

BRITISH SURGICAL
PRACTICE

VOLUME 8

BRITISH SURGICAL PRACTICE

Under the General Editorship of

SIR ERNEST ROCK CARLING, F.R.C.S., F.R.C.P.
CONSULTING SURGEON, WESTMINSTER HOSPITAL

and

SIR JAMES PATERSON ROSS, K.C.V.O., M.S., F.R.C.S.
SURGEON AND DIRECTOR OF SURGICAL
CLINICAL UNIT, ST. BARTHOLOMEW'S HOSPITAL;
PROFESSOR OF SURGERY, UNIVERSITY OF LONDON

IN EIGHT VOLUMES
(With Index Volume)

VOLUME 8

LONDON
BUTTERWORTH & CO. (PUBLISHERS), LTD.
BELL YARD, TEMPLE BAR
1950

SET AND BOUND IN GREAT BRITAIN BY HAZELL, WATSON AND VINEY, LTD.,
AYLESBURY AND LONDON
PRINTED BY BRÜDER ROSENBAUM, VIENNA, AUSTRIA

**BRITISH
SURGICAL PRACTICE**

AFRICA: BUTTERWORTH & CO. (AFRICA), LTD.
DURBAN: 1 LINCOLN'S COURT, MASONIC GROVE

AUSTRALIA: BUTTERWORTH & CO. (AUSTRALIA), LTD.
SYDNEY: 8 O'CONNELL STREET
MELBOURNE: 430 BOURKE STREET
BRISBANE: 240 QUEEN STREET

CANADA: BUTTERWORTH & CO. (CANADA), LTD.
TORONTO: 1367 DANFORTH AVENUE

NEW ZEALAND: BUTTERWORTH & CO. (AUSTRALIA), LTD.
WELLINGTON: 49/51 BALLANCE STREET
AUCKLAND: 35 HIGH STREET

Editors-in-Chief

SIR ERNEST ROCK CARLING

F.R.C.S., F.R.C.P.

CONSULTING SURGEON, WESTMINSTER HOSPITAL

AND

SIR JAMES PATERSON ROSS

K.C.V.O., M.S., F.R.C.S.

SURGEON AND DIRECTOR OF SURGICAL CLINICAL UNIT,
ST. BARTHOLOMEW'S HOSPITAL; PROFESSOR OF SURGERY,
UNIVERSITY OF LONDON

Consultant Editors

SEYMOUR BARLING, C.M.G., M.S., M.Ch., F.R.C.S.

Emeritus Professor of Surgery, University of Birmingham

**SIR LANCELOT BARRINGTON-WARD, K.C.V.O., Ch.M.,
F.R.C.S.**

Senior Surgeon, Royal Northern Hospital, London

F. GORDON BELL, M.C., M.D., F.R.C.S.

President, Royal Australasian College of Surgeons

**LT.-GEN. SIR ERNEST BRADFIELD, K.C.I.E., O.B.E., M.S.,
F.R.C.S.Ed.**

Formerly Director-General, Indian Medical Service

SIR HUGH CAIRNS, K.B.E., D.M., F.R.C.S.

Nuffield Professor of Surgery, University of Oxford; Consulting Surgeon,
London Hospital

D. F. CAPPELL, F.R.S.Ed., M.D.

Professor of Pathology, University of Glasgow

P. T. CRYMBLE, F.R.C.S.

Emeritus Professor of Surgery, Queen's University, Belfast

SIR HUGH DEVINE, M.S.(MELB.), F.R.A.C.S., HON.F.R.C.S.

Formerly President, Royal Australasian College of Surgeons

H. R. DEW, F.R.C.S.

Professor of Surgery, University of Sydney

E. F. FINCH, M.D., M.S., F.R.C.S.

Formerly Professor of Surgery, University of Sheffield

E. R. FLINT, F.R.C.S.

Emeritus Professor of Surgery, University of Leeds

C. F. W. ILLINGWORTH, C.B.E., M.D., CH.M., F.R.C.S.ED.,
F.R.F.P.S.

Regius Professor of Surgery, University of Glasgow

SIR JAMES LEARMONTH, K.C.V.O., C.B.E., F.R.S.ED., CH.M.,
F.R.C.S.ED.

Regius Professor of Clinical Surgery and Professor of Surgery, University
of Edinburgh

JOHN MORLEY, CH.M., F.R.C.S.

Emeritus Professor of Surgery, University of Manchester ; Surgeon,
Manchester Royal Infirmary

SIR HENEAGE OGILVIE, K.B.E., M.D., M.CH., F.R.C.S.,
HON.F.A.C.S., HON.F.R.C.S.(C.), HON.F.R.A.C.S.,
HON.M.S.FOUAD I.

Surgeon, Guy's Hospital ; Surgeon, Royal Masonic Hospital, London

WILDER PENFIELD, C.M.G., F.R.S., M.D., HON.F.R.C.S.
Director, Neurological Unit, McGill University, Montreal

LAMBERT ROGERS, M.Sc., F.R.C.S., F.A.C.S., F.R.A.C.S.
Professor of Surgery, University of Wales ; Director, Surgical Unit, and
Surgeon, Cardiff Royal Infirmary

C. F. M. SAINT, C.B.E., M.D., M.S., F.R.C.S., HON.F.R.A.C.S.
Professor of Surgery, University of Cape Town

G. GREY TURNER, M.S., F.R.C.S.,
HON.LL.D.GLAS., HON.D.CH., HON.F.A.C.S., HON.F.R.A.C.S.
Emeritus Professor of Surgery, Universities of Durham and London ;
Formerly Director of Surgical Unit, British Postgraduate Medical School

SIR JAMES WALTON, K.C.V.O., M.S., F.R.C.S., HON.F.A.C.S.
Surgeon, London Hospital

Associate Editors for Special Subjects

WILLIAM BEAUMONT, M.R.C.S., L.R.C.P.
Physician-in-Charge, Physiotherapy Department, Westminster Hospital ;
Physician and Medical Director, Institute of Ray Therapy and Electro-
therapy, London

SIR HENRY COHEN, M.D., F.R.C.P., F.F.R.
Professor of Medicine, University of Liverpool

SIR THOMAS FAIRBANK, D.S.O., O.B.E., M.S., F.R.C.S.
Consulting Orthopaedic Surgeon and Emeritus Lecturer in Orthopaedic
Surgery, King's College Hospital, London

SIR WILLIAM GILLIATT, C.V.O., M.D., M.S., F.R.C.P., F.R.C.S.,
F.R.C.O.G.

Obstetric and Gynaecological Surgeon, King's College Hospital; Consulting
Surgeon, Samaritan Free Hospital for Women, London

GEOFFREY HADFIELD, M.D., F.R.C.P.

Sir William Collins Professor of Human and Comparative Pathology,
Royal College of Surgeons of England

T. B. JOHNSTON, C.B.E., M.D.

Superintendent and Professor of Anatomy, Guy's Hospital, London

PETER KERLEY, M.D., F.R.C.P., D.M.R.E., F.F.R.

Physician-in-Charge, X-ray Department, Westminster Hospital; Radiologist,
Royal Chest Hospital, London

E. F. KING, F.R.C.S., D.O.M.S.

Ophthalmic Surgeon, Westminster Hospital; Surgeon, Moorfields,
Westminster and Central Eye Hospital, London

W. M. MOLLISON, C.B.E., M.Ch., F.R.C.S.

Consulting Surgeon, Ear and Throat Department, Guy's Hospital and
London Hospital

C. PRICE THOMAS, F.R.C.S.

Surgeon, Westminster Hospital; Surgeon, Hospital for Consumption and
Diseases of the Chest, London

Medical Publishing Editor

G. E. HESKETH, M.D.

CONTRIBUTORS

TO THIS VOLUME

SPLEEN—SURGERY OF

ARNOLD K. HENRY, M.B.,
M.Ch.(Hon.) Cairo, F.R.C.S.I.
Emeritus Professor of Clinical
Surgery, Faculty of Medicine,
Cairo ; Professor of Anatomy,
Royal College of Surgeons of
Ireland

STERILITY AND STERILIZATION

KENNETH WALKER, F.R.C.S.
Surgeon-in-Charge, Genito-
urinary Department, Royal
Northern Hospital, London ; and
C. S. LANE-ROBERTS, C.V.O.,
F.R.C.S., F.R.C.O.G., Gynaeco-
logical Surgeon, Royal Northern
Hospital ; Consulting Obstetric
Surgeon, Queen Charlotte's
Hospital, London

STERILIZATION OF SURGICAL APPARATUS

LAWRENCE P. GARROD, M.D.,
F.R.C.P. Professor of Bacteri-
ology, University of London ;
Bacteriologist, St. Bartholomew's
Hospital, London

STOMACH—DISEASES OF

NORMAN C. TANNER, F.R.C.S.
Senior Surgeon, The St. James
Hospital, London

STRABISMUS AND HETEROPHORIA

T. KEITH LYLE, M.D., M.Chir.,
M.R.C.P., F.R.C.S.
Ophthalmic Surgeon, King's
College Hospital ; Surgeon,
Moorfields, Westminster and
Central Eye Hospital ; Assistant
Ophthalmic Surgeon, National
Hospital, Queen Square, London ;
Civilian Consultant in
Ophthalmology, Royal Air
Force

SUBPHRENIC ABSCESS

R. MILNES WALKER, M.S.,
F.R.C.S. Professor of Surgery,
University of Bristol

SUPRASPINATUS LESIONS

R. GUY PULVERTAFT, F.R.C.S.
Director, Accident and
Orthopaedic Service, Derbyshire
Royal Infirmary ; Associate
Surgeon, Harlow Wood
Orthopaedic Hospital, Mansfield ;
Civilian Orthopaedic Specialist,
Royal Air Force

SURGICAL TECHNIQUE

KENNETH W. STARR, O.B.E.,
E.D., M.B.(Syd.), M.S.(Melb.),
F.R.C.S.(Eng.), F.A.C.S.,
F.R.A.C.S. Surgeon, Sydney
Hospital, New South Wales ;
Visiting Surgeon, Repatriation
General Hospital, Concord, New
South Wales ; Consulting Plastic
Surgeon, Faculty of Dentistry,
University of Sydney

SURGICAL TECHNIQUE—
WOUND DRESSINGS

LEONARD COLEBROOK, M.B.,
F.R.C.O.G., F.R.S. Formerly
Director, Medical Research
Council Burns Unit,
Birmingham Accident Hospital

SYPHILIS

V. E. LLOYD, M.C., M.B., B.S.,
M.R.C.S., M.R.C.P. Director,
Venereal Diseases Department,
Guy's Hospital, London

TABES DORSALIS
(LOCOMOTOR ATAXIA)

ANTHONY FEILING, M.D., B.Ch.,
F.R.C.P. Physician to the
Neurological Department,
St. George's Hospital ; Senior
Physician, Maida Vale Hospital
for Nervous Diseases ; Consulting
Physician, Royal National
Orthopaedic Hospital, London

TESTICLE AND TUNICA
VAGINALIS

R. H. O. B. ROBINSON, M.B.,
F.R.C.S. Surgeon, St. Thomas's
Hospital, London ; Consulting
Urological Surgeon, Ministry of
Pensions

TETANUS

J. S. K. BOYD, O.B.E., M.D.,
D.P.H. Director, Wellcome
Laboratories of Tropical
Medicine, London

TETANY

F. AVERY JONES, M.D., F.R.C.P.
Physician, Central Middlesex
Hospital ; Consultant in Gastro-
enterology, Postgraduate
Medical School, London

THORACIC AND
INTRATHORACIC INJURIES

W. P. CLELAND, M.R.C.P.,
F.R.C.S. Assistant Surgeon,
Brompton Hospital ; Assistant
Thoracic Surgeon, King's College
Hospital ; Lecturer in Thoracic
Surgery, Postgraduate Medical
School, London

THROMBOSIS AND
EMBOLISM

GORDON MURRAY, M.D.,
F.R.C.S.(Can.), F.R.C.S.
Surgeon, Toronto General
Hospital ; Assistant Professor of
Surgery, University of Toronto,
Canada

THYMUS GLAND

G. L. KEYNES, M.D., F.R.C.S.
Emeritus Surgeon, St. Barth-
olomew's Hospital, London

THYROGLOSSAL CYST,
SINUS AND FISTULA

SIR THOMAS P. DUNHILL,
G.C.V.O., C.M.G., M.D.,
F.R.C.S., F.R.A.C.S. Consulting
Surgeon, St. Bartholomew's
Hospital, London

THYROID GLAND—
DISEASES OF

The Late SIR ALAN NEWTON,
M.S., F.R.C.S., F.A.C.S.,
F.R.A.C.S. Late Consulting
Surgeon, Royal Melbourne
Hospital ; Late Member of the
Faculty of Medicine, University
of Melbourne

TONSILLITIS

F. C. W. CAPPS, F.R.C.S.
Surgeon-in-Charge, Ear, Nose
and Throat Department, St.
Bartholomew's Hospital, London

TROPICAL DISEASE—
SURGERY IN

F. MURGATROYD, M.D.,
F.R.C.P., D.T.M. Physician,
Hospital for Tropical Diseases
(University College Hospital) ;
Deputy Director, Department of
Clinical Tropical Medicine,
London School of Hygiene and
Tropical Medicine ; Consulting
Physician to the Colonial Office,
London

TUBERCULOSIS

A. Q. WELLS, D.M. Member,
Scientific Staff, Medical Research
Council

TYPHOID FEVER,
SURGERY IN

PHILIP H. MITCHINER, C.B.,
C.B.E., T.D., M.D., M.S.,
F.R.C.S., D.Ch. Honorary
Surgeon to H.M. The King ;
Consulting Surgeon, St. Thomas's
Hospital, London ; Major-
General, A.M.S.T.A.

ULCERS AND
ULCERATION

PHILIP H. MITCHINER, C.B.,
C.B.E., T.D., M.D., M.S.,
F.R.C.S., D.Ch. Honorary
Surgeon to H.M. The King ;
Consulting Surgeon, St. Thomas's
Hospital, London ; Major-
General, A.M.S.T.A.

UMBILICUS—DISEASES OF

D. F. ELLISON NASH, F.R.C.S.
Assistant Surgeon, St. Barth-
olomew's Hospital ; Assistant
Surgeon, South Eastern Hospital
for Children, London

URAEMIA

E. M. DARMADY, M.D., M.R.C.P.
Senior Pathologist, Portsmouth
and Isle of Wight Area
Pathological Service ; and
RONALD W. REID, M.S.,
F.R.C.S. Surgeon, Essex County
Hospital, Colchester

URETER—
TRANSPLANTATION OF

E. W. RICHES, *M.C., M.S.,
F.R.C.S.* Surgeon and Urologist,
Middlesex Hospital, London ;
Surgeon, Hospital of St. John
and St. Elizabeth, London ;
Consulting Urologist to the
Ministry of Pensions Spinal
Injury Centre

URETHRA AND BLADDER:
CONGENITAL
MALFORMATIONS

T. POMFRET KILNER, *C.B.E.,
M.B., F.R.C.S.* Nuffield
Professor of Plastic Surgery,
University of Oxford ; and
E. W. PEET, *F.R.C.S.* Assistant
Director, Nuffield Department of
Plastic Surgery, Oxford

URETHRA—NEW GROWTHS
AND STRICTURE

R. H. O. B. ROBINSON, *M.B.,
F.R.C.S.* Surgeon, St. Thomas's
Hospital, London ; Consulting
Urological Surgeon, Ministry of
Pensions

URINARY ANTISEPTICS

LAWRENCE P. GARROD, *M.D.,
F.R.C.P.* Professor of
Bacteriology, University of
London ; Bacteriologist, St.
Bartholomew's Hospital, London

UTERUS—FIBROIDS

C. H. G. MACAFEE, *M.B.,
F.R.C.S., F.R.C.S.I., F.R.C.O.G.*
Professor of Midwifery and
Gynaecology, Queen's
University, Belfast ;
Gynaecologist, Royal Victoria
Hospital, Belfast ; Surgeon, Royal
Maternity Hospital, Belfast

UTERUS—CARCINOMA OF
THE BODY

GILBERT I. STRACHAN, *M.D.,
F.R.C.P., F.R.C.S., F.R.C.O.G.*
Professor of Obstetrics and
Gynaecology, University of
Wales ; Obstetrician and
Gynaecologist, Cardiff Royal
Infirmary

UTERUS—CERVIX; AND
VAGINA

HUMPHREY G. E. ARTHURE,
M.D., F.R.C.S., M.R.C.O.G.
Assistant Obstetric Physician,
Charing Cross Hospital ;
Obstetric Surgeon, Queen
Charlotte's Hospital ;
Gynaecologist, Mount Vernon
Hospital, London

UVEAL TRACT

H. B. STALLARD, M.B.E., M.D.,
F.R.C.S. Surgeon, Moorfields,
Westminster and Central Eye
Hospital ; Ophthalmic Surgeon,
St. Bartholomew's Hospital,
London

VASCULAR SURGERY

GORDON MURRAY, M.D.,
F.R.C.S.(Can.), F.R.C.S.
Surgeon, Toronto General
Hospital ; Assistant Professor of
Surgery, University of Toronto,
Canada

VEINS—VARICOSE

J. B. KINMONTH, M.S., F.R.C.S.
Senior Lecturer, Surgical Unit,
St. Thomas's Hospital, London

VISCEROPTOSIS

SIR HENRY COHEN, M.D.,
F.R.C.P. Professor of Medicine,
University of Liverpool ; Senior
Physician, Royal Infirmary,
Liverpool

VISUAL FIELDS—
PERIMETRY AND
INTERPRETATION

H. M. TRAQUAIR, F.R.S.Ed.,
M.D., F.R.C.S.Ed.
Consulting Ophthalmic Surgeon,
Royal Infirmary, Edinburgh

VITAMINS AND
NUTRITION IN RELATION
TO SURGERY

J. R. MARRACK, M.D. Professor
of Chemical Pathology,
University of London

VITREOUS—INJURIES AND
DISEASES

C. DEE SHAPLAND, M.B., B.S.,
M.R.C.P., F.R.C.S. Surgeon,
Moorfields, Westminster and
Central Eye Hospital ;
Ophthalmic Surgeon, University
College Hospital ; Ophthalmic
Surgeon, Royal Cancer
Hospital, London

VOLVULUS

ARTHUR E. PORRITT, C.B.E.,
M.Ch., F.R.C.S. Surgeon to H.M.
The King ; Surgeon, St. Mary's
Hospital, London

YAWS

N. HEATH, F.R.C.S.Ed.
Assistant Orthopaedic Surgeon,
Royal Hospital, Wolverhampton ;
Assistant Orthopaedic Surgeon,
Guest Hospital, Dudley

TABLE OF CONTENTS

	PAGES
SPLEEN—SURGERY OF — — — —	1–24
STERILITY AND STERILIZATION — —	25–38
STERILIZATION OF SURGICAL APPARATUS — — — — — —	39–48
STOMACH—DISEASES OF — — — —	49–87
STRABISMUS AND HETEROPHORIA — —	88–103
SUBPHRENIC ABSCESS — — — —	104–114
SUPRASPINATUS LESIONS — — —	115–123
SURGICAL TECHNIQUE — — — —	124–144
SURGICAL TECHNIQUE— WOUND DRESSINGS — — — — —	145–156
SYPHILIS — — — — — — —	157–168
TABES DORSALIS (LOCOMOTOR ATAXIA)	169–173
TESTICLE AND TUNICA VAGINALIS —	174–190
TETANUS — — — — — — —	191–198
TETANY — — — — — — —	199–202
THORACIC AND INTRATHORACIC INJURIES — — — — — — —	203–233
THROMBOSIS AND EMBOLISM — — —	234–242
THYMUS GLAND — — — — —	243–249
THYROGLOSSAL CYST, SINUS AND FISTULA — — — — — — —	250–255
THYROID GLAND—DISEASES OF — —	256–279
TONSILLITIS — — — — — —	280–298

TROPICAL DISEASE—SURGERY IN	—	—	299–310
TUBERCULOSIS	—	—	311–331
TYPHOID FEVER, SURGERY IN	—	—	332–338
ULCERS AND ULCERATION	—	—	339–349
UMBILICUS—DISEASES OF	—	—	350–360
URAEMIA	—	—	361–369
URETER—TRANSPLANTATION OF	—	—	370–382
URETHRA AND BLADDER: CONGENITAL MALFORMATIONS	—	—	383–406
URETHRA—NEW GROWTHS AND STRICTURE	—	—	407–417
URINARY ANTISEPTICS	—	—	418–426
UTERUS—FIBROIDS	—	—	427–439
UTERUS—CARCINOMA OF THE BODY	—	—	440–450
UTERUS—CERVIX; AND VAGINA	—	—	451–475
UVEAL TRACT	—	—	476–488
VASCULAR SURGERY	—	—	489–528
VEINS—VARICOSE	—	—	529–543
VISCEROPTOSIS	—	—	544–553
VISUAL FIELDS—PERIMETRY AND INTERPRETATION	—	—	554–564
VITAMINS AND NUTRITION IN RELATION TO SURGERY	—	—	565–572
VITREOUS—INJURIES AND DISEASES	—	—	573–577
VOLVULUS	—	—	578–587
YAWS	—	—	588–597