A review of the present state of uterine pathology / by James Henry Bennet.

Contributors

Bennet, James Henry, 1816-1891.

Publication/Creation

London : John Churchill, 1856 (London : Savill and Edwards.)

Persistent URL

https://wellcomecollection.org/works/e384bdeu

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





Digitized by the Internet Archive in 2015

https://archive.org/details/b20388950



Mith the authors'

Compliments.

AREVIEW

OF THE

PRESENT STATE

OF

.

UTERINE PATHOLOGY.

By the same Author.

A Practical Treatise on the Diseases of the Uterus.

The Third Edition, Svo, cloth, 12s. 6d.

M. D. do

AREVIEW

OF THE

PRESENT STATE

OF

UTERINE PATHOLOGY.

BY

JAMES HENRY BENNET, M.D.

MEMBER OF THE ROYAL COLLEGE OF FHYSICIANS; FRYSICIAN-ACCOUCHEUR TO THE ROYAL FREE HOSPITAL; FORMERLY HOUSE FHYSICIAN (BY CONCOURS) TO THE HOSPITALS-SAINT LOUIS. LA PITIE, AND LA SALPETRIÈRE, PAR:S.



LONDON: JOHN CHURCHILL, NEW BURLINGTON STREET.

M DCCC LVI.

148388957 HIVIISLA

.

TRATE TYPE SHIT

UTERINE PATHOLOGY.

and and an arriver arriver and

ATTACK SHARE AND AND AND AN ADDRESS AND ADDRES

.

M19751



PREFACE.

In the successive editions of my "Practical Treatise on Uterine Inflammation," I have studiously avoided controversial discussions; and the present Essay has been partly written to obviate the necessity of entering the polemical arena in a future edition. Time and experience have proved the correctness of the facts I have advanced: as will ever be the case when facts-albeit novel and startling-are really true, and can be easily demonstrated. Various doctrinal explanations of these facts have, however, been brought forward or reproduced during the last few years-explanations at variance with the views which I profess. I have endeavoured, in the following pages, to analyse and answer these antagonistic doctrines, and most sincerely do I trust that I may be deemed to have accomplished the rather ungracious task in a spirit of courteous scientific inquiry. Several of the writers whose views I criticise are esteemed and valued friends, the opinions of whom I would fain have respected; but science admits not such distinctions. In the defence of what we conscientiously consider to be the truth, all considerations of private friendship must be laid aside; and may be laid aside, provided the discussion be carried on in a strictly honourable and truthful spirit. This I have endeavoured to do; and it remains with the profession to decide how far I have succeeded.

60, GROSVENOR STREET, May, 1856.

. shall will have a second concert the second delegance . and a sport of a second s 1. .

CONTENTS.

CHAP. P	AGE
I PRELIMINARY REMARKS	1
The Pathology of the Uterine Mucous Membrane, for-	
merly ignored, now definitively elucidated	1
	-
II. — A SKETCH OF UTERINE PATHOLOGY	7
III. — Objections	16
The Existence of Inflammatory Ulceration of the Neck of	
the Uterus Denied by Dr. Robert Lee; Proved by the	
recent Researches of Dr. West	16
Dr. West's Denial of its Pathological Importance	23
Dr. Tyler Smith's Recognition and Microscopical Descrip-	
tion of Ulceration of the Uterine Neck	31
Its Existence generally Recognised in Edinburgh, Dublin,	
France, and America	38
IV. — THE LEUCORRHEA THEORY — THE SYPHILIS THEORY —	
THE OVARIAN THEORY	42
V. — THE DISPLACEMENT THEORY	56
Historical Considerations	56
Anatomical and Physiological Facts bearing on Displace-	
ment of the Uterus	62
The Pathology and Therapeutics of Displacements of the	
Uterus \ldots \ldots \ldots \ldots \ldots	69
	00
VI. — SUMMARY	81
The Double Medico-Chirurgical Character of Uterine	
Pathology	81

CONTENTS.

APPENDIX	
 I. A Table containing a Memorandum of the Condition of the Genital Organs in the Bodies of Fifty Native Indian Women who had died of various Diseases. By Madoo- sudun Goopta, S.A.S. Contributed by Dr. Stewart, H.E.I.C., late Professor of Midwifery in the Medical College of Calcutta	
Disease	
The Presidents of the Chanter Manual Manual Stanformer, for-	
1 Interimete stratificite stor for torne simile	
T Possioned annenil to startal /	
We are a set of a set of a set of a set of the set of t	
and which is a start of the Area to and the second of the start of the	
The second se	
The Tread's Division of the Statistic and Statistics and Anno.	
the first of all section of the Uterick Streets	
an and a second a s	
Ver Par Internetical Renewards French Turonger .	
the second s	
La	
The second se	
Contraction and the second s	
	-
The Dorth Matter-Chinastina affiningering of Thering	

A REVIEW

OF THE

PRESENT STATE OF UTERINE PATHOLOGY.

CHAPTER I.

PRELIMINARY REMARKS.

THE PATHOLOGY OF THE UTERINE MUCOUS MEMBRANE FORMERLY IGNORED, NOW DEFINITIVELY ELUCIDATED.

UNFORTUNATELY for the medical community, and still more so for the numerous females suffering from uterine symptoms whom its members are called upon to treat, the greatest diversity of views respecting uterine disease still obtains amongst those who are looked up to as authorities. Not only is this the case in England, but also in France, where uterine pathology has occupied so much of the attention of the profession during the last twenty years; as is proved by the late discussion at the Paris Academy of Medicine. That my writings have contributed to this diversity of opinion, both at home and abroad, is more than probable, and I can only hope and trust that they have, even in so doing, exercised a beneficial influence, by directing the current of professional research in a sound and true direction.

It is now more than ten years since I first made known, in The Lancet, the opinions and doctrines I entertain with reference to uterine diseases. These doctrines have been favourably received, adopted, and acted upon by very many practitioners in nearly all parts of the world, and I now feel that it has become a duty incumbent upon me to state what influence or change, time, additional experience, and the labours of those who have followed me in the field of scientific investigation, have produced in my mind. I feel the more called upon so to do, as I have been for many years a silent, although certainly not an indifferent, observer of all that has been written and said in favour of or in opposition to the views I advocate. I have endeavoured to learn from my opponents the weak points of my own doctrines. I have tried to think that they *might* be right and that I *might* be wrong, and year after year have repeated my observations on large masses of sufferers. I have tried to divest myself of all prejudice or preconceived opinions, and endeavoured to arrive at conclusions, as if all were doubt and obscurity in my mind; as was the case before I had accomplished the unravelling of the confused web of uterine pathology, such as I found it in my earlier days.

All these experimental researches and investigations have, however, invariably led me to the same results-to the confirmation of the doctrines brought forward in my papers published in The Lancet in 1844-45, and in the successive editions of my work on Uterine Inflammation. Had I not already arrived at these doctrines, the observation of any one year might have led me to the erection of the scientific edifice which the work alluded to contains. How could it be otherwise when all the cases I meet with, in their previous history, in their progress, and in their results, corroborate them ? May I also be allowed to add, incidentally, that I have constantly been receiving corroborative testimony from men practising in the most distant parts of the globe, whose intellect, powers of observation, and sincerity, I cannot but respect, and who appear to have studied the question conscientiously, and without any other bias than the one, decidedly inimical to my opinions, of former professional convictions.

The views I have propounded may be said to be the result of the progressive improvement of medical science, which has been taking place since the close of the last century. They flow naturally, inevitably, from the direction which pathologists since that epoch have given to medical investigations. From the moment that theories, that preconceived general views, were more or less laid aside, and that Nature herself was questioned —from the moment that pathologists began minutely to examine the changes that occur in our organs during life, or are found after death—all the discoveries which my predecessors and I have made with reference to the uterus became inevitable, and merely a question of time. It was impossible that every organ

THE PATHOLOGY OF THE UTERINE MUCOUS MEMBRANE. 3

in the economy, however minute, however physiologically obscure, should be examined, probed, analysed, in health and disease, and that the uterus alone should escape investigation. I and those who preceded me have merely endeavoured to accomplish for the uterus what the crowd of modern investigators have done or are doing for other organs. We are men of our time, contributing to the scientific structure which is now rising by degrees on a basis unknown to the votaries of science in the darker ages of the human intellect,—that of faithful, conscientious observation, and careful, accurate induction.

Medical men of all ages have observed an intimate connexion between the train of symptoms to which the generic term " uterine" is given, and morbid conditions of innervation, digestion, and nutrition. The connexion, however, which so constantly exists between these general morbid states and chronic inflammatory conditions of the neck and body of the uterus was universally ignored until the beginning of the present century, when it was rediscovered by M. Récamier, the late distinguished physician of the Hôtel Dieu at Paris. I say rediscovered, because, as I have elsewhere proved, traces of a knowledge of these local morbid uterine states are to be found in the writings of the Greek and Roman physicians of antiquity. M. Récamier, and subsequently M. Lisfranc, who laboured actively in this new direction, whilst endeavouring to connect general symptoms with local disease, merely followed in the wake of the pathologico-physiological or Broussaian school, in the palmy days of which they lived and flourished. Their labours are certainly amongst the most valuable that we owe to this school, which, during the early part of this century, contributed so much to our positive knowledge of disease and of the anatomical changes which it produces during life in the human economy. Previous to these eminent men, the knowledge of uterine pathology, as it existed in the Paris school, was limited to a more or less perfect acquaintance with fibrous tumours, polypi, cancer, acute and chronic metritis, and displacements. Functional derangements, such as amenorrhœa, dysmenorrhœa, menorrhagia, sterility, abortions, &c., were attributed to vital uterine states, to irritability, or to want of tone of the uterus, or to the debility and disordered state of general health, which so frequently accompanies these functional derangements. The leucorrhœal discharges, which are also so frequently observed along with these conditions, were considered to be merely symptomatic in the great majority of cases. Such, I may safely say, was also the view taken of uterine pathology in our most esteemed works on the subject up to the time when my first contributions to uterine pathology appeared. Moreover, such are still the views of a large portion of the medical profession in this country at the present time.

In uterine pathology, thus viewed, there are many errors, many oversights, but there is one especially which not only weakens, but totally destroys it—the pathology of the uterine mucous membrane is ignored, is passed over all but as if it did not exist; although the mucous membrane which lines the two cavities of the neck and body of the uterus is a most highly organized and a most important one. Its liability to inflammation and to inflammatory lesions, and the influence which such inflammation exercises over all other morbid uterine conditions, with the exception of cancer, is so great as to render an intimate knowledge of its diseases absolutely indispensable for the understanding and successful treatment of uterine affections, and of disordered functional uterine conditions.

Nor is it surprising that such should be the case. If we go back to general pathology, if we refer to the laws which regulate disease in each of the separate tissues which, by their combination, constitute the animal economy, we shall find that wherever there is a highly organized mucous membrane, the inflammatory lesions, acute or chronic, to which that mucous membrane is liable, constitute the principal feature in the pathology of the organ to which it belongs. Morbid growths, cancerous degenerescence, and mere functional derangements, are everywhere infinitely more rare than these mucous membrane lesions. Thus, in the lung, how infinitely more frequent are bronchitis and the emphysematous or asthmatic conditions which it often entails, than pneumonia or pleurisy—that is, than inflammation of the substance and of the serous covering of the lungs;—or than morbid growths, or cancerous degene-

THE PATHOLOGY OF THE UTERINE MUCOUS MEMBRANE. 5

rescence; or than mere functional derangement. The same may be said of the throat, of the eye, of the intestines, &c. In each organ, the mucous membrane has its own individual peculiarities and liabilities, depending on structure, on functions, and on physiological exposure to offending causes, but still the general law is the same in all, as regards the comparative frequency of its diseases.

We might also, à priori, conclude that this particular mucous membrane would be more than usually liable to inflammation, and to inflammatory ulceration, and that these morbid conditions, once established, would be more than usually difficult to remove, when we reflect that it presents important structural and physiological predisposing conditions. Thus it contains, scattered throughout its texture, a vast number of mucous follicles, and these follicles, in all mucous membranes, are very liable to take on inflammatory action, and, as a sequela, to ulcerate. The physiological predisposing causes of inflammation, also, are numerous; the principal one being the menstrual congestion to which the uterus is periodically exposed for about one week in four during the entire duration of uterine life.

And such, in reality, modern research has proved to be the case, by the employment of physical or instrumental means of investigation. Inflammatory lesions of the uterine mucous membrane are as frequent, indeed, even more frequent, than the laws of general pathology would have led us to expect. Moreover, they are perhaps more liable to pass into the chronic stage, and more difficult to eradicate than in any other mucous membrane.

What general pathology, however, could not discover, although it might foreshadow it—what could only be brought to light and proved by experience—is, that *permanent* functional derangements of the uterine system, and the general conditions of dyspepsia, debility, and morbid cerebro-spinal innervation, which generally accompany such functional derangements, are mostly occasioned by these mucous membrane lesions and their sequelæ, and are only to be permanently got rid of by their entire removal.

This is one of the most important lights that modern science

has thrown on the uterine pathology of former days. I, for my part, think I may claim the credit of having sifted the data furnished by those who preceded me; of having still further pursued their investigations, and accumulated fresh materials; of having pursued the local history of uterine inflammation throughout all the ages and phases of female life; and of having built up in my work on Uterine Inflammation a scientific edifice, founded on the faithful observation of Nature, sufficiently practical and comprehensive to explain nearly all that is obscure in the observation of uterine diseases, and calculated to afford a true guide to the practitioner in his attempt to restore the health of his patients.

I will now give a concise and at the same time complete view of the doctrines I profess, and, having done so, I intend to examine the objections that have been raised to these views, and the opinions respecting uterine pathology generally that clash with them; thus giving my readers an opportunity of judging for themselves.

CHAPTER II.

A SKETCH OF UTERINE PATHOLOGY.

I ADMIT, to the fullest extent, that the nutrition, vitality, and functions of the uterus are susceptible of being modified by general causes, or by general morbid conditions, without the existence of any description of local mischief, inflammatory or other, of the uterus or ovaries. So fully, indeed, do I admit this fact, that I believe few women can have their health profoundly modified by any disease or by any morbid state, without the uterine functions being modified. At the same time I believe, as a result of lengthened experience, that the great majority of instances of confirmed uterine suffering that come under the observation of the medical practitioner, are cases in which the primary and principal evil, the morbid centre, is inflammation of the mucous membrane or of the proper tissue of the neck or body of the uterus, with their varied sequelæ. Around this inflammatory disease, when accurate physical examination has proved its existence, may generally be grouped the principal symptoms the patient presents, both local and general.

The expression *confirmed*, which I have used in speaking of uterine suffering, is of vast importance; for in it lies the distinction between morbid conditions of uterine vitality and of uterine functional activity the reflex of general pathological states, and the same morbid conditions the result of actual local disease, inflammatory or other. When these morbid conditions are the indications of local disease, they are *confirmed*, varying in intensity but constant. When they are the reflex of general pathological states they are *changeable*;—arriving and departing with the "general" cause, and giving way under the influence of the appropriate treatment of the general states of the system to which they owe their existence.

Although thus fully admitting the influence of general pathological causes in disturbing the vital and functional activity of the uterus, it will be seen, by what precedes, that I consider such modifications as essentially temporary, and as remediable by the general treatment of the disease or diseased state of which they are the symptom. On the other hand, it must be equally evident that I consider confirmed uterine suffering, confirmed derangements of vital and functional uterine action, which resist the treatment of the general morbid conditions that accompany them, as the decided result, generally speaking, of local disease, and in the great majority of cases, of chronic inflammatory lesions.

From the dawn of menstruation until a very advanced period of female existence, the uterine mucous membrane may be attacked by inflammation, and is very frequently so attacked; more especially between the ages of twenty and fifty. The inflammation may be limited to the cervix, but most generally it passes into the cervical canal, where it has a great tendency to perpetuate itself, owing partly to the numerous follicles which the cervical mucous membrane contains, and partly to menstrual influences. It may also pass into the uterine cavity, but this comparatively seldom occurs, as I believe I first pointed out. Inflammation may exist for months or years without ulceration ensuing, but in a very large proportion of cases ulceration does ensue at an early period, and has also a tendency to perpetuate itself indefinitely, if not treated. By ulceration I mean the result of destructive inflammation, characterized by the destruction of the epithelium, and the exposure of a muco pus-secreting surface. The characteristics of the ulceration vary from those of a mere abrasion, to those of a bleeding, fungous, foul-looking sore.

Inflammation and inflammatory ulceration of the mucous membrane lining the cervix and its canal are generally attended in their early stages by swelling and enlargement of the cervix. If the disease is not discovered and treated, the swollen cervix may remain indefinitely soft, but it more frequently becomes hardened, indurated, and consequently larger and heavier than in the normal state. The hypertrophy may be confined to the cervix alone, or extend to the body of the uterus. These enlargements of the cervix and of the uterus give rise to a train of important secondary symptoms-viz., to displacements. If the enlarged and heavy cervix remains in a normal position, it drags the womb down, and produces prolapsus. In the married female it is frequently thrust backward, and retroverted on the rectum and sacrum, the uterus being at the same time more or less anteverted. The recumbent position or its own weight produce occasionally the same result in the non-married female. This tendency to hypertrophy, owing to physiological causes easily appreciated, is greater in the married than in the unmarried-greater in women who have had children than in those who have not.

Acute and chronic inflammation of the proper tissue of the body of the uterus and of the cervix are not unfrequently met with, quite independently of mucous membrane inflammatory conditions. They are, however, of very much less frequent occurrence than these latter lesions. Both the cervix and body of the uterus may become enlarged and heavier, as a result of acute and chronic metritis, and be secondarily displaced, without the existence of inflammation or of inflammatory ulceration of the mucous membrane. Chronic enlargement of the uterus posteriorly, and its retroversion on the rectum, are frequently thus produced.

The tendency of the neck and body of the uterus to become hypertrophied under the influence of chronic mucous membrane inflammation, or of acute and chronic inflammation of the uterine proper tissue, is explained by the extreme physiological facility with which the uterus enlarges under the influence of physiological and morbid uterine stimuli. Passive hypertrophy of the cervix and uterus, in women who have had children, is often merely the result of the powers of transformation and absorption,—which, after confinement, reduce the uterus from forty ounces to two in four or five weeks,—flagging, from some cause or other, before entire resolution is obtained. This arrest is often owing to the presence of some mucous membrane lesion of the neck of the uterus, either existing before the confinement, or occasioned by it. Hypertrophy of the neck and body of the uterus may also occur as a result of mere modified functional activity.

Whatever the cause of the hypertrophy, it is attended with displacements, which are merely the result of gravity, in the great majority of cases, the womb being prolapsed, retroverted, or anteverted, according to the region of the uterus or its cervix which is the seat of enlargement. These displacements I consider to be only curable, generally speaking, by the removal of the conditions which produce them—that is, the enlargement, induration, or hypertrophy. If the latter cannot be removed, I believe that mechanical means of replacement or sustentation nearly always prove useless as means of effecting a permanent cure. Displacements may, however, it must be remembered, be produced by other causes, such as laxity of the vagina and vulva, or of the ligaments, pressure of surrounding organs, tumours, &c.

These local morbid conditions, inflammation, ulceration, hypertrophy, and displacements, are generally found connected in practice with *local or uterine* symptoms, such as intractable leucorrhœal discharges, ovarian, sacro-lumbar, and hypogastric pains, bearing down, and inability to stand or walk with ease; with functional uterine derangements, such as amenorrhœa, dysmenorrhœa, menorrhæjia, sterility, abortions, uterine inertia, &c.; and with *general* symptoms, such as disordered states of the chylopoietic viscera, of the nutritive and assimilative functions, and of the cerebro-spinal system, as indicated by dyspepsia, debility, anæmia, hysteria, &c.

I have no hesitation in stating as a fact, in my mind fully established, that when females present the above-enumerated local or uterine symptoms, in a chronic, *confirmed* manner, even without the general symptoms, the local diseased conditions described will be generally found, on examination, in a more or less developed state. Conversely, when weak, debilitated, dyspeptic, hysterical females do not recover their health under judicious medical and hygienic treatment, and when they present habitually any of the uterine symptoms before mentioned, there is generally local uterine disease; its existence being generally the key to their ill health, and its removal a necessary preliminary to their permanent recovery.

In the first class of females, viz., those who have local uterine symptoms without a general break-down of health, the test as to their having or not having actual structural uterine disease is to be found in the nature and duration of the uterine symptoms. If they are recent, fugitive, and give way to general treatment, we may conclude that the cause is also recent, fugitive, and that there is merely functional derangement; but if, on the contrary, they are chronic and confirmed, and obstinately resist ordinary treatment, we may conclude that there is some chronic confirmed local mischief existing, which ought to be thoroughly investigated and treated. With them the general health remains good, because the constitution is vigorous, and resists the local disease, so that the usual visceral and cerebrospinal sympathetic reactions are not roused.

In the second class of females, viz., those who are weak and debilitated, and have but little local evidence of disease, the test again is general treatment. If they are merely dyspeptic, chlorotic, anæmic, rheumatic, gouty, &c., the uterine symptoms ought to improve and eventually disappear under the usual treatment of these morbid conditions. If they do not, we must look out for some other cause, and it will frequently be discovered in the uterine organs themselves. To this class belong a large proportion of the population of sofa, bath-chair, nervous, debilitated, dyspeptic females, who wander from one medical man to another, and who crowd our watering-places in summer : most of them are suffering from chronic uterine inflammatory disease, unrecognised and untreated, and most of them would, if their disease were only discovered and cured, become amenable to the resources of our art, and eventually recover their health, spirits, and powers of locomotion. It is a singular and instructive fact that amongst the male part of the community there is no similar invalid population, always ill, unable to walk or ride, constantly requiring medical advice, and yet living on from year to year, without their friends or themselves knowing what is amiss with them, beyond the evident weakness, dyspepsia, &c.

When both the local and general symptoms are combined, there is really no element of error left for those who are acquainted with these forms of disease, and there must come the day when such cases will be recognised and properly treated by all educated medical practitioners, as surely as a case of pneumonia or rheumatism.

As I have before stated, inflammation and the lesions which accompany and follow it may occur at any period of female life, from the dawn of menstruation until old age. As the female progresses through the various phases of her existence, the position in which she is physiologically and socially placed, varies with reference to the uterine organs. In the unmarried state, she is spared all the dangers to which marriage renders her sex liable; but she is still exposed to perturbations of the menstrual function and to mental influences which combine to produce, occasionally, even early in life, aggravated forms of uterine inflammation, and of mucous membrane ulcerative disease; as was first pointed out by myself. Many of the worst cases of hysterical convulsions, spinal irritation, dysmenorrhœa, dyspepsia, debility, &c., observed in young unmarried females, may be traced to this cause.

In the married, inflammatory affections of the uterus, but more especially of the cervical mucous membrane, are very frequent; and in addition to the symptoms and conditions above enumerated, are amongst the most frequent causes of sterility, miscarriages, false conceptions, and premature confinements; of sickness, uterine pain and hæmorrhage during pregnancy; of non-dilatation of the cervix during labour; and of puerperal metritis, hæmorrhage, &c., after labour.

Even after the cessation of menstruation, inflammatory and ulcerative disease of the uterine mucous membrane may persist, and be the principal cause of that agonizing backache of which elderly women sometimes complain, and which resists every means of treatment, unless its true cause be discovered and removed.

Inflammatory affections of the uterus, but more especially of

the cervical mucous membrane, often complicate polypi, both vascular and fibrous, and fibrous tumours of the uterus, an important fact which I believe I was also the first to discover.

Functional derangements of the uterine system, existing independently of uterine lesions, inflammatory or other, occur, as I have already stated, in everyday life, but they seldom come under the cognizance of the consulting medical practitioner. Being essentially fugitive and temporary in their existence, like the causes which produce them, and being unattended with confirmed sympathetic reactional symptoms, they are not complained of in a general way, or are viewed as mere epiphenomena of the disease the course of which they chequer.

Ovarian inflammatory lesions, thickening, hardening, &c., are frequently met with in the dead, and consequently we may presume that they not very unfrequently exist in the living. That they may and do occasion all the symptoms of deranged vital and functional uterine action above enumerated is certain; and I occasionally see cases which illustrate and prove this fact. Judging, however, from careful observation and lengthened experience, I do not believe that these morbid uterine symptoms are generally, or, indeed, very frequently, occasioned by actual ovarian disease, notwithstanding the all but constant existence of ovarian pain when they are present. What proves that in these cases it is not really the ovaries that are, generally speaking, the seat of disease, is, that however long and actively you may treat the ovarian pain, tenderness, &c., they persist; whereas, if you leave the ovaries entirely alone, and treat and remove the uterine lesions which co-exist, the ovarian symptoms rapidly subside. A partial key to this practical fact is probably to be found in the absence of a mucous membrane element in the ovaries. Consequently its pathology is likewise absent.

Although fibrous tumours of the uterus and polypi frequently co-exist with inflammatory lesions, we cannot connect them as cause and effect. Polypi appear to develop themselves as a result of erratic nutrition quite independently of inflammation.

- Cancer in the uterus, as elsewhere, is a disease per se,

and has, in my opinion, no link or connexion whatever with inflammation, which neither leads to it, nor usually complicates it.

If the views which I have here briefly developed are correct, the therapeutics of uterine pathology must necessarily be totally altered. If, in confirmed uterine suffering, existing alone or along with general derangement of health, the cause is mostly to be found in chronic uterine inflammatory lesions, it is clear that the paramount and primary duty of the medical attendant is to get rid of these lesions once their existence has been ascertained. If general therapeutic treatment, combined with dietetic and hygienic management, rest, functional repose, &c., fail, or have failed, to remove such confirmed inflammatory lesions (and this is usually the case), recourse must be had, simultaneously, to more energetic means of treatment. The more energetic means of treatment then required are those which surgery resorts to in the treatment of chronic local inflammatory disease in other accessible parts of the body-the throat, the eye, the anus, &c.-viz., local depletion, emollient, sedative, and astringent injections, counter-irritants, the use of stimulating vitalitymodifying agents, such as caustics of variable strength, &c.

From what precedes, it must have become clear to my readers that uterine pathology, as I have interpreted it, in its more aggravated and confirmed forms, passes, in a great measure, from the domain of medicine into that of surgery. Instead of having to rely on drugs, on the agencies of general therapeutics, and on skill in their administration, we are called upon to have recourse to surgical instruments and agencies; and we want in the medical attendant skill in their use, a knowledge of local diseases, of the treatment local diseases require, and an acquaintance with their reactions on the economy at large. So true is this, that in France, since the new light broke on uterine pathology, it has fallen, by general consent, into the domain of surgery to such an extent that the leading authorities have principally been surgeons. I have only to mention Lisfranc, Marjolin, Velpeau, Jobert de Lamballe, Ricord, Huguier, &c., to corroborate this assertion.

No class of maladies, indeed, more aptly illustrates how arti-

ficial is the barrier between medicine and surgery than uterine disease, as illuminated by modern research. In their earlier stage, and in their simpler forms, they are medical, and fall all but necessarily under the eye of the physician; but, in their later stage, and in their more aggravated form, they are essentially surgical. No medical practitioner, therefore, who is not at the same time a sound physician and a good practical surgeon, is competent successfully to struggle with the difficulties which have to be encountered in their treatment.

CHAPTER III.

OBJECTIONS.

THE EXISTENCE OF INFLAMMATORY ULCERATION OF THE NECK OF THE UTERUS DENIED BY DR. ROBERT LEE; PROVED BY THE RECENT RESEARCHES OF DR. WEST.

In the last chapter, I have given a rapid sketch of uterine pathology, or at least of the debateable ground in this department of medical science, based on my own experience and researches. In this sketch, inflammation and inflammatory lesions occupy the most prominent position, and by their presence are explained most of those forms of *confirmed* vital and functional uterine derangement which were formerly considered to be morbid entities, and described under the names of leucorrhœa, amenorrhœa, dysmenorrhœa, menorrhæjia, &c. &c.

These views have now been many years before the medical public, and although adopted and acted upon by numerous eminent practitioners, whose approbation has been my greatest and most valued reward, they have been denied or severely criticised and opposed by others. The opponents to this doctrine may be classed in two categories :—Firstly, those who deny entirely the existence of inflammatory and ulcerative lesions of the neck of the uterus, and consequently the expediency of instrumental uterine treatment under any circumstances; and those who, although not going so far, inasmuch as they admit the possibility of inflammatory changes occurring in the mucous membrane of the neck of the uterus, yet deny their ulcerative nature, and consider instrumental examination unnecessary or even prejudicial. Secondly, those who admit all the lesions of the cervix and body of the uterus which I have described, yet differ from me as to their causes, symptoms, and pathological importance; denying that they exercise the influence over the general health which I have ascribed to them, or denying that they require the surgical treatment which I have stated to be so frequently indispensable.

Thus there are still some practitioners to be found who totally reject the correctness and accuracy of modern researches into uterine pathology. In their eyes, inflammatory affections of the cervix uteri are a mere delusion-a thing that is not, a creation of the imagination. I cannot call these opponents " false observers," for they have not observed at all, and therein lies their strength. Had they "looked at Nature," they could not speak with the confidence which they evince. As yet, however, none have ventured to give utterance to their opinions in print; they are merely enunciated in private, and are the result of preconceived ideas. In close proximity to, but a step in advance of, these men of a past day, we find others on whose unwilling senses a certain amount of evidence has been absolutely forced, but who still explain away and try to ignore what they have actually seen. Foremost amongst these, I regret to say, is a physician of great and deserved eminence, who has contributed much to medical literature, whose talents all respect, and whose character all esteem, but who, in this department of science, has unfortunately done much to retard the progress of truth. I allude to Dr. Robert Lee, whom I am unfortunate enough to number amongst my antagonists ; I say unfortunate, inasmuch as his weight and authority, in and out of the profession, have been a great barrier in London even to the investigation of my views. Dr. Lee denies entirely the existence of inflammatory ulceration of the cervix uteri, as will be seen in the following extracts from his paper read before the Medico-Chirurgical Society in 1850 ("Transactions," vol. xxxiii. p. 270) :---

"In cases of obstinate leucorrhœa, I have often employed the speculum in married women, after I had failed to detect the existence of disease by the ordinary mode of examination. In some of these cases, there has been seen an unusual degree of redness of the os uteri, sometimes affecting the whole, and

OBJECTIONS.

at other times limited to the inner margin, with or without swelling. The white, viscid discharge has been seen issuing from the os uteri. I have never seen ulceration of the orifice of the uterus in such a case."

Again, page 275, he says emphatically: "Neither in the living nor in the dead body have I ever seen ulceration of the os and cervix, except of a specific character, and especially scrofulous and cancerous."

And yet that Dr. Lee has seen one of the conditions, to which the term ulceration has been applied by nearly all the pathologists who have latterly written on this subject, is evident from the first few lines of the following description, which I find also on page 270:—

"At other times, both the lips are swollen, nodulated, and fissured, and the mucous membrane covering them intensely red, with an appearance of superficial excoriations or granulations, which are elevated above the surrounding surface. These apparent granulations are usually considered and treated as ulcers of the os and cervix uteri, but they do not present the appearances which ulcers present on the surface of the body, or in the mucous membranes lining the viscera, and they are not identical with the granulations which fill up healthy ulcers. They present the appearances often observed on the tonsils, which are said to be ulcers, and are not."

The above extracts show, that although Dr. Lee states he has never seen inflammatory ulceration of the orifice of the uterus, he has seen some of those conditions which I and my predecessors and successors term ulcerative—that is, pussecreting, granular surfaces, denuded of epithelium by destructive inflammation. The difference between us, therefore, is partly one of words, Dr. Lee recognising and describing at least one of the forms of inflammatory ulceration that we recognise and describe. That Dr. Lee should consider such a state as the one he depicts in these extracts as unimportant, as not demanding any local surgical treatment which requires the agency of instrumental examination, that he should think it perfectly curable by general treatment, is another matter. For the present, I am satisfied with having thus demonstrated, by Dr.

18

THE EXISTENCE OF ULCERATION PROVED BY DR. WEST. 19

Lee's own testimony, the existence of these cervical lesions. Dr. Lee teaches that these conditions are rare, and I am afraid that my testimony has but little weight in his eyes; but what will he say to that of Dr. West, of St. Bartholomew's Hospital? Dr. West, in his Croonian Lectures for 1854, "On the Pathological Importance of Ulceration of the Os Uteri," to which I shall presently allude more at length, states that out of 268 patients examined by him, at the Middlesex and St. Bartholomew's Hospitals, he found ulceration in 125. This testimony as to the frequency of inflammatory ulceration, is of the more value, as Dr. West all but agrees with Dr. Lee in considering these lesions, although of so frequent occurrence, to be of little or no pathological value.

We now come to the second category of my opponents, to those who have investigated the question of uterine disease, armed with the same means of physical examination as myself and my predecessors; and whose testimony is of a mixed character, corroborating some of the results at which we have arrived, and invalidating others; but who finally announce totally different conclusions. Foremost amongst these more formidable antagonists is Dr. West, to whose lectures I have just alluded. Before proceeding, however, I must be allowed to pay a tribute to the scientific spirit in which Dr. West's researches have been conducted, and to express my regret that I cannot reply to his objections, and at the same time extend to him the courtesy which he appears to have shown to me in not alluding to my name, although combating many of my opinions and assertions.

Dr. West's lectures are founded, as I have stated, on the instrumental examination of 268 females, presenting uterine symptoms of sufficient importance in his eyes to warrant such an investigation. The lectures are written with a view to elucidate the pathological importance of ulceration of the uterine neck. In 125 cases, he found ulceration slight, or the reverse; in 143, there was no ulceration. Of the 143 cases in which no ulceration existed, in 29, the uterus was apparently healthy; in 110, it was not healthy in one respect or other. In the 110 cases of unhealthy uterus, the morbid conditions were either

OBJECTIONS.

displacements, enlargements, indurations of the body or cervix of the uterus, or congestion of the cervix : all more or less variously combined. These varied morbid changes and conditions, it should be remembered, are generally the result of acute or chronic inflammatory action, existing in the mucous membrane, or in the proper tissue of the neck or body of the uterus.

Dr. West's deductions and conclusions are principally drawn from the comparison of these two groups of females : those who present symptoms of uterine ailment with ulceration, and those who present the same symptoms without ulceration ; and the pith of these deductions may be said to be, that as the symptoms and morbid results are nearly the same in both groups, ulceration can have no decided pathological importance, and is not a condition that requires special attention or treatment.

I would, firstly, draw attention to the important corroborative testimony given by Dr. West as to the correctness of my statements respecting the frequency of inflammatory ulceration of the cervix uteri. Dr. West does what I have constantly implored all who presume to give an opinion on the subject to do -he looks, he examines for himself; and what does he find? 125 cases of ulceration in 268 women examined. If we eliminate the cases of healthy uterus, we find the proportions as follows :--- Ulcerated, 125; non-ulcerated, 110; that is, more than half the patients examined presented ulceration. In the 300 cases examined by myself at the Western General Dispensary, and reported in my work, the proportions were :---Ulcerated, 222; non-ulcerated, 78; that is, not quite threefourths presented ulceration. The difference between more than half and less than three-fourths is not one which, in a statistical inquiry of this nature, invalidates results. Dr. West's figures prove the extreme frequency of ulceration in women suffering from symptoms of uterine ailment just as forcibly as mine. The slight discrepancy would admit of easy interpretation were it desirable to enter into the subject. Amongst other causes, it may depend on the less degree of severity with which symptoms were scanned and weighed, before an instrumental examination was decided on.

What more conclusive answer than the above facts can be

THE EXISTENCE OF ULCERATION PROVED BY DR. WEST. 21

made to Dr. Robert Lee, when he states that he has never seen an inflammatory ulceration of the uterine neck? Surely I need not pursue any further the refutation of this remarkable assertion.

The frequency of inflammatory ulceration of the uterine neck is corroborated by several striking and important facts mentioned by Dr. West, as brought to light in the course of his inquiry, although, singularly enough, he does not appear himself to see that such is the necessary inference. Thus he examined 40 females affected with venereal diseases on the day of their admission into the venereal wards of St. Bartholomew's Hospital: 18 were suffering from gonorrhœa alone; 10 from gonorrhœa and syphilis; and 12 from syphilis only. Of these 40 patients, *thirteen* presented ulceration; "in 10 it was mere excoriation; in 3 the ulceration was more extensive."

Dr. West draws also from the above facts the conclusion that "be the causes of ulceration of the os uteri what they may, sexual excesses, at any rate, have no great share in their production." Now it appears to me that when, out of forty women possibly, not certainly, exposed to this influence, onethird (13 in 40) present ulcerative lesions in a more or less marked degree, and that the presence of these ulcerative lesions is not satisfactorily explained by the existence of syphilis, or by that of gonorrhœa, we are quite warranted in coming to a totally different conclusion. I would remind my readers, that the periodical examinations made by the Parisian medical police have proved the frequency of inflammatory lesions of the cervix uteri amongst the females most exposed to such excesses.

Again, Dr. West gives the result of a careful examination of the uteri of 62 females who died in the medical wards of St. Bartholomew's Hospital of other than uterine disease. Of the whole number, 43 were married, or were presumed to be so; and 19 were believed to be virgins. The uterus was healthy in 33, diseased in 29. Of the latter, *there was ulceration* in 17; induration of walls of uterus without ulceration, in 5; disease of lining of uterus without ulceration, in 7.

Dr. West sees in this startling and very unexpected result

OBJECTIONS.

of his post-mortem researches, evidence of the non-importance of these lesions in a pathological sense ! " The very frequency of their occurrence," he remarks (p. 26), "instead of substantiating the opinion that they are of great importance, rather militates against that supposition." I, on the contrary, see in it positive proof of what I have often stated-viz., that the existence, unrecognised and untreated, of a large amount of uterine disease in the female population, is an indirect cause of death. Inflammatory diseases of the uterus and of its neck are essentially debilitating affections, through their reactions on the functions of digestion and nutrition. When, therefore, as so generally occurs, they are not treated, they gradually induce a state of debility and anæmia, and of deficient vital energy, which may render the female unable to resist the attack of intercurrent disease, to which she becomes an easy prey. Such at least is my interpretation of this pathological revelation.

Whether pathologically important or not, the facts brought forward by Dr. West remain. Out of 62 miscellaneous uteri examined by him, there were inflammatory lesions, more or less severe, in 29, nearly one half, and in 17 there was ulceration. Thus does Dr. West himself blow to the winds and utterly destroy the value of the statistical statements made by Dr. Robert Lee, in the paper I have already quoted. According to Dr. Lee (p. 273), Dr. Boyd examined 708 uteri, at the Marylebone Infirmary, without finding a single case of inflammatory ulceration. He found 21 cases of cancer, 31 of bony or fibrous tumour, 13 dropsies of the ovaries, 24 puerperal cases, 3 of enlargement, but nothing else. Therefore, Dr. Boyd concludes "that ulceration of the neck of the womb is an exceedingly rare disease, else," he observes, "I must have observed it; having cut up and weighed many hundred (uteri), it could have scarcely escaped my notice." Dr. Lee adds (p. 274), that Mr. Hewett and Mr. Pollock have examined 900 uteri at St. George's Hospital, and that they " did not observe a single example of simple ulceration of the os and cervix in the 900 uteri they examined, which confirms the accuracy of the opinion given by Dr. Boyd -that ulceration of the neck or mouth of the womb is a very rare disease."

DR. WEST'S DENIAL OF ITS PATHOLOGICAL IMPORTANCE. 23

At the time these statements were first published, and were brought forward as a proof that pathological anatomy gave no evidence even of the existence of a morbid condition said by me to be of such frequent occurrence during life, my reply was : that mucous membrane lesions had not been found after death, because they had not been sought for; as had often before been the case in the history of pathological anatomy. The observers whose results were so confidently appealed to by Dr. Leeobservers whose talents and integrity I esteem greatly-were looking for bony and fibrous tumours-for dropsies and cancerous degenerescence-and they found them. They were not looking for inflammatory ulcerations, and they did not find them. I could bring other valuable testimony forward to corroborate the results arrived at by Dr. West, who being alive to the existence of ulceration, was looking for it and found it; but I prefer leaving to him, for the present, the refutation of Dr. Lee on this point, as on others. Certainly no one will accuse Dr. West of a favourable bias towards the views I defend.

I must, however, be allowed to call attention to the rather remarkable fact, that Dr. Lee comes to the conclusion that ulceration of the neck of the uterus does not exist and is of no pathological importance, because *he does not* find it after death; whilst Dr. West also concludes that it is of no pathological importance, because, on the contrary, *he does* find it very frequently after death.

DR. WEST'S DENIAL OF THE PATHOLOGICAL IMPORTANCE OF IN-FLAMMATORY ULCERATION OF THE NECK OF THE UTERUS.

In the preceding remarks, my principal object has been to show, that the researches of one of my scientific opponents, Dr. West, so far from invalidating the statements I have published respecting the frequency of inflammatory ulceration of the neck of the uterus during life and after death, powerfully confirm them, and constitute the best refutation I can adduce (apart from my own personal experience) of the negative assertions of Dr. Robert Lee. It now behaves me to analyse more fully the train of erroneous reasoning which has led so con-
OBJECTIONS.

scientious and accurate an observer as Dr. West to differ entirely with me, and with those who adopt the same views as myself, as to the pathological importance of the lesions we both recognise.

The key to Dr. West's lectures, the explanation of the frame of mind under the influence of which his researches were carried out, and the résumé of the results to which they have led him, are to be found in a paragraph at the foot of page 14, which runs as follows :--- " The really important question is, whether ulceration of the os uteri is to be regarded as the first in a train of processes which are the direct or indirect occasion of by far the greater number of the ailments of the generative system; or whether, on the other hand, it is to be considered as a condition of slight pathological importance, and of small semeiological value-a casual concomitant, perhaps, of many disorders of the womb, but of itself giving rise to few symptoms, and rarely calling for special treatment ?" The first part of this paragraph may be considered a concise statement of the views Dr. West attributes to his antagonists, of the scientific error he thinks he has to encounter. The second part may be considered a concise enunciation of the opinions with which he rises from the investigation.

Dr. West wrestles with an imaginary enemy-combats a foe of his own creation. No pathologist, to my knowledge, as I have already stated, at home or abroad, has described ulceration of the os uteri as a morbid entity-as a disease existing per se. On the contrary, all who have written on the subject have spoken of ulceration, and described it as a result of the inflammation which invariably, necessarily, precedes and accompanies it, and which may exist without it for years, in the uterus as elsewhere. Dr. West has been apparently misled by the discussion to which Dr. Lee's extraordinary assertions gave rise. Dr. Lee, in his anxiety to crush the modern views of uterine pathology, boldly denied the existence of ulceration. He thereby thought to destroy doctrines which announced inflammation and inflammatory lesions as of constant occurrence, and ulceration as the most frequent secondary lesion of all, and the one that more especially necessitates instrumental

24

DR. WEST'S DENIAL OF ITS PATHOLOGICAL IMPORTANCE. 25

interference. Thence it was that the discussion took place on this one point: is there, or is there not, such a condition as ulceration? Thence also, I presume, the origin of Dr. West's error in thinking that his antagonists impute to ulceration alone all the pathological influences which they ascribe in reality to inflammation and to inflammatory lesions generally. At least, I can most assuredly say, that I have never in my writings for a moment attempted such a separation. This is evident from the very title of my work, which I call "A Practical Treatise on Inflammation of the Uterus, its Neck, and Appendages." If Dr. West will substitute, in the paragraph I have quoted, the words-"inflammation of the neck and body of the uterus and their sequelæ," for the words "ulceration of the os uteri"-I will accept his proposition as a true exposition of my opinions; but as long as it remains as it is, I cannot possibly thus accept it.

This fundamental error, made at the very threshold of Dr. West's inquiry, appears to me to thoroughly negative its value. It has induced him to establish a comparison, which runs throughout his essay, and on which his statistical tables are based, between two groups of patients who, in reality, do not admit of being compared. This is at once apparent when we reflect that one group contains 125 females presenting inflammatory ulceration of the cervix, and the other group 110, who present morbid uterine conditions, by far the greater part of which are also the result of inflammation. Thus, the uterus was displaced in 36 cases; in 28 it was lower than natural; in 3 it was retroverted; in 5 anteverted; the body was enlarged in 20; the os or cervix was also enlarged or indurated in 10; the cervix or os was enlarged or indurated in 44; the orifice of the os was more or less congested, with the uterus healthy, enlarged, or misplaced, or with the os or cervix indurated in 58.

I cannot myself see what scientific advantage can possibly accrue from the minute comparison of the symptoms, local and general, presented by 125 women having ulcerated uteri; and by 110 women in whom the cervix uteri is not ulcerated, it is true, but who are mostly suffering from other modes of manifestation of the same inflammatory disease. It can only make

OBJECTIONS.

confusion worse confounded, and so far from clearing up the subject, involve it in impenetrable darkness. Indeed, to me it appears incomprehensible that a pathologist of Dr. West's powers of observation and analysis should, in studying a disease, have thus isolated one of its morbid conditions; should have laboriously compared the cases in which it is present with those of the same generic nature in which it is absent, and because he could find no real substantial difference between them, have denied its pathological importance.

I renounce, therefore, following Dr. West on this ground, and shall only deal with the unfortunate and unwarranted conclusion to which the above error has led him—viz., "That ulceration of the cervix is to be considered as a condition of slight pathological importance, and of small semeiological value \therefore rarely calling for special treatment (p. 14) . . . that it does not appear to exercise any special influence, either in causing sterility, or in inducing abortion," &c. (p. 58.)

Dr. West bases these conclusions on his statistical analysis of the cases seen and treated, and what I consider his failure to discover the truth is another illustration of the danger of trusting too implicitly to results obtained by numerical calculations. I profess a great respect for statistics, and am well aware that they have done much for medical science; but there is always a danger in resorting to them. If there is the slightest flaw in the basis, the whole superstructure will probably be false, and yet it may present the appearance of demonstration, and by many be accepted as such; the mind has surrendered itself to figures-has abdicated its powers of observation, and has accepted in advance the results they give, whatever they may be. Nothing, consequently, surprises; nothing shocks. Is it possible, however, always to add up the fugitive elements of disease-always to operate numerically with success on such ever-varying elements as those which manifest their influence in the loss and recovery of health?

Thus Dr. West states that he has ascertained, by statistical researches, that inflammatory ulceration of the cervix uteri has no influence in producing sterility or abortions. Now if I, as a practitioner, have found, during a long series of years, that I

DR. WEST'S DENIAL OF ITS PATHOLOGICAL IMPORTANCE. 27

have constantly been consulted by young sterile married women, in whose history I can trace the evidence of uterine mischief dating from the earliest period of their married life, or even from an epoch antecedent to it-if, on examination, I find some chronic inflammatory uterine lesions, say ulceration,-if I treat the local disease, and cure it; and if a considerable proportion of these women subsequently become fertile,-am I not warranted in considering the local disease as the cause of their sterility? If, again, I find married women who have had children, often becoming sterile for years after a tedious or instrumental labour, which has left traces of uterine suffering,if, discovering this condition to be connected with local inflammatory mischief, I remove it by treatment, and they, subsequently, in very many instances, again become pregnant, am I not warranted in considering the temporary sterility of these women as occasioned by the temporary local disease? If, on the other hand, I find that women who are continually aborting or miscarrying, are generally suffering from symptoms of uterine ailment, and present, on examination, local inflammatory lesions, mostly inflammatory ulceration; and if, on thoroughly removing these lesions, I find that a large proportion at once go to the full time, and are delivered of live children, am I not warranted in concluding that in these females the existence of the inflammatory disease was the cause of the abortions and of the premature termination of the pregnancies?

Such being the case,—and it has been the case in my practice for many years,—am I to suspend the exercise of my observing faculties, to question the experience of the past, and to acknowledge that inflammatory lesions of the cervix have nothing to do with sterility or with abortions, because some statistical researches, based on the enumeration of the number of children which one group of women has had, as compared with the number that another group has had, decide the question on one side or the other? My answer is—certainly not. I know that I am right, and that the figures are wrong. I know that there must be some fallacy, some source of error, and I repudiate numerical results, which, were I to put faith in them, would evidently lead me astray. And here is the real

OBJECTIONS.

danger of the numerical method, when incautiously applied to vital symptoms and conditions, and to the results of treatment. There may be such a fallacy, such a source of error, which misleads the unwary, and which can only be detected by those who have had extensive experience, and who are led by this experience to question what the figures announce, and to look for the source of error.

The doctrine which Dr. West teaches with reference to the treatment of inflammatory ulceration of the neck of the uterus -viz., "that it rarely calls for special treatment," appears to me most deplorable, for if it were adopted, most of the pathological discoveries made in this direction would become positively fruitless, and women would be left to suffer as of old. I cannot, however, discuss the question on the confined basis on which Dr. West has placed it; I must be allowed to throw into the scale all the inflammatory lesions which constitute so large a part of what he makes his antagonistic group. I must have the inflammatory congestions, the chronic inflammatory indurations of the os, of the cervix, and of the uterus, &c., and this will leave but little behind. That given, the questions to examine will be-Firstly, are these lesions connected with the general break-down of the health so constantly observed in the patients presenting them ? Secondly, is their removal necessary for the recovery of health? Thirdly, can they be removed without resorting to instrumental and surgical means of treatment?

I have not the slightest hesitation in answering the two first questions affirmatively, and the third negatively, on the ground both of my own individual experience and of that of other pathologists.

That the local lesions and the break-down of health are connected is evident from their very general co-existence; and that the entire removal of the local mischief is necessary for the permanent recovery of health, is a fact of which I every day become more convinced. For many years I have been living amongst a population of invalids, presenting the two conditions. Before they apply to me they have generally exhausted, during years, all the resources of medical science, and have enjoyed every

28

DR. WEST'S DENIAL OF ITS PATHOLOGICAL IMPORTANCE. 29

advantage that social means and the affection and kindness of relatives can contribute; but all in vain, because the local uterine mischief has been overlooked. That once discovered and remedied, they gradually rally, and are eventually restored to health. Such, also, has been the experience of very many talented practitioners whom I could name, were it desirable. Nor can it be said, as Dr. West surmises, (p. 85,) that these patients recovered—owing to the rest and the correct medical and hygienic management which was combined with the local treatment, the latter being a useless concomitant of such general treatment.—All these means have generally been tried for years, in the cases to which I allude, by the most skilful practitioners, but in vain.

As to the third question, I have no hesitation, either, in saying, that if chronic inflammatory lesions of the cervix, ulceration, thickening, inducation, &c., are to be removed, in very many cases, it can only be effectually accomplished by persevering surgical treatment. It is a perfect delusion to suppose that these lesions, in a confirmed state, can be got rid of merely by attention to the general health, and by rest of body and mind, hip-baths, lotions, &c. Such treatment only alleviates, only enables sufferers to get on; it only temporarily takes the sting out of their ailments; it does not cure them. However much better they may feel under it, as soon as they resume the ordinary duties of life, all their sufferings, local and general, return.

If the medical practitioner makes up his mind that these lesions are insignificant, mere concomitants of the general ill health, and that their removal is not necessary for the patient's well-doing, of course he feels warranted in discarding surgical means of treatment. But if, on the contrary, he knows that they constitute the pivot of the case; that their existence has probably been the cause of the patient's falling into bad health, that as long as they remain there is not a chance of a permanent recovery; and that the slightest residue of local disease will all but inevitably, in the course of time, reproduce the entire mischief, he will not shrink from exacting from his patients the necessary submission to surgical treatment, and he will do his duty to them, however painful that duty.

OBJECTIONS.

The surgical agents which I recommend in the treatment of chronic inflammatory lesions of the cervix uteri are the same as those which are used for the treatment of similar conditions in other parts of the body. They are local antiphlogistic remedies, such as local depletion, emollients, sedatives, astringents, counterirritants, and vitality-modifying agents, such as caustics of variable intensity. There are few surgical agencies, the knife excepted, which cannot be classed under the above heads. The object in resorting to their use is, firstly, to subdue sub-acute or chronic inflammatory action, and thus to promote the healing of the excoriations, abrasions, or deep ulcerations, and to favour the softening and absorption of the sub-mucous inflammatory indurations. Whilst these means of treatment are being resorted to, experience has pointed out that the greatest assistance can be derived from the use of caustics; indeed, that they are often indispensable. The object in view is to modify the vitality of the diseased tissues, and to substitute healthy, manageable inflammation for morbid inflammation.

This treatment of chronic, obstinate, intractable, inflammatory conditions-ulcerations of mucous membrane, induration, and hypertrophy of sub-mucous and proper tissue-is strictly consonant with the recognised doctrines of surgery. It is merely the application of the laws which regulate the therapeutics of surgery to the diseased conditions of this peculiar region. Moreover, I have no hesitation in saying that those who, having recognised these local morbid states, shrink (through convictions, timidity, or ignorance) from the use of surgical agents, and are contented to treat their patients generally, and by the use of lotions and injections, &c., must very frequently remain satisfied with their non-cure. They must, and do, often dismiss their patients with the morbid states described still existing. It is to this result, indeed, that the conclusions to which Dr. West has arrived directly tend-viz., the imperfect treatment and cure of uterine disease, and the consequent reproduction or perpetuation of the patient's sufferings.

The above analysis of Dr. West's lectures may be summed up as follows :--Firstly, Dr. West's testimony, founded on accurate researches, carried out at two of the large metropolitan hospi-

30

tals, establishes in the most peremptory and undeniable manner, the oft-disputed accuracy of my pathological statements respecting the existence and frequency in the living and in the dead, of inflammatory lesions of the cervix uteri; such as ulcerations, indurations, &c. This testimony, therefore, utterly invalidates and destroys, were it still necessary, the scientific value of Dr. Robert Lee's negation of the existence of inflammatory ulcerative disease in this region of the body.

Secondly, Dr. West's negative conclusions as to the pathological importance of inflammatory ulceration of the os uteri, are, even in argument, quite valueless, owing to the singular fact of his having drawn them from the statistical comparison of two groups of patients, labouring, in a great measure, under identically the same disease, only manifesting its existence in one group by one mode of expression, in the other group by another mode of expression.

DR. TYLER SMITH'S RECOGNITION AND MICROSCOPICAL DESCRIP-TION OF ULCERATION OF THE UTERINE NECK.

In the preceding remarks I have shown the utter fallacy of Dr. Robert Lee's denial of the existence of inflammatory ulceration of the neck of the uterus, by referring to the testimony of Dr. West, of St. Bartholomew's Hospital. Thus, on the authority of Dr. West, it is evident that when Dr. Lee writes—" Neither in the living nor in the dead body have I ever seen ulceration of the os and cervix, except of a specific character, and especially scrofulous and cancerous" ("Medico-Chirurgical Transactions," vol. xxxiii. p. 275)—he must either have taken upon himself to contradict my statements without due investigation of the subject, or his mental vision must have been so obscured by prejudice, that he was incapable of recognising the truth when placed before him.

That Dr. Robert Lee is open to one or other of these imputations, is also undeniably proved by the recent evidence of Dr. Tyler Smith in his work on Leucorrhœa. Dr. Tyler Smith's testimony as to the existence of non-specific ulcerations of the cervix uteri, and consequently as to the soundness and correctness of the descriptions of the more severe forms of inflammatory ulceration, contained in the successive editions of my work

31

OBJECTIONS.

on Uterine Inflammation, is even more emphatic and more conclusive than that of Dr. West, inasmuch as it is based on minute microscopical investigation. It also carries with it the additional weight of emanating from a physician who, only a few years ago, publicly advocated and supported many of Dr. Lee's assertions.

Dr. Tyler Smith's first contribution to uterine pathology was a memoir, which was read at the Westminster Medical Society, and subsequently published in The Lancet, April 20th, 1850, under the title of "Observations on the supposed Frequency of Ulceration of the Os and Cervix Uteri." In this essay, Dr. Smith supported most of the opinions and views contained in Dr. Lee's memoir, although in a much more guarded manner. Thus he admitted the frequent existence of abrasions and excoriations of the cervix uteri, but denied their ulcerative nature, or their claim to be called forms of ulceration. Then, without denying, as Dr. Lee did, the existence of inflammatory ulcerations of the cervix uteri of a more marked type, he argued against their existence, both in the living and the dead, using the same arguments as Dr. Lee with reference to the living, and appealing to the same negative testimony-that of the curators of St. George's Hospital-with reference to the dead.

In order to show that I am not misrepresenting the views brought forward by Dr. Tyler Smith in the essay to which I allude, I must be allowed to give the following extract (*The Lancet*, vol. i. 1850, p. 474):—

"The granulations which are sometimes found surrounding the os uteri—which may secrete mucus or pus abundantly, and which may bleed on being roughly handled—are, I have no doubt, the result of inflammation; but they resemble the granular state of the conjunctiva, (Dr. Tyler Smith's italics,) rather than the granulations of a true ulcer, the granular os uteri offering no edges or signs of solution of continuity, by which we might satisfactorily declare it to be an ulcer. The granular os uteri would be a more correct designation, in such cases, than 'ulceration' of the os uteri. Some of the so-called ulcerations appear to be nothing more than patches of thickened epithelium, or portions of the os and cervix from which

33

the epithelium has been melted away by acrid and irritating secretions. . . . It appears to me that we can neither receive the existence of excoriation, or abrasion; of granulation or of fungous growths; the secretion of pus or muco-purulent matter; as affording undeniable evidence of the existence of 'ulceration' of the os and cervix uteri. We must try ulceration in this part of the body by the same test which we apply to ulcers in other parts of the economy. We must look for a solution of continuity, with a secreting surface, separated from the healthy structures, having defined edges, everted or inverted, for an ulcer, in fact, in the common pathological meaning of the term."

Such were Dr. Tyler Smith's views of the pathology of ulceration of the uterine neck in 1850. Even after the elimination of abrasions and excoriations,-the result of morbid action, not of accident, be it remembered,-Dr. Smith refused to admit that "bleeding granular surfaces, secreting mucus and pus abundantly," were ulcerations, because, apparently, they had not (like old skin ulcers) "defined edges, everted or inverted." The very enunciation of such views as the above impressed me at the time with the conviction that they originated in want of practical experience, and in the controversy which followed between myself and Dr. Smith I said as much. The following year Dr. Tyler Smith was appointed physician-accoucheur to St. Mary's Hospital, where a wide field of practical observation was opened to him. What has been the result? Dr. Smith has recently published a work on " Leucorrhœa," in which the granular, bleeding, muco-pus-secreting surfaces, described above as not constituting ulceration, as not deserving that appellation, are now carefully and minutely depicted as superficial ulcerations of the os and cervix uteri, and are distinctly stated to be the morbid change that immediately follows abrasions or excoriations of the mucous membrane (vide pp. 88, 89, 90). The following paragraphs are verbatim extracts from Dr. Smith's work :---

"Epithelial Abrasion of the Os and Cervix Uteri.—The next morbid change (to vascular injection of the os and cervix uteri) consists of loss of epithelium, and partial or entire denudation of the villi. To the naked eye a red circle of excoriation surrounds the os uteri. It sometimes involves the whole surface of the os uteri, and extends to the upper part of the vagina, and also ascends within the canal of the cervix. The denuded surface does not generally secrete pus, but an abundance of mucous plasma and epithelial scales is produced, and the surface frequently bleeds upon slight irritation. To the naked eye the abrasion appears rough, and to the touch it feels erectile and 'velvety'-a term which has very commonly been applied to what has been considered ulceration of the os and cervix uteri. The villi do indeed in this condition stand out somewhat like the pile of velvet, and in some cases the villi themselves are considerably enlarged. When such cases are examined microscopically after death, the villi are seen with their vascular loops, but with entire loss of their epithelial covering. The naked villi are sometimes so large as to be visible, and they look like an irregular fringe skirting the uterine aperture. This state has been considered one of superficial ulceration, but epithelial abrasion is the only morbid change which exists in cases of this kind, and it is nothing like that state which is considered ulceration in other parts of the body. If this were to be considered genuine ulceration, we must apply the same term to the simple loss of the epidermis after the application of a blister to the skin. In leucorrhœa, it is, I believe, caused, like the superficial redness, chiefly by the irritation of the os uteri from the alkaline cervical discharges. This loss of epithelium is the most frequent change which I have met with upon the surface of the os uteri in cases of ordinary leucorrhœa."-pp. 82, 83.

"Superficial Ulceration of the Os and Cervix Uteri.—When these changes have proceeded a step further, there is found not merely loss of the dense layer of epithelium covering the os uteri, but the villi both of the external surface of the os uteri, and of the mucous surface within the labia uteri, are destroyed entirely or in patches. It is this condition which constitutes the granular condition of the os uteri. In that state of the os uteri, which upon examination after death would be pronounced to be undoubtedly superficial ulceration, the condition

DR. TYLER SMITH'S DESCRIPTION OF ULCERATION. 35

which generally obtains is a partial or entire loss of the epithelial layer around the os uteri in circumscribed patches, and here and there the partial or entire destruction of the villi. This loss of the villi gives an eaten, corroded appearance to the surface of the os. Such a condition of the os uteri may be limited in extent, or it may spread over the whole of the os uteri and external portion of the cervix, and pass within the labia. In this state there is a free secretion of purulent or muco-purulent fluid. . . . On the surface of the os uteri superficial ulceration does not go beyond the removal of the epithelium and villi, but I have seen a portion of the rugæ in the lower part of the cervical canal itself eaten away in very severe cases." pp. 83, 84.

What can be more graphic, and at the same time more minute, more accurate, and more conclusive than this description of ulceration of the uterine neck? And yet it is from the pen of a pathologist, who, when he wrote the memoir from which is taken the first extract, considered these identical mucous membrane lesions to be merely granular, conjunctivalike states, of a non-ulcerative nature. It is from the pen of one who, if he did not repudiate the very existence of ulceration in this region, like Dr. Lee, appeared to accept it principally on the faith of others, and more through cautious reserve than because he had ever himself met with any lesion of the kind.

At the time that Dr. Robert Lee's memoir and that of Dr. Tyler Smith were simultaneously brought forward, the one at the Medico-Chirurgical Society, and the other at the Westminster Society, the one denying the very existence of inflammatory ulceration of the uterine neck, and the other, if not its existence, its frequency—at the time that the archives of St. George's Hospital were ransacked for post-mortem arguments it was currently reported that the result of this combined effort would be the annihilation of the views I upheld. The unsoundness of doctrines so pernicious in their tendency, it was said, was to be demonstrated, their progress arrested, and those who supported them placed under general professional ban. I must be pardoned if I here briefly state what has been the result of the efforts thus made to crush the pathological truths of which I had made myself the interpreter.

Finding that my appeals to facts and to experience were received with incredulity, and met by counter-assertions,—the thorough fallacy of which I have now proved by other testimony than my own,—I challenged my opponents to meet me in the field of observation. I proposed to assist a committee of the Medico-Chirurgical Society to investigate the state of fifty, or more, new patients, presenting symptoms of uterine suffering, in any hospital or dispensary in London, and to abide by the result. My challenge was not accepted ;—but my views and assertions have since then been tacitly and unintentionally submitted to the very ordeal I courted, at St. Mary's Hospital, and that by one of my "then" opponents, Dr. Tyler Smith himself. The results of the investigation, in his hands, I have just laid before my readers.

In the above extracts, it will have been remarked that Dr. Tyler Smith still denies that the condition which he describes under the head of epithelial abrasion constitutes ulceration. Am I not, however, justified in saying that it is merely a discussion of words to deny the generic term ulceration to the conditions of abrasion, excoriation, epithelial denudation,whatever it may be called,-which Dr. Smith himself describes as the first stage in the destructive process which ends by giving rise to what he now admits is really "ulceration ?" In sound logic, does not the term ulceration apply just as rationally to the first stage of the destructive process that which destroys the epithelium, and exposes the fringe-like villi, as to the second stage, that which corrodes and destroys the surface of the villi themselves? In both, the difference is merely one of degree. Whether the epithelium alone be destroyed, or the epithelium and a portion of the villi, there is equally destruction of one at least of the elements, which, by their combination, constitute the healthy mucous membrane. The morbid cause, also, is confessedly the same in both, whether that cause be inflammation or leucorrhœa.

As regards mere pathological facts, it does not appear to me, taking into consideration the above passages, and the general

DR. T. SMITH'S RECOGNITION OF INFLAMMATORY LESIONS. 37

tenour of his work, that there is now much difference of opinion between Dr. Tyler Smith and myself. The experience of the last few years, in the very field where I was long engaged, (Paddington,) has led Dr. Smith at last to recognise and describe the same lesions that I have observed, taught, and described ever since 1837-that is, thirteen years before the publication of his first memoir. He now admits that vascular injection of the os and cervix uteri, epithelial abrasion of the os and cervix uteri, and superficial ulceration of the os and cervix uteri, are all stages, degrees of the same morbid process. That I should call these conditions inflammatory conditions, the result of inflammation, and that he should simply describe them, attributing their presence to "leucorrhœa," does not prevent his agreeing with me, that they are of great pathological importance; which Dr. West denies, as we have seen. Thus, in addition to his recognition of their frequent existence, Dr. Smith admits that they produce hypertrophy of the subjacent tissues by their long-continued presence; that they often cause abortion and sterility; and that they are constantly connected with deranged conditions of general health, which can only be effectually and permanently remedied by their removal.

If any further evidence were required to show how greatly a few years of practical hospital experience on his part have narrowed the gulf which formerly separated Dr. Tyler Smith and myself, and have, necessarily, inevitably led him to the results at which I had in a great measure arrived before I even wrote my thesis on this subject in 1843, I would refer to the rules he now lays down to guide the practitioner in the surgical examination of patients. In the memoir to which I have repeatedly alluded, and in the discussion which followed, Dr. Smith fully admitted the necessity of resorting to instrumental examination in uterine disease. From the severity, however, of his criti cisms on those who, holding contrary opinions to himself, frequently looked for and treated ulcerative disease, it is very clear that he was then far from considering instrumental examination as necessary, in the investigation and treatment of confirmed uterine disease, as he now evidently thinks it. These rules will be found at page 214 :---

OBJECTIONS.

"The rule I adopt, with respect to examinations, is as follows : —In all married persons suffering from uterine disease, where the symptoms are severe, I make a careful examination digitally, and with the speculum, if necessary, at the first time I am consulted. The frequency of subsequent examinations depends upon the nature of the case. With respect to unmarried women, I never make a physical examination, unless ordinary means fail of curing the uterine disorder. I then examine in the first instance digitally, and only use the speculum in cases where the finger detects disease of the os or cervix uteri, such as loss of surface, enlargement of the labia uteri, induration, or gaping of the os uteri, with purulent or muco-purulent discharge," &c.

Assuredly I have never gone further, indeed scarcely as far, either in the instructions I have given to others, or in my own practice. The advice I have always given to practitioners has been, even with married women, to resort only to digital and instrumental means of examination, when general treatment has failed, unless the symptoms be very marked and decided. In my own practice I am, and have ever been, so scrupulous that it does not occur to me once in six months to examine a patient without finding sufficient disease to warrant the examination. When, perchance, it has occurred to me to make a fruitless examination, I have always felt that I had committed a grievous error of diagnosis by which my patient had suffered, and I have reproached myself greatly for so doing. Thence, probably, it is that in my published statistics the proportion of severe cases is large.

THE EXISTENCE OF INFLAMMATORY ULCERATION OF THE OS UTERI GENERALLY RECOGNISED IN EDINBURGH, DUBLIN, FRANCE, AND AMERICA.

It will be admitted, I think, by all, that in the preceding strictures I have proved, in the most peremptory and incontrovertible manner, both the existence and the frequency of inflammatory lesions of the uterine neck, including inflammatory ulceration. My readers must also bear in mind that I have proved my position, not by appealing to my own personal expe-

THE EXISTENCE OF ULCERATION GENERALLY RECOGNISED. 39

rience, but by recording that of other London physicians opposed to me in their general views of uterine pathology.

I should not have considered this demonstration worth either the time or the space which I have devoted to it, had it not been for the paralyzing influence which Dr. Robert Lee's unreserved denial of these pathological facts has had over the medical profession in London. Coming, as this extraordinary denial has come, from one of the oldest, most scientific, and most esteemed of our body, the effect has been to imbue the minds of the leading members of the profession, medical and surgical, with a scepticism which has tended to stifle even inquiry, and has marred the progress of doctrines of inexpressible value to the welfare of the female community.

Fortunately, the blighting influence of Dr. Lee's negation of these vitally important facts has not extended beyond the metropolis. In the provinces, many experienced practitioners, and principally hospital surgeons practising midwifery, have examined for themselves. They have found, as all have done who have conscientiously investigated Nature, that my descriptions of diseased uterine conditions are taken from life, and are strictly accurate and true; and they have adopted the doctrines which I defend. Whilst speaking of provincial inquirers, I must not omit to mention Dr. Whitehead, of Manchester, who was one of the earliest in the field, and whose labours and researches place him in the foremost ranks of uterine pathologists.

In Edinburgh, our celebrated fellow-practitioner, Dr. Simpson, has for many years taught and demonstrated the correctness of these views. The great and deserved authority which surrounds him, and the talent and energy with which he upholds his opinions, have borne down all opposition; and although difference of opinion may be entertained on other points, I am not aware that the existence and frequency of inflammatory and ulcerative lesions of the uterine neck has even been questioned in modern Athens since the publication of the first edition of my work in 1845.

I may say the same of Ireland, where these morbid conditions have been long recognised, and treated surgically, as a matter of course, by the most eminent uterine pathologists of the day, amongst whom I may name Dr. Montgomery, Dr. Evory Kennedy, and Dr. Beatty.

In France, their existence and frequency, and the necessity of treating them on surgical principles, have been generally recognised ever since the publication of Lisfranc's lectures, more than twenty years ago.

In America, the change that has taken place within the last ten years in the opinions of the medical profession with reference to uterine disease is, I believe, even still more decided than in England. The existence and frequency of inflammation and of inflammatory ulceration of the neck of the uterus and of its canal is now, I am told, all but universally recognised. I think I may fairly lay claim to the honour of having contributed to this change, the reprint of my work "On Uterine Inflammation" having been received with favour in the United States, and having gone through four editions. Dr. Meigs himself has recently testified to the frequency of inflammation and of inflammatory lesions of the neck of the uterus, as the cause of obstinate leucorrhœal discharge, and of confirmed uterine suffering, in his work " On Acute and Chronic Diseases of the Neck of the Uterus," published at Philadelphia in 1854. Dr. Meigs has so long most deservedly held the highest position amongst obstetric and uterine authorities in the United States, that his adhesion to the views advanced by modern pathologists, as to the local inflammatory cause of leucorrhœa accompanied by confirmed uterine ailment and constitutional disturbance, I consider to be very valuable. Thus (page 37) we find the following paragraph :--- "We should cure a much greater number of leucorrhœas if we would not misinterpret the disorder, calling that a vaginal which is really a cervical malady, and vice versa. We repeat, the serious cases (of leucorrhœa) are cases of disease of the cervix; but a vaginal injection for inflammation of the canal of the neck is simply ridiculous. The albuminous leucorrhœa is a sign of inflammation of the cervix, in which is included the canal, with its copious muciparous apparatus. It is as much a surgical disease as an ulcer of the leg, as an anthrax, or conjunctivitis. When the surgical disorder is cured, the sign disappears. Hence we desire to express the opinion

THE EXISTENCE OF ULCERATION GENERALLY RECOGNISED. 41

that such leucorrhœas are to be held as acute or chronic inflammations of the canal of the neck, and ought to be treated accordingly."

Although Dr. Meigs thus recognises the existence and frequency of inflammatory lesions of the cervix uteri, attributes due importance to them, and teaches that they are surgical conditions which must be discovered and treated by surgical means if we wish to cure the leucorrhœal discharges, and the local and general disturbance which they occasion, he denies that the term ulcer or ulceration can be applied to them. The disagreement, however, is clearly one of words only; his book itself contains several very good coloured figures, which most graphically represent the different stages of inflammatory ulceration. With Dr. Meigs it is a mere fastidiousness of phraseology, which a little thought and the knowledge of the labours of others will no doubt modify. He is so convinced, indeed, of the frequency of these diseased conditions, of their importance, and of the necessity of their surgical treatment, that he impresses most strenuously on all family practitioners, the necessity of becoming acquainted with the true pathology and treatment of these diseases, that they may afford real relief to their patients without the latter being obliged to apply to special practitioners.

Having thus established the soundness and correctness of the pathological facts on which the doctrines I advance are, in a great measure, founded, I shall briefly examine the various theories which are more or less current in uterine pathology, and which are invalidated by these doctrines. In speaking of Dr. West's researches, I have already referred to the views of those who, although admitting the existence of inflammatory lesions, most unaccountably and illogically deny their pathological importance. I shall now briefly examine various other opinions and doctrines, which I shall class under the following heads:—The Leucorrhœa Theory, the Syphilis Theory, the Ovarian Theory, and the Displacement Theory.

CHAPTER IV.

THE LEUCORRHCEA THEORY-THE SYPHILIS THEORY-THE OVARIAN THEORY.

THE LEUCORRHCA THEORY.

DR. TYLER SMITH's recent work appears to have been principally written in order to bring before the profession the peculiar views which he professes with reference to the morbid states, general and local, to which we have alluded as characterizing conditions of uterine ailment. The germ of these views is to be found in his Memoir of 1850. He therein observed, that the abrasions, granular conditions, &c., which are found at the os uteri, are probably "the result of irritation, produced by secretions depraved by some change in the innervation or nutrition of the uterus." This is the idea which Dr. Smith has developed, and on which he has based a theory of uterine pathology, in opposition to what he terms the "Inflammation Theory." Calling to his assistance the microscopical talents of Dr. Hassall and of Dr. Handfield Jones, he has submitted the mucous membrane of the vagina, cervix, and cervical canal, to a minute microscopical examination, and the results thus obtained are interesting. It would appear that the vaginal and cervical mucous membrane, which are covered with pavement epithelium scales, contain few, if any, mucous follicles. The mucous membrane of the cervical canal, on the contrary, which is covered with cylindrical epithelium scales, presents even more mucous follicles disseminated over its surface than was previously supposed. The drawings of this mucous membrane, and of its follicular structure, are very beautiful, and the description of their structure and disposition given by Dr. Tyler Smith is more minute than that of any previous anatomist. Numerous as we thought them, it appears that they are even still more numerous, amounting to many thousands. Adopting the researches of M. Donné and of Dr. Whitehead, Dr. Tyler Smith draws attention to the fact, that the ropy, mucous secretion of these follicles is alkaline, and remains transparent in the cervical canal. On reaching the vagina, and meeting with the acid vaginal secretion, its albumen becomes coagulated, if not very abundant, and it is thus transformed into the white, creamy fluid therein found.

Starting from these anatomical and physiological considerations, and extending his former idea, Dr. Tyler Smith assumes (p. 80) that a morbidly-augmented secretion from the mucous glands of the cervical canal, occurring under the influence of general or local causes, is "the most essential part of the disorder," in women presenting symptoms of uterine ailment, and is the cause of the mucous membrane lesions, and of their sequelæ, which are observed in practice. To this morbid condition, which he terms Leucorrhœa, Dr. Tyler Smith attributes the morbid changes which I and others have described as the evidence and result of inflammation-that is, congestion, erosion, well-marked ulceration, hypertrophy, induration, the functional derangements of the uterus, and the secondary sympathetic reactions which are observed in the cases presenting them. The word inflammation is so sedulously avoided, that a careful perusal of Dr. Tyler Smith's work leaves in the mind a doubt as to whether he admits its existence even as a secondary result of this mysterious entity, " Leucorrhœa." Thus, at page 85, we find the following paragraph :---

"In maintaining the important part played by the cervical secretions in inducing morbid conditions of the os uteri, I do not wish to be understood as saying that they are the only causes of these conditions. What I contend for is, that in the majority of cases in which leucorrhœa is present, in combination with non-malignant disease of the os and cervix, the morbidly active condition of the cervical glands is the primary and essential disorder. Amongst the other causes of morbid change in the os and cervix uteri, the varying vascular and mechanical conditions of these parts in menstruation, coitus, pregnancy, and parturition, must of course be enumerated. Eruptive conditions of the cutaneous covering of the os uteri, in the shape of aphtha, herpes, or eczema, form another class of cervical discharge. Vaginitis may also extend upwards, and involve the os and cervix."

In the above extract it will be observed that the morbidly increased cervical secretion is not given as the cause of inflammation, which secondarily induces ulceration, induration, &c., but as the *essential disorder* of which these lesions are the morbid conditions. Neither is the intervention of inflammation recognised in the enumeration of the other causes which produce morbid changes in the os and cervix, except in the case of vaginitis extending to the cervix.

Dr. Tyler Smith seems to have endeavoured to establish an union between the pathology of former days and the results of modern experience. Thus formerly it was thought that the discharges, be they mucous, purulent, or bloody, which issued from the female organs, were in a great measure the mere reflex of general and functional morbid conditions. The modes of investigation which are now adopted show the all but constant existence, in such cases, of local lesions. Dr. Smith evidently tries to combine the two by thus stating that, under the influence of both general and local causes, the cervical secretions become morbidly exaggerated and modified, without the intervention of inflammation, thus establishing what he terms Leucorrhœa. This new entity, this peculiar morbid state once admitted, it becomes the source of all evil, producing congestion, erosion, ulceration, hypertrophy, abortions, sterility-indeed, whatever mischief subsequently occurs, local or general, in the uterine organs! Thus it is that we find him describing erosions, ulcerations, &c., not as inflammatory lesions, but merely as symptoms of leucorrhœa.

This attempt to unite past and present pathology does not certainly appear to me calculated to overturn what Dr. Smith calls "The inflammation Theory." What are the lesions described in the extracts I have given—the congestions of the capillary villi or network, the subsequent erosions, ulcerations, and hypertrophies? Are they not inflammatory lesions? To say that they are symptoms of leucorrhœa is merely to evade the question, to answer by a word which thus used has no rational meaning; and yet if Dr. Smith admits that they are in their intimate essence inflammatory conditions, why does he not frankly say so? In every part of the economy, in every tissue, they are considered by pathologists to be the symptoms, conditions, and sequelæ of inflammation, and to ignore this fact is to ignore the established laws of general pathology. Indeed, it would be just as rational to call inflammation, ulceration, and thickening of the mucous membrane of the throat, "leucorrhœa," as to give that appellation to these identical changes in the cervical and vaginal mucous membrane.

The unsoundness of Dr. Tyler Smith's fundamental doctrine is at once detected if we refer to the laws of general pathology. Mere morbid hypersecretions, fluxes, as they have been called, from mucous or glandular organs, do not produce irritation and morbid changes in the structures with which they come in contact, apart from inflammation. It requires the existence of inflammation to endow these hypersecretions with acrid irritating properties. Thus a mucous flux or discharge may exist from the bowels for months or years to an enormous extent, without the anus or adjacent parts ever being irritated. The nasal secretion may be greatly increased, for a considerable space of time, without irritation of the alæ of the nose or of the lips. But let inflammation be the cause of the hypersecretion or flux, and at once the scene changes. If the mucus from the bowels is occasioned by inflammation of the intestinal mucous membrane, it becomes irritating, and excoriates the anus. If the hypersecretion from the nasal mucous membrane is occasioned by coryza or inflammatory cold in the head, the alæ of the nose and the lips are excoriated. Moreover, in all these instances, the morbid changes themselves produced on the anus, the lips, the cheeks - erythema, excoriation, &c., are inflammatory changes, produced by an acrid inflammatory secretion. Inflammation has supervened both as cause and as effect.

Such being the pathological law in other parts of the economy, it must also hold good in the uterus. The morbid hypersecretions of the cervical canal, and of the vagina, are in themselves innocuous, and only acquire irritating properties through the intervention of inflammation. They may and do increase and diminish in the different phases of the female's physiological state, under the influence of menstruation, pregnancy, over-exertion, mental emotion, &c., without any local morbid change occurring. This, indeed, Dr. Tyler Smith himself acknowledges and developes. When, however, their increase is accompanied with the ordinary local evidences of inflammation-swelling, redness, heat, pain, ulceration, and thickening of diseased tissues-it is because inflammation co-exists, here as elsewhere, has changed the character of the discharge, and developed the whole train of morbid changes that characterize inflammation, &c. To say that the primary cause of these morbid conditions, the essential disorder, is the morbidly increased mucous secretion, is a mere assertion which cannot be proved; and is contrary, as we have seen, to the laws of general pathology, our only safe guide in such questions.

This doctrine of "leucorrhœa," as developed by Dr. Tyler Smith, appears to me a mystical, unpathological doctrine, unworthy of the present state of science. It is a doctrine that substitutes words for facts. What, I would ask, is the intimate nature, the cause of this morbid hypersecretion which, according to his views, is the "essential disorder;" which creates morbid changes that are not inflammatory, although they present all the characteristics of inflammatory lesions? Dr. Tyler Smith cannot tell us, for he ignores inflammation, and does not soar above the idea or a "morbidly exaggerated secretion." But the profession will tell him that the essential disorder is *inflammation*—neither more nor less.

Much might be added, but I believe I have said enough to show that the new "Leucorrhœa" theory is but a poor substitute for the one Dr. Tyler Smith attacks. This, the "inflammation theory," as he calls it, is founded on the recognition of the positive fact, that most of the morbid lesions observed in patients suffering from confirmed uterine ailment are inflammatory lesions, the result of inflammation. Those who adopt it believe that, in these cases, inflammation is the primary condition, as in other mucous membranes, and that the hypersecretions are, generally speaking, quite secondary, mere symptoms. At the same time, we believe that the inflammatory disease itself, and the lesions it produces, including the hypersecretions, are completely subservient to the general pathological laws which regulate inflammation in its origin, progress, and termination, in all parts of the animal economy.

Before I pass to another subject, I would remark, that Dr. Smith, throughout his work, corroborates a very important practical fact, which I was, I believe, the first to point out and elucidate-viz., that the discharges, mucous or purulent, which issue from the cervical canal are generally secreted by the cervical canal, and not by the uterine cavity. In other words, I believe that I was the first to demonstrate that nearly all that had been previously written by French and English pathologists on endo-metritis, or inflammation of the lining membrane of the uterine cavity, had been written in error as to the seat of disease, and as to the origin of the morbid discharges. Instead of proceeding from the uterine cavity, as was generally supposed, in the great majority of cases, they proceed from the cervical cavity or canal only, the uterine mucous membrane being, comparatively, seldom the seat of disease and of morbid secretions. These views were developed at great length in the second edition of my work on "Uterine Inflammations," 1849; and it is gratifying to me to find them so thoroughly corroborated by Dr. Tyler Smith's more recent researches.

Recognising, as Dr. Tyler Smith does, fully, the pathological importance of uterine lesions, ulcerative and other, he agrees with me as to the absolute necessity of their removal by local as well as by general treatment. He adopts the more simple means of local treatment which I recommend—astringents, injections, local depletion, applications of the nitrate of silver, &c., but repudiates and strongly condemns the more energetic surgical agencies, such as the acid nitrate of mercury, and other mineral acids, potassa fusa, the actual cautery, &c. Dr. Tyler Smith must not think me discourteous if I once more appeal to time and to his own increased experience. These will, in my opinion, inevitably do away with all disagreement between us, by proving to him the absolute necessity of the more potent surgical agencies which he now repudiates. Dr. Tyler Smith is too sensible a man, too clever a physician, to leave in the hands of his fellow-practitioners means of treatment which are occasionally indispensable in order to entirely remove important morbid conditions. When additional experience has shown him that there are patients, especially in private practice, where cases can be followed, who can only be restored to health by the instrumentality of the vitality-modifying agents which he now condemns; and that if he does not therewith cure them, others will; I predict that he will pass the "Rubicon," and become a convert to the vitality-modifying doctrine, as he has become a convert to the ulcerative doctrine.

Should that day come, however, as I believe it will, I shall have a right to ask Dr. Tyler Smith to publicly acknowledge his conversion, and not in a second or third edition of his work, to act by this question, as he has done in the first by the ulceration one. Although compromised, as we have seen, by the expression of very decided opinions, in the controversy on the existence and frequency of ulceration of the neck of the uterus, Dr. Smith, in his work on Leucorrhœa, never even alludes to his having formerly entertained other opinions than those which he enumerates; but quietly describes ulceration as if its pathology had never been questioned, either by himself or by any one else. I may be allowed to add, that many practitioners who formerly denounced me loudly for using too energetic surgical means in the treatment of uterine disease, have, since then, taught by experience and by my example, adopted these very means, and are now quietly and tacitly employing them, thereby gaining credit and honour in practice. Such a course may be admissible in a private practitioner, but it is certainly not justifiable in a public man, in one who claims to teach and to lead professional opinion.

The term leucorrhœa, if retained at all, ought, in sound pathology, it appears to me, to be reserved for those forms of passive mucous hypersecretion of the vaginal, cervical, and intra-

THE SYPHILIS THEORY.

cervical mucous membrane which often temporarily exist independently of inflammatory lesions, and independently of uterine ailment. These passive and fleeting conditions of hypersecretion, really and truly, are the reflex of general conditions of health, and seldom come under the eye of the profession as distinct morbid states.

THE SYPHILIS THEORY.

One of the first explanations that were given in Paris, many years ago, of the presence of inflammatory and ulcerative lesions of the uterine neck, was, that they were frequently, if not principally, secondary syphilitic conditions. This explanation of no longer deniable pathological facts has found, of late, advocates and supporters in England. Amongst others, I may mention Dr. Tyler Smith, who, in his work "On Leucorrhœa," states "that far too little importance has hitherto been given to the connexion between Secondary Syphilis and obstinate Leucorrhœa with disease of the os and cervix uteri," (p. 96.) A few pages further on, after discussing my opinions on the subject, he adds, "I have always been of opinion that there is a large amount of undetected syphilis in the works of Dr. Whitehead and Dr. Bennet."

The careful perusal of the arguments brought forward by Dr. Tyler Smith and others has not, however, in any respect modified the opinions which I laid before the profession in 1845, in the first edition of my work on "Uterine Inflammation." My firm impression, indeed, is, that Dr. Tyler Smith, and those who formerly defended, or now defend, similar ideas, very greatly exaggerate the part that syphilis, primary or secondary, plays in the production of inflammatory lesions of the neck of the uterus. Their view of the subject appears to be the natural result of a transition state of opinion. First, inflammatory lesions of the uterine neck are ignored or denied. Second, it being no longer possible to deny their existence, they are considered to be often syphilitic. Third, their inflammatory nature is recognised as the rule, and their syphilitic nature is taught to be an occasional but rare occurrence. May I be allowed to add, that I have a strong conviction, that when the pathologists who

now see syphilis everywhere have had as much experience of local uterine disease as I have had, their ideas will undergo considerable modification.

The opinions which I hold on this subject have not been adopted without considerable study, experience, and research. In the year 1840, I became attached as interne (house-surgeon) to the Hôpital St. Louis, the celebrated Parisian Skin Hospital, to which are sent most of the cases of secondary syphilis that apply for admission to the Bureau Central. I was then told by several of the medical officers that ulcerative affections of the neck of the uterus were very common amongst these patients, and that they were considered to be mostly of a secondary syphilitic character.

I remained at this hospital two years, and during nearly the entire time I had under my charge several wards of women suffering under secondary cutaneous syphilis. I invariably examined the state of the uterine organs, and found, as I had been told, that ulcerative lesions of the uterine neck were of very common occurrence. At first, I was quite prepared to accept their secondary nature; indeed, I may say that the bias in my mind was such as would have naturally led me to this But before I came to St. Louis I had had conclusion. much experience of uterine disease in non-syphilitic hospitals, and especially at La Pitié, where vast numbers of females are received who have recently left the Maternité, the largest lying-in hospital in Paris, and in whom the uterine lesions are undeniably of an inflammatory nature. Thus forewarned, I was at once struck by the similarity between the ulcerative states I saw amongst the syphilitic patients at St. Louis and the ulcerative states I had seen amongst the non-syphilitic patients at La This induced me to question the secondary nature of Pitié. the uterine disease in the former, and to investigate narrowly the entire subject.

The researches which I then commenced were carried on throughout my lengthened residence in this hospital, and soon showed me that not only the morbid characters presented by the ulcerations were, generally speaking, quite different from those which are observed in the throat in secondary syphilitic disease, but that they did not yield to anti-syphilitic treatment, like the secondary cutaneous and throat affections. If the uterine ulceration was left untouched, and the patient was only treated anti-syphilitically, the syphilitic cutaneous eruption got well, as also the throat, when the latter was affected; but the uterine disease generally remained the same. Thus it became evident to me that in the majority of cases the ulcerative conditions observed were not the result of syphilis; that they were, on the contrary, generally speaking, mere inflammatory lesions, the existence of which was in a great measure to be accounted for by the abandoned life most of the patients had led previous to their entrance into the hospital. These views will be found explained at length in the chapter on Syphilis, in my work on "Uterine Inflammation."

If chronic inflammatory and ulcerative conditions of the uterine neck are, generally speaking, non-syphilitic, even in those who are actually suffering from secondary syphilis, they are, à fortiori, still more likely to be non-syphilitic in women who are to all appearance free from any syphilitic taint; and such I believe to be the case. During the last sixteen years, I have constantly kept this question in view when analysing the nature and cause of uterine disease, and the result has been the confirmation of the opinions arrived at when at St. Louis. I occasionally meet with inflammatory and ulcerative disease of the cervix, which presents all the characteristics of secondary throat syphilis, but it is all but invariably in women who present other evidences of confirmed constitutional syphilis-cutaneous eruptions, throat and nasal mucous membrane disease, &c. As to secondary syphilis localized in the uterus alone, I am as much as ever convinced that it is extremely rare, and that consequently it is an error in pathology to attribute to it any but a very minute proportion of the cases of uterine cervical disease met with in practice. In expressing this opinion, it must be understood that I speak of syphilis proper, and not of gonorrhœa. I believe in the totally distinct nature of these diseases, and in the impossibility of simple gonorrhœa giving rise to secondary syphilitic symptoms. Gonorrhœa itself, in its chronic neglected form, I consider to be a frequent, although

THE OVARIAN THEORY.

often non-recognisable, cause of chronic inflammatory disease of the uterine neck—ulcerative and non-ulcerative, especially in the lower classes.

THE OVARIAN THEORY.

What may be termed the Ovarian Theory of Uterine Pathology has evidently originated in physiological prepossessions. It may be traced to the great progress made during the last twenty years in the physiology of the female organs of generation. The discovery of the fact that menstruation, and all the healthy phenomena connected with it, are completely subordinate to the existence and monthly maturation of ova in the ovaries, has led to the idea that morbid menstrual conditions must be also subordinate in the great majority of cases, to morbid ovarian conditions, and principally to subacute ovaritis. This mode of reasoning, perfectly logical in theory, is apparently substantiated in practice by the clinical fact, that in cases of morbid menstruation, complicating uterine ailment-and, indeed, even in cases of uterine ailment, without morbid menstruation-there is all but constantly tenderness, pain, and fulness in the ovarian regions, and principally in the left.

When the patients who present these ovarian symptoms are instrumentally examined, the ovarian pain and tenderness, the morbid menstrual states, and the constitutional disturbance, are all but invariably found complicated by the inflammatory uterine lesions so often described; but the latter, in the "ovarian theory," are considered to be generally the result of secondary uterine irritation, to be sympathetic of ovarian disease.

Nothing can be more lucid, more apparently logical, than this theory. The sequence in the reasoning appears perfect: subacute ovarian inflammation, as demonstrated by pain and tenderness in the ovarian region; disturbance in the menstrual functions; with sympathetic inflammatory lesions of the uterus; and, lastly, constitutional sympathetic reactions.

Unfortunately, the ovarian theory does not bear the test of experience. If the ovarian pain and tenderness are symptomatic of subacute ovaritis, and the subacute ovaritis is the cause, through sympathetic reaction, of all the uterine and general disturbance, it follows as a necessary consequence, that by treating the ovaritis we ought to subdue, remove all the secondary disturbances and lesions, and general morbid reactions, and thus restore the patient to health. But, alas, this is not the case, in the very great majority of instances. We may blister, leech, and otherwise treat the supposed ovaritis indefinitely, without either permanently subduing the ovarian pains, or removing the uterine lesions and symptoms. If, on the contrary,—ignoring entirely the ovarian symptoms, looking upon them as mere neuralgic sympathetic pains,—we treat the uterine mischief only, we find that, in the very great majority of cases, all is gradually restored to order. The menstrual and other uterine functions return to a normal state, the sympathetic general symptoms subside, and the ovarian pains and tenderness themselves permanently disappear.

Thus does experience prove the fallacy of an apparently rational theory. Thus does it show that the disease is really uterine, and that the ovarian pains, tenderness, and fulness must, generally, be considered merely sympathetic, and not necessarily indicative of ovarian disease.

I have said necessarily, because, in some exceptional cases, these very symptoms really do indicate morbid ovarian conditions, the result of subacute or chronic inflammatory disease. In these exceptional cases, either there are no uterine lesions, or if there are such lesions, the ovarian and morbid menstrual symptoms persist after their entire removal. Often, also, in these cases, the ovaries, one or both, are very perceptibly enlarged to the touch. It must be remembered likewise, that the two conditions, chronic inflammation of the ovaries and of the uterus, may co-exist, and may give way to the same means of treatment.

We must not, however, forget that, as I stated in a former chapter, a key to this apparent discrepancy between physiology and pathology is to be found in the anatomy of the female generative organs. The uterus has a mucous membrane, the ovary has none. Thus the uterus is predestined, by its anatomical structure, by the laws of general pathology, to be very much more frequently the seat of inflammatory disease than the

THE OVARIAN THEORY.

ovaries, which are purely parenchymatous. Thence it is that, in practice, we find the ovaries so much more frequently manifesting sympathetic disturbance, owing to the reaction of uterine disease, than we find the uterus manifesting sympathetic disturbance owing to the reaction of ovarian disease.

It will be seen by what precedes, that I fully and entirely admit the physiological and pathological consensus between the ovaries and the uterus-consensus which makes it all but impossible for the one to be diseased without the other suffering more or less sympathetically. But it will also be seen that I consider clinical experience undeniably proves that, in the immense majority of cases of uterine ailment, the uterus, and not the ovaries, is the actual seat of disease. The uterus is not a mere receptacle, a mere bladder, as has been asserted. Hippocrates was much nearer the truth when he called the uterus "animal in animali." To me, as to the older writers, its influence over the female organization, in health and in disease, is a constant source of wonder and admiration. In health, it is the womb that stamps on woman her peculiar impress-that makes her what she is sexually and even individually. In disease, there are scarcely any limits to the morbid influences over body and mind which it is capable of producing.

The frequency, in post-mortem examinations, of morbid ovarian states, thickening, induration, cystic development, &c., in persons who have died from other diseases, does not invalidate the above facts. It merely proves what may be recognised during life, that chronic inflammatory and other changes may occur in the ovaries-as in other parenchymatous organswithout giving rise to symptoms of any very marked character. Moreover, as the ovaries are two in number, even when one is obliterated, as it were, by morbid changes, if the other remains healthy, and ova are regularly matured in its structure, all the phenomena of normal menstruation may take place under its single influence. This we frequently see in the early stages of ovarian cystic disease. I think, therefore, that I am quite warranted in saying, that the morbid ovarian changes discovered after death cannot be the origin and cause of the ovarian pains which so frequently accompany uterine ailment and uterine lesions, for in that case the latter would not so constantly disappear on the removal of the uterine lesions, and so constantly persist, whatever the amount and duration of merely ovarian treatment.

The part which the ovaries play in uterine pathology has been ably described by my friend Dr. Tilt, in his work on "The Diseases of Females and on Ovarian Inflammation." Dr. Tilt authorizes me here to state "that whatever may be the exaggerations of those who have adopted his views, he himself repudiates all exaggeration; that he views as I do the majority of cases which occur in practice; that he treats them as I do; and that he only admits subacute ovaritis as the sole disease or as a complication of uterine affections, in a limited number of instances."

CHAPTER V.

THE DISPLACEMENT THEORY.

HISTORICAL CONSIDERATIONS.

By the expression, Displacement Theory, I refer to the opinion held by those practitioners who consider that the displacements of the uterus so frequently recognised in females presenting symptoms of uterine disturbance and suffering, are the principal and often the sole cause of these conditions. The questions raised by the consideration of these opinions are by far the most difficult to solve of all that I have had to examine in the course of this review, and have now for many years exercised the minds of the most eminent uterine pathologists, both in this country and in France. In the latter country, the pathological importance and the treatment of uterine displacements was discussed for three consecutive months, during the year 1854, at the Academie de Médecine, and most of the more eminent Paris uterine pathologists took a part in the debate. It would indeed be vanity for me to pretend to accomplish what they failed to do,-to clear up the obscurity which surrounds this vexata questio, entirely to solve its difficulties, and such a pretension is far from me. Without aspiring, however, to so much, I hope to be able, by appealing this time to my own personal experience, to contribute to the defence of the doctrines which observation has led me to adopt, from the vigorous attacks which they have had to sustain.

The existence of uterine displacements, other than prolapsus, has long been noticed by writers on the Diseases of Females, but the attention of the profession does not appear to have been more than casually directed to them, until Récamier, by his minute researches into uterine pathology, roused a new spirit of inquiry amongst his countrymen. It would appear, from the recent discussion at the Paris Academy, that as far back as 1826, thirty years ago, M. Amussat, impelled to investigation by M. Récamier's example, recognised the clinical fact, that falling or prolapsus of the uterus is not the only displacement to which that organ is liable; and that displacements, forwards and backwards, anteversion and retroversion, are also very common. M. Amussat made in that year many attempts to replace the uterus, and to keep it replaced by mechanical means. He states that he invented and tried various kinds both of extra-uterine and of intra-uterine sounds, and pessaries, specimens of which he presented to the Academy at the late debate. His researches in the direction of intra-uterine support were arrested, however, by the death of a young lady, suffering from anteversion, into whose uterus he had introduced an ivory stem pessary, with the view of permanently straightening it. She went home, was attacked with inflammation, and died "promptly."

Discouraged by this sad event, M. Amussat ceased to make any efforts to straighten the uterus by mechanical agents applied to the interior of the organ, and directed his attention merely to cervical and vaginal means of treatment and support.

A few years later, M. Velpeau commenced a series of experiments with the same view, that of straightening the womb mechanically, through the agency of intra-uterine sounds. He invented a metallic spring stem, which he first introduced curved into the uterus through a gum-elastic canula, and then straightened by touching the spring. Finding, however, that although the intra-uterine sound temporarily restored the uterus to its natural direction, its presence occasioned severe accidents, M. Velpeau likewise discarded its use, and, from that time forward, principally relied on bandages of various kind, and especially on abdominal bandages.

My own personal knowledge of Parisian uterine opinions and practice dates from the year 1836, in the early part of which I joined the medical schools of that city. During nearly eight years that I remained there, I was, without interruption, connected with the hospitals as pupil, dresser, clinical clerk, housesurgeon, or house-physician, and thus became acquainted with the views and practice of most of the surgeons and accoucheurs who have taken part in the recent debate; for it is worthy of passing remark, that surgeons and accoucheurs only spoke on the subject under discussion, not a single physician having joined in it. I was from the first thrown in contact with M. Velpeau, to see whom I had visited Paris, and who then and since has ever shown himself to me the kindest of teachers and friends. I can thus bear testimony to the fact, that he was at that epoch constantly lecturing on anteversion and retroversion. Indeed, during the year 1838, when I officiated under him at La Charité, as dresser and clinical clerk, I took down many cases of this description, in his female wards. At that time, he was not using for treatment any mechanical means of support, but depending on rest, general treatment, and the use of bandages. The speculum was also but seldom resorted to, and inflammatory lesions were but little talked of. He was clearly then, even more than now, under the influence of the mechanical views of uterine pathology-that is, he then attributed, as he still does, principal importance to displacements of the uterus. He thought that they often existed independently of inflammatory action, as a cause, and considered them to be the main origin of the uterine suffering which so often accompanies them.

I was the more struck with these views, as at the same time I had become acquainted with the doctrines and practice of Lisfranc and Gendrin at La Pitié. These practitioners both used the speculum constantly, considered the lesions which it brought to light as of primary importance, and the displacements—deviations they are called in Paris—which accompany them, as secondary phenomena; generally speaking, the result of inflammatory engorgement or enlargement.

Since then, in Paris, uterine pathology has obeyed these two directions. Some have followed Amussat and Velpeau, and inclined to what I have called the "displacement theory" that is, to the interpretation of uterine suffering by uterine displacement; whilst others, on the contrary, following Récamier, Lisfranc, and Gendrin, have inclined to the inflammation theory. I need not tell my readers that I myself belong completely to this latter school. The more I have studied and observed, the more convinced have I become that the true key to by far the largest part of the field of uterine pathology is to be found in the accurate knowledge of inflammation in the different tissues and regions of the uterus.

Although uterine pathologists have been thus, in Paris, separated, as it were, theoretically, into two schools, I may say that the actual treatment of uterine disease has not so essentially differed as might have been expected until the recent researches and publications of our countryman, Dr. Simpson, became known. All, or nearly all, admitted the frequent existence of inflammatory lesions, and taught that they ought, once recognised, to be treated and removed. Only, those who considered these lesions the "fons et origo mali" were satisfied that they had done all that was necessary for the local treatment of their patients when they had removed them; whereas those who thought the displacements of the uterus the principal mischief, and the inflammatory lesions mere epiphenomena, often overlooked their presence, and trusted from the first to pessaries, bandages, &c.

In the late discussion at the Academy of Medicine, these two schools were very fairly reproduced. Singularly enough, the surgeons, represented by Velpeau, Amussat, Malgaigne, Huguier, &c., principally took the displacement view of the subject. Whereas the inflammation view was supported by the physician-accoucheurs, Paul Dubois, Depaul, and Cazeau. This fact, which struck me at once on reading the report of the discussion, renders it all the more difficult for an impartial observer to judge between conflicting opinions, as it shows the existence of a mental bias, corresponding with the general tenour of studies and of professional preoccupation. Is it not possible, however, that practitioners, whose pursuits, like those of accoucheurs, are not purely either medical or surgical, and whose position in the healing art is, consequently, a double one, may be the best qualified to judge a question which evidently lies on the frontier-ground between medicine and surgery?

In Great Britain, displacements of the uterus, with the ex-
ception of prolapsus, were but little thought of until the publication of Dr. Simpson's paper on the Uterine Sound, in 1843, and more especially that of his essay on Retroversion of the Unimpregnated Uterus, in the Dublin Quarterly Journal for May, 1848. In this latter able and lucid memoir, Dr. Simpson described at length retroflexion and retroversion of the uterus. Finding the replacement of the retroverted uterus by means of the uterine sound totally inefficient, he proposed for their treatment his fixed stem pessary. This pessary comprises, as every one knows, three parts ; the stem two inches and one-third long, which occupies the cervical canal, and enters the uterus, terminating in a bulb on which the cervix rests; and the vaginal and external parts, by means of which it is fixed on the pubis. It thus mechanically straightens the uterus, and maintains it all but immovable. In his essay, Dr. Simpson merely alludes to anteversion, on which French pathologists lay great stress, and he does not speak of lateral displacements, or latero-versions. He enters, however, at length into the pathology of retroversion, and ascribes to it most of the symptoms of uterine disturbance and suffering which I and others ascribe to inflammatory lesions. The intra-uterine mode of treatment is also brought forward by Dr. Simpson, in the essay in question, as one which he had tried for some time, found free from risk or danger, and pre-eminently successful.

The intra-uterine, or stem pessary, thus revived,—simplified and improved no doubt, and guaranteed as a safe and efficacious agent by a pathologist of great weight and authority, was received with favour, both in this country and abroad, by the followers of the mechanical or displacement school. To them, the deviations of the uterus were still the principal cause of uterine suffering, and yet they were miserably deficient in means of treatment. M. Amussat was reduced to propose to establish adhesion between the posterior surface of the cervix uteri and the vagina by means of potassa fusa! M. Velpeau seemed to rely on abdominal and other bandages; M. Hervey de Chegoin and others, on vaginal pessaries of various forms and materials : and all to little or no purpose, for the displacements were obstinate, and the womb would not be replaced or straightened by such means. This favour was greater even in Paris than in England, owing to the greater hold that these doctrines had over the medical mind. The late M. Valleix, like myself, an old pupil of M. Velpeau, more especially distinguished himself by his ardent and uncompromising advocacy of the displacement theory, and of the treatment of uterine displacements by the use of the intra-uterine stem pessary.

It would be vain to attempt to reproduce the various arguments that have been adduced on both sides, at home and abroad; it would take a volume. I shall therefore confine myself to recording my own opinions, and the data on which they are founded. Seven years' additional personal experience, and an attentive study of all that has been done and said during that time, have only confirmed the views which I advanced in the second edition of my work on "Uterine Inflammation" in 1849. I then said, and still believe, that the displacement theory, as an explanation of the morbid uterine and general symptoms of those who present uterine displacements, is an error. I also stated that most (not all) of these uterine displacements had their origin in modifications of volume, the result of inflammatory lesions, directly or indirectly; and that the rational treatment of these displacements consisted in the treatment of the inflammatory lesions which produce them.

I have myself had little experience of the fixed intra-uterine stem pessary : firstly, because, holding the above views, I did not often see its applicability, or the necessity for its use; and secondly, because I was afraid of it, for reasons which I shall give hereafter. The experience of others, however, now obliges me to say that its use is attended with considerable risk and danger. Although Dr. Simpson has himself, I believe, had no fatal accident in his practice, several fatal cases have occurred in England, and in Paris seven deaths from the use of the intrauterine pessary have been published—the one of M. Amussat, which occurred in 1826, and six recent cases. Of the latter, three have taken place in the practice of M. Valleix—two from acute peritonitis, and one from secondary pelvic abscess; one in that of M. Nélaton; one in that of M. Maisonneuve; and one in that of M. Aran. The three last were also cases of acute peritonitis. The discussion at the Academy of Medicine, on uterine displacements, and on their treatment by the intrauterine pessary, originated in the communication to the Academy of two of these fatal cases.

I shall now take into consideration the facts which have led me, individually, to repudiate the doctrine of uterine displacement as the principal cause of uterine suffering, and which have prevented my resorting, unless in exceptional cases, to mechanical means for the treatment of these displacements.

ANATOMICAL AND PHYSIOLOGICAL FACTS BEARING ON DISPLACE-MENT OF THE UTERUS.

In order to appreciate correctly the intricate question of uterine displacements, there are various facts, anatomical and physiological, which should be known and borne in mind.

The principal anatomical feature to which I would draw attention is, the extreme mobility of the healthy unimpregnated uterus. This extreme mobility may be proved experimentally. If the index finger is passed into the vagina—the patient lying on her back, the pelvis elevated, and the knees flexed—and if pressure is made on the cervix with the finger, it will be found that the healthy uterus yields with the greatest readiness to the slightest impulsion. It affords so little resistance to the finger, that, if the bladder and rectum are empty, it may be either raised directly upwards, towards the upper pelvic outlet, or depressed posteriorly, anteriorly, or laterally, and that with the greatest ease, and without the patient experiencing even discomfort.

The anatomical explanation of this great freedom of motion of the healthy uterus is to be found in the smallness of its size, and in the laxity of its connexions with the pelvic organs and cavity. In the female who has not borne children, the uterus only weighs an ounce or an ounce and a half; even in the one who has borne children, it does not weigh more than two ounces in the healthy state. This smallness in size of the uterus is evidently a provision of Nature. A small, light organ could be supported and kept *in situ* without the necessity of strong, unyielding bands or ligaments; whereas such means of support and retention would have been indispensable had the uterus been large and heavy, and at the same time would have been quite incompatible with the changes which it is destined to undergo in pregnancy.

On examining minutely the means of support which the uterus presents, we find that they are very slight. The lateral ligaments are not so much means of sustentation as peritoneal folds, enveloping the uterine appendages,-the ovaries. Fallopian tubes, and round ligaments. The latter, by their passage through the inguinal canal, and their firm cutaneous attachment, are really means of sustentation; but the support which they give to the uterus is very much like that given to a swing by the two ropes which suspend it, and which allow great freedom of motion in every sense. The insertion of the vagina on the neck of the uterus, and the closure of the vaginal canal on the lower extremity of the cervical cone, evidently constitute another important means of sustentation. It is at the insertion of the vagina on the neck of the uterus that the neck or lower segment of the uterus passes out of the pelvic cavity through the inferior pelvic fascia, which probably assists the vagina to support it. The connexion between the fundus of the bladder and the neck of the uterus also contributes, no doubt, to fix the uterus in its normal state; as does the pressure of the surrounding organs, the pelvic cavity being full and more or less closely packed during life.

If the walls of the abdomen are removed, and the uterus is examined *in situ*, it will be found that the uterus and the lateral ligaments extend across the pelvic cavity, and divide it into two sub-cavities; one smaller, the anterior, which contains the bladder; the other larger, the posterior, which contains the rectum. The uterus and the bladder are generally in juxtaposition; but the uterus and rectum, especially when the latter is empty, are separated by small intestines, which fill up the pelvic cavity and form a posterior support to the uterus.

The healthy uterus, in its normal condition and position, especially in women who have never borne children, is, I have ascertained, generally slightly inclined forwards,—that is, slightly anteflexed. This fact is not mentioned by anatomists; but if true, as I believe it to be, is of importance, from its direct bearing on the pathology of one of the forms of uterine displacement—anteflexion and anteversion. I became acquainted with the existence of this normal anteflexion accidentally a few years ago. Finding, as I have elsewhere stated, that the vital contraction of the os internum during life often opposes considerable resistance to the introduction of the sound into the uterus, I tried small wax or gum-elastic bougies, which generally pass with comparative ease. If these bougies are left a minute or two in the uterine cavity, the uterus being perfectly healthy and normal in size, on withdrawal they invariably present a slight anterior curve, as in the accompanying woodcut :—



The degree of the curve varies, as in the engraving, which represents two bougies that had been allowed to remain a couple of minutes in the uteri of two young sterile patients, perfectly free from uterine disease. One I had treated successfully, by dilatation, for dysmenorrhœa, the result of congenital narrowness of the cervical canal; the other I had treated for an inflammatory affection of the neck of the womb, and she had quite lost all morbid symptoms. Every precaution was taken to ensure correctness; the bougies being introduced by means of the speculum. This slight curve I find so constantly as I describe it, in the healthy uterus, and especially in females who have never been impregnated, that I cannot but consider it to be normal. Its existence, as the rule, moreover, is corroborated by the researches of M. Boullard, a young Paris surgeon, Prosector to the Faculty, who, after numerous and extended cadaveric investigations, has arrived at the same conclusion. Thus, his researches tend to establish by the examination of the dead, what mine tend to establish by the examination of the living,-viz., the existence of a slight degree of anteflexion as a natural anatomical state. M. Boullard's statements were discussed, and partly substantiated, partly negatived, at the Academy of Medicine, but principally on data furnished by the digital examination of living patients. The least consideration, however, will show that such a slight curve as the one indicated in the woodcut on the preceding page can be scarcely appreciable to the touch, although pathologically very important, as a predisposing cause of morbid anteversion.

The axis of the unimpregnated healthy uterus is generally considered to be that of the upper pelvic outlet; but if the slight anterior curvature which I describe is recognised, we must admit that the axis of the upper portion of the uterus only, corresponds to the upper pelvic outlet, whereas that of the lower portion or neck would partly correspond to that of the lower pelvic outlet. M. Cruveilhier says that the uterus has "no axis"—meaning thereby that its changes of position are so variable and constant that it can scarcely be said, anatomically speaking, to have any normal axis.

In speaking of the axis and normal position of the uterus, it is necessary to call to mind the fact that congenital modifications of form and axis are occasionally found. The uterus may be anteflexed, retroflexed, or lateroflexed as a congenital state, the inflexion varying from a scarcely perceptible degree to one in which the uterus is completely bent on itself, so that the cervix and body of the uterus correspond. These congenital malformations were ably described by M. Huguier a few years ago; and I have repeatedly met with illustrations of this form of deviation of the uterus from its normal standard.

The position of the uterus, and consequently its axis, is often changed or modified, owing to a physiological cause—marriage —which acts independently of disease of any kind or description. This really physiological displacement is of such constant occurrence, that it ought to be taken seriously into consideration, and I am much surprised that none of the speakers at the French Academy mentioned it. Under the influence of congress, in a great number of women entirely free from any morbid uterine state, sterile or not, the cervix is thrown mechanically backwards, and the body of the uterus forwards, that is in anteversion. This is more especially the case when the vagina is short, or when the cervix is long from the vagina being inserted high up on the uterus, so as to expose in the vaginal cul-de-sac a considerable portion of the uterine neck. This frequent existence of deviation or displacement of the cervix backwards and of the uterus forwards, as a really postmarital physiological state, independently of any morbid uterine condition, or of any kind of pelvic change or influence, must be considered an important element in the appreciation of the pathological importance of anteversion of the uterus. Indeed, its non-recognition, in my opinion, renders to a great extent valueless the conclusions of many who have spoken and written on the subject.

Owing to the laxity and freedom of the anatomical connexions which I have above described, the uterus moves, as we have seen, with the greatest freedom in the pelvic cavity, readily adapting itself to the ever-varying positions which it is called upon to assume. Thus, if the bladder is full, it presses on the uterus and retroverts it, a fact which can easily be ascertained. If the rectum is loaded with fæces, it displaces the small intestines, presses on the uterus from behind, and anteverts it. In walking and riding the uterus sways to and fro, more or less, according to the degree of tightness with which the pelvic viscera are packed, and according to the degree of support it receives. Both in walking and in standing it falls slightly; indeed, I much question, whether, in every woman, however healthy, the uterus is not always lower when she retires to rest at night, than when she rises in the morning. Moreover, in the married condition, it is constantly exposed to physiological displacements.

The freedom of motion which its ligaments and modes of attachment allow to the uterus is, however, most forcibly illustrated by the change of position which occurs in pregnancy. After the first few months of pregnancy, the enlarged uterus ascends and leaves its former position and connexions in the pelvic cavity, becoming for the time an abdominal organ. To admit of this entire change of position, the lateral ligaments unfold, and the round ligaments are elongated as the uterus increases in size. At the termination of the pregnancy, the uterus, which in a primipara has increased from one ounce to thirty or forty ounces, rapidly returns to all but its former size,—to about two ounces,—passing through a series of vital changes. This marvellous return to all but the original size and weight no doubt takes place, in order that the means of support which we have enumerated may again be sufficient to support the uterus, and to maintain it *in situ*. These changes, from small to large, and from large to small, moreover, are capable of being reproduced an indefinite number of times, during the period of ovarian activity. It is to this end that the uterus is made an organ apart from all others; that it is endowed with vital powers which no other either requires or possesses.

From what precedes,—and the facts which I have advanced cannot be denied,—it is evident that even the unimpregnated uterus, in health, is by no means destined to remain constantly in the same anatomical position, to preserve constantly the same axis. It is also equally evident that the healthy uterus bears changes of position, and considerable pressure from surrounding organs, &c., without either pain, discomfort, or inconvenience.

The explanation of this fact is to be found in a physiological law, which, although well known, appears to me to have been all but entirely lost sight of in the discussion of uterine displacements. All our organs, internal and external, when in a healthy state, are capable of bearing, without pain or inconvenience, considerable pressure, and any degree of displacement of which their means of fixity can admit. Thus, if a healthy person lies on the side,-say the right side,-the heart, the left lung, the stomach full of food, obey the laws of gravity, fall more or less, and press on the organs beneath them; and that, as I have said, without occasioning pain or inconvenience. Were any of these organs inflamed, however, the result would be far different: great pains would be experienced. Thence it is that patients suffering from inflammation of any thoracic or abdominal organ lie on the back, to avoid the pressure of the surrounding viscera on the diseased organ, pressure which it can no longer bear.

It may be objected that physiological pressure, the result of

F 2

change of position and of functional conditions, is essentially temporary, and that, were it permanent, it would not be so easily borne. Here, however, general pathology comes to our assistance, and teaches us that *non-inflammatory* morbid growths and tumours, slowly developing themselves, may exercise considerable *permanent* pressure on the organs which surround them, in any part of the economy, without the supervention of any symptoms of distress or inconvenience. This fact, which has not received the attention it deserves, I developed at considerable length in the third edition of my work; and I shall conclude this rapid survey of the anatomy and physiology of the uterus, with reference to its mobility, by the following extract, page 405 :—

"The impunity with which pressure may be exercised on viscera and organs by tumours, the growth of which is very gradual, may be observed in every part of the economy. Even the brain, the most sensitive of all to pressure, will bear it if very gradually applied. Thus, we often see exostosis and tubercular formations greatly compressing the cerebral substance without the supervention of any symptom until the growths have reached a considerable size, or until inflammation supervene. It may, indeed, be considered an axiom in pathology, that all organs will largely accommodate themselves to pressure, provided such pressure be gradually applied, not carried to the extent of seriously interfering with their functions, and be unaccompanied by inflammatory action. . . . The history of fibrous growths (of the uterus) permits no room for doubt on this question. These growths almost invariably attain a considerable size, and deeply modify the position of the uterus, giving rise to retroversion, or anteversion, and exercising considerable pressure on the pelvic viscera, before they occasion any appreciable symptoms. In fact, my experience shows that patients thus suffering seldom complain at all, unless there be some concomitant inflammatory affection of the cervix or of its cavity, until either the external appearance of the abdomen be modified by the size of the tumour, or until hæmorrhage supervene. The first period of the existence of the tumour, and the displacement which it occasions, pass unperceived and unnoticed by the patient herself, and by her medical attendant."

THE PATHOLOGY AND THERAPEUTICS OF DISPLACEMENTS OF THE UTERUS.

In my preceding remarks I have drawn attention to the smallness of size and lightness of weight of the uterus; to the great laxity of its means of support and fixity; to the extreme mobility which it consequently evinces; to the ease with which it obeys the many physiological causes of displacement to which it is subjected; and to the complete immunity from pain, or even inconvenience, with which these displacements are borne.

I have explained the immunity from pain evinced by the uterus when displaced under the influence of physiological causes, by referring to the law through which all our viscera bear, without inconvenience, any amount of displacement compatible with their means of fixity, and any amount of pressure to which they can be exposed from the proximity and functional activity of surrounding organs. I have pointed out that this capability of our organs to bear considerable pressure without inconvenience is not only observed in the temporary physiological conditions described, but is also found to exist under the permanent pathological pressure of non-inflammatory morbid growths, such as tumours, aneurisms, &c. I have laid stress on the very important fact, that when once inflammation supervenes, this immunity from pain and inconvenience on pressure ceases ;-as evidenced by the inability of patients suffering from inflammation of the abdominal or thoracic viscera to lie otherwise than on their back : or as evidenced by the pain which is experienced on the pressure of an inflamed finger. Finally, I have recalled the rapidity with which the uterus increases in size and weight under the influence of the physiological stimulus of pregnancy, and reverts to its natural size and weight when that stimulus is removed .- This brief recapitulation is necessary, as in the above facts is found the key to the history of uterine displacements or deviations, as I have interpreted them.

The uterus may be displaced or deviated in various ways. Its position and form may be modified with reference to its own axis, or with reference to its conventional anatomical pelvic axis, which corresponds, as we have seen, to that of the upper pelvic outlet. When the axis of the uterus itself is modified, the uterus is said to be flexed, anteriorly, posteriorly, or laterally; and we have thus antero-flexion, retro-flexion, and latero-flexion. When the uterus is displaced *in toto*, without any abnormal bend or flexion taking place, so that its axis is changed with reference to that of the upper pelvic outlet, it is said to be antero-verted, retro-verted, or latero-verted.

Practically, these two forms of uterine displacement are so often met with in the same uterus, and are often so evidently stages, degrees, of the same morbid state, that Dr. Simpson has merged them into one, and only recognises, practically, three forms of uterine displacement-antero-version, retro-version, and latero-version. Theoretically, however, we must accept the two; for if these displacements really do exercise an important influence in the production of morbid uterine and general symptoms, the modus operandi in both, or at least in the more simple cases of both, must be quite different. In simple flexion, unaccompanied by uterine enlargement, the pressure is merely intra-uterine,-is only felt, in an appreciable degree, by the walls, vessels, and nerves of the bent uterus. In actual displacement of the uterus in mass, the uterine structures themselves remain as they are; the pressure is on the surrounding organs, and the strain is extra-uterine; on the ligaments and extra-uterine vessels and nerves.

Simple or combined, these morbid conditions of uterine position—to which we must add prolapsus, more or less complete, of the entire organ—are generally found to co-exist with the uterine suffering or ailment to which I have so repeatedly alluded, and with the inflammatory lesions which so usually accompany it. The extreme partisans of "The Displacement Theory" attribute to the existence of these displacements primary importance, and think that, in the majority of cases, they are the real cause of the mischief existing ; that they constitute the morbid condition which principally requires treatment. In their eyes the co-existing inflammatory lesions, the ulcerations, hypertrophies, and indurations, are, in many, if not in the majority of cases, epiphenomena, either occasioned by the displacement, or merely complicating it.

The reasons which have led me to the conclusion that these views are erroneous, that the displacement is, on the contrary, in most instances, really the epiphenomenon, and that it does not require, generally speaking, actual treatment of any kind, may be divided into physiological, pathological, and therapeutical.

Physiologically, we have seen that the uterus bears pressure and displacement, when perfectly healthy, without pain or inconvenience. We have seen also, that in the married state the neck of the uterus is very frequently mechanically retroverted, thrust on the rectum, into the sacral cavity,-the body of the uterus being, at the same time, anteverted,-and yet that all goes on normally, without either distress or discomfort being experienced. We have seen that slight anteflexion, or anteversion, is probably a natural condition during life, and that very decided flexions of the uterus may exist congenitally, or be produced by accidental causes, such as violent efforts, habitual rectal constipation, or even menstruation, and remain for a time or for life, without producing any morbid symptoms. Such being the case, on what reasonable grounds can we be called upon to attribute to a slight flexion or to a slight displacement of the uterus the symptoms of uterine suffering presented by a female in whom one or the other co-exists with inflammatory lesions? Is it sound logic-is it rational, so to do? Is it not much more consistent with physiological observation and common sense to attribute the uterine and general disturbance to the inflammation, and to consider the displacement as the epiphenomenon-as the secondary, comparatively unimportant, element? And if this reasoning applies to slight displacements, does it not also apply, by extension, although in a minor degree, to the more decided uterine displacements when connected with inflammatory lesions?

Pathologically, there are many valid reasons for considering moderate displacement of the uterus a phenomenon of secondary, and not of primary, importance, in the cases of uterine suffering in which it is observed. The inflamed uterus, instead of bearing, without inconvenience, as the healthy uterus does, pressure and displacement, often becomes extremely tender, and, like the inflamed finger, suffers not only from pressure, but from mere contact. Thus, even when there is no deviation or displacement of any kind, we frequently find that females who are labouring under slight uterine inflammation, complain greatly of weight, heaviness, and bearing-down, and are unable to stand or walk with ease. The mere physiological weight of the inflamed uterus or cervix uteri, its mere contact with, and pressure against, the surrounding organs when in the erect position, becomes all but unbearable, and the recumbent position is sought with eagerness. Why, therefore, should we attribute uterine suffering to displacement only, or even principally, if, on the one hand, we constantly find all the symptoms, local, functional, and general, that characterize such suffering existing in cases where there are inflammatory lesions only, without either deviation or displacement; whilst, on the other hand, mere displacement unattended with inflammatory disease fails to produce these symptoms?

This train of reasoning becomes the more cogent when we consider that-setting aside the physiological and accidental displacements to which I have alluded-uterine displacements are generally the immediate result of enlargement of the uterus or of its cervix, and that enlargement of the uterus is generally the result, direct or indirect, of inflammation. Both these propositions have been contested, and yet it appears to me that they admit of easy demonstration. We have seen that the uterus is physiologically endowed with a vital property that no other organ possesses. Under the influence of its normal stimulus, a fecundated ovum, it increases to twenty or thirty. times its usual weight in the course of nine months; and once freed of the ovum, it rapidly diminishes, so as to return in a few weeks to its natural size. This property is capable of being roused by other than physiological stimuli. Almost any morbid stimulus is followed by the same vital result. Thus all kinds of morbid growth, which originate in the substance of the uterus, are attended with the development and aggrandizement of the uterine structures. Inflammation of the

uterus also, wherever situated, is usually attended with enlargement, as in other organs, but more readily than in other organs. If the inflammation is general, the entire uterus enlarges; if it is local, the part affected increases, either alone or principally.

This form of uterine enlargement is the direct result of inflammation acting on tissues vitally prone to develope themselves. There is, however, another form of uterine enlargement, indirectly the result of inflammation, which is of great importance, and which does not appear to me to have received the attention that it deserves-viz., enlargement from the premature arrest of the absorption or transformation process, which physiologically reduces the uterus to its normal size after parturition. This pathological arrest frequently occurs as a result of metritis, and, more frequently still, as the result of inflammatory lesions of the cervix uteri, existing before labour, or produced by contusions or lacerations during labour. Under the influence of uterine irritation thus induced, instead of diminishing-as it ought, until it reaches a weight of two ounces-the uterus stops short at three, four, five, &c. When the arrest is connected with actual metritis, the enlarged uterus is sensitive to pressure, and all the symptoms of chronic metritis are present. When, on the other hand, it is the mere indirect result of cervical disease, the uterus is in a passive state of enlargement only, and is neither sensitive nor painful on pressure.

As the uterine cavity enlarges along with the walls when the uterus is generally enlarged, we have in the uterine sound a valuable means of estimating, indeed of positively measuring, the size of the enlarged uterus. Should there be any difficulty in passing the sound, a small wax bougie may be used, as I have stated, and if left a couple of minutes will give a model of any incurvation that may exist.

The means of sustentation which the uterus possesses are adapted, as we have seen, to support an organ one or two ounces in weight only. If the uterus enlarges regularly, through the presence of a morbid growth in its cavity,—a fibrous tumour, for instance,—it may gradually rise out of the pelvis, as in pregnancy; but when the enlargement and increase of weight are partial or concentric, and limited, the tendency is for the uterus to follow the laws of gravity, and to fall either backwards in retroversion, or forwards in anteversion, or downwards in prolapsus. The direction which the uterus takes depends on various circumstances. If the enlargement or increased weight is principally in the posterior wall of the uterus, as is often the case, or if the patient lies much in the recumbent position, the tendency is for the weighted uterine fundus to fall backwards in retroversion. If the anterior wall is the seat of enlargement, the uterus may fall forwards in anteversion. Anteversion also very frequently occurs as a direct result of the mechanical post-marital displacement backwards of the neck of the uterus, which I have described ; especially when the cervix itself is hypertrophied and indurated. The natural anteflexion which I have described is likewise, no doubt, a predisposing cause of this displacement. When the uterine enlargement is general, not very great, and the patient is obliged to stand and walk much, the uterus falls directly, giving rise to prolapsus.

Partial prolapsus is one of the commonest of all uterine displacements, and the study of the conditions under which it takes place throws considerable light on the displacements of the body of the uterus. Prolapsus of the uterus, as distinguished from anteversion and retroversion, is most frequently the result of the increase in size and weight of the lower or cervical segment of the organ. The cervix uteri becomes enlarged as a result of metritis, or of the arrest of post-partum absorption; or, as is much more frequently the case, of local inflammatory disease of the cervical mucous membrane. Its weight being increased, it drags down the uterus, as a piece of lead affixed to the bottom of a cork floating in water would drag down the cork. This displacement is more especially prone to occur if the floor of the pelvis, the vagina, the vulva, and perinæum, and the uterine ligaments generally, have been relaxed and over-distended by frequent parturition or from idiosyncrasy. When the cervical or vaginal mucous membranes, or both, are inflamed and tender, prolapsus is attended with considerable distress; but when these conditions are absent, the cervix may be very low in the vagina without either pain or discomfort being experienced. This is a pathological illustration of the fact which we have already seen physiologically demonstrated—viz., that a considerable degree of uterine displacement, of any description, may exist without distress, provided there be the absence of inflammatory action.

The latero-versions which are not occasioned by adhesions, the result of pelvic abscesses, peritonitis, &c., are, I believe, nearly always congenital. In some women, the healthy, normal uterus lies diagonally in the pelvis, the cervix being directed to the groin, and the fundus towards the ilium. This congenital deviation is generally observed from right to leftthat is, the uterus lies so that the cervix is directed towards the left groin. As I observe in my work, page 11, "This fact, which is not mentioned by anatomists, should be borne in mind, as ignorance of it may lead to error in the diagnosis of disease. Most of the lateral deviations of the uterus described by pathologists are merely exaggerations in a diseased and hypertrophied organ of this natural position or direction." M. Huguier, I may mention, attributes congenital lateroversion to congenital shortness of one of the round ligaments.

Therapeutically, the secondary nature and importance of uterine displacements, when not carried to an extreme degree, may be undeniably proved by the results of practical experience. For very many years I have completely ignored, as far as direct treatment is concerned, the existence of displacement in the numerous cases of uterine ailment which I have been called upon to treat. Looking upon the displacement as a mere congenital, physiological, or pathological concomitant of the inflammatory disease which I all but invariably find to exist when uterine suffering is present; or considering it to be the direct result of enlargement of the body or neck of the uterus, inflammatory or other, I have generally looked upon it as a mere symptom, and acted on this view. Thus, as a rule, I have thrown aside pessaries, bandages, and all artificial or mechanical agencies for the sustentation or straightening of the prolapsed or deviated uterus; accepting these conditions,

and the distress they may occasion, as symptoms not in themselves requiring any particular treatment beyond partial rest. My great aim has been to remove what I consider the cause of the pathological prolapsus, retroversion, or anteversion; be that cause relaxation or disease of the vagina, congestion, induration and hypertrophy, or passive enlargement, either of the body or neck of the uterus.

I find that when these morbid conditions can be thoroughly and completely removed by treatment, and when time has been allowed to Nature to restore the integrity and functional activity of the recently diseased organs, one of two things occurs—either the displacement ceases—the uterus ascending to its natural position if prolapsed, and returning to its normal intra-pelvic situation if retroverted or anteverted,—or it does not. In either case, however, in the immense majority of instances, the patient is perfectly freed from pain, or even discomfort, and ceases to complain of the symptoms of uterine suffering.

When the uterus returns to its physiological position as a result of the removal of the morbid condition which produced the displacement, the subsidence of pain and discomfort is a fact which may be explained either by appealing to the displacement, or to the inflammatory lesions which accompanied it. This alternative, however, is no longer admissible when the displacement—prolapsus, anteversion, or retroversion—remains after the removal of the inflammatory lesions; all pain and discomfort at the same time disappearing, and this I am constantly witnessing.

I speak within very reasonable limits when I say that scores and scores of my former patients, who had for years suffered from uterine ailment before they were treated by me, are now living like other people, perfectly free from inconvenience of any kind, walking, standing, running, and going through all the ordinary ordeals of life, *although the uterus has remained displaced*. It has either remained lower than normal, or has kept in anteversion or retroversion, and in some to a considerable extent. These women are, however, otherwise sound, free from any inflammatory lesion, and the displacement consequently

76

gives them no more trouble than do the congenital and physiological displacements described above.

Thus taught, thus enlightened by anatomical and physiological data, and by therapeutical experience, when women who are wearing bandages, pessaries, &c., for displacements apply to me, I commence by removing them-temporarily, as I tell the patients. I then study minutely the state of the uterine organs, and generally find a very tangible cause for this painful displacement in the shape of some of the diseased conditions which I have enumerated. These I make it my object to remove, at the same time carefully regulating the general health, treating all local complications of bladder, bowels, &c., and enjoining partial rest and repose. I tell the patients to bear the annoyance and pain occasioned by the displacement as a temporary symptom of their disease, as they would bear the pain and discomfort of a sprained ankle or of a broken leg. All disease removed as far as possible, I ask for time,-for three, six, or twelve months passed at home under general hygienic and dietetic discipline, in order that Nature may be enabled to come to the patient's assistance, to fine down swelling, and to restore healthy tone and action. That period passed, if the displacement still persists and still proves a source of discomfort, I myself am ready to sanction the return to the bandages and pessaries. Not one out of fifty, however, of my patients has ever occasion to resume these mechanical means of treatment when they have gone through the above ordeal. The necessity ceases with the diseased condition that occasioned it, and the bandages, abdominal and other, as also the pessaries, are all but invariably thrown aside for ever.

In the preceding remarks I have purposely excepted severe cases of displacement. There are cases of prolapsus or procidentia uteri, in which all the means of sustentation which the uterus naturally presents have been so strained and weakened, and in which the vaginal outlet is so loose and open, that the uterus will fall when the patient is in the erect position, and no treatment can restore the healthy tone of the parts involved so as to admit of the uterus being retained *in situ*. When this is the case, like other practitioners, I resort to mechanical agencies, but principally to extra-vulvar pressure and support. All intra-vaginal pessaries, in my experience, give rise to irritation, and are consequently objectionable, and to be dispensed with, if possible. Complete procidentia uteri is principally observed in the lower classes, and is evidently the result, generally speaking, of their being up and about too soon after their confinements, when the uterus is much too heavy.

Retroversion, when extreme, and attended with considerable non-reducible enlargement of the uterus, is also a most unmanageable form of ailment, and must likewise be excepted from the above remarks. It may remain as a serious morbid condition when all inflammatory disease has been removed, blocking up the rectum, and occasioning considerable distress by pressure; as does retroversion in pregnancy when the displaced uterus has attained a certain size. The mention of this intractable morbid condition leads me back to the consideration of Dr. Simpson's fixed intra-uterine stem pessary.

Holding, as I do, the views above enunciated, my readers will at once understand that I see no occasion whatever for the use, either of the stem pessary or of any other, in the more ordinary cases of retroversion and anteversion. Thinking, as I do, that these displacements are often met with as mere temporary results of removable morbid conditions ; or that they are either physiological conditions, or non-important traces-remains-of past pathological states, why should I torment my patients with mechanical remedies, the presence of which is often attended with suffering and accidents, and occasionally with dangerous, or even fatal, consequences? In the more severe forms of retroversion, however, to which I have just alluded, I would gladly avail myself of the stem pessary, other means failing, had I any confidence in its efficacy, and were I convinced that its use was free from danger. I have seldom, however, resorted to it, because I think I have reason, even from my own limited experience, to believe it to be inefficacious in such cases, the displacement returning as soon as it is removed; and because the experience of others shows that it is a dangerous remedy ; especially, I should say, in this very class of cases, in which the strain on the intra-uterine extremity must be very great.

78

This remark, however, it must be remembered, does not apply to the bulb-ended metallic dilators which Dr. Simpson has introduced and recommended for the dilatation of the cervical canal. I have very often used them, and believe them to be free from risk of any kind, if prudently and carefully employed. Not being fixed, and moving with the uterus as they do, there is no strain or pressure on the walls of the uterine cavities.

I have always treated the uterine cavity with great respect, owing partly, no doubt, to a painful lesson which I received long ago, whilst house-surgeon to M. Jobert de Lamballe at the Hôpital St. Louis. A fine young woman, twenty-six years of age, died under my charge from acute metro-peritonitis, the result of an injection into the uterine cavity. She was suffering from enlargement of the womb, and it was only discovered after death that the cause was the presence of a small fibrous tumour. The os internum being thereby opened, the injection penetrated freely into the uterus, and caused the inflammation which rapidly destroyed her. When, also, I began to use the uterine sound, at Dr. Simpson's suggestion, I soon found that as long as it occupied only the cervical canal there was usually no pain; but that as soon as it passed the os internum, and touched the uterine mucous membrane, there was always pain, sometimes faintness, and often a discharge of blood. These facts, combined with my theoretical and practical views, have contributed to make me very cautious in the experimental use of the fixed stem pessary. Nor do I regret that it has been so, seeing the fatal results which have recently attended the practice of the Paris surgeons.

With their experience before me, and the knowledge that other fatal cases have occurred in England, I am inclined to think that I shall henceforth be even still less disposed than formerly to resort to the intra-uterine method of treating retroversion of the uterus. It is fortunate, therefore, for me that the experience of many years has led me to the conclusions which I have embodied in the course of this Review—viz.,

That uterine displacements, in the immense majority of cases, require no special treatment; that in those extreme cases of anteversion and retroversion in which it really would be desirable to straighten the uterus by mechanical means, the intra-uterine pessary, when borne, is of but little, if of any use, as the displacement usually returns as soon as it is extracted; and that in complete prolapsus, vulvar bandages afford the support the easiest borne, and the most efficacious; combined occasionally with an abdominal bandage, with a view to take off intestinal pressure.

CHAPTER VI

81

SUMMARY.

THE DOUBLE MEDICO-CHIRURGICAL CHARACTER OF UTERINE PATHOLOGY.

My aim in writing the Review of the opinions and theories more or less current respecting uterine pathology which I have now concluded has been twofold. Firstly, I have wished to show that the frequent existence of inflammatory lesions of the uterine neck, ulcerative and other, which I and those who preceded me in the surgical investigation of uterine diseases have announced, is a truth. That it really is a truth, an undeniable truth, I have proved, not by my own experience, or by that of the pathologists who agree with me, but by appealing to the observation and writings of practitioners who hold totally opposite opinions as to the pathological importance, and even as to the cause and nature, of these lesions. Henceforth this fact must be accepted as one established on an incontrovertible basis, and to question it will merely expose those who do so to the smile of the more enlightened members of the profession. Secondly, I have wished to show that the various theories which have been brought forward with a view to explain uterine ailment and uterine lesions, without referring to idiopathic uterine inflammation as, generally speaking, their direct cause, are untenable on scientific and practical grounds. This I have proved by demonstrating that these theories are founded on the endeavour to give a general application to facts which in reality only admit of a very partial application.

Thus, cases may and do occur in which inflammatory lesions of the neck of the uterus, including ulceration, exist without presenting any pathological importance. In some women, the

organic sensibility of the womb, and its sympathetic connexion with the rest of the economy, are so slight, that severe uterine disease, inflammatory or other, may exist for months or yearsas in other organs-without producing either much local discomfort or much general disturbance; but these are exceptional cases. To conclude from them that inflammatory lesions in this region are, as a general rule, of no pathological importance, is to state what is, on the one hand, contrary to experience, and, on the other, contrary to the laws of general pathology, to which I have so often and so confidently appealed in the course of this Review. What would be thought of a pathologist who gravely asserted that ulcerations of the eye, the nose, the mouth, the throat, the larynx, the stomach, the rectum, the anus, the vulva, &c., were of no pathological importance ?---and if they are of importance, why should the uterus, the sensitive centre of so many affinities and sympathetic reactions, be the solitary exception to a general pathological law?

Thus, leucorrhœa often exists as a mucous membrane and follicular hypersecretion, the result of physiological or pathological congestion, and may, in some rare cases, exercise a morbid reaction on health, and require treatment. But to consider this hypersecretion as the essential disease that generally produces the symptoms of uterine ailment, local and constitutional; and to look upon the recognised inflammatory lesions and reactions of uterine mucous membrane, which are so constantly found in cases of uterine ailment, as mere symptoms of this essential disease, is to ignore entirely the laws of general pathology. It is, indeed, to mingle together in inextricable confusion the cause, nature, symptoms, and sequelæ of uterine disease.

Thus, ovaritis exists both in the acute, sub-acute, and chronic forms, and when it is present, reacts of course on the uterine functions, giving rise to a regular sequence of symptoms; but to attribute to sub-acute ovaritis the cases in which tenderness, pain, and fulness of the ovarian region are found, and to look upon the coexisting uterine lesions and symptoms as merely sympathetic conditions, is simply a pathological error, the result of physiological prepossessions. It is giving to the ovaries pathologically the same pre-eminence in the female genital system

that they really do exercise physiologically-a pre-eminence to which they have no real claim.

Thus, primary and secondary syphilis are both observed in the neck of the womb, but their presence is, in reality, so rare, that even in the wards of a syphilitic hospital they are seldom observed, and they have very little to do with the uterine disease observed in town practice.

Thus, displacements of the uterus are constantly met with; but, except in extreme cases, they are, in reality, of secondary importance. They often exist in the healthy without being recognised or complained of; and they often remain after the removal of disease without distress or inconvenience being experienced. Whilst in those who suffer from the symptoms of uterine ailment, they generally coexist with decided inflammatory lesions; their presence may be generally explained by these lesions; and they generally disappear by degrees, as the inflammatory lesions are cured and removed.

If I have succeeded in establishing the truth of these two propositions, the correctness of the doctrines which I have so long and so strenuously defended, and which I briefly exposed in my second chapter, must be acknowledged; and the inflammation theory, as it has been termed, must be accepted as the key to the greater part by far of the field of uterine pathology. My readers, however, are now in possession of the principal data, anatomical, physiological, and therapeutical, on which my own convictions are founded, and it remains for them to examine Nature herself, to use their own powers of observation and judgment, and thus to arrive at personal conclusions and opinions on the subject. Most sincerely do I trust that the arguments which I have adduced may lead many who have hitherto been supine to throw off the trammels of preconceived opinions, to think and observe for themselves, and thus to assist in establishing on a firm basis a branch of medicine of such vital importance to the whole community. At present it is in a transition state, many conflicting opinions and doctrines, as we have seen, dividing the medical mind. Such a state of things, however, is not destined to last. The sound common sense of the practical members of the medical profession will

G 2

before very long discern the truth, winnow the grain from the chaff, and definitively settle these disputed questions, as it has settled many others. This, the future verdict of the profession, may give the palm to the opinions which I defend, or it may possibly give it to those which I criticise or condemn. In the latter case, I should only be able to excuse my error by claiming to have conscientiously brought to the study of the subject all the powers of observation and reasoning which I possess. But if, on the contrary, as I hope and believe, the views I defend are eventually triumphant, my great reward will be the knowledge that I shall have contributed, under difficulties of no ordinary kind, to the advancement of true science, and to the welfare of the human family.

Before concluding, there is one fact which I am anxious to again bring forcibly before my readers; and that is, the double, medico-chirurgical character of uterine pathology. If the views which I have developed are correct, confirmed uterine disease generally passes out of the domain of medicine into that of surgery, and requires surgical means of investigation and surgical means of treatment. The practitioner, therefore, who would successfully grapple with the difficulties of uterine pathology must, on the one hand, be thoroughly imbued with medical knowledge; and on the other, he must be well acquainted with the doctrines of surgery, and accustomed to its manipulations and operations. The publication of this essay in the pages of The Lancet has given rise to a discussion which illustrates and substantiates this fact, and also shows what are some of the difficulties against which the rational therapeutics of uterine disease have to contend. It has been stated that to use the more powerful surgical agents which I recommend to modify morbid vitality in chronic, intractable, or suspicious forms of inflammatory and ulcerative disease of the cervix, is to mutilate that organ. I can, for my part, scarcely understand how any one conversant with the doctrines and operations of surgery can apply such a term to the cautious and prudent use of the mineral acids, of the potassa cum calce, or of the actual cautery, employed, not to destroy, but to modify morbid vitality. Nor can I understand how any such prac-

titioner can write with absolute horror and dread of the actual cautery, or " white iron," which is an acknowledged, accepted surgical agent, still used and prized by many surgeons, and which would be more employed, were it not that it alarms patients. I have often seen it used, and used it myself in my early surgical days, for various diseases, and have always found it a safe and manageable agent. Indeed, this fear of the actual cautery, and of the more powerful caustics, appears to me quite puerile in a surgical point of view, if these agents really are required to cure disease. What is surgery, but the application of the knife, of caustics, of the actual cautery, or of whatever powerful agent may be required to remove or to destroy disease, or to modify vitality? Why, therefore, in plain common sense, should the application of these agents to the occasional treatment of uterine disease, be spoken of with "unsurgical horror and alarm," if they really are occasionally required? and why should they not be required in exceptional cases of uterine disease, as well as in exceptional cases of disease of the bowel, vulva, meatus urinarius, &c. ?

Here again we may appeal to the laws of general pathology. Once it is admitted that the neck of the uterus is liable to inflammation, ulceration, thickening, hypertrophy, and induration; that it may become the seat of unhealthy, suspicious disease, ulcerative and other; and that these diseased conditions may exist uncured an indefinite number of years,-every well-informed surgeon will allow that there must be cases which will not give way to the nitrate of silver, to astringents, leeches, &c. And if so, what is to be done with them? Are we to leave the patients to their fate, and confess ourselves impotent to cure, whilst we have more powerful surgical agents in our hands,-agents which can cure these very morbid states ? To the surgically-educated practitioner there is but one solution of this question : as long as there is a fair chance of cure, he will keep to the milder means of treatment; it is his imperative duty so to do. As soon, however, as he has ascertained that these means are insufficient, he will at once, prudently and cautiously, but without fear or trepidation, resort to the more powerful means of treatment at his command.



APPENDIX.

DURING the publication of this Review, I have received a valuable communication from an Indian practitioner, a thorough stranger to me, which so fully bears out the truth of an assertion elsewhere made, that I think I cannot do better than here append it. I allude to the statement contained in the preface to the second edition of my treatise on "Uterine Inflammation," to the effect that "the descriptions of uterine disease which I have given are the expression of facts truly observed and faithfully reproduced, and will hold good alike in all climes, in all lands, and in all grades of social life." I may add that Dr. Stewart's testimony, as to the frequent existence of inflammatory and ulcerative disease of the neck of the uterus amongst the native women of India, is thoroughly corroborated by the experience of Dr. Scott, formerly Physician to the Hospital for Native Women at Madras, and now practising at Ootacamund. Dr. Scott has repeatedly informed me that he has found these diseased conditions to be quite as frequent amongst the native women at Madras as I have done in Paris and London. Ι merely transcribe Dr. Stewart's communication, which is as follows :--

"Warley Barracks, Brentwood, Essex, 19th March, 1856.

"DEAR SIR,—It may perhaps interest you and the readers of *The Lancet* to know that your views and observations regarding the frequency and importance of ulceration of the cervix and os uteri are amply borne out in India, as everywhere else. In proof of this, I take the liberty of sending you a somewhat curious memorandum, drawn up for me by one of my late esteemed associates in the Calcutta Medical School, Baboo Madoosudun Goopta, of the appearances observed in these parts on the post-mortem examination of fifty *native Indian* females, whose deaths occurred in hospital from other casual diseases.

"A long and extensive experience amongst native families in Calcutta, from the highest to the lowest classes, fully satisfied me that the particular affections which you have so ably described and brought to the notice of the profession are of *immense frequency*, and that the plan of treatment which you so ably advocate is the only right one. "I am, Sir, yours truly,

"D. S. STEWART, M.D., "Surgeon Hon. E.I.Co.'s Depôt, Warley."

Memorandum of the Condition of the Genital Organs in the Bodies of Fifty Native Indian Women, who had Died of various Diseases. By MADOOSUDUN GOOPTA, S.A.S.

No.	Age	Uterus.	Cervix and Os Uteri.	Ovaries and Fallopian Tubes.
1	46	Natural	Natural	Fallopian tubes obliterated.
2	50	Small, hard	Os rigid and contracted f Os irregular, a tumour on ?	Ovaries shrivelled.
3	35	Natural	{ one side	Left ovary much diseased.
4	40	Ditto	f Cervix much inflamed, os ?	Healthy. (Left ovary enlarged and in-
5	24	Ditto	ulcerated	flamed,
6	34	Ditto	Os and cervix ulcerated	Fallopian tubes strictured.
7 8	45 50	Ditto	Os closed Fungous tumour	Both ovaries absorbed. Left Fallopian tube obliterated.
9	25	Ditto	Os widely open	Both ovaries healthy.
10	27	Enlarged by re- cent pregnancy, inflamed}	Inflamed	Ovaries, &c., inflamed.
11	50	Swollen and soft	Os ulcerated	Healthy.
12	30	Natural	Os scirrhous, deep ulcers	Ovaries natural.
$\frac{13}{14}$	42 40	Ditto Ditto	Cervix swollen Os ulcerated	One Fallopian tube obliterated, Natural.
15	30	Large and inflamed	Lacerated ulcers	General redness.
16	27	Natural	Cervix inflamed, os ulcerated	Tubes and ovaries adherent.
17	30	Gravid	{ Cervix inflamed, os exten-} { sively ulcerated}	General inflammation.
18	28	Natural	Cervix swollen, soft	Ovaries sound.
19	50	Prolapsed	Not unhealthy	Natural. S Right Fallopian tube oblite-
20	30	Natural	open	{ rated.
21	50	Ditto	Os irregular, hard	Ovaries absorbed.
22 23	36 27	Sloughing Natural	Cancerous ulcers Cervix and os inflamed	Inflamed. Natural.
24	45	Ditto	Ditto	Ditto.
25	46	Ditto	Os obliterated	Ovaries absorbed.
26 27	40 25	Fatty degeneration Natural	Cervix and os ulcerated Tubercles in cervix	Ditto, Ovaries red.
28	30	Ditto	Natural	Healthy.
29	29	{ Displaced fundus } adherent to rec- }	{ Cervix long and large, bent } { slightly backward}	Natural.
00	20	(tum)	(Ulcers within the canal of)	Ovaries very hard,
30	30	Natural	the cervix	
31 32	30 50	Ditto	Healthy Cervix and os congested	Fallopian tubes adherent. Healthy.
33	40	Ditto	Healthy	Hydatids in left ovary.
34	45	Ditto	Ulcers in cervix	Ovaries sound, Fallopian tubes obliterated.
35	45	Ditto	Healthy	Scirrhus of right ovary.
00	10	(Displaced to right)		
36	65	{ side, hard and swollen	Cervix much ulcerated	{Ovaries congested, Fallopian tubes obliterated.
37	65	Natural	Natural	Right ovary atrophied. Ovaries small.
38	60 50	Hard and small Natural	Cervix hard, os small Cervix swollen and red	Healthy.
40	30	Ditto	Natural	Ditto.
41	19	Ditto	Ditto	Ditto.
42	50	{ Fibrous tumour } { of the fundus }	Ditto	Natural.
43	40	Natural	Os very red, abraded	Natural.
44	35	Ditto	Natural	Right ovary very hard and horny.
45	28	Long neck	Ditto	Healthy.
46	42	Natural	{ Cervix fissured and hard; } os red, abrasion	Left ovary corrugated.
47	32	Large and soft	Reddish	Natural.
48	13	Natural	Natural	Undeveloped.
49 50	26 22	Ditto	Ditto Extensively ulcerated	Natural. Inflamed.
00	22	Healthy	Extensively mounded minin	

D. STEWART, M.D., First-Class Staff Surgeon, Late Professor of Midwifery in the Medical College of Calcutta.

Calcutta, March, 1855.

THE USE AND ABUSE OF THE STRONGER CAUSTICS. 89

This interesting and valuable document from the far east speaks for itself. In fifteen cases out of the fifty, there was inflammatory ulceration; and in many the ulceration is noticed as extensive. In various other instances the cervix was also inflamed and indurated. Thus does it bear out all my statements and opinions respecting the frequency of inflammatory and ulcerative lesions of the cervix uteri in the dead as well as the living. It corroborates the results arrived at by Dr. West, and proves, at the same time, the utter fallacy of Dr. Robert Lee's and Dr. Tyler Smith's negative assertions in 1850assertions founded on the old post-mortem records of St. George's Hospital. It is impossible, also, to cast an eye over the list of lesions, uterine and ovarian, which it reveals, and not to feel that the defective nutrition and debility which usually accompany such lesions during life must have exercised a pernicious influence on the individuals in whom they were found, and must have thus contributed to their death, by depriving them of the power of resisting intercurrent disease.

II.

THE USE AND ABUSE OF THE STRONGER CAUSTICS, AND OF THE ACTUAL CAUTERY, IN THE TREATMENT OF UTERINE DISEASE.

In the course of the discussion to which the publication of this Review has given rise, it has been stated that I recommend the stronger caustics to be used to *destroy* the indurated and hypertrophied tissues in chronic inflammatory disease of the neck of the uterus. I cannot better disprove such assertions —which are thoroughly unfounded and untrue—than by giving a few extracts from my own writings. They will show, in the most undeniable manner, not only that I am not open to any such accusation, but that I have been the very first to raise my voice against the *abuse* of the surgical agents, the discreet *use* of which I recommend in the treatment of intractable disease of the cervix uteri. They will also tend to place the question in its real light, should it become the subject of further discussion.

APPENDIX.

Extracts from the Third Edition of my Work on "Uterine Inflammation," published 1853.

"It cannot, however, be denied that cauterization of the cervix, as above described, and especially deep cauterization, is an operation, and, like all operations, surrounded with danger. It must not, therefore, be either injudiciously resorted to, or carelessly carried out. Although my own practice has hitherto been free, or all but free, from serious accidents, the same immunity does not appear to have attended that of others. Various cases in which serious accidents have followed the use of the caustic potash have been narrated as arguments against its use since the last edition of this work was published; and M. Gendrin has himself, within the last few years, had several cases of acute metritis, and of abscess in the lateral ligaments, the evident and immediate result of deep cauterization. He has, however, seen the same results follow the use of the nitrate of silver, and of injections; and I may mention, that the two most severe instances of acute metritis that I have myself witnessed for some time in the unimpregnated womb, occurred after the use of weak astringent vaginal injections." —р. 297.

"I must, however, most emphatically guard practitioners against an error into which there would appear to be some danger of their falling, from misinterpretation of my views. I wish it to be most distinctly understood that I do not propose to destroy the hypertrophied cervix by cauterization, but merely to set up an artificial eliminatory inflammation, by means of an eschar or issue, of limited extent, established in the centre of the hypertrophied region. I do not calculate, in the remotest degree, on the destruction of tissue to which the caustic or cautery gives rise, for diminishing the size of the hypertrophied cervix, but solely and entirely on the inflammation subsequently set up. Any attempt actually to destroy the hypertrophy by direct cauterization appears to me both dangerous and unnecessary; dangerous, because I should be afraid that the intensity of the reactional inflammation would be so great as often to extend to the uterus or to the lateral ligaments, and because I

THE USE AND ABUSE OF THE STRONGER CAUSTICS. 91

consider it next to impossible always to limit the action of the caustic when applied with such profusion; unnecessary, because a mere eschar, of the size of a shilling, will answer the purpose of reducing the hypertrophy equally well. It may, perhaps, be necessary to apply it several times; but of what consequence is prolonging for a few weeks the treatment of a disease which must have existed for years to require treating at all by such agents, compared with the danger of perforating the vagina, and causing peritonitis, or of giving rise to acute metritis?" —p. 302.

A Memoir read before the Medical Society of London, July, 1854, On the Use and Abuse of the Stronger Caustics in the Treatment of Uterine Disease, and published in "The Lancet," July and August, 1854.

It is now more than nine years since I introduced to the profession, in the first edition of my work on "Uterine Inflammation," potassa fusa and potassa cum calce as valuable remedies in the treatment of some chronic and intractable forms of uterine inflammation. Since then these agents have been adopted by many practitioners at home and abroad, a fact of which I have ample evidence in my own practice, as I am constantly consulted by patients in whom this means of treatment has been resorted to. In some of these cases I have found that the caustic potash has been incautiously used, so that lesions of the vagina and partial occlusions of the cervical canal have been produced, notwithstanding the careful and minute directions which I have given for its employment. As I cannot but consider myself to a certain extent responsible for the use of a remedy which I have introduced in this country, I am anxious, in the present paper, to lay down precisely the rules which ought to regulate practitioners when they resort to so powerful an agent.

Potassa cum calce was first used in the treatment of chronic inflammation of the cervix uteri by M. Gendrin, the enlightened physician to la Pitié, Paris. It was in the year 1837, seventeen years ago, that I first saw him employ it, and during the three years that I subsequently passed with him, as his pupil

APPENDIX.

and interne, we were scarcely ever without cases in process of treatment by this means. Subsequent experience confirmed the results at which I then arrived, and led me to the conviction which I have repeatedly expressed,-a conviction that time only strengthens,-that the application of caustic potash to the treatment of chronic and intractable uterine inflammation is one of the most valuable contributions to uterine pathology that has been made in modern times. At the same time, I am perfectly ready to admit, that in unskilled hands it is a dangerous remedy-a double-edged sword, which indiscreetly used may do positive harm, instead of good. But we must recollect that the same remark equally applies to all surgical means of treating disease in every part of the human economy. What havoc may not the bistoury, the principal agent of the operating surgeon's ministry, produce, unless guided by skill and prudence? The fact of a powerful remedy being, in unskilled hands, a dangerous one, is no more a reason why it should be discarded than is the same fact a reason why the health or death-giving instruments of the surgeon should be anathematized. It is, however, a reason why the rules that ought to guide us in the use of this remedy should be carefully elucidated and scrupulously followed. It is owing, no doubt, to the unvarying care with which I use the caustic potash, that I am able to say that, after seventeen years' extensive experience of the remedy, I have not yet had a single serious accident.

M. Gendrin always used a paste made of the potassa cum calce of the Pharmacopœia, moistened with alcohol. I myself followed his example for some years; but finding its application difficult, I first tried the caustic potash of Dr. Filhos, and then potassa fusa alone. The former consists of two parts of lime and one of potash, run into lead moulds. I found these tubes convenient for use, but not sufficiently active; whilst the pure caustic potash in cylinders was so very deliquescent, that it required a troublesome process of packing the surrounding parts with cotton steeped in vinegar, to limit the action of the caustic to the region on which it was intended to act. This induced me to try if I could not obtain cylinders of

THE USE AND ABUSE OF THE STRONGER CAUSTICS. 93

potassa cum calce in a more active form : two parts of potash to one of lime, and in a free state — that is, not cased in tubes. In this attempt, with Mr. Squirr's assistance, I completely succeeded, by casting it in iron moulds, and obtained sticks of potassa cum calce nearly as active as the pure potassa fusa, and yet having the non-deliquescent properties of the potassa cum calce paste. These cylinders, which are made of various sizes, render the application of this powerful remedy as easy as that of the nitrate of silver, no previous packing of the parts being necessary, and the action being limited to the region to which it is applied. Thus has been attained a great desideratum—a valuable agent, which could previously only be used with some trouble and risk, having been rendered manageable and safe.

The conditions of local uterine disease in which I consider that potassa cum calce may be used with advantage, are *intractable* chronic inflammation, or inflammatory ulceration of the mucous membrane covering the cervix uteri, or lining the cervical canal; chronic inflammatory hypertrophy of the cervix; and lastly, chronic inflammation of the body of the uterus, in which form of disease I merely apply the caustic potash to the cervix, to produce a derivative issue.

The principles on which I have endeavoured to found the local treatment of the chronic inflammatory conditions which are so common about the cervix, its os and cavity, are those which ought to regulate the treatment of all inflammatory diseases of the skin and mucous membrane in explorable regions. If the acute or subacute stage of inflammation still exists, emollient applications and local depletion are indicated; if that stage has passed, and the disease appears in the chronic form, astringents should be used to directly modify the diseased capillary circulation, and they failing to restore healthy action, caustics should be resorted to, especially if ulceration be present, with a view to substitute healthy, reparative, manageable inflammation for that in existence, which is unhealthy, destructive, and unmanageable. This appears to me the true modus operandi of caustics and of the actual cautery, whenever they are used in the treatment of morbid inflammatory conditions,

APPENDIX.

from a minute ulcer of the cornea to hospital gangrene. The inflammation set up by nature to throw off the eschar artificially produced, is naturally of a healthy, reparative kind, which admits of being controlled, and brought to a favourable termination, provided the stimulation be sufficiently powerful. Thence it is that if one caustic, the nitrate of silver, for instance, does not produce the desired effect, another more powerful, such as the acid nitrate of mercury, may; and that failing, a still more powerful agent, such as the actual cautery or caustic potash, will certainly succeed. This law-for law it may be termeddeserves a more general recognition in surgery than it has hitherto obtained, for it points out the true mode of treatment in many intractable forms of chronic inflammatory disease. It will be observed that I speak of the actual cautery in the same paragraph with caustic potash, the rationale of the action of these agents being identically the same.

In chronic ulcerative disease, the caustic should only be lightly applied, the object being merely to renew the surface of the sore. In chronic hypertrophy, the object in view is rather different. It is not the destruction of the hypertrophied tissues which is desired; but the production of a state of increased vitality, bordering on inflammation, in these tissues, under the influence of which they soften and melt. This result is produced by the mere formation and elimination of an eschar the size of a shilling, and a few lines in depth. It is certainly quite unnecessary to destroy any amount of diseased tissue, as has been recommended since I first introduced this plan of treatment; such a course greatly aggravates the importance and risk of the operative process, without any equivalent benefit accruing to the patient. If the softening and melting of the indurated and hypertrophied cervix does not take place entirely on the first application, it may be repeated several times on different regions of the cervix, at intervals of four or six weeks. Although a more tedious mode of proceeding, I am convinced that it is a more safe one than the extensive destruction at one sitting of the indurated tissues of the cervix uteri, advised by some who have adopted the practice.

It is, however, more especially when the caustic cylinder is

94

THE USE AND ABUSE OF THE STRONGER CAUSTICS. 95

passed into the cervical canal, in the treatment of inflammation of that region, that caution is necessary, and that I find it is not always observed. Inflammatory ulceration not unfrequently passes into the lower part of the cervical canal, and proves intractable to all ordinary means. Chronic inflammation of the mucous membrane and follicles lining the cervical canal, may obstinately resist all means of treatment, owing, probably, to many of the diseased follicles being concealed between the sulci, or depressions existing between the rugæ of the arbor vitæ. In both these forms of cervical disease, I have recommended, as a last resource, a small potassa cum calce cylinder to be applied inside the os, to the diseased surface. Its action being more decided and deeper than that of iodine, the nitrate of silver, &c., it probably produces more energetic vital reaction, and reaches, moreover, the concealed follicles, which the other milder caustics do not. It is certain that I occasionally meet with cases of chronic inflammation of the cervical canal, otherwise incurable, both in my hands and in those of other physicians who have preceded me, which I am able to cure by this means, and this alone. I must, however, be allowed to repeat, that in my practice the use of potassa cum calce, especially in the treatment of inflammation of the cervical canal, is altogether an ultima ratio-a last resource, and not an ordinary mode of treatment.

When a small caustic cylinder is merely passed gently inside the cervical canal, and only allowed to remain a few seconds, all that is generally required,—the destruction of tissue is very slight, and there is afterwards no very marked tendency to contraction. If a more decided action is produced, however, the subsequent tendency to contraction is great, and unless counteracted by dilatation during the process of healing, may end in all but complete obliteration of the cervical canal, and that by a cicatricial tissue which it is very difficult to dilate. Several instances of the kind have come under my notice from the country. In one lady, I was a fortnight before I could discover the external orifice of the canal, and then I only found it through the advent of menstruation, the blood bulging behind the mucous membrane, for I had been previously dilating the
APPENDIX.

orifice of a mucous follicle. This lady, aged forty, had scarcely seen any show for months, although the menstrual molimen came periodically; and she had become liable at those times to severe hysterical attacks bordering on epilepsy. These attacks all but ceased on a free exit being procured for the menstrual discharge. I have now under my care a young lady aged twenty-six, in whom the cervical canal was so narrowed from the same cause, that I was not able to pass the smallest bougie. Menstruation took place with extreme difficulty, and guttatim. Her state was one which it was very difficult to remedy, for the stricture was high up-half an inch from the os-and extended some distance. That such a cicatricial stricture must be difficult to remove stands to reason, as the union between the walls of the canal is no doubt very intimate. Two years ago I had an opportunity of examining the uterus of a former patient of my own, similarly, but more cautiously, treated some years previously, and found the cervical canal, although quite permeable, much diminished in calibre by extensive adhesions. This lady died at the age of thirty-seven of cancer of the cæcum ; the uterus was quite healthy.

These and other similar cases which I have met with prove that great care should be shown when this plan of treatment is followed, but not that it is one which should not be adopted if imperatively required. If the caustic is not too severely applied, on the one hand, and, on the other, the canal is kept open by passing a common bougie once or twice a week regularly, until the surface acted on is healed, and all tendency to contraction have ceased, no morbid diminution of the calibre of the cervical canal can ensue. Many of the cases which I see being extreme ones, I not unfrequently have had to resort to this mode of treatment, and yet I have very seldom had occasion to dilate the cervical canal afterwards; and when I have, it has been because accidental circumstances have taken the patient out of my reach whilst under treatment. As a rule, I should say that no patient, in whose case the caustic potash has been applied to the cervical canal, should be lost sight of in less than six weeks, and during that time the canal should be kept open by the passage of a moderate-sized bougie once or twice a week.

96

THE USE AND ABUSE OF THE STRONGER CAUSTICS. 97

The other accidents which may follow the use of caustic potash are, extension of the caustic to the vagina, and extension of the inflammatory reaction produced to the uterus and peri-These accidents, like the former, may be avoided by tonæum. common care and prudence. Potassa fusa itself ought, I think, to be discarded, now that we have in the potassa cum calce cylinders such an admirable and safe substitute. All the instances in which I have seen the vagina compromised have been cases in which pure potassa fusa had been used. It is so extremely deliquescent, that it is all but impossible to always avoid its running on to the adjoining parts. As regards the extension of the secondary inflammation, that need not be feared if due precautions are taken both before and after the caustic is applied. All acute or even subacute inflammatory action should be first subdued, and the proper time should be chosen for the operation. Four or five days after menstruation is the best time, as it allows two or three weeks' quiescence from the menstrual molimen. Lastly, the eschar produced should not be too extensive.

One of the chief arguments that have been adduced against the use of caustic potash to the neck of the uterus is, that it produces cicatrices that may interfere with the process of parturition. This is merely a theoretical objection, not founded on observation, and devoid of truth. The fact is, that the faintest trace of even a deep eschar produced in this region, either by a caustic or by the actual cautery, ceases to be visible after the lapse of a few months. So far from causing induration, the action of these surgical agents is to melt and soften induration of the cervix when the latter is the result of chronic inflammation, as is usually the case, by favourably modifying the morbid nutrition of the parts diseased. The idea of hard cicatrices has been taken from the observation of what occurs in the skin, without taking into consideration that the structure of the skin and of mucous membrane is essentially different. In the skin there is a fully developed fibrous framework, which is the principal foundation of the hard cicatrix that follows any loss of substance in which it is involved. This fibrous framework is merely rudimentary in mucous mem-

APPENDIX.

branes, and thence the facility with which any loss of substance in them is repaired. This we see exemplified in the mouth and intestinal canal, where all traces of ulcerative action are eventually lost. In the cervix uteri we see how nature repairs divisions and losses of substance, by observing what occurs after the lacerations of the substance of the cervix, which are so common in parturition, and which, when no subsequent inflammation sets up, merely leave a soft notch as the trace of their occurrence.

Such being the case, it is clear that the application of potassa cum calce to the cervix uteri, so far from hardening the organ, and proving an impediment to future labours, acts in the reverse manner, positively facilitating parturition, by removing chronic inflammatory hypertrophy. Indeed, I may here remark, that the more I progress in life the more I become convinced of the truth of an assertion which I made many years ago—viz., that most of the cases of rigid, undilating os uteri met with in practice are occasioned by chronic inflammatory disease of that organ, and not by constitutional conditions, spasms, &c., an important fact in practical midwifery.

In concluding these remarks on the use and abuse of caustic potash in the treatment of inflammatory disease of the uterus, I wish to lay stress on the fact, that I only recommend it, and resort to it, when there is actual disease present, when the cervix is the seat of chronic inflammatory action, intractable to all other agents, general and local, and when the hypertrophy is caused and kept up by such disease. In those cases of hypertrophy in which the cervix is merely passively enlarged, in which inflammatory action either does not exist, or has given way to treatment or time, it ought not to be resorted to. The enlargement may then be safely left to nature and to general treatment. The absorbent powers of the uterus are, perhaps, greater than those of any other organ in the economy, and are generally sufficient, in the course of time, to fine down the enlarged cervix, when all actual disease has been removed.

I must be allowed to add, that the potassa cum calce cylinders constitute a very valuable and manageable caustic, whenever such an agent is required, for the destruction of chancres, the

98

THE USE AND ABUSE OF THE STRONGER CAUSTICS. 99

treatment of indolent sores, &c. I have found it of great use in the treatment of hæmorrhoids, and, in some cases, preferable to the nitric acid, which has been of late so much recommended.

Extract from a Communication to "The Lancet" of May 3rd, 1856.

There are morbid conditions of the cervix uteri, chronic inflammatory indurations, indolent ulcerations, suspicious sores and tumours, which, like similar morbid conditions in other parts of the economy, occasionally resist mere antiphlogistic remedies, and require for their radical cure more potent surgical agencies-viz., the mineral acids, potassa cum calce, or the actual cautery. In the immense majority of cases, these surgical means need only be used as vitality-modifying agents; and, when so employed with due care and discretion, leave no trace behind them : neither cicatrix nor other evidence of their use, beyond the removal of disease. There are instances, however, in which these agents may be legitimately used, and must be used, to destroy diseased tissue; as, for instance, in the treatment of cauliflower excrescences, or of other forms of suspicious but removable tumours springing from the cervix. In such cases, we ought not to be satisfied merely with the removal of the tumour, but to destroy, without hesitation but with care, the diseased surface from which it springs. In so doing we may, if successful, leave traces of the operation; but we have not mutilated the patient: we have simply saved life. Mutilation, in its accepted scientific sense, implies, on the contrary, "the unnecessary, unwarrantable destruction of organic textures."

THE END.

LONDON: SAVILL AND EDWARDS, PRINTERS, CHANDOS STREET, COVENT GARDEN.

. .

.

The Third Edition, 8vo, cloth, 12s. 6d.

A PRACTICAL TREATISE

8

INFLAMMATION OF THE UTERUS,

Its Cerbix and Appendages.

BY JAMES HENRY BENNET, M.D.

Notices of the First Edition, published in 1845.

(From the British and Foreign Medical Review for January, 1846.)

The opportunities which Dr. Henry Bennet possessed of investigating uterine disease in Paris were considerable, and he has certainly made the most of them; with the results he makes us acquainted in his book, of which we feel it but fair to speak in terms of considerable praise, as the produce of much industry and accuracy of observation. We augur well for the future success of the author from the ability and industry shown in the present attempt, and wish him heartily well in the very important course of investigation which lies open to him. The observations of Dr. Bennet on the pathology and treatment of ulcerations of the cervix, in the uterus which has never been pregnant, are practical and valuable, and deserve to be well borne in mind in forming a prognosis. We cannot part with our author without again expressing our high opinion of his work, and recommending our brethren to possess themselves of it.

(From the Edinburgh Monthly Journal of Medical Science.)

Few works issue from the medical press which are at once original and sound in doctrine; but such, we feel assured, is the admirable treatise now before us. The important practical precepts which the author inculcates are all rigidly deduced from facts. . . . Every page is good, and eminently practical. . . . So far as we know and believe, it is the best work on the subject of which it treats.

(From the Medico-Chirurgical Review for April, 1846.)

Dr. Bennet's work, we think, has very ably supplied a deficiency in this part of medicine. . . . We do not hesitate to say, that Dr. Bennet has treated these subjects more clearly and faithfully than any author we are acquainted with, and we have read his treatise with much real satisfaction.

(From the American Journal of the Medical Sciences for April, 1846.)

This short and unpretending treatise of Dr. Bennet is one of a highly interesting and instructive character. Should the conclusions of the author be confirmed by a more extended series of observations, he has conferred a very important benefit upon the profession by directing their attention to a diseased condition of the neck of the uterus, which, although, according to his experience, of frequent occurrence, and productive of much suffering, and a long chain of symptoms of a more or less serious character, has heretofore been almost entirely overlooked. . . . The remarks of Dr. Bennet on syphilitical ulcerations of the cervix uteri, and on cancerous ulcerations of the same part, are unquestionably of very great interest; they are marked throughout by good sense and sound discrimination, and are evidently based upon a series of accurate and minute personal observations. . . . His observations in relation to ulceration of the cervix uteri are unquestionably of a highly interesting character. His opportunities for studying it in its several stages and different degrees of intensity have been sufficiently ample certainly to enable him to arrive at correct conclusions as to its true character, symptoms, progress, and results. Admitting that his pathological views are sound, and that his account of the effects of the remedies recommended by him for its treatment is in the main perfectly accurate,-and we see no reason for suspecting that such is not the case, -- no one will dony the important service he has rendered to the profession by pointing out to them the true character of many of the groups of

symptoms of common occurrence in the female; in relation to the pathology of which (notwithstanding they are very generally admitted to be connected with uterine disease) the most indefinite and discordant views are entertained; and by, at the same time, directing their attention to a plan of treatment at once simple and successful. We recommend the essay of Dr. Bennet to the careful study of all who feel an interest in the diseases of the female sex.

Notices of the Second Edition, published in 1849.

(From the Dublin Quarterly Journal of Medical Science for August, 1849.)

Dr. Bennet is now too well known as a zealous and successful writer on uterine diseases to need any recommendatory comment in introducing his work to the notice of our readers. The fact of a second edition having been called for is sufficient proof of the estimation in which he is held as an author, and confirms us in the favourable opinion we expressed of the former edition of his treatise. A vast deal of important matter has been added, and the size of the volume is thereby so much augmented, that although nominally a second edition, it is in reality a new work. We cannot better convey an idea of the character of this truly classical treatise than by giving a short analysis of its contents. . . . Having now concluded our sketch of the contents of this truly excellent treatise, it only remains for us to express our deep admiration for the talents of its author, and our sense of obligation for the great benefit he has conferred on this department of practical medicine. We feel convinced that if the first edition of this work was worthy of a favourable reception by the profession, the second is, in every respect, infinitely more so.

(From the Lancet for April 6th, 1850.)

.... In conclusion, we can safely affirm that Dr. Bennet's work is a model in its style of composition, and divested completely of any controversial asperity. Howsoever practitioners may differ from Dr. Bennet in some of his conclusions, all unprejudiced readers, and every honest reviewer, will admit that he has communicated his views in a lucid, candid, and praiseworthy manner; and we are firmly of opinion that, in proportion as a knowledge of uterine diseases becomes more appreciated, this work will be proportionally established as a text book in the profession.

(From the Obstetric Record, June 15th, 1849.)

Dr. Bennet's truly excellent work has been for some time out of print; we hail, . therefore, a new edition of it with considerable pleasure. The work is an admirable one, and exhibits a splendid proof of what can be effected by persevering industry and devoted attention to any subject of particular inquiry; and the more so when those investigations are made by persons of great ability, and in every way calculated to elucidate the matter. Such is the work before us. It has another peculiarity-it is not a mere reprint of the former edition, with a more modern date (as is the case with many new works), but truly and in fact a new work, comprising an immense fund of additional experience, reading, and reflection. . . . The large experience, clinical and otherwise, and more accurate means of investigation of the author, are in every way worthy and deserving of careful and serious consideration, since the facts arrived at by the author are opposed to the current opinions of the profession at large on this subject. In Dr. Bennet's work the reader will find a large amount of new and really original information. . . . We feel certain, from a careful examination of this work, together with our knowledge of the former labours of the author, that a perusal of its pages will lead to great improvement in the treatment of the class of diseases to which its investigations are devoted. Every page is replete with information; and whoever will be at the trouble to read will certainly derive benefit from it. We therefore cordially recommend it to our readers.

(From the London Monthly Journal of Medicine and Surgery, Feb. 1850.)

We have already stated that Dr. Bennet has furnished an amount of solid information regarding uterine disease not to be met with in any other treatise; and we would now add, that to Dr. Bennet is fairly due the great improvement—we might say the revolution—which has taken place in the management of these affections since his views first began to be diffused by means of his original contributions to the *Lancet*, and subsequently by their republication in the first edition of the work now under review. It is no small merit to have been chiefly instrumental in rescuing a very numerous class of patients from the inefficacious trifling and empirical routine till lately in the ascendant.

(From the Dublin Medical Press, July 4th, 1849.)

We presume there are few medical men whose practice embraces the disease in question who will not possess themselves of Dr. Bennet's Treatise, which we have no hesitation in pronouncing to be the most original, as well as the most complete, upon the subject that it has fallen to our lot to peruse.

(From the British and Foreign Medico-Chirurgical Review, January, 1850.)

Dr. Bennet has shown the most ardent zeal in his inquiries, and an integrity which makes them especially valuable. His first work contained a condensed account of his facts and experience, and we are glad to perceive that the rapid sale of this small work gives the best evidence of the strong desire of the profession to throw aside their prejudices, and to give their best attention to the nature and treatment of the affections hitherto classed under the term leucorrhœa. We have now equal pleasure in introducing to their notice a larger work on the same subject. We shall not call it a second edition, because, as Dr. Bennet truly observes, it is really a new work. The length of our analysis of Dr. Bennet's work, and the general tone of our commentary, will have afforded to our readers suf-ficient evidence of our high estimation of it. It throws a new light on diseases hitherto treated without any knowledge of their real character, and opens forth to us a subject almost totally neglected by preceding writers. In pointing out the frequency of inflammation of the womb, its various consequences, and the protracted suffering to which it gives rise, we consider that Dr. Bennet has done great service to the profession. The lessons it contains are invaluable, and we feel assured that they ought to be perused and studied by every practitioner who would venture on the treatment of female complaints.

(From the Half-yearly Abstract of Medical Science, 1849.)

We have the pleasure of being able to speak in terms of high commendation of the next book on our list by Dr. Bennet. When, a few years back, the first edition of the present work was published, the subject was one which was almost unknown, even to the obstetrical celebrities of the day; and even now we have reason to know that the bulk of the profession are not fully alive to the importance and frequency of the disease of which it takes cognizance. Dr. Bennet's volume is another proof that in medicine, as in everything else, for whatever of real progress is made, we are, nine times out of ten, indebted to, comparatively speaking, young men. Dr. Bennet has not, we believe, reached the meridian of life [has only just reached], but we question whether there is any senior in his department, that must not own, if he has candour enough to do so, that the volume before us contains a mass of information to which with all his "experience" he was previously a stranger.

(From the American Journal of Medical Sciences for April, 1850.)

The favourable opinion of the views advanced by Dr. Bennet in relation to the more frequent diseases of the uterus, their diagnosis and treatment, expressed by us in our notice of the first edition of his treatise, has been strengthened and confirmed by the results subsequently derived from our own experience. His observations have unquestionably been the means of throwing much light upon the pathology of what were previously considered as obscure and intractable uterine affections, and by insisting upon the use of the speculum as the only certain means of diagnosis in these diseases, he has greatly facilitated their study, and rendered an acquaintance with their phenomena and phases more familiar to the mass of the profession, while at the same time he has rendered their management less empirical, and its results more certain and satisfactory. We invite the physicians of this country to a careful study of the work of Dr. Bennet. We believe that the leading views advanced by the author are founded in truth, and lead to a simple and certain plan of treatment in a class of diseases, the character of which has heretofore been much misunderstood, and the treatment of which has been most grievously mismanaged. Every chapter of the work is replete with instruction. The facts advanced by Dr. Bennet have evidently been the fruits of personal observation made in a wide and favourable field, and through the test of repeated observation made by others their truthfulness will in time be fully established. The sufferings, privations, and mortification inflicted upon the female sex by diseases of the uterine organs, strongly press the study of these diseases upon the attention of the physician, and in that study we believe he can find no more faithful or efficient guide than is furnished him by Dr. Bennet in the work before us.

(From the New York Journal of Medicine, July, 1850.)

The first edition of the work which stands at the head of this article was published in 1845. As regards the subjects on which it treated, it was far in advance of anything that had appeared in the English language. This has been for some time out of print in England—a strong evidence of the favourable reception which it received from the profession. In this country it was republished by Lea and Blanchard in 1847, and its value fully recognised by all those in the profession who have duly estimated the importance and frequency of the disease of which it treated. The present edition may, in fact, be regarded as a new work.

The first edition produced a marked change in the opinions of a large portion of English and American practitioners, among whom may be named some of the most eminent uterine pathologists of the present day, and the practice of nearly all has been greatly modified since its appearance. While the enlarged experience and careful observation of the author have strikingly confirmed the views enunciated in the first edition; he has in the present work added much that is original and new to the profession, particularly on chronic metritis and the displacements it occasions—internal metritis, or, as Whitehead terms it, endo-uteritis—inflammation and abscess of the lateral ligaments in the non-puerperal state-inflammation and ulceration in the cavity of the cervix-inflammation and ulceration in the virgin-in the pregnant and puerperal condition-in the aged-and in connexion with polypus and uterine tumours—and a most valuable and important chapter on the "diagnosis of cancer." . . . We next pass to a consideration of inflammation, ulceration, and hypertrophy of the neck of the uterus. This may be regarded as Dr. Bennet's own peculiar field, as to him we are indebted for the first full and accurate description, in the English language, of the most frequent of all the uterine diseases. With unusual opportunities for clinical experience, a decided genius for observation, great industry in collecting facts, and a philosophical appreciation of their relative value, Dr. Bennet has startled the profession with results which revolutionize the whole subject of uterine pathology. By someby many, we are compelled to say—his opinions have been sceptically received, his results unhesitatingly rejected, his practice unqualifiedly condemned. But, on the other hand, some of the best uterine pathologists, both of Great Britain and America, are now teaching the same doctrines and adopting the same practice. From some experience, we are prepared to say, with a good degree of confidence, that the same results will be arrived at by all who, possessing the requisite skill and acquirement, make use of the same means of investigation. In some important particulars, which we shall have occasion to allude to, we regard Dr. Bennet as far in advance of his French teachers and confrères.

Notices of the Third Edition, published in 1853.

(From the Edinburgh Medical and Surgical Journal for July, 1853.)

Dr. Henry Bennet's treatise in its first form unquestionably awakened interest and attracted attention, for in no long time the author found it requisite to publish a second edition, which contained much more detailed information on the nature and causes of the diseases brought under notice ; it presented also more ample, and, if possible, more forcible and conclusive evidence, that his doctrines were in general wellfounded. As a third edition is now placed before the profession, it becomes requisite to direct the attention of practitioners, both medical and surgical, to the consideration of a subject upon which it is of the utmost importance that they should entertain correct ideas, both pathological and therapeutic. It is due to Dr. Bennet to say, that he has in the present volume given a very complete view of the questions relating to the propositions which he advocates, and the evidence which he adduces will certainly be most serviceable in enabling practitioners to judge for themselves to what extent these propositions are supported by facts.

(From the Edinburgh Journal of Medical Science for Nov. 1853.)

Obstetric pathology is indebted to the labours of Dr. Bennet for the establishment of the important function of the inflammatory process in uterine pathology; he has shown that inflammatory changes constitute numerous forms of uterine disease, and complicate most. In this way he has succeeded in greatly simplifying this subject, a result which has manifest bearings on the therapeutics of uterine disease. Dr. Bennet's chapters on chronic metritis throw much light on these affections, and should, if carefully studied, lead to much simplification of the treatment of these various diseases. Dr. Bennet's first book appeared in the form of a small octavo. It suddenly reappeared as a large and thick octavo. This, the third edition, contains many additions and considerable improvements.



London, New Burlington Street, July, 1856.

MR. CHURCHILL'S Publications,

MEDICINE, SURGERY,

AND

SCIENCE.



"It would be unjust to conclude this notice without saying a few words in favour of Mr. Churchill, from whom the profession is receiving, it may be truly said, the most beautiful series of Illustrated Medical Works which has ever been published."—Lancet.

"All the publications of Mr. Churchill are prepared with so much taste and neatness, that it is superfluous to speak of them in terms of commendation." — Edinburgh Medical and Surgical Journal.

"No one is more distinguished for the elegance and recherché style of his publications than Mr. Churchill."-Provincial Medical Journal.

"Mr. Churchill's publications are very handsomely got up: the engravings are remarkably well executed."-Dublin Medical Press.

"The typography, illustrations, and getting up are, in all Mr. Churchill's publications, most beautiful."-Monthly Journal of Medical Science.

"Mr. Churchill's illustrated works are among the best that emanate from the Medical Press."-Medical Times.

"We have before called the attention of both students and practitioners to the great advantage which Mr. Churchill has conferred on the profession, in the issue, at such a moderate cost, of works so highly creditable in point of artistic execution and scientific merit."—Dublin Quarterly Journal. MR. CHURCHILL is the Publisher of the following Periodicals, offering to Authors a wide extent of Literary Announcement, and a Medium of Advertisement, addressed to all Classes of the Profession. COMMUNICATIONS, BOOKS for REVIEW, addressed to the respective Editors, are received and duly forwarded by Mr. Churchill.

THE BRITISH AND FOREIGN MEDICO-CHIRURGICAL REVIEW; OR, QUARTERLY JOURNAL OF PRACTICAL MEDICINE.

Price Six Shillings. Nos. 1 to 35.

THE QUARTERLY JOURNAL OF MICROSCOPICAL SCIENCE.

Edited by EDWIN LANKESTER, M.D., F.R.S., F.L.S., and George Busk, F.R.C.S.E., F.R.S., F.L.S. Price 4s. Nos. I. to XVI.

THE MEDICAL TIMES AND GAZETTE.

Published Weekly, price Sevenpence, or Stamped, Eightpence.

Annual Subscription, £1.10s., or Stamped, £1. 14s. 8d., and regularly forwarded to all parts of the Kingdom.

The MEDICAL TIMES AND GAZETTE is favoured with an amount of Literary and Scientific support which enables it to reflect fully the progress of Medical Science, and insure for it a character, an influence, and a circulation possessed at the present time by no Medical Periodical.

THE HALF-YEARLY ABSTRACT OF THE MEDICAL SCIENCES.

Being a Digest of the Contents of the principal British and Continental Medical Works; together with a Critical Report of the Progress of Medicine and the Collateral Sciences. Edited by W. H. RANKING, M.D., Cantab., and C. B. RADCLIFFE, M.D., Lond. Post 8vo. cloth, 6s, 6d. Vols. 1 to 23.

THE JOURNAL OF PSYCHOLOGICAL MEDICINE AND MENTAL PATHOLOGY.

Being a Quarterly Review of Medical Jurisprudence and Insanity. Edited by FORBES WINSLOW, M.D. Price 3s. 6d. No. III. New Series.

THE PHARMACEUTICAL JOURNAL.

EDITED BY JACOB BELL, F.L.S., M.R.I.

Published Monthly, price One Shilling.

*** Vols. 1 to 15, bound in cloth, price 12s. 6d. each.

THE DUBLIN MEDICAL PRESS.

Published Weekly, Stamped, price Sixpence, free to any part of the Empire.

THE LONDON AND PROVINCIAL MEDICAL DIRECTORY.

Published Annually. 12mo. cloth, 8s. 6d.

DR. ACLAND.

MEMOIR ON THE CHOLERA AT OXFORD IN THE YEAR 1854; with Considerations suggested by the Epidemic. 4to. cloth, with Maps, 12s.

MR. ACTON, M.R.C.S.

A PRACTICAL TREATISE ON DISEASES OF THE URINARY AND GENERATIVE ORGANS OF BOTH SEXES, INCLUDING SYPHILIS. Second Edition. 8vo. cloth, 20s.

DR. ADDISON.

ON THE CONSTITUTIONAL AND LOCAL EFFECTS OF DISEASE OF THE SUPRA-RENAL CAPSULES. 4to. cloth. Coloured Plates, 21s.

DR. WILLIAM ADDISON, F.R.S.

.....

CELL THERAPEUTICS. 8vo. cloth, 4s.

ON HEALTHY AND DISEASED STRUCTURE, AND THE TRUE PRINCIPLES OF TREATMENT FOR THE CURE OF DISEASE, ESPECIALLY CONSUMPTION AND SCROFULA, founded on MICROSCOPICAL ANALYSIS. 8vo. cloth, 12s.

MR. ANDERSON, F.R.C.S.

く美人用く+2

HYSTERICAL, HYPOCHONDRIACAL, EPILEPTIC, AND OTHER NERVOUS AFFECTIONS; their Causes, Symptoms, and Treatment. 8vo. cloth, 5s.

II.

THE SYMPTOMS AND TREATMENT OF THE DISEASES OF PREGNANCY. Post 8vo. 4s. 6d.

DR. JAMES ARNOTT.

ON THE REMEDIAL AGENCY OF A LOCAL ANÆSTHENIC OR BENUMBING TEMPERATURE, in various painful and inflammatory Diseases. 8vo. cloth, 4s. 6d.

II.

ON INDIGESTION; its Pathology and its Treatment, by the Local Application of Uniform and Continuous Heat and Moisture. With an Account of an improved Mode of applying Heat and Moisture in Irritative and Inflammatory Diseases. With a Plate. 8vo. 5s.

PRACTICAL ILLUSTRATIONS OF THE TREATMENT OF OBSTRUCTIONS IN THE URETHRA, AND OTHER CANALS, BY THE DILATATION OF FLUID PRESSURE. 8vo. boards, 3s.

III.

MR. F. A. ABEL, F.C.S.,

MR. C. L. BLOXAM.

HANDBOOK OF CHEMISTRY: THEORETICAL, PRACTICAL, AND TECHNICAL. 8vo. cloth, 15s.

MR. T. J. ASHTON.

ON THE DISEASES, INJURIES, AND MALFORMATIONS OF THE RECTUM AND ANUS. 8vo. cloth, 8s.

II.

A TREATISE ON CORNS AND BUNIONS, AND IN-GROW-ING OF THE TOE-NAIL: their Causes and Treatment. Post 8vo. cloth, 3s.6d.

.....

MEDICAL BIBLIOGRAPHY. Vol. I. Royal 8vo. 16s.

DR. WILLIAM BALY, F.R.S.,

DR. WILLIAM W. GULL.

REPORTS ON EPIDEMIC CHOLERA; its Cause and Mode of Diffusion, Morbid Anatomy, Pathology and Treatment. Cholera Committee of the Royal College of Physicians. Urawn up at the desire of the With Maps, 8vo. cloth, 16s.

DR. BARLOW.

A MANUAL OF THE PRACTICE OF MEDICINE. Fcap. 8vo. cloth, 12s. 6d.

MR. RICHARD BARWELL, F.R.C.S.

ASIATIC CHOLERA; its Symptoms, Pathology, and Treatment. Post 8vo. cloth, 4s. 6d.

DR. BASCOME.

A HISTORY OF EPIDEMIC PESTILENCES, FROM THE EARLIEST AGES. 8vo. cloth, 8s.

MR. BATEMAN.

MAGNACOPIA: A Practical Library of Profitable Knowledge, communicating the general Minutiæ of Chemical and Pharmaceutic Routine, together with the generality of Secret Forms of Preparations; including Concentrated Solutions of Camphor and Copaiba in Water, Mineral Succedaneum, Marmoratum, Silicia, Terro-Metallicum, Pharmaceutic Condensions, Prismatic Crystallization, Crystallized Aromatic Salt of Vinegar, Spa Waters; newly-invented Writing Fluids; Etching on Steel or Iron; with an extensive Variety of *et cætera*. Third Edition. 18mo. 6s.

+01

DR. BEALE.

200-

THE MICROSCOPE, AND ITS APPLICATION TO CLINICAL MEDICINE. With 232 Engravings on Wood. Post 8vo. cloth, 10s. 6d.

MR. LIONEL J. BEALE, M.R.C.S. I.

THE LAWS OF HEALTH IN THEIR RELATIONS TO MIND AND BODY. A Series of Letters from an Old Practitioner to a Patient. Post 8vo. cloth, 7s. 6d.

HEALTH AND DISEASE, IN CONNECTION WITH THE GENERAL PRINCIPLES OF HYGIENE. Fcap. 8vo., 2s. 6d.

MR. BEASLEY. Τ.

THE BOOK OF PRESCRIPTIONS; containing 2900 Prescriptions. Collected from the Practice of the most eminent Physicians and Surgeons, English and Foreign. 24mo. cloth, 6s.

II.

THE DRUGGISTS' GENERAL RECEIPT-BOOK: comprising a copious Veterinary Formulary and Table of Veterinary Materia Medica; Patent and Proprietary Medicines, Druggists' Nostrums, &c.; Perfumery, Skin Cosmetics, Hair Cosmetics, and Teeth Cosmetics; Beverages, Dietetic Articles, and Condiments; Trade Chemicals, Miscellaneous Preparations and Compounds used in the Arts, &c.; with useful Memoranda and Tables. Third Edition. 24mo. cloth, 6s.

POCKET FORMULARY AND SYNOPSIS OF THE THE BRITISH AND FOREIGN PHARMACOPCEIAS; comprising standard and approved Formulæ for the Preparations and Compounds employed in Medical Practice. Sixth Edition, corrected and enlarged. 24mo. cloth, 6s.

DR. O'B. BELLINGHAM.

ON ANEURISM, AND ITS TREATMENT BY COMPRESSION. 12mo. cloth, 4s.

DR. HENRY BENNET.

PRACTICAL A 8vo. cloth, 12s. 6d.

4

TREATISE ON INFLAMMATION AND OTHER DISEASES OF THE UTERUS. Third Edition, revised, with Additions.

DR. BILLING, F.R.S.

ON DISEASES OF THE LUNGS AND HEART. 8vo. cloth, 6s. п. FIRST PRINCIPLES OF MEDICINE. Fifth Edition, Revised and Improved. 8vo. 10s. 6d.

MR. P. HINCKES BIRD, F.R.C.S.

PRACTICAL TREATISE ON THE DISEASES OF CHILDREN AND INFANTS AT THE BREAST. Translated from the French of M. BOUCHUT, with Notes and Additions. 8vo. cloth. 20s.

DR. GOLDING BIRD, F.R.S. Τ.

URINARY DEPOSITS; THEIR DIAGNOSIS, PATHOLOGY. AND THERAPEUTICAL INDICATIONS. With Engravings on Wood. Fourth Edition. Post 8vo. cloth, 10s. 6d.

II.

ELEMENTS OF NATURAL PHILOSOPHY; being an Experimental Introduction to the Study of the Physical Sciences. Illustrated with numerous Engrav-ings on Wood. Fourth Edition. By GOLDING BIRD, M.D., F.R.S., and CHARLES BROOKE, M.B. Cantab., F.R.S. Fcap. 8vo. cloth, 12s. 6d.

MR. JAMES BIRD, M.R.C.S.

ON THE MEDICINAL AND ECONOMIC PROPERTIES OF VEGETABLE CHARCOAL; with Practical Remarks on its Use in Chronic Affections of the Stomach and Bowels. 8vo. cloth, 3s. 6d.

******* MR. BISHOP, F.R.S. Ι.

ON DEFORMITIES OF THE HUMAN BODY, their Pathology and Treatment. With Engravings on Wood. 8vo. cloth, 10s.

II.

ON ARTICULATE SOUNDS, AND ON THE CAUSES AND CURE OF IMPEDIMENTS OF SPEECH. 8vo. cloth, 4s.

III.

LETTSOMIAN LECTURES ON THE PHYSICAL CONSTI-TUTION, DISEASES AND FRACTURES OF BONES. Post 8vo., 2s. 6d.

DR. BLAKISTON, F.R.S.

PRACTICAL OBSERVATIONS ON CERTAIN DISEASES OF THE CHEST; and on the Principles of Auscultation. 8vo. cloth, 12s.

DR. JOHN W. F. BLUNDELL.

MEDICINA MECHANICA; or, the Theory and Practice of Active and Passive Exercises and Manipulations in the Cure of Chronic Disease. Post 8vo. cloth, 6s.

MR. WALTER BLUNDELL.

PAINLESS TOOTH-EXTRACTION WITHOUT CHLOROFORM ; with Observations on Local Anæsthesia by Congelation in General Surgery. Second Edition, 2s. 6d. cloth. Illustrated on Wood and Stone.

-0-

MR. JOHN E. BOWMAN.

PRACTICAL CHEMISTRY, including Analysis. With numerous Illustrations on Wood. Second Edition. Foolscap 8vo. cloth, 6s. 6d.

II.

MEDICAL CHEMISTRY; with Illustrations on Wood. Third Edition. Fcap. 8vo. cloth, 6s. 6d.

DR. JAMES BRIGHT.

ON DISEASES OF THE CHEST AND AIR PASSAGES; with a Review of the several Climates recommended in these Affections. Second Edition. Post 8vo. cloth, 7s. 6d.

MR. ISAAC BAKER BROWN, F.R.C.S. ON SOME DISEASES OF WOMEN ADMITTING OF SUR-GICAL TREATMENT. With Plates, 8vo. cloth, 10s. 6d.

MR. BERNARD E. BRODHURST.

ON LATERAL CURVATURE OF THE SPINE: its Pathology and Treatment. Post 8vo. cloth, with Plates, 3s.

DR. BUDD, F.R.S.

ON DISEASES OF THE LIVER. Illustrated with Coloured Plates and Engravings on Wood. Third Edition. Preparing.

TT. ON THE ORGANIC DISEASES AND FUNCTIONAL DIS-ORDERS OF THE STOMACH. 8vo. cloth, 9s.

DR. BURNETT.

THE PHILOSOPHY OF SPIRITS IN RELATION TO MATTER. 8vo. cloth, 9s. II.

INSANITY TESTED BY SCIENCE. 8vo. cloth, 5s.

DR. WILLOUGHBY BURSLEM.

PULMONARY CONSUMPTION AND ITS TREATMENT. Post 8vo. cloth, 5s.

DR. CHAMBERS.

DIGESTION AND ITS DERANGEMENTS. Post 8vo. cloth, 10s. 6d.

DR. CARPENTER, F.R.S.

PRINCIPLES OF HUMAN PHYSIOLOGY. With numerous Illustrations on Steel and Wood. Fifth Edition. 8vo. cloth, 26s.

PRINCIPLES OF COMPARATIVE PHYSIOLOGY. Illustrated with 300 Engravings on Wood. Fourth Edition. 8vo. cloth, 24s.

III.

A MANUAL OF PHYSIOLOGY. With numerous Illustrations on Steel and Wood. Second Edition. Fcap. 8vo. cloth, 12s. 6d.

THE MICROSCOPE AND ITS REVELATIONS. With numerous Engravings on Wood. Fcap. 8vo. cloth, 12s. 6d.

MR. ROBERT B. CARTER, M.R.C.S.

ON THE INFLUENCE OF EDUCATION AND TRAINING IN PREVENTING DISEASES OF THE NERVOUS SYSTEM. Fcap. 8vo., 6s.

THE PATHOLOGY AND TREATMENT OF HYSTERIA. Post 8vo. cloth, 4s. 6d.

MR. H. T. CHAPMAN, F.R.C.S.

THE TREATMENT OF OBSTINATE ULCERS AND CUTA-NEOUS ERUPTIONS OF THE LEG WITHOUT CONFINEMENT. Second Edition. Post 8vo. cloth, 3s. 6d.

VARICOSE VEINS: their Nature, Consequences, and Treatment, Palliative and Curative. Post 8vo. cloth, 3s. 6d.

DR. G. C. CHILD.

ON INDIGESTION, AND CERTAIN BILIOUS DISORDERS OFTEN CONJOINED WITH IT. Second Edition. 8vo. cloth, 6s.

SIR JAMES CLARK, M.D., BART.

THE SANATIVE INFLUENCE OF CLIMATE. With an Account of the Principal Places resorted to by Invalids in England, South of Europe, the Colonies, &c. Fourth Edition, revised. Post 8vo. cloth, 10s. 6d.

MR. J. PATERSON CLARK, M.A. THE ODONTALGIST; OR, HOW TO PRESERVE THE TEETH, CURE TOOTHACHE, AND REGULATE DENTITION FROM INFANCY TO AGE. With plates. Post 8vo. cloth, 5s.

LEWIS CORNARO.

SURE METHODS OF ATTAINING A LONG AND HEALTH-FUL LIFE. Thirty-eighth Edition. 18mo., 1s.

DR. CONOLLY.

THE CONSTRUCTION AND GOVERNMENT OF LUNATIC ASYLUMS AND HOSPITALS FOR THE INSANE. With Plans. Post 8vo. cloth, 6s.

MR. COOLEY.

COMPREHENSIVE SUPPLEMENT TO THE PHARMACOPCEIAS.

THE CYCLOP ÆDIA OF PRACTICAL RECEIPTS, AND COL-LATERAL INFORMATION IN THE ARTS, PROFESSIONS, MANU-FACTURES, AND TRADES, INCLUDING MEDICINE, PHARMACY, AND DOMESTIC ECONOMY; designed as a Compendious Book of Reference for the Manufacturer, Tradesman, Amateur, and Heads of Families. Third and greatly enlarged Edition, 8vo. cloth, 26s.

MR. BRANSBY B. COOPER, F.R.S. LECTURES ON THE PRINCIPLES AND PRACTICE OF SUR-GERY. 8vo. cloth, 21s.

MR. W. WHITE COOPER.

ON NEAR SIGHT, AGED SIGHT, IMPAIRED VISION, AND THE MEANS OF ASSISTING SIGHT. With 31 Illustrations on Wood. Second Edition. Fcap. 8vo. cloth, 7s. 6d.

すくろう

いまへ

+DE

MR. COOPER.

A DICTIONARY OF PRACTICAL SURGERY; comprehending all the most interesting Improvements, from the Earliest Times down to the Present Period. Seventh Edition. One very thick volume, 8vo., 12. 10s.

SIR ASTLEY COOPER, BART., F.R.S.

ON THE STRUCTURE AND DISEASES OF THE TESTIS. Illustrated with 24 highly finished Coloured Plates. Second Edition. Royal 4to. Reduced from £3. 3s. to £1. 10s.

DR. COPEMAN.

RECORDS OF OBSTETRIC CONSULTATION PRACTICE; and a TRANSLATION of BUSCH and MOSER on UTERINE HÆMORRHAGE; with Notes and Cases. Post 8vo. cloth, 5s.

DR. COTTON.

ON CONSUMPTION: Its Nature, Symptoms, and Treatment. To which Essay was awarded the Fothergillian Gold Medal of the Medical Society of London. 8vo. cloth, 8s.

PHTHISIS AND THE STETHOSCOPE: a concise Practical Guide to the Physical Diagnosis of Consumption. Foolscap 8vo. cloth, 3s. 6d.

MR. COULSON.

ON DISEASES OF THE BLADDER AND PROSTATE GLAND. The Fourth Edition, revised and enlarged. 8vo. cloth, 10s. 6d.

ON LITHOTRITY AND LITHOTOMY; with Engravings on Wood.

III.

ON DISEASES OF THE JOINTS. 8vo. In the Press.

DR. JOHN GREEN CROSSE, F.R.S.

CASES IN MIDWIFERY, arranged, with an Introduction and Remarks by Edward Copeman, M.D., F.R.C.S. 8vo. cloth, 7s. 6d.

MR. CURLING, F.R.S. I.

OBSERVATIONS ON DISEASES OF THE RECTUM. Second Edition. 8vo. cloth, 5s.

A PRACTICAL TREATISE ON DISEASES OF THE TESTIS, SPERMATIC CORD, AND SCROTUM. Second Edition, with Additions. 8vo. cloth, 14s.

MR. JOHN DALRYMPLE, F.R.S., F.R.C.S.

PATHOLOGY OF THE HUMAN EYE. Complete in Nine Fasciculi: imperial 4to., 20s. each; half-bound morocco, gilt tops, 9l. 15s.

DR. DAVEY.

ON THE NATURE AND PROXIMATE CAUSE OF IN-SANITY. Post 8vo. cloth, 3s.

DR. HERBERT DAVIES.

ON THE PHYSICAL DIAGNOSIS OF DISEASES OF THE LUNGS AND HEART. Second Edition. Post 8vo. cloth, 8s.

MR. DIXON.

A GUIDE TO THE PRACTICAL STUDY OF DISEASES OF THE EYE. Post 8vo. cloth, 8s. 6d.

DR. TOOGOOD DOWNING.

NEURALGIA: its various Forms, Pathology, and Treatment. THE JACKSONIAN PRIZE ESSAY FOR 1850. 8vo. cloth, 10s. 6d.

DR. DRUITT, F.R.C.S.

THE SURGEON'S VADE-MECUM; with numerous Engravings on Wood. Seventh Edition. Foolscap 8vo. cloth, 12s. 6d.

DR. DUNDAS.

SKETCHES OF BRAZIL; including New Views on Tropical and European Fever; with Remarks on a Premature Decay of the System, incident to Europeans on their Return from Hot Climates. Post 8vo. cloth, 9s.

DR. JOHN C. EGAN.

SYPHILITIC DISEASES: THEIR PATHOLOGY, DIAGNOSIS, AND TREATMENT: including Experimental Researches on Inoculation, as a Differential Agent in Testing the Character of these Affections. 8vo. cloth, 9s.

SIR JAMES EYRE, M.D.

THE STOMACH AND ITS DIFFICULTIES. Third Edition. Fcap. 8vo. cloth, 2s. 6d.

PRACTICAL REMARKS ON SOME EXHAUSTING DIS-EASES. Second Edition. Post 8vo. cloth, 4s. 6d.

るような大雨へ

0

MR. FERGUSSON, F.R.S.

A SYSTEM OF PRACTICAL SURGERY; with numerous Illustrations on Wood. Third Edition. Fcap. 8vo. cloth, 12s. 6d.

DR. D. J. T. FRANCIS.

CHANGE OF CLIMATE; considered as a Remedy in Dyspeptic, Pulmonary, and other Chronic Affections; with an Account of the most Eligible Places of Residence for Invalids in Spain, Portugal, Algeria, &c., at different Seasons of the Year; and an Appendix on the Mineral Springs of the Pyrenees, Vichy, and Aix les Bains. Post 8vo. cloth, 8s. 6d.

C. REMIGIUS FRESENIUS.

ELEMENTARY INSTRUCTION IN CHEMICAL ANALYSIS, AS PRACTISED IN THE LABORATORY OF GIESSEN. Edited by LLOYD BULLOCK, late Student at Giessen.

QUALITATIVE; Fourth Edition. 8vo. cloth, 9s. QUANTITATIVE. Second Edition. 8vo. cloth, 15s.

MR. FRENCH, F.R.C.S.

.....

THE NATURE OF CHOLERA INVESTIGATED. Second Edition. 8vo. cloth, 4s.

MR. FOWNES, PH.D., F.R.S.

A MANUAL OF CHEMISTRY; with numerous Illustrations on Wood. Fifth Edition. Fcap. 8vo. cloth, 12s. 6d.

Edited by H. BENCE JONES, M.D., F.R.S., and A. W. HOFMANN, PH.D., F.R.S.

CHEMISTRY, AS EXEMPLIFYING THE WISDOM AND BENEFICENCE OF GOD. Second Edition. Fcap. 8vo. cloth, 4s. 6d.

III.

INTRODUCTION TO QUALITATIVE ANALYSIS. Post 8vo. cloth, 2s. IV. CHEMICAL TABLES. Folio, price 2s. 6d.

DR. FULLER.

ON RHEUMATISM, RHEUMATIC GOUT, AND SCIATICA: their Pathology, Symptoms, and Treatment. Second Edition. 8vo. cloth. In the Press.

DR. GAIRDNER.

ON GOUT; its History, its Causes, and its Cure. Third Edition. Post 8vo. cloth, 8s. 6d.

MR. GALLOWAY.

THE FIRST STEP IN CHEMISTRY. Second Edition. Fcap. 8vo.

A MANUAL OF QUALITATIVE ANALYSIS. Post 8vo. cloth, 4s.

MR. ROBERT GARNER.

EUTHERAPEIA; or, AN EXAMINATION OF THE PRINCIPLES OF MEDICAL SCIENCE, including Researches on the Nervous System. Illustrated with 9 Engravings on Copper, and Engravings on Wood. 8vo. cloth, 8s.

DR. GARRETT.

ON EAST AND NORTH-EAST WINDS; the Nature, Treatment, and Prevention of their Suffocating Effects. Fcap. 8vo. cloth, 4s. 6d.

ON THE PATHOLOGY AND TREATMENT OF SCROFULA; being the Forthergillian Prize Essay for 1846. With Plates. 8vo. cloth, 10s. 6d.

> DR. GRANVILLE, F.R.S. ON SUDDEN DEATH. Post 8vo., 2s. 6d.

MR. GRAY, M.R.C.S.

PRESERVATION OF THE TEETH indispensable to Comfort and Appearance, Health, and Longevity. 18mo. cloth, 3s.

MR. GRIFFITHS.

CHEMISTRY Autumn, Winter. 8vo. cloth, 7s. 6d. OF THE FOUR SEASONS - Spring, Summer, Illustrated with Engravings on Wood. Second Edition. Foolscap

DR. GULLY.

THE WATER CURE IN CHRONIC DISEASE: an Exposition of the Causes, Progress, and Terminations of various Chronic Diseases of the Viscera, Nervous System, and Limbs, and of their Treatment by Water and other Hygienic Means. Fifth Edition. Foolscap 8vo. sewed, 2s. 6d.

п.

THE SIMPLE TREATMENT OF DISEASE; deduced from the Methods of Expectancy and Revulsion. 18mo. cloth, 4s.

DR. GUY.

HOOPER'S PHYSICIAN'S VADE-MECUM; OR, MANUAL OF THE PRINCIPLES AND PRACTICE OF PHYSIC. New Edition, considerably enlarged, and rewritten. Foolscap 8vo. cloth, 12s. 6d.

GUY'S HOSPITAL REPORTS. Third Series. Vol. I., 8vo. 7s. 6d.

DR. MARSHALL HALL, F.R.S.

PRACTICAL OBSERVATIONS AND SUGGESTIONS IN MEDI-CINE. Post 8vo. cloth, 8s. 6d.

DITTO. Second Series. Post 8vo. cloth, 8s. 6d.

MR. HARDWICH.

A MANUAL OF PHOTOGRAPHIC CHEMISTRY. Third Edition. Foolscap 8vo. cloth, 6s. 6d.

MR. HARE, M.R.C.S.

PRACTICAL OBSERVATIONS ON THE PREVENTION, CAUSES, AND TREATMENT OF CURVATURES OF THE SPINE; with Engravings. Third Edition. 8vo. cloth, 6s.

MR. HARRISON, F.R.C.S.

THE PATHOLOGY AND TREATMENT OF STRICTURE OF THE URETHRA. 8vo. cloth, 7s. 6d.

MR. JAMES B. HARRISON, F.R.C.S.

ON THE CONTAMINATION OF WATER BY THE POISON OF LEAD, and its Effects on the Human Body. Foolscap 8vo. cloth, 3s. 6d.

DR. HARTWIG.

I.

ON SEA BATHING AND SEA AIR. Fcap. 8vo., 2s. 6d.

ON THE PHYSICAL EDUCATION OF CHILDREN. Fcap. 8vo., 2s. 6d.

п.

MR. ALFRED HAVILAND, M.R.C.S.

ě

べ思い

CLIMATE, WEATHER, AND DISEASE; being a Sketch of the Opinions of the most celebrated Ancient and Modern Writers with regard to the Influence of Climate and Weather in producing Disease. With Four coloured Engravings. 8vo. cloth, 7s.

DR. HEADLAND.

ON THE ACTION OF MEDICINES IN THE SYSTEM. Being the Prize Essay to which the Medical Society of London awarded the Fothergillian Gold Medal for 1852. Second Edition. 8vo. cloth, 10s.

MR. HIGGINBOTTOM, F.R.S., F.R.C.S.

ADDITIONAL OBSERVATIONS ON THE NITRATE OF SIL-VER; with full Directions for its Use as a Therapeutic Agent. 8vo., 2s. 6d.

п.

AN ESSAY ON THE USE OF THE NITRATE OF SILVER IN THE CURE OF INFLAMMATION, WOUNDS, AND ULCERS. Second Edition. Price 5s.

MR. JOHN HILTON, F.R.S.

ON THE DEVELOPMENT AND DESIGN OF CERTAIN POR-TIONS OF THE CRANIUM. Illustrated with Plates in Lithography. 8vo. cloth, 6s.

DR. HINDS.

THE HARMONIES OF PHYSICAL SCIENCE IN RELATION TO THE HIGHER SENTIMENTS; with Observations on Medical Studies, and on the Moral and Scientific Relations of Medical Life. Post 8vo., cloth, 5s.

MR. LUTHER HOLDEN, FR.C.S.

HUMAN OSTEOLOGY: with Plates, showing the Attachments of the 8vo. cloth, 16s.

MR. C. HOLTHOUSE.

LECTURES ON STRABISMUS, delivered at the Westminster Hospital. 8vo. cloth, 4s.

DR. W. CHARLES HOOD.

SUGGESTIONS FOR THE FUTURE PROVISION OF CRIMI-NAL LUNATICS. 8vo. cloth, 5s. 6d.

1011

く田へーの

DR. HOOPER.

THE MEDICAL DICTIONARY; containing an Explanation of the Terms used in Medicine and the Collateral Sciences. Eighth Edition. Edited by KLEIN GRANT, M.D. 8vo. cloth, 30s.

MR. JOHN HORSLEY.

A CATECHISM OF CHEMICAL PHILOSOPHY; being a Familiar Exposition of the Principles of Chemistry and Physics. With Engravings on Wood. Designed for the Use of Schools and Private Teachers. Post 8vo. cloth, 6s. 6d.

DR. HUFELAND.

THE ART OF PROLONGING LIFE. A New Edition. Edited by ERASMUS WILSON, F.R.S. Foolscap 8vo., 2s. 6d.

DR. HENRY HUNT.

ON HEARTBURN AND INDIGESTION. 8vo. cloth, 5s.

MR. THOMAS HUNT, M.R.C.S.

THE PATHOLOGY AND TREATMENT OF CERTAIN DIS-EASES OF THE SKIN, generally pronounced Intractable. Illustrated by upwards of Forty Cases. 8vo. cloth, 6s.

DR. ARTHUR JACOB, F.R.C.S.

A TREATISE ON THE INFLAMMATIONS OF THE EYE-BALL. Foolscap 8vo. cloth, 5s.

DR. JAMES JAGO, A.B., CANTAB.; M.B., OXON. OCULAR SPECTRES AND STRUCTURES AS MUTUAL EXPO-NENTS. Illustrated with Engravings on Wood. 8vo. cloth, 5s.

DR. HANDFIELD JONES, F.R.S. PATHOLOGICAL AND CLINICAL OBSERVATIONS RESPECT-ING MORBID CONDITIONS OF THE STOMACH. Coloured Plates, 8vo. cloth, 9s.

DR. HANDFIELD JONES, F.R.S., & DR. EDWARD H. SIEVEKING. A MANUAL OF PATHOLOGICAL ANATOMY. Illustrated with numerous Engravings on Wood. Foolscap 8vo. cloth, 12s. 6d.

MR. WHARTON JONES, F.R.S.

A MANUAL OF THE PRINCIPLES AND PRACTICE OF OPHTHALMIC MEDICINE AND SURGERY; illustrated with Engravings, plain and coloured. Second Edition. Foolscap 8vo. cloth, 12s. 6d.

I.

THE WISDOM AND BENEFICENCE OF THE ALMIGHTY, AS DISPLAYED IN THE SENSE OF VISION; being the Actonian Prize Essay for 1851. With Illustrations on Steel and Wood. Foolscap 8vo. cloth, 4s. 6d.

п.

DR. BENCE JONES, F.R.S.

ON ANIMAL CHEMISTRY, in its relation to STOMACH and RENAL DISEASES. 8vo. cloth, 6s.

MR. KNAGGS.

UNSOUNDNESS OF MIND CONSIDERED IN RELATION TO THE QUESTION OF RESPONSIBILITY IN CRIMINAL CASES. 8vo. cloth, 4s. 6d.

DR. LAENNEC.

A MANUAL OF AUSCULTATION AND PERCUSSION. Translated and Edited by J. B. SHARPE, M.R.C.S. 3s.

DR. HUNTER LANE, F.L.S.

A COMPENDIUM OF MATERIA MEDICA AND PHARMACY; adapted to the London Pharmacopœia, 1851, embodying all the new French, American, and Indian Medicines, and also comprising a Summary of Practical Toxicology. Second Edition. 24mo. cloth, 5s. 6d.

MR. LAURENCE, F.R.C.S.

THE DIAGNOSIS OF SURGICAL CANCER. The Liston Prize Essay for 1854. Plates, 8vo. cloth, 4s. 6d.

MR. LAWRENCE, F.R.S.

A TREATISE ON RUPTURES. The Fifth Edition, considerably enlarged. 8vo. cloth, 16s.

MR. EDWIN LEE.

THE WATERING PLACES OF ENGLAND, CONSIDERED with Reference to their Medical Topography. Third Edition. Foolscap 8vo. cloth, 5s, 6d.

THE BATHS OF FRANCE, CENTRAL GERMANY, &c. Third Edition. Post 8vo. cloth, 6s. 6d.

THE BATHS OF RHENISH GERMANY. Post 8vo. 2s. 6d.

MR. HENRY LEE, F.R.C.S.

PATHOLOGICAL AND SURGICAL OBSERVATIONS; including an Essay on the Surgical Treatment of Hemorrhoidal Tumors. 8vo. cloth, 7s. 6d.

DR. ROBERT LEE, F.R.S.

CLINICAL REPORTS OF OVARIAN AND UTERINE DIS-EASES, with Commentaries. Foolscap 8vo. cloth, 6s. 6d.

IT.

CLINICAL MIDWIFERY: comprising the Histories of 545 Cases of Difficult, Preternatural, and Complicated Labour, with Commentaries. Second Edition. Foolscap 8vo. cloth, 5s.

PRACTICAL OBSERVATIONS ON DISEASES OF THE UTERUS. With coloured Plates. Two Parts. Imperial 4to., 7s. 6d. each Part.

III.

MR. LISTON, F.R.S.

PRACTICAL SURGERY. Fourth Edition. 8vo. cloth, 22s.

1-0-+

WHAT TO OBSERVE AT THE BED - SIDE, AND AFTER DEATH. Published by Authority. Second Edition. Foolscap 8vo. cloth, 4s. 6d.

MR. EDWARD F. LONSDALE.

OBSERVATIONS ON THE TREATMENT OF LATERAL CUR-VATURE OF THE SPINE. Second Edition. 8vo. cloth, 6s.

M. LUGOL.

ON SCROFULOUS DISEASES. Translated from the French, with Additions by W. H. RANKING, M.D., Physician to the Suffolk General Hospital. 8vo. cloth, 10s. 6d.

MR. JOSEPH MACLISE, F.R.C.S.

SURGICAL ANATOMY. A Series of Dissections, illustrating the Principal Regions of the Human Body.

The singular success of this Work exhausted the First Edition of 1000 Copies within six months of its completion.

The Second Edition, now in course of publication, Fasciculi I. to XII. Imperial folio, 5s. each.

MR. MACILWAIN.

ON TUMOURS, THEIR GENERAL NATURE AND TREAT-MENT. 8vo. cloth, 5s.

DR. MAYNE.

AN EXPOSITORY LEXICON OF THE TERMS, ANCIENT AND MODERN, IN MEDICAL AND GENERAL SCIENCE, including a complete MEDICAL AND MEDICO-LEGAL VOCABULARY, and presenting the correct Pronunciation, Derivation, Definition, and Explanation of the Names, Analogues, Synonymes, and Phrases (in English, Latin, Greek, French, and German,) employed in Science and connected with Medicine. Parts I. to V., price 5s. each.

DR. WM. H. MADDEN.

THOUGHTS ON PULMONARY CONSUMPTION; with an Appendix on the Climate of Torquay. Post 8vo. cloth, 5s.

DR. MARKHAM.

DISEASES OF THE HEART: THEIR PATHOLOGY, DIAG-NOSIS, AND TREATMENT. Post. 8vo. cloth, 6s.

SKODA ON AUSCULTATION AND PERCUSSION. Post 8vo.

DR. MARTIN.

THE UNDERCLIFF, ISLE OF WIGHT: its Climate, History, and Natural Productions. Post 8vo. cloth, 10s. 6d.

MR. J. RANALD MARTIN, F.R.S.

THE INFLUENCE OF TROPICAL CLIMATES ON EURO-PEAN CONSTITUTIONS. Originally by the late JAMES JOHNSON, M.D., and now entirely rewritten; including Practical Observations on the Diseases of European Invalids on their Return from Tropical Climates. Seventh Edition. 8vo. cloth, 16s.

DR. MASSY.

ON THE EXAMINATION OF RECRUITS; intended for the Use of Young Medical Officers on Entering the Army. 8vo. cloth, 5s.

DR. CHARLES D. MEIGS.

A TREATISE ON ACUTE AND CHRONIC DISEASES OF THE NECK OF THE UTERUS. With numerous Plates, coloured and plain, 8vo. cloth, 25s.

DR. MEREI.

ON THE DISORDERS OF INFANTILE DEVELOPMENT AND RICKETS: preceded by Observations on the Nature, Peculiar Influence, and Modifying Agencies of Temperaments. 8vo. cloth, 6s.

DR. MILLINGEN.

ON THE TREATMENT AND MANAGEMENT OF THE IN-SANE; with Considerations on Public and Private Lunatic Asylums. 18mo. cloth, 4s. 6d.

MR. JOHN L. MILTON, M.R.C.S.

PRACTICAL OBSERVATIONS ON A NEW WAY OF TREATING GONORRHCEA. With some Remarks on the Cure of Inveterate Cases. 8vo. cloth, 5s.

DR. MONRO.

REMARKS ON INSANITY : its Nature and Treatment. 8vo. cloth, 6s.

AN ESSAY ON STAMMERING. 8vo. 2s. 6d.

Aler +DE

III.

REFORM IN PRIVATE LUNATIC ASYLUMS. 8vo. cloth, 4s.

DR. NOBLE. I.,

ELEMENTS OF PSYCHOLOGICAL MEDICINE: AN INTRO-DUCTION TO THE PRACTICAL STUDY OF INSANITY. Second Edition. 8vo. cloth, 10s. II.

THE BRAIN AND ITS PHYSIOLOGY. Post 8vo. cloth, 6s.

DR. J. NOTTINGHAM.

PRACTICAL OBSERVATIONS ON CONICAL CORNEA, AND on the Short Sight, and other Defects of Vision connected with it. 8vo. cloth, 6s.

MR. NOURSE, M.R.C.S.

TABLES FOR STUDENTS. Price One Shilling.

1. Divisions and Classes of the Animal Kingdom.

2. Classes and Orders of the Vertebrate Sub-kingdom.

3. Classes of the Vegetable Kingdom, according to the Natural and Artificial Systems.

4. Table of the Elements, with their Chemical Equivalents and Symbols.

MR. NUNNELEY.

A TREATISE ON THE NATURE, CAUSES, AND TREATMENT OF ERYSIPELAS. 8vo. cloth, 10s. 6d.

DR. ODLING.

~~~~~~~~~~~~~~~~

A COURSE OF PRACTICAL CHEMISTRY, FOR THE USE OF MEDICAL STUDENTS. Arranged with express reference to the Three Months' Summer Course. Post 8vo. cloth, 4s. 6d.

### Orford Editions .- Edited by Dr. GREENHILL.

I. ADDRESS TO A MEDICAL STUDENT. Second Edition, 18mo. cloth, 2s. 6d. II. PRAYERS FOR THE USE OF THE MEDICAL PROFESSION. Second

Edition, cloth, 1s. 6d.

III. LIFE OF SIR JAMES STONHOUSE, BART., M.D. Cloth, 4s. 6d.

IV. ANECDOTA SYDENHAMIANA. Second Edition, 18mo. 2s.
V. LIFE OF THOMAS HARRISON BURDER, M.D. 18mo. cloth, 4s.

VI. BURDER'S LETTERS FROM A SENIOR TO A JUNIOR PHYSICIAN,

ON PROMOTING THE RELIGIOUS WELFARE OF HIS PATIENTS. 18mo. sewed, 6d. VII. LIFE OF GEORGE CHEYNE, M.D. 18mo. sewed, 2s. 6d.

VIII. HUFELAND ON THE RELATIONS OF THE PHYSICIAN TO THE SICK, TO THE PUBLIC, AND TO HIS COLLEAGUES. 18mo. sewed, 9d. IX. GISBORNE ON THE DUTIES OF PHYSICIANS. 18mo. sewed, 1s.

X. LIFE OF CHARLES BRANDON TRYE. 18mo. sewed, 1s.

XI. PERCIVAL'S MEDICAL ETHICS. Third Edition, 18mo. cloth, 3s. XII. CODE OF ETHICS OF THE AMERICAN MEDICAL ASSOCIATION. 8d. XIII. WARE ON THE DUTIES AND QUALIFICATIONS OF PHYSICIANS. 8d.

XIV. MAURICE ON THE RESPONSIBILITIES OF MEDICAL STUDENTS. 9d.

XV. FRASER'S QUERIES IN MEDICAL ETHICS. 9d.

### MR. PAGET.

A DESCRIPTIVE CATALOGUE OF THE ANATOMICAL MUSEUM OF ST. BARTHOLOMEW'S HOSPITAL. Vol. I. Morbid Anatomy. 8vo. cloth, 5s.

DITTO. Vol. II. Natural and Congenitally Malformed Structures, and Lists of the Models, Casts, Drawings, and Diagrams. 5s.

### MR. LANGSTON PARKER.

THE MODERN TREATMENT OF SYPHILITIC DISEASES, both Primary and Secondary; comprising the Treatment of Constitutional and Confirmed Syphilis, by a safe and successful Method. Third Edition, 8vo. cloth, 10s.

### DR. THOMAS B. PEACOCK, M.D.

ON THE INFLUENZA, OR EPIDEMIC CATARRHAL FEVER OF 1847-8. 8vo. cloth, 5s. 6d.

### DR. PEREIRA, F.R.S.

SELECTA E PRÆSCRIPTIS. Twelfth Edition. 24mo. cloth, 5s.

### MR. PETTIGREW, F.R.S.

ON SUPERSTITIONS connected with the History and Practice of Medicine and Surgery. 8vo. cloth, 7s.

### MR. PIRRIE, F.R.S.E.

THE PRINCIPLES AND PRACTICE OF SURGERY. With numerous Engravings on Wood. 8vo. cloth, 21s.

PHARMACOPCEIA COLLEGII REGALIS MEDICORUM LON-DINENSIS. 8vo. cloth, 9s.; or 24mo. 5s.

IMPRIMATUR.

Hic liber, cui titulus, PHARMACOPCEIA COLLEGII REGALIS MEDICORUM LONDINENSIS. Datum ex Ædibus Collegii in comitiis censoriis, Novembris Mensis 14<sup>to</sup> 1850.

JOHANNES AVETON PARIS. Præses.

10

PHARMACOPCEIA OF THE HOSPITAL FOR DISEASES OF THE SKIN. Second Edition. 48mo. cloth, 1s.

### THE USE OF THE BLOWPIPE IN THE EXAMINATION OF MINERALS, ORES, AND OTHER METALLIC COMBINATIONS. Illustrated by numerous Engravings on Wood. Third Edition. 8vo. cloth, 10s. 6d.

THE PRESCRIBER'S PHARMACOPCEIA; containing all the Medicines in the London Pharmacopceia, arranged in Classes according to their Action, with their Composition and Doses. By a Practising Physician. Fourth Edition. 32mo. cloth, 2s. 6d.; roan tuck (for the pocket), 3s. 6d.

### DR. JOHN ROWLISON PRETTY.

AIDS DURING LABOUR, including the Administration of Chloroform, the Management of Placenta and Post-partum Hæmorrhage. Fcap. 8vo. cloth, 4s. 6d.

### SIR WM. PYM, K.C.H.

OBSERVATIONS UPON YELLOW FEVER, with a Review of "A Report upon the Diseases of the African Coast, by Sir WM. BURNETT and Dr. BRYSON," proving its highly Contagious Powers. Post 8vo. 6s.

### DR. RADCLIFFE.

EPILEPSY, AND OTHER AFFECTIONS OF THE NERVOUS SYSTEM which are marked by Tremor, Convulsion, or Spasm: their Pathology and Treatment. 8vo. cloth, 5s.

### DR. F. H. RAMSBOTHAM.

THE PRINCIPLES AND PRACTICE OF OBSTETRIC MEDI-CINE AND SURGERY. Illustrated with One Hundred and Twenty Plates on Steel and Wood; forming one thick handsome volume. Fourth Edition. 8vo. cloth, 22s.

### DR. RAMSBOTHAM.

PRACTICAL OBSERVATIONS ON MIDWIFERY, with a Selection of Cases. Second Edition. 8vo. cloth, 12s.

### DR. RANKING & DR. RADCLIFFE.

HALF-YEARLY ABSTRACT OF THE MEDICAL SCIENCES; being a Practical and Analytical Digest of the Contents of the Principal British and Continental Medical Works published in the preceding Half-Year; together with a Critical Report of the Progress of Medicine and the Collateral Sciences during the same period.

Volumes I. to XXII., 6s. 6d. each.

### DR. DU BOIS REYMOND.

ANIMAL ELECTRICITY; Edited by H. BENCE JONES, M. D., F.R.S. With Fifty Engravings on Wood. Foolscap 8vo. cloth, 6s.

### DR. REYNOLDS.

THE DIAGNOSIS OF DISEASES OF THE BRAIN, SPINAL CORD, AND THEIR APPENDAGES. 8vo. cloth, 8s.

### DR. EVANS RIADORE, F.R.C.S., F.L.S.

ON SPINAL IRRITATION, THE SOURCE OF NERVOUS-NESS, INDIGESTION, AND FUNCTIONAL DERANGEMENTS OF THE PRINCIPAL ORGANS OF THE BODY. Post 8vo. cloth, 5s. 6d.

II.

THE REMEDIAL INFLUENCE OF OXYGEN, NITROUS OXYDE, AND OTHER GASES, ELECTRICITY, AND GALVANISM. Post 8vo. cloth, 5s. 6d. III.

ON LOCAL TREATMENT OF THE MUCOUS MEMBRANE OF THE THROAT, for Cough and Bronchitis. Foolscap 8vo. cloth, 3s.

入明へ

### MR. ROBERTON.

ON THE PHYSIOLOGY AND DISEASES OF WOMEN, AND ON PRACTICAL MIDWIFERY. 8vo. cloth, 12s.

### DR. W. H. ROBERTSON.

I. AND TREATMENT OF GOUT. THE NATURE 8vo. cloth, 10s. 6d.

II. A TREATISE ON DIET AND REGIMEN.

Fourth Edition. 2 vols. post 8vo. cloth, 12s.

### DR. ROTH.

ON MOVEMENTS. An Exposition of their Principles and Practice, for the Correction of the Tendencies to Disease in Infancy, Childhood, and Youth, and for the Cure of many Morbid Affections in Adults. Illustrated with numerous Engravings on Wood. 8vo. cloth, 10s.

#### DR. ROWE, F.S.A.

NERVOUS DISEASES, LIVER AND STOMACH COM-PLAINTS, LOW SPIRITS, INDIGESTION, GOUT, ASTHMA, AND DIS-ORDERS PRODUCED BY TROPICAL CLIMATES. With Cases. Fourteenth Edition. Feap. 8vo. 2s. 6d.

### DR. ROYLE, F.R.S.

A MANUAL OF MATERIA MEDICA AND THERAPEUTICS. With numerous Engravings on Wood. Second Edition. Fcap. 8vo. cloth, 12s. 6d.

### MR. RUMSEY, F.R.C.S.

ESSAYS ON STATE MEDICINE. 8vo. cloth, 10s. 6d.

マーク語シン語クート

Ser-of

#### MR. SAVORY.

A COMPENDIUM OF DOMESTIC MEDICINE, AND COMPA-NION TO THE MEDICINE CHEST; comprising Plain Directions for the Employment of Medicines, with their Properties and Doses, and Brief Descriptions of the Symptoms and Treatment of Diseases, and of the Disorders incidental to Infants and Children, with a Selection of the most efficacious Prescriptions. Intended as a Source of Easy Reference for Clergymen, and for Families residing at a Distance from Professional Assistance. Fourth Edition. 12mo. cloth, 5s.

#### DR. SCHACHT.

というと思うである

THE MICROSCOPE, AND ITS APPLICATION TO VEGETABLE ANATOMY AND PHYSIOLOGY. Edited by FREDERICK CURREY, M.A. Fcap. 8vo. cloth, 6s.

### DR. SHAPTER.

THE CLIMATE OF THE SOUTH OF DEVON, AND ITS IN-FLUENCE UPON HEALTH. With short Accounts of Exeter, Torquay, Teignmouth, Dawlish, Exmouth, Sidmouth, &c. Illustrated with a Map geologically coloured. Post 8vo. cloth, 7s. 6d.

THE HISTORY OF THE CHOLERA IN EXETER IN 1832. Illustrated with Map and Woodcuts. 8vo. cloth, 12s.

II.

### MR. SHAW, M.R.C.S.

THE MEDICAL REMEMBRANCER; OR, BOOK OF EMER-GENCIES: in which are concisely pointed out the Immediate Remedies to be adopted in the First Moments of Danger from Poisoning, Drowning, Apoplexy, Burns, and other Accidents; with the Tests for the Principal Poisons, and other useful Information. Fourth Edition. Edited, with Additions, by JONATHAN HUTCHINSON, M.R.C.S. 32mo. cloth, 2s. 6d.

### DR. SIBSON, F.R.S.

MEDICAL ANATOMY. With coloured Plates. Imperial folio. Fasciculi I. to IV. 5s. each.

-DE

10+

500

### MR. SKEY, F.R.S.

OPERATIVE SURGERY; with Illustrations engraved on Wood. 8vo. cloth, 18s.

### DR. SMELLIE.

OBSTETRIC PLATES: being a Selection from the more Important and Practical Illustrations contained in the Original Work. With Anatomical and Practical Directions. 8vo. cloth, 5s.

### DR. W. TYLER SMITH.

THE PATHOLOGY AND TREATMENT OF LEUCORRHCEA. With Engravings on Wood. 8vo. cloth, 7s.

п.

THE PERIODOSCOPE, a new Instrument for determining the Date of Labour, and other Obstetric Calculations, with an Explanation of its Uses, and an Essay on the Periodic Phenomena attending Pregnancy and Parturition. 8vo. cloth, 4s.

### DR. SNOW.

I.

ON THE MODE OF COMMUNICATION OF CHOLERA. Second Edition, much Enlarged, and Illustrated with Maps. 8vo. cloth, 7s.

п.

ON THE INHALATION OF CHLOROFORM AND OTHER MEDICINES, FOR THE PREVENTION OF PAIN AND THE RELIEF OF DISEASE. 8vo. Nearly ready.

### DR. SPURGIN.

LECTURES ON MATERIA MEDICA, AND ITS RELATIONS TO THE ANIMAL ECONOMY. Delivered before the Royal College of Physicians. 8vo. cloth, 5s. 6d.

### MR. SQUIRE.

THE PHARMACOPCEIA, (LONDON, EDINBURGH, AND DUBLIN,) arranged in a convenient TABULAR FORM, both to suit the Prescriber for comparison, and the Dispenser for compounding the formulæ; with Notes, Tests, and Tables. 8vo. cloth, 12s.

30+->0)

#### DR. STEGGALL.

STUDENTS' BOOKS FOR EXAMINATION.

A MEDICAL MANUAL FOR APOTHECARIES' HALL AND OTHER MEDICAL BOARDS. Eleventh Edition. 12mo. cloth, 10s.

п

A MANUAL FOR THE COLLEGE OF SURGEONS; intended for the Use of Candidates for Examination and Practitioners. Second Edition. 12mo. cloth, 10s.

111.

GREGORY'S CONSPECTUS MEDICINÆ THEORETICÆ. The First Part, containing the Original Text, with an Ordo Verborum, and Literal Translation. 12mo. cloth, 10s.

IV.

THE FIRST FOUR BOOKS OF CELSUS; containing the Text, Ordo Verborum, and Translation. Second Edition. 12mo. cloth, 8s.

\*\*\* The above two works comprise the entire Latin Classics required for Examination at Apothecaries' Hall.

ν.

A TEXT-BOOK OF MATERIA-MEDICA AND THERAPEUTICS. 12mo. cloth, 7s.

FIRST LINES FOR CHEMISTS AND DRUGGISTS PREPARING FOR EX-AMINATION AT THE PHARMACEUTICAL SOCIETY. 18mo. cloth, 3s. 6d.

### MR. STOWE, M.R.C.S.

A TOXICOLOGICAL CHART, exhibiting at one view the Symptoms, Treatment, and Mode of Detecting the various Poisons, Mineral, Vegetable, and Animal. To which are added, concise Directions for the Treatment of Suspended Animation. Eleventh Edition. On Sheet, 2s.; mounted on Roller, 5s.

DR. ALFRED S. TAYLOR, F.R.S.

A MANUAL OF MEDICAL JURISPRUDENCE. Fifth Edition. Fcap. 8vo. cloth, 12s. 6d.

II.

ON POISONS, in relation to MEDICAL JURISPRUDENCE AND MEDICINE. Fcap. 8vo. cloth, 12s. 6d.

DR. THEOPHILUS THOMPSON, F.R.S.

CLINICAL LECTURES ON PULMONARY CONSUMPTION. With Plates. 8vo. cloth, 7s. 6d.

LETTSOMIAN LECTURES ON PULMONARY CONSUMPTION; with Remarks on Microscopical Indications, and on Cocoa-nut Oil. Post 8vo., 2s. 6d.

-D-F

\$

### MR. TAMPLIN, F.R.C.S.E.

LATERAL CURVATURE OF THE SPINE: its Causes, Nature, and Treatment. 8vo. cloth, 4s.

### DR. THOMAS.

THE MODERN PRACTICE OF PHYSIC; exhibiting the Symptoms, Causes, Morbid Appearances, and Treatment of the Diseases of all Climates. Eleventh Edition. Revised by ALGERNON FRAMPTON, M.D. 2 vols. 8vo. cloth, 28s.

### HENRY THOMPSON, M.B. LOND., F.R.C.S.

STRICTURE OF THE URETHRA; its Pathology and Treatment. The last Jacksonian Treatise of the Royal College of Surgeons. With Plates. 8vo. cloth, 10s.

### DR. TILT.

ON DISEASES OF WOMEN AND OVARIAN INFLAM-MATION IN RELATION TO MORBID MENSTRUATION, STERILITY, PELVIC TUMOURS, AND AFFECTIONS OF THE WOMB. Second Edition. 8vo. cloth, 9s.

THE CHANGE OF LIFE IN HEALTH AND DISEASE: a Practical Treatise on Diseases of Women at the Critical Time. Second Edition. Fcap. 8vo. Preparing.

### MR. TOD, M.R.C.S.

A DISQUISITION ON CERTAIN PARTS AND PROPER-TIES of the BLOOD. With Illustrative Woodcuts. 8vo., 10s. 6d.

### DR. ROBERT B. TODD, F.R.S.

CLINICAL LECTURES ON PARALYSIS, DISEASES OF THE BRAIN, and other AFFECTIONS of the NERVOUS SYSTEM. Foolscap 8vo. cloth, 6s.

CLINICAL LECTURES ON CERTAIN DISEASES OF THE URINARY ORGANS, AND ON DROPSIES. Fcap. 8vo. In the Press.

......

#### MR. SAMUEL TUKE.

DR. JACOBI ON THE CONSTRUCTION AND MANAGEMENT OF HOSPITALS FOR THE INSANE. Translated from the German. With Introductory Observations by the Editor. With Plates. 8vo. cloth, 9s.

#### DR. DANIEL H. TUKE.

THE PRIZE ESSAY ON THE PROGRESSIVE CHANGES WHICH HAVE TAKEN PLACE, SINCE THE TIME OF PINEL, IN THE MORAL MANAGEMENT OF THE INSANE. 8vo. cloth, 2s. 6d.

### DR. TURNBULL.

A TABULAR VIEW AND SYNOPSIS OF THE PHYSICAL SIGNS AND DIAGNOSIS OF THE DISEASES OF THE LUNGS. With Woodcuts, mounted on cloth, 5s. boards.

II.

AN INQUIRY HOW FAR CONSUMPTION IS CURABLE; WITH OBSERVATIONS ON THE TREATMENT AND ON THE USE OF COD-LIVER OIL AND OTHER REMEDIES. Second Edition. 8vo. cloth, 4s.

### DR. UNDERWOOD.

TREATISE ON THE DISEASES OF CHILDREN. Tenth Edition, with Additions and Corrections by HENRY DAVIES, M.D. 8vo. cloth, 15s.

VESTIGES OF THE NATURAL HISTORY OF CREATION. Tenth Edition. Illustrated with 100 Engravings on Wood. 8vo. cloth, 12s. 6d.

BY THE SAME AUTHOR.

EXPLANATIONS: A SEQUEL TO "VESTIGES." Second Edition. Post 8vo. cloth, 5s.

\*\*\*\*\*\*

#### DR. UNGER.

BOTANICAL LETTERS. Woodcuts. Post 8vo., 5s. Translated by Dr. B. PAUL. Numerous

くまどへほうーも

#### DR. VAN OVEN.

ON THE DECLINE OF LIFE IN HEALTH AND DISEASE; being an Attempt to Investigate the Causes of LONGEVITY, and the Best Means of Attaining a Healthful Old Age. 8vo. cloth, 10s. 6d.

### MR. WADE, F.R.C.S.

STRICTURE OF THE URETHRA; its Complications and Effects. With Practical Observations on its Causes, Symptoms, and Treatment; and on a Safe and Efficient Mode of Treating its more Intractable Forms. 8vo. cloth, 5s.

### DR. WAGSTAFF.

ON DISEASES OF THE MUCOUS MEMBRANE OF THE THROAT, and their Treatment by Topical Medication. Post 8vo. cloth, 4s. 6d.

### MR. HAYNES WALTON, F.R.C.S.

\*\*\*\*\*

OPERATIVE OPHTHALMIC SURGERY. With Engravings on Wood. 8vo. cloth, 18s.

ON DISEASES OF THE HEART. 8vo. cloth, 12s.

### DR. EBEN. WATSON, A.M.

ON THE TOPICAL MEDICATION OF THE LARYNX IN CERTAIN DISEASES OF THE RESPIRATORY AND VOCAL ORGANS. 8vo. cloth, 5s.

### DR. WEBER.

A CLINICAL HAND-BOOK OF AUSCULTATION AND PER-CUSSION. Translated by JOHN COCKLE, M.D. 58.

### DR. WEGG.

-----

OBSERVATIONS RELATING TO THE SCIENCE AND ART OF MEDICINE. 8vo. cloth, 8s.

-----

### MR. T. SPENCER WELLS, F.R.C.S.

PRACTICAL OBSERVATIONS ON GOUT AND ITS COMPLI-CATIONS, and on the Treatment of Joints Stiffened by Gouty Deposits. Foolscap 8vo. cloth, 5s.

### DR. WEST.

LECTURES ON THE DISEASES OF WOMEN. 8vo. cloth, 10s. 6d.

MR. WHEELER.

HAND-BOOK OF ANATOMY FOR STUDENTS OF THE FINE ARTS. New Edition, with Engravings on Wood. Fcap. 8vo., 2s. 6d.

#### DR. WHITEHEAD, F.R.C.S.

ON THE TRANSMISSION FROM PARENT TO OFFSPRING OF SOME FORMS OF DISEASE, AND OF MORBID TAINTS AND TENDENCIES. 8vo. cloth, 10s. 6d.

THE CAUSES AND TREATMENT OF ABORTION AND STERILITY: being the result of an extended Practical Inquiry into the Physiological and Morbid Conditions of the Uterus, with reference especially to Leucorrhoeal Affections, and the Diseases of Menstruation. 8vo. cloth, 12s.

### MR. WILLIAM R. WILDE, F.R.C.S.

AURAL SURGERY, AND THE NATURE AND TREATMENT OF DISEASES OF THE EAR. 8vo. cloth, 12s. 6d.

#### DR. WILLIAMS, F.R.S.

PRINCIPLES OF MEDICINE: comprehending General Pathology and Therapeutics. The Third Edition, 8vo. In the Press.

### DR. JOHN CALTHROP WILLIAMS.

PRACTICAL OBSERVATIONS ON NERVOUS AND SYM-PATHETIC PALPITATION OF THE HEART, as well as on Palpitation the Result of Organic Disease. Second Edition, 8vo. cloth, 6s.

### DR. J. WILLIAMS.

INSANITY: its Causes, Prevention, and Cure; including Apoplexy, Epilepsy, and Congestion of the Brain. Second Edition. Post 8vo. cloth, 10s. 6d.

ON THE ANATOMY, PHYSIOLOGY, AND PATHOLOGY OF THE EAR; being the Prize Essay in the University of Edinburgh. With Plates. 8vo. cloth, 10s. 6d.

### DR. J. HUME WILLIAMS.

UNSOUNDNESS OF MIND, IN ITS MEDICAL AND LEGAL CONSIDERATIONS. 8vo. cloth, 7s. 6d.

#### DR. JAMES WILSON.

-----

THE PRINCIPLES AND PRACTICE OF THE WATER CURE, and HOUSEHOLD MEDICAL SCIENCE, in Conversations on Physiology, on Pathology, or the Nature of Disease, and on Digestion, Nutrition, Regimen, and Diet. Second Edition. 8vo. cloth, 7s.

DR. HENRY G. WRIGHT.

HEADACHES; their Causes and their Cure. Fcap. 8vo., 2s. 6d.

MR. ERASMUS WILSON, F.R.S.

THE ANATOMIST'S VADE-MECUM: A SYSTEM OF HUMAN ANATOMY. With numerous Illustrations on Wood. Sixth Edition. Foolscap 8vo. cloth, 12s. 6d.

п.

DISEASES OF THE SKIN: A Practical and Theoretical Treatise on the DIAGNOSIS, PATHOLOGY, and TREATMENT OF CUTANEOUS DIS-EASES. Third Edition. 8vo. cloth, 12s.

THE SAME WORK; illustrated with finely-executed Engravings on Steel, accurately coloured. 8vo. cloth, 30s.

111.

HEALTHY SKIN: A Treatise on the Management of the Skin and Hair in relation to Health. Fifth Edition. Foolscap 8vo. 2s. 6d.

1V.

PORTRAITS OF DISEASES OF THE SKIN. Folio. Fasciculi I. to XII., completing the Work. 20s. each.

V

ON SYPHILIS, CONSTITUTIONAL AND HEREDITARY; AND ON SYPHILITIC ERUPTIONS. With Four Coloured Plates. 8vo. cloth, 16s.

### DR. FORBES WINSLOW, D.C.L. OXON.

.

LETTSOMIAN LECTURES ON INSANITY. 8vo. cloth, 5s.

オーション語シータ

Cont Of

A SYNOPSIS OF THE LAW OF LUNACY; as far as it relates to the Organization and Management of Private Asylums for the Care and Treatment of the Insane. In the form of a Chart, varnished, mounted on canvas and rollers, price 6s.

III.

ON THE CAUSES, SYMPTOMS, DIAGNOSIS, AND TREAT-MENT OF SOFTENING OF THE BRAIN, AND OTHER OBSCURE DIS-EASES OF THE ENCEPHALON. 8vo. With Plates. In the Press.

### DR. G. C. WITTSTEIN.

......

PRACTICAL PHARMACEUTICAL CHEMISTRY: An Explanation of Chemical and Pharmaceutical Processes, with the Methods of Testing the Purity of the Preparations, deduced from Original Experiments. Translated from the Second German Edition, by STEPHEN DARBY. 18mo. cloth, 6s.

### MR. YEARSLEY.

DEAFNESS PRACTICALLY ILLUSTRATED; being an Exposition of Original Views as to the Causes and Treatment of Diseases of the Ear. Fourth Edition. Foolscap 8vo., 2s. 6d.

ON THE ENLARGED TONSIL AND ELONGATED UVULA, and other Morbid Conditions of the Throat. Sixth Edition. 8vo. cloth, 5s. Ber + 08

CHURCHILL'S SERIES OF MANUALS.

"We here give Mr. Churchill public thanks for the positive benefit conferred on the Medical Profession, by the series of beautiful and cheap Manuals which bear his imprint."-British and Foreign Medical Review.

AGGREGATE SALE 75,500 COPIES.

DR. BARLOW.

A MANUAL OF THE PRACTICE OF MEDICINE. Foolscap 8vo. cloth, 12s. 6d.

DR. GOLDING BIRD, F.R.S., and CHARLES BROOKE, M.B. Cantab, F.R.S. ELEMENTS OF NATURAL PHILOSOPHY;

Being an Experimental Introduction to the Study of the Physical Sciences. With numerous Illustrations on Wood. Fourth Edition. Fcap. 8vo. cloth, 12s. 6d.

DR. CARPENTER, F.R.S.

A MANUAL OF PHYSIOLOGY.

With numerous Illustrations on Steel and Wood. Second Edition. Fcap. 8vo. cloth, 12s. 6d.

BY THE SAME AUTHOR. THE MICROSCOPE AND ITS REVELATIONS. With numerous Engravings on Wood. Fcap. 8vo. cloth, 12s. 6d. 

MR. FERGUSSON, F.R.S.E. A SYSTEM OF PRACTICAL SURGERY. With numerous Illustrations on Wood. Third Edition. Fcap. 8vo. cloth, 12s. 6d.

MR. FOWNES, PH.D., F.R.S.

るーく思く思く

30- ->

A MANUAL OF CHEMISTRY.

With numerous Illustrations on Wood. Fifth Edition. Fcap. 8vo. cloth, 12s. 6d.

MR. WHARTON JONES, F.R.S.

MANUAL OF OPHTHALMIC MEDICINE & SURGERY. А With Coloured Engravings on Steel, and Illustrations on Wood. Second Edition. Fcap. 8vo. cloth, 12s. 6d.

Dr. HANDFIELD JONES, F.R.S., & Dr. EDWARD H. SIEVEKING. A MANUAL OF PATHOLOGICAL ANATOMY.

Illustrated with numerous Engravings on Wood. Foolscap 8vo., cloth, 12s. 6d.

DR. ROYLE, F.R.S.

A MANUAL OF MATERIA-MEDICA.

With numerous Illustrations on Wood. Second Edition. Fcap. 8vo. cloth. 12s. 6d.

DR. ALFRED TAYLOR, F.R.S. A MANUAL OF MEDICAL JURISPRUDENCE.

Fifth Edition. Fcap. 8vo. cloth, 12s. 6d. BY THE SAME AUTHOR.

POISONS. O N

Fcap. 8vo. cloth. 12s. 6d.

MR. ERASMUS WILSON, F.R.S.

### THE ANATOMIST'S VADE-MECUM;

A SYSTEM OF HUMAN ANATOMY. With numerous Illustrations on Wood. Sixth Edition. Fcap. 8vo. cloth, 12s. 6d.

Printed by W. BLANCHARD & Sons, 62, Millbank Street, Westminster.







