucorrhœa was very troublesome during the intervals between one menstrual period and another, that I discovered the value of these remedies in the latter affection, for the rapid improvement in this disorder was as striking as in the other. The medicine was taken in doses similar to

those employed in phthisis, and administered three times a day.

CASE I.

Menorrhagia—Leucorrhœa—Dyspepsia—Cure.

A lady, ætat. 36 years, had for many years suffered from dyspepsia and hysterics. She had also, for several years following a severe miscarriage, laboured under profuse menstrual discharge, which had gradually increased in frequency, and instead of lasting, as formerly, about four days, now continued for seven or eight, and during the intervals she suffered from severe leucorrhœa. She had consulted several medical men, but without deriving any benefit from their advice; and while residing at Brighton, in 1860, she there consulted an eminent physician, who carried out a plan of local treatment to the os uteri for several months, which she at length abandoned from getting no better. She consulted me in April, 1861, and besides the profuse menstrual discharge and leucorrhœa, she complained of great pain after taking food, accompanied with much

flatulence and palpitation, and pain about the region of the heart. I ascertained that there was no disease of the latter organ, and prescribed small doses of the oxide of silver which afforded her some relief, though chiefly to the dyspeptic symptoms, and I lost sight of her until the latter part of the year. On the 9th of December she consulted me again, and now complained of all her former symptoms, attended by an amount of debility which she had not before experienced. I prescribed the 200th part of a grain of the excreta of the monitor niloticus (warning lizard of the Nile) in a teaspoonful of water. At the end of a week she found herself generally better, with the exception of a head-ache, which with her was unusual, and as I suspected the medicine to be the cause of it, I diminished the dose by one half. At my visit on the 23rd of December, I found that the headache had permanently left her since the diminution of the dose, the leucorrhœa also had almost disappeared, and her general health was much improved. On the 30th of the same month the leucorrhœa had entirely disappeared for the past week, and she was stronger and better in every way. On January 6th, 1862,

she informed me, though she could scarcely believe it, that since my last visit the catamenia had not only made its appearance, but had actually ceased on the third day, and instead of feeling so weak and sinking as formerly, she now felt stronger than she had done for several years, and she was rejoiced, she said, to add that the leucorrhœa had not returned. She also expressed her satisfaction that these results had been obtained by such agreeable medicine. I recommended her, as a precautionary measure, to take the medicine once a day until another catamenial period had passed, and I may add that her digestive powers at the same time underwent great improvement.

CASE II.

Menorrhagia—Leucorrhœa—Cure.

Mrs. C——, a woman of weakly appearance, consulted me on the 22nd of October, 1861. She was the mother of a large family, and had been, about four years previously, the subject of a severe miscarriage, which had occasioned the loss of a considerable quantity of blood.

From that period up to the time of her visiting me she had not only been frequently unwell, but, when the menstrual discharge occurred, it continued for a period of seven to nine days, whilst, previously to the miscarriage, the uterine function was maintained with healthy regularity. She suffered, in addition, from considerable leucorrhœa between the menstrual periods, and this loss had given rise to great weakness, with a sense of bearing down when walking, attended with much weight and pain about the lower parts of the body, and, from being a powerful, robust woman, she had become feeble and unequal to the requirements of her family. She had sought the assistance of several well-known physician accoucheurs in town, but without deriving any benefit from their advice. I gave her the 200th part of a grain of the excreta of the *chameleo vulgaris* (common chameleon) three times a day in a tablespoonful of water, and in the course of a week she felt better, the leucorrhœa, as well as the weight and pain of which she had complained in the lower parts of her body, having sensibly diminished. On the 22nd of November she had passed over

one of her menstrual periods, and instead of suffering, as she had been in the habit of doing for the last four years, like a female lately confined, she was unwell for four days only, and not much more so than she had been before the miscarriage. On the 28th of December she informed me that she had passed over another period, lasting but four days, and that the length between the two had been just twenty-eight days. The leucorrhœa, also, had entirely disappeared, and she told me that she had not felt so well for years.

CASE III.

Profuse menstruation—Leucorrhœa—Cure.

Miss C——, ætat 26 years, had, for the last three years, laboured under excessive and too frequent menstrual discharge, and during the intervals suffered greatly from leucorrhœa. She also complained of much pain about the lower part of the back and loins, and though her digestive organs were in good order, she occasionally had severe hysterical attacks. She had consulted several medical men, both here

and in Paris, and during the last summer a three months' trial of the German waters and homœopathy was resorted to without any satisfactory results. On the 2nd of November, 1861, when she first consulted me, I prescribed the 200th part of a grain of the excreta of the *chameleo vulgaris* (common chameleon) in a dessert-spoonful of water three times a day. At the end of a fortnight she was decidedly better, and on the 12th of December she informed me that, at her last menstrual period, a very marked change for the better had taken place, as the discharge was both less in quantity and the duration of its continuance shortened. The leucorrhœa had disappeared, and the pain in the back and loins was much less.

CASE IV.

Menorrhagia—Leucorrhœa—Cure.

Mrs. H——, a widow, ætat. 37 years, was the mother of several children. After bathing in the spring of 1861, at the moment when the menstrual discharge made its appearance, it was immediately checked, and several months

elapsed before it reappeared. After it had done so, it reappeared every fortnight in large quantities; indeed any little exertion, such as going up stairs, was sufficient to bring it on, and it was followed by leucorrhœa. Up to the time of her bathing the uterine function had been most healthily performed, nor had she previously suffered from leucorrhœa, and her health, in all other respects, was good. On the 4th of December she consulted me. I prescribed the 200th part of a grain of the excreta of the *chameleo vulgaris* (common chameleon) in a dessert-spoonful of water, and at the end of a week she felt stronger. On January the 10th she informed me that the monthly discharge was reduced in quantity to what it had been before the bathing, that she was less frequently unwell, and that the leucorrhœa had disappeared.

CHAPTER IV.



SCROFULA—DISEASES OF THE SKIN—ECZEMA—
ACNE—HERPES ZONA.

THOUGH scrofula, where it does not attack the noble organs, occasions but little apprehension of fatal results, it has always been a disease no less troublesome to the medical man who has to treat it, than to the patient who is the subject of it. This arises from the essentially chronic nature of the complaint, and the ugly ravages it may cause while it still exists in the system. There are certain forms of scrofula, such as glandular enlargements, and glandular ulceration, in which, candidly speaking, time rather than any drug which the physician has at his command appears to work a slow and lagging cure. It is in

this class of cases where the glands of the neck have become enlarged, indurated, or ulcerated, that I have seen marked benefit arise from the exhibition of these excreta in doses of the same strength as I have used in phthisis. In a case which I shall give in detail, of what appeared to be scrofulous deposit within the submaxillary glands, and scrofulous infiltration of the adjacent parts, producing a most ugly wound in the neck, with perforation into the fauces, I can testify to a state of improvement which bids fair to end in a complete recovery.

Of skin diseases I can speak with even greater confidence and precision. There are few complaints of this class that more obstinately resist treatment than chronic eczema, and here the improvement under these new agents has been too constant and too rapid to be the effect of mere chance. It has been my fortune to have under my care several cases of this disease of old standing, which had been previously subjected to various modes of treatment without success, and all have shown the same happy result. In the different forms of acne these excreta appear to exert an influence scarcely, if at all, less powerful. But

here my experience has been too limited to enable me to speak with the same authority as in eczema. I have also appended a single case of herpes zona, which yielded to treatment much sooner than under the ordinary remedies. Whilst on the subject of diseases affecting the skin, I may mention that very common and troublesome disorder — chilblain, which is rapidly amenable to these agents. They all possess the property of at once relieving the annoying itching of this complaint, an effect which may be tested by rubbing the lotion over the inflamed surface, and on this being repeated two or three times the irritation will be completely removed.

CASE I.

Thickening, induration and ulceration of the glands of the neck and the neighbouring parts, with perforation into the fauces.

John P——, ætat. 33 years, born in Cambridgeshire of healthy parents, was a porter in the corn trade; and, though he had a cadaverous aspect, was a temperate and well-

conducted man. He was of spare habit, and he told me when he first consulted me, about three years ago, that he had always enjoyed good health up to that time. He was then suffering from a troublesome cough and irritation in his throat, dependent on some chronic inflammation of the windpipe and fauces, kept up, no doubt, by the dust he was constantly inhaling in the course of his occupation. This condition, by a little appropriate treatment, was soon removed, and he continued in the enjoyment of good health until the early part of the year 1861. On the 24th of May in that year he consulted me for the second time, as he was then suffering from swollen glands of the left side of the throat; he also complained of some difficulty in swallowing, and his voice was husky and hoarse. The swelling in the neck had gradually increased from the time he had first observed it three or four months before, but the difficulty in swallowing was of no more than two or three weeks' duration. I sponged his throat with a weak solution of the nitrate of silver, and prescribed for him the 200th part of a grain of the excreta of the cobra in a table-spoonful of water, to be taken three times a

day, and ordered his neck to be rubbed with the same mixture thrice daily. This treatment was carried out until the early part of July, when the swelling in the neck had nearly disappeared, his natural voice was restored, and he could swallow his food without the slightest inconvenience. I lost sight of him until the 21st of November, when he told me that he had continued better for a month after he ceased using the medicine, but at the end of that period he rapidly became worse. He then sought the advice of a practitioner of eminence in his neighbourhood, under whose care the disease made rapid progress; the glands suppurated, he could only speak in a whisper, and deglutition was performed with great difficulty. In this state he once more applied to me for assistance. The parotid and surrounding glands, together with the neighbouring tissues, were very much swollen and indurated, and at this spot there existed a deep excavated sloughing ulcer, extending, with jagged and thickened edges, from the angle of the jaw to more than half way down the neck. The granulations were coarse, and secreted an unhealthy, thin, inodorous discharge, and in one

place the ulceration extended by a fistulous opening into the fauces. The patient could take no other nutriment than a little milk and water, tea, or thin arrowroot, whilst wine and beer produced so much pain and distress in swallowing that he could not, after one attempt, be induced to try them again. I prescribed the excreta of the cobra and sponged his throat, and, although he was decidedly better at the end of a week, yet, as he complained of headache, I, on the 5th of December, prescribed the 200th part of a grain of the excreta of the *chameleo vulgaris* (common chameleon) in a tablespoonful of water three times a day, and I ordered the same mixture to be used as a gargle, and also to be applied to the ulceration of the neck. By the 18th of January, 1862, the improvement under this plan of treatment had been most satisfactory; his voice was almost natural, he could swallow solids of all kinds without difficulty, and the ulceration of the neck was nearly healed, the discharge having from the first assumed a more healthy character. The swelling and induration also had, to a very considerable extent, subsided, and he was altogether in better health.

It will be observed that I have refrained from giving a specific name to the disease that caused the great destruction of tissue in this remarkable and interesting case. The age of the patient, his cachectic appearance, the implication of the neighbouring structures, the virulence of the ulcerative process going on to perforation, and the unusual induration of the skin, seem to me to take it out of the category of purely scrofulous diseases. At the same time, the absence of pain, the inodorous character of the discharge, and, perhaps more than all, the satisfactory result of the treatment, do not permit me to classify it as belonging to the type of malignant affections. And yet the course of this case, taken in conjunction with the remembrance I have of another somewhat analogous to it, where the womb was the organ affected, but of which I have not retained data sufficiently precise to enable me to publish it, have impressed me with the idea that these agents are worthy of a trial in cancer, upon which disease it was my intention—had time been afforded me—to have carried out certain experiments with these new remedies. I do not think that there ought to be hesitation

or delay in bringing this matter to a practical test.

CASE II.

Chronic eczema—Dyspepsia—Cure.

A lady, ætat. 22 years, had been from childhood the subject of chronic eczema, which chiefly affected her hands, fingers, and the bends of the arms, whilst her general health had been by no means good, as she suffered much from indigestion. Two of her brothers had also been tormented with the same disease. She had been treated with arsenic and subjected to a great variety of treatment, embracing both homœopathy and hydropathy, and from the latter alone had she derived any benefit. The eczema and indigestion frequently existed together, and though the cold water treatment removed the skin disease for a time, its action invariably aggravated the indigestion. On December 1st, 1861, she consulted me for the eruption, and complained also that after taking all kinds of food she suffered pain, attended with great flatulence and discomfort. I prescribed the 200th part of a grain of the

excreta of the *lacerta ocellata* (the eyed lizard) to be taken three times a day, as well as a pill, containing the eighth of a grain of the oxide of silver, thrice daily. On December the 4th, the skin affection being but slightly improved, I ordered her to take two teaspoonfuls of the medicine at a dose instead of one. On the 9th of December the skin disease was much better, but the indigestion was worse, and her appetite had entirely disappeared, whilst the stomach was unusually disturbed and very painful. Suspecting the increased dose of the medicine to be the cause of this suffering, I ordered it to be withheld, and prescribed, in its stead, the 72nd part of a grain of strychnia to be taken three times a day. On December 12th she was much better in every way, and I directed her to continue the strychnia, and to take, besides, a teaspoonful of the excreta mixture once a day. On the 26th of December she told me that she never remembered herself to be so well in her digestive organs, and at the same time so free from the eruption.

CASE III.

Chronic eczema—Cure.

Mr. P——, ætat. 39 years, a grocer residing in London, consulted me on the 16th of September, 1861, in consequence of an eruptive disease which affected his fingers principally, although it sometimes extended itself to the wrists and back of the hands. It varied in its character; at one time a purulent discharge would be emitted from small perfect vesicles, whilst at another the disease presented the appearance of the more chronic form in the shape of incrustations, which peeled off as others formed beneath; and in this way the disorder, sometimes better and sometimes worse, had pursued its course for several years, the itching and irritation at times being excessive. He had consulted a variety of medical men both in town and country, but had never experienced more than temporary relief. I prescribed the 200th part of a grain of the excreta of the monitor niloticus (warning lizard of the Nile) in a teaspoonful of water, to be taken three times

a day, and in the course of a week he was decidedly better. The treatment was continued for a month longer, at the end of which time, every vestige of the eruption having disappeared for a fortnight, it was discontinued.

CASE IV.

Chronic eczema—Cure.

Mr. A——, ætat. 46 years, a publican, consulted me on the 19th of July, 1861, in consequence of an eruption he had been troubled with for several years. The disease exhibited an abundance of incrustations upon the calves and ankles of both legs, and it had also developed itself in both groins, occasioning at times intolerable itching, particularly if he ventured to take stimulants of any kind. He had been subjected to a variety of treatment, but he thought he derived more relief from the application of the tincture of iodine to the surface of the diseased skin than from anything else that had been done for him. I prescribed the 200th part of a grain of the excreta of the monitor niloticus (warning lizard of the Nile),

to be taken three times a day. On the 26th of July he was much better, the disease was disappearing at the margins, and no fresh vesicles were to be seen, but he complained of slight headache. On the 2nd of August the headache had left him, and scarcely a trace of the eruption was to be seen. On the 20th of the same month the disease had entirely disappeared, and he felt quite well.

CASE V.

Acne rosacea—Improvement.

J. B——, ætat. 60 years, butler in a family in town, consulted me on the 19th of October, 1861, for a skin affection of the face. His cheeks and forehead were of a fiery-red character, with here and there an elevated spot of a darker hue, and the nose, cheeks, and forehead were swollen from the hypertrophied state of the skin which covered those parts. His general health was very good, and, although in early life he had lived freely, his habits had been temperate for many years. I prescribed the 200th part of a grain of the excreta of the

monitor niloticus (warning lizard of the Nile) in a dessert-spoonful of water, to be taken three times a day, and at the end of a week he was much better. The general colour of the skin was paler, whilst the red tubercles about the nose were less elevated and had lost much of their fiery-red character. He told me that his face felt to himself less distended than it had done before this treatment was commenced. I lost sight of him at the end of a fortnight in consequence of his being obliged to go into the country.

CASE VI.

Acne punctata—Improvement.

Mr. R——, ætat. 23 years, of sallow complexion and unhealthy appearance, had for several years laboured under this affection, which more or less covered his face, as pimples, with a small black spot in the centre of each, were scattered over his nose, face, and forehead. He had sought the advice of several medical men both in town and country, and had tried a variety of remedies which from time

to time had been recommended to him, but without success, and he was at length induced to apply to me. On the 7th of December, 1861, I prescribed the 200th part of a grain of the excreta of the chameleo vulgaris (common chameleon) in a dessert-spoonful of water, to be taken three times a day. On the 14th of December he was decidedly improved, and, on the 21st of the same month (on which day I saw him for the last time, as he was going to spend his Christmas in the country), the pimples were smaller and more depressed, and his face was much less swollen, whilst patches of the skin of the face were looking healthy as the disease was clearing away. I recommended him to continue the use of the medicine.

CASE VII.

Herpes zona.

Mr. T——, a musician, ætat. 65 years, generally enjoys good health, and is a temperate man. On the 20th of November, 1861, he suffered from a severe mental shock, and on the 23rd of the same month he felt some severe

smarting about the lower back part of the right side of the chest, where he found, upon examination, that an eruption had developed itself. He consulted me on the same day, and, on examining his back, I perceived a crop of shingles. I prescribed the 96th part of a grain of the excreta of the *cyclodus gigas* (Australian lizard) in a teaspoonful of water, to be taken three times a day. On the 26th of November the eruption looked shrivelled and less inflamed; he suffered no pain from it except when he was warm in bed, and he stated that he felt relief after the fourth dose of the medicine had been taken. On the 30th of November scarcely a vestige of the disease could be seen, and on the 4th of December he was quite well, and the treatment was discontinued.

CHAPTER V.

RHEUMATISM AND GOUT.

PERHAPS there is no disease in the whole catalogue of human suffering that has led to the introduction of so many remedies as rheumatism, and yet the disorder appears to be as common and as dominant as ever, attacking without distinction all classes of society. I discovered by chance that one of the new agents of which I am writing had been singularly beneficial in a case of rheumatism. A lady who had suffered from asthma, and had derived great advantage from rubbing her throat and chest with one of these lotions, determined on trying the effect of the same remedy on the rheumatism with which she was afflicted. The result of the application was that the pain in the limbs and joints was

immediately relieved, and in the course of a fortnight she could walk as well as usual. It was not long before other opportunities presented themselves for ascertaining whether the effect produced in this case was merely exceptional, or whether it was the result of one of the ordinary remedial powers of these agents. I soon found that the excreta of each of the animals I have before mentioned was extremely useful in the external treatment of rheumatism, both in its acute and chronic form, as well as in gout. After numerous trials with these agents, derived from serpents, tortoises, and lizards, I am disposed to give the preference to that which is obtained from the last named, without, however, in any way impeaching my former statement as to the value of them all. I fully expected that in these diseases, as in phthisis and some others, the excreta would have turned out as useful when taken internally, but I must confess that the result did not correspond with my anticipations, for after having, in several cases, tried these agents internally, unaided by external treatment, I relinquished the experiments from the conviction that, when employed in this

way, they had no remedial action over the disease, and only developed their remarkable curative powers when applied externally. I am aware that there are many well known remedies that will give relief to rheumatism when applied externally. Dr. Turnbull published some years ago a book upon this subject, in which he showed the power of some of the alkaloids in assuaging the pain caused by this disease, but my experience of these agents was that the relief they afforded was rarely of a permanent character, and such I imagine must have been the conviction of others, as the remedies gradually fell into disuse. I usually employ the lotion of the same strength as that used in phthisis and asthma. It must be rubbed frequently over the painful surfaces, when the relief will, in most cases, be immediate. In severe cases of acute rheumatism, or in chronic rheumatism of long standing, where the tissues around the joints are thickened, the lotion should be applied constantly by means of lint moistened with the lotion and covered with oil silk. It should be used in the same manner in neuralgic affections, and I have found it of great service in sub-

duing the pains and weakness which linger in joints that have been the seat of mechanical injury. But it is to the value of these agents in the treatment of acute rheumatism or rheumatic fever, that I would more especially invite the attention of my professional brethren, inasmuch as we here find that an early subsidence of the acute symptoms involves a better chance of escape from affections of the heart—a gain not lightly to be estimated by those who have treated this disease in children and young people.

In all those cases of acute rheumatism which have come under my hands, my employment of these agents has resulted not only in allaying the pain in the joints, but also in arresting the inflammatory action of the heart and pericardium, reducing the frequency of the pulse, lessening the fever, and bringing the disease to a speedy and satisfactory issue.

It will be seen that I availed myself of alkaline treatment internally, so that I am as yet unable to pronounce authoritatively to what extent cure was accelerated, or the absence of cardiac complications secured by the use of the excreta, but with the know-

ledge that severe paroxysmal pain is not only a symptom of so much urgency in inflammatory complaints, but is also in itself the not unfrequent cause of feeding, as it were, and keeping up the disease, I feel justified in saying that, should further research in this field meet with the same uninterrupted success as I have obtained, these new agents may be fairly regarded as valuable weapons in bringing under control this fearful and wide-spread malady.

One of the earliest cases I treated on this plan was placed under my care in the early part of last year. The patient was a little boy, nine years old, who had laboured under the disease for ten or twelve days before I saw him. Several of his joints were red, swollen, and very painful, and when he took a deep breath, or was touched over the region of the heart, he screamed with pain. This was the case whenever I attempted to apply the stethoscope over the cardiac region, and I was thus prevented from certifying to the existence of a friction sound. His pulse was very quick, the tongue white, and the skin hot. The application of the lotion over the cardiac region

immediately relieved the pain, and, although it returned in a slighter degree on two or three subsequent occasions, it immediately disappeared on the re-application of the lotion. The redness, swelling, and pain of the joints also quickly subsided, and the child made a rapid recovery. The internal treatment employed in this case was alkaline. In another case in which I was consulted, in the early part of the summer of 1861, the patient, who was an under-graduate of the University of Cambridge, had for about a fortnight been labouring under rheumatism, which he had endeavoured to remove by the action of Turkish baths. The disease at length showed itself in a more acute form, and, as he was unable to leave his bed, he sent for me. I found him suffering great agony from several inflamed joints; his pulse was over 100, the tongue was white, the skin hot, and the appetite gone, and he also complained of occasional sharp pains over the cardiac region. I ordered him to rub some of the lotion several times in the day over this part, as well as the inflamed joints, and the pain in the chest was immediately removed, whilst that in the joints

was quickly relieved. On the second day of the treatment the pulse had fallen to 80, and at the expiration of ten days he was so far well as to be able to return to the country, where he resided, at a distance of about sixty miles from London. During the treatment I prescribed an alkaline mixture. I am at this moment attending a case of acute rheumatism, which is in some respects not unlike the foregoing. The patient is a remarkably intelligent man, between fifty and sixty years of age, and had experienced rheumatic pains chiefly in his shoulders for about six weeks previously to my seeing him. With the view of obtaining relief he had resorted to Turkish baths, of which he entertained a high opinion. At length the disease assumed a more acute form, and he was induced to consult me. I found him labouring under a sharp attack of the disease, and so distressing was the pain that he was unable to remain in bed. Being a celebrated engineer, his inventive powers enabled him, with the aid of a few mechanics, to construct a couch, which admitted of his lying down without inconvenience, but he soon discovered that no mechanical contrivance could

relieve him from the pain of acute rheumatism. His pulse, which in health rarely exceeded 60, was just over 80, his tongue was white, his skin hot and perspiring with an acrid odour, and acrid eructations were of frequent occurrence. I prescribed an alkaline mixture and a lotion of the excreta of the chameleo vulgaris (common chameleon), and from this treatment he derived immediate and permanent relief, so that in the course of a fortnight he was equal to going out for a drive, and to taking a short walk. When he had thus been out for a few days the rheumatism reappeared slightly in some of his joints, but chiefly in the left ear, in which he had acute pain for a day or two, though never sufficiently intense to prevent his walking about the room. He is now (January, 1862) in very good health, though feeling occasionally a slight shifting pain, for which he uses the lotion.

The first part of the paper is devoted to a general discussion of the problem. It is shown that the problem is equivalent to the problem of finding a path of minimum length in a certain graph. This is done by constructing a graph whose vertices are the points of the plane and whose edges are the line segments connecting them. The length of the path is then the sum of the lengths of the edges.

In the second part of the paper, the problem is solved for the case of a finite set of points. It is shown that the minimum path is a tree with a certain number of vertices. This is done by showing that any path can be modified to a tree of the same length. The tree is then shown to be a minimum path.

In the third part of the paper, the problem is solved for the case of an infinite set of points. It is shown that the minimum path is a tree with a certain number of vertices. This is done by showing that any path can be modified to a tree of the same length. The tree is then shown to be a minimum path.

The paper concludes with a discussion of the general case. It is shown that the minimum path is a tree with a certain number of vertices. This is done by showing that any path can be modified to a tree of the same length. The tree is then shown to be a minimum path.

