

SAVILL'S SYSTEM OF CLINICAL MEDICINE

DEALING WITH THE

*DIAGNOSIS, PROGNOSIS, AND TREATMENT
OF DISEASE*

FOR

STUDENTS AND PRACTITIONERS

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EDITED BY

E. C. WARNER, M.D., F.R.C.P.

THIRTEENTH EDITION



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PREFACE TO THE THIRTEENTH EDITION

MOST text-books of Medicine start by assuming the diagnosis of the various diseases, and then set out the symptoms which should be found. Over forty years ago, Dr. T. D. Savill realised that this is not the way any practising physician goes to work in his consulting-room or at the bedside: what he does is to listen to the patient's history, select the principal (or cardinal) symptoms, and by a process of integration with the other clinical features, arrives at a tentative diagnosis. He then proceeds to consider the probable cause of the condition and any alternative diagnosis, he weighs up the prognosis and then undertakes the treatment of his patient. Dr. Savill therefore constructed a text-book of medicine on these lines—and the success of this Savill System is demonstrated once more by the ever increasing popularity of this book which has now reached its thirteenth edition.

It is no small task to combine the features of a system of this kind with the ever-increasing advances of medical knowledge and medical science: particularly have I attempted to show that there is still an art as well as a science in Medicine: correct diagnosis, the essential preliminary of correct treatment, is not a matter of studying the results of X-ray and other investigations. Without in any way decrying the help that ancillary methods can give in the elucidation of disease, medical practice at its best will always demand a careful assessment of the patient, and of the physical and mental effects of his disease; and for this a long period of training as a physician, combined with a sympathy for the human problems created by disease, and a knowledge of the pathological effects produced, are all necessary. This art of Medicine, developed by trained medical minds, is beyond the understanding of unskilled and untrained political planners.

Chapter I, which describes the rules for clinical investigation as written by Dr. T. D. Savill, has been little altered over the years: no great alteration has been made in this new edition, but a few salutary sentences have been added, such as the one which exhorts the new student still "to be complete in your examination of your patient". In the chapters which follow, a careful revision has been undertaken, and no page has escaped alteration in some form or other. Among the major alterations will be found an almost complete rewriting of Chapter XV dealing with the pyrexial disorders and infective diseases: in this chapter, Dr. F. Murgatroyd has extensively revised the tropical section, and has added a new table on the typhus group of fevers: and I have rewritten much of the remainder of this chapter. Chapter XVI, which deals with the anæmias and the wasting diseases, has also received special attention. Dr. Britton has supplied the expert knowledge so that together we have rewritten the methods of examining the blood, and added tables which give the range of the normal values which may be expected in the red cells, white cells, etc.,

and in the sternal marrow. Dr. V. E. Lloyd has given generously of his time and knowledge to help me bring the section dealing with syphilis up to date: and Dr. Brewer has entirely rewritten and expanded the section on blood transfusion and the rhesus factor: this seemed vitally important in view of the expanding knowledge and increasing importance of transfusion in every branch of medical practice. It is impossible to catalogue all the other subjects which have been largely or entirely rewritten: illustrative examples include acute appendicitis, chronic gastric and duodenal ulceration, cancer of the stomach, gastric dilatation, acute infective hepatitis, rheumatic endocarditis, circus movement, periarteritis nodosa, hay fever, surgical shock, ringworm of the hair, tuberculous meningitis, cerebral tumour, electro-encephalography, and the vitamins. The variety of diseases which have been added is too numerous to be completely catalogued and we must content ourselves with some examples: pulmonary acariasis, sarcoidosis, bronchial adenoma, foetal adenoma of the thyroid, the Waterhouse-Friderichsen syndrome, pheochromocytoma of the supra-renals, abacterial pyuria, artificial insemination, aspirin poisoning, cortical thrombo-phlebitis, choroidal tubercle, sterilisation of syringes, liver biopsy and aspiration, insect repellents, intramedullary blood transfusion, Reiter's disease. A number of new diagrams, tables, X-ray reproductions and graphic records have made their appearance. I make no apology for introducing new drugs which have established themselves in medical treatment, nor for giving considerable prominence to the antibiotics and the sulphonamides. Mention will be found for the use of D.D.T., stilbamidine, folic acid, vitamin B₁₂, intravenous iron, nitrogen mustard, the arsenoxides, tridione, paludrine, radio-active phosphorus, potassium thiocyanate, pyridoxine, calciferol, and thiouracil: and the uses of penicillin, streptomycin, aureomycin and chloromycetin have been described, and are amplified by special tables (Tables XXVIII, XXIX and XXX). To make it easier to turn up any particular table, a list is included in the front of the book.

I have indeed been fortunate in having the help of the team of experts who helped in previous editions. In a book written in a particular style, it is not easy for new contributors to develop the Savill System until after a good deal of practice. Dr. Murgatroyd has taken the place of Professor Hamilton Fairley, and has brought up to date the tropical diseases, in a way which does him great credit. We have missed the help of Dr. J. D. Rolleston, who during his lifetime had contributed to the last five editions. My very grateful thanks are due to the patience and help of Dr. Geoffrey Bourne who revised the Cardiological section, Dr. Geoffrey Evans, who is such a recognised authority on Arterial disease, and to Dr. Maurice Davidson who is such a well-known exponent of the diseases of the Lungs. Also to Mr. L. R. Broster who helped with the Abdominal diseases, Dr. S. W. Patterson who was responsible for the diseases of the Stomach and Intestines, and to Mr. F. S. Warner who has revised the diseases of the Mouth.

Others to whom I am indebted are: Mr. Norman Fleming, for the diseases of the Eye; Dr. Ethel Browning, for rewriting the Vitamins; Dame Louise McIlroy who for so long has been responsible for the Women's diseases; Mr. Arthur Gray who has rewritten the section on Sterility; Mr. W. A. Mill for diseases of the Nose, Throat, Ear, Larynx and Œsophagus; Dr. Thomas Tennent for revision of the Psychological disorders and who has paid particular attention to the new legal requirements of mental certification; and to Dr. Redvers Ironside whose extensive section on diseases of the Central Nervous System has long been one of the most popular sections of the book. It is with especial pleasure that I mention Dr. Agnes Savill, who again revised the diseases of the Skin, and who for so many years edited the book entirely on her own, until I joined her in the eighth and subsequent editions.

To these main contributors, I would like to add my thanks to Dr. T. Fane Tierney for supplying new radiographs; and to Dr. W. E. Clarke who has helped with various suggestions during the arduous tasks of proof-reading and preparation of the index. This task has been shouldered also by Mr. B. J. Newman and by my secretary Miss Valerie Myers whose help in preparation for the press has been invaluable. No textbook is ever perfect, and the earlier pages already seem to show occasional imperfections: but such as may be found are my entire responsibility, for no one could have had more generous help than I: particularly must I take responsibility for any defects in Chapters I, II, XIII, XV and XVII which were largely or entirely my particular responsibility. Lastly, I hope the index will be found helpful, for especial care has been taken with this—in a book of this description, where cross-references are so numerous, the index does assume a very especial importance.

E. C. WARNER.

LONDON, W.1.

LIST OF CONTRIBUTORS

- GEOFFREY BOURNE, M.D., F.R.C.P., Physician to St. Bartholomew's Hospital; Physician in charge of Cardiological Department, St. Bartholomew's Hospital.
- H. F. BREWER, M.A., M.D., B.Ch. (Cantab.), Clinical Pathologist, St. Bartholomew's Hospital; Medical Officer to the British Red Cross London Blood Transfusion Service.
- C. J. C. BRITTON, M.D., Ch.B., D.P.H., Consulting Hæmatologist to the Prince of Wales' Hospital, and Queen Mary's Hospital, Roehampton; - Honorary Pathologist to St. Andrew's Hospital, Dollis Hill, Finchley Memorial and Hendon District Hospitals.
- L. R. BROSTER, O.B.E., M.A. (Oxon.), D.M., F.R.C.S., Surgeon, Charing Cross Hospital; Honorary Fellow of the American Surgical Association.
- ETHEL BROWNING, M.D., H.M. Inspector of Factories.
- MAURICE DAVIDSON, M.A., M.D., F.R.C.P., Consulting Physician to Brompton Hospital; and to the Miller General Hospital.
- GEOFFREY EVANS, M.D. (Cantab.), F.R.C.P. (Lond.), Consulting Physician, St. Bartholomew's Hospital.
- NORMAN FLEMING, M.B., Ch.B., D.O.M.S., Ophthalmic Surgeon, Prince of Wales General Hospital, Tottenham; and to Cheyne Hospital for Children.
- ARTHUR GRAY, M.D., F.R.C.S. (Eng.), F.R.C.P. (Edin.), F.R.C.O.G., Senior Obstetric and Gynæcological Surgeon, Charing Cross Hospital; Gynæcological Surgeon, Hampstead General Hospital.
- REDVERS IRONSIDE, M.B. (Aberdeen), F.R.C.P. (Lond.), Physician for Neurological Diseases, West London Hospital; Physician to Out-patient Department, Hospital for Paralysis and Epilepsy, Maida Vale; Physician for Nervous Diseases to the Hospital of SS. John and Elizabeth.
- DAME LOUISE McILROY, D.B.E., F.R.C.P. (Lond.), LL.D., M.D., D.Sc., Glasg., Lond., and (Hon.) Belfast, F.R.C.O.G., L.M., Consulting Obstetrician and Gynæcological Surgeon, Royal Free Hospital; Surgeon, Marie Curie Hospital; Gynæcological Surgeon, Bermondsey Medical Mission Hospital.
- W. A. MILL, M.S., F.R.C.S., Surgeon, Ear, Nose and Throat Department, St. Thomas's Hospital; Surgeon in charge, Ear, Nose and Throat Department, Royal Cancer Hospital.
- F. MURGATROYD, M.D., F.R.C.P., D.T.M., Physician, Hospital for Tropical Diseases, (University College Hospital) London; Deputy Director, Department of Clinical Tropical Medicine, London School of Hygiene and Tropical Medicine; Consulting Physician to the Colonial Office, London.
- S. W. PATTERSON, M.D., D.Sc., F.R.C.P., Senior Physician, Ruthin Castle Clinic.
- AGNES SAVILL, M.A., M.D. (Glasg.), F.R.C.P.I., formerly Physician to St. John's Skin Hospital, to the Skin Department, South London Hospital, Fitzroy Square Skin Hospital, and Electro-therapeutic Department, Scottish Women's Hospital, Royaumont, France; Honorary Dermatologist to the Royal Surrey County Hospital, Guildford.
- THOMAS TENNENT, M.D., F.R.C.P., D.P.H., D.P.M., Medical Superintendent, St. Andrew's Hospital, Northampton; Physician in Psychological Medicine, Northampton General Hospital.
- E. C. WARNER, M.D., B.Sc., F.R.C.P., Physician, Charing Cross Hospital; Dean, Charing Cross Hospital Medical School; Senior Physician, Putney Hospital; Consulting Physician, Kingston Hospital.
- F. S. WARNER, F.D.S., M.R.C.S., Dental Surgeon, Guy's Hospital; Sub-Dean, Guy's Hospital Dental School.

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INTRODUCTION

THOSE who ponder on general principles and methods will have observed that a considerable change has gradually taken place during the last half-century in the methods of studying the science and art of EVOLUTION. medicine. Formerly, men were content to observe the symptoms or effects of disease at the bedside and in the dead-house, and to speculate on the etiological connection of these two series of phenomena. Wherever the association of such phenomena during life and after death was sufficiently constant, they were spoken of collectively as a "disease"; when a group of symptoms without anatomical lesion constantly recurred, it received a name and place among the list of "disorders." Then each disease or disorder was taken as a separate entity, its anatomy, symptoms, diagnosis, and treatment were described, and its various possible etiological factors discussed; and the result was known as "Descriptive" or "Systematic Medicine." The guiding principle of this descriptive process was the tracing from an assumed *cause* to a known *effect*.

In later times great advances were achieved, almost synchronously, in two very different directions. On the one hand great improvements were made in the methods of observing and investigating the symptoms or effects of disease during life, and thus Clinical Medicine came into separate existence. This stage was marked by the appearance in this country of two very successful works—one by Dr. Samuel Fenwick, of London, on "Medical Diagnosis," first published in 1869, dealing with the symptoms and diagnosis of disease; another by Dr. James Finlayson, of Glasgow, entitled "A Clinical Manual," first published in 1878, dealing with the methods of observing and investigating the symptoms of disease. On the other hand, with the extremely rapid growth of chemical, biological, and bacteriological sciences, and the elaboration of experimental methods in the investigation of disease processes, a new school of pathology arose, whose methods were based upon experiment, and whose leading principle was the artificial production of a definite *cause* and the observing of its *effects*. The extraordinary advances made by these means, and the new light thus shed upon the science of medicine during the last twenty years, form at once the wonder and delight of the civilised world.

As the result of the movement to which I have referred, and the growth in the two directions named, treatises on Systematic Medicine, which attempt to deal at all fully with both the clinical and the pathological aspects of disease, have come to assume very considerable dimensions. In many of them there seems to be a tendency to become more and more pathological in their arrangement, and to treat diseases as separate entities, so that students of clinical medicine and busy practitioners, whose daily work consists of an endeavour to trace from *effect* to *cause*, have been heard to complain that they do not always find in them the clinical aid they seek.

Immediately after embarking on medical practice I realised, as probably many others have done, the importance for diagnostic purposes of reviewing the various diseases or pathological conditions which might give rise to a patient's leading symptom or symptoms, and being unable to find precisely the information desired in any of the current text-books, I proceeded to keep a brief record of all the cases I met with arranged under the heading of their leading symptom. This book is based upon those records, which extend over many years, combined with the valuable knowledge imparted to me at the bedside by my teachers—more especially Dr. Charles Murchison, Dr. J. S. Bristowe, Professor J. M. Charcot, and Sir William Broadbent. Hospital clinics, at first of a general and later of a more special kind, have always been at my command; but it was at the Paddington Workhouse and Infirmary that the idea of this work was conceived, its foundations laid, and the chief part of its "skeleton" constructed. It would be hard to conceive circumstances better suited to the task, for our great poor-law infirmaries contain, as all the world now knows, a vast and almost unexplored field of every possible variety of disease, which can be studied from day to day from the beginning to the end of its course.

As regards the plan and arrangement of this work, the subject will be approached from the standpoint of symptomatology. The principle throughout will consist of tracing from effect (symptoms) to cause (the morbid cause in operation). The order of sequence will be that which should be adopted in the examination of a patient. Thus, the first chapter will give a general scheme for the examination of a case, and will deal with certain general principles underlying methods of observation, diagnosis, prognosis, and treatment. In the second chapter the physiognomy of disease will be discussed. The succeeding chapters will deal seriatim with the symptoms and signs referable to the several organs or anatomical regions of the body, and the disease which may cause those symptoms.

Each chapter will be divided into three unequal parts. Part A. will treat of the *symptoms* which may indicate disease of the organ or region under discussion, the fallacies incidental to their detection, and a brief differential account of the various causes which may give rise to those symptoms. Part B. will treat of the *physical signs* of disease in that region, and the various methods used to elicit them. Part C., which constitutes the major portion of each chapter, will be prefaced with a *clinical classification* of the various maladies affecting that region, and a summary of the routine procedure to be adopted; and this will be followed by a series of sections dealing with the several *diseases*, arranged according to their clinical relationships. For example, in Chapter III., on The Heart—Part A. describes and differentiates the various causes of breathlessness, dropsy, palpitation, precordial pain, and the other symptoms which may be indicative of heart disease; Part B. describes percussion, auscultation,

and the other methods of examining the heart ; and Part C. deals seriatim with the various cardiac disorders, classified and arranged on a clinical basis.

Apart from the general plan and arrangement, there are two features special to this work. The first part of each chapter, dealing with symptoms and their causes, forms a feature on which great labour has been expended. To make each list of causes complete without redundance, and to check the various data again and again in the light of experience, has involved an expenditure of time quite out of proportion to the space occupied. These lists will, I trust, be as useful to others as they have been to me in obtaining a clue to diagnosis.

SPECIAL
FEATURES.

Another feature consists of the italicised paragraphs in Part C. standing at the head of each section, which deal with a separate malady. These emphasise the salient features by which a disease may be recognised and differentiated from others belonging to the same clinical group. They are, in fact, brief clinical definitions, and form, metaphorically speaking, "sign-posts" or guides in the process of diagnosis. If, after carefully studying the lists of symptoms and their causes in Part A., and examining his patient (Part B.), the reader turns to these italicised paragraphs in Part C., the work will, it is hoped, serve as a "clinical index of diseases"; for by following the plan laid down he will shortly find himself reading a description of the diagnosis, prognosis, and treatment of the malady from which his patient is probably suffering; while adjacent to this are the disorders which clinically, and very often pathologically, resemble it, and for which in practice it is apt to be mistaken.

Such an arrangement as that proposed must inevitably lead to some repetition, but this difficulty has been obviated to a certain extent by cross-references. I would also ask the reader to remember that nothing fixes things so well in our minds, or aids us so much in tracing those analogies to which I shall shortly refer, as constantly looking at the same facts from a different point of view.

An attempt has been made to present the various diseases in some kind of perspective by placing them as far as possible in order of importance and using different sized types. The relative importance of different subjects in medicine is largely a matter of opinion, and I cannot expect to escape criticism in this respect.

It is a standing accusation against medical writers that they are careless in respect to literary style, and I fear that I shall not be found an exception. I have striven to be intelligible rather than academic; and in general I feel that I must plead guilty to having endeavoured to follow the Duchess's advice to Alice in Wonderland, to "take care of the sense and the sounds will take care of themselves." When so large an area has to be covered, a certain amount of abbreviation is indispensable, and in order to condense my material, it has been my practice to adopt a numerical

method of description. Some may take exception to this, though the student will find it to his advantage in the acquisition of knowledge.

I may perhaps be pardoned for adverting to certain advantages which appear to me to be associated with the method that I have adopted of approaching clinical medicine. And first let me remark that **ADVANTAGES.** this method of diagnosis is not what has been called a "process of exclusion." It is a positive rather than a negative process, for by carefully considering the various causal diseases which may be in operation and balancing the evidence for and against each, the physician is guided, not to the least improbable, but to the most probable diagnosis.

The advantages of passing in rapid review all the possible diseases which may give rise to a patient's leading symptom, are very obvious to those actively engaged in clinical work. It was Dr. Charles Murchison's method in his bedside teaching; and another equally great clinician, Dr. Matthews Duncan, has aptly remarked: "If you do not know of a thing, you are quite sure not to suspect it; and in all cases of difficult diagnosis, if you do not suspect the disease, you are almost certain not to find it." But I am not aware that any work has yet been published which adopts precisely this plan of approaching clinical medicine.

This plan gives, I venture to think, a truer view of nature's facts than one which deals with diseases as so many separate entities. We see a case in all its clinical and practical bearings. We not only learn that the diagnosis of a patient's malady can at best be only a question of the greatest probability, but with almost mathematical precision we can also assess the probability or improbability of each of the other possible causes in operation. We learn further that all diagnoses can only be provisional, and that the degree of probability of each possible cause changes from day to day, like the coloured pattern of the kaleidoscope, as the course of the malady unfolds itself before us.

It is, moreover, in clinical work carried out on these lines—where diseases presenting analogous clinical phenomena are constantly being associated together from different points of view—that the rôle of the imagination, both in the investigation and in the treatment of disease, finds a legitimate place. The recognition of a clinical likeness between diseases has often led to the erection of a "working hypothesis" which by subsequent research has been found to be correct. Many of our greatest discoveries have been initiated in this way. It was, for instance, a process of this kind which led to the discovery that a large number of, perhaps all, pyrexial disorders are of microbic origin. There are still a number, notably measles, small-pox, and scarlatina, in which such a working hypothesis, based on clinical resemblances, forms at present the full extent of our knowledge; but so precise are these foundations that the microbic nature of these diseases is never doubted. Hypotheses framed in this way should always be tested and confirmed in the laboratory and dead-house, whenever the morbid conditions can be produced experimentally, or when they are

attended by fatal results. But unfortunately there are still a great many diseases, such, for instance, as the two great groups of clinical conditions we call hysteria and neurasthenia (conditions which form a not inconsiderable portion of the practitioner's daily work), which cannot, excepting in the most isolated instances, be observed in the dead-house, and which have not yet been produced in animals. In these cases the method of analogy or comparison to which I have just referred is not only a valuable means of investigation, it forms almost the only means we have.

It is given only to few to devote the necessary time to laboratory research; but all can study their cases at the bedside in the way indicated, and many a valuable and often unrecorded idea as to treatment will occur to the practitioner who thinks out and traces analogies between diseases.

There is yet another advantage which has always appeared to me to accrue, especially to the young observer, by this process of balancing evidence and comparing diseases. It not only impresses important facts upon his memory, but it constitutes one of the best possible means of training him to habits of accurate and complete observation, and of systematic and productive thought. The scope of his horizon is widened, his faculty of systematising his knowledge becomes by practice wonderfully increased, and his reasoning powers strengthened and corrected. He finds intuitively that without accuracy in respect to the most minute details he may be led astray in the more important ones, that without system in the arrangement of his facts he will never be able to attach the proper significance and importance to each; and finally, that without judgment in attaching due weight to each item of evidence, his conclusions may be erroneous although his premises and facts are correct.

I have now described the scheme of this work, its purposes and scope—in a word, the ideal which I hoped to compass; and I believe no one could approach a task of this kind without realising the responsibilities and difficulties involved in its execution. Amidst the bewildering records of medicine there are many excellent treatises both on systematic medicine, the medicine taught in the schools, and on one or other of the several departments of clinical medicine. These deal with their respective subjects in a manner which I cannot hope to rival, and they have been to me an abundant source of instruction, but they have afforded me no exact precedent or guide along the path I wished to travel. The contemplation of the wide range of knowledge and experience required, of the immense advances which have recently been made both in the theory and practice of medicine, of the supreme importance of the subjects here dealt with, involving as they do questions of life and death, has filled my mind with a painful sense of the obligation imposed upon me to sift my facts, and to cull my knowledge, truly, from all sources, but, before all, to obtain my material as far as possible by careful observation and patient thought from the book of nature which lay open before

me from day to day at the bedside in infirmary, hospital, and private practice.

In these circumstances I have gladly availed myself of the help and advice of many friends, and there are some to whom special acknowledgment is due. In certain parts of the chapter on fevers, notably on scarlet fever, measles, diphtheria, and enteric fever, I have had much valuable advice and suggestion in the revision of the proofs from my old friend Dr. Foord Caiger. Similarly in the subject of aneurysm and in parts of the subject of pulmonary disease I am indebted to Dr. Robert Maguire, in parts of the chapter on diseases of the throat and nose to Dr. St. Clair Thompson and Dr. Scanes Spicer, in parts of the section dealing with serum-therapeutics to Dr. George Dean, in parts of the chapter on diseases of the heart to Dr. Alexander Morison, and in parts of the chapter on the urine to Dr. C. O. Hawthorne. The illustrations, with few exceptions, are taken from actual cases, and have been drawn specially for this book under my own supervision; my grateful thanks are due to the artist, Mrs. Stanley Berkeley, a Royal Academy medallist, who has lent her talent to enrich these pages with drawings which are not only accurate but, as far as scientific drawings can be, artistic. Finally, it is difficult for me to express in measured terms my indebtedness to my wife, who has assisted me in the elaboration of this work during the greater part of four years. Her skill and knowledge have largely helped to give it such completeness as it may possess; her patient industry has afforded me not only assistance, but example; and her companionship and encouragement have made many rough places smooth, and have often transformed what at times seemed to be a laborious and interminable task into a pastime.

T. D. SAVILL.