

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY

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THIRTEENTH EDITION

One hundred and seventy-seventh thousand

With 1142 illustrations, of which 58 are unnumbered

First edition, August, 1927.
Reprinted, October, 1928.
Second edition, January, 1930.
Third edition, June, 1931.
Fourth edition, April, 1933.
Reprinted, May, 1934.
Fifth edition, October, 1935.
Reprinted, December, 1936.
Sixth edition, September, 1937.
Reprinted, August, 1938.
Seventh edition, January, 1940.
Reprinted, December, 1940.
Eighth edition, May, 1942.
Reprinted, December, 1942.
Ninth edition, March, 1944.
Reprinted, December, 1944.
Tenth edition, March, 1946.
Reprinted, November, 1947. (Special Export Edition.)
Eleventh edition, Pt. I, May, 1948.
Pt. II, August, 1948.
Pt. III, September, 1948.
Pt. IV, February, 1949.
Reprinted, January, 1950.
Reprinted, August 1951. 2
Twelfth edition, October, 1954.
Reprinted, January, 1957.
Thirteenth edition, June, 1960.

<i>German First Edition</i>	1939
<i>„ Second Edition</i>	1956
<i>„ Third Edition</i>	1959
<i>Turkish Edition</i>	1943
<i>Spanish Edition</i>	1947
<i>Bulgarian Edition</i>	1948
<i>Jugoslav Edition</i>	1953

One hundred and seventy-seventh thousand excluding foreign editions

PREFACE TO THE THIRTEENTH EDITION

WRITTEN originally for the student commencing clinical work in the surgical wards and the out-patient department, it is to him or her that this book is still principally addressed. Couched in language that should be understood easily by anyone who has been trained in anatomy and physiology, when a term with which the beginner is unlikely to be familiar is introduced, its meaning and derivation are explained.

It is true that as they proceed the demonstrations tend to become less elementary, but this is by design. It is also true that this, the thirteenth edition, has been made more comprehensive—for three very good reasons. Firstly, there is overwhelming evidence that many students continue to consult their copy of 'Physical Signs' long after they have qualified. Secondly, the book is used by many candidates for higher examination; indeed, in at least one course of instruction for the Fellowship it has been officially recommended for this purpose. Lastly, with the wider and widening horizon of surgery, physical signs unheard of even a decade ago must now be included.

I believe that the majority of clinical teachers would testify that careful methods of physical examination have, at the present time, become not less, but even more, important. That is the theme of this book, and to this end I have brought before the reader many new patients.

In the task of modernizing this long-established book I have taken full advantage of the criticisms made by reviewers; indeed I have re-studied every review that has appeared. If it be conceded that the book has been modernized and improved, it is to reviewers who have pointed out its failings that most of the credit is due.

To place illustrations in or near the text they concern is always most desirable. In any heavily illustrated book, unless special skill and vigilance is exercised, text and illustrations soon become dissociated; even one illustration in excess of a proportional amount of text can displace all the subsequent illustrations of that chapter from their desirable, to a more forward, position. So it comes about that too often the reader must turn back and forth if text and illustration are

to be correlated. In a medical or surgical book this forward displacement can be positively dangerous; for instance, desirous of refreshing his memory or seeking information on a particular condition, the reader turns to the page indicated in the Index. There he finds the heading or subheading he requires, beneath which there is an illustration belonging to an entirely different condition. In his haste he assumes that the illustration refers to the condition upon which he seeks information, and so he may become entirely misinformed. With the sole object of positioning the illustrations to the best advantage, for this edition Messrs. John Wright and Sons Ltd. have had an additional page proofing of the whole book. It is confidently believed that this has reduced the frequent failing of illustrated books referred to.

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April, 1960.

FROM THE PREFACE TO THE FIRST EDITION

THERE is a growing tendency to rely upon laboratory and other auxiliary reports for a diagnosis.

A former chief, to whose clinical teaching I am for ever indebted, was wont to picture the modern graduate of medicine, when summoned to an urgent call, driving up to the patient's house followed by a pantechicon containing a fully equipped X-ray installation, and a laboratory with a staff of assistants. Without these aids the future doctor would be unable to formulate a diagnosis.

The history, and physical methods of examination, must always remain the main channels by which a diagnosis is made.

ACKNOWLEDGEMENTS

For Reading the Proofs

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 ALLAN CLAIN, M.B. (Cape Town), F.R.C.S. (Eng.). Formerly Surgical Registrar, Royal Marsden Hospital, London. (For suggesting that there should be a separate chapter on The Orbit.)
 WILLIAM WILKINS DAVEY, M.D. (Belf.), F.R.C.S. (Eng.), F.R.C.S.I. Professor of Surgery and Head of the Department, University College, Ibadan, Nigeria. (For criticisms regarding the explanation of Rous's sign.)
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 DENNIS WALKER, M.B., B.S. (Lond.), F.R.C.S. (Eng.). Assistant Orthopaedic Surgeon, Ashford Hospital, Middlesex. (For advice concerning fractures of the carpal bones.)
 HUGH ROLAND EYRE WALLIS, M.D. (Camb.), M.R.C.P. (Lond.). Pediatrician, Bath Clinical Area, Bath Somerset. (For help with many diseases of infants and children.)

For Help with the Literature on Physical Signs

- T. JOHN SHIELDS, Librarian, British Medical Association.

For Help with Biographical Footnotes

- WILLIAM JOHN BISHOP, F.L.A. Editor of "Medical History".
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- Semon and Moritz's Atlas of the Commoner Skin Diseases, 5th ed., 1957. (John Wright & Sons Ltd., Bristol). (Fig. 80.)

“The proper exercise of the five senses is often far more valuable in diagnosis than a handful of laboratory reports and radiographs.” (L. Norrlin.)

★ ★ ★ ★ ★ ★

“Physical examination rather than ancillary investigations helps to complete a diagnosis.” (Allan E. Lee.)

★ ★ ★ ★ ★ ★

“Clinical diagnosis is an art, and the mastery of an art has no end; you can always be a better diagnostician.” (L. Clendening.)

★ ★ ★ ★ ★ ★

“If it is a question of doubt in diagnosis, you may often observe that one man solves the doubt when the others could not, and the way in which one man happened to solve it is this: he applied to the diagnosis of the case some method of examination which the others had not applied.” (C. B. Lockwood.)

★ ★ ★ ★ ★ ★

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CHAPTER I

INTRODUCTION

THE making of a surgical diagnosis resolves itself into seven stages—usually not more than three or four of these will be found necessary.

1. A history is taken and a general observation of the patient is made.

2. Physical signs are elicited.

3. A mental process on the part of the surgeon, whereby 1 and 2 are sifted and correlated, and a logical conclusion is drawn.

4. A differential diagnosis is entertained: this is also a mental process—largely one of exclusion, but reinforced, when possible, by further physical signs.

5. The more accessible parts of the interior are rendered visible by ingeniously constructed tubes, such as the cystoscope, sigmoidoscope, œsophagoscope, gastroscope, and bronchoscope.

6. Confirmatory investigations—e.g., radiological, chemical, bacteriological—are carried out, usually by a colleague.

7. A biopsy or an exploratory operation is performed.

If a diagnosis is still found wanting after the seven stages have been exploited two possibilities remain: Nature cures the patient of his disease, and the diagnosis is for ever one of surmise; or he dies, and a post-mortem, the final court of appeal, if performed, reveals the exact pathology.

The seven stages may be termed the 'surgical crescendo'. *It is mainly with the second stage and the latter part of the fourth that this book is concerned.*

"Data, give me data!" expostulated Sherlock Holmes. In the demonstrations that follow an earnest endeavour has been made to train the student to elicit and assemble data upon which to formulate a reasoned diagnosis.

Another important objective of this book is to bring before the reader selected patients with surgical conditions for demonstration, so that not only can a physical sign or signs be sought, but in a number of instances attention can be drawn to some characteristic feature or

to some syndrome* that is helpful in arriving at a diagnosis or directing the clinician's attention to the need for excluding or confirming a suspected lesion by other physical signs, or by one or more of the scientific adjuncts to diagnosis referred to above.

Not all the patients presented suffer from conditions that will be encountered frequently. In this connexion it must be pointed out that whereas a particular disease is rare in one part of the world, sometimes it is not so uncommon in another (e.g., lymphogranuloma inguinale). Also it is possible that the reader, having seen an illustration and having read the corresponding text, sometimes will be enabled to make a correct diagnosis in spite of the fact that never before had he or she encountered the condition. Actually this fond hope is known to have been realized in the diagnosis of a case of traumatic asphyxia (see p. 294).

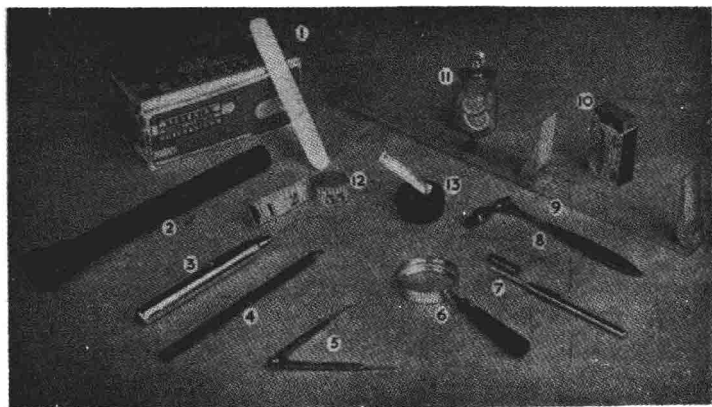


Fig. 1.—Apparatus used for diagnostic purposes in this book. 1, Wooden tongue depressor; 2, Author's transilluminoscope; 3, Electric pocket torch; 4, Indelible pencil; 5, Dividers; 6, Magnifying glass; 7, Clinical thermometer; 8, Tendon hammer; 9, Bootmaker's size-stick; 10, Box of wooden matches; 11, Finger-stalls; 12, Linen tape-measure; 13, Metal tape-measure.

Armamentarium.—A few simple instruments are necessary; their cost is small. Practically all the apparatus employed in the descriptions that accompany this work is shown in Fig. 1. The bootmaker's

* *Syndrome*. Greek, *συνδρομή* = concurrence. A syndrome is an aggregation of symptoms and physical signs that collectively constitute a clinical entity. When, as is often the case, there are three leading criteria, the alternative term 'triad' is sometimes employed (e.g., Hutchinson's triad, p. 84).

size-stick is not mentioned specifically in the text, but it is a useful means of measuring not only the foot, but also other parts of the body, especially when we are comparing one side with the other.

To become a competent up-to-date clinician, the student and the practitioner must become familiar with the use of a rectal, vaginal, and nasal speculum, together with the otoscope, laryngoscope, and ophthalmoscope. In spite of requests to do so, I have made no attempt to demonstrate the use of these important aids to diagnosis because: (1) I consider that this is beyond the scope of physical signs; (2) an adequate description of this aspect of clinical surgery would greatly increase the size of the book.

CHAPTER II

SOME FUNDAMENTAL STATES

SHOCK

SHOCK, more descriptively called 'peripheral circulatory failure', is a state that is met with frequently in surgical practice. When shock follows soon after the receipt of trauma, the peripheral circulation becomes impaired to a varying degree consequent upon transudation of plasma through the capillaries from the blood to the tissue spaces; this is in part compensated by peripheral vasoconstriction of arterioles. When shock follows immediately or soon after the receipt of trauma—primary (neurogenic)* shock—there is little difficulty in recognizing the condition. When it supervenes after a not inconsiderable interval (usually 2–6 hours after an injury, but occasionally up to 12 hours or more)—delayed (oligæmic)† shock—its recognition is more difficult. When delayed shock follows a surgical operation the diagnostic resources of the clinician are often taxed to the utmost, for the differentiation between pure shock and internal hæmorrhage is so difficult. The main signs of shock are as follows:—

The patient lies still, paying but little or no attention to events around him. Rather he stares aimlessly and apathetically straight before him. Disturbed, he will move a little, and will answer questions in a weak voice; the necessity for repeating questions often arises. Left undisturbed, he soon reverts to his former state of lethargy.

The pupils are dilated, and react slowly to light.

His colour is pale, and is often described as grey. Pallor is present because there is less blood than normal in and beneath the skin; grey, because what blood there is, being stagnant, is more venous than usual. Sometimes in profound shock this leads to marbling of the skin of the

* Neurogenic shock must be distinguished from psychogenic shock (vasovagal 'faint'). The well-known condition of a person 'fainting' is not considered here, as its inclusion would add to the complexity of this difficult subject.

† So named because a lowered blood-volume is an essential accompaniment. Also known as 'hypovolæmic shock'.