

MEDICINE

ESSENTIALS FOR PRACTITIONERS AND STUDENTS

By

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SEVENTH EDITION

WITH 70 ILLUSTRATIONS



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PREFACE TO THE SEVENTH EDITION

IN preparing this, the seventh, edition I have subjected the book to a thorough revision in order to include the many advances made in medicine during the past four years.

New articles have been written on the following subjects: Behçet's syndrome, gastric diverticula, the dumping syndrome, carcinoid tumours of the intestine, steatorrhœa, proctalgia fugax, thrombosis of the hepatic veins, post-necrotic hepatic cirrhosis, constitutional hyperbilirubinæmia, hepatic coma, the post-cholecystectomy syndrome, sequestration of a lung, North American blastomycosis, the Wolff-Parkinson-White syndrome, ischæmic heart disease, dissecting aneurysm, tuberous sclerosis, cervical spondylosis, Christmas disease, agammaglobulinæmia, sarcoidosis, histoplasmosis, osteoporosis, Kwashiorkor, primary amyloidosis, the Fanconi syndrome, idiopathic hypoparathyroidism and pseudo-hypoparathyroidism. Chapter VI, on Water and Electrolytic Balance, is new, and has been kindly written for me by Dr. P. H. Friedlander.

The following sections have been largely or entirely rewritten: Fibrocystic disease of the pancreas, suppurative bronchitis, the etiology of carcinoma of the lung, the pneumonias, the types of pulmonary tuberculosis, the etiology of emphysema, collapse of the lung, anticoagulants, abscess of the lung, cor pulmonale, the signs of mitral stenosis, arteriosclerosis, high blood pressure, Raynaud's disease, tuberculous meningitis, epilepsy, nephritis, nephrosis, uræmia, and the etiology of pernicious anæmia.

The treatment of the following subjects has been recast: Gastric ulcer, celiac disease, acute pancreatitis, ascites, ruptured œsophageal veins, pulmonary tuberculosis, emphysema, meningococcal meningitis, neuro-syphilis, the prophylaxis of measles and whooping-cough, the treatment of scarlet fever, typhoid fever, syphilis, tetanus, gout, malaria, chronic leukæmia and rheumatoid arthritis.

Notes have been added on the following subjects: Calcification of the liver, "liver palms," "vascular spiders," "silver stools," cough syncope, pre-menstrual asthma, printers' asthma, the rheumatoid lung, hamartoma of lung, diffuse interstitial pulmonary fibrosis, endomyocardial fibrosis, the auriculo-temporal syndrome, the Klippel-Feil syndrome, cation exchange resins, pseudohæmophilia, thrombasthenia, cat scratch disease, potassium-losing nephritis, Conn's syndrome, the Rogitine test for phæchromocytoma, and the insulin zinc suspensions.

Other additions include the therapeutic use of over thirty new preparations. Six figures have been omitted, and seven new figures added.

I have received much help in preparing this edition from my publishers, Messrs. J. and A. Churchill, and in particular from Mr. J. Rivers. My secretary, Miss E. G. Smyth, has made many valuable suggestions, has prepared the manuscript for the press, and has helped me with the proof sheets. I am indebted to Miss Josephine Hart for the photograph of my patient suffering from insulin lipodystrophy (Fig. 64), and to Mr. J. Shields for preparing the index of the book.

LONDON.

G. E. BEAUMONT.

PREFACE TO THE FIRST EDITION

It has been my endeavour to produce a text-book of medicine which is not too long for the use of the student preparing for his final examination and which will also be of assistance to the general practitioner. The ideal aimed at has been to include the essentials of medicine and to omit all extraneous matter, to give the student a clear account of the essential features of each disease described, and to supply the practitioner with information as to the investigations required to establish the diagnosis in any particular disease, together with an up-to-date account of a definite line of treatment.

Special attention is directed to clinical findings. Several detailed diet sheets are given, such as those suitable for the treatment of pneumonia, typhoid fever, diabetes, nephritis, gastric ulcer, obesity, constipation, etc. The appropriate dosage, prescriptions and methods of administration of drugs are included in the treatment sections of the various diseases, over one hundred prescriptions being given in full. No effort has been spared to bring every article up to date, to illustrate them with explanatory diagrams, figures and temperature charts, and to connect them with cross references. A series of diagrams, illustrating the anatomy and physiology of the parts concerned, has been introduced into the chapter dealing with nervous diseases, so that this difficult branch of medicine may be more easily understood. The old anatomical terminology has been employed, but a glossary showing the corresponding terms in the international (B.N.A.) nomenclature is included at the beginning of the book.

It is still the duty of the general physician, attached to the teaching staff of a general hospital, to care for patients suffering from most branches of medical diseases, and to instruct students in the symptoms, signs and treatment of such diseases. Such is the reply, if reply be needed, to the criticism that the day of the one-man text-book has passed. If this is so, it could be argued that no single physician should be allowed to teach general medicine and have charge of general medical wards.

Psychological and Dermatological medicine have not been included. They are highly specialised subjects, which are not dealt with in the general medical wards of a hospital. It is true that the student and practitioner must have a working knowledge of these branches of medicine, but this is best acquired from practical experience in the special departments of a general hospital. Infectious fevers have been included, as they frequently cause difficulty in the diagnosis of other medical diseases, and they are so important in general practice. Apart from this, the diseases described are those treated in the medical wards of a general hospital.

This book is largely based upon personal experience in hospital and private practice, and I am indebted first of all to my teachers, and secondly to the authors of the numerous books and articles which I have read. I should like to acknowledge them in detail, but space does not permit, and I take this opportunity of thanking them all for the information they have put before the medical profession.

It is a great pleasure to express my gratitude to Dr. Lee Lander, who has read the typescript and made valuable suggestions and alterations. The publishers of this volume have rendered me every facility and assistance; they have been patient during the five years it has taken me to write and rewrite the manuscript, and I cannot thank them sufficiently for their help and courtesy.

G. E. BEAUMONT.

LONDON, 1932.

ANATOMICAL GLOSSARY

Old Nomenclature	International (B.N.A.) Nomenclature
Fissure of Rolando	Central sulcus.
Sylvian fissure	Lateral cerebral fissure.
Lenticular nucleus	Lentiform nucleus.
Foramen of Monro	Interventricular foramen.
Foramen of Majendie	Medial aperture.
Foramen of Luschka	Lateral aperture.
Sylvian aqueduct	Cerebral aqueduct.
Valve of Vieussens	Anterior medullary velum.
Crus cerebri	Cerebral peduncle.
Superior corpus quadrigeminum	Superior colliculus.
Inferior corpus quadrigeminum	Inferior colliculus.
Superior cerebellar peduncle	Brachium conjunctivum.
Middle cerebellar peduncle	Brachium pontis.
Inferior cerebellar peduncle	Restiform body.
Cisterna magna	Cisterna cerebello-medullaris.
Cisterna basalis	Cisterna interpeduncularis.
Superior longitudinal sinus	Superior sagittal sinus.
Inferior longitudinal sinus	Inferior sagittal sinus.
Circular sinus	Intercavernous plexus.
Basilar sinus	Basilar plexus.
Lateral sinus	Transverse sinus.
Pacchionian bodies	Arachnoideal granulations.
Gasserian ganglion	Semilunar ganglion.
Ganglion of Scarpa	Vestibular ganglion.
Deiters' nucleus	Lateral vestibular nucleus.
Column of Goll	Funiculus gracilis.
Column of Burdach	Funiculus cuneatus.
Direct pyramidal tract	Anterior cerebro-spinal tract.
Crossed pyramidal tract	Lateral cerebro-spinal tract.
Direct cerebellar tract	Posterior spino-cerebellar tract.
Indirect cerebellar tract	Anterior spino-cerebellar tract.
Clarke's column	Dorsal nucleus.
Circumflex nerve	Axillary nerve.
Lesser internal cutaneous nerve	Medial cutaneous nerve.
Intercosto-humeral nerve	Intercosto-brachial nerve.
External cutaneous nerve (arm)	Posterior cutaneous nerve.
Internal cutaneous nerve (arm)	Medial cutaneous nerve.
Musculo-spiral nerve	Radial nerve.
Posterior interosseous nerve	Deep branch of radial nerve.
Radial nerve	Superficial branch of radial nerve.
External cutaneous nerve (leg)	Lateral cutaneous nerve.
Internal cutaneous nerve (leg)	Medial cutaneous nerve.
Middle cutaneous nerve (leg)	Intermediate cutaneous nerve.
Small sciatic nerve	Posterior cutaneous nerve.
Peroneal nerve	Common peroneal nerve.
Anterior crural nerve	Femoral nerve.
Genito-crural nerve	Genito-femoral nerve.
Internal saphenous nerve	Saphenous nerve.
Internal popliteal nerve	Tibial nerve.
Anterior tibial nerve	Deep peroneal nerve.
External saphenous nerve	Sural nerve.
Musculo-cutaneous nerve	Superficial peroneal nerve.
Internal plantar nerve	Medial plantar nerve.
External plantar nerve	Lateral plantar nerve.

BLOOD

Normal Chemical Constituents

FIGURES are mg./100 ml. unless indicated otherwise. mEq./L = milli-equivalent per litre. This is one thousandth of a gramme equivalent, which is the amount of a compound which can react with, or be substituted for, one gramme of hydrogen. Conversion from mg./100 ml. is effected by the following formula : $\text{mEq./L} = \frac{10 \times \text{mg./100 ml.} \times \text{valency}}{\text{atomic weight}}$.

ESTIMATION	WHOLE BLOOD	PLASMA OR SERUM
Alkali reserve (as HCO_3') . . .	—	53-77 vol. CO_2 % (24-25 mEq./L).
Amino-acid nitrogen . . .	4-8	3-7
Bilirubin (Van den Bergh) . . .	—	0.1-0.8
Calcium (total) . . .	5-7	9-11 (4.5-5.5 mEq./L).
„ (diffusible) . . .	—	4.2-5.6 (2.1-2.8 mEq./L).
Chlorides (as Cl') . . .	270-310 (76-87 mEq./L)	340-370 (96-105 mEq./L).
Cholesterol (total) . . .	110-230	140-280
Creatine . . .	2-8	0.2-0.8
Creatinine . . .	0.5-2.5	0.5-2.5
Diastrase (amylase) . . .	—	50-150 glucose units.
Icterus index . . .	—	1-6 units.
Iron . . .	—	0.08-0.18
Non-protein nitrogen . . .	25-30	20-40
Phosphatase (acid) . . .	—	1-3 King-Armstrong units/100 ml.
Phosphatase (alkaline) . . .	—	3-13 King-Armstrong units/100 ml.
Phosphate (inorganic, as P) . . .	2.5-5	2-4.5
Potassium (as K') . . .	150-250 (38-64 mEq./L)	17-22 (4.4-5.6 mEq./L).
Protein (total) . . .	—	5.5-8 G./100 ml.
Albumin . . .	—	3.5-6 G./100 ml.
Globulin . . .	—	1.5-3 G./100 ml.
Fibrinogen . . .	—	0.2-0.4 G./100 ml.
Prothrombin time . . .	—	14-16 seconds
„ concentration . . .	—	70%-140%
Sodium (as Na') . . .	170-225 (74-98 mEq./L)	320-345 (139-150 mEq./L)
Glucose (fasting) . . .	60-110	60-110
Urea . . .	15-40	15-40
Uric acid . . .	1-4	1-4
Vitamin A . . .	—	0.02-0.05 (70-20 i.u./100 ml.)
Vitamin C . . .	0.6-1.8	0.5-2.0

CONTENTS

CHAPTER

I. THE ALIMENTARY SYSTEM

PAGE

1

Introductory 1

The Mouth and Pharynx 1

Gingivitis. Pyorrhœa alveolaris. Dental abscesses. Halitosis. Stomatitis. The Stevens-Johnson syndrome. Behçet's syndrome. Ludwig's angina. Tonsillitis. Vincent's angina. Quinsy. Tuberculosis, syphilis and tumours of the tonsil. Acute glossitis. Chronic glossitis. Leukoplakia. Geographical tongue. Ulcers, tumours and granulomata of the tongue. Acute pharyngitis. Chronic pharyngitis. Retropharyngeal abscess. Ulcers and tumours of the pharynx. Pharyngeal neuroses.

The Salivary Glands 14

Ptyalism. Xerostomia. Acute septic parotitis. Chronic parotitis. Mikulicz's disease. Tumours and calculi.

The Œsophagus 16

Acute œsophagitis. Chronic œsophagitis. Obstruction. Carcinoma. Sarcoma. Simple tumours. Syphilis. Diverticula. Varices. Ulceration. Rupture. Dysphagia.

The Stomach 24

Acute gastritis. Chronic gastritis. Gastric dyspepsias. Hypochlorhydria. Hyperchlorhydria. Flatulent dyspepsia. Bulimia. Anorexia nervosa. Heartburn. Water-brash. Acute dilatation. Chronic dilatation. Congenital hypertrophic stenosis of the pylorus. Hypertrophic stenosis of the pylorus in adults. Cascade stomach. Hæmatemesis. Vomiting. Ulcer. Diverticula. Carcinoma. Sarcoma. Benign tumours, cysts and foreign bodies. Tuberculosis. Syphilis.

The Intestines 44

Duodenal ulcer. Dumping syndrome. Duodenal obstruction. Duodenal ileus. Duodenal diverticula. Carcinoma of the duodenum. Duodenitis. Jejunal ulcer. Gastro-colic fistula. Intestinal diverticula. Regional ileitis. Appendicitis. Irritable colon. Acute catarrhal colitis. Chronic catarrhal colitis. Colitis. Ulcerative colitis. Intussusception. Intestinal obstruction. Intestinal new growths. Intestinal argentaffin carcinoma. Hirschsprung's disease. Steatorrhœa. Celiac disease. Celiac disease in adults. Constipation. Diarrhœa. Visceroptosis. Proctalgia fugax.

The Pancreas 72

Introductory. Acute pancreatitis. Chronic pancreatitis. Fibrocystic disease. Tumours, simple and malignant. Cysts. Calculi.

The Liver, Gall-Bladder and Bile Ducts 78

Introductory. Hepatic efficiency tests. Hepatitis. Malformations and displacements. Hyperæmia. Infarction. Perihepatitis. Liver abscess. Suppurative pyelephlebitis. Thrombosis of hepatic veins. Portal thrombosis. Cysts of the liver. Calcification of the liver. Cirrhosis of the liver; portal cirrhosis, post-necrotic cirrhosis, biliary cirrhosis, Hanot's cirrhosis, Charcot's cirrhosis, pericellular cirrhosis, capsular cirrhosis, pigmentary cirrhosis, parasitic cirrhosis, syphilitic cirrhosis, congestive cirrhosis. Jaundice. Obstructive, toxic and infective hepatic, hæmolytic. Jaundice in the new-born. Erythroblastosis foetalis. Infective hepatitis. Homologous serum jaundice. Acute massive liver necrosis. Hepatic coma. Carcinoma of the liver. Sarcoma of the liver. Hodgkin's disease. Amyloid liver. Fatty liver. Von Gierke's disease. Leukæmic liver. Tuberculosis of the liver. Syphilis of the liver. Actinomycosis of the liver. Acute cholecystitis. Subacute cholecystitis. Chronic cholecystitis. Torsion of the gall-bladder. Parasitic infections of the gall-bladder. Tumours of the gall-bladder. Carcinoma of the gall-bladder. Gall-stones. Post-cholecystectomy syndrome. Congenital obliteration of the bile ducts. Suppurative cholangitis. Catarrhal cholangitis. Tumours of the bile ducts.

The Peritoneum 114

Acute peritonitis, tuberculous peritonitis, gonococcal peritonitis, bile peritonitis. Sub-diaphragmatic abscess. Chronic peritonitis; localised and diffuse plastic peritonitis, tuberculous peritonitis. Cysts. New growths. Ascites.

The Mesentery 122

Inflammation. Structural abnormalities. Hæmorrhage. Thrombosis and embolus. Cysts and new growths. Tuberculous glands.

II. THE RESPIRATORY SYSTEM 124**Introductory 124****The Upper Respiratory Tract 124**

Hay fever. Epistaxis. Acute simple laryngitis. Chronic simple laryngitis. Tuberculous laryngitis. Syphilis of the larynx. Tumours of the larynx. Œdema of the larynx. Croup. Laryngitis stridulosa. Laryngismus stridulus. Infantile laryngeal stridor. Laryngeal paralysis. Functional aphonia. Organic laryngeal paralysis.

The Trachea 133

Tracheitis. Tracheal obstruction. Tracheal diverticula.

The Bronchi 164

Acute tracheobronchitis. Capillary bronchitis. Acute suppurative bronchitis. Acute fibrinous bronchitis. Chronic bronchitis. Chronic suppurative bronchitis. Chronic fibrinous bronchitis. Bronchiectasis. Bronchial diverticula. Asthma. Bronchial obstruction. Tumours. Adenoma. Carcinoma. Injury to the bronchi.

The Lungs 150

Congenital agenesis of a lung. Sequestration of a lung. The bacterial pneumonias; pneumococcal pneumonia, streptococcal pneumonia, staphylococcal pneumonia, Friedlander's pneumonia. Other bacterial pneumonias. Bronchopneumonia in infants. Viral and rickettsial pneumonias. Primary atypical pneumonia. Pneumonitis. Aspiration lung infections. Pulmonary tuberculosis. Emphysema. Tumours. Fibrosis. Pneumokoniosis. Syphilis. Actinomycosis. Aspergillosis. Moniliasis. North American blastomycosis. Collapse of the lungs. Hyperæmia. Hæmorrhagic concussion. Œdema. Infarction. Hæmoptysis. Abscess. Gangrene. Hydatid disease. Dermoid cysts. Congenital cysts. Paragonomiasis.

The Pleuræ 194

Acute dry pleurisy. Chronic dry pleurisy. Pleural effusion; hydrothorax, empyema, hæmothorax, hæmo-serothorax, hæmohydrothorax, chylothorax, pseudo-chylothorax, chyliform effusions. Pneumothorax. Spontaneous hæmopneumothorax. New growths. Calcification.

The Mediastinum 208

Mediastinitis. Mediastinal emphysema. Enlarged mediastinal glands. Tumours. Cysts.

The Diaphragm 210

Hiccough. Paralysis. Hernia. Eventration. Flutter.

III. THE CARDIO-VASCULAR SYSTEM 213

Introductory 213

The X-ray appearances of the heart. X-ray kymography. The normal electrocardiogram. Angiocardiography.

The Pericardium 215

Acute fibrinous pericarditis. Pericardial effusion, sero-fibrinous pericarditis, hydropericardium, pyopericardium, hæmopericardium, hæmoseropericardium, hæmohydro-pericardium. Calcified pericardium. Pyopneumopericardium. Pneumopericardium. Adherent pericardium. New growths and cysts of the pericardium.

The Neuro-Myocardium 222

Disorders of rate and rhythm; simple tachycardia, the effort syndrome, simple bradycardia, sinus arrhythmia, paroxysmal tachycardia, simple paroxysmal tachycardia, nodal tachycardia, ventricular tachycardia, paroxysms of auricular flutter, paroxysms of auricular fibrillation, premature systoles, auricular fibrillation, auricular flutter, ventricular fibrillation. Heart-block; sino-auricular block, auriculo-ventricular block, bundle-branch block, the Wolff-Parkinson-White syndrome, arborisation block. Pulsus alternans. Pulsus paradoxus.

The Myocardium	233
Atrophy. Cloudy swelling. Fatty degeneration and infiltration. Fibrosis. Amyloid, hyaline and calcareous degenerations. Granulomata. Tumours. Cysts. Hypertrophy. Dilatation. Inflammation. Vascular degeneration. Rupture. Hypertensive heart disease. Endomyocardial fibrosis. Pulmonary heart disease. Primary pulmonary hypertension. The failing heart. Peripheral circulatory failure. Syncopal attacks. Ischaemic heart disease. Angina pectoris. Cardiac infarction. Non-penetrating injuries of the heart.	
The Endocardium	249
Acute bacterial endocarditis. Subacute bacterial endocarditis. Non-bacterial endocarditis. Acute rheumatic carditis. Chronic valvular disease. Mitral incompetence. Mitral stenosis. Aortic incompetence. Aortic stenosis. Tricuspid incompetence. Tricuspid stenosis. Pulmonary regurgitation. Pulmonary stenosis.	
Congenital Disease of the Heart	265
Congenital pulmonary stenosis. Patent ductus arteriosus. Patent interventricular septum. Patent foramen ovale. Coarctation of the aorta. Fallot's tetralogy. Tricuspid atresia.	
Aneurysm	270
Aortic aneurysm. Aneurysm of the thoracic aorta. Aneurysm of the sinuses of Valsalva. Fusiform dilatation of the arch. Saccular aneurysm of the arch. Aneurysm of the descending aorta. Aneurysm of the abdominal aorta. Dissecting aneurysm. Acute polyarteritis nodosa. Temporal arteritis.	
Arteriosclerosis	277
Atherosclerosis. Peripheral arteriosclerosis. Medial sclerosis. Diffuse hyperplastic sclerosis. Endarteritis obliterans. Periarteritis. Pulmonary arteriosclerosis. Phlebosclerosis.	
Thrombosis of the Axillary Vein	280
High Blood Pressure	280
Essential hypertension.	
Low Blood Pressure	284
Thrombo-angiitis Obliterans	284
Thrombo-phlebitis Migrans	287
Erythromelalgia	287
Raynaud's Disease	288
Angio-neurotic Œdema	289
Milroy's Disease	290
IV. THE NERVOUS SYSTEM	292
Introductory	292
Anatomy and physiology. Nervous disease case sheet.	
Meningitis	303
Tuberculous meningitis. Meningococcal meningitis. Septic meningitis. Pneumococcal meningitis. Acute lymphocytic chorio-meningitis. Meningism. Arachnoiditis.	

The Cerebrum	313
Intracranial aneurysms. Intracranial hæmorrhage. Extradural hæmorrhage. Concussion. Subdural hæmatoma. Subarachnoid hæmorrhage. Intracerebral hæmorrhage. Cerebral thrombosis. Cerebral embolus. Sinus thrombosis. Intracranial tumours. Abscess of the brain. Hydrocephalus. Aphasia. Encephalitis lethargica. Acute disseminated encephalomyelitis. Encephalitis periaxialis diffusa. Cerebral diplegia. Amaurotic family idiocy. Tuberculous sclerosis. Epilepsy. Chorea. Huntington's chorea. Pink disease. Paralysis agitans. Progressive lenticular degeneration. Migraine. Headache. Obsessive compulsive neurosis. Professional cramp. Hysteria. Neurasthenia.	
The Cerebellum	368
Anatomy and physiology. Hypoplasia. Atrophy. Hæmorrhage. The cerebellar syndrome. Thrombosis. Tumours. Extra-cerebellar tumours. Abscess. Cortical cerebellar atrophy.	
The Cranial Nerves	375
The olfactory nerve. The optic nerve. Optic neuritis, papillitis and papilloedema. Retro-bulbar neuritis. Primary optic atrophy. Secondary optic atrophy. The optic chiasma, optic tract, optic radiations and calcarine region. The oculo-motor nerves. The trigeminal nerve. The facial nerve. The auditory nerve. The vestibular nerve. Vertigo. Nystagmus. Ménière's syndrome. The glossopharyngeal nerve. The vagus. The spinal accessory nerve. The hypoglossal nerve.	
Syphilis of the Nervous System	405
Meningo-vascular syphilis; cerebral syphilis, spinal syphilis. Parenchymatous syphilis; tabes dorsalis, general paralysis of the insane.	
Diseases of the Motor Neurones	413
Progressive ophthalmoplegia. Progressive bulbar paralysis. Progressive muscular atrophy. Amyotrophic lateral sclerosis.	
The Spinal Cord	417
Hæmatorrhaxis. Hæmatomyelia. Myelitis. Compression myelitis. Compression of the cauda equina. Acute poliomyelitis. Landry's paralysis. Disseminated sclerosis. Neuro-myelitis optica. Syringomyelia. Subacute combined degeneration of the cord. Friedreich's ataxia. Spino-cerebellar ataxia. Peroneal muscular atrophy. Progressive spinal muscular atrophy of infants.	
The Spinal Nerves	441
Neuralgia. Herpes zoster. Radiculitis. Neuritis. Multiple neuritis. Tumours. The cervical plexus and its branches; the phrenic nerve. The brachial plexus and branches; the long thoracic nerve, the circumflex nerve, the musculospiral nerve, the ulnar nerve, the median nerve, the musculocutaneous nerve. Cervical spondylosis. The lumbo-sacral plexus and its branches; the anterior crural nerve, the obturator nerve, the external cutaneous nerve, the sciatic nerve. Sciatica. Prolapsed intervertebral disc.	

	PAGE
V. THE URINARY SYSTEM	461
Introductory	461
Abnormalities of the Urine	461
Albuminuria. Albumosuria. Phosphaturia. Oxaluria.	
Glycosuria. Acetonuria. Indicanuria. Hæmaturia.	
Hæmoglobinuria. Porphyrinuria. Pneumaturia. Pyuria.	
Renal Function Tests	467
Examination of the urine. Examination of the blood.	
Excreting power of the kidney. The blood urea clearance	
test. The injection of dyes and their excretion.	
Nephritis and Nephrosis.	468
Types of nephritis and nephrosis. Acute glomerulo-	
nephritis. Focal nephritis. Acute interstitial nephritis.	
Subacute nephritis. Chronic glomerulonephritis, the	
œdematous type, the non-œdematous type. The kidney	
of pregnancy. Arteriolar nephrosclerosis. The nephroses;	
lipoid nephrosis, amyloid nephrosis. Chronic intercapillary	
glomerulosclerosis. Acute tubular necrosis. The crush	
syndrome. The pathogenesis of renal œdema.	
Uræmia	482
Acute uræmia. Chronic uræmia. Latent uræmia. Acute	
convulsive uræmia.	
Bacterial Infections of the Renal Tract	487
Bacilluria. Bact. coli infections of the urinary tract,	
pyelitis, acute and chronic. Cystitis. Carcinoma of	
prostate. Pyelonephritis. Pyonephrosis. Perinephric	
abscess. Tuberculosis of the kidney. Tuberculous	
cystitis.	
Hydronephrosis	494
Nephrolithiasis	495
Miscellaneous Affections of the Kidneys	497
Movable kidney. Congestion. Infarction. Syphilis.	
Tumours. Cysts. Fusion.	
VI. FLUID AND ELECTROLYTE BALANCE	501
Basic Physiological Considerations.	501
Types of Disturbances	503
Causes of Electrolytic Disturbances	504
Treatment of Electrolytic Disturbances	505
VII. THE HÆMPOIETIC AND RETICULO-ENDOTHELIAL	
SYSTEMS	507
Introductory	507
Examination of the blood. The bleeding time. Coagula-	
tion time. Sedimentation rate. Estimation of pro-	
thrombin. Sternal puncture. Grouping.	

CHAPTER

PAGE

Leucocytosis	510
Leucopenia	511
Thrombocytosis	511
Anæmia	511

Nutritional deficiency anæmias; pernicious anæmia, the pernicious anæmia of pregnancy, the anæmias of sprue and of diphyllbothrium latum infestation, tropical megalocytic anæmia, simple achlorhydric anæmia, the Plummer-Vinson syndrome, the nutritional anæmia of infancy, chlorosis. Post-hæmorrhagic anæmias; the anæmia of acute hæmorrhage, the anæmia of chronic hæmorrhage. The hæmolytic anæmias; acute hæmolysis, Lederer's anæmia, chronic hæmolysis, congenital acholuric familial jaundice, acquired acholuric jaundice, sickle-cell anæmia, Cooley's anæmia, Von Jaksch's anæmia. Anæmias due to inhibition of bone marrow function; aplastic anæmia. Agranulocytosis.

The Leukæmias	527
Acute leukæmias. Chloroma. Chronic lymphatic leukæmia. Chronic myeloid leukæmia.	
Hodgkin's Disease	532
Splenic Anæmia	535
The Lipoidoses	536
Gaucher's disease. Niemann-Pick disease. Hand-Schüller-Christian disease.	
The Spleen	538
Enlargement, rupture, perisplenitis.	
Erythrocytosis	540
Erythræmia	540
Enterogenous Cyanosis	541
The Primary Purpuras	543
Purpura hæmorrhagica, purpura simplex, Schönlein's purpura, Hænoch's purpura, purpura fulminans.	
The Secondary Purpuras	548
Hæmophilia	548
Christmas Disease	549
Hæmorrhagic Thrombocythæmia	549
Hæmorrhagic Disease of the Newborn	550
Agammaglobulinæmia	550

VIII. THE INFECTIOUS FEVERS 551

Introductory. Measles. German measles. Scarlet fever. Diphtheria. Chicken-pox. Small-pox. Vaccinia. Mumps. Whooping-cough. Typhoid fever. The paratyphoid fevers. Brucellosis. Typhus fever. Q fever. Erysipelas.

IX. INFECTIOUS DISEASES OF KNOWN AND DOUBTFUL ETIOLOGY 592

Syphilis. Gonorrhœa. Rheumatic fever. Influenza. Tetanus. Actinomycosis. Sarcoidosis. Glandular fever. Glanders. Anthrax. Hydrophobia. Psittacosis. Cocci-
doimycoss. Toxoplasmosis. Histoplasmosis. Spirochætal
jaundice. Tularemia. Cat scratch disease.

X. THE LOCOMOTOR SYSTEM 621

The Muscles and Fasciæ 621

Fibrositis. Epidemic myalgia. Dermatomyositis. Primary myositis fibrosa. Progressive myositis ossificans. The muscular dystrophies ; pseudohypertrophic muscular dystrophy, juvenile muscular dystrophy, facio-scapulo-humeral dystrophy. Amyotonia congenita. Myotonia congenita. Myotonia atrophica. Myasthenia gravis. Familial periodic paralysis.

The Bones 630

Osteitis deformans. Generalised osteitis fibrosa. Focal osteitis fibrosa. Leontiasis ossea. Osteoporosis. Osteomalacia. Multiple myelomatosis. Diffuse osteosclerosis. Osteogenesis imperfecta. Osteopsathyrosis. Achondroplasia. Oxycephaly. Hypertrophic osteoarthropathy.

The Collagen Diseases 637

The Joints 637

Rheumatoid arthritis. Disseminated lupus erythematosus. Osteoarthritis. Rheumatoid spondylitis. Osteoarthritic spondylitis. Still's disease. Specific infective or toxic arthritis. Reiter's disease.

XI. DISORDERS OF METABOLISM 646

Deficiency Diseases 646

Introductory. The vitamins. Rickets. Infantile scurvy. Adult scurvy. Beri-beri. Pellagra. Famine œdema. Kwashiorkor.

Glycosuria 656

Diabetes Mellitus 657

Acidosis 668

Alkalosis 669

Gout 669

Obesity 673

Generalised lipomatosis. Localised lipomatosis. Lipo dystrophia progressiva. Localised lipodystrophy.

Ochronosis 675

Hæmochromatosis 676

Primary Amyloidosis 677

The Fanconi Syndrome 678

CONTENTS

xv

CHAPTER

PAGE

XII. THE DUCTLESS GLANDS	679
The Thyroid Gland	679
Introductory. Simple goitre. Hyperthyroidism. Masked hyperthyroidism. Toxic adenoma. Hypothyroidism. Cretinism. Myxœdema. Masked hypothyroidism. Acute thyroiditis. Riedel's disease. Lymphadenoid goitre. Tumours. Granulomata. Cysts.	
The Parathyroid Glands	692
Introductory. Hyperparathyroidism. Hypoparathyroidism. Tetany. Idiopathic hypoparathyroidism and pseudo-hypoparathyroidism.	
The Suprarenal Glands	696
Introductory. Hyperadrenia. Hypoadrenia. Addison's disease.	
The Pituitary Body	701
Introductory. Hyperpituitarism. Acromegaly. Hypopituitarism. Pituitary infantilism. Hypopituitarism in adults. Diabetes insipidus.	
The Thymus Gland	709
Status lymphaticus. Tumours.	
The Pineal Body	709
The pineal syndrome.	
The Testes	710
The Ovaries	710
Infantilism and Dwarfism	711
XIII. THE TROPICAL DISEASES	713
Malaria. Blackwater fever. Bacillary dysentery. Amœbiasis. Cholera. Sprue. Plague. Yellow fever. Leprosy. Relapsing fever. Scrub typhus. Trypanosomiasis. Dengue. Yaws. Phlebotomus fever. Rat-bite fever. Leishmaniasis. Kala-azar. Tropical sore.	
XIV. THE PARASITIC WORMS	746
The Cestodes	746
The <i>Tœnia solium</i> . The <i>Tœnia saginata</i> . The <i>Diphyllobothrium latum</i> . The <i>Echinococcus granulosus</i> , hydatid disease. The <i>Hymenolepis nana</i> .	
The Trematodes	750
Schistosomiasis; urinary schistosomiasis, intestinal schistosomiasis, Eastern schistosomiasis. Paragonomiasis. Fascioliasis.	
The Nematodes	753
Ascariasis. Enterobiasis. Trichuriasis. Trichiniasis. Strongyliasis. Ankylostomiasis. Filariasis. Wucheria bancrofti. Loa loa. Onchocerca volvulus. Dracontiasis.	

CHAPTER

PAGE

XV. DISEASES DUE TO PHYSICAL AGENTS 763

Caisson Disease	763
Mountain Sickness	764
Sea-Sickness	764
Heat-Stroke	765
Heat Exhaustion	766
Frost-bite	767
Electric Shock and Burns	768

XVI. THE POISONS 770

Introductory	770
Mercury Poisoning	771
Lead Poisoning	772
Arsenic Poisoning	775
Alcoholic Poisoning	777

Acute alcoholic poisoning. Chronic alcoholic poisoning.
Delirium tremens. Methyl alcohol poisoning.

Benzene Poisoning	780
Carbon Monoxide Poisoning	781
Barbiturate Poisoning	782
Aspirin Poisoning	784
Acute Morphine Poisoning	784
Morphinism	785
Strychnine Poisoning	786
Acute Cocaine Poisoning	787
Chronic Cocaine Poisoning	787
Acute Atropine and Belladonna Poisoning	788
Phenol Poisoning	788
Food Poisoning	789

Meat poisoning. Botulism. Diseases carried by milk.
Staphylococcal poisoning. Fish poisoning. Potato poisoning.
Mushroom poisoning. Cheese poisoning. Rye poisoning.
Lathyrism. Food idiosyncrasies.

CHAPTER 1

THE ALIMENTARY SYSTEM

Introductory. Special investigations are required in the elucidation of many of the diseases of the alimentary system. These include test meals, opaque meals and enemata, gastroscopy, tests for pancreatic and hepatic efficiency, cholecystography, and bacteriological and chemical examination of the fæces.

THE MOUTH AND PHARYNX

Gingivitis

Definition. Inflammation of the gums. There are three varieties : Marginal, general and ulcerative. These will be considered separately.

Marginal Gingivitis

Etiology. Marginal gingivitis is associated with mouth-breathing, lack of efficient mastication and cleanliness of the gums, and the use of hard tooth brushes and tooth picks.

Clinical Findings. The patient may complain of bleeding or soreness of the gums on brushing the teeth. The gums are red and swollen at their margins, or they may be retracted around the teeth. Pus may be squeezed from between the gums and teeth.

Treatment. The causes of mouth-breathing should be eradicated if possible. Tartar should be removed from the teeth, and the gums massaged with the fingers towards the teeth, night and morning. The tooth brush should be small and soft, and no gritty powder used. A mouth-wash of milk of magnesia should be used at night.

General Gingivitis

Etiology. General gingivitis may be caused by drugs such as mercury or lead, or result from ill-fitting dentures and inattention to the teeth. It may also occur during pregnancy, in scurvy, or in association with any severe illness.

Clinical Findings. The gums are red, swollen, sore and bleed on pressure. A blue line may be seen in lead poisoning.

Treatment. This is as for marginal gingivitis. In scorbutic or pre-scorbutic conditions, as judged by urine tests, vitamin C should be given until the patient is saturated. The initial dose is ascorbic acid tab. mg. 50, 2 t.i.d. followed after a few days by mg. 50 b.i.d.

Ulcerative Gingivitis

Etiology. Ulcerative gingivitis is associated with the fusiform bacillus and the treponeme of Vincent. Pyogenic organisms may also be present.

Clinical Findings. There is an acute infection, often with pyrexia.

The gums are painful and swollen. Sloughing may occur and the teeth fall out. The infection may spread to the tonsils or pharynx.

Treatment. The ulcers should be painted with a solution of liq. arsenical. m. 90, tnc. ipecac. m. 90, glycerin. m. 60, and, in addition, a mouth-wash such as gargarisma pot. chlorat. should be used frequently. Good results have been obtained in some cases by the oral administration of nicotinic acid tab. mg. 50, 1 five times daily for 10 days. A penicillin lozenge may be placed between the affected area of the gum and the cheek, and allowed to dissolve, every hour for 8 doses, or the gum may be sprayed with a penicillin solution (1,000 units per ml.) every 2 hours. In severe cases the best result is obtained by the intramuscular injection of 800,000 units of a procaine penicillin every morning and evening for 5 days.

Pyorrhœa Alveolaris

This may be a more advanced stage of marginal gingivitis, or occur independently. There is inflammation of the periodontal membrane around the tooth root, and later rarefying osteitis of the alveolar margin. No specific causative organism has been found, but streptococci and various anaerobes are usually present. Innumerable ills are attributed to pyorrhœa, from mild degrees of ill-health to crippling attacks of rheumatism and fatal illnesses such as malignant endocarditis. However this may be, pyorrhœa should be adequately treated by a dental surgeon, but wholesale extractions for marginal gingivitis are to be deprecated.

Dental Abscesses

The Alveolar Abscess. This may result either from dental caries leading to inflammation and death of the pulp of the tooth, or from periodontitis. The abscess is painful.

The Small Apical Abscess. This is usually due to infection of the pulp in a crowned or carious tooth. There is no actual pus present, but a small granulomatous mass, which often causes no local symptoms, is revealed by X-ray examination. The focal infection is considered to be etiologically connected with numerous diseases, such as rheumatism, thrombo-phlebitis migrans, infective endocarditis, etc.

The offending tooth should be extracted.

Halitosis

Definition. Offensive breath.

Etiology. Halitosis may be due to numerous causes, such as chronic tonsillitis, pyorrhœa, infection of the antra or adenoids, chronic gastritis, bronchiectasis, etc.

Stomatitis

Definition. Inflammation of the mucous membrane lining the mouth. Six varieties are described.

Catarrhal (Simple) Stomatitis

Etiology. Catarrhal stomatitis may be due to local causes, such as a sharp tooth, very hot food, or over-smoking. It may also result from