

Consumption curable, and the manner in which nature ... operates in effecting a healing process ... to which is added, a mode of treatment, by which the development of tubercles may be prevented / [Francis Hopkins Ramadge].

Contributors

Ramadge, Francis Hopkins, 1793-1867

Publication/Creation

London : Longman, 1834.

Persistent URL

<https://wellcomecollection.org/works/cs9d5yne>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

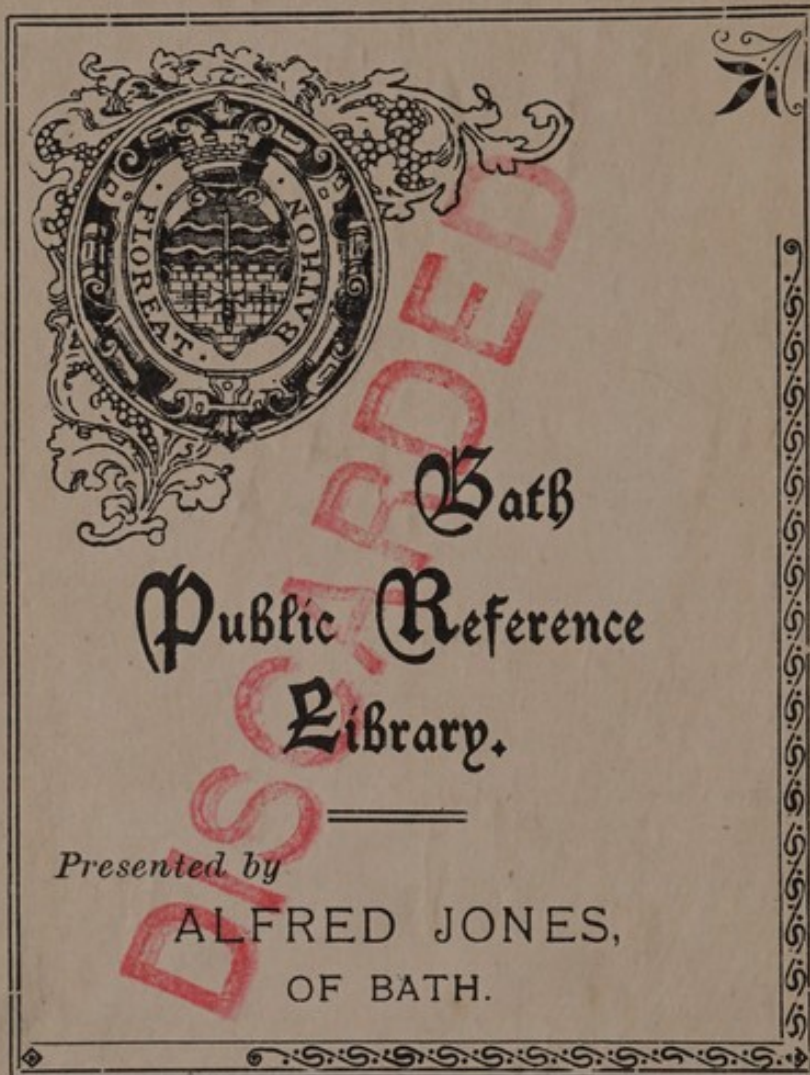


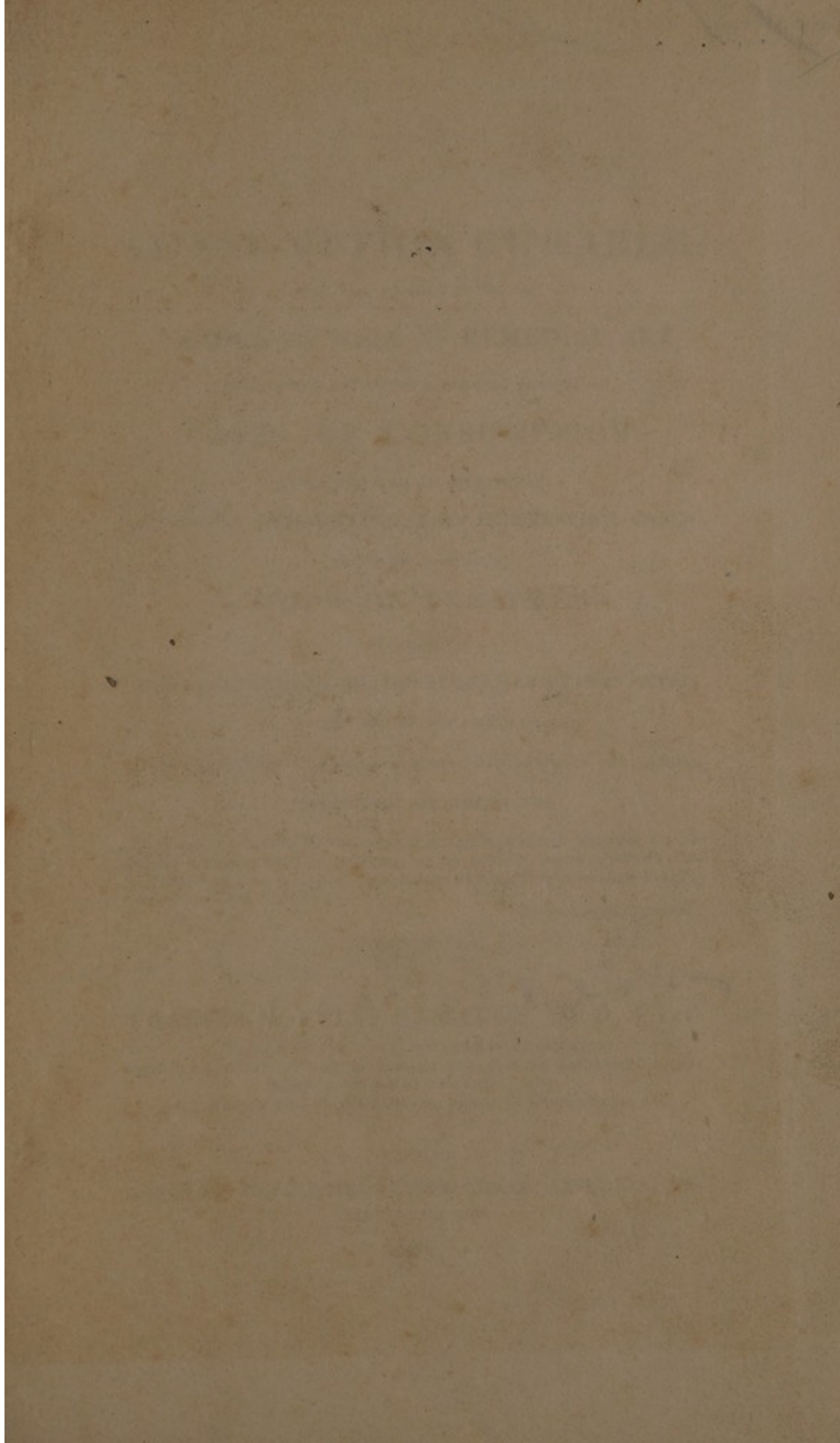
42853/3

Access. No. 21488

Claim No. 616.246

loc. NMR.





1

1750

W. H. Jones
Symonds

PAID PUBLIC REFERENCE
LIBRARY
OFF.

CONSUMPTION CURABLE;

AND THE MANNER IN WHICH

NATURE AS WELL AS REMEDIAL ART

OPERATES IN EFFECTING A HEALING PROCESS IN

CASES OF CONSUMPTION;

EXPLAINED AND ILLUSTRATED BY

NUMEROUS REMARKABLE AND INTERESTING CASES;

TO WHICH IS ADDED,

A MODE OF TREATMENT,

BY WHICH

THE DEVELOPMENT OF TUBERCLES MAY BE PREVENTED

IN PERSONS LIABLE THERETO,

FROM HEREDITARY PREDISPOSITION, OR A BAD STATE OF THE SYSTEM,

INDUCED BY VARIOUS CAUSES.

"La guérison dans les cas de phthisie pulmonaire où l'organe n'a pas été entièrement envahi ne présente, ce me semble, aucun caractère d'impossibilité, ni sous le rapport de la nature du mal, ni sous celui de l'organe affecté."—Tom. ii. p. 112.

Laennec, Nouvelle Edition.

Ex libris
Second Edition.

BY

FRANCIS HOPKINS RAMADGE, M.D, F.L.S. *W. H. Jones*

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS,
SENIOR PHYSICIAN TO THE INFIRMARY FOR ASTHMA, CONSUMPTION, AND
OTHER DISEASES OF THE CHEST, AND
LECTURER ON THE PRINCIPLES AND PRACTICE OF MEDICINE, ETC.

London :

LONGMAN, REES, ORME, BROWN, GREEN, AND LONGMAN,

PATERNOSTER ROW.

1834.

95256



CONSUMPTION CURABLE;
AND THE MANNER IN WHICH
NATURE AS WELL AS REMEDIAL ART
OPERATES IN RESTORING A DISEASED THORAX TO
CASES OF CONSUMPTION;
DETAILED AND ILLUSTRATED BY
NUMEROUS REMARKABLE AND INTERESTING CASES;
IN FOUR VOLUMES.
A MODE OF TREATMENT
BY THE AUTHOR
THE DISEASES OF THE THORAX MAY BE PREVENTED

By the same Author,
IN THE PRESS,
ASTHMA; its species, and complications, elucidated in a
Practical Treatise.
LONGMAN, REES, ORME, BROWN, GREEN & LONGMAN.



FRANCIS HOPKINS, M.D., F.R.S.
PHYSICIAN TO THE LONDON HOSPITAL, AND
LECTURER ON THE THEORY AND PRACTICE OF MEDICINE, ETC.
LONDON:
LONGMAN, REES, ORME, BROWN, GREEN, AND LONGMAN.

MAYHEW, ISAAC, AND CO., 14, HENRIETTA STREET, COVENT GARDEN.



CONTENTS.

	PAGE.
Preface to the First Edition	
Preface to the Second Edition	
Introduction	vi
CHAP. I.	
General Observations on Consumption	10
CHAP. II.	
Causes of Consumption	18
CHAP. III.	
The Symptoms of Pulmonary Consumption, local and sympathetic.—Physical Signs of the Disease	26
CHAP. IV.	
Morbid appearances of Consumption	49
CHAP. V.	
Prophylactic Treatment, by which the development of tubercles in the lungs may be prevented in per- sons liable thereto from hereditary predisposi- tion, or a cachectic state of the system	77
CHAP. VI.	
The Treatment of Consumption	130
APPENDIX.	
Cases	177
Description of Plates	188



CONTENTS

PAGE

Preface to the First Edition
Preface to the Second Edition
Introduction

CHAP. I.

10

General Observations on Consumption

CHAP. II.

18

Causes of Consumption

ERRATA.

Page 38. line 13 from bottom, *lege*, "on the *exterior* of the cyst."

— 186, line 3 from bottom, *lege*, "over the great cornu of the thyroid cartilage."

CHAP. V.

77

Prophylactic Treatment, by which the development of tubercles in the lungs may be prevented in persons liable thereby to become consumptive, previous to, or a cachectic state of the system

CHAP. VI.

130

The Treatment of Consumption

APPENDIX

177

188

Cases
Description of Plates



PREFACE

TO THE FIRST EDITION.

MOST men have some one darling wish, which forms the central point to which all their ideas and feelings verge. My attention was directed, at my outset in the profession, to that tremendous disease, which, from its wasting effects on the human frame, too truly and appropriately bears the name of Consumption. I found those to whose experience I looked to direct and guide me, themselves walking in the dark. Books only displayed to me a mass of crude, ill-arranged, unreasoned-upon facts, or the fanciful chimeras of medical visionaries. I saw that those branches of the science (to which I purposed resolutely devoting my best energies), which had been re-



PREFACE.

deemed from the wastes of empiricism, and brought within the pale of art, had been indebted for this successful issue to the system of induction, which owns BACON as its father. The assemblage of facts without classification, and this last without careful investigation of specific differences, might, and did, I perceived, pass for labour and observation, but was certainly not science. I felt mortified and degraded at the utter inefficacy of medicine, and of medical art, in this the commonest of diseases; and I was soon convinced that the only means of rescuing my profession from this "darkness visible" was to make the physician subordinate to the anatomist. I had yet a higher object in view—that of mitigating human suffering. I have toiled to this end, and what I felt to be my duty has been my reward. In no boastful spirit do I speak, but in a thankful one. I have proved that there is a cure for what has hitherto been deemed incurable; and this, no drug known but to its compounder, but a simple mechanical process available to all. That, which

PREFACE.

has been as yet confused, is, I would hope, rendered clear; and I trust that modes of treatment resulting up to this period from conjecture, and leading but too often to confirm the disease they were intended to cure, will soon pass away with other exploded practice, that now moves but our pity, or our disgust.

PREFACE.

has been as yet confused, as I would hope, rendered clear; and I trust that modes of treatment resting up to this period, from conjecture, and leading but too often to confirm the disease, they were intended to cure, will soon pass away with other exploded practices, that now move, but our pity, or our disgust.

PREFACE

TO THE SECOND EDITION.

“It is passing strange” that medical attention, in this country, should have been so little directed to the pathological consideration of Consumption. Nor is it less so, that consumptive patients are expressly excluded by the regulations, from more than one of the metropolitan hospitals. We are chiefly indebted to foreign writers for anatomical investigations of the various diseases connected with the chest ; although they have done but little towards developing any plan of treatment, holding out decided hopes of success, in Consumption. The ill fortune which characterized the means usually pursued by the profession, in consumptive cases, early struck my attention. My medical

PREFACE.

brethren appeared, with respect to this disease, to be as rigid fatalists as the Mahomedan; and to resign themselves calmly to the belief, that when once Consumption appeared, human efforts could be of no avail. Yet this apathetic resignation was consistent, neither with reason nor sound philosophy. No man could feel more deeply than myself that the issue is ever in the hands of the Omnipotent; but I could not bring myself to the conclusion, that, because failure had hitherto attended human agency, to cure was therefore impossible. I could not sit down, like our Oriental prototypes, with the exclamation, "Allah Akbar," and do nothing. Such were my impressions, and such my reasoning, twenty years ago. It appeared to me, that not only the treatment of pulmonary consumption was ill-understood, but that the pathology of most of the affections of the chest, had not received that investigation which they deserved. Yet none are more important, or indeed, taking their number into consideration, so much so; seeing that the heart and lungs constitute the two

PREFACE.

main props of what, together with the brain, Bordeu felicitously terms the *tripod of life*. For the time just mentioned, it has been one of the chief objects of my professional labours to advance our knowledge of this interesting class of diseases. The vacancy which the resignation of Dr. Buxton (for several years physician to the London Hospital,) left at the Infirmary for Diseases of the Chest, presenting the only favourable opportunity London affords for seeing, in large numbers, every variety of case connected with pulmonary and other affections of the chest, was eagerly embraced by me. I was fortunate enough to obtain the situation of physician to the Infirmary; and trust that the present work will prove I have not misemployed the abundant facilities it holds out, for investigating the pathology of these diseases.

I feel a sincere pleasure in stating the reception which the first edition of "Consumption Curable" has met with, from the liberal portion of my profession. The letters I have received, from intelligent practitioners in every part of the united

PREFACE.

kingdom, have gratified me in more than a selfish point of view. They have proved to me that, however interested motives may bias some, there is an active and honourable spirit abroad in the profession at large, which induces a frank and manly openness to conviction. The owls, who shut their eyes to the light of truth, because it would guide others through the "palpable obscure," are likely soon to be left alone in their blindness. An amended medical education will rectify all these things.

It will not be thought that I overrate the importance of the diseases affecting the chest, when it is considered that scarcely any part of the body can be indisposed without the chest's participating. Yet it is consolatory to reflect, to employ the words of Laennec, that "Quelque dangereuses que soient les maladies de la poitrine, elles sont cependant plus souvent curables qu'aucune autre maladie interne grave."

24, *Ely-place.*

September 22, 1834.



INTRODUCTION.

I AM induced, from my long connexion with the Infirmary for Asthma, Consumption, and other Diseases of the Chest, the only institution of the kind in this country, and as far as I have been able to ascertain, in Europe, to publish my opinions on the treatment of Pulmonary Consumption—a disease unfortunately too well known to the inhabitants of this clime, by its prevalence and fatality. Having been thus for nearly fourteen years placed in a situation which has given me unrivalled opportunities of seeing numerous cases of this disease, I conceive it a duty I owe the public, through whose philanthropic aid the above charity has been long and liberally supported, to present them with the fruits of my labours, and unreservedly to state how far medical art is capable of arresting a disease to which nearly one-third of the adult population falls a sacrifice.



The results which have hitherto attended the treatment of phthisis, have added but little to the reputation of the medical profession. I am fully satisfied, however, from the experience of years in treating this important malady, as well as from the deductions of unremitting pathological research, that it is in our power to adopt a line of practice more scientific, and successful, than that which has hitherto been employed.

Though great attention has been bestowed by several distinguished continental writers, especially by Laennec, Andral, and Louis, on the physical signs and morbid appearances of consumption, and notwithstanding cases have been minutely detailed by them in which nature has effected a cure, still they seem to me to have had little idea that we can do more than relieve indications purely symptomatic.

A modern writer on consumption in this country, the late Dr. Young of St. George's Hospital, who did not pay that attention to morbid anatomy, so commendable in our Gallic neighbours, but whose opportunities of treating the disease were considerable, favours us with an opinion as to its curability, which is very discouraging. He says, "It is probable that without assistance, not one case in a thousand of the disease would recover ;

and with the utmost power of art, perhaps, not more than one in a hundred will be found curable." It is my intention, in the succeeding pages, briefly to shew that this statement is unfounded in fact ; and that medical treatment has, in not a few instances, tended to prevent, rather than advance recovery. I trust, too, I shall demonstrate, in the histories of some of my cases, that recovery has been owing, in a great measure, to the supervention of some catarrhal disease occurring spontaneously through an apparently imprudent exposure to cold, after remedial agents had failed.

The reader will probably learn with some degree of surprise, that no inconsiderable number of catarrhal and asthmatical disorders, are, indeed, the sequelæ of the disease, which forms the subject of this work, more or less perfectly cured. Had the learned Doctor, whose name I have recently quoted, been at the pains to investigate the primary symptoms of such disorders, he would have found, in many instances, that they displayed all the common symptoms of pulmonary consumption ; and had this hospital physician been accustomed to the examination of dead bodies, he would have discovered, in more than one-fourth of the adult subjects examined after death, cicatrizations indicative of cured consumption ; and on finding these ap-

pearances, had he enquired of some near relative of the deceased if the individuals, at any period of their lives, had for a time expectorated blood—had been troubled with indomitable cough, night sweats, diarrhœa, with emaciation of the body—or had been regarded by their medical attendants as consumptive, he would probably have arrived at a more favourable conclusion.

It is, indeed, strange that medical men have not noticed the non-liability of the asthmatic individual to pulmonary consumption; and that various species of catarrh are the instruments by which nature chiefly arrests that disease. It has been observed by me for years past, and on many occasions I have particularly remarked to my pupils, that asthmatics (I mean those persons whose lungs are emphysematous), however long exposed to circumstances that favour the tubercular development in the lungs, never become consumptive. Indeed I have long found, and it is a remarkable fact, that whenever the general health has been impaired by some ailment of a chronic and even incurable nature, provided the individual have a voluminous and catarrhal state of the lungs, no phthisical state supervenes, which is unhappily in too many cases the more immediate cause of death, the foregoing pathological condition not existing.

From having long observed the asthmatic state of the lungs, which is frequently witnessed on the dissection of persons, who, having recovered from consumption, have died from some other cause, I am induced to recommend artificial means to be early employed for the healing of ulcerous phthisis. After the careful examination of at least three thousand dead bodies, and after having had under my care many thousand consumptive cases, my fixed opinion is, that ulcers of the lungs are most effectually cured, and a fresh formation of tubercles prevented, by an expansion of the vesicular structure of the lungs ; which it will be seen hereafter is, in many instances, brought on by chronic catarrh. Before tuberculous excavations have taken place, and even after their existence is ascertained by stethoscopic signs, there is an absence, except towards the close of the disease, of any catarrhal affection, or at least its continuance is only of short duration. I know this statement of the non-existence of a catarrhal state accompanying phthisis, is opposed to what appears in the excellent work of M. Laennec ; but I am satisfied of its general correctness, and that extended research will confirm my assertions.

Independently of the extensive experience obtained through my situation in the Infirmary for

Diseases of the Chest, I have enjoyed the advantages afforded by no inconsiderable share of private practice, as well as a wide field of inquiry opened to me for several years, at the Central Infirmary and Dispensary, an institution established, and in a great degree upheld, at my own expense, for all classes of diseases ; and where, from my being physician to the first mentioned charity, I had a more numerous assemblage than is generally seen in any institution of a similar kind, of patients affected with some disease or other of the chest.

It affords me pleasure to state, that my practice at both institutions has been attended by numerous and intelligent classes of pupils, who had opportunities, equally with myself, of witnessing the recovery of many consumptive persons, and of ascertaining that peculiar condition of the lungs, which I have already pointed out as invariably occurring when a cure has been effected.



GENERAL OBSERVATIONS

ON

CONSUMPTION.

CHAP. I.

THE mortality which annually takes place in this country through consumptive disease is a melancholy truism, although its extent, familiar as it may appear, is yet imperfectly known. The ordinary estimate, and this as I shall subsequently prove far from an exaggerated one, gives one-fourth of the deaths yearly occurring in this ever-varying climate, as consequent on pulmonary consumption alone. Dreadful as this amount seems, yet since numerous instances exist of patients labouring under chronic diseases, as dyspepsia, cancer, severe diseases of the bones, joints, &c., or any other affections by which the general system may have been deteriorated, who owe the immediate cause of their death, not to these complaints, but to the super-vention of consumption, it is evident that the propor-



2 GENERAL OBSERVATIONS ON CONSUMPTION.

tion of one-fourth is indeed lower than the truth. Again, considering the frequency of cases in which asthmatic, or catarrhal, complaints arise in the first instance from consumption, which, though arrested or finally cured, occasions these very complaints as its consequences, I may fairly assume that the startling proposition I have laid down is corroborated by fact. To individuals, unaccustomed to extended pathological researches, my assertions will, at first sight, undoubtedly appear rash and hypothetical. The pathologist, who is deserving of the name, will either from his own experience be ready to acquiesce in my views, or at least will candidly endeavour, by further inquiries, to verify conclusions arrived at by the labours of years; and this at a sacrifice both of time and money, which none but the very few who cultivate this branch of science with the zeal and assiduity its importance deserves, are prepared to estimate.

In addition to the reasons I have just given, to show the inaccurate statement presented by the bills of mortality, I could enumerate numerous instances in which the real as distinguished from the apparent causes of the patient's death, would offer conclusive testimony to my position. Frequent are the cases in which an individual will suddenly expire after a violent expect-

toration of blood, and his demise be attributed to a ruptured blood-vessel, when indeed this hemorrhage has been consequent solely on latent and unsuspected phthisis. My readers must not misconceive me to state, that every case of sudden death from spitting of blood arises from the little suspected presence of this destroyer; but that, in not a few instances, consumption is indisputably the pre-existing cause. It were easy to adduce further statements corroborative of the soundness of my conclusions; but I have, I should think, stated sufficient to induce conviction of their reasonableness, if not of their entire validity.

The first questions to be considered are, to what the frequency of this disease is owing, how it is produced, and in what manner its ravages are unfortunately extended. The prevalence of consumption has long been attributed to the proverbial variableness of our climate; but the mode by which this operates upon the constitution has not been clearly explained. It seems to me, however, that the action of the climate on the system may be reduced to three distinct heads, each equally common, and equally fatal: checked perspiration, retaining the superfluous humours, and thus vitiating the fluids of the body—constant fluctuations of health, resulting from constant atmospheric changes

—and dejection of spirits, caused by mental troubles. To these may be subjoined an unfortunate configuration of the body, consisting in an undue narrowness of the chest, especially in its upper part, less observable in foreigners than among ourselves. It is not necessary to dilate upon the process by which checked perspiration lays the foundation of this dreadful malady; since it must be evident to the tyro, that when those humours which pass off insensibly in a healthy state of the body are retained, and the natural functions thus disturbed, disease more or less extensive will inevitably ensue. With respect to the second of these heads, it may to the ordinary observer appear superfluous to insist upon the ill effects generated by constant change of weather, in persons not only of delicate but even of robust habits; still, obvious as these effects are, it is not quite so apparent in what they consist, or rather how they are produced. Now, when we take into consideration the peculiarly delicate conformation of the lungs, and their immediate susceptibility of every alteration in the atmosphere, we at once arrive at a resolution of the question. It is essential, in order to maintain a healthy action and proper configuration of the chest, that our inspirations should be uniformly deep and full; but, from the great ine-

quality of atmospheric pressure resulting from the constant fluctuations of the weather, the depth and fulness of the inspiration are exposed to frequent diminution; and that play of the chest which is as requisite to a healthy state of the lungs as exercise to muscular development, is consequently subject to repeated checks. Thus, owing to the want of due excitement, or, more strictly speaking, of proper exercise, the healthy functions of the chest become deranged, its expansion is restricted, its action languid, and by degrees its shape alters; so that, instead of the bony compages of the chest being forced boldly out in a somewhat semicircular form, and the sternum pushed forward, the ribs fall in, drawing the breast-bone backward to a position nearer the spinal column than is the case in its natural movement. Now, to bear out and verify the foregoing remarks, by showing how requisite the expansible power of the chest is to the healthy constitution of the lungs, I would state, as almost an invariable law, that the commencement of pulmonary consumption will be found to take place in the superior lobes of the lungs, owing doubtless to the small extension of the upper ribs as compared with the more complete movement of the lower. Another singular instance, confirmatory of the novel view I am now

taking of the subject, is to be found in the exemption of asthmatic patients from consumptive disorder. From the peculiar nature of their complaint, gasping for breath, and forced to respire frequently, their lungs are ever fully exercised; and the expansion of the chest, which follows as a necessary consequence, preserves the sufferer free from the attacks of this still more dreadful malady. To come to the third head,—depression of spirits, or mental anxiety,—we shall meet with the same cause still producing the same effects. The unfortunate who lives in the world as if he were not of it, and to whom, whether his cares be the offspring of disappointed ambition, hopeless love, or ruined circumstances, the world presents nothing but a cheerless blank—the tenant of the sick chamber, whose distemper improper medical treatment has unduly prolonged, or confirmed; in fine, all, who from any cause labour under prostration of strength or general debility, are prone to fall victims to the insatiable tyrant, consumption, for reasons precisely similar—inability to take inspirations of depth sufficient to keep up the necessary changes produced by the air on the venous circulation. I have adverted to another cause, which in my opinion contributes, at least in a degree, to render the inhabitants of this country more

peculiarly liable to phthisis—a malformation of the chest, which, after repeated and numerous examinations that I have been enabled to make in considerable manufactories, where I had the opportunity of comparing foreigners of different countries with our own countrymen, would seem to be more prevalent in England than elsewhere. As a corollary to the above remark, I may note, that the children of consumptive parents generally inherit the narrowness of chest, and depression of the ribs, which characterize the victims of this malady; and that thus the range of its influence is indefinitely increased. I must now advert to a very remarkable circumstance, upon the propriety of advancing which I have long hesitated; yet as it serves not merely to elucidate and strengthen, but to prove the truth of the propositions advanced above, and is a phenomenon as fatal in its effects as it is singular in a physiological point of view, I should, after mature reflection, deem myself the slave of a false and injurious shame were I to withhold it. When we are the prey of other disorders, the desires are deadened, and lie comparatively dormant; but even in the last stage of consumption the love of the sex seems to increase with the decay of the strength, and the disease, while it kills, is still propagated in the future life of an

unborn being. The same holds true, though in a less degree, with respect to the gentler part of the creation. Following up the tenor of the preceding observations, we shall find that the benefit usually derived from a sea voyage, or change of air, is not so much due to the removal from an impure to a purer atmosphere, *per se*, but to the stimulating effects produced on the respiratory organs, and the increased energy of the muscular powers of the chest, on which pulmonary dilatation is of course consequent. Let us compare the muscular frame, expanded chest, and robust health of the mariner, or of the husbandman, with the emaciated figure, contracted chest, and general want of vigour betrayed by the artizan of manufacturing cities; and, on attentive consideration, we shall own that these differences are the consequences of the superior expansion and activity of the pulmonary apparatus enjoyed by the former. Among the many distressing cases which the medical practitioner has to encounter, the premature and rapid decline of the young of both sexes, more particularly of the weaker, is without doubt the most painful. The fragility of woman's constitution, as compared with that of man, the delicacy of her frame, her retired and domestic habits, and the sensitiveness of her mind, all contribute to

render her a mark at which consumption frequently aims his deadly darts. No sight is more painfully interesting than that of a female, on the very verge of womanhood, yielding unconsciously to the fatal decree, and, like a drooping flower nipped untimely in the bud, graceful and lovely to the latest breath. Independently of their greater liability to pulmonary disease from delicacy of constitution, there exist other causes which increase their susceptibility in a fearful manner. The style of their dress,—which, in compliance with the fantastic usages of fashion, seems devised to alter the free and graceful outlines, traced by the hand of Nature, into a wasp-like angularity, alike injurious to the tender structure of their body and unpleasing to the eye of taste,—has been often pointed out as a pregnant source of disease, and justly so. It has been already observed, that a full and free dilatation of the chest is absolutely necessary to preserve the lungs in a sound and healthy state; but how can a female, her chest compressed by an artificial support, the convexity of the ribs incapable of being extended upwards and outwards, and the sternum consequently without the power of coming sufficiently forward, enjoy this requisite expansion? She is “cribb’d, confin’d,” and “curtailed of Nature’s fair proportion.” How-

ever, to counterbalance these inconveniences, it has fortunately happened, that owing to a power they possess of abdominal respiration, more decided in them than in the male, the unnatural restraint they have imposed upon themselves is divested of some portion of its ill effects. Still, so mischievous are the consequences entailed upon woman by her adherence to this baneful part of her costume, that in consumptive cases there is this striking distinction between the sexes, that the female thus deprives herself of the great, indeed the sole chance of recovery,—a due expansion of the chest. Thus the probability of spontaneous and permanent recovery, which is attended by an increase in the volume of the lungs, is sensibly lessened to the female sufferer; and they who need most aid may be said “to take arms against themselves.”

CAUSES OF
CONSUMPTION.

~~~~~  
CHAP. II.  
~~~~~

COLD, resulting either from imprudent exposure to the air when the body has become heated, or from the wearing of too light and insufficient clothing, is deemed one of the most general and powerful causes of consumption. Yet, in many instances, I am persuaded that the real and efficient cause is to be found in the pre-existence of latent tubercles in the lungs; and when these become softened by general indisposition, produced by the action of the cold, phthisis ensues. Still, the influence of cold is considerable, and where an hereditary tendency to consumption exists, or the constitution has been previously debilitated, it most certainly induces pulmonary disease. The transmis-

sion of this disease from parent to child, is a melancholy fact to which I have already adverted. The generic marks of this sad heir-loom may be traced in the sanguine yet delicate hue of the countenance, the unusual brightness of the eyes, the confined and narrowed waist, the sharp projection of the scapulæ or shoulder-blades, and the fragility of the bony structure of the body, not unfrequently united with a disposition to an unhealthy stoutness. In laying down the causes of consumption, it becomes requisite to distinguish betwixt those which are direct, and the far greater class commonly confounded with them, but which in point of fact are indirect. Amongst the latter, may be enumerated inflammation of the lungs, pleurisy, contagious eruptive fevers, repelled eruptions, badness, and deficiency of food, amenorrhœa, unhealthy localities, affections of the abdominal viscera (sometimes caused by excessive drinking), spitting of blood, constitutional syphilis, and a long list of disorders, whose sole influence in producing consumption consists in the debilitated state of body they induce. I have said that it is requisite to distinguish betwixt the direct, and indirect causes of consumption, not that there are any that can with propriety be termed direct, but in order to impress thoroughly upon the mind the grand

truth that phthisis is the sequence of debilitated bodily health alone. When the general health becomes impaired, a total change takes place in the fluids and secretions of the body, and there is consequently an aberration of nutriment: on this, the formation of tubercles soon follows.

Laennec gives an interesting account of the effect of depressing passions in producing phthisis, in the case of a religious association of females, all of whom became consumptive from the ascetic spirit which regulated their minds, rather than the austerity of their diet. Confinement, most likely, contributed to this result. Since this society was bound by no vow, Laennec persuaded the members, as soon as consumption was clearly indicated in each, to change to another place of abode, and he expressly declares that nearly all who took his advice recovered. The possibility of consumption's being cured is even yet denied by many practitioners, although the light of truth is beginning to dawn upon them; and yet the above relation is a proof, that, some years previous to the appearance of the present work, the greatest medical authority on the disease had stated opinions similar to mine. A parallel circumstance has occurred, in the course of my practice, within the last six months. Two young ladies

were removed from a school in the neighbourhood of London, in order to be put under my care for consumption. I ascertained that ten or twelve of their school-fellows had sunk under decline, within the twelvemonth preceding; and, on enquiry, I found that the only exercise they were allowed, and this but seldom, was the prim, formal walk, two by two, which pernicious and false decorum, it is to be hoped, will soon be banished from these establishments. I should mention the sequel of Laennec's account, in order to establish more fully the coincidence between the circumstances, and to direct attention to the ill effects of such absurd confinement. He goes on to narrate, that he witnessed, in the course of ten years, two or three renewals of the religious society, by the admission of new members to replace the loss of the old ones; and that the only individuals attached to it, who withstood its depressing influence, were the superior, the grate-keeper, and the sisters who had charge of the kitchen, the garden, and the infirmary. In addition to the exercise given by these offices, the same individuals were called upon, occasionally, to visit the city on the concerns of the establishment. This narrative requires no comment.

To such an excess were the fantastical restrictions of

the school above-mentioned carried, that the poor girls were not even allowed to hold their heads erect, or maintain a proper carriage, being told that so to do was a sign of pride. By this enforced humility, conjoined with the radical error—want of exercise—both my young patients not only stooped, but, I am sorry to add, had contracted chests, and lateral curvature of the spine.

Many writers are of opinion, that various thoracic diseases are a fruitful cause of consumption; but this supposition I am satisfied is groundless, and it is merely owing to the loss of health entailed, that the development of those accidental productions, called tubercles, takes place. It would be endless to enumerate the various causes of consumption, for, in fact, whatever is capable of impairing the constitution is liable to produce a phthisical state. Thus, mental anxiety, or any depressing passion long continued, as well as chronic diseases of various kinds, engender consumptive predisposition. In this country the frequency and prevalence of this disease are attributed, in no small degree, to the great and sudden vicissitudes of atmospheric temperature, and the moist nature of our climate. These operate powerfully in effecting changes in the human body, more or less calculated to affect the ge-

neral health; especially in those who are naturally of a delicate make, and who inherit a tendency to scrofula. Particular employments, in which dusty particles and noxious fumes are inhaled, have long been regarded as producing this disease; but experience has taught me that some catarrhal affection, and not consumption, is what most frequently supervenes, and that the former complaint is a preservative against the latter.

The distinguished French writer I have lately quoted, denies that phthisis pulmonalis is a frequent consequence of pulmonary catarrh; which opinion approximates to, although it does not go so far as my own: but it is strange that so acute an observer, with all the facts before him—facts first promulgated by himself—should have stopped short of the truth just as he was on the point of reaching it. He clearly saw that catarrh was not the cause of consumption, and affirms, “We recognize a thousand instances of catarrh for one of phthisis.” One step further would have led him to the discovery, that catarrh was the remedy of nature for the cure of phthisis. In the same paragraph, he alludes to Broussais, as supporting the once established, but I trust now exploded, doctrine of “Phthisis pulmonalis being the consequence of pulmonary catarrh.” Broussais, indeed, had the temerity, or rather folly, to

assert, that a pupil of his used to bring on consumption—in fact, generate tubercles in the lungs of a dog—by irritating the trachea in some unexplained manner, and thus producing catarrh. The contrary would happen. The catarrh would prevent the appearance of consumption. But what will not writers advance to support a favourite theory!

Contagion has been considered in the southern parts of Europe, especially in the Italian States, as a frequent source by which large families of children have been destroyed by consumption. For my own part, it has never appeared to me to spread amongst individuals having the same hereditary constitution, by any infectious medium; but by other circumstances operating where there was an inherent predisposition to tuberculous disease, which, as I have already said, is indicated by a particular conformation of the body; such as a long neck, slender trunk and extremities, contracted chest, high shoulders, delicate and transparent complexion, weak voice, and great sensibility. The same locality and the same manner of living, no doubt, have often an influence in propagating it in certain families; and to this cause, and not to contagion, we may attribute its remarkable fatality. In my neighbourhood there are many Italians resident, who, for

the most part, live huddled together in small and ill-ventilated rooms, and are apparently liable, from their peculiar and not very nutritive diet, a neglect of cleanliness, and misery and disappointment in every shape, to have a consumptive constitution, yet I have not been able to trace any case of the disease's being disseminated. Still, notwithstanding my firm belief that consumption is not contagious, I would not be understood to recommend neglect in separating consumptive from healthy persons; on the contrary, for the sake of the personal comfort of the sufferer, and to forward the chances of his recovery, I would have every precaution taken that prudence can suggest, or kindness inspire.

THE SYMPTOMS OF
PULMONARY CONSUMPTION,

LOCAL AND SYMPATHETIC.

PHYSICAL SIGNS OF THE DISEASE.

CHAP. III.

It has long been acknowledged that the symptoms, on which practitioners generally rely, in the incipient stage, as indicative of consumption, are extremely variable and uncertain. Its attack indeed is, in many instances, so deceitful, that before the patient is in the least aware of his danger the case has become desperate. Again, it rarely happens that pain, or any other uneasy sensation, is felt in the part which is well known to be the primary seat of the disorder, although it results from tubercles, disseminated at first in the substance of the upper part of one, or both lungs. At other times, we see cases in which its progress is latent, and altogether unheeded; still a slight cough is gene-

rally the first symptom, and this is attributed to some uneasiness in the throat, produced by a common cold. After a time the cough increases, and, from being either hard or dry, is followed by the expectoration of a little mucus, often devoid of colour, as in common catarrh. This is succeeded by some degree of weight and slight pain, felt in the chest, along with difficulty of breathing, general weakness, and an accelerated pulse, which seldom ranges below 90; during the hot stage of the hectic fever, it is generally 120. A sense of chillness, commonly experienced towards noon along the course of the spine, is the next symptom; which is followed by an augmented temperature of the body on the approach of evening, and finally by perspirations, which usually come on profusely after midnight, and greatly attenuate the body. When spitting of blood occurs with the foregoing symptoms, or when the matter expectorated begins to assume the appearance of pus, we have strong grounds to suspect the presence of pulmonary consumption. The occurrence of cough in any case, in which the general health has been impaired, ought to be regarded with no small suspicion. Cases are not wanting in which the disease manifests itself most irregularly. For example, either mesenteric enlargement, aphthæ, severe diarrhœa, amenor-

rhœa, or an affection of the larynx, attended with a slight alteration of the voice, not uncommonly precedes for a short time the usual characteristic symptoms. Though in the early stages there may be some doubt as to the existence of this disease, without the aid of physical signs, there can be however little chance of mistake in the advanced stages. As soon as hectic fever is fully established, the wasting of the flesh becomes remarkable, and rapidly increases, if perspiration, diarrhœa, and expectoration have been abundant. To me, who have been for so many years accustomed to see this disease daily, the very look of the patient is in most instances sufficient.

The nose and cheeks assume a striking prominence, and the bluish paleness and emaciated appearance of the face are remarkable, when contrasted with the suffused, and, at other times, circumscribed flush, which quickly goes and comes, together with the shining white or pearl-blue appearance of the conjunctiva of the eyes; the projection of the shoulder-blades (which has been noticed as resembling wings), while, at the same time, the chest is narrowed in its lateral as well as transverse diameter, in consequence of the increased convexity of the ribs, which has a greater inclination downwards, and which thus likewise admits of the

nearer approach of the sternum towards the back. On the upper and anterior part of the chest, the intercostal spaces appear widened and depressed, and the belly is at the same time flat and retracted ;—the fingers seem lengthened, and the joints of these, as of other parts, are apparently enlarged ; incurvation of the nails takes place, and where large tuberculous excavations have long existed, an actual enlargement of the ends of the fingers is observable ; the neck seems elongated and impeded in its movements, and the angles of the lips are drawn back, and produce a bitter smile.

Phthisis is not a disease difficult to be recognized in that stage in which the tuberculous mass is softened, and finds an opening into some of the neighbouring bronchi, and lastly leaves a cavity, whose existence is clearly indicated by its characteristic symptom—pectoriloquy. This peculiar phenomenon is generally heard first in the upper portion of the right lung, where tubercles first appear, when they are softened down ; and may be detected by applying the ear over the uppermost ribs, or over the infra-spinal fossa of the shoulder-blade. When the voice of the patient, on the naked ear's being applied, or with the aid of the instrument called a stethoscope, to that part of the chest, corresponding with the supposed seat of an ex-

cavation, is heard much louder than natural, and seems to issue uninterruptedly from within, with a thrilling sound, it constitutes what is termed a satisfactory pectoriloquy, and is an indubitable sign of a tuberculous cavity, the contents of which we even hear not unfrequently by the same method of diagnosis, agitated by the action of coughing. Whenever the walls of an old, and nearly emptied excavation, are dense and firm, a severe fit of coughing gives to the ear a metallic resonance, or a sound as of some empty glasses slightly shaken against each other. If the excavations are numerous, and communicate one with another, the liquid matter within is heard changing its situation every time the patient breathes.

The plan I always pursue, and indeed a most ready one, to distinguish consumption from pulmonary catarrh, with which it is liable to be confounded, is to apply the ear to the posterior part of the chest, about two or three inches below the inferior angle of the scapula. Here, if the respiration be almost natural, or slightly puerile, we can at once, and early, proclaim the case to be phthisical, if the patient have a troublesome cough, though he may present few of the other common symptoms belonging to consumption. Except near the fatal termination of the disease, when

the great emaciation, confirmed hectic fever, diarrhœa, and other bad symptoms manifest themselves, we have no physical sign of any bronchial inflammation; save in cases in which some progress towards recovery has taken place. When the sonorous rattle occurs before the lower lobes of the lungs are affected with tubercles, it is to be considered as a highly favourable symptom. However violent and long the cough may be in other cases, auscultation gives us no signs of the catarrhal state which precedes, and follows, complete recovery. Having daily opportunities of seeing new consumptive cases, I readily come to a conclusion, by the absence of catarrh, that they are undoubtedly consumptive, without taking the trouble to ascertain the state of the upper part of the chest; for, if an individual coughs up blood, or muco-purulent matter, is subject to chills, accessions of fever and night-sweats, wastes away and complains of debility, and no catarrh is heard in the inspirations, we may be perfectly satisfied that tuberculous cavities exist. When there is a cough which is not influenced by remedies, and the sympathetic signs of consumption, and the auscultatic results beneath the clavicles are somewhat unsatisfactory, while the lower part of the chest has the murmur of respiration almost natural, I should then, satisfied with the expe-

rience derived from exploring the chests of several thousand consumptive patients, unhesitatingly pronounce the case to be genuine consumption. In numerous instances, much to the surprise of my pupils, and of those practitioners who have witnessed my practice, I have pronounced a patient to have tuberculous disease in the superior lobes, while he exhibited no look indicative of such serious illness, but had merely an annoying cough. This prompt decision has, after I have ascertained by the ear the sanity of the respiratory murmur, and absence of bronchial irritation in the inferior part of the chest, been generally correct. In some instances, in the upper part of the chest, obscure respiration, arising from tubercles and pulmonary induration; in others, a tuberculous cavity, affording the most perfect pectoriloquism, has been ascertained; and, on closely questioning the patient, the symptoms he has detailed have usually been corroborative of what might be termed, if we were guided by the apparently unimpaired state of health, latent phthisis.

It were easy to enter into a more full and minute detail of the symptoms which characterize this complaint; but as my present object is to elucidate the preventative and sanatory treatment to be observed, I deem it advisable to reserve many observations of a

curious nature connected with this branch of my subject. However, should I have occasion 'to reprint this work, I may be tempted to enlarge the present chapter, and publish many interesting, and, as far as my knowledge extends, original facts.

I suffer this passage to remain as it stood in the first edition, as a renewed pledge to fulfil the promise thus given. The sudden call made upon me for a second impression, as well as a pressure of literary and professional labour, prevents me from redeeming my word at present; but as I am now engaged in an extensive work on the "Diseases of the Chest," I shall have an opportunity of pursuing the enquiry through all its ramifications.

MORBID APPEARANCES
OF
CONSUMPTION.

~~~~~  
CHAP. IV.  
~~~~~

THE most common morbid appearances met with in the lungs, are a peculiar species of accidental production, known under the generic name of tubercles. These, according to the different appearances they present, may be distinguished into two primary forms—that of *insulated bodies*, and that of *interstitial infiltration* or *secretion*. In the former are classed *miliary tubercles*, so named from their size, which usually corresponds with that of a millet seed, although they are sometimes found of much larger size. In their origin they are observed to be semi-transparent, and of a greyish colour, sometimes nearly colourless and transparent. On superficial inspection, they are apparently orbicular, but, when more minutely observed,

occasional angularities and anfractuositities are visible. So closely are they interwoven with the fibre of the lungs, that it is found impossible to separate them without bringing away, at the same time, a part of the former. They gradually approximate to, and unite with each other, forming semi-cartilaginous groups or masses, which in time acquire a light straw colour, and change into a substance of the consistency of cheese. When they thus spread and unite by intussusception, they form what is technically denominated *crude* tubercles, or *yellow crude* tubercles. Their progress to this state commences with the appearance of yellow, opaque specks occurring generally, but by no means uniformly, as has been erroneously stated, in their centres. These tubercles increasing by degrees, either unite in the manner described above, or remain, when thus converted into the crude state, separate and isolated. A strong proof of the soundness of the principle I am anxious to inculcate throughout this work, namely, that pulmonary consumption is seldom met with in individuals of large and expanded chests, will be found in the fact that these nodules, or tubercles, almost invariably commence in the upper portion of the lungs, which, by the very structure of the thorax, is their most confined part. From the summit they

spread downwards, and in their single formation will enlarge to the size of a hazel nut, although rarely; indeed, I consider it probable, that when they apparently reach these dimensions, they are not in point of fact single, but an aggregation, so compacted as to defy separation.

A second form of insulated bodies are the *granular tubercles*, first pointed out by Bayle, who regarded them as an accidental cartilaginous formation, different from tubercles; but without sufficient reason, since, on dividing them, we find that they present the same colour and opacity as the common tubercle, and their growth evidently proceeds through the same stages: therefore, I am of opinion that they are unquestionably the same. The principal difference between the two, consists in their external form. The *granular tubercles* are roundish or ovoid, of the size of a millet seed, which they seldom exceed, and germinate singly in immense numbers over an entire lung, or its greater portion, so that even where apparently blended, the granules are found, on examination, to be entirely distinct. They differ still further, by their being transparent and colourless. Their induration and cartilaginous structure may arise, it is not unreasonable to suppose, from their remaining during a long period

without showing any disposition to suppurate, which they are sometimes however found to do.

I have stated, that one of the principal differences between the miliary and the granular tubercles consists in the latter being colourless and transparent; yet this is not an invariable distinction, since they occur at times of a greyish tint, and are not invariably diaphanous, but in conjunction with this grey colour are also semi-transparent, thus furnishing an additional proof of their assimilation with the miliary tubercle.

The second form, in which tuberculous matter exhibits itself in the lungs, is that of *interstitial infiltration*; this, like the first, may be divided into two classes, one of which may be denominated *grey tuberculous infiltration*, and the other *jelly-like tuberculous infiltration*. The former is found, in this the second stage of the tubercular progress, infiltrated around tubercular cysts, and incorporated, if I may use the term, with the pulmonary tissue. Occasionally it is met with in a separate deposit, independent of the previous formation of miliary tubercles, and forms large masses of a moist compact substance, impenetrable by the air. Its greyish hue is derived from the secretion of black pulmonary matter in minute particles. Softening gradually, in a manner similar to the insulated tubercle,

it passes into a state of crudity, which is indicated by minute yellow, and opaque points, or specks. On making a section of this mass, the matter contained in these minute specks oozes out, and there remain small orifices similar to so many holes left by the mark or prick of a pin. The jelly-like substance, termed the jelly-like tuberculous infiltration, is discovered in the intervals of the miliary tubercles, and is for the most part colourless, although occasionally it is tinged with red. Gradually gaining greater consistency (says Laennec), it becomes converted into yellow tuberculous matter; and this indeed, according to him, at times so rapidly, that, on inspecting large masses of the substance thus changed, we are often unable to find any trace of its original state: but, according to my own opinions, which have been based on observations continued for a series of years, this view is altogether erroneous; since the jelly-like infiltration is, I conceive, the result of specific chronic inflammation. Nor does this jelly-like infiltration, or, more correctly speaking, secretion, ever become, as far as I am aware, converted into yellow tuberculous matter. Again, the secretion, of which we are now speaking, is precisely similar to that morbid deposit frequently found beneath the serous surface of the lungs, in cases of chronic pleu-

ris; and in chronic inflammation of the heart I have repeatedly seen the same gelatinous matter—beneath the serous investure of the auricles and that of the ventricles, within the laminae of the pericardium, and underneath the serous surface of parts within the abdominal cavity. These facts are strong corroborations of my opinion as to the specific chronic nature of this secretion; but when we find the presence of capillary vessels, extending themselves into this gelatinous matter, which minute vessels are also traced in the jelly-like secretion of the different parts above-mentioned, I think my assertion fully borne out. To extend my proofs still further, I may observe, that, in some severe chronic diseases of the joints, I have seen a like secretion on the exterior surface of the sinovial capsule, extending itself to no inconsiderable distance into the surrounding cellular membrane.

The process, by which both the insulated and diffused tuberculous matter becomes softened into a fluid state, is similar. Generally, in the centre of several coalesced tubercles, and in different parts of the diffused tuberculous matter, a number of small, yellow, opaque specks make their appearance, until, by degrees, the whole of the substance is converted into a uniform yellow mass, which after an uncertain period becomes softened, and

is changed into thick and curdy pus. However, the consistency of this pus is by no means invariably the same, a portion assimilating to the secretion from an ordinary sore, and being thin and watery. In expediting this change in the tuberculous mass from hard to soft, the secretion from the lining surface of the membrane circumscribing it, I entertain no doubt, contributes not a little. I find in a work, published by M. Lombard of Geneva, that he supposes each portion of tuberculous matter to act like a foreign body on the tissues with which it is in contact, thus producing a secretion of pus mechanically dividing the tubercle into clots; but I conceive that this gentleman, though partially correct, attributes too much to the action of this fluid, since we find a particle, or particles of pus, contained within the solitary tubercle, and evidently not in contact with any tissue having the power of generating pus—nay more, we find deposits of pus in the large tuberculous masses, in which the natural alveolar structure of the lungs is by no means discernible. When, partly by a process of irritation, a secretion of pus takes place, and to an amount sufficient to effect a solution of continuity, an opening is made into some of the neighbouring bronchial tubes, or into some tubercular cavity, of previous

formation, communicating with them. By this compound process, according to the foregoing view, the elimination of tuberculous granules is effected. The interior of such cavities, when of large extent, has columnar bands extending across it; these are formed of condensed pulmonary tissue, and they are sometimes coated with the tuberculous degeneracy; it should be observed, that none of the bronchial ramifications traverse these excavations, and that the few vessels, occasionally seen within the bands, are in almost every instance obliterated. In the parietes of the large anfractuous excavations of long standing, the blood-vessels are frequently observed in a flattened state, and those that are obliterated are covered by a thin, semi-cartilaginous membrane. On the contrary, the bronchial ramifications, with the exception of those necessary for the discharge of sputa, though found obliterated, and invariably discovered to be cut off, yet would appear to have been originally enveloped by the tuberculous matter, and to have traversed the space it occupies. As soon as these cavities have discharged their contents, they become lined by a soft, thin, and nearly opaque morbid membrane, or are merely invested by an exudation, which is in some parts deficient, and varies in density. At times, we meet with

cases in which laminæ of a semi-cartilaginous nature line these excavations, of a light blue colour, with slight eminences interspersed here and there, and in intimate connexion with the pulmonary tissue, being continuous also with the lining membrane of the bronchi. At others, the boundaries of the excavations are found without either of the false membranes, and are formed by the natural texture of the lungs merely condensed, or infiltrated with tubercular matter. In concluding my remarks on the formation of the tubercular cavities, I must express my concurrence with the view taken by M. Bayle, of the false membrane's secreting the pus which is expectorated, instead of its being the product of the bronchial secretion. The grounds on which I base my opinion are these—in the first place, that no bronchial affection is perceptible until the disease is drawing to a close, or unless nature attempts to effect a cure by the supervention of catarrh; and, in the second place, since, on dissection, we find that these excavations are not frequently empty, as stated by Laennec, but that in general they contain no inconsiderable quantity of puriform matter, similar to the sputa which had been ejected by the patient.

The stage of my subject, at which I have now arrived, leads me to the consideration of *encysted tuber-*

cles. Although seldom met with, except in the bronchial glands, yet I have found these tubercles previous to softening, in at least a dozen instances, surrounded by an accidental membranous formation, and sometimes by condensed pulmonary tissue. Still, seldom as this occurs, Nature, ever prone to discover and apply a remedy to her own infirmities, has benignantly provided that the black deposit, caused by the tuberculous irritation, shall answer every purpose of a cyst. It has often happened to me to have had opportunities of examining patients of my own, who, after having recovered from consumption, and enjoyed a good state of health for years, have expired of diseases not referrible to the pulmonary organ. In many of these instances, in which ulcers of the lungs have been transformed into semi-cartilaginous fistula, or in which perfect cellular cicatrization has taken place, I have remarked, that such nodules of tubercles as then existed have become enveloped by black pulmonary matter, which has evidently produced the same beneficial effects as would have resulted from the encysted state, by isolating them, and rendering them innoxious. Indeed, I have reason to believe, from enquiring into the history of many cases of persons, who in their youth laboured under consumption, from which they

afterwards recovered, and on whose demise I have been called in to examine the body, that latent nodules, in the state described above, have existed upwards of thirty years. Again, in individuals in whom consumption has been arrested by the spontaneous occurrence of chronic catarrh, or by treatment adapted to render the disease chronic, similar nodules, similarly situated, together with wrinkled depressions on the exterior surface of the lungs, signs of internal cicatrices, are of no infrequent occurrence. Without intending to enter too far into the debateable ground of hypothesis, I yet feel induced to observe that I regard tubercular deposition as a specific vitiated secretion, arising from an aberration of nutrition. In confirmation of this opinion, I have strong grounds for believing that tubercles of very recent date, and not arrived at a state of crudity, undergo absorption, and that upon this, restoration from incipient phthisis soon follows. Thus I have indicated two modes by which recovery from phthisis occurs; the one is the re-absorption of tubercles in their early stage, and the other is their insulation, even in a state of crudity, by black pulmonary matter. I now approach what I consider the most interesting portion of my subject connected with the morbid anatomy of phthisis, the mode of union, and cicatrization

of ulcerous excavations, which seems by no means understood. Whenever nature operates a cure, there is an extension of irritation from the lining of the cavity into the neighbouring bronchial tubes; and the consequence of this is, supposing there exist one or more cavities, in the summit of the right lung for example (since the right is the one generally first attacked), an emphysematous state of the vesicular structure of that portion of the lung, through imprisonment of the air in the act of expiration. Hence, through enlargement of the ærial cells, and consequent voluminous state of the pulmonary tissue, the pressure is so 'constantly exerted from without inwards on the interior of the cyst, that in time an apposition of the parietes of the cavity takes place, and the ulcerous excavation becomes healed by the first intention. If the healing occurs early, and the cavity is of not of old date, cellular cicatrization is the consequence; but if no pulmonary catarrh supervenes until after phthisis has existed for a length of time, the cicatrizations are generally formed of fibro-cartilaginous lamellæ, or there is left an imperfect cicatrix, with semi-cartilaginous fistula. Whenever vesicular emphysema exists, recent tubercles are rarely seen; hence it happens that fresh crops of tubercles have no disposition to appear in the cicatrized

summit of the newly-healed lung; but if, after recovery has taken place through this change, any circumstance should arise to injure the patient's health, the summit of the other lung, not being emphysematous, may be the seat of a fresh formation of tubercles; and the fresh, successive crops of tubercles may even appear beneath the emphysematous portion of the summit of the right lung, as well as in other parts. In the progress of the disease, when unchecked, these crops proceed downwards by progressive stages. No sooner has a cavity been formed in the summit of either lung, than, after an indefinite period, a succeeding eruption appears lower down, so that the appearances, presented on dissection, show the inroads of the disorder, from its direst ravages down to its latest attacks. Thus, an anfractuous cavity is generally found in the summit, surrounded by tubercles in an advanced state of crudity; somewhat lower down are smaller cavities containing portions of undissolved tuberculous matter, and around them small nodules assuming the yellow appearance; beneath these the crude miliary tubercles are apparent, having their centres already occupied with yellow points; and lastly, the transparent miliary tubercles, which form the first morbid tuberculous appearance in pulmonary consumption, occupy the in-

ferior portion of the lower lobes of the lungs. I ought here to mention, that, if after tubercles are deposited, or a cavity is formed in the summit of the lung, general vesicular emphysema arises in consequence of catarrhal affection, or of irritation, spreading through the ramifications of the bronchi from the seat of the disease, there will be no disposition to the formation of tubercles. This strange, and singular, exception may be probably the result of the extraordinary exercise of the pulmonary apparatus, caused by the frequency of respiration inseparable from catarrh or asthma. Most truly does Laennec observe, what my own extended experience confirms, that tubercles are less frequently met with in the muscles of voluntary motion than elsewhere; and here we find a strong confirmation, given by the hand of Nature herself, of the value of artificial means to increase the action of the lungs, and thus arrest any new development of tuberculous eruptions.

Before I conclude my observations on the morbid appearances, I deem it necessary to notice the organic changes which accompany phthisis; many of which are entirely dependent on the particular treatment to which the patient may be subjected. The intestines, more especially the small, are, next to the lungs, most

liable to tuberculous degeneration, leading to the ulcerous state, which in its turn keeps up profuse and wasting purgation. This troublesome condition may be, in many instances, avoided by a plan of treatment which the reader will find laid down in another part of this work. More than one-fourth, according to Dr. Lombard, in a hundred adult subjects, had tubercles in the intestines; but I have found, that, under judicious management, this proportion may be considerably decreased. Being desirous, however, to see how far phthisical patients were liable to this intestinal affection, I found that, out of the same number of adult subjects who came under my notice, less than a sixth-part had intestinal tubercles: yet, though such was the result of my inquiry with respect to these particular cases, I cannot but allow that the relative proportion, as stated by M. Lombard, is, generally speaking, correct. Next in order of frequency, as subject to the tuberculous state, are the mesenteric, the bronchial, and the cervical ganglions; the viscus most liable to be affected after the intestines, is the spleen; then the kidneys, and less rarely the liver. A wide difference, however, in the proportions above estimated, and in the liability of the several parts to tubercles, according to the order I have just set down, is met

with in young as compared with adult subjects. Thus intestinal tubercles are more rare in the former than in the latter, but the mesenteric, as well as the bronchial ganglions, are much more frequently the seat of this disease in children than in adults; and the result of repeated examinations has proved to me, that the presence of tubercles is oftener detected in the nervous centres of children than in those of adults. Were I to follow the bias of my inclination, I should willingly extend my remarks on this interesting branch of my subject still further; but the plan of the present work precludes me from entering upon a more detailed notice. I am thus necessarily restricted to brevity, in my observations on the principal lesions which accompany phthisis pulmonalis. It is with no small degree of surprise, that I find it stated by a French physician of eminence, M. Louis, that peripneumony and pleurisy were found by him to occur in so small a proportion as one-tenth of the cases; whereas I am fully persuaded that, in the last stage of consumption, not less than one-fourth, nor should I exaggerate by stating the proportion as greater, display, on dissection, one or both of these diseases. Another strange error into which a medical writer of the same country, M. Andral, has fallen, is his supposition, that peripneumony

is common in the early stages of the disease, the contrary being decidedly the fact. I admit that partial peripneumonies, around the nodules of tubercles, are not uncommon; but the cases, in which this disease occupies the lower lobes of the lungs, the usual seats of inflammation, are rare indeed. Were phthisical patients so frequently affected with pulmonary inflammation as M. Andral describes, the duration of consumption would be wonderfully shortened. One diseased state or other of the mucous membrane of the trachea, of the larynx, and of the epiglottis, occurs in the same ratio as pneumonia; but these affections are of infrequent occurrence until phthisis has made considerable progress. Fortunate indeed would it be for consumptive patients, to be early attacked with inflammation of some part of the great air passage, since, in such case, the progress of their disease would be effectually checked. I would here particularly draw attention to an important circumstance, which, if left unexplained, might appear subversive of the very principles and practice I would inculcate throughout this work. It may reasonably be enquired, if inflammation of the air passage, in one part or other, oppose so completely the progress of consumptive disease, how does it hap-

pen, that in numberless cases we find the first symptoms of phthisis, exhibited by the patient, to consist in loss of voice, hoarseness, and, in short, all the apparent evidences of laryngeal affection; and yet the pulmonary disorder receives no visible relief? Now, auscultative experience has clearly demonstrated to me that, in cases of this kind, latent tubercular disease invariably exists in the lungs previously to this aphonia; and that this very loss of voice, and accompanying hoarseness, are the results of a thickening and ulceration of the mucous membrane of the ventricles, and vocal chords, of the larynx alone, which, however, do not present an obstruction to the expiration so as to excite the action of the lungs, in the manner effected by catarrhal, or asthmatic complaints: yet there exists an essential difference in the character, and effects, of this distressing aphonia, and of catarrhal disorder. Notwithstanding in patients thus afflicted, all the various symptoms of phthisis proceed uninterruptedly; yet, through a subacute irritation in the ventricles of the larynx, at last producing a swelling of the surrounding mucous tissue, so as to encroach on the area of the windpipe, sufficiently to cause a slight obstruction to the expiratory process, consumptive subjects

of this class, I have often observed, live at least twice as long as the generality of those whose disease is not accompanied by such laryngeal affection.

The stomach, liver, spleen, and pancreas deviate not unfrequently from a healthy state. In consequence of observing the hardness, enlargement, and other structural alteration in the liver, the late Mr. Abernethy, to whom the department of surgery owes so much, was induced to believe that consumption frequently originated in a diseased state of this organ. From this erroneous view, a mode of treatment was pursued by him, calculated rather to aggravate than lessen phthisical symptoms. By too great a reliance on the effects of mercury, he unfortunately hastened the catastrophe which he sought to avert; and gave the sanction of his high authority to a practice, which, for several reasons, could not be attended with other than pernicious effects. It is evident, that he never reflected upon the causes to which this morbid condition of the liver is to be ascribed.

The great venous trunks are, in consumption, always congested in a greater or less degree. The cold stages of the hectic paroxysms, the tuberculous indurations, the partial pleurisies, peripneumonies, and the contraction of the chest constantly diminishing the capa-

city of the lungs, retard the circulation from the right side of the heart through the lungs; hence a gorged state of the *venæ cavæ*, and congestion of the liver, the inseparable consequence of the preternatural plenitude of the inferior cava, which receives the blood of this the largest gland in the system. The anatomist, being aware that the *vena portæ* carries the residual blood of the already specified organs through the liver, will readily account for the frequent occurrence of the morbid appearances, that are observable after death in these various parts; since the derangement of the liver will, it need hardly be said, exercise an injurious influence on the stomach, spleen, pancreas, and the intestinal tube: nay, it is by no means uncommon to meet with the symptoms of subacute inflammation of these parts during life. The frequency, extent, and complication, however, of these lesions on dissection, are chiefly dependent on the treatment that has been pursued. Should depletion have been neglected, these morbid affections will necessarily be considerable; but should the contrary course have been judiciously resorted to, they will be proportionably rarer. I may mention, by way of corollary to these remarks, that serous effusions take place, as a sequence of neglect in recurring to due depletion, and also, in many instances,

as the result of debility, and are the proximate cause of death. These may occur to a quintuple extent; for example—in the brain, the pericardium, the cellular membrane of the lungs, the pleural sacs, and the peritoneal cavity. From repeated observations made by me, and which have never yet been subject to a single exception, I may lay it down as almost an invariable rule, that an œdematous state of the feet is an index of some internal effusion. Indeed, after death, and before dissection, whenever I observe that the extremities are swollen, I feel convinced that the presence of effusion will be one of the results of the examination. As one of the complications of phthisis, I may here mention a disposition to fistula, which Borden states to be of common occurrence; but, according to my calculation, I estimate that the proportion does not exceed one in five hundred cases. Yet anal abscesses are far from being infrequent: on examination, they do not deserve the name of true fistulæ. Calcareous deposits are occasionally found loose, in some large cavities of the lungs; and I entertain no doubt, from having seen them in imperfect cicatrizations, that they have escaped into these excavations, from their containing cicatrice having been destroyed by ulceration. The general formation of these deposits, which are chiefly com-

posed of phosphate of lime, and of traces of animal matter, is not a little curious. When the process of healing is imperfectly performed, and the constitution of the individual is possibly inclined to a chalky diathesis, a calcareous secretion is substituted for the cicatrization that remains to be finished, and a cure of the part is thus completed: and I am satisfied that, in such of the bronchial glands as contain similar concretions, they supply the room of tuberculous matter, which, it is by no means improbable, is partly removed by absorption.

Mr. Abernethy has remarked in the heart, which is generally free from disease, with the exception of slight dilatation of the right ventricle, that the foramina thebesii are frequently enlarged. However, I have never yet met with any appearances which could justify his assertion.

There remain many observations which I would gladly make public, on the morbid appearances observable in consumption, a department of enquiry to which I have devoted my entire professional life; for instance, empyema, resulting from the escape of tuberculous matter into the cavity of the chest, pneumothorax, gangrene, &c.: but, as I have already stated, the circumscribed limits, and peculiar nature of my

work, preclude me from indulging my wishes on this my favourite theme. On a future occasion, however, it is not improbable that I may have to offer a distinct treatise on this interesting subject.

This opportunity will be presented in the work on "Diseases of the Chest," to which I have already alluded. However, the reader will find, that I have made an addition to the plates, illustrating the morbid anatomy of the disease.

PROPHYLACTIC TREATMENT,

BY WHICH THE DEVELOPMENT OF TUBERCLES IN THE LUNGS
MAY BE PREVENTED IN PERSONS LIABLE THERETO FROM
HEREDITARY PREDISPOSITION, OR A CACHECTIC STATE OF
THE SYSTEM.

CHAP. V.

EARLY in my practice, when consulted by patients of an hereditary bias towards consumption, it was usual with me to recommend a generous invigorating mode of living, and daily exercise in the open air, with

a caution to avoid every thing calculated to impair the general health. If, too, it were in the patient's power to avail himself frequently of change of air, and scene, I generally found it productive of considerable benefit, both in a physical and mental point of view. The advantages, derivable from short excursions, or still better, voyages by sea, always invited my recommendation when circumstances rendered them available. Impregnated as the sea-breezes are with saline particles, they act, I conceive, both as stimulants of the lungs to deeper and more frequent inspiration; and thus forward the enlargement of the chest, a point to which I have more than once adverted, in the course of this work, as of primary importance. They may also be regarded as possessed of a tonic power, bracing and invigorating the surface of the body, and, by continuous sympathy, exerting a beneficial influence on the viscera, especially those connected with the digestive functions. Another strong inducement to recommend a sea-voyage, in the case of persons labouring under incipient consumption, is the probability of the patient's having his chest expanded in the manner described above, and thus increasing the chances of his contracting some variety of catarrh—hence bidding defiance to phthisis. With reference to a generous



mode of living, it is obvious that the tendency to weakness, exhibited by individuals of consumptive constitution, calls for a method of treatment calculated to counteract the commencing symptoms. Particular rules and limitations, with respect to the dietetic management, will be specified under the head of diet. As to change of residence, a singular instance of its preventive effects occurred some years ago in the family of a near relative of mine, formerly colonel of a distinguished cavalry regiment, who, after the afflicting loss of two grown-up daughters and a son, removed with his remaining children to Tours. Here he resided for five years; at the expiration of which period, returning to his native country, and to the neighbourhood of the place in which the disease had first manifested itself in the children he had lost,—within the short period of two years, he had the affliction of witnessing the premature deaths of three other members of his family.

Celsus says, that the worst air for the patient is that which has given rise to the disease; to which we may add, that to consumptive families the worst locality is that in which the disease has first betrayed itself.

Whilst preparing these sheets for the press, I have met with a very striking exemplification of the value



52 PROPHYLACTIC TREATMENT OF CONSUMPTION.

of distant removal, in families consumptively inclined, to those members whom circumstances have called from their native land. Out of a family, consisting at one period of eleven individuals, seven remaining here have fallen victims to consumption; whilst two, who displayed the same phthisical constitution as these, having removed abroad, have enjoyed an excellent state of health for many years, the one in the West, the other in the East Indies, and have continued free from any pectoral complaint.

Of the different kinds of exercise, I would particularize running, and riding, as the most calculated to forward the purposes of prevention; indeed, as the best general prophylactics. After a quick and brisk run, the respiration becomes frequent and deep, and the panting that ensues exercising the muscles of the chest, favours a healthy development of that part, and enlarges the volume of the lungs. It has been my universal practice to recommend, in those schools I have been in the habit of attending, a constant attention to this healthy exercise, and to advise the preceptors to promote it by every inducement within their power; and I have never been disappointed in the results experienced. Nor are its happy effects confined to the mere expansion of the chest; by the greater

portion of air thus brought into contact with the venous system, the blood becomes more effectually decarbonized, the animal heat increased, the action of the heart more vigorous, and the multifarious secretions are carried on with greater energy.

Riding, which stood so high in Sydenham's estimation, is an exercise of no mean value, for the self-same reasons, with this advantage, that it yields all the good effects of the former, unattended with its fatigue. To those, however, in whom consumption has decidedly appeared, the benefit derivable from this mode of exercise may, perhaps, be enhanced by the tendency to an upward motion imparted to the lungs, thus disposing to apposition the diseased surfaces in the upper region of the chest. There is yet another mode of exercise, which was proposed by Dr. Carmichael Smyth, and to which he devoted a separate treatise, namely, that of swinging; which, although he does not explain its mode of operation, undoubtedly acts in a manner similar to the foregoing, and, notwithstanding I have never recommended it, it may not be unworthy of trial as a prophylactic. A strong proof of the advantages of exercise may not unwarrantably be sought for in the probable exemption of man, in a savage state, from the ravages of this disease. Although various disorders

are mentioned by travellers as having fallen under their observation, I do not remember, in the course of my reading, to have met with any notice of consumption, recorded by those who have mingled with the savage tribes of either the old or the new world; at least, amongst the more active races of uncivilized man. Indeed, it would be wonderful were the case otherwise. Dependant for their subsistence on incessant vigilance and vigorous exertion; constantly engaged in the toils of the chase, or animated to activity by the animosities ever subsisting between neighbouring tribes, however they may lapse occasionally into habits of sloth and indolence, their life from the cradle to the grave must, generally speaking, be calculated to call forth and perfect every bodily energy. Free from the restraints which are the unavoidable consequence of a state of superior intelligence,—neither confined to the manufactory, nor chained down to the desk of the counting-house, untrammelled by dress, and uncramped by the various devices to which either fashion, or the force of habit, renders us subservient, despite the dictates of reason,—the savage possesses at least the uncontrolled use of his limbs; and the symmetry, usually observed in him, is perhaps the best index of the health he enjoys. If, too, we extend our course of

reasoning to the inferior race of animals, and observe the differences existing between them in their wild and domestic condition, we shall find a singular analogy betwixt them and man. To go no further than the harmless creature, the rabbit, I have found, in the course of my researches in comparative anatomy, that this animal frequently dies of consumption, in its tame state; but I never met with an instance of the kind in the wild rabbit. Perhaps the benefit of exercise cannot be better exemplified than by way of contrast. Swine, proverbially the most indolent of animals, are also the most subject to tuberculous disease; hence the derivation of the word *scrofula* from the Latin *scrofa*, a swine; and consumption and scrofula are identically the same, both resulting from the presence of tubercles. To pursue the analogy, another strong instance of the force and good effects of exercise is observable in the race-horse, the hunter, and indeed in all of this class that are subject to frequent and active exertion. These seldom or ever, I believe, are found to have tubercles in the lungs, so long as they are kept constantly employed. Many illustrations of this nature might be adduced, but sufficient has been said to enable the reader to extend this comparative enquiry, and to confirm the high value which I set on the effects

of judicious and well-regulated exercise. In additional confirmation of my reliance on mechanical modes of exercise, as prophylactics, I proceed to relate a few out of numerous cases of the kind I find recorded in my note-book.

CASE I.—Some few years back I was called in to see the eldest son of a family of rank, a boy of twelve years of age, who, when I first saw him, was in the last stage of consumption, to which a younger member of the same family, whose case I had not the opportunity of witnessing, had previously fallen a victim. As was expected, the case terminated fatally; and on examining the body, independently of the diseased state of the lungs, which usually occurs in consumption, the serous surfaces of the chest, as well as of the abdomen, were studded with innumerable tubercles. Some of these, seated in the peritoneum, investing the intestinal tube, were of large size, and in a state of crudity; and I traced two minute openings in the ileum, formed, I have reason to believe, by softened tuberculous matter, through which liquid fœcal contents were diffused within the abdominal cavity. This part, during life, was of ascitical magnitude, and fluctuated on percussion, but was almost devoid of pain. He vomited, on two or three occasions, considerable

quantities of liquid matter, emitting a fœcal odour, and similar in appearance to what I afterwards found deposited in the peritoneal sac; and subsequent to each vomiting, a perceptible reduction in the magnitude of the abdomen took place. This circumstance would induce me to believe, judging from the peculiar smell and appearance of the ejected fluid, that a portion had been returned from the abdominal cavity into the intestinal canal, whence, by inverted action, it reached the stomach to be discharged by vomiting. The same appearances, in regard to extensive tuberculous deposit, with the exception of the intestinal perforation, were, I was given to understand, presented in the body of the younger brother, whose death, I have already mentioned, preceded that of his elder. From the delicate health of the remaining members of the family, two especially, joined to the foregoing signs of highly-charged scrofulous habit, it was apprehended by their nearest relatives that the disease would successively pervade the whole family. One, however, I felt assured, from her having had for two years a pulmonary catarrh, would be exempt from the dreaded visitation. Following up the plan which I had ever found so eminently serviceable, I immediately recommended them to commence a course of inhalation. For this purpose,

I ordered that tubes, of diameters varying with the respective ages of the patients, should be prepared, through which they were directed to respire twice a day; and the time for this process was gradually extended, until it occupied half an hour, morning and evening. By pursuing this plan of treatment, their chests gradually enlarged, their health became surprisingly amended, and a regularity of bowels, without the aid of medicine, was soon established. It may here be advisable to explain in what manner the simple process of inhalation, whilst it expands the pulmonary apparatus, at the same time regulates the most important of the visceral functions. The mere expansion of the lungs, in the first instance, tends indirectly to remove congestion of the liver, and also of the stomach, spleen, pancreas, and intestinal canal, all dependent on the more free circulation of the blood in the former. The biliary, as well as the great salivary secretion, is hereby promoted to a healthy activity. Such morbid irritability of the mucous membrane of the stomach, as may be present, productive of indigestion, is removed; the chyloferous absorption belonging to the small intestines, so indispensable to life, is actively carried on; and the injurious retention of excrementitious matter, in the larger intestines, is obviated.

by increased mucous moisture, and accelerated peristaltic motion. It were easy, did I deem it essential, to point out at length the beneficial effects produced on other secretions, and to explain the mode by which inhalation acts upon that of the kidneys; but sufficient has been stated to enable the medical man to draw his own deductions in these particulars. To bring the history of this family case to a close; I have the pleasure of saying, that a perfect restoration has attended my endeavours, and that at this moment these, my former patients, are enjoying all the blessings of health.

CASE II.—A young gentleman was brought to my house, by the secretary of an incorporated Literary Institution in Lincoln's Inn Fields, labouring, his friends feared, under incipient consumption. His conformation evidently predisposed him to phthisis; and his chest in particular was singularly narrow and slightly deformed. I laid down the plan which I conceived it would be most advisable for him to follow, and pointed out the necessity of strict adherence to my directions. Inhalation, of course, formed a prominent feature in the treatment to be observed. It so happened, that I had only this solitary opportunity of prescribing for him, although I could have wished to have seen him from time to time, since there are circumstances which

occasionally render it expedient to suspend inhalation for a short period, and to have recourse to local and other treatment. Notwithstanding the want of this opportunity might be considered unfavourable, it so occurred, to my great satisfaction, that meeting with the gentleman who had introduced the youth, about eighteen months subsequent to his consulting me, and of course inquiring into the state of his health, I found that he, having punctually adhered to my instructions, had not only overcome all his consumptive symptoms, and been restored to robust health, but that his chest, formerly so flat and confined, had altered its shape, was considerably enlarged, and was, to use the expression of his friend, perfect symmetry.

CASE III.—Two young ladies, of adult age, were brought to town by their mother in the middle of the year 1832, for the purpose of taking my advice. Four of her children had, she stated, in a short period of time, been attacked by consumption, and had fallen a prey to it. All, when I first visited them, had a short, hacking cough, with undefined pain in the chest. In the eldest, who was in her nineteenth year, the murmur of respiration was imperfect in the top of the right lung; percussion also, on the centre of the clavicle of the same side, yielded a flat sound. My own

impression from these signs was, that a tuberculous deposit had already taken place. Bronchophonism was distinctly heard by the naked ear; and it was plain from the absence of any variety of pectoriloquy, that no softening of the mass, so as to form a cavity, had occurred. With respect to the other sister—since the sound of her respiration was natural, and no bronchial affection whatever was indicated, yet as she had occasional cough, and had had, as I was informed, slight hæmoptysis—I conceived that a few solitary tubercles might possibly exist in her lungs, irritating the pulmonary tissue like the thorn of Van Helmont. These symptoms considered, I commenced with local blood-letting, and the exhibition of nitre in doses of a scruple, &c.; after which, my chief reliance was on inhalation. They persevered in a course of this for some months, inhaling, according to my customary directions, twice a-day, varying the diameter of the tubes employed, since occasionally pain arose from the expansive process being too powerful. Indeed, the liability to pulmonary engorgement, from using tubes of too small a diameter, points out the necessity for the constant superintendence of the practitioner, skilled in the auscultative exploration of the chest. One circumstance, perhaps, should not be passed over, as exhibiting an

additional proof of the good effects of inhalation on the general health. The periodical uterine secretion of the elder of these young ladies having been suppressed for some months, she recovered in the course of a few weeks the usual feminine habit, which subsequently continued underanged. Nothing of further moment occurred in the course of these cases. Continuing gradually to improve, the younger became perfectly restored to health; and the elder, although the respiration in the upper lobe of the right lung is not so perfect as I could desire, still, from the general expansion which the pulmonary tissue underwent in all other parts, and the probability that in time black pulmonary secretion will form round the existing nodules, so as to isolate them in the manner I have fully described in the chapter on Morbid Appearances, I consider as entirely free from all danger of any new formation of tuberculous matter.

The value of exercise, in checking and removing symptoms of incipient phthisis, is, in my opinion, so great, that I am induced to dwell at some length upon this part of my subject. Those musicians, whose profession it is to play upon wind instruments, are in general supposed to be peculiarly subject to pulmonary complaints; and perhaps not inaccurately so: yet, I

am not aware that any detailed, or circumstantial, explanation has been given of the mode, through which injurious effects arise from the use of such instruments. Whoever will take the trouble to watch attentively a player on the flute, or clarionet, &c., will find, that although the performer seemingly inspires and expires frequently and fully, yet that, in point of fact, he often makes several consecutive expirations to one inspiration. Thus his breathing, so far from being advantageous, and so far from developing the lungs, as I have previously declared well-regulated mechanical exercise will ever do, is indeed so irregular and furtive, that it produces effects entirely the reverse, narrowing the chest, and confining the volume of the lungs : indeed, it favours that diminished size of the respiratory apparatus which engenders a tendency to consumption. What I may not inaptly term a wholesale case, occurred some years ago, illustrative of the foregoing remarks. The leader of an itinerant band of musicians applied to me, in behalf of himself and followers, to know what method they should pursue to avert the threatening appearances, which they considered would ultimately lead to confirmed pulmonary affection. I advised, that after their musical entertainment for the time being was concluded, they should always take a

long and quick run, or else carry walking-sticks, perforated longitudinally, through which they might respire, and thus compensate their previous irregularity in breathing. Ludicrous as the idea may appear, of a set of men scampering off, after an exhibition of their scientific powers, these poor fellows had the good sense to perceive the advantage of pursuing my advice; and I have subsequently learnt that they have experienced its happy influence. It has been my uniform practice indeed, in similar instances, to recommend a similar proceeding, and the benefit has, I trust, been widely diffused. Before proceeding further in this chapter, it may not be irrelevant to notice, that protracted indisposition, whether arising from mental or bodily causes, is productive of diminution of the chest; the general debility causing local muscular weakness, and this being more particularly the case in the muscles of inspiration. The lungs, thus compressed, are of course favourable to the development of tubercles; as well as to pleurisies, which, according to a great authority, M. Laennec, are the cause of permanent contraction of the chest in consumption. But it should be borne in mind, that this writer is utterly mistaken, when he asserts that the endeavours of nature to cure phthisis originate the same phenomenon.

The truth is—the contrary is the fact; since, on examination of the lungs of persons who have recovered from consumption, we almost invariably find their lungs voluminous, and their chest of increased capacity. When individuals labour under chronic, or incurable diseases of any kind, whether medical or surgical, and the constitution is much impaired by the continuance of ill health, consumption is, in such cases, peculiarly prone to manifest itself: but should they have been subject for any length of time to catarrhal, asthmatic, or cardiacal affections, I have long observed that they enjoy a complete immunity from tuberculous attacks, and hence cannot become consumptive. Therefore, in imitation of my own practice, I would earnestly recommend the physician, as well as surgeon, to exercise the chest by means of inhalation; and the result would be to ward off any secondary complaint, such as consumption, which so commonly supervenes to shorten lives, that otherwise might have been indefinitely prolonged. To strengthen my assertions respecting the beneficial results arising from the manifestation of catarrh, in patients suffering from incurable complaints, I could give from my case-book, and indeed from memory as well, innumerable

cases confirmatory of my views : but a few will suffice to shew that I do not exaggerate its happy influence.

CASE IV.—Sarah Jackson, aged forty-eight, applied four years ago to the Infirmary for Asthma, Consumption, &c., in consequence of consumptive symptoms ; such as hectic fever, frequent pulse, violent cough, with copious puriform, and sometimes sanguineous expectoration, profuse nocturnal perspirations, and, as might be expected, great emaciation and debility. Her habit had long been feeble, which had been in the first place induced by cancerous affection of the womb, destructive of the cervix, and a portion of its body, and which had produced malignant ulceration of the upper part of the vagina, accompanied with racking pain, fetid sanies, and other exhausting discharges attendant on schirrous uterine disease. It was not till she had been an out-patient at the infirmary for some time, that I was made acquainted with the above alarming cancerous state. This of course appeared a fearful complication of disease, and, in fact, made me regard the case as almost hopeless. However, by means of small local bleedings, at times from the chest, and occasionally from the neighbourhood of the uterus, together with the exhibition of saline medicines, conjoined with tar-

tar emetic in small quantity, and aluminous and other injections for the womb, I succeeded in entirely removing her constitutional disorder, and in greatly mitigating the disease of the chest, as well as that of the uterus. Now, whether it was owing to her own imprudence in improperly using the injections too cold, or from incautious exposure to the weather during the prevalence of easterly winds, a severe bronchial affection took place, in which was well-marked sonorous, and sibilant rattle. Excepting mucilaginous and demulcent drinks, with small doses of nitre, she had very little medicine administered to her. Indeed, I hailed this adscititious complaint, notwithstanding her much embarrassed breathing and distressing cough, as the most fortunate circumstance that could have befallen her; and was therefore inclined to let nature work, carefully watching every indication, and desirous to assist, rather than to interfere, with her operations. It is superfluous to enter into all the minutiae of this patient's treatment; suffice it to say, that a permanent catarrh was established, thus at once arresting the progress of consumption, and daily adding to her security from all danger of relapse. Nor was this the sole advantage resulting from the supervention of a bronchial complaint. By the improvement which the patient's

general health experienced, from the successful termination given to the consumptive symptoms, the uterine malady has increased but little, which, aggravated by the supervening phthisis, would, without the ingression of the last of this ternary complication, most probably have long since proved fatal. Thus, in this instance, as well as in many others of no dissimilar nature, which it were easy to adduce, we have a proof corroborative of the fact, that the supervening catarrh, occurring spontaneously, will not only give a favourable turn to the course of consumption but be instrumental in delaying the advance of an incurable disease. So well defined is this case, and so strong a proof does it afford of the efficacy of the practical treatment, which it is my chief object to point out, that I deem it necessary to demonstrate beyond doubt the consumptive condition of this patient; and I therefore am anxious to add, that my opinion was not grounded merely upon the common symptoms of phthisis, but upon the more certain indices afforded by physical phenomena. This female, whose employment is that of a nurse, has, I understand, communicated her improved health to Mr. White, surgeon to the Westminster Hospital, and also to Dr. Borett, a Polish physician, and others, who, in conjunction with myself, carefully ascertained

the nature of her pectoral as well as uterine disorders, and can bear testimony to the order in which they occurred.

CASE V.—Mr. C. W., from the neighbourhood of Rumford, applied to me in February, 1828, for a complaint of the chest. He had been for some months expectorating muco-purulent matter in considerable quantities; through this, as well as profuse perspirations, and an occasional febrile state, he had become excessively debilitated and attenuated. After pursuing my advice for a short time, he lost his more formidable symptoms; and there were merely left slight cough, and an oppressive wheezing, which, at times, would compel him to leave his bed about two hours after midnight. Though he considered himself well for nearly five years after this, I have nevertheless grounds for belief, as this was a cured consumptive case, and as he exhibited slight symptoms of emphysema, that his lungs must have been, throughout this space of time, more or less affected with some bronchial irritation, though he had but little cough. Being called in to this gentleman about eight months ago, as apprehensions were entertained, from certain pulmonary indications, of his relapsing into the state from which I had formerly relieved him, I ascertained by the ear

that a bronchial affection had been established, which, from my recollection of the peculiarities of his ailments, and my having regarded it as one of cured consumption, I felt satisfied, previous to auscultation, would prove to be the case. Pointing out this condition of his patient to that most intelligent practitioner, Mr. Sewell, I assured him that he need not have contemplated a recurrence of consumption, though such might not unreasonably be apprehended from a malignant, schirrous affection, which made its appearance eighteen months ago, and had committed extensive ravages on the rectum, perineum, and adjoining parts, for which the most celebrated surgical advice was taken. From the ill-health induced by the foregoing destructive malady, the chances of his having consumption were considerably augmented; but owing to the protection afforded by chronic catarrh, as I have often reiterated, the patient is placed beyond the reach of that most common and fatal of human diseases—pulmonary consumption.

CASE VI.—However anti-Malthusian the doctrine may be, yet as it is in accordance with the law, and may likewise be regarded as a special dispensation of nature, I do not scruple to advance it as my opinion, that many cases of threatened, or indeed actual con-

sumption, in the female, may be warded off by a timely compliance with the first benignant ordination given to our first parents—marriage. In order fully to explain how the benefit arises, and in what manner the blessings of matrimony,—for such I believe, despite the talented professor above-alluded to, they are still called,—operate, I shall cite one from a variety of similar cases. Mrs. E. S., aged thirty-eight, made application to me, in the winter of 1827, for a painful state of the chest, with oppressed breathing and severe cough, with expectoration of blood, mixed with frothy, yellow matter. She likewise complained of profuse perspirations, followed by emaciation and extreme debility. Among other physical signs, pectoriloquism was distinctly heard underneath the second and third ribs of the right side, by the naked ear. When she first came to me, she laboured under much depression and anxiety with respect to her state, not only from her having lost two sisters by the same disease, but from her husband's having inadvertently communicated to her, the opinion of a respectable medical practitioner of Great Ormond-street, who, to use her own words, had unreservedly stated to him, “that no power on earth could save her life.” My opinion, at first, was also of an unfavourable kind. The experience of a

few days, however, since the most distressing symptoms of the case yielded to remedial treatment, induced me to entertain hopes. These hopes became certainty when I discovered that she was in a state of pregnancy, for I had long noticed that the constantly increasing magnitude of the womb exerts a powerful influence in suspending, and still further in curing, tubercular phthisis. This circumstance is not brought forward as any novelty to the profession, but simply as affording an opportunity of explaining the process, by which the gravid uterus accomplishes so favourable an end. Contrary to the hitherto received opinion, that a diversion of morbid action from the lungs takes place, through the necessary afflux of sanguineous fluid to the womb, and its embryo, thus arresting disease, I conceive that this mode of accounting for the cures effected is utterly vague and unsatisfactory. In such cases, the suspension of disease existing in the lungs, and indeed the permanent removal of the constitutional symptoms of phthisis, are no doubt effected as follows. The encroachment made on the chest from below upwards by the pressure beneath the diaphragm, has the effect, in many instances, of bringing in apposition the inferior and superior surfaces of the pulmonary cavities, by which they may after a time unite; and this view

of mine is borne out by the *post-mortem* appearances, which I have witnessed in those who had recovered from consumption while in a pregnant state. In not a few examinations of this kind, I have noticed that the internal cicatrizations of the healed lungs were transverse or horizontal, thus proving that the progressive pressure upwards, in the direction of the diseased summit, had been the sole cause of that union to which the disease has, in great measure, owed its cure. This mode of explaining the cure appears to me much less hypothetical than the generally received doctrine, since it is based on proofs derived equally from anatomical and pathological research; yet I do not wholly dissent from the customary view of the subject, the cure being indisputably, in many instances, consequent on the determination of blood to the uterus, thus diminishing to a certain extent a local disease, and allowing, by this diminution, the supervention of subacute bronchial irritation, in no slight degree, perhaps, favoured by the horizontal enlargement of the lungs, especially of the lower lobes. Though instances of recovery, attendant on pregnancy supervening on consumption, are numerous, yet, as cases notwithstanding happen in which a cure has not been effected, I think it essential to indicate one or two reasons for such occurrence.

First, we cannot be surprised, when pregnancy takes place in an advanced stage of the disease, at not meeting with the usual effects; and a second reason that may be assigned for death following, what might otherwise be regarded as a case of cured consumption, may be found in the absence of chronic catarrh; or in ill health, after cicatrization has taken place, causing a fresh growth of tubercles. Having thus purposely digressed, in order to explain my views of the sanatory influence of pregnancy, I hasten to the conclusion of the present case. Since she first became my patient she has had four children, now alive; and, with the exception of a discharge of blood and muco-purulent matter, that continued for a week about three years ago, possibly expectorated from some imperfectly-healed cavity of long date, she has had no recurrence of her former formidable complaint. During the last year she was free from any cough; and, with the exception of a slight catarrh, which is now attended with an abundant pituitous discharge, she is in the enjoyment of better health than she has been in for the last eight years. At present, I consider her as perfectly secured against a relapse into her former state, for two reasons—the partial cicatrization which evidently took place during pregnancy, and the existence of emphy-

sematous, and voluminous lungs—the first discoverable by respiration denoting that state, and the second being the sure consequence of the former. It cannot, I think, be wondered at, that having repeatedly witnessed the fortunate results arising from the pregnant state, I should have some years ago occasionally ventured to suggest to the unmarried consumptive female the propriety or necessity of matrimony, where, from the circumstance of existing reciprocal attachment, such an engagement could be happily entered into.

I have previously mentioned that asthmatic, catarrhal, and cardiacal individuals are exempt from all danger of pulmonary consumption; and to these I may subjoin persons affected with diseases of the convulsive kind; such as hysteria, epilepsy, or, in truth, all in which a prolonged, forcible retention of the breath is frequently seen. This circumstance, in patients of this description, must be accounted for in the manner already explained, when dwelling upon the benefits arising from the mechanical extensibility of the air-cells by inhalation.

Before bringing these remarks on the prophylactic treatment of phthisis to a close, there remain a few general observations, the tendency and spirit of which spring as much, or nearly so, from experience in my

own person, as from my attention to the cases of others. I have advised, in the foregoing portion of my work, a generous mode of living as among the preventives of this disease; and in peculiar circumstances I would even recommend the use—of course the cautious use—of wine, sound home-brewed malt liquors, and occasionally of other stimulants. I now allude to a failure of health, the forerunner of consumptive attack, induced by trouble of mind, to which I lament to say numbers fall lingering victims. It has been my misfortune to witness, in the course of my practice, but too many afflicting instances of the maladies engendered by “a mind diseased.” Well has the poet of nature remarked this, amongst his aggregate of human ills, when he mentions “the law’s delay,” than which I know not a greater destroyer of peace of mind, and, with it, of the body’s health. We are accustomed to look back with horror on the proceedings, recorded by historians, as having taken place in that iniquitous court which went under the name of the Star Chamber: how then, judging by analogy, will our posterity execrate the records left them of the practice of the Court of Chancery! They will there read a piteous tale of justice withheld,—of hope, the brightest boon of heaven, extended and protracted, until to look for-

ward is to exclaim, with Lear, "Oh! that way madness lies." The ghastly train of diseases,—consumption, cancer, and other fell destroyers of the human race,—which I have seen brought on the wretched victims of the procrastination, until recently the characteristic of this court, leads me, in common with the general voice, to reflect with gratitude on the change that has been effected by the wise energy of one master-spirit. Had the reforms, introduced by him, been adopted even a few years sooner, how many a fair fabric of human happiness would have been spared, that now lies dismantled and overthrown! To return from this digression. On occasions when the mind is kept constantly on the rack, I consider it not unadvisable to allow a comparative freedom in point of living; but I must add a caution, with respect to patients of the weaker sex, to whom this freedom, limited as I have stated it should be, must be still more sparingly granted. The difference in strength, both mental and physical, calls for strict attention to this distinction.

THE TREATMENT
OF
CONSUMPTION.

CHAP. VI.

THERE are but two modes by which we can hope to cure this disease: the one is by rendering it chronic, and the other by artificially enlarging those portions of the lungs which are pervious to air. In the first we endeavour to effect an absence of constitutional disorder; but, after this change is effected, there may still remain for an indefinite period one, or more, cavities uncicatrized, with lining membrane, partly semi-cartilaginous, or of such condensed and insensible structure as to be productive of little inconvenience, if we except occasional cough and some hæmorrhage; which last occurs at long intervals, and rarely to a great extent. In the second, there is produced what is invariably seen when nature or art has effected a cure—an enlargement of the vesicular structure of the lungs,

and subsequently a gradual healing of the tuberculous excavations.

It has always been my great aim to put an end, as early as possible, to the symptoms of hectic fever. This I have successfully accomplished, in many instances, by employing moderate anti-phlogistic means ; among which, I may first mention general and local blood-letting. It is astonishing how great is the relief afforded by even six or eight leeches, applied to the chest whilst the patient is labouring under the hectic paroxysm. It was early my practice to bleed two or three times from the arm, as we thus interrupt the noonday chills, evening fever, and the nightly perspirations : and when the abstraction of blood by the lancet is employed early (acute inflammation being absent), and in a quantity rarely exceeding five or six ounces at a time, weakness is seldom complained of ; on the contrary, the greatest relief is experienced. The weight and erratic pains of the chest, distressing cough, shortness of breath, and irritability of the stomach, are greatly lessened. It has long appeared to me, that the necessity for the abstraction of blood has not been judiciously considered ; otherwise, I should not be consulted by so many consumptive individuals, in whom the disease has gone on unpalliated by any sanguineous

depletion. Let us only consider how much the chilly fits, which are of daily occurrence, and how much tubercular deposits and engorgements in the lungs themselves (the bulk of which is gradually undergoing a diminution by the contraction of the chest), have a tendency to produce a certain degree of venous congestion.

The blood of the right ventricle of the heart not finding a ready passage through the lungs, afflicted as above-mentioned, causes a preternatural quantity of the same fluid in the adjoining auricle, and especially in the two great veins opening into it. The consequences of this state are head-ache, owing to interruption of the free return of blood from the head; pulmonary engorgement, through the difficulty the bronchial veins experience in transmitting their blood, by either its direct or circuitous course, into the vena azygos; and serious derangement, or actual disease, of the most important viscera of the abdomen. The superior cava, preternaturally full of blood, will, by retarding that fluid in the jugular veins, produce pain in the head; and, by a similar interruption to the circulation of the vena azygos, besides interfering with the free return of the blood into the bronchial veins, it will in some degree impair the activity of the kidneys; the due return of

the effete blood of which organs depends on the freedom with which it is conveyed from the vena azygos, into the vena cava superior:

The moderate abstraction of blood occasionally, prevents that congestion in the floating viscera of the abdomen which gives rise to diarrhœa, irritability of stomach, and likewise effusion from the serous membrane investing them, which at times occurs. It has, indeed, an excellent effect in giving freedom to the hepatic circulation; and thus all the parts, whose venous circulation passes through the liver by the vena portæ, are long preserved in a state of integrity. Besides the great exemption from diarrhœa which this practice affords, the colliquative perspirations likewise are either greatly lessened, or for no inconsiderable period wholly removed. Where the disease is not of such long duration as to be attended by much emaciation and debility, I would advise general blood-letting, to the extent of four or six ounces, to be performed three or four times, during the presence of hectic fever; allowing of course, the patient being better, a reasonable time to elapse before he be again subjected to this operation. In consumption, particularly in its early stage, I find patients generally say they are strengthened, rather than weakened, when

four or five ounces of blood are taken at intervals of a few days. After the constitutional fever has been in this manner interrupted, if it seems in a little while to have a disposition to return, we may again ward it off by applying six or eight leeches on the summit of the chest just beneath the clavicles. In my opinion, they are best applied on the upper part of the chest, since it is there that the tubercular affection first commences. By thus alternating the general and local bleedings, we husband the patient's strength, while at the same time we mitigate the most distressing symptoms of his disorder. Cases are at times met with, in which the lancet may be used with some degree of freedom. For example: when signs of pleuritic or pneumonic inflammation are present, and when hæmoptical discharges are attended with much oppression, pain, and heat in the chest. I have not seen it noticed, that, in the absence of acute inflammation, the blood taken from the arm of consumptive persons is peculiar in its crassamentum; it is never cupped, and its upper surface has a somewhat greenish, semi-transparent, gelatinous appearance, with yellow filaments here and there interspersed. Mr. Herring, the attentive apothecary for many years at the Infirmary for Diseases of the Chest, has long noticed this extraordinary and

characteristic state of the blood. It is indicative of an actual, and inappreciable, change in the circulatory fluid. When the muscular parts, and integuments, about the chest are greatly attenuated, local bleedings are best accomplished by leeches, rather than cupping—the tediousness of the former may be obviated by picking them off when they are tolerably full. Instead of fomenting the bites as is customary, which practice exposes the patient unnecessarily to cold, I advise some lint or old linen to be immediately applied, and not removed for at least half an hour; by this means, the blood absorbed acts as a fomentation to encourage a sufficient effusion.

By auscultative examination, I have ascertained, that when sanguineous sputa make their appearance in chronic or latent phthisis, they not unfrequently result from inflammation of the lower lobe of one or both lungs, causing an unusual degree of congestion in parts remaining unhealed; therefore my advice is, in all cases, however unequivocal be the common symptoms of inflammation of the substance of the lungs, that a careful exploration of the chest, both by the ear and percussion, take place. The consequence of this will be (after we have fully satisfied ourselves that the spitting of blood is not the result of primary change

in the vessels, coasting tuberculous excavations in the summit of the lungs, but that it is owing almost wholly to some engorgement, or sympathy with the portions of the lung beneath, in a state of actual inflammation), that an effective abstraction of blood, to the amount of fourteen or sixteen ounces, being directed and repeated after a couple of days, if the same condition should exist, will assist in bringing the patient in a short time to his wonted state of health. Any active treatment of this kind employed without discrimination, particularly when much tuberculous disease is disseminated throughout the lungs, and has formed numerous cavities, which have seriously and manifestly impaired the general health, would in most cases be productive of the greatest evil, and possibly soon give rise to œdema of the lungs, or some other watery effusion elsewhere. Few consumptive cases terminate fatally, without being preceded by some dropsical state of the lungs. This generally occurs when the feet and legs begin to swell, and is a period too when leeches even are rarely admissible.

I shall now close my observations on bleeding, with mentioning, that blood drawn from the arm, in any inflammatory affection of the chest, co-existing with phthisis, appears with a cupped and buffy coat, and

not with the peculiar appearance, already noticed by me, as attending the latter disease in its unmasked state. Not unfrequently the close of existence in the consumptive individual, already reduced to the lowest condition of weakness and emaciation, is preceded by some pneumonic and pleuritic affection, which admits of no permanent relief by bloodletting.

INHALATION.—I am well aware that many objections may be started to this practice from prejudice, or inefficient observation. Strange to say, the principle, on which this mode of treatment operates beneficially, appears to me quite unknown to medical men. It is supposed, that the inspiration of medicated vapours has in many instances proved useful by allaying cough, and by producing some healthy and unexplained change in diseased parts of the lungs, as well as on such adventitious surfaces as are formed after the softening, or discharge, of tuberculous matter. The permanent advantages which inhaling is capable of affording, I am convinced, have been very rarely witnessed by the generality of practitioners. First, because the period, during which persons are directed to inhale, is generally too short to produce either a catarrhal or an enlarged state of the lungs, one of which conditions is absolutely necessary in order to suspend,

or cure, consumption : and, secondly, the apparatuses employed for this purpose are not constructed scientifically, so as to facilitate those physical changes which it is desirable the chest should undergo. Proper inhalers ought to be so arranged, as to offer some slight impediment to free expiration ; which can be effected by having the vessels, for containing the materials to be inhaled, of a size capable of holding about two quarts of liquid, with covers perforated by two apertures ; one of very small size, serving as an air-vent, and the other furnished with a flexible or straight tube, of narrow diameter, and at least five feet long. For the end of the tube destined to be received between the lips, we may have mouth-pieces formed of ivory or bone, each of them having an aperture of a different size. The length of the tube will save the patient's countenance from being heated by too close an approximation to the body of the apparatus, when filled with heated water ; besides, it contributes, together with the small air-vent, to retard the free egress of air from the lungs, which, I shall presently show, constitutes in no small degree the great virtue of inhalation.

An extraordinary, but most undeserved, reputation is bestowed on various substances, mechanically received into the lungs in a state of vapour. Among

these I may mention, tar, iodine, chlorine, hemlock, turpentine, and many other articles of a stimulating, or sedative nature. I attach little or no importance to any of them. If benefit is derived, it is, in almost every instance, in consequence of some such effects as the following:—Pulmonary expansion, to a degree sufficient to exert an influence in bringing into contact the surfaces of those early cavities, which are almost invariably formed in the summit of the lungs;—pulmonary catarrh, or its common consequence, a vesicular emphysema, in both of which the lungs acquire an unusual magnitude; in the latter more especially.

Neither perfect recovery, nor indeed exemption, from the danger of relapse into a consumptive state, is found to occur, except in very rare instances, unless the pulmonary organs become naturally, or artificially, voluminous; which not unfrequently happens by the supervention of some catarrhal state of the larynx, trachea, or bronchial tubes. It is a most fortunate circumstance for some affection of this kind to occur early, as it never fails permanently to arrest this most fatal disorder. When the lower lobes of the lungs are entirely free from tuberculous matter (which is often indisputably the case for a considerable period, unless there be strong hereditary predisposition); and though

there exist, at the same time, cavities in the superior part of one or both lungs, clearly indicated by perfect pectoriloquism, there is almost a never-failing hope of recovery to be entertained, provided an emphysematous sound can be heard. In fact, I never knew a consumptive person who did not lose all his formidable symptoms, and regain health, when an emphysematous, or a semi-asthmatic, change had early taken place: and, likewise, I never knew an individual to become consumptive who was a subject of chronic catarrh, or any species of asthma. It is from long consideration of these facts, that I interfere but little with any catarrhal inflammation, which may show itself [in the midst of consumptive symptoms, for I well know that it will gradually supersede all these.

I may here remark, that cavities in the upper part of the chest are never healed, unless the pulmonary tissue be expanded in their neighbourhood, or in the other lobes of the lungs. In such case, I have repeatedly listened to some bronchial inflammation which has most luckily taken place near to those cysts, which are left when tuberculous matter has been removed by absorption or expectoration. I have been truly gratified to hear the well-marked pectoriloquy gradually become less distinct, till, together with the constitu-

tional symptoms of phthisis, it has been at last entirely lost, and nothing has remained but the dry *râle* of enlarged air-cells, slight catarrh, and a little absence of respiratory murmur in the place before occupied by tubercles.

Should there be catarrh in the superior bronchial tubes, of a duration sufficiently long only to heal ulcerations and cure the patient, he may months or years afterwards, if there be any cause assisting to impair the general health, be again attacked by consumption; but never can this relapse happen, if the bronchial tubes be subacutely inflamed for a period sufficient to produce chronic dyspnoea, or habitual asthma, more or less severe. Half of those, which are commonly regarded as cases of catarrhal asthma, originate in consumptive disease whose progress has been arrested by the supervention of that affection; but in which neither fresh crops of tubercles, nor hectic fever, need be apprehended. Any individual indeed having asthma, from whatever cause, is as perfectly exempt from consumption as he who had been consumptive, but has afterwards had his disease merged into asthma. In a word, it may be confidently affirmed, that no asthmatic person need ever fear becoming consumptive.

In order to promote expansion of the ærial tissue of

the lungs, it is my usual practice, in the absence of catarrh, and when congestion in the chest and the symptoms of hectic fever have been diminished by small general bleedings, repeated at proper intervals, or by the application of leeches over the second and third ribs anteriorly, to advise inhalation as soon as possible. A drawing of a suitable apparatus will be found at the end of this work. There are few early cases of consumption but what will be rapidly improved by this treatment, steadily pursued. The disease being thus checked, the same changes will follow which are attendant on catarrh. The nodules of unripe tubercles will become innoxious in consequence of being surrounded by black secretion, or what has been called black pulmonary matter; and small cavities, already formed, will have their surfaces soon brought in contact, so as to heal by what surgeons term the first intention. It is, we must own, preferable to effect pulmonary expansion by sure artificial means, rather than to depend upon the uncertain production of catarrh. And there is another point gained, inasmuch as recovery takes place unaccompanied by the cough, or difficulty of breathing, generally attendant on those cures which Nature herself now and then accomplishes, by introducing this less fatal, yet distressing, complaint.

Inhaling, performed two or three times daily, for half an hour each time, will in the space of a few weeks work a wonderful change on the chest; externally the muscles concerned in respiration will be manifestly enlarged, and the bony compages of the chest, both before and laterally, visibly increased; whilst, at the same time, the natural respiratory murmur will be heard internally, far more distinct than ever. Such has been the increase of size which the chest, in young persons especially, has undergone through the exercise of inhalation, that I have known a waistcoat, which buttoned easily, require in little more than a month to be widened. It is in fact incredible, to one who has never been at the pains to measure the chest, or examine its shape, what an enlargement it acquires, by the simple action of breathing for the time above-stated, backwards and forwards, through a narrow tube of a few feet in length. I have several times found, on measurement of the chest, that its circumference has increased, within the first month after inhaling, to the extent of an inch. I here speak of patients not arrived at adult age. Though I attach but little virtue to the substances that are inhaled, still, as we find patients more willing to receive into their lungs something having sensible properties, rather than pure at-

mospheric air, I recommend a handful of hops, ether, a little vinegar, or a table-spoonful of spirits of turpentine, to be added to the warm water in the inhaler. Every impediment to the free action of the ribs is to be guarded against by loosening whatever, in the way of dress, is at all likely to confine them; and it would be advisable too for the patient, if strength allows, to inhale at times in a standing position, as the diaphragm will then descend more easily, and deeply, and of course allow the lungs more room to expand.

There are cases in which inhalation is contra-indicated; for instance, in dilatation, or hypertrophia of the heart, severe mucous catarrh, general emphysema of the lungs, pleuritic, or pneumonic inflammation, hæmoptysis, or latent consumption of long standing.

It is to be discontinued, at least for a time, should there arise distressing head-ache, or much internal thoracic soreness. When it agrees well, it can be safely and most beneficially used for six months, or even longer. By this time, besides a removal of every consumptive symptom, a permanent enlargement of the chest will have taken place, proving a perfect safeguard against the recurrence of any future attack.

No permanent benefit is to be expected from this remedy, when the inferior lobes of the lungs contain

cavities, or are studded with tubercles: yet, even in this unfavourable state, I have known relief arise, and surprising prolongation of life ensue, from its employment. I have, at this moment, under my care individuals, in whom one lung is almost useless from extensive tuberculous disease, and with even well-marked pectoriloquy on the top of the opposite lung; still, from having the rest of the lung on this side in a satisfactory state, and thus being partially susceptible of the influence of inhalation, the progress of consumption has been arrested; and, in more than one instance, the relief afforded by inhaling has enabled the individual to attend to the duties of his calling—of course, no very onerous ones. Indeed, I shall feel happy to introduce any of my readers, who may entertain a desire to see such remarkable instances of the virtues of inhalation, to these patients of mine.

I must direct especial attention to the circumstance, that restoration, by means of inhaling, is only to be looked for when the cavities are confined to the summits of one, or both lungs. When they extend into the lower lobes, relief, as I have before shown, will often be given, but it would be unreasonable to expect perfect recovery. The experience of the medical world, from the days of Hippocrates down to our own

time, has proved, that medicine is utterly powerless over the excavations formed in the lungs by tubercular phthisis. It cannot bring into contact, and unite the opposite surfaces of the cavities : it cannot enlarge the pulmonary tissue ;—mechanical agency will. I have never known inhalation fail, when resorted to in the incipient stage of consumption ; and am firmly of opinion, that when pursued under the eye of a skilful practitioner, who knows how to apply, according to circumstances, the other inferior but still accessory powers of art, it never will.

As tubercles are rarely formed in the muscles of voluntary motion, we have hence reason to believe that the same additional exercise of the pulmonary organs, by more frequent expansions and contractions, will act as a preventive.

Before I was aware how materially the lungs can be enlarged, by simply respiring through a long tube, of small diameter, I, some years ago, was induced to try various means for producing pulmonary catarrh, or some corresponding affection, in the great air-passage, vulgarly called the windpipe ; knowing well what an excellent agent such an affection is for expanding the chest, removing speedily well-marked symptoms of consumption, and, in a word, destroying altogether

the tuberculous tendency. For this purpose, as in the heat of summer and the early part of autumn, we rarely meet with cases attended with a catarrhal complaint, one of my expedients was to oblige the patient to breathe twice or thrice a day atmospheric air, made cold by artificial means. In more than one case I succeeded in producing a catarrh, which led to the recovery of the consumptive patient. I have, on several occasions, dismissed those in-patients of the Infirmary for Diseases of the Chest,—the wards of which are heated in winter so as to imitate a moderate summer temperature,—whose consumptive state seemed to be but little relieved; but, owing to their going at once from the warm atmosphere to their own abodes, where perhaps some of them were badly secured against cold, or indeed owing perhaps to their imprudent and thoughtless exposure to the open air, they have caught a severe cold of a catarrhal nature; and this, in some, having tubercular excavations of ancient, as well as recent date, I can assure the reader, has alone effected a cure. I subjoin a case, in which will be seen the value of a catarrhal affection in removing, or affording perfect security against consumption.

A young man, a cutler by trade, having lost three brothers by consumption, came to my house in the

summer of 1827, seeking to be relieved from symptoms similar to those which he had observed in them during their illness. He stated, that the first indication of his complaint appeared after he had had a severe attack of rheumatism, which was with difficulty removed, and which left him much debilitated. When I first saw him, he computed that his cough, which was soon followed by a discharge of blood from the chest, had existed four months. He stated, too, that he had early placed himself under medical advice; but that, in spite of various medicines administered for his cough, the spitting of blood, periodic fever, profuse perspirations at night, and occasional diarrhœa, in short all the unfavourable symptoms, seemed daily to increase. The moment I saw him, his countenance bespoke the nature of his malady; and a few questions put to him soon confirmed my supposition,—that he had all the common symptoms of consumption. Whilst exploring the chest by the naked ear, and by the stethoscope, I ascertained on the summit of the right lung the existence of a cavity, which afforded, when he spoke, a perfect pectoriloquy, and there was a gurgling when he coughed. On the left side, anteriorly, beneath the clavicle and over the second and third ribs, the respiratory sound was indistinct. In all other

parts the chest seemed healthy, save a state of respiration approaching the puerile which was heard in the lower lobes. In order to subdue the constitutional fever, attended by a painful cough, I directed some blood to be taken from the arm; and this, after some few hours, not having afforded the expected relief, several leeches were applied to the anterior and upper part of the chest; and, at intervals of four or six hours during the day, scruple doses of nitre, with a quarter of a grain of tartar emetic, and a drachm and a half of syrup of poppies, were taken in an ounce of some demulcent vehicle. This compound acted freely on the kidneys, and, together with pills taken at bedtime, containing extract of lettuce, ipecacuanha, and precipitated sulphuret of antimony, gave, in the course of four or five days, great relief to his pectoral disorder. Though I succeeded two or three times, by means of leeches again and again applied, and medicine varied to meet new symptoms as they appeared, in regaining for him what, comparatively speaking, he considered a return of tolerable health; still, with a view to effect a perfect cure, it occurred to me, as my patient was a man of no small ingenuity, that I might possibly get him to make a steel instrument, shaped like a collar, deep behind, and so contrived, whilst it

produced no inconvenience on the neck laterally, as to make a gentle pressure on a small part of the trachea, immediately above the sternum, and between the sterno-cleido mastoid muscles. This new agent was soon ready for use, and was worn at intervals for the space of two months. In front, a small piece of dry sponge was placed between the converging points of this imperfect collar and the wind-pipe; most happily for the patient, the pressure on the wind-pipe caused a slight mucous inflammation within it, and this was succeeded throughout the lungs by bronchial irritation, with a slight wheezing denoting an enlargement of the air-vesicles. None of these symptoms were interfered with; and they continued for some months, after every apprehension of consumption was removed. It was really wonderful how much he increased in flesh, and to what bodily vigour he arrived, especially when the catarrhal complaint had established itself in the neighbourhood of the tuberculous disease in the superior lobes. At the expiration of a fortnight from this time, a loud mucous rattle began to appear near to the seat of the pectoriloquy in the top of the right lung; all trace of a cavity was nearly lost, and the respiration there daily became more audible. The same improvement took place in the respiration of the upper portion

of the other lung, which, I have already mentioned, seemed to be diseased. With the exception of periodic shortness of breathing, sometimes preceding and at other times following fits of coughing, the patient might be said, were he judged only from his looks, and his feelings, to be perfectly well. After tracheal rattle had for a month been distinctly heard in the larynx, and appeared to be extending itself along the trachea to the larger bronchial tubes, he was directed to discontinue altogether the further use of that simple apparatus, the steel collar. On one occasion only was it necessary to moderate, by the application of leeches, the mucous excitement of the lungs, when it ran so high as to cause suffocative breathing, incessant cough, superabundant expectoration, and general febrile disorder. With the exception of five grains of compound ipecacuanha powder, and double that quantity of extract of hops, made into pills to be taken at bed-time, and the occasional use of a mild aperient, there was little else done for the supervening catarrh; for I felt exceedingly-reluctant to interfere much, well knowing the value of the new disorder, and that it would long prove a successful antagonist to any future, as well as present, liability of sinking under consumption. In the month of August, 1830, which was three years

from the time he became my patient, I had an opportunity of seeing him in the enjoyment of excellent health; if I except a little asthmatic respiration, which I detected by the naked ear whenever he made a forcible expiration. The expirations were of an emphysematous character, in the upper part of the chest, both before and behind; the air, in fact, was heard escaping from the enlarged air-cells, with prolonged murmur in which dry cracklings, perhaps arising from some air-cells being united into one, were audible. Having ascertained what I have just described, and how much the shape of the chest had been altered, which, from being narrow in its antero-posterior diameter and flat, was become cylindrical and enlarged, I assured him that he never would relapse into his former consumptive state; and that with some care, on his part, in attending to the directions which I gave him, his present asthmatic symptoms would have little effect in abbreviating the duration of his life.

This case is highly instructive. It is one by which mechanical aid produced, in the midst of summer, such a degree of general catarrhal affection of the air passages of the lungs, that complete recovery took place. Nor was this all; for, through the emphysematous state of the lungs, a perfect security existed

against any liability hereafter to tuberculous productions. In a word, he escaped every chance of pulmonary consumption.

It may not be uninteresting to mention the particular circumstance, which led me to imagine and adopt the above invention. A gentleman of the name of Willis, who a few years ago resided in the neighbourhood of Kennington, and was under my care, happened to have a small oblong tumour in front of the neck, with its inferior portion lying between the sternum and the trachea, from which resulted a slight obstruction to his respiration.

This tumour, which had existed for some years, had induced a perfectly asthmatic state. By preventing free expiration, and likewise by exciting a slight continuous inflammation of the mucous membrane, from the point of pressure into the numerous ramifications of the bronchi, the air had become imprisoned within the air-cells, and in this manner was produced a general emphysematous state of the lungs. Besides the difficulty of breathing, usually attendant on this condition of the pulmonary organs, the obstruction from the tumour naturally caused him to breathe with a loud, wheezing, and somewhat croupy sound. Observing this, I concluded that if a slight mechanical

resistance to the free egress of air from the lungs could be produced, so as to impart the prophylactic benefits of the asthmatic state, without the distressing and aggravated accompaniments, noticed in the case just described, it would be a remedial agent of no small efficacy. "On this hint I spake;" and, seconded by the ingenious contrivance of the artizan whose case I have particularized, I was fortunate enough to bring the contrivance to bear, and to find that I had not miscalculated its advantages. I have entered into this detail, as it serves, by analogy, to throw additional light on the position I have advanced respecting the non-liability of the asthmatic, or catarrhal, patient to phthisis; although, from the superior benefits to be obtained by a duly extended course of inhalation, and having satisfied my curiosity by the experiment, I have never since employed the preceding mechanical contrivance.

Having noticed the effects arising from a small tumour on the neck of my patient, Mr. Willis, I may observe, that that enlargement of the thyroid gland, technically called bronchocele, but more familiarly known by the name of Derbyshire neck, induces, when considerable, symptoms of a similar nature, and like results, by the pressure it occasions on the trachea.

Nor are the consequences of aggravated hysteria to be overlooked in this place; since a frequent communication of spasm to the posterior membrane of the trachea, will, by imparting to the person so affected a slight asthmatic tendency, and thus enlarging the volume of the lungs, preserve the female from all liability to pulmonary consumption.

A positive proof of the advantage accruing to the consumptive patient, through mechanical development of the lungs, is to be inferred from the general immunity from phthisis enjoyed by those families in which a well-formed chest is common to all the members. I may cite as, what the lawyers call, a case in point, the numerous offspring of the venerable George the Third, himself the model of a manly form. Heaven knows, nature must have done more for them than medicine.

A negative proof of the benefits of inhalation, and a positive one of the inefficacy of medicine, has unfortunately occurred, of late years, in the family of a noble lord, to whose illustrious kinsman this country is indebted for one of the greatest boons ever conferred upon it by legislation. It is impossible to look upon the frank, artless, but pensive features of the lovely boy, whose lineaments are recorded by the imperish-

able pencil of Lawrence, and not to regret that medicine could effect nothing.

How long will it be before this truth will lead the scientific to adopt its fellow truth,—that, so surely as medicine alone will ever fail, the mechanical means I have pointed out will succeed?

Whilst preparing this edition for the press, I have met with two very singular cases, confirmatory of my views; the one in Hippocrates, and the other in a curious treatise, entitled “*Phthisiologia*,” written by Dr. Richard Morton, a man of considerable eminence in our early English medical school. I term them singular, inasmuch as written at two such distant periods, they present accounts which elucidate and strengthen my opinions as strongly as any case taken from my own memoranda. The father of medicine relates, that the daughter of Agisis, when a girl, laboured under tubercular consumption; that becoming pregnant after marriage, she expectorated an unusual quantity of puriform matter; and that, subsequently to this, she became asthmatic. Here the process of cure, as laid down by me in the preceding pages, is distinctly traced. I have already noticed the advantages of pregnancy in consumption; and have

proved, what the above early record so surprisingly confirms, that if asthma supervene on consumption, the latter is cured.

The case, I am now about to quote, bears witness to the solidity of my practice no less triumphantly than the former. I quote Dr. Morton's own words:—"My only son, before he was eight years old, whilst I was out of town, was taken with a most severe bloody flux, by which he seemed to be brought into a consumption, even to a *marasmus*, before I returned: but after the bloody flux was plainly overcome by the diligent use of all sorts of convenient remedies, and his body, with respect to his stools, was reduced to its natural state, there still remained a hectic heat, a dryness of his skin, a quick pulse, with other signs of a hectic heat. Moreover, his appetite failed him very much; a dry cough came upon him, and a thickness of hearing, with a dulness of his brain: but yet, with the choice of a wholesome air, the use of a milk diet, and afterwards of the Peruvian bark, and of a plentiful nourishment, which afforded a good juice, he recovered a good colour, and his flesh, within the space of three or four months, without any other inconvenience, but only *that he has been ever since very subject to an asthmatical cough upon the least occasion.*"

My remaining observations on the treatment of consumption will be brief, for two reasons: first, since I have fully detailed the two most important branches of the curative process; and, secondly, because the general uses of medicine are to palliate, or, by inducing a chronic state, to favour the supervention of catarrh. Again, by removing the constitutional symptoms, the local affection may terminate in an insensible excavation, hardly interfering with the general health.

Amongst the innumerable medicaments that have been, and are still tried, I shall specify a few, the advantages of which are capable of proof, not depending on the caprice of fashion—there being a fashion even in medicine—or upon any imaginary virtues. Our dispensaries are full of such drugs, and so unfortunately is practice; yet the number, applicable under any form to phthisis, is of very limited extent.

CATHARTICS.—In the commencement of consumptive symptoms, as the general health is usually deranged, recourse must be had to purgatives very sparingly. From an erroneous view of the causes of consumption, great mischief has arisen in the employment of aperient medicines; and this injudicious treatment has been propagated by the sanction of names of no mean authority. Instead of increasing debility by

the exhibition of cathartics, it is infinitely preferable to remove congestion by the moderate abstraction of blood, as previously noticed. Great caution should be observed, as to the kind of medicine employed for purgative purposes. Saline aperients ought in general to be avoided, from the debility they induce by carrying off the serum of the blood, and by too rapidly accelerating the passage of the chyliferous matter, before due absorption takes place. It should be borne in mind, that a relaxed state of the bowels is a very frequent accompaniment of consumption; and that any undue administration of laxative medicines will, in most cases, superinduce abdominal gripings and diarrhoea, events which cannot be too sedulously guarded against. In the inflammatory complication of phthisis, a powder, composed of from ten to fifteen grains of jalap, combined with two or three grains of calomel, may be administered as an auxiliary to venous depletion. Indigestion is of no uncommon occurrence in consumptive complaints, yet, as it usually arises from vascularity, and morbid sensibility of the stomach and of the intestines, the most rational method of proceeding is to equalize the circulation by moderate venesection. Occasionally, a few leeches, applied to the pit of the stomach, will be equally successful in removing dyspep-

sia. As an ordinary laxative, a few grains of dried subcarbonate of soda, calcined magnesia, and rhubarb, taken in some liquid vehicle, will be found highly useful.

Since I am on the subject of dyspepsia, I cannot help adverting to the strange tissue of absurdities, gravely put forth by a Dr. James Johnson, in a treatise on Indigestion. So far as I can make out the meaning of a series of passages, which contain a number of scientific words, serving only to show a remarkable ignorance of morbid anatomy, this person seeks to establish a distinction betwixt the symptoms of phthisis, when it "supervenes on derangement of the liver and digestive organs;" and when it "commences originally in the chest." What he would have his reader understand by this word "originally" is somewhat difficult to make out. I never before heard of pulmonic affection commencing in any other part than the lungs. Does he wish to have it inferred that consumption, at times, originates in the stomach, or the head, or the feet? Again, it is by no means clear what he intends to convey by pulmonic affection supervening on "derangement of the liver," &c. If the literal interpretation of these words be taken, he states what is by no means the fact. Phthisis supervenes on impaired ge-

neral health, and this may be occasioned by dyspeptic ailments; but to say that it supervenes on dyspepsia, is nonsense. But when he begins to draw his distinctions, he sinks still deeper into "confusion worse confounded." He talks of phthisis advancing in consequence of "a previously tuberculated state of the lungs." As Parson Evans says, "These be phrases and tropes, look you." Advancing!—If phthisis be not established, and too surely established, when the lungs are tuberculated, then "there's nothing serious in mortality." We shall hear next, that when an individual has got a wooden leg, he is in a fair way of losing his fleshly one. Perhaps Dr. Johnson makes use here of the figure *Hysteron, Anglicé*, "putting the cart before the horse." He then, pursuing his nice distinctions, winds up his medical budget by stating it as a pathological fact, that "phthisis, of the common and fatal kind, will soon be developed—after what—after hepatization of the parenchymatous tissue of the lungs." Better and better still! In plain English, the doctor expressly affirms, that, instead of consumption inducing hepatization—for this is the natural order—the latter, which every anatomist knows is the consequence, will be the cause of the former. To attempt to unravel still further this Gordian knot

of technical terms, which, like Mrs. Malaprop's, are "so ingeniously misapplied," would be waste of time: nor should I have thought it worth while to have taken this slight notice, but for the parade of superior knowledge, the "flourish of drums and trumpets," with which this nautical surgeon ushers in his *dicta*. They may suit the cock-pit, but not the temple of science.

Another individual, Dr. W. Philip, who has likewise written on Indigestion, with more, although not much, success, has stated, that the pulmonic affection is merely sympathetic; and again, that the sympathetic produces actual disease in the lungs, indicated by some degree of inflammation in the bronchia, &c. Now, had his experience been at all of an extended nature, or his observation been keenly applied to even limited opportunities, he could hardly, one would imagine, have failed of perceiving that such a disease as dyspeptic phthisis does not exist. Indigestion is a very common disorder; but the dyspeptic patient never becomes consumptive, until his general health has been seriously impaired by the disarrangement of the digestive functions. Dyspepsia, it may be as well for him to know, often follows pulmonic affections, but is never their proximate cause. Were Dr. P. in the habit of employing auscultative exploration of the chest, he would

discover that the presence of blood in the expectoration is not, as he seems to imagine, the forerunner of tubercles; but that, in three-fourths of the cases, it arises from the existence of cavities already formed by the softening down of tubercles. As to inflammation of the bronchia occurring at the time he speaks of, if it does, it is of a very fugacious description indeed.

The singular opportunities I have enjoyed, for observing every variety of disease connected with the chest, have led me to entertain views not a little at variance with those of this writer. Ten years ago I have had the opportunity of seeing a hundred patients, at the infirmary alone, in a single day; and, since that time, my field for observation has been very considerable: yet I have never found the daily use of mercury, as advocated by Dr. P., of advantage, even in a solitary instance. I have had, on the contrary, patients who have been under his care, and who have derived no benefit whatever from his undue estimate of the virtues of this mineral. It is by no means improbable, judging from his opinions, as expressed by himself, and from his non-employment of auscultation, that he has been mistaken in the nature of those cases which have yielded to his treatment; that he has sup-

posed them to have been connected with phthisis, when no such complication had existed.

EMETICS.—At one period emetics were held in no slight repute; and much useless torture, or I should rather say injurious pain, was the consequence to the consumptive sufferer. It has always been a principal object with me to avoid every thing calculated to distress, or annoy, without imparting benefits equivalent to the uneasiness undergone. That this is not the case with the administration of emetics is proved convincingly by the fact, that when vomiting is brought on in a natural way, by violent coughing, the patient experiences no relief. Whatever faith medical men may be inclined to place in the remedial powers of emetics, I have none; although I candidly confess, that I am in the daily habit of prescribing small doses of the tartarized antimony, and of ipecacuanha; yet in so minute a degree, that they are within the limit of actual nausea.

SUDORIFICS.—Twenty or thirty years ago, it was the general practice, in all diseases, to determine to the surface of the body; and some practitioners, enamoured of the wisdom of their youthful days, still adhere to it. Great injury undoubtedly resulted from

this indiscriminate course, and more particularly would this be the case in phthisical complaints. Although employed with the view of diverting morbid action from the lungs to the surface of the skin, yet the consequence of the stimulus thus imparted is not unfrequently increase of hectic fever, terminating in pulmonary engorgement, or visceral excitement.

No relief indeed is afforded by sudorifics: on the contrary, when perspirations occur spontaneously, they are found sensibly to reduce the patient's strength. In the hot stage of hectic fever, I endeavour to reduce the tenseness and aridity of the cuticular surface, by having the hands and upper part of the body sponged with tepid water and vinegar; and I order this to be continued, until a reduction of temperature takes place. The same treatment is to be pursued on every return of the hectic paroxysm. It being of infinite importance to preserve an equable temperature of the body, I uniformly attempt the removal of whatever state is unduly predominant: therefore, in the cold stage, I direct the immersion of the feet in warm water, and advise the patient to take some warm beverage, as tea, &c.; and, when perspiration is profuse, I lessen it by administering either an infusion of columba or of camomile, in preference to the acidulated infu-

sion of roses, in such general, but, in my opinion, injudicious use. In periodically recurring perspiration, except in the very last stage of the disease, the application of leeches to the chest will be found far superior to any tonic whatever.

EXPECTORANTS.—The use of this class of medicines seems founded on no valid reasons; nor are the benefits produced very visible or satisfactory. Could they stimulate the mucous membrane of the lungs to a catarrhal state, they would be beneficial indeed: colchicum, I have reason to believe, occasionally operates in this manner; but its effects are uncertain.

In many consumptive cases there exists a superabundance of expectoration; and, consequently, in these all expectorants are supererogatory. Above all, that anxiety which is frequently displayed to avert, or palliate cough, is unnecessary, since it often occurs that to this an emphysematous state of the lungs is owing; which protective, by the injudicious attempt to allay the cough, is thus lost. The chief good resulting from expectorants is not owing to any specific action exerted, in particular, on the pulmonary organs: but rather, as is the case with ipecacuanha and tartar emetic, it is due to a variety of influences. Thus, the former of these medicines seems to act as an astringent

where expectoration is superabundant ; and, generally speaking, both these substances, in addition to their value as expectorants, aid all the secretions. Other expectorants, as squill, ammoniacum, myrrh, &c., are to be cautiously employed when phthisis is accompanied by hectic fever ; but ipecacuanha, and preparations of antimony, possess the great advantage of being of safe administration, in proper doses, during every stage. Mercurial agents exert a powerful influence in promoting expectoration, as they likewise do on every other secretion ; and this property has led to most injurious consequences. Some years ago, I had opportunities of seeing, in the practice of a deceased physician at the London Hospital, a woful example of the evils arising from the exhibition of mercury in cases of phthisis. The facility given to expectoration seemed to delight this practitioner ; but it was so rapidly increased, and accompanied by such extreme perspirations, wasting away, and diarrhœa, that the patients soon went into what is vulgarly, but not inappropriately, denominated—galloping consumption.

NARCOTICS AND DEMULCENTS.—The latter, as remedies, are out of the question ; but, as palliatives, are highly serviceable. Being mostly of a nutritious nature, they tend to keep up the patient's strength, while

they soothe the irritability of the chest. The former are occasionally useful, but they are liable to great abuse. Given with a view to promote sleep at night, much nicety is required in their regulation. When the hectic state, and excitement, obstructive of sleep have been removed, recourse may for one night be had to an opiate; but should it be repeated on the succeeding evening, it too often happens that its effect will be lost. Digitalis and hydrocyanic acid have both been extolled as of infinite efficacy; but they are undeserving of the high reputation bestowed upon them. Dr. Ferriar imagined, that by combining the former with myrrh and sulphate of iron, he increased its utility in consumptive disease; yet, how its union with two stimulants could be productive of benefit, I do not exactly see. As to hydrocyanic acid, I concur with Laennec in regarding it, although it may sometimes relieve cough and dyspnœa, as of far inferior value to many preparations of opium. In particular idiosyncrasies, in which opium under any form is found to disagree, the extract of hyoscyamus, and the feebler narcotics, as extract of lettuce or hops, will singly, or combined, lull cough and afford rest. I should regard it unfair, were I not to state, that Battley's Liqueur Opii Sedativus is the preparation I in general prefer. I

may here note, that the pharmacopœia of this country exhibits an unsatisfactory catalogue of opiates. It is to be hoped that these, with other omissions, will shortly be rectified. The expected admission of the numerous and intelligent physicians, termed licentiates, to the privileges due to their learning and science, will indisputably operate a most beneficial change, and form a new era in medicine.

ASTRINGENTS AND TONICS.—The first of these are employed for a threefold purpose—to check discharges of blood from the lungs, to restrain colliquative perspirations, and also diarrhœa. Sulphuric acid, with infusion of roses, has acquired much notoriety as an astringent; but I seldom employ it, since I find its use not unfrequently followed by distressing tension of the chest. Although, I own, it may be advantageous for a time, yet its continuance is apt to exercise an effect the reverse of what is intended. It seems to me, in such cases, to increase rather than diminish hæmoptysis. The acetate of lead, in small doses, combined with opium, is far superior not only to the acid but to every other astringent. All danger of its producing an unpleasant action upon the bowels, apprehended by some, may be obviated by occasionally intermitting it, and regulating the evacuations. I have already pointed out

the most salutary mode of checking perspiration, by the application of leeches to the chest, and it remains for me to notice the best remedial agents for diarrhoea. These are chalk, kino, catechu, pomegranate bark, and Armenian bole. Chalk, with a few minims of Battley's preparation of opium, administered in barley water, gruel, &c., will be found to equal in efficacy more compound admixtures. Of tonics, the simplest are the best. Bark I rarely, or never, prescribe; but under particular circumstances infusion of columba, of camomile, or occasionally of cascarilla, may for a short period be not disadvantageously employed. While the Brunonian theory was held as the guide of practice, preparations of iron were in high repute; and one of these, the antihectic mixture of Dr. Griffith, so termed it would seem like "*lucus a non lucendo*," from its possessing properties the reverse of its name, is still, I am sorry to say, in estimation with some practitioners. The use of such medicines, in a complaint that calls for every effort to abate and moderate excitement, cannot be too highly reprobated.

It is not a little curious, that the only medical work which has, I believe, issued from the University of Oxford for the last century and a half, should have been written to divulge the virtues of an insignificant astringent.

Dr. Bourne, the *Aldrichian Professor of the Practice of Physic*, published in the year 1805 an octavo volume, wholly dedicated to the recommendation of the *uva ursi*, or whortleberry, as a specific in phthisis pulmonalis. The poor gentleman even apologizes, in his preface, for having delayed divulging this astounding discovery to the world so soon as he might have done. I honour his sense of humanity, but cannot help being amused at the simplicity of the professor. The little good he did effect was obviously due to the medicines combined with the aforesaid whortleberry. As for any pathological views, they were out of the question. He does not even enter into any consistent *rationale* of his own practice. However, he did manage to write a book, and attempt, in his small way, to promote science; which is more than many of his brother professors have done. The medical world should not be severe upon them, seeing that, from their situation as heads of the art, they have enough to do in conferring degrees, without the additional trouble of acquiring knowledge. What can be expected from a place where there is no regular school of anatomy; and no lectures on half the useful branches of medical science? Indeed, professors in all places, in this country, seem to be alike;—witness the elder Duncan's anomalous treat-

tise on the same complaint. Both appear to have been exempt from the sin of having ever opened a human body. May the reign of such teachers be quickly at an end! To think, too, of the last having been forty years a medical lecturer at Edinburgh, and of having written fifty volumes,—such is his own boast: it is to be hoped, at least, that he never published them.

BALSAMS.—I hold it totally unworthy time, or paper, to waste many words on this very futile description of medicine, at least as applied in consumptive cases. It was supposed, in the days of Dr. Morton, and of Van Swieten as well, that balsams exerted a vulnerary power; but to use such medicines at present, or to suppose that any medicine whatever can heal ulcers of the lungs, betrays an extraordinary ignorance of the peculiar nature of phthisis. There can be no other possible method of healing them, than by bringing their surfaces in apposition, since, unlike other ulcers, they never granulate.

BLISTERS.—When expectoration is superabundant, or an œdematous state of the lungs is supervening, these may be applied with success; and when abstraction of blood generally, as well as locally, fails in removing fixed pain of the chest, I find them very useful. In general, however, they are too indiscrimi-

nately employed ; since their use at an improper period tends to bring on, and accelerate, the hot stages of hectic paroxysms. Thus they superinduce a continued febrile state, not unfrequently terminating in some variety of thoracic inflammation. One fact, peculiar to the application of epispastics in consumptive cases, seems almost unknown to the medical profession. I have never known a patient suffer from gangrene through their use, although such cases are of no uncommon occurrence in other disorders. How little susceptible individuals labouring under phthisis are to mortification, has been noticed by that great authority, Laennec: he explicitly states, that even protracted confinement is inapt to produce gangrenous eschars, and the whole course of my experience corroborates his assertion.

DIET.—This should ever be varied according to the digestive powers of the patient. Van Swieten has given a homely, but very sensible, illustration of what ought to form the general guide in all dietetic advice. He compares the physician, who pronounces such or such food to be wholesome, without reference to the state of the patient, to the sailor who shouts out that the wind is fair without considering to what port the vessel is bound. As a general rule, the system of over-

feeding, or, to use a common phrase, of keeping up the strength of the consumptive individual, cannot be too strongly deprecated. It is, indeed, strange to find any one so imbecile as to recommend in a disease in which, even under the most judicious treatment, febrile action will be of almost daily occurrence, a course of diet suitable only to the healthy and vigorous : yet, in the absence of gastric irritation, and on the abatement of hectic fever, the food may be of a nutritive and invigorating description. This caution, however, is to be borne in mind, that whatever is followed by increased heat of body should be abstained from. The best index of food's agreeing with a patient, is the absence after meals of constitutional disturbance. Except during the presence of inflammation and of hæmoptysis, I am in the habit of allowing the moderate use of meat once a day, with an egg occasionally at breakfast or by way of lunch, according to the patient's fancy ; nutritive broths, taken lukewarm (indeed, except the patient feels chilly, whatever liquid is drunk should be of very moderate temperature) ; and, as to a milk diet, so commonly ordered, I reject it altogether. It excites expectoration in an unusual degree, without however leading to any catarrhal state. When consumption is decidedly manifested, wine is for the

most part inadmissible. A small glass of ale at dinner may at times be permitted; and occasionally at night, with the view of inducing sleep.

I subjoin a few leading observations on the common articles of diet. To begin with fish, an important item in the *cuisine* of the invalid. It forms a moderately nutritious food; and is so far of advantageous use, that it does not stimulate the body, and raise the pulse, in the same degree as flesh. The chief considerations, in selecting fish for the patient, are, in the first place, its exemption from oiliness and viscosity; in the second, its firmness of texture; and, lastly, the colour of its muscle, which should be a clear white. Such being the most desirable qualities, haddock, whiting, sole, cod, and turbot, all, in different degrees, answer to these requisites. The whiting and haddock are the easiest of digestion,—the cod, perhaps, the least so of all. Salmon is too heating, and too oily, to be indulged in.

As to shell-fish, the claws of crabs, lobsters, and craw-fish, are usually palatable, and agree well with the patient. Nor are shrimps and prawns to be forbidden: of course, they should not be indulged in to any extent; but, in moderation, they may be safely eaten. Indeed, I have often observed, that the petty

delay and trouble that there is in unshelling this tiny fry seem to excite the salivary glands, and, by supplying the food in small quantities and in slow succession, to stimulate the secretion of the gastric juice. In cases, too, of extreme debility, the preparation and process of the repast serve to interest and amuse a mind weakened by long indisposition. Oysters I generally leave to the discretion of the patient. If there is any desire expressed for them, I see no reasons for their refusal; but I have observed that patients, whose expectoration is heavy, generally turn from them with loathing. I do not deny, that many of these articles are commonly and justly considered as indigestible; but this can only hold good when they are taken in any quantity. When their use is moderated by prudence, I have never found them more liable to disagree than the ordinary edibles of the table. I may mention, that I have a patient, a very frequent article of whose food is turtle. He takes it, of course, dressed in a less stimulating manner than the usual form.

So much does the agreement or disagreement of food depend upon the constitution and habit, that, in laying down dietetic rules, we must always bear in mind the old axiom, "*Quid nocet alteri, alteri juvat.*" I have found it a very ordinary custom among my

poorer patients to indulge in eels, when first permitted, after illness, to take any thing of a more solid nature than gruels, &c. Judging *a priori*, one would conclude, from their oleaginous nature, that they would prove a most indigestible article of diet: yet nothing can be more common than for them to be chosen by the lower orders, on these occasions, as a delicacy; and nothing can be more certain than that they agree.

So long as hectic fever, or any febrile symptoms continue to any extent, the living of consumptive individuals should indisputably be low; but otherwise a generous diet, in the absence of fever, so far from being deprecated, may be safely left to the option of the patient. Mutton is the lightest, most digestible, and most nutritious meat for the invalid; and broiling one of the most advisable modes of cookery: at the same time that few things are more palatable, nothing can be more wholesome than a mutton chop. Beef is of a denser fibre, requires a longer space to perfect its chymification, and is consequently less easy of digestion. Although it is equally as nutritious as mutton to the healthy, it can hardly be pronounced to be so to the invalid, since it requires a tone and vigour in the digestive organs which the latter seldom possesses. Veal and pork are the meats which follow next in the

order of digestion. I need scarcely enter my veto against eating much of the fat, whether of mutton or any other meat; for the delicate state of the stomach in illness will, in general, cause a repugnance to it.

The meat should always be plainly cooked; and, when it does not contravene all the laws of cookery, I would say, let it be roasted: next to this, broiling is the most wholesome form. Spallanzani has demonstrated satisfactorily, that meat should be neither over nor under-done; and, since he has established this point by numerous well-conducted experiments, the general order to the cook, on this head, should be to observe the "*juste milieu*." A few words, as to the reasons of the preference given to roasting over the other modes of cookery, may not be unacceptable to the patient. The loss in roasting arises from the diminution of the fat, which is melted out, and the evaporation of the water; in boiling, the loss is caused chiefly by the solution of the gelatine and osmazone: therefore, the nutritious matter, as the gelatine, is considerably lessened in boiled meat, but remains condensed in roasted. Its superiority over broiling consists in its retaining, from its size—we are of course supposing that a joint is put down—more of the juices of the meat. Broiling, from the quickness with which

the outside of the meat is hardened, suffers it to retain a much greater portion of its juices than boiling or baking; but even the celerity with which a chop or steak is thus cooked, cannot enable it to compete, in this respect, with the advantage roasting possesses from the size of the portion, usually submitted in this mode, to the action of the fire. Baking, from its peculiar process, not only prevents the evaporation of the oils of the meat, but renders them additionally indigestible by presenting them in an empyreumatic form. On the whole, however, I prefer it to boiling. Before quitting the subject of meats, I may mention, that venison or hare will, to those whose stomach is debilitated, prove a very nutritious food. They are easily digested; but, as they furnish a quantity of highly stimulating chyle, they must be avoided by those whose state of body requires the absence of all stimuli.

As to the bird kind, the wild are more digestible, but at the same time more stimulating, than the domesticated; and the darker the colour, and the greater the proportion of fibrin, the more stimulant the chyle produced. There is this advantage presented by the bird kind, that they all differ in flavour from each other, and are consequently well adapted to tempt the invalid. The appetite, in ill health, is often in abey-

ance,—not so much from weakness of the digestive functions, as from the want of a little management in varying the food. Persuasion is no less requisite in leading the animal, than in conciliating the rational powers. An argument, pleasingly addressed to the palate, is often no less conducive to bodily than—when directed to the judgment—it is to the mental health. Nothing is to be deemed trivial which can soothe; nothing should be neglected which may, with due limitation, contribute to invigorate the sufferer.

CLIMATE.—It has been seen, from the preceding pages, how much I am at variance with the common opinions entertained of phthisis; and to none am I more diametrically opposed than to those which respect climate. So far from sending a consumptive patient to the south of France or Italy, I should, if change be requisite, deem the climate of St. Petersburg a thousand times more beneficial. In the latter case he has a chance of contracting catarrh, and of thus staying consumption; in the former, any catarrhal state which might exist would assuredly be fatally removed. 'When I hear of consumptive individuals being recommended to try the genial climes, as they are absurdly termed in these instances, of Lisbon, Madeira, or other sunny lands; and when I reflect on the evidence given by

medical statistics of their deadly influence on phthisis, I long to suggest the fitting answer to such advisers,—
“*Me vestigia terrent, omnia adversum spectantia, nulla retrorsum.*” My experience on this point is full and explicit; and I could substantiate it, were it requisite at the close of a treatise, the scope of which has been to prove the true nature of this little understood malady, by numerous cases. So decided am I on this head, that I never admit into the infirmary a phthisical patient with recent catarrh, because its wards are heated in winter time, so as to resemble a moderate summer temperature. Facts are the best, and most stubborn arguments. The cases of consumption, that come under my notice in summer, are nearly double the number of those I see in winter. The reason is evident:—the augmented temperature of the weather increases the intensity of two of the most important stages of the hectic paroxysm—the hot and the sweating. To subdue these then becomes peculiarly difficult: how likely they are to be aggravated by going abroad, any well-constructed thermometrical table will tell. Again, if the disease be latent, removal to a warm climate is the most probable means of making the case one of manifest phthisis. In uniformity with these opinions, I feel no anxiety respecting consump-

tive patients being kept scrupulously within doors. Whenever the weather permits, they should be allowed to take an airing daily ; but be by no means suffered to remain so long as to be sensible of chilliness or cold.

From every inquiry I have made, with respect to the influence of climate, I conceive that, all things duly considered, the patient cannot have a more suitable residence in winter than in some of the spacious, well-ventilated streets of our own metropolis. Another consideration—a great one to the invalid—is that of comfort, a word indigenous among ourselves. Many of those, who had been led by blind guides to roam abroad in a vain search after that health which, under judicious treatment, they might have preserved here, have assured me, to use the language of Sterne, that they had done better to “have remained dry shod at home ;” and I am convinced that the greater number thus sent on a useless errand, make—when hundreds of miles from their own comfortable fireside—the reflection that occurred to honest Touchstone, “Ay, now am I in Arden—the more fool I ; when I was at home, I was in a better place.”

APPENDIX.

CASE I.

SUPPOSED CONSUMPTION CURED BY PARACENTESIS.

EXUPERIUS V. PARKER, aged 32, of the merchant service, but formerly a petty officer in the royal navy, was admitted into the Infirmary for Diseases of the Chest in November, 1831. He was at this time suffering under frequent and painful cough, attended with expectoration of opaque yellow sputa, singularly fetid, and so abundant in its discharge as to amount, in one day, to three quarts, being occasionally tinged with blood. Along with violent pain in the inferior part of the left side, his respiration was obstructed and difficult; and his sleep was unrefreshing, and broken through constant suffering, and accessions of high fever on the approach of night. He likewise laboured under profuse perspirations, was excessively emaciated, and his complexion was of a sickly yellow hue. It appeared, on inquiring the causes which had led to this state, that whilst on his passage, in 1829, from Kingston to Morant Bay, in Jamaica, he had been frequently drenched to the skin, and that he had suffered his clothes to be dried

on him by the heat of the sun. In consequence, as he supposed, of this, he was seized with the yellow fever, and, on a relapse occurring after his return to Kingston, he was admitted into the hospital. The fever was so violent as to produce delirium, during which he repeatedly rose from his bed to commit suicide, and as he was then under a course of mercury, he concluded that he must, in these paroxysms, have caught cold; since, when convalescent, he experienced severe pains in the left breast, accompanied by violent cough. The latter continued unabated; and on his return to England, he consulted a medical man at Limehouse, after a violent seizure, in which he experienced a sense of strangulation, followed by a copious discharge of matter. Being regarded by this gentleman as in the last stage of Consumption, he was induced to apply to the Infirmary. Here he derived such relief, notwithstanding the existence of a large abscess, occupying the inferior lobe of the left lung, which I detected on the first examination of the chest, that I recommended him to go to sea again. I was induced to give this advice from having met with two or three similar cases, in which the abscess had remained stationary for some years. He again made a voyage to the West Indies: on his return from which to this country it was that he presented himself to me, affected with the formidable symptoms I have detailed at the commencement of the case.

Having satisfied myself by auscultation with the naked ear (which I invariably prefer to the stethoscope) of the extent

of the disease, and after various topical applications, combined with constitutional treatment, had failed to mitigate the intense pain of his side, or to relieve his suffocative respiration, I determined to introduce a small trochar into an intercostal space immediately over the seat of the abscess. On my first calling on this patient, two years previous to the period of which I am now speaking, had no improvement taken place, I had resolved to perform this operation; but finding his health so amended on the very day I had fixed for the paracentesis thoracis, as to preclude its necessity, I deemed it expedient to trust to time and palliative treatment. The result proved I had not judged incorrectly. But to return to the operation. Having observed a slight tumefaction about two inches beneath the left nipple, I directed Mr. Herring, in the presence of Mr. Hudson, navy surgeon, to open it; having first carefully ascertained, that the pressure of the accumulated matter had occasioned a sensible inclination of the heart towards the right side. From the intensely acute pain felt in this spot by the patient, for which the abstraction of blood afforded no relief, it appeared to me that nature was on the point of endeavouring to work a cure by gangrene of the pleura; and that by fixing on this as the spot of election, a ready escape would be given to the contents of the pulmonary abscess. After the division of the integuments by the lancet, the same instrument was used to open the intercostal space; and no sooner was this effected, than a quantity of air issued from the orifice with a hissing noise, followed by a

discharge of opaque yellow matter, similar to his expectoration, with the exception of its containing particles of a friable substance. The opening thus made continued to discharge matter, mixed with air, for the space of ten days, with surprising mitigation of his previous suffering. Having about this period imprudently sat for a considerable time in an un-
aired apartment, he was seized with so violent an inflammation of the bowels, as to demand vigorous and decided antiphlogistic treatment. This attack produced a sudden and entire suspension of the thoracic secretion; but on the abatement of the inflammatory symptoms, his convalescence was slowly but permanently effected. It should be mentioned, that on examining his chest, I ascertained that the portion of the lung, which had previously been the seat of matter and air, and from which a clear, gurgling sound, as well as pectoriloquism emanated, began almost immediately after the operation to be occupied by the dilated pulmonary tissue, a process indicated by respiratory murmur. Before the operation, and indeed for three years previously, the respiration of the whole of the right lung, and of the upper portion of the left, as far as a line drawn horizontally from the outside of the nipple of the left breast to the spine, had been distinct, and somewhat puerile. In the inferior part of the left side of the chest, pectoriloquism was clearly marked; and nearly the whole of the lower lobe of the left lung was, as far as I could judge, the seat of an immense abscess, from which he could discharge matter at will, even to the amount of a tea-cup full.

At times, during the action of coughing, I could perceive the intercostal spaces over the vomica, apparently distended. Mensuration of the chest gave no perceptible difference between the capacity of the two sides; but that enlargement of the ends of the fingers, especially of the thumbs, which I have already noticed as indicative of the existence of large excavations, was in this case particularly observable. On his recovery, this unnatural tumefaction entirely subsided. I have been thus minute in detailing this case, from my conviction of its rarity and importance. It was, as has been seen, a case of pulmonary abscess, which had existed for three years, resulting from the combined effects of yellow fever and severe cold, terminating in pneumonia; and during the greater part of this time, I was called upon to observe, and consequently felt a strong interest in, its progress. As I had early intimated to my pupils my judgment on this case, and was sanguine in my belief of the patient's recovery, I derived great satisfaction from having the precision of my diagnosis verified.

CASE II.

CONSUMPTION CURED BY PARACENTESIS.

DAVID SCOTT, aged 17, admitted an in-patient of the Infirmary, Nov. 1827, had been indisposed eleven years; his illness originating in his having taken arsenic by mistake. For several years previous to my seeing him, he had been afflicted with cough, and other symptoms of Consumption. On

entering the Infirmary, he showed none of the usual signs of emaciation in his person, but there were an unhealthy fulness and flushing in his face; he expectorated abundantly viscid, frothy sputa, of a greenish colour, and semi-opaque. This matter, amounting to about two pints daily, was of an odour so intolerably offensive, as to require the almost instant removal of the vessel which received it, in order to spare the feelings of the patients in the same ward. Conceiving that a well-regulated atmosphere, such as that of the Infirmary, (which is kept of a uniform temperature by means of German stoves,) would, conjoined with sedatives, lessen the copiousness of the discharge, I deemed it advisable to try their influence for a time. After a month's sojourn in the Infirmary, and the failure of remedial agents, finding his feet œdematous, and considerable dyspnœa present, and that there was, in fact, a decided change for the worse, I resolved to have recourse to an operation. His condition, at this period, was as follows. On the right side, anteriorly, from the clavicle to the fourth rib, there was a strong gurgling rattle, indicating the passage of air through cavities containing matter. The character of the sound induced the belief, that the fluid was in immediate contact with the walls of the chest. Pectoriloquism was well marked, posteriorly, as well as anteriorly; his respiration cavernous, but there was entire absence of the *souffle voilé* (the veiled puff). Hence, I became certain, that the surface of the lung adhered firmly to the costal pleura. Percussion on the same side, as well as the naked ear, showed

that some portion of the inferior lobe of the lung, a little below the excavations, still admitted the passage of air. On the left side, the chest sounded well, and the respiration was distinctly audible over the whole of it, except below the clavicle, where I at once detected imperfect pectoriloquism. The operation was performed with a small trochar, in the presence of Mr. Herring, the apothecary, and of more than twenty of my pupils, by a surgeon, a fellow-lecturer of mine. The place of election was in the intercostal space, a little anterior to the digitations of the greater serratus muscle. It was my desire that the puncture should have been made between the third and fourth ribs; however, it so happened that the instrument was introduced between the fourth and fifth, upon which there immediately issued a quantity of air, with a hissing noise, without any discharge of matter. The point of the trochar, indeed, exhibited traces of pus, and although it had been fairly introduced, yet the place of election was too low to suffer the escape of the matter. Observing that the patient was lapsing into syncope during the rushing out of the air, I stopped its further escape by placing my finger over the orifice, until this could be properly secured by bandages. On his recovering from this disposition to faint, and scarcely complaining of pain, I explored his chest with my naked ear, and in the region of the spot operated upon, I distinguished a dry, crepitous rattle, accompanied by a continued sound as of a rent, or as of something being torn within the chest. This particular noise lasted, and even increased,

for some days. Subsequent to the operation, he slept well, with the aid of a composing draught; his expectoration, as well as the œdema of his legs, gradually diminished, and for a short period he exhibited every sign of returning health. However, confinement to the house appearing to operate injuriously, it was resolved he should return to his place of abode in the country, a short distance from town. Here I saw him two or three times, and at first he displayed symptoms of amendment; but subsequently his breathing became troublesome, in consequence of an emphysematous state of his left lung, and of the other's being, from cicatrization of its several cavities, and from compression also, impermeable to air. So great was this compression, proceeding from contraction of his chest, that he became what is termed pigeon-breasted, the thorax being altered to the condition represented in figure 1, plate 4. As a consequence of the hepatized state of the one lung, which occurred a few months afterwards, the circulatory functions were disturbed, and venous congestion gave rise to general dropsy. I recommended abstraction of blood to equalize the circulation, diuretics, and other hydro-pical remedies, but fruitlessly, he having been, I apprehend, prejudiced against my advice by some neighbouring practitioner. After much suffering he succumbed to this complication of disease, about eleven months from the time of his leaving the Infirmary. I was sent for to examine the body, which I did about twenty-four hours after decease. Notwithstanding the deformity which the chest underwent, there was

no perceptible contraction of the affected side, which, subsequent to the operation, had yielded the fleshy sound on percussion. The right lung was one-fourth less than the left, and adhered intimately to the costal pleura by well organized cellular tissue, and likewise to the middle mediastinum, which, with the heart, was forced considerably into the right side of the chest, by enlargement of the left lung. This lung was altogether emphysematous, remained uncollapsed, and occupied the entire cavity of the left side of the chest. The anterior edge was rounded, and displayed vesicles which were of great size, owing to the union of several air-cells into one. The summit of the lung adhered to the chest, developing in its centre the indurated trace of cicatrization; and presented several nodules of tubercles, surrounded by numerous points of black pulmonary matter. In the cavity of the pleura, there were above two pints of reddish serosity. On making a longitudinal section of the right lung, its interior, which was flaccid, somewhat fleshy, and of a marbled blue and brown colour, presented cellular lines running in different directions, being the remains of obliterated excavations; but there was not the slightest vestige of tuberculous formation. The pericardium contained about a tea-cup full of serum, and the apex of the left ventricle was unusually prolonged; a considerable quantity of fluid existed in the peritoneal cavity; the chylopoietic viscera were much congested; the kidneys were of remarkable magnitude, and their cortical substance underwent fatty degeneracy.

From a general view of the case, I feel satisfied that this patient might have lived some years, had he submitted to the treatment I proposed to him, on his change for the worse.

CASE III.

CONSUMPTION, IN ITS VERY ADVANCED STAGE,

SINGULARLY ARRESTED.

— W., clerk in a counting-house in the city, aged 25,—for whom my advice was solicited by Dr. Tuke, the humane and talented proprietor of Sidney House, Homerton, the best regulated private establishment for the insane I have ever visited,—had, when first seen by me, been for some months affected with cough, and expectoration of thick, yellow sputa. He was extremely pallid, and much emaciated, perspired profusely at night, and had occasionally been subject to hæmoptysis. It appeared that he had recently lost a brother by the same complaint: this circumstance, as was natural, seemed to prey upon his mind, and depress his spirits; and to so low a condition was he reduced, that he was given over by a respectable surgeon-apothecary, who had attended him. I detected distinct pectoriloquism on the anterior and upper part of both sides of the chest; and this phenomenon, together with a strong gurgling sound, most audible in the left side, was clearly perceptible, over the whole space, from the top of the shoulders to the third rib. From partial indistinctness in the respiratory murmur, without the *râle* of pneumonia on the lower part of the right side, I apprehended that nodules

of tubercles were disseminated throughout its lung. I ordered the application of leeches to his chest, with a view to lessen perspiration, and remove congestion and morbid sensibility of the chest; and having described to him the species of apparatus for inhalation I wished him to use, he procured for himself a tube of half an inch in diameter, and furnished with a stop-cock, by turning which he was enabled to increase, or diminish, the resistance to the egress of air from the chest. With very little medicine, and that merely to regulate his stomach and bowels, a striking amendment was soon visible, through the beneficial effects of the above mechanical exercise. His progress to recovery being now rapid and decided, I recommended him to repair to the country for a short time, and to continue the plan from which he had already derived such benefit. After some weeks' residence, he returned to town well enough to resume his employment, and exhibited every appearance of health. He had gained flesh in a surprising degree, his muscles were firm and developed, his cough and expectoration had almost left him, and he was—comparatively speaking—a vigorous man. The only time I saw him after his return, I examined his chest, and the result was, on the whole, satisfactory. Pectoriloquism, indeed, could still be detected on both sides of the chest; but on the right it was imperfect: on the left, however, it was extensively manifested, though in a less degree than before, and had a metallic sound. From this last circumstance, I inferred that the lining membrane was acquiring a semi-cartilaginous structure; which I

have found in many individuals will remain insensible, and be productive of but trifling inconvenience for a series of years. It unfortunately happened, that at no long period after his convalescence, he was attacked with pleurisy, probably from neglecting himself; and although he survived this latter affection, as I was given to understand, for two months, yet not applying for advice, he ultimately sunk beneath its effects.

CASE IV.

PULMONARY EXCAVATION, DISCHARGING ITS CONTENTS BY AN OPENING MADE IN THE RIGHT SIDE OF THE NECK.

IN 1822, a child, nearly two years old, whose father was an out-door patient at the Infirmary, was brought for my advice, labouring under cough, as well as a rare disease, known under the name of pemphigus, which commenced behind the right ear, with the eruption of vesicles, about the size of almonds; and these successively extended themselves some way down the back, and the same side of the neck, discharging acrimonious yellow serum, and forming deep pits in the skin. This almost intractable disease yielded, at last, to varied treatment, and the application of an ointment composed of the *scrofularia nodosa*. The part that had been affected with the disease, healed up like a burned surface, but with several depressions. The delicacy, brought on by this disorder, terminated in tubercular formations in the summit of the right lung, which finally softened and made a way for

themselves by forcing a passage under the clavicle—the matter approaching the middle of the neck, in the direction of the cicatrized integuments. Observing that every time the child coughed, a puffing up of this part took place, and that there was air within it, I directed Mr. Sturkey, the intelligent surgeon-apothecary of the establishment at that time, to make an opening here, when there immediately issued a considerable quantity of air and matter, with great relief to the little sufferer. This discharge ceased after some days; but in consequence of the extreme debility, induced by two diseases occurring in a short space of time, the child, originally of delicate constitution, did not survive beyond two weeks. Its death, indeed, was absolutely owing to a complete prostration of vital power, not to be restored, either by nourishing diet, or tonic remedies. On examination there were several tubercles in both lungs, but the surfaces of the large cavity were found to be in apposition, and in more than one point slightly adherent; affording a proof, evidenced likewise by the voluminous state of the lungs, that had the child lived, it would have triumphed over every consumptive tendency. I must not omit to mention, that the mesenteric glands were so enlarged, as to present a decided obstruction to proper nutrition of the body.

CASE V.

CONSUMPTION CURED BY PARACENTESIS.

MR. G. S., aged 30, residing in Norfolk-street, Strand, hav-

ing experienced several severe losses in trade, fell into a declining state, which ultimately led to confirmed consumptive symptoms. It appeared that about three years previous to my attending him, he had laboured under phthisis, from which it would seem that he recovered; and his recovery took place, as I have reason to believe, from the occurrence of a bronchial affection, which after a time deserted him. However, meeting with new calamities, he relapsed into his former phthisical condition. At the time he first sought my advice, every sign indicated that his malady had made considerable progress. From the history of his case, I concluded that a secondary eruption of tubercles must have taken place at least eighteen months before; and that the softening of a tuberculous mass of large size had led to the formation of a vomica. At times he was sensible of fulness in the upper region of the left side of the chest, as if produced by accumulation of matter in the cavity, unable to find an exit; and he would suddenly be relieved by expectorating a quantity of purulent secretion, sufficient to fill a small tea-cup. He could himself distinguish the agitation of the fluid in his chest, when he coughed. On examination with the ear, extensive pectoriloquism was audible, extending from beneath the clavicle to below the third rib, and I distinctly recognised the gurgling of the fluid over the whole of the upper part of the left side of the chest. I succeeded in removing for a time, in a great measure, well-marked hectic fever, and the abundant expectoration was somewhat lessened. The fluctuations from

amendment to relapse were frequent; and, among other remedial measures, I advised him to go to the north of England by sea, conceiving that he might derive benefit from the bracing qualities of the air. Remaining there a brief period, he returned to London but slightly improved in health. Convinced that medicine could only afford temporary relief, and being satisfied that his right lung, with the exception of old cicatrization, was sound, and that the inferior lobe of the left lung was in a very satisfactory state, I ventured to propose an operation to him. In spite of the ridicule thrown upon the proposal by a medical acquaintance of his, he reposed such entire confidence in me, that he unhesitatingly agreed to it. Indeed, no accident ever attended the operation, as performed by me, except in a case of empyema, occurring in my early practice; the particulars of which extraordinary case I unreservedly stated to a medical society of this city. Laennec gives an instance not dissimilar from that which happened to me, since both arose from an unnatural position, in my case, an unheard-of one, of an important viscus.

Attended by one of my pupils, I operated with entire success. The trochar was introduced by me between the second and third ribs, in a line nearly perpendicular with the left nipple: very little matter escaped, as I had expected; for my chief object in performing this operation was to ensure the emission of the air, and thus effect a diminution of the cavity by the expansion of the inferior lobe of the left lung. I kept the punctured place open for about ten days, by the intro-

duction of a small piece of catgut, properly secured externally; when, finding that the cavity became so contracted, through the encroachment made on it by general pulmonary expansion, as to preclude all further escape of air, I withdrew it. About this time, a catarrhal affection of the inferior lobe of the punctured side supervened; and I could tell by the ear, that the pulmonary tissue, in the summit of the same side, was undergoing expansion. In less than two months, my patient was able to go out, and had completely lost all his phthisical symptoms. In less than two years after the operation, he was in the enjoyment of excellent health, the only drawback being the existence of catarrh, to which he more immediately owes his recovery.

CASE VI.

CONSUMPTION CURED BY SUDDENLY SUPERVENING EMPHYSEMA.

A YOUNG lady, daughter of a highly respectable tradesman in Little Britain, long subject to a nervous disorder, for which various advice had been taken, without permanent effect, became consumptive. Her decline was, in my opinion, brought on by the too liberal and prolonged use of medicine. After long manifestation of the various symptoms of phthisis, it was proposed to me to meet in consultation a physician, belonging to one of the metropolitan hospitals. The view of the case taken by this gentleman was so unfavourable, that he unhesitatingly gave it as his opinion to her parents—she

could not survive six weeks. Careful exploration, however, of the summit of the left lung, where I suspected the presence of a cavity, convinced me of the probable error of his conclusion. This belief, on my part, originated in my detecting decided indications of emphysema from a dry crepitous rattle, with large bubbles, manifested by auscultation. This emphysematous state, I conceive, arose from a spasmodic attack of the throat, so violent as almost to produce suffocation. From this circumstance, combined with the suddenness of the emphysema, I inferred that a rupture of several air-cells had taken place, and that in time cicatrization would be effected, through the consequent pulmonary dilatation. Nor did my conjecture prove erroneous; since, though three years have elapsed from the period of which I am speaking, I am most happy to state, that this young lady is not only living, but is in the enjoyment of excellent health.

CASE VII.

CONSUMPTION CURED BY NEGLECT.

A SILVERSMITH, when in good health and circumstances, and nearly fifty years of age, was exposed to one of the most terrible of all paternal inflictions—the misconduct and subsequent legal punishment of his son. The young man, having formed dissolute connections, had been persuaded to pass a forged note; and, on the fact being proved against him, was sentenced to transportation. The disgrace, thus brought on their hitherto unimpeachable family, operated so powerfully

on the feelings both of the father, and of a daughter just entering into life, that their distress and agony of mind at last entirely undermined their health. The debility, thus induced, terminated, in each of them, in Consumption. After a few months' illness, the daughter died; and the father, after extreme suffering, both of body and mind, having apparently reached the verge of the grave, and being indeed so utterly reckless of life, which he regarded only as a burden, as to neglect not only recourse to medical advice, but even common care of himself, yet recovered, and survived for many years. It was fully seventeen years subsequent to this seemingly miraculous recovery, that I attended him on the occasion of his being seized with an apoplectic fit, resulting, as I afterwards had reason to believe, from valvular disease of the heart. During his convalescence from this attack, he was unfeelingly taunted by some brute in human shape with his son's disgrace; and so wounded and humiliated did he feel by this unworthy allusion, and so deeply did it sink into his mind, that I entertain no doubt it accelerated his death. It was during my attendance on him, that learning from his wife his previous consumptive state and recovery, and perceiving that he laboured under a bronchial affection of long standing, I at once attributed the return to health, which she regarded as so strange, to the ingression of catarrh on phthisis. The *post-mortem* examination verified my conclusions; it presented well-defined cicatrizations, especially on the summit of the right lung; nodules of tubercles, yellow and opaque

in the centre, and rendered inert by the secretion of black pulmonary matter in the surrounding tissue; and the lungs were voluminous, and distended with air. I will venture one observation on this case, which, although it may appear harsh, regard for truth and the advancement of medical science compel me to make; namely, that had this person, when reduced to a phthisical state, recurred to medical advice, the probability is, the bronchial affection, which was his safeguard, would, as is but too frequently the practice, have been interfered with, its value being unknown to the profession, and his life, consequently, shortened for many years.

CASE VIII.

CONSUMPTION SPONTANEOUSLY CURED.

Miss M——, about 23 years of age, a lady of great personal attractions, and highly-cultivated mind, consulted me in the summer of 1826 for symptoms of confirmed Consumption; for which she had already enjoyed the benefit of Mr. Howship's advice. It was arranged that I should visit her in conjunction with this talented surgeon; and we continued to attend her for several weeks. In all the cases I have witnessed, I never met with such distressing, racking, and perpetual cough. We tried every method of relief we could possibly devise, and administered sedatives of every description, but without effect. Her disorder, instead of receiving mitigation, evidently increased; and not only were the fears of her friends awakened, but we ourselves began to despond.

At this crisis, through the importunity of some near connexions, her mother was persuaded to try the advice of an individual, who, although I am not aware that he had received a regular medical education, enjoyed some notoriety. On receiving a delicate intimation to this effect, and being of course inclined to humour the natural anxiety of a parent, we agreed, that it might not be totally *infra dignitatem* of us, the more legalized authorities, to hear what this person might suggest, although a formal consultation was out of the question. To do him justice, we found his opinions sensible, and much to the purpose; but he considered the condition of the patient as so hopeless, that he declined interfering with the case. Yet, notwithstanding these grave prognostics, the young lady, to our great satisfaction, soon after this began to exhibit signs of amendment. Her health was gradually restored, and continues, I believe, unimpaired up to the present time. From my further experience, and from cases which have subsequently come under my notice, I entertain no doubt that the cough I have already alluded to, and which was of a convulsive character, like that of the whooping-cough, must have produced a rupture of the air-cells, which caused infiltration of air within their partitions. This variety of emphysema, similarly to the vesicular, renders, while it lasts, the lungs voluminous; and when happening in the neighbourhood of the diseased summit of the lung, would naturally bring the surfaces of any excavation into contact. Indeed, although from my reluctance to put the patient to inconvenience, by ex-



mining the chest in the latter part of her illness, I could not positively affirm the existence of emphysema, still all my reflections on the case lead me to the belief, that she is in no small degree indebted for her cure to a cough, which in general would be considered highly injurious, and in fact appeared so to me at the time.

CASE IX.

REMARKABLE INFLUENCE OF THE PROTECTIVE POWER OF BRONCHIAL AFFECTION.

I OFFER this case as one instance out of many, equally as decisive, which I could adduce, of the value of catarrh in preventing Pulmonary Consumption. An eminent publisher of Paternoster-row, all whose brothers and sisters have been the prey of Consumption, is himself subject to asthma, induced by a catarrhal affection of the chest, contracted in childhood. The gentleman, to whom I allude, is at present about fifty years of age, of a ruddy, healthy complexion, expanded chest, and excepting occasional inconvenience experienced from the above constitutional complaint, he enjoys life in every respect. It is but fair then to infer that since, out of a numerous family, he is the sole member who has escaped phthisis, this singular exemption has been owing to what might to a superficial observer appear an infliction, but which is really in this instance, a providential dispensation; namely, asthma.

Being thus naturally led to the subject, I take the opportunity of explaining a very remarkable phenomenon, exhibited

in the offspring of consumptive, and asthmatic individuals. That Consumption is hereditary, I have already noticed; but an additional confirmation not only of this fact, but of the truth of the opinions I have given on the preventive nature of catarrh, may be found in a circumstance, often noted by me;—that when a consumptive individual becomes asthmatic, the children, born prior to the supervention of asthma, exhibit a phthisical diathesis, whilst those who are born subsequently are entirely free from any consumptive tendency. Exceptions may undoubtedly be met with, the result of some strong exciting cause; but, generally speaking, the rule will be found to hold good: the exception, indeed, will substantiate the rule, from the resistance, in such cases, offered by nature to the inroads of Consumption.

CASE X.

COMPLICATION OF DISEASE ENDING IN PHTHISIS.

C. L., aged 50, the matron of a medical institution, and consequently having the best advice within her reach, being visited by several eminent medical men, was for some months subject to distressing uneasiness and irritability of stomach, which prevented the due retention of food. It being supposed that she laboured under a cancerous affection of this organ, various palliative expedients were resorted to. Her health, however, declined, and she became subject to frequent cough, from which she had hitherto been free; to shortness of breath, purulent expectoration, much emaciation, hectic

fever, and night sweats. After great suffering for a lengthened period, she sank under this seemingly double affection of the stomach, and the chest. On examination, however, of the body, the cause of this train of disease was discovered to be a polypus of the womb, which had considerably enlarged it, and had undoubtedly excited that morbid sensibility of the stomach, which, deranging the general health, induced phthisis. The only remarkable appearances, presented by the stomach, were several small opaque glands, in the mucous surface, near the pylorus. The lungs were excavated, and tuberculous; and exhibited marks of inflammation in various places. I have introduced this case to prove the justness of the views I have taken in the preceding portion of this work, with respect to the fatal supervention of phthisis on general debility, when unchecked by catarrh, or mechanical expansion of the chest. Had inhalation been early employed, the disease would have been at once arrested; and the patient might have lived until the appearance of the polypus, through the external opening of the womb, would have attracted notice; when means might have been adopted for its removal.

I have by me numerous cases, in which Consumption has fatally supervened on diseases, both of a curable and incurable kind; but their description could only confirm what I have already, I trust, established.

CASE XI.

THE PROTECTING INFLUENCE OF CATARRH, SUPERVENING
ON CONSUMPTION, EXEMPLIFIED.

MRS. H——, the wife of a gentleman attached to the Bank of England, who had been under the care of a lecturer on midwifery at one of our largest hospitals, without relief of her consumptive symptoms, applied to me about ten years ago. She suffered from hectic fever, spitting of blood, and, in short, exhibited all the well-known symptoms of phthisis. At this time, my views of the treatment of Consumption were not matured. However, I succeeded in rendering her disease chronic; and soon after this change was effected, a bronchial affection supervened. Until the pulmonary cavity was perfectly healed, she was liable, at long intervals, to sanguineous expectoration; and her health consequently exhibited occasional fluctuation. During one of these temporary relapses, she consented, in order to oblige a friend, whose importunities were unceasing, although at the same time her confidence in me continued unshaken, to apply to a physician, whose interest had obtained for him the honour of prescribing for royalty. This gentleman shook his head at her case, to the great alarm of my poor patient, and in most melancholy mood assured her friend that she was a doomed woman. Full of consternation at these dismal prognostics, Mrs. H. hurried to me, and revealed, after apologizing for the seeming want of trust in me, this tale of horrors. To her amazement, the more she dwelt on the gravity and misgivings of the said physician,

the more were my risible faculties excited; and while she talked of death, I was convulsed with laughter. I soon reasoned her out of her fears, and carefully putting by the prescription, she proceeded in better spirits, from my assurances, to order mine to be made up. The usual results, attendant upon catarrh in Pulmonary Consumption, were not belied in her case. She is at this moment ever ready to join in the laugh with me at her former trepidation; and is one, out of hundreds of instances that have passed under my observation, of the cures effected by the interposition of Nature herself.

CASE XII.

CONSUMPTION CURED BY EXPOSURE TO COLD, AND WANT OF FAITH IN MEDICINE.

MR. D——, aged 24, had so materially impaired his constitution through irregular habits, as to fall, in consequence, into a decline. He, of course, availed himself of the benefit of medical advice, which produced no very visible amelioration of his state of health. Being naturally of active habits, he grew impatient of the confinement to which he was subjected, and, tempted by the return of spring, he suddenly deserted his heated apartment, and determined, since he concluded he must die, to die in the manner most agreeable to himself. Accordingly he betook himself to his favourite sport of fishing. This was in the month of March, a period at which easterly winds are most prevalent. The worst consequence of this apparently rash exposure was, that after a time

he caught cold, which, as it would appear, was confined to the trachea. His respiration was sensibly affected, and he laboured under a distressing fulness of the chest. He continued subject to this affection, with an apparent increase of the violence of his disorder; but he still rejected all care and medicine, and persevered in going out. After some period, he began to exhibit signs of amendment; he gradually lost his emaciated appearance, acquired flesh and bodily vigour; but was much annoyed by wheezing of the chest, and loud rattle in his throat. He had remained in this state for some months, when he applied to me. On examination of his chest, and hearing a detail of his complaints, not only from himself, but from the gentleman under whose care he had previously been, I at once perceived that he was indebted for his recovery from Consumption, to this catarrhal state of the trachea. I may here observe, that recoveries of this kind are more frequent among the lower, than the other classes of the community; owing, doubtless, to what may at first appear a misfortune, but is to the consumptive patient, in numerous instances, a blessing—exposure to cold!

CASE XIII.

CASE OF CONSUMPTION RELIEVED BY INHALATION, AND DETAILED BY THE PATIENT HIMSELF.

“JOHN EALES, compositor, aged 40, was affected in the month of July 1833, with a violent consumptive cough and hectic fever; so much so, that the phlegm was coated with blood,

and afterwards followed a great quantity of clear blood for about ten minutes, which caused my health and strength to decline very fast, and my system was very much reduced, so that it was with great perseverance and suffering I was enabled to keep to my employment. Having applied to Dr. Ramadge under this extreme suffering and danger, he ordered me to inhale hops through a tube about four feet long; and by inward medicine and outward application of bleeding, I soon found myself improving very fast: and I am happy to say that I am entirely out of danger, and free from internal bleeding, and any appearance of Consumption."—Feb. 13, 1834.

CASE XIV.

CASE OF CONSUMPTION, EXEMPLIFYING THE GREAT VALUE OF INHALATION.

A GENTLEMAN, aged 50, whose house of business is in Hatton garden, began to exhibit decided symptoms of Consumption about sixteen months ago. Originally of delicate constitution, and inclined by his make to phthisical disorder, his health was undermined by family afflictions. Within a very brief period, he lost his wife and two grown-up daughters; the two latter through the same destructive complaint, which, supervening on the decay of health, occasioned by grief for their loss, has since endangered his own life. At the time I was called in, he exhibited the physical signs, as well as constitutional symptoms of the disease. He had inflammation

of the inferior and middle lobe of the right lung; and expectorated no inconsiderable quantity of blood. This circumstance, indeed, is no infrequent concomitant of the above inflammatory state, when it co-exists with tuberculous excavations of the lungs. He had been under the care of two able practitioners, his brother-in-law, Mr. Wallace, and Mr. Christie, a surgeon in the neighbourhood of his country-residence. Both these gentlemen considered their patient in a most alarming state; and on seeing him, I fully shared their apprehensions. The first consideration was to subdue the inflammatory state; and for this purpose, blood was taken from the arm, and medicines were likewise exhibited to further the end proposed. The pneumonia continuing, it became necessary to repeat the general abstraction of blood, and to follow this up by the application of leeches near the seat of the inflammatory action. By these depletory measures, the pneumonic disease lost its more violent symptoms; but, after displaying a temporary amendment, the active determination of blood to the chest recurred with its former severity. At this juncture, his brother-in-law, Mr. Wallace, who watched the case with great anxiety, considered himself fully justified in bleeding him in my absence, and that to some extent. Leeches were also repeated, and medicines given, whose chief action was determined to the kidneys. Under this plan of treatment, he gradually got rid of the formidable pneumonic complication; and it remained to counteract the phthisical disease alone; which, after a time, began to exhibit graver and more

pressing symptoms. In fact, the patient was at this period in so lamentable a condition, and so utterly hopeless of recovery—being rendered additionally uneasy by the discharges of blood again appearing—that he arranged his affairs, and made every preparation which a conscientious man deems it imperative to do, when looking forward to the awful summons. Having first reduced the spitting of blood, and removed some of the more formidable external symptoms connected with phthisis, I pressed the necessity of recurring to inhalation. The practice was novel to the other medical gentlemen, but I pointed out its *rationale*, and illustrated my opinions by the convincing support of cases. They yielded to my arguments, inasmuch as their reason was convinced; yet so unwillingly, that they could not enlist their hopes on my side. The utmost they at first expected, was palliation; but they could not bring themselves, as they have since owned to me, to believe that inhalation could, as I asserted, effect the healing of internal ulcers, and prevent the formation of any secondary eruption. The trial was, however, made; and its result, up to the present date, has been attended with marked success. In less than two months from the period of the patient's commencing to inhale, his chest was so much enlarged, as to render it necessary for him to have his waistcoats let out; and his general health was proportionably amended. It is now eight months since he began this process, and for the last six, he has been enabled to attend constantly to his business in town. He has inhaled during this period twice a-day,

except at such times as slight spitting of blood, arising from the cavities not being yet entirely closed, has called for an interruption. This is a circumstance, which, although it is apt to occasion alarm in the patient, is to be expected in many instances, so long as the excavations remain partially open. I have already adverted in Case XI. to a similar instance of sanguineous expectoration; which likewise proved perfectly innocuous. The cure was, in the case of this lady, complete; and in that now under consideration, I have no doubt of being able to say, "*finis coronat opus.*"

By a recent exploration of my patient's chest, I find, that there is throughout, extensive augmentation of the respiratory murmur; and that pectoriloquism, which was distinct on the anterior and upper parts of both sides, some months ago, especially on the left, is now indistinctly perceptible. I am fully convinced, from all the signs of amendment, both general and local, that no false convalescence has taken place, but that the patient is progressing rapidly to a perfect and permanent restoration.

CASE XV.

ANOTHER CASE CORROBORATIVE OF THE EFFICACY OF INHALATION, WRITTEN BY THE FATHER OF THE PATIENT.

"DINAH MARKS, of the Jewish persuasion, aged 19, was suddenly seized with spitting of blood, in the beginning of last September. On application to a medical gentleman, he treated the case as of no importance, but prescribed for her; and she

continued under his care, without experiencing any relief, until the end of December. She was seized, at this juncture, with sanguineous expectoration, similarly to the first attack; and this was followed by a violent cough. Nocturnal sweats ensued, accompanied by loss of appetite, dejection of spirits, and other common symptoms of decline. She drooped visibly; and her appearance awakened all the fears of her mother and myself. At this critical period, I made the acquaintance of a person, who had been indebted to you for restoration from a state, even more alarming than my daughter's; and I immediately sought the benefit of your advice for her. The state of weakness to which she had been reduced, and consequent inability to inhale, prevented her from deriving, or rather, perhaps, from exhibiting outwardly, much immediate benefit from your prescriptions; and she remained, apparently, in a very precarious condition. The spitting of blood came on again in the beginning of March; and, on its removal by your treatment, you advised her at once to commence inhaling. From this moment, her progress to convalescence has been rapid. With her amended health, her spirits also have revived. She has been enabled to resume her business; and no doubt can possibly be entertained of her ultimate recovery. Her mother and myself" —

I cut short the thanks of the worthy couple, as they have nothing to do with the understanding of the case. Since the above was written, the amendment of my youthful patient has

been still more decisive; and, in fact, I may even pronounce her cured.

A large circle of friends, and Mr. Herring, the talented apothecary of the "Infirmity for Diseases of the Chest," have witnessed the above case.

CASE XVI.

CASE OF A MEDICAL GENTLEMAN, WHO HAS RECOVERED BY INHALATION.

MR. CLEMENTS, aged 25, member of the Royal College of Surgeons, did me the honour to solicit my advice some months ago. I found that he laboured under well-marked symptoms of Consumption. Since, however, they presented no peculiar features, it is unnecessary to recapitulate the long list of constitutional and physical phenomena, which have been so often described, in the preceding pages, as concomitants of the disease: suffice it to say, that I have enjoyed the satisfaction of seeing him recover; and that he chiefly owes his restored health to inhalation.

CASE XVII.

PROTECTING INFLUENCE OF PARTIAL EMPHYSEMA, EXEMPLIFIED IN THE LONG LIFE OF A CONSUMPTIVE PATIENT.

MARTHA HENDERSON, of Cherry Garden-street, Bermond-

sey, first came under my care about ten years ago. She was at that time fifteen years of age. It appeared that phthisical symptoms first supervened after an attack of the small pox, which seized her naturally the year preceding. The ill health engendered by this, it is probable, gave rise to the formation of tubercles in the lungs. She exhibited no signs of consumption in her person. Her countenance was florid, not flushed; and the emaciation, usually witnessed in consumptive patients, was not observable in her. The hectic symptoms were very irregular and undefined, recurring at uncertain intervals, and those far distant. She was subject to cough, and shortness of breath, influenced by changes of weather; but the most remarkable symptom was the quantity and the fetor of her expectoration. It resembled the matter discharged by a phlegmonous abscess, and she could bring it up at will. She imagined, from the peculiar sensation she felt there, that it proceeded from the right side of the chest; and, in point of fact, a great sympathy was discernible betwixt the external and internal parts, on this side. A swelling, and induration of the mamma, invariably took place whenever the matter collected to any great extent within. I have alluded to the fetid odour of the expectorated matter: it was of so rank and sickening a nature, that her parents, although she was their favourite child, needed every excitement, that a sense of parental duty could give, to enable them to live with her. It is no exaggeration to say, that it contaminated the whole house, and was perceptible as soon

as the street-door was opened. I have seen my own pupils ready to vomit at the disgust it occasioned, and have, used as I am to such scenes, been affected by it myself. When I first examined her, she exhibited the following symptoms. The sound of respiration was barely audible over the right side of the chest, with the exception of a space, about two inches square, between the clavicle and the third rib, where a loud, gurgling rattle was heard, caused by the intromission of air into a cavity, containing a quantity of puriform sputa. A mucous, and sometimes sibilous sound was occasionally heard in some of the bronchial tubes, in the inferior region of the same lung. The opposite side of the chest gave out an asthmatic wheezing, from the clavicle downwards, as far as the fourth rib. The inferior part of the same side, both before and behind, yielded a dull sound on percussion; and the respiration was nearly inaudible over the same region. I could discover on the same side, when she spoke, distinct pectoriloquism in the midst of this imperfect respiration. After examination, I recorded the following diagnosis:—Large excavation in the superior lobe of the right lung, containing a quantity of liquid matter; the rest of the lung, on the same side, tuberculated; cavity in the middle of the inferior lobe of the left lung, the remainder of the lobe in a state similar to the opposite; the upper lobe of the same lung emphysematous throughout.

I augured, no long period after this, that she was likely to live many years; feeling assured that the asthmatic condi-

tion of the one lobe of the lung would counterbalance the defects, alarming as they were, of the rest of the pulmonary apparatus. I caused her to attend, on several occasions, when lecturing on Diseases of the Chest, to point out the phenomenon of a person's existing so long under such ravages from consumptive disease. She was seen several times at the Central Infirmary, as well as the Infirmary for Diseases of the Chest; was well known to the two apothecaries of those establishments; and must have come under the notice of above one hundred professional individuals. I was not aware, for some short time after her first attendance on me, of the value of that emphysematous state, which I now recognize as the preserver of her life for so long a period. Hers was at first considered by me as a remarkable case, from the circumstance of her displaying most of the external signs of health in spite of her really distressing condition. Of late years, however, I have learnt to estimate properly this strong corroboration of the truth of those views, which I have at last systematized, and reduced to proof.

A singular peculiarity, connected with the history of the patient, is, that from the age of fifteen to twenty-two, her personal appearance exhibited no change. She displayed the same girlish look throughout these years; and it was not, indeed, until she had turned her twenty-second year, that she underwent the catamenial crisis. After this, it was astonishing how quickly she acquired the aspect and proportions of womanhood. She was an occasional patient of mine,

as I have already stated, for the space of ten years; applying to me, from time to time, whenever she was at home. In the course of these years, she experienced several severe inflammatory attacks. The immediate cause of her death was, in fact, a violent pleurisy, which seized her, when on a visit to some friends, about forty miles from town. She endured this as long as she could hold up, without taking any medical advice; and at last hastened home, and sent for me. But she had delayed till too late. Her tongue was thickly covered with aphthæ, her lips livid, her respiration so impeded as to prevent her from lying down, and accompanied with extreme pain in the side: her extremities were cold, and she had occasional hiccough. I saw that she was beyond the reach of medical aid; and the poor girl expired within thirty hours after reaching her home.

Dissection thirty-six hours after death.—The right lung was adherent throughout, by ancient attachments, to those parts with which (though without adhesion) it is naturally in contact. The summit was indented, indurated, and covered, or capped as it were, by a fibro-cartilaginous mass. Highly condensed cellular substance, of irregular thickness, and about an inch and a half in length, extended itself into the lung, and gave off several bands, of the same structure, which ran in nearly a horizontal direction, and gradually lost themselves in the cellular membrane of the viscus. The structure, just described, was probably formed from the cicatrization of ancient vomicæ. In the same summit

there was a number of tubercles, in different stages, several of them surrounded by black pulmonary matter. There was a large cavity, nearly opposite the third and fourth intercostal spaces, containing a calcareous secretion of the size of a peach stone; and, instead of being lined by semi-cartilaginous membrane, its lining was composed of laminæ of the colour, and consistence, of old yellow wax. The rest of the lung contained a multitude of greyish tubercles, of unusually firm consistence, and of various sizes: on cutting it, a quantity of frothy serum flowed out. The upper lobe of the left lung completely filled the cavity of the chest, on that side; and, when handled, imparted a sensation different from the natural crepitation, and somewhat similar to that caused by the displacement of some elastic fluid. Its surface exhibited several transparent vesicles, some of the size of an almond, evidently dilated air-cells. The dilatation of the cells, over the rest of this lung, was likewise remarkable. On making a longitudinal section of this lobe, a slight trace of a cellular cicatrix was perceptible; and two of the bronchial tubes were considerably dilated from their cartilaginous termination. The mucous membrane of all the tubes, without appearing highly vascular, was considerably thickened, and contained much yellow opaque matter. The inferior lobe, on the same side, on its anterior and lateral surface, was adherent through the medium of a false membrane, a quarter of an inch in thickness, containing beneath it a gelatinous substance, transparent and almost colourless. There was a large cavity,

with tubercles, similar to those presented in the superior lobe of the opposite lung, but not so numerous ; and marks of inflammation were exhibited in various places. The above cavity, which occupied the centre of the lobe, and communicated, by a large opening, with another of lesser size, had a membranous lining exactly resembling in structure that which I have described as appearing in the excavation of the right side.

I entertain no doubt that there existed originally a cavity in the summit of the left lung, and possibly smaller ones, along with tubercles in a state of semi-transparency ; the latter of which were absorbed, and the former healed by the first intention.

CASE XVIII.

CONSUMPTION WARDED OFF BY THE PRE-EXISTENCE OF ASTHMA,
WHICH HAD LASTED UPWARDS OF TWENTY YEARS, IN A FEMALE,
WHO SUBSEQUENTLY DIED THROUGH CANCER OF THE WOMB.

MR. MORGAN, a general practitioner of Great Newport-street, has, on various occasions, invited me to accompany him to *post-mortem* examinations. I have had the pleasure of pointing out to him, in some of these associated labours, the cicatrices of cured Consumption, arising from enlargement of the volume of the lungs. In the case now under consideration, extensive cancerous disease had destroyed a

great portion of the uterus and the bladder; had produced considerable induration of the rectum, as well as obturation of the external iliac, with a portion of the adjoining hypogastric vein on the right side; and had affected the whole of the right leg and thigh in a manner similar to what is witnessed in *phlegmasia dolens*. Notwithstanding the ill-health, induced by the continuance of cancer of the womb, with the deplorable accompaniments just detailed, as well as exhausting discharges for upwards of two years, no symptom of Consumption appeared; but the patient, at last, succumbed under general effusion, the result of protracted debility. On opening the body, I pointed out to Mr. Morgan the asthmatic state of the lungs, with cicatrices on their summits, which had acted as a preservative against the ingress of that phthisical condition which, in such a case, would, without this, have indisputably supervened. I have had opportunities of showing similar cases to several respectable practitioners, and, amongst others, to my worthy friend, Mr. Helsham. My chief inducement for mentioning this case, is to impress upon the medical world the high advantage of recurring, in all instances of debility occasioned by long continued chronic ailment, to mechanical means for preventing the sure inroads of Consumption, the consequence of such state. Mr. Carmichael states, as far as my memory serves me, in the second edition of his excellent work on Cancer, that he never examined the body of a patient, who died with any variety of cancer, without finding the lungs

tuberculated. This, in the first instance, strongly corroborates the correctness of my opinion, that Consumption is a very common result of ill-health produced by any ailments of long continuance; and, in the second, it shows by negative testimony the value of those means which will prevent such supervention. I have no doubt that this gentleman will, in the prosecution of his pathological studies, meet with cases in which the utility of catarrhal and asthmatic affections in anticipating, or arresting phthisis, will be well-marked: and I feel pleasure in adding, that, from his high character, and zeal for the true interests of his profession, he will, I am confident, be forward, in such case, to acknowledge the accuracy of these observations, already verified by me in numerous *post-mortem* examinations.

I have at this moment a patient, a medical gentleman, who has been likewise visited by Sir Astley Cooper and Mr. Earle; and who, for two years, has been suffering under most painful urino-vesical disease, but latterly with evident influence on his general health. Apprehensive that his chest is becoming the seat of tuberculous disease, he has expressed a wish, with which I fully concur, to have recourse to inhalation. I mention this, as it is gratifying to me to find that a practitioner of his long standing has, in spite of the force of opinions entertained for years, been won round to assent to the truth of my doctrine, that Consumption is not only curable, but that the development of tubercles may be effectually prevented.

To the above cases, which bear a slight proportion indeed to the number I have at this moment lying on the table before me, detailed as well by the thankful patients themselves as minuted by me, I append some letters from medical gentlemen, illustrative of the happy results of pulmonary expansion. The first of these stands in need of no other explanation than my observing that the writer has omitted, that, on exploration of the chest, the physical signs of Consumption were distinctly marked. Mr. Graves, the brother-in-law of my patient, who enjoys an extensive practice in the east end of the town, and has been long accustomed to auscultative examination, fully concurred with me in the opinion I expressed of the existence of cavities, and entered into my views as to the plan of treatment I laid down.

“DEAR SIR,

“In compliance with your request, I beg to give you the following statement relative to my health:—

“In the winter of 1832 I was troubled with a cough, after which my health continued indifferent, and in the month of May last I had a violent attack of pain in my chest, for which a blister was applied and medicine taken, apparently with good effect; but in about eight days the pain returned with increased severity. After being twice bled copiously from the arm, and the local application of leeches and a blister, the pain was allayed, so as to allow of free respiration. I was now, of course, extremely weak. In about four weeks

APPENDIX.

the pain again returned in my chest. Leeches and blisters were repeatedly applied, without effecting its removal, and although the general state of my health was of course attended to, my strength of body soon so much decreased, that it was thought I should not recover. Under these circumstances, I applied to yourself in July, and am happy to say, that under your skilful treatment I soon began to amend, and that for the last two or three months I have entirely left off taking medicine, being now stouter and stronger than before the commencement of my illness in 1832. I have been for some time without any cough.

"Hoping these particulars may be useful to you, believe me to be,
"Dear sir,"

"Your much obliged, humble servant,

"CHARLES ROSE.

"P.S. I omitted to mention that I still continue inhaling.

"24, Beaumont-square, Feb. 5, 1834.

"To Dr. Ramadge, Ely-place, Holborn."

The following is an extract from the letter of a medical gentleman, who has done me the favour of consulting me on a case of advanced Consumption, submitted to his care. He bears, I am happy to say, this powerful evidence to the virtues of inhalation.

"To Dr. Ramadge, Ely-place.

"MY DEAR SIR,

Rye, Feb. 17, 1824.

* * * * *

"I am sedulously using all you have recommended, and, whatever may be the termination of the case, more benefit has been received from the plan you have mentioned, than any I have ever tried, or known recommended.

"Yours very truly,

"F. H. WILSON."

It has so happened, that within the last eighteen months I have had several cases of Consumption, in medical men, under my care, and in every instance the result has proved satisfactory.

I subjoin to the above testimonies to the value of inhalation the following letter from a professional friend of mine, whose abilities need no encomium from me, and who is very generally known among his brethren, from the circumstance of his having been secretary to the Medical Society of St. Bartholomew's Hospital some years since. The gratification I experienced in receiving so powerful a corroboration of my opinions from so excellent a judge, was enhanced by its having been entirely unexpected. Several years had elapsed since through business, and the every-day cares of life, our correspondence had ceased. To have it renewed was in itself a pleasure; which was doubled by the manner of the renewal. I shall not apologize for inserting remarks so fa-

vourable to myself. The writer is too independent to have written any other than his conscientious opinion; and I have not the false pride which would conceal praise when praise is honourable. His residence on a part of the coast, to which consumptive patients are frequently sent, has given Mr. Bowden peculiar opportunities of studying the nature of phthisis. I feel that he is well qualified to pronounce a judgment on any mode of treating the disease, which may be propounded, and am grateful for the manly liberality with which he has come forward. There are many reasons for the opposition to my views which, I know, exists among many of my medical brethren: disinclination to unlearn is, perhaps, among the chief. Were it the only one, I should not step out of my way to notice it. I should be well contented to undergo what Harvey, Sydenham, and Jenner had undergone before me. The thought of the future would indemnify me for any temporary annoyance, and I should anchor my hopes upon the indisputable axiom, "*Magna est veritas et prævalebit*:"—but unworthier motives have been at work. I was one of the first, if not the first, to point out the deficiencies of the medical education of the day; and had my suggestions been attended to, many M.D.'s might have been spared the pain of their confessions before the Medical Committee lately sitting at Westminster. I have gone further; and have long denounced the vile system of cramming patients, "*ad nauseam*," with medicine, as a disgrace to the country. I do verily believe, that more physic

is yearly swallowed in the United Kingdom than in half Europe. A nobleman, with whom I was conversing on the subject, literally shuddered at the recollection of the quantities of drugs he had been obliged to take—for the advantage of the apothecary. The profession has been made a trade. The mechanical means I advocate would, if generally employed, cut off a large source of profit. The “still, small voice of truth” is long ere it can reach the ear into which interest is shouting with trumpet-tongue. I must, indeed, candidly acknowledge that the profession itself is not to blame, but the defective state of its organization, and of the laws on the subject. As matters at present stand, the surgeon-apothecary is obliged to send in physic to indemnify himself for his time and trouble; the physician doubles and trebles in his prescriptions the amount of medicine strictly required, out of compassion to the apothecary; and if the patient be a sensible person, he forms his own judgment, and takes, or declines it, accordingly. It is this apparently merciless conduct—merciless, as regards the pocket of the patient—which drives the public to empirics. One box of pills will enable a patient to throw away his crutches,—after taking a second, he will never know what illness is. Thus, for two or three shillings, he is, he supposes, a made man. Were he to apply to the regular, the medicine alone would come, taking the lowest computation, to many pounds. This is the process of thought which passes through many a mind, not of the lowest class either;

and the quack steps in and claims the spoil. The labours of Mr. Warburton, and of the other gentlemen on the Committee, will, I confidently hope, rectify these abuses, and elevate the profession, both in point of knowledge, and of efficient working, to a level with our continental neighbours. My own forbearance from over-dosing the patient has drawn upon me the ill-will of several dispensers of drugs, of which body,—and I would all my brethren could say the same,—I am entirely independent. I remember the attorneys threatening the present Lord Chancellor some years ago, on the occasion of his endeavours to reform the expences and delays of the law, with sending him to Coventry; that is, never giving him any briefs: to which he quietly responded, in his place in the House of Commons, that he could manage very well to conduct a cause without them. Now, what he said to the attorneys I can say to the apothecaries; and with this addition, that I can not only do without them, but that my patients will be all the better for it. But to the extract:—

“Dawlish, Devon.,

“MY DEAR DOCTOR,

“June 20th, 1834.

“I have just purchased, and read your book on Consumption with much gratification. I perfectly coincide with your views, in every particular, and am satisfied of their accuracy. It is, perhaps, paying myself a compliment at the expence of my professional brethren to say, that I have, ever since I had the pleasure of knowing your sentiments, differed



from them as much as you do. With regard to their treatment of that plague-spot in the English constitution—Consumption—it has ever appeared to me founded on false principles, or dictated by the hereditary prejudices of our profession: of you they are particularly jealous, and would gladly rob you of your dearly-earned knowledge and fame. I call it dearly-earned, for I remember the many unpleasant situations we have been placed in, amongst the haunts of London disease and misery, particularly in the purlieus of Saffron-hill. I must say honestly, and without flattery, that I never knew one of your profession who laboured so zealously, and constantly, as you did in *post-mortem* examinations; or who was so thoroughly conversant with morbid appearances, and their anatomical detail and minutiae. I have myself experienced the accuracy of your observations, in the persons of several of my own patients; and so nearly have our ideas coincided, that I have been in the habit of making my patients inhale, through an Œsophagus tube, to oblige them to inspire deeply. I am quite certain I have cured two cases of tubercular phthisis by your means.

* * * * *

“Believe me to be, &c.

“Dear Doctor,

“Very sincerely and truly yours,

“R. B. BOWDEN.

“To Dr. Ramadge.”



EXPLANATION OF THE PLATES.

PLATE I.

FIG. 1. displays a section of the upper lobe of the lung, taken from a person who had, many years preceding death, recovered from consumptive disease, but had died asthmatic. Like most lungs of the kind, it exhibits, on the summit, adhesion of the two pleural surfaces; and an emphysematous state is indicated by large, transparent vesicles, full of air, formed by the rupture of several air-cells into one. The semi-cartilaginous external wrinkling, or pursing, is the mark of internal cicatrix. The size to which this lung had attained, is not shown by the drawing, frequent handling having compressed it.

a. A portion of the pleura costalis.

b. The point of adhesion between the pleura pulmonalis and the pleura costalis.

c. c. Large air-vesicles, the products of imprisoned air, chiefly arising from bronchial affection.

d. External wrinkling, the result of internal cicatrix.

e. Black pulmonary matter, in unusual quantity, seen through the serous surface of the lung.

FIG. 2. represents an old excavation, with semi-cartilaginous lining; and the marks of cicatrization both fibro-cartilaginous and cellular; also ancient crude tubercles surrounded by black pulmonary matter. The individual, from whom this superior portion of the lung was taken, had had consumptive disease arrested, more than six years previous to his death, which was occasioned by apoplexy.

a. Emphysematous vesicles.

b. Chronic pleurisy, with jelly-like effusion beneath it.

c. A line passing through semi-cartilaginous, as well as cellular, cicatrizations.

d. Tubercles, of long date, in a state of crudity, and in the midst of widely diffused black pulmonary matter. There are two smaller tubercles above the horizontal cicatrization.

e. The lining membrane of an ancient cavity.

f. The semi-cartilaginous lining of the same cavity.

g. Passing over an external wrinkling, and terminating in the opening of a bronchial tube.

h. Shows the bottom of the section of the lung, and the dissemination of black pulmonary matter.

PLATE II.

FIG. 1. Showing a section of the summit of the lung, with the partially complete cicatrix of a tuberculous excavation. The preparation, from which the drawing is taken, is part of the lung of a cured consumptive person.

- a.* Large tuberculous nodule, environed by black pulmonary matter.
- b.* Indicates the point where adhesion is completed.
- c.* Opening of the trachea, the lung inclining forward.
- d.* Vesicles, generally seen in cured consumptive cases.
- e.* External depression, the sign of cicatrix.
- f.* Edge of the section, resting on black pulmonary matter.

FIG. 2. Another summit, taken from a cured consumptive individual.

- a.* Small excavation of long standing.
- b.* Crude tubercles.
- c.* Black appearance of the lungs from inordinate secretion of black pulmonary matter.
- d.* Semi-cartilaginous corrugation of the exterior surface.
- e.* Calcareous deposit, lying loose, having fallen out of an imperfect cicatrix. Another may be seen above, in the line of cicatrization.

PLATE III.

FIG. 1. A section of a lung, lengthwise, taken from a young man, who died eleven months after the operation of paracentesis. His case is the second described in the Appendix.

- a.* Represents well-organized cellular tissue, with a portion of the pleura fibro-cartilaginous.
- b.* Dense cellular tissue, of a white colour, in a few places

semi-cartilaginous, running in various directions, formed by the adhesion of several excavations.

- c.* A broad cicatrized band.
- c.* (On the right side.) Cicatrization all but complete.
- d.* Apparent thickening of the pleura investing the lung.
- e.* A bronchial tube, opening into an incomplete fibro-cartilaginous cicatrix.

FIG. 2. Apparatus for inhaling, to be two-thirds filled with warm water.

- a.* Air-vent.
- b.* Flexible tube, inserted into the cover of the inhaler.
- c.* Flexible tube, of narrow diameter, furnished with ivory mouth-piece.

PLATE IV.

FIG. 1. Figure of a young consumptive patient, who underwent paracentesis, which operation was followed by considerable reduction and impermeability of the right lung. Instead of contraction of this side taking place, through the emphysematous enlargement of the opposite lung, and the unnatural intrusion of the heart into its cavity, the anterior part of the chest assumed that peculiar deformity, which is denominated pigeon-breasted. Contrary to the opinion of Laennec, even in cases of empyema, in which, after long compression of the lung, recovery has taken place, I have more than once

seen, instead of lateral contraction, which he concludes to be the common result, the appearances portrayed in the annexed drawing.

a. Unnatural elevation and squareness of the shoulders.

b. Pigeon-like deformity of the chest.

FIGS. 2. and 3. represent two lungs taken from an individual, who underwent spontaneous recovery from Consumption, and whose chest was deformed in the manner shown in the figure above. FIG. 2. represents the right lung highly emphysematous. An induration in its apex is omitted in the drawing. FIG. 3. shows the left lung, one-third less than the right, and semi-solid. On making a longitudinal section, this lung displayed appearances nearly similar to those seen in Plate III. I am strongly inclined to believe, that interlobular emphysema took place in this instance, from violent coughing; and that air extravasated into the surrounding cellular substance, forced the several cavities into apposition.

PLATE V.

REPRESENTING chronic ulceration of the larynx, in which the vocal chords and ventricles are entirely destroyed, as well as a considerable portion of the anterior of the thyroid cartilage.

a. The epiglottis suspended by a hook; the mucous surface exhibiting high vascularity; the edges much thickened.

b. b. The cornua of the thyroid cartilage.

- c. c.* The aretynoid cartilages.
- d.* Lateral boundary of the large ulcer.
- e.* Denuded edge of the ulcerated thyroid cartilage.
- f.* Cricoid cartilage bisected.
- g. g.* Ulceration of the mucous follicles of the trachea.

I have given this plate, which was drawn on stone from one out of more than sixty preparations of the larynx, contained in my museum, as exhibiting a highly interesting specimen of the state of the larynx in laryngeal Consumption. It is very seldom that the disease advances to such a height as is represented in the plate. The present specimen was obtained at the *post-mortem* examination of a gentleman, who had laboured for two years under loss of voice; and had been an occasional patient of mine for about six weeks before dissolution. It was at the suggestion of Dr. Ridgway, who was on the eve of leaving the country, as physician to the embassy to Brazil—at the head of which was Sir Charles Stuart, the present Lord Stuart de Rothesay—that he put himself under my care. Previous to this, Dr. Ridgway had favoured me with a visit at the Infirmary, where he witnessed a large number of similar cases; indeed so large, as to occasion him to express his surprise.

The talented and indefatigable M. Cruveilhier, whose labours reflect so much honour on his country, asks, Whether there may not be a primitive laryngeal phthisis, independent on every pulmonary lesion? and appears to conclude from several clinical facts, that there does. My own experience leads me

to doubt this; or at least, to explain the pathology of the disease, on grounds overlooked by this skilful anatomist. In every body I have examined of the male sex,—and I have examined a very large proportion,—I have uniformly found the lungs tuberculated. M. Cruveilhier is undoubtedly in the right, so far as appearances have formed his guide. In many instances, even in the male sex, the disease seems to put on a primary form; still, during experience in auscultation for fifteen years, I have found on exploration of the chest, that disease in the summit of one or both lungs has constantly co-existed. Exceptions to this must be rare indeed. But in females,—a difference unsuspected by M. Cruveilhier,—the disease generally assumes a primitive form. The reason must be sought in the peculiar tendency of the female to hysteria, which ordinarily forms a complication with the laryngeal affection, causing a frequent stricture of the posterior membrane of the trachea, and by this opposition to the freedom of expiration, expands the pulmonary tissue, so as to render it unfavourable for the development of tubercles. Such is the general distinction betwixt the sexes; and so well marked is it, that for one female suffering under tubercular, co-existing with laryngeal Consumption, there are twenty males.

Alarming as this disease appears, especially in the male, it usually makes but slow progress in abridging life, when compared with Consumption unaccompanied by the laryngeal affection. This is referrible to the impediments presented to free expiration in three ways. Firstly, by a certain degree of

sub-acute inflammation of the trachea; secondly, by lateral encroachment, a little above the centre of the larynx, caused by a thickening of the vocal chords; and lastly, in a very advanced stage of the disease, by an œdematous state of the sub-mucous cellular tissue lining the rima glottidis. The disease is first indicated by a failure in the voice, which sinks to a whisper, and cannot be extended; resulting from inflammation and want of suppleness in the vocal chords, and from a closure of the ventricles of the larynx, produced by swelling and ulceration of the mucous membrane lining them. There is frequent cough, which seems to participate in the suppression of the voice, being stifled, and singularly husky. A feeling of constriction in the throat is often complained of, as well as distressing dryness of the fauces, frequently attended, in the act of deglutition, with pains lancinating in the direction of the ears. Little pain is felt from external pressure on the seat of the disease. No complaint is more irritating and distressing than this, in its advanced stage, when difficulty in swallowing is experienced, and the food is convulsively rejected through the nose, under the sense of impending suffocation. So annoying is this disorder, and so fraught with constant disturbance to the sufferer, that he appears to live in a state of constant excitement. The best temper, and most equally balanced mind, fail in resisting the continued harass, and gradually yield to its influence. The patient, finding no relief, flies from one medical man to another, and this per-

turbed, unsettled condition lasts, until he finally sinks beneath the struggle.

It may be asked, what this disease has to do with the subject of the present work. I have already noticed the circumstance of a consumptive patient's living long, although labouring under the distressing symptoms, usually connected with aphonia, or loss of voice. Plates 5 and 6, with their accompanying descriptions, have been given to extend my proofs of the curability of Consumption. If a patient's life be prolonged by the opposition to the free egress of the air, presented by the three-fold condition of the larynx and trachea above described, and consequent enlargement of the volume of the lungs, even when the constitution is impaired by the exhaustion of such a disease as the laryngeal affection—and when ulceration to such extent exists—how infinitely great is the chance, or rather, how certain becomes the proof, that Consumption, if timely taken, is curable! “I pause for a reply.”

PLATE VI.

a. THE upper border of the epiglottis, which part was throughout considerably thickened, highly vascular, and extensively ulcerated, in the inferior or laryngeal surface.

b. b. Each pointing to the ulceration of the mucous surface. The one on the right passing over the corniculum of the thyroid cartilage on that side, points to a concavity in the line of the two lamellæ.

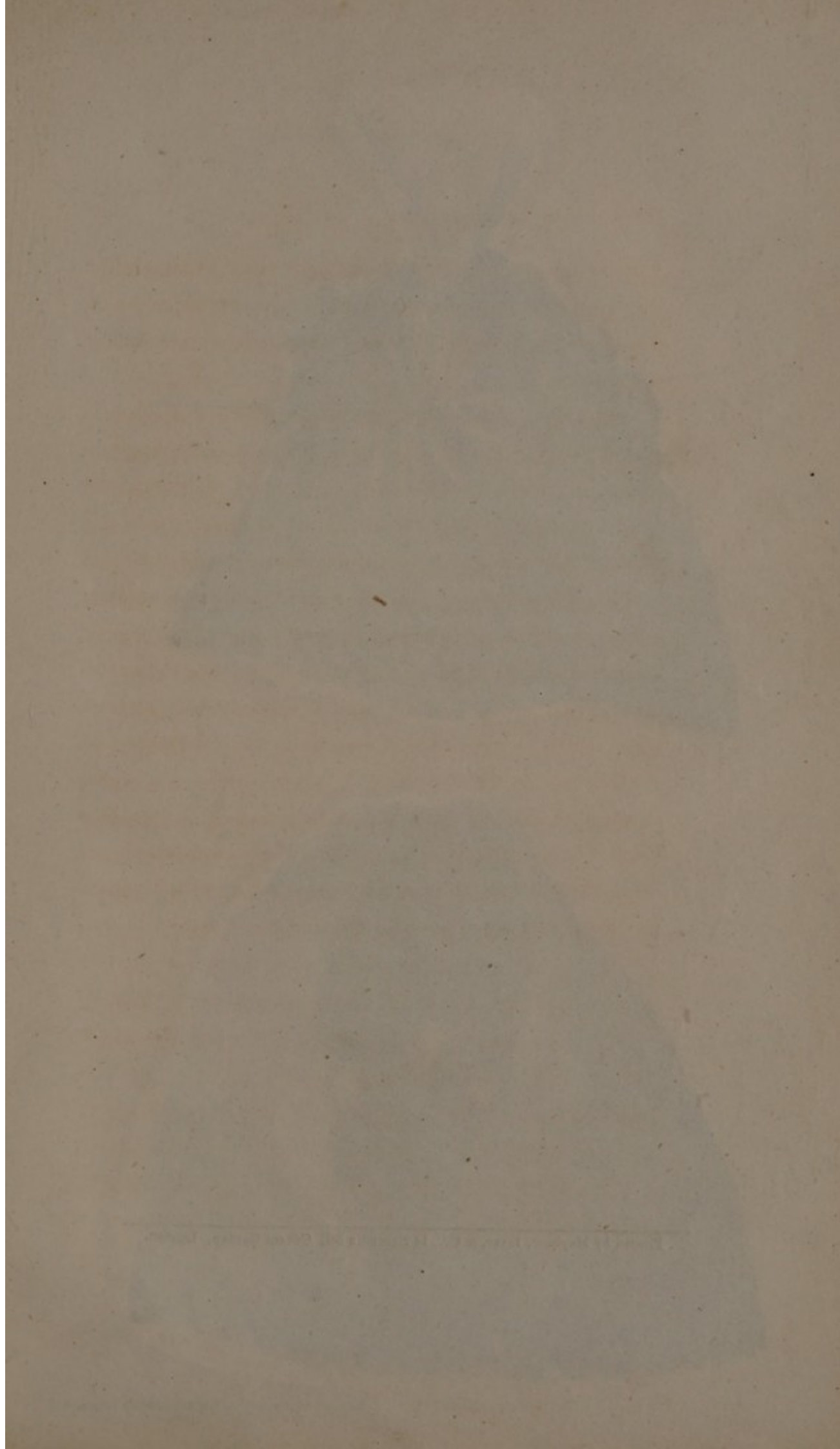
- c.* Vocal chord considerably thickened.
- c. c.* Cornua of the os hyoides.
- d.* The closed ventricle of the larynx on that side.
- e.* Section of the cricoid cartilage.
- f.* Erosion of the mucous surface.

The present specimen was taken from an individual, who had lived for some time, labouring under affection of the larynx. Previously to the appearance of laryngeal disease, he had exhibited symptoms of Consumption. Loss of voice, sense of straitness in the trachea, and the other characteristics of disease of the great air-passage, began, it appeared, to manifest themselves about a year before his decease. The same aphonia affected the individual in the present instance, that was observable in the subject of the case last detailed; although there is a great difference presented by the morbid appearances. In the latter, as may be seen on referring to the plates, the vocal chords, as well as the ventricles, were wholly destroyed; and necrosis, or more correctly speaking, caries, had removed a portion of the thyroid cartilage, of about the size of a sixpence. But in the present case, the vocal chords were merely thickened, yet to such extent, as to be in close apposition; and the ventricles on each side were closed up. In this, as in the preceding case, obstruction was presented to the freedom of expiration, some time after the manifestation of the disease. It is not a little surprising, how considerably the patient's life is prolonged, when a laryngeal complaint, so painful and harassing as I have stated it to be, as

well as intractable, supervenes early upon Consumption. When phthisis has reached its last stage, its supervention can, of course, have but little effect in adding to the duration of existence.

I close these observations on the complication of this disease of the larynx with Consumption, by noticing a singular omission on the part of an author, who has devoted a treatise to the consideration of the pathology of the membrane of this organ. It is not strange, that the author, a young man, who could not, at so early a period of his medical life, have enjoyed many opportunities of mastering the pathology of any disease, should have overlooked an important fact; but it is extraordinary, that having had his father's experience to fall back upon, which he states to have extended to half a century, he should not be aware, that croup in young children is almost invariably connected with an enlarged state of the thymus gland. It is, indeed, owing to the presence of this enlargement, that the medical man is so often baffled in his attempts to subdue this disease.—*Vide* CHEYNE on Croup.

THE END.



well as available, especially early in the morning. When the sun has risen and the air is clear, the view of the city is magnificent. The city is situated on a hill, and the view of the river and the surrounding country is beautiful.

I have been thinking of the city of New York, and of the many things that have happened there. I have been thinking of the many people who have lived there, and of the many things that they have done. I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world.

I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world. I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world. I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world.

I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world. I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world. I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world.

I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world. I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world. I have been thinking of the many things that have happened in the city, and of the many things that have happened in the world.

Fig. 1.

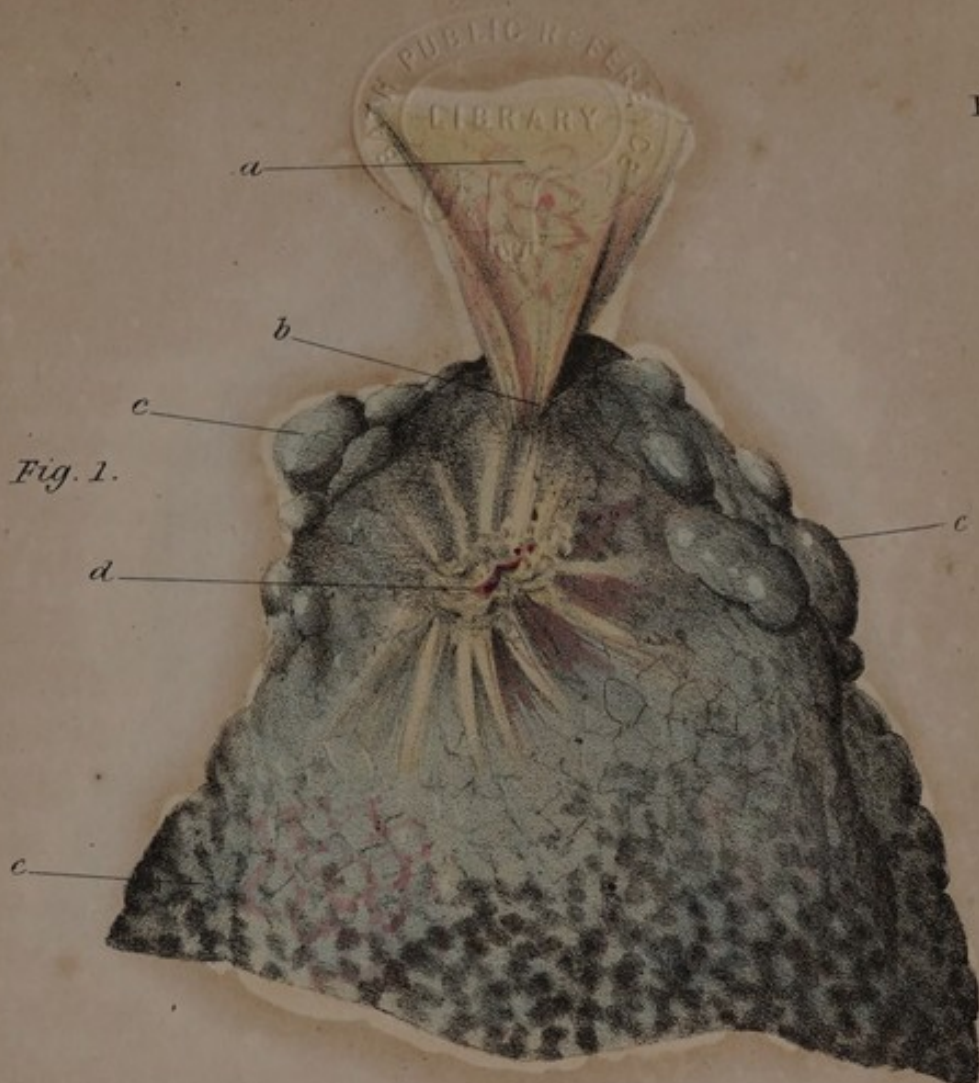


Fig. 2.







PLATE II.

Fig. 1.



Fig. 2.







Fig. 1.



Fig. 2.







Fig. 1.

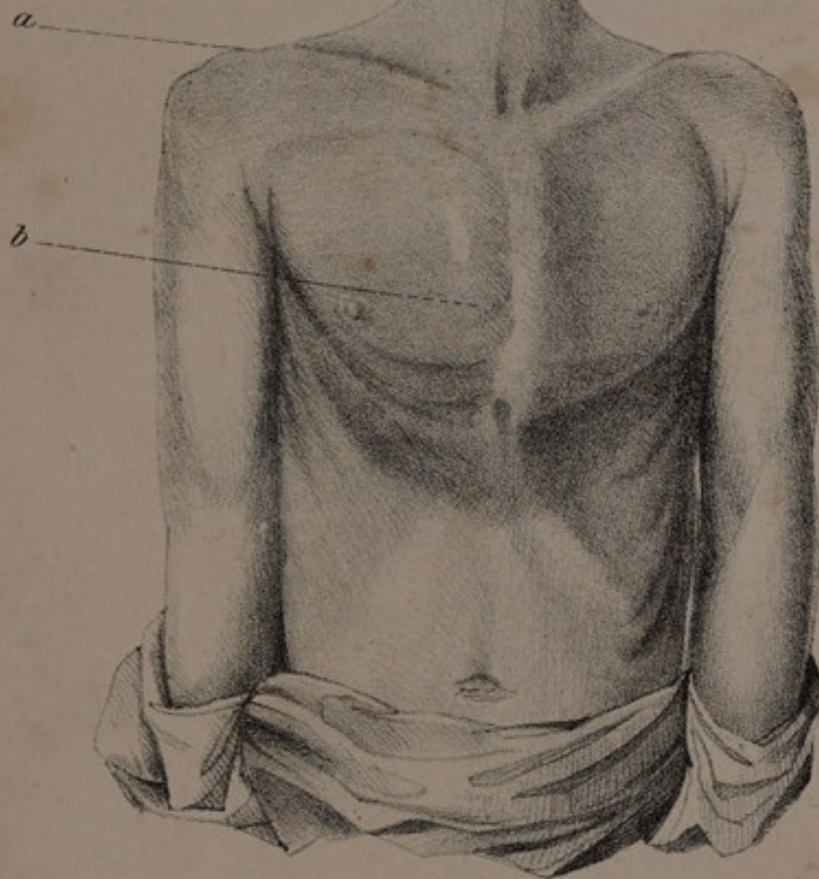


Fig. 2.



Fig. 3.





