CONTENTS

Number 1, September, 1928

I. The Relation Between Concentration and Action of Adrenaline. By David Wilkie	
II. A Comparative Study of the Prophylactic and Sterilizing Properties of Certain Organic Arsenical and Mercurial Compounds in Experimental	
Rabbit Syphilis. By G. E. Wakerlin and A. S. Loevenhart	18
III. The Therapeutic Action of Certain Organic Mercurial Compounds in Experimental Rabbit Syphilis. By G. E. Wakerlin and A. S. Loevenhart.	2
IV. The Electromotive Action of Drugs as a Cause of Their Toxicity. IV.	
The Augmentor Effect. By R. Beutner	29
Pressure. By F. R. Curtis	37
VI. The Emetic Action of Digitalis Bodies and Strophanthidin in Cats with	
Denervated Hearts. By Melvin Dresbach and Kenneth C. Waddell VII. Further Observations on the Motility of the Human Stomach. By	43
· · · · · · · · · · · · · · · · · · ·	65
VIII. Comparative Studies on Pupillary Reaction in Tetrapods. IV. The	-
Mode of Action of Pilocarpine on the Pupil of the Rat. By Theodore	
11 V	73
IX. Studies on the Toxicity of Various Lead Compounds Given Intravenously. By Fritz Bischoff, L. C. Maxwell, Richard D. Evans, and Frank-	
	85
Number 2, October, 1928	
X. The Site of the Toxic Action of Nicotin on the Respiratory Mechanism.	
By J. Earl Thomas and F. E. Franke	.11
XI. Concerning the Absorption of Quinin and Oxyquinolin Sulphate Through	
the Vagina. By David I. Macht	37
XII. The Rôle of the Liver in Controlling the Distribution of Blood. By Alvah R. McLaughlin	47
KIII. On the Prevention of Experimental Effusions by Calcium Salts. By	41
Harry Gold	69
XIV. Studies on Toxicity of Sodium Fluosilicate. By S. Marcovitch 1	7 9
XV. The Action of Acridine Antiseptics—Acriflavine and Rivanol—on	
Streptococci with Special Reference to Subcutaneous Infections in Mice. By C. H. Browning and R. Gulbransen	07
KVI. Ergotamine Tartrate: Its Direct Hyperglycemic Action and Its Influ-	01
ence on the Hyperglycemia Produced by Epinephrine in Normal Un-	
anesthetized Dogs. By G. E. Farrar, Jr., and A. M. Duff, Jr	97
KVII. IV. A Note on the Rhythmic Contractions of the Ureter as Influenced	v.
by Pituitary Extract and by Histamine. By Charles M. Gruber 2	υJ

ILLUSTRATIONS

Action of adrenaline on isometric response of carotid strip (Fig. 1)	2
of adrenaline on isometric responses of several carotid strips (Fig. 2)	3
— of adrenaline on isotonic contraction of carotid strips (Fig. 3)	5
Effect of perfusion with adrenaline on outflow and radius of frog's aorta	
(Fig. 4)	7
Action of adrenaline injections on blood pressure of cat (weight 2 kgm.)	
(Fig. 5)	9
Healing power of mercuric salicylate in experimental rabbit syphilis (Fig. 1)	25
— power of flumerin in experimental rabbit syphilis (Fig. 2)	26
— power of the sodium salt of 1-mercuri-bis-3-nitro-naphthalene-8-car-	-0
boxylic acid (drug 93) in experimental rabbit syphilis (Fig. 3)	27
Electromotive action of drugs as a cause of their toxicity (Fig. 1)	31
Reversal by ergotamine of the effect of ephedrine on the blood pressure (Figs.	01
1 and 2)	38
	90
3 and 4)	39
Studies on the toxicity of various lead compounds given intravenously	99
(Figs 1 to 6)	100
Curve showing the average rate of decrease in the response to the respiratory	102
impulses of the intact diaphragmatic muscle, in six dogs, due to the	
, , , , , , , , , , , , , , , , ,	110
peripheral action of Nicotin. (Dose, 15 mgm. per kilogram) (Fig. 1)	119
Records showing the effect of experimental procedures on the contractions	
which persisted in the excised diaphragmatic muscle after peripheral par-	105
alysis due to nicotin had occurred elsewhere in the animal (Fig. 2)	125
Simultaneous records of the contractions of the intact right side and ex-	
cised left side of the diaphragm, and the blood pressure, in a dog (11 kgm.)	- 00
that received 15 mgm. of nicotin per kilogram intravenously (Fig. 3)	
	139
	140
	141
Reaction of the liver of a dog to 1.2 cc. epinephrine per liter. July 29, 1924	100
	163
Action of epinephrine (1:500,000) upon the liver of a rabbit. May 24, 1924	100
	163
of barium chloride, 0.4 per cent upon the liver of a cat. May 17, 1924	101
\\\.\.\.\.\.\.\.\.\.\.\.\.\.\.	164
of barium chloride, 0.4 per cent upon the liver of a rabbit. May 23, 1924	101
	164
Velocity of fatality culex quinquefasciatus (Fig. 1)	
VI	199
Combined hyperglycemic action of epinephrine and ergotamine (Fig. 2)	200

Bladder half of excised pig ureter previously kept in °C. Locke's solution	00.4
	204
Same as figure 1 except that the entire ureter was employed (Fig. 2)	205
Partial vasomotor reversal to epinephrine effected by ergotamine, later	
rendered complete after shock had been induced by means of histamine	
(Fig. 1)	243
Augmented susceptibility to ergotamine in histamine shock (Fig. 2)	246
Progressively increasing vasomotor inhibition in shock and complete vasomo-	
	251
Partial vasomotor reversal produced by severe hemorrhage and augmented	
susceptibility to ergotamine in hemorrhage shock (Fig. 4)	252
vasomotor reversal obtained subsequent to the injection of 1.0 mgm.	202
per kilogram of ergotamine tartrate made nearly complete by severe	
hemorrhage, and partial restoration of the peripheral vasomotor mech-	
anism by reinjecting of the withdrawn blood (Fig. 5)	253
Serum calcium after intraperitoneal inoculation with 0.001 mgm. bovine	
	269
calcium after intraperitoneal inoculation with 0.001 mgm. bovine tu-	
bercle bacilli (Fig. 2)	270
calcium, weight, and rectal temperature after intraperitoneal inocula-	
tion of 0.001 mgm. bovine tubercle bacilli (Fig. 3)	271
Sketch of the main veins of the fowl's kidney, with the position of the various	
clamps indicated (Fig. 1)	279
Renal blood-flow of the bird (Figs. 2, 3 and 4)	283
— blood-flow of the bird (Figs. 5, 6 and 7)	
blood-flow of the bird (Figs. 8, 9 and 10)	
the state of the s	294
Photograph of special Condon recorder (Fig. 2)	
— of electric valve, with manometer attached (Fig. 3)	
	290
Chart showing that methyl and ethyl alcohols and glycerol increase sugar	
utilization; that the anesthetics chloroform, ether and ethylene decrease	
it while nitrous oxide has practically no effect (Fig. 1)	
Renal excretion of chlorides and water (Fig. 1)	
excretion of chlorides and water (Fig. 2)	311
Serum calcium in rabbit 23 following subcutaneous inoculation of 0.001 mgm.	
bovine tubercle bacilli: ulceration of the local lesion. Rabbit 28 a	
normal control (Fig. 1)	319
calcium in rabbit 85 following subcutaneous inoculation of 0.001 mgm.	
bovine tubercle bacilli: no ulceration of the local lesion (Fig. 2)	322
Thermal conductivity methods of gas analysis in the study of pharmacologi-	
cal problems (Fig. 1)	326
Apparatus as used except for the galvanometer which was changed for 2500-e	
••	327
* ** :	329
Concentration curves in milligrams per liter of CCl ₄ in the exhaled air of three	323
dogs after injection of this substance into the small intestine (Fig. 4)	330
dogs after injection of this substance into the small intestine (rig. 4)	371

ILLUSTRATIONS

vii

Guinea-pig blood corpuscles showing development of crenation. Injection of	
average lethal doses of NaClO ₃ . Chronic poisoning (Fig. 1)	399
ClBN33. Relation of the average chlorid concentration of the blood to differ-	
ent levels of systolic blood pressure (Fig. 1)	410
ClBN34. Relation of the average chlorid concentration in the blood to	
different, rising, levels of diastolic blood pressure (Fig. 2)	410
ClBN35. Relation of the average systolic blood pressure to varying blood	
chlorid concentrations (Fig. 3)	411
ClBN36. Relation of the average diastolic blood pressure to varying blood	
chlorid concentrations (Fig. 4)	411
ClBN6. Graphic illustration of progress in a patient under treatment for	
hypertension with bismuth subnitrate (Fig. 5)	412
ClBN22. Graphic illustration of progress in a patient under treatment for	
hypertension with bismuth subnitrate, showing a definite rise in the	
chlorid content of the blood as the blood pressure falls (Fig. 6)	413
ClBN21. Graph illustrating spontaneous variation of the blood chlorids and	
blood pressure in a normal subject (Dr. O. D. J.)	414
ClBN20. Graph showing spontaneous variations in the blood chlorids and	
the blood pressure of the author (Fig. 8)	415
CIBN26. Graph showing fluctuation of blood pressure with associated	
changes in the blood chlorids (Fig. 9)	416