CONTENTS

Number 1, January, 1932

I. Walter Ernest Dixon	3
the Rabbit after Administration of Potassium Iodide. By Harold A. Shoemaker and Frank P. Underhill	23
III. Can Iodides Replace Chlorides in Chloride Deficiency? By Harold A. Shoemaker and Frank P. Underhill	4 3
 IV. Study of Pituitary Hormones. IV. Relation Between Hypophysis Hormones and Vitamine C. By R. T. Agnoli	47
on the Germination of Seeds of Lupinus albus L. By R. T. Agnoli VI. Sulfonium Compounds and the Autonomic Nervous System. By Reid	55
Hunt and R. R. Renshaw	63
Benzoates. By A. I. Bernheim, L. Hirschhorn and M. G. Mulinos VIII. The Action of Physostigmine. With Special Reference to the Circu-	81
latory System and the Intestine. By Reginald St. A. Heathcote IX. The General Properties, Actions and Toxicity of Propylene Glycol.	95
By M. A. Seidenfeld and P. J. Hanzlik	109
Number 2, February, 1932	
X. A Contribution to the Pharmacology of Pseudomorphine. By Janet Travell.	123
XI. Thio and Thiomethyl-ammonium Compounds. By Reid Hunt and R. R. Renshaw	
XII. The Action of Arsenic on Leaves. By I. A. Parfentjev and W. K. Devrient	171
XIII. An Experimental Investigation on the Treatment of Toxaemia. Part I. By G. Norman Myers	191
XIV. A Study of the Cardiovascular Responses in Man to the Intravenous and Intra-arterial Injection of Acetylcholine. By Laurence B. Ellis	
and Soma Weiss	235
XV. Claude Bernard's Theory of Narcosis. By V. E. Henderson and G. H. W. Lucas.	253
Number 3, March, 1932	
XVI. The Effect of Radon Radiation upon Isolated Organs. By S. E. F.	
Gooding	269
XVII. Combined Ephedrine-pituitary Extract (Posterior Lobe) Therapy in Histamine Shock. By K. I. Melville	279

XVIII. The Effect of Ultraviolet Irradiation upon the Toxicity of Pure Nicotine. By Glen Wakeham and George P. Tracy	005
XIX. Rôle of Chemical Structure of Cocaine in the Cocaine Sensitization-	290
desensitization Phenomena. By S. K. Wirt and M. L. Tainter	000
	299
XX. Blood Alcohol and Its Relation to Intoxication. By R. G. Turner.	
Assisted by E. R. Loew	305
XXI. The Duration of Action of the Barbituric Acid Hypnotics as a Basis of	
Classification. By Richard H. Fitch and Arthur L. Tatum	325
XXII. Picrotoxin as an Antidote in Acute Poisoning by the Longer Acting	
Barbiturates. By A. H. Maloney and A. L. Tatum	337
XXIII. Slowing of the Heart Rate, Due to Irradiated Synephrin, Epi-	
nephrine, Nicotine and Related Drugs. By John A. Higgins, Paul L.	
Ewing and Hugh A. McGuigan	353
XXIV. The Estimation of the Relative Toxicities and Efficiencies of Local	
Anesthetics. By A. D. Macdonald and M. C. G. Israëls	359
XXV. The Effect of Ergotamine on the Intestine with Observations on the	500
Influence of Calcium on Its Action. By William Salant and William	
M. Parkins	280
WI, Faraius	908
Number 4, April, 1932	
• •	
XXVI. The Influence of Sodium Phenobarbital (Sodium Luminal) on the	
Cardiac Action of Pituitary Extract. By B. B. Raginsky and R. L.	
Stehle	385
XXVII. A Note Referring to the Paper of Frank Wokes: A Method of Com-	
paring the Absorption of Calcium Preparations. By L. Kofler and R.	
Fischer	393
	395
XXIX. The Amide Nitrogen of Blood. VI. A Reply to Nash and Williams.	
By Sidney Bliss	397
XXX. The Toxic Action of p-Diazoiminobenzene Hydrochloride and of Its	
	409
XXXI. Studies on the Pharmacology of Metaphen and Acriflavine. By P.	
Jeanette Crittenden	499
XXXII. The Effect of Phosphate and Bicarbonate Buffers on the Ionization	120
of Calcium Salts in Physiologic Salt Solutions. By W. F. von Oettingen	405
and R. E. Pickett	430
XXXIII. Chemotherapy of Quinoline Compounds. III. The Action of	
Certain Quinoline Compounds on Paramoecia. By Phanindranath	
Brahmachari, Upendranath Brahmachari and Radhakrishna Banerjea.	44 5
XXXIV. Further Studies of the Control of Experimentally Produced Con-	
vulsions. By Haddow M. Keith	44 9
XXXV. The Stimulant Action of Nicotine upon the Spleen. By F. D.	
McCrea	457
XXXVI. On the Pharmacologic Action of Some New Choline Derivatives in	
Relation to Their Chemical Constitution. By W. F. von Oettingen	
and D. F. Eveleth	465
XXXVII. The Intact Intestine in Non-anesthetized Dogs as Affected by	
Anthraquinon (Emodin) Cathartics. By Charles M. Gruber, William	
	479

ILLUSTRATIONS

Study of pituitary hormones. IV. Relation between hypophysis hormones and vitamine C (Fig. 1)	50
- of pituitary hormones. IV. Relation between hypophysis hormones	00
and vitamine C (Fig. 2)	50
— of pituitary hormones. IV. Relation between hypophysis hormones and	
vitamine C (Fig. 3)	51
of pituitary hormones. IV. Relation between hypophysis hormones	
and vitamine C (Fig. 4)	51
— of pituitary hormones. IV. Relation between hypophysis hormones	
and vitamine C (Fig. 5)	52
Isolated toad heart (Fig. 1)	100
rabbit heart (Fig. 2)	102
0,1	105 106
Anesthetised dog (Fig. 4)	100
by white rats (Fig. 1)	118
Effect of pseudomorphine, initial injection of 0.1 mgm., on respiration (A)	110
and carotid blood pressure (B) (Fig. 1)	137
— of pseudomorphine, 0.5 mgm., on respiration (A) and carotid blood	10.
pressure (B) (Fig. 2)	137
of pseudomorphine, second dose of 0.5 mgm., on respiration (A) and	
carotid blood pressure (B) (Fig. 3)	138
— of pseudomorphine, 10.0 mgm., on respiration (A) and carotid blood	
pressure (B) (Fig. 4)	138
— of epinephrine, 1:10,000 solution, 0.15 cc., on respiration (A) and carotid	
blood pressure (B), before pseudomorphine (Fig. 5)	140
— of pseudomorphine, 0.1 mgm., and of epinephrine, 1:10,000 solution,	
0.15 cc., injected fifty-five seconds later, on respiration (A) and carotid	
blood pressure (B) (Fig. 6)	140
of epinephrine, 1:10,000 solution, 0.15 cc., given two minutes after the	
injection of pseudomorphine, 0.5 mgm., on respiration (A) and carotid blood pressure (B) (Fig. 7)	141
of pseudomorphine, 5.0 mgm., on respiration (A) and carotid blood	141
pressure (B) (Fig. 8)	141
	222
• • • • • • • • • • • • • • • • • • • •	223
Skin temperature measurements over the cheek in three subjects before,	
during and after the intravenous injection of 0.08 gram per minute of	
	239

The effect of the intravenous injection of varying dosages of acetylcholine	
on the pulse rates of thirteen normal subjects (Chart 2)	24 0
effect of the intravenous injection of varying dosages of acetylcholine on	
	241
Skin temperature measurements over the thigh in four normal subjects before,	
during and after the intra-arterial injection of acetylcholine (Chart 4).	
Record of isolated and perfused heart of tortoise (Fig. 1)	271
— of perfused frog's heart (Fig. 2)	
— of isolated rabbit's intestine (Fig. 3)	273
— of isolated guinea pig's uterus (Fig. 4)	274
of movements of isolated guinea pig's uterus (Fig. 5)	275
— of movements of isolated guinea pig's uterus in Locke Ringer's solution	
(Fig. 6)	276
Respiration and blood pressure tracings. Time recorded in minutes. Dog,	
female, 7.2 kgm. Operative procedures under ether anestheia (Fig. 1).	282
and blood pressure tracings. Time recorded in minutes. Dog, female,	
	283
— and blood pressure tracings. Time recorded in minutes. Dog, female,	
	283
Blood pressure tracing. Time recorded in minutes. Dog, female, 5.8 kgm.	
	284
Respiration and blood pressure tracings. Time recorded in minutes. Dog,	
male, 6.1 kgm. Operative procedures under ether anesthesia (Fig. 5)	284
— and blood pressure tracings. Time recorded in minutes. Dog, male,	201
	285
— and blood pressure tracings. Time recorded in minutes. Dog, female,	200
<u> </u>	286
— and blood pressure tracings. Time recorded in minutes. Dog, female,	200
	287
Blood pressure tracing. Time recorded in minutes. Dog, female, 7.5 kgm.	201
	288
Alcohol absorption in fasting dogs. Ingestion of 10 per cent solution. Alco-	200
	315
- absorption in dogs one-half hour after feeding. Ingestion of 10 per	010
	315
Slowing of the heart rate, due to irradiated synephrin, epinephrine, nicotine	010
	354
— of the heart rate, due to irradiated synephrin, epinephrine, nicotine and	001
related drugs (Fig. 2)	354
— of the heart rate, due to irradiated synephrin, epinephrine, nicotine	001
, , , , , , , , , , , , , , , , , , , ,	355
of the heart rate, due to irradiated synephrin, epinephrine, nicotine and	000
	356
of the heart rate, due to irradiated synephrin, epinephrine, nicotine and	JJJ
	356
related drugs (Fig. 5)	UUU
· · · · · · · · · · · · · · · · · · ·	357
related drugs (Fig. 6)	001

ILLUSTRATIONS

vii

Slowing of the heart rate, due to irradiated synephrin, epinephrine, nicotine	a
and related drugs (Fig. 7)	357
and related drugs (Fig. 8)	35 8
Fracings of respiration and blood pressure during three infusions of local	004
anesthetic into a cat under "liquid dial" (Fig. 1)	364
of calcium on its action (Fig. 1)	372
— effect of ergotamine on the intestine with observations on the influence	270
of calcium on its action (Fig. 2)	3/0
of calcium on its action (Fig. 3)	380
influence of sodium phenobarbital (sodium luminal) on the cardiac	900
action of pituitary extract (Fig. 1)	389
compound with cupric chloride (Fig. 1)	413
toxic action of p-diazoiminobenzene hydrochloride and of its additive	41.4
compound with cupric chloride (Fig. 2) Effect of p-diazoiminobenzene hydrochloride on temperature in artificially	414
induced fever in rabbits (Fig. 3)	417
Blood pressure kymograms showing the acriflavine "reversal" due to anesthetic (above) and ergotamine (below) (Fig. 1)	429
The effect of phosphate and bicarbonate buffers on the ionization of calcium	
salts in physiologic salt solutions (Chart 1)	437
	438
- effect of phosphate and bicarbonate buffers on the ionization of calcium	
	439 459
- stimulant action of nicotine upon the spleen (Fig. 1)	
stimulant action of nicotine upon the spleen (Fig. 3)	461
— stimulant action of nicotine upon the spleen (Fig. 4)	462
	473
0	
Non-anesthetized dog, weight 10 kgm. (Fig. 2)	
dog, weight 14 kgm. (Fig. 3)	
dog, weight 18 kgm. (Fig. 5)	