

CONTENTS

PREFACE TO THE THIRD EDITION	v
PREFACE TO THE SECOND EDITION	vii
PREFACE TO THE FIRST EDITION	ix
CONTRIBUTORS	xi

S E C T I O N

I

Introduction

1. GENERAL PRINCIPLES	<i>Edward Fingl and Dixon M. Woodbury</i>	1
-----------------------	---	---

S E C T I O N

II

Drugs Acting on the Central Nervous System

INTRODUCTION	<i>Don W. Esplin</i>	37
2. HISTORY AND THEORIES OF GENERAL ANESTHESIA	<i>Peter J. Cohen and Robert D. Dripps</i>	43
3. SIGNS AND STAGES OF ANESTHESIA	<i>Robert D. Dripps</i>	50
4. PREANESTHETIC MEDICATION ✓	<i>Robert D. Dripps</i>	57
5. UPTAKE, DISTRIBUTION, ELIMINATION, AND ADMINISTRATION OF INHALATIONAL ANESTHETICS ✕ ✕ ✕	<i>Harry Wollman and Robert D. Dripps</i>	61 ✓
6. GENERAL ANESTHETICS	<i>Henry L. Price and Robert D. Dripps</i>	71
I. Gas Anesthetics: Nitrous Oxide, Ethylene, Cyclopropane, and Other Gaseous Anesthetics ✓		
7. GENERAL ANESTHETICS (<i>Continued</i>)	<i>Henry L. Price and Robert D. Dripps</i>	83
II. Volatile Anesthetics: Diethyl Ether, Divinyl Ether, Chloroform, Halothane, Methoxyflurane, and Other Halogenated Volatile Anesthetics		
8. GENERAL ANESTHETICS (<i>Continued</i>)	<i>Henry L. Price and Robert D. Dripps</i>	100
III. Intravenous Anesthetics ✓		
9. HYPNOTICS AND SEDATIVES	<i>Seth K. Sharpless</i>	105
I. The Barbiturates ✓		

10.	HYPNOTICS AND SEDATIVES (<i>Continued</i>)	<i>Seth K. Sharpless</i>	129
	II. Miscellaneous Agents		
11.	THE ALIPHATIC ALCOHOLS	<i>J. Murdoch Ritchie</i>	143
12.	DRUGS USED IN THE TREATMENT OF PSYCHIATRIC DISORDERS	<i>Murray E. Jarvik</i>	159
13.	DRUGS EFFECTIVE IN CONVULSIVE DISORDERS	<i>James E. P. Toman</i>	215
14.	CENTRALLY ACTING MUSCLE RELAXANTS; DRUGS FOR PARKINSON'S DISEASE	<i>Don W. Esplin</i>	237
15.	NARCOTIC ANALGESICS ✓	<i>Jerome H. Jaffe</i>	247
16.	DRUG ADDICTION AND DRUG ABUSE	<i>Jerome H. Jaffe</i>	285
17.	ANALGESICS AND ANTIPYRETICS	<i>Dixon M. Woodbury</i>	312
	Salicylates and Congeners; Phenacetin and Congeners; Antipyrine and Congeners; Colchicine		
18.	CENTRAL NERVOUS SYSTEM STIMULANTS	<i>Don W. Esplin and Barbara Zablocka</i>	345
	I. Strychnine, Picrotoxin, Pentylenetetrazol, Bemegrade, Nikethamide, and Miscellaneous Agents (Ethamivan, Flurothyl)		
19.	CENTRAL NERVOUS SYSTEM STIMULANTS (<i>Continued</i>)	<i>J. Murdoch Ritchie</i>	354
	II. The Xanthines		

SECTION

III

Local Anesthetics

20.	COCAINE; PROCAINE AND OTHER SYNTHETIC LOCAL ANESTHETICS	<i>J. Murdoch Ritchie, Peter J. Cohen, and Robert D. Dripps</i>	367
-----	---	---	-----

SECTION

IV

Drugs Acting at Synaptic and Neuroeffector Junctional Sites

21.	NEUROHUMORAL TRANSMISSION AND THE AUTONOMIC NERVOUS SYSTEM	<i>George B. Koelle</i>	399
22.	ANTICHOLINESTERASE AGENTS	<i>George B. Koelle</i>	441
23.	PARASYMPATHOMIMETIC AGENTS	<i>George B. Koelle</i>	464
24.	DRUGS ACTING ON POSTGANGLIONIC ADRENERGIC NERVE ENDINGS AND STRUCTURES INNERVATED BY THEM (SYMPATHOMIMETIC DRUGS)	<i>Ian R. Innes and Mark Nickerson</i>	477
25.	DRUGS INHIBITING THE ACTION OF ACETYLCHOLINE ON STRUCTURES INNERVATED BY POSTGANGLIONIC PARASYMPATHETIC NERVES (ANTIMUSCARINIC OR ATROPINIC DRUGS)	<i>Ian R. Innes and Mark Nickerson</i>	521

26. DRUGS INHIBITING ADRENERGIC NERVES AND STRUCTURES INNERVATED BY THEM *Mark Nickerson* 546
27. GANGLIONIC STIMULATING AND BLOCKING AGENTS
Robert L. Volle and George B. Koelle 578
28. NEUROMUSCULAR BLOCKING AGENTS *George B. Koelle* 596

SECTION

V

Autacoids

29. HISTAMINE AND ANTIHISTAMINES *William W. Douglas* 615
30. 5-HYDROXYTRYPTAMINE AND ANTAGONISTS; POLYPEPTIDES—ANGIOTENSIN AND KININS *William W. Douglas* 644

SECTION

VI

Cardiovascular Drugs

31. DIGITALIS AND ALLIED CARDIAC GLYCOSIDES
Gordon K. Moe and Alfred E. Farah 665
32. ANTIARRHYTHMIC DRUGS *Gordon K. Moe and J. A. Abildskov* 699
33. ANTIHYPERTENSIVE AGENTS AND THE DRUG THERAPY OF HYPERTENSION
Mark Nickerson 716
34. VASODILATOR DRUGS *Mark Nickerson* 736
35. DRUGS USED IN THE PREVENTION AND TREATMENT OF ATHEROSCLEROSIS
Howard A. Eder 754

SECTION

VII

Water, Salts, and Ions

36. AGENTS AFFECTING VOLUME AND COMPOSITION OF BODY FLUIDS
Louis G. Welt 763
37. CATIONS: CALCIUM, MAGNESIUM, BARIUM, LITHIUM, AND AMMONIUM
Louis G. Welt and William B. Blythe 795
38. ANIONS: PHOSPHATE, IODIDE, FLUORIDE, AND OTHER ANIONS
Louis G. Welt and William B. Blythe 809

SECTION

VIII

Drugs Affecting Renal Function
and Electrolyte Metabolism

INTRODUCTION

Gilbert H. Mudge 820

39. DIURETICS AND OTHER AGENTS EMPLOYED IN THE MOBILIZATION OF EDEMA FLUID *Gilbert H. Mudge* 827
40. AGENTS AFFECTING THE RENAL CONSERVATION OF WATER *Paul Brazeau* 859
41. INHIBITORS OF RENAL TUBULAR TRANSPORT OF ORGANIC COMPOUNDS *Paul Brazeau* 871

SECTION

IX

Drugs Affecting Uterine Motility

42. OXYTOCICS *Paul Brazeau* 878
Ergot, Ergot Alkaloids, and Oxytocin

SECTION

X

Gases and Vapors

43. THE THERAPEUTIC GASES *Harry Wollman and Robert D. Dripps* 893
Oxygen, Carbon Dioxide, and Helium
44. NOXIOUS GASES AND VAPORS *Ewart A. Swinyard* 915
Carbon Monoxide, Hydrocyanic Acid, Benzene, Gasoline, Kerosene, Carbon Tetrachloride, and Miscellaneous Organic Solvents

SECTION

XI

Heavy Metals and Heavy-Metal Antagonists

45. HEAVY-METAL ANTAGONISTS *Walter G. Levine* 929
46. HEAVY METALS *Stewart C. Harvey* 943

SECTION

XII

Locally Acting Drugs

47. DEMULCENTS, EMOLLIENTS, PROTECTIVES AND ADSORBENTS, ABSORBABLE HEMOSTATICS, ASTRINGENTS, IRRITANTS, SCLEROSING AGENTS, CAUSTICS, KERATOLYTICS, ANTISEBORRHEICS, MELANIZING AND DEMELANIZING AGENTS, AND CERTAIN ENZYMES *Ewart A. Swinyard* 976
48. GASTRIC ANTACIDS AND DIGESTANTS *Stewart C. Harvey* 990
49. CATHARTICS *Edward Fingl* 1008
50. ANTISEPTICS AND DISINFECTANTS; FUNGICIDES; ECTOPARASITICIDES *Don W. Esplin* 1021

SECTION

XIII

Chemotherapy of Parasitic
Diseases

51. DRUGS USED IN THE CHEMOTHERAPY OF HELMINTHIASIS	<i>Ian M. Rollo</i>	1058
52. DRUGS USED IN THE CHEMOTHERAPY OF MALARIA	<i>Ian M. Rollo</i>	1087
53. DRUGS USED IN THE CHEMOTHERAPY OF AMEBIASIS	<i>Ian M. Rollo</i>	1118
54. MISCELLANEOUS DRUGS USED IN THE TREATMENT OF PROTOZOAL INFECTIONS	<i>Ian M. Rollo</i>	1135

SECTION

XIV

Chemotherapy of Microbial
Diseases

55. SULFONAMIDES	<i>Louis Weinstein</i>	1144
56. ANTIBIOTICS	<i>Louis Weinstein</i>	1171
I. General Considerations		
57. ANTIBIOTICS (<i>Continued</i>)	<i>Louis Weinstein</i>	1193
II. Penicillin		
58. ANTIBIOTICS (<i>Continued</i>)	<i>Louis Weinstein</i>	1230
III. Streptomycin		
59. ANTIBIOTICS (<i>Continued</i>)	<i>Louis Weinstein</i>	1242
IV. The Tetracyclines: Chlortetracycline, Oxytetracycline, Tetracycline, and Demethylchlortetracycline		
60. ANTIBIOTICS (<i>Continued</i>)	<i>Louis Weinstein</i>	1260
V. Miscellaneous Antimicrobial Agents		
61. DRUGS USED IN THE CHEMOTHERAPY OF LEPROSY AND TUBERCULOSIS	<i>Louis Weinstein</i>	1308

SECTION

XV

Chemotherapy of Neoplastic
Diseases

62. CYTOTOXIC DRUGS, HORMONES, AND RADIOACTIVE ISOTOPES	<i>Paul Calabresi and Arnold D. Welch</i>	1345
---	---	------

SECTION

XVI

Drugs Acting on the Blood and
the Blood-Forming Organs

63. DRUGS EFFECTIVE IN IRON-DEFICIENCY AND OTHER HYPOCHROMIC ANEMIAS
Victor Herbert 1394
64. DRUGS EFFECTIVE IN MEGALOBlastic ANEMIAS
Victor Herbert 1410
65. ANTICOAGULANTS
Walter G. Levine 1443
Heparin, Bishydroxycoumarin, and Congeneric Substitutes

SECTION

XVII

Hormones and Hormone
Antagonists

66. THYROID AND ANTITHYROID DRUGS
E. B. Astwood 1466
67. PARATHYROID
Dixon M. Woodbury 1504
68. ANTERIOR PITUITARY HORMONES AND RELATED SUBSTANCES
E. B. Astwood 1515
69. ESTROGENS AND PROGESTINS
E. B. Astwood 1540
70. ANDROGENS
E. B. Astwood 1566
71. INSULIN AND ORAL HYPOGLYCEMIC DRUGS
George Sayers and Randall H. Travis 1579
72. ADRENOCORTICOTROPIC HORMONE; ADRENOCORTICAL STEROIDS AND THEIR
SYNTHETIC ANALOGS
Randall H. Travis and George Sayers 1608

SECTION

XVIII

The Vitamins

- INTRODUCTION
Paul Greengard 1649
73. WATER-SOLUBLE VITAMINS
Paul Greengard 1653
- I. The Vitamin B Complex
74. WATER-SOLUBLE VITAMINS (*Continued*)
J. J. Burns 1673
- II. Ascorbic Acid (Vitamin C)
75. FAT-SOLUBLE VITAMINS
H. George Mandel and William P. Weiss 1681
- I. Vitamin A and Vitamin D
76. FAT-SOLUBLE VITAMINS (*Continued*)
Victor H. Cohn and H. George Mandel 1697
- II. Vitamin K and Vitamin E
- APPENDIX. PRINCIPLES OF PRESCRIPTION ORDER WRITING
Ewart A. Swinyard 1707
- INDEX 1727