

## INDEX

- Acetylcholine, certain actions of, Influence on, of addition of chlorine to side chain, 1
- Adenine-thiomethylpentose, pharmacological actions of, 164
- Air, expired, tissues and blood, Determination of paraldehyde in, 281
- N*-Allyl-normorphine, Antagonistic effect of, upon morphine, 27
- Aminase, deamination of sympathomimetic amines by. Relation to, of molecular configuration, 85
- Amines, sympathomimetic, rate of deamination of, by aminase, Relation to, of molecular configuration, 85
- Anderson, Carl E., Cornatzer, W. E., and Andrews, James C. Rôle of liver in metabolic destruction of quinine, 62
- Anderson, Robert C., Chen, K. K., and Harris, Paul N. Action of carthamoidine, 133
- Steldt, Frank A., Mills, C. A., and Chen, K. K. Environmental temperature and drug action in mice, 127
- Andrews, James C., Anderson, Carl E., and Cornatzer, W. E. Rôle of liver in metabolic destruction of quinine, 62
- Anesthesia, Ether, and output of fluids from respiratory tract, 346
- Anesthetic action of isopropenyl vinyl ether, 179
- dosage, Effect on, of hemorrhage, 259
- Anoxia and shock, Dephosphorylation of cocarboxylase in tissues during, 169
- Ansari, M. Y., and Robson, J. M. Fate of D.B.E. (*aa* di(*p*-ethoxyphenyl) $\beta$ -phenyl bromo-ethylene) in the body, 340
- Antipyresis, aspirin, Mechanism of, in monkeys, 55
- Arsenicals and sulfonamides, Comparison of mechanism of action of, 32
- Arsphenamines, Physico-chemical properties of, in relation to distribution and retention in tissues, 140
- Aspirin antipyresis, Mechanism of, in monkeys, 55
- Bacterial (coliform) flora of intestine of normal mice, Effect on, of oral administration of succinyl sulfapyrazine, 200
- Barbour, H. G., and Guerra (Perez-Carral), F. Mechanism of aspirin antipyresis in monkeys, 55
- Becker, T. J., Warren, M. R., Marsh, D. G., Thompson, C. R., and Shelton, R. S. Pharmacological studies on *dl*- $\beta$ -phenyl *n*-propylmethylamine, a volatile amine, 187
- Beyer, Karl H. Relation of molecular configuration to rate of deamination of sympathomimetic amines by aminase, 85
- Blood levels of sulfadiazine, sulfamerazine and sulfamethazine in relation to binding in plasma, 320
- specific gravity, Increased, in anesthetized dogs following pilocarpine injections, 16
- tissues and expired air, Determination of paraldehyde in, 281
- Boyd, Eldon M., and Munro, Jean S. Ether anesthesia and output of fluids from respiratory tract, 346
- Burch, Buford H., and Westfall, B. A. Increased blood specific gravity in anesthetized dogs following pilocarpine injections, 16
- Burton, Andrew F., and Kelsey, F. E. Metabolism of quinine in pregnant animals, 70
- Callomon, Fritz T., and Raiziss, George W. Effect of oral administration of succinyl sulfapyrazine on bacterial (coliform) flora of intestine of normal mice, 200
- Carbamyl choline, furfuryl trimethyl ammonium iodide, oxygen and soybean lecithin, effect of, on experimental polycythemia, 37
- Carr, C. Jelleff, Horney, Amos G., Evans, William E., Jr., and Krantz, John C., Jr. Anesthetic action of isopropenyl vinyl ether, 179
- Carthamoidine, Action of, 133
- Chen, K. K., and Scott, C. C. Pharmacological action of *N*-methylcytisine, 334
- Anderson, Robert C., Steldt, Frank A., and Mills, C. A. Environmental temperature and drug action in mice, 127

- Harris, Paul N., and Anderson, Robert C. Action of carthamoidine, 133
- Swanson, E. E., Scott, C. C., and Lee, H. M. Comparison of pressor action of some optical isomers of sympathomimetic amines, 329
- Chlorine, Influence of addition of, to side chain on certain actions of acetylcholine, 1
- Cholinesterase, inhibitory effect on, of Breakdown products of physostigmine, 309
- Coccarboxylase, Dephosphorylation of, in tissues during shock and anoxia, 169  
*in vitro* hydrolysis and synthesis of, by liver tissue, effect on, of cellular damage, 240  
phosphatase in dog serum, 246
- Cornatzer, W. E., Andrews, James C., and Anderson, Carl E. Role of liver in metabolic destruction of quinine, 62
- Davis, John Emerson. Effect of oxygen, soybean lecithin, carbamyl choline and furfuryl trimethyl ammonium iodide on experimental polycythemia, 37
- D.B.E. ( $\alpha$  di(*p*-ethoxyphenyl) $\beta$ -phenyl bromo-ethylene) in the body, 340
- Deamination, rate of, of sympathomimetic amines by aminase, Relation to, of molecular configuration, 85
- Demerol, Addiction liability of, 5  
Method for determination of, in urine, and results of its application, 10
- Dephosphorylation of coccarboxylase in tissues during shock and anoxia, 169
- 2,4-Dinitrophenol, toxicity of, effect of environmental temperature on, in mice, 176
- Diuretics, Bioassay of, 97
- Dreisbach, Robert, and Snyder, Franklin, F. Effect on fetus of pentobarbital sodium and pentothal sodium, 250
- Electrical convulsions, threshold for, Influence of various drugs on, 42
- Ellis, Sydney. Studies on physostigmine and related substances. IV. Chemical studies on physostigmine breakdown products and related epinephrine derivatives, 364
- Krayer, Otto, and Plachte, Frank L. Studies on physostigmine and related substances. III. Breakdown products of physostigmine; their inhibitory effect on cholinesterase and their pharmacological action, 309
- Plachte, Frank L., and Straus, Oliver H. Studies on physostigmine and related substances. II. Destruction of physostigmine in buffered solutions and in serum, 295
- Epinephrine, toxicity of, Influence on, of sodium bisulfite, 111
- Ether anesthesia and output of fluids from respiratory tract, 346  
isopropenyl vinyl, Anesthetic action of, 179
- Evans, William E., Jr., Krantz, John C. Jr., Carr, C. Jelleff, and Horney, Amos, G. Anesthetic action of isopropenyl vinyl ether, 179
- Ewing, P. L., and Schlenk, F. Pharmacological actions of adenine-thiomethylpentose, 164
- Fetus, Effect on, of pentobarbital sodium and pentothal sodium, 250
- Field, John, 2d, Fuhrman, Geraldine J., and Weymouth, Frank W. Effect of environmental temperature on toxicity of 2,4-dinitrophenol in mice, 176
- Fisher, Saul H., Troast, Leonard, Waterhouse, Alice, and Shannon, James A. Relation between chemical structure and physiological disposition of series of substances allied to sulfanilamide, 373
- Friedlander's bacillus (*Klebsiella pneumoniae*) Comparative activity against, of sulfonamides, 117
- Fuhrman, Geraldine J., Weymouth, Frank W., and Field, John, 2d. Effect of environmental temperature on toxicity of 2,4-dinitrophenol in mice, 176
- Furfuryl trimethyl ammonium iodide, oxygen, carbamyl choline and soybean lecithin, effect of, on Experimental polycythemia, 37
- Germicides, Effect of repeated applications of sublethal concentrations of, on living embryonic tissue fragments, 271
- Gilligan, D. Rourke. Blood levels of sulfadiazine, sulfamerazine and sulfamethazine in relation to binding in plasma, 320

- Gonzalez, R. I., Tainter, M. L., Tainter, E. G., Lawrence, W. S., Neuru, E. N., Lackey, R. W., Luduena, F. P., and Kirtland, H. B., Jr. Influence of various drugs on threshold of electrical convulsions, 42
- Govier, W. M., and Greig, Margaret E. Dephosphorylation of cocarboxylase in tissues during shock and anoxia, 169
- and Greig, Margaret E. Studies on shock induced by hemorrhage. V. Effect of cellular damage on *in vitro* hydrolysis and synthesis of cocarboxylase by liver tissue, 240
- VI. Cocarboxylase phosphatase in dog serum, 246
- Graessle, Otto E., Robinson, Harry J., and Siegel, Henry. Studies on sulfapyrazine, 354
- Greig, Margaret E., and Govier, W. M. Dephosphorylation of cocarboxylase in tissues during shock and anoxia, 169
- and Govier, William M. Studies on shock induced by hemorrhage. V. Effect of cellular damage on *in vitro* hydrolysis and synthesis of cocarboxylase by liver tissue, 240
- VI. Cocarboxylase phosphatase in dog serum, 246
- Guerra (Perez-Carral), F., and Barbour, H. G. Mechanism of aspirin anti-pyresis in monkeys, 55
- Haag, H. B., Larson, P. S., and Schwartz, J. J. Effect of urinary pH on elimination of quinine in man, 136
- Hadidian, Zareh, Kerpscar, Andrew, and Lipschitz, Werner L. Bioassay of diuretics, 97
- Harris, Paul N., Anderson, Robert C., and Chen, K. K. Action of carthamoidine, 133
- Hemorrhage, Effect of, on anesthetic dosage, 259
- Henderson, V. E., and Yi, C. L. Experiments on pharmacology of respiration in rabbit, 235
- Heroin, Studies on fate of, 266
- Himmelsbach, C. K. Addiction liability of demerol, 5
- Hitchcock, Philip, and Nelson, Erwin E. Metabolism of paraldehyde. I. De-termination of paraldehyde in tissues, blood and expired air, 281
- II, 286
- Hodge, Harold C., and Sterner, James H. Skin absorption of triorthocresylphosphate as shown by radioactive phosphorus, 225
- Horney, Amos G., Evans, William E., Jr., Krantz, John C., Jr., and Carr, C. Jelleff. Anesthetic action of isopropenyl vinyl ether, 179
- Isopropenyl vinyl ether, Anesthetic action of, 179
- Jaco, N. T., and Wood, D. R. Effect of hemorrhage on anesthetic dosage, 259
- Kelsey, F. E., and Burton, Andrew F. Metabolism of guinine in pregnant animals, 70
- and Oldham, Frances K. Distribution of quinine oxidase in animal tissues, 77
- and Oldham, Frances K. Influence of pregnancy on quinone oxidase of rabbit liver, 81
- Kerpscar, Andrew, Lipschitz, Werner L., and Hadidian, Zareh. Bioassay of diuretics, 97
- Klebsiella pneumoniae* (Friedlander's bacillus), Comparative activity against of sulfonamides, 117
- Kirtland, H. B., Jr., Gonzalez, R. I., Tainter, M. L., Tainter, E. G., Lawrence, W. S., Neuru, E. N., Lackey, R. W., and Luduena, F. P. Influence of various drugs on threshold for electrical convulsions, 42
- Krantz, John C., Jr., Carr, C. Jelleff, Horney, Amos G., and Evans, William E., Jr. Anesthetic action of isopropenyl vinyl ether, 179
- Krayer, Otto, Plachte, Frank L., and Ellis, Sydney. Studies on physostigmine and related substances. III. Breakdown products of physostigmine; their inhibitory effect on cholinesterase and their pharmacological action, 309
- Wood, Earl H., and Montes, Gonzalo. Studies on veratrum alkaloids. IV. Sites of heart rate lowering action of veratridine, 215
- Lackey, R. W., Luduena, F. P., Kirtland, H. B., Jr., Gonzalez, R. I., Tainter,

- M. L., Tainter, E. G., Lawrence, W. S., and Neuru, E. N. Influence of various drugs on threshold for electrical convulsions, 42
- Larson, P. S., Schwartz, J. J., and Haag, H. B. Effect of urinary pH on elimination of quinine in man, 136
- Lawrence, W. S., Neuru, E. N., Lackey, R. W., Luduena, F. P., Kirtland, H. B., Jr., Gonzalez, R. I., Tainter, M. L., and Tainter, E. G. Influence of various drugs on threshold for electrical convulsions, 42
- Lee, H. M., Chen, K. K., Swanson, E. E., and Scott, C. C. Comparison of pressor action of some optical isomers of sympathomimetic amines, 329
- Lipschitz, Werner L., Hadidian, Zareh, and Kerpscar, Andrew. Bioassay of diuretics, 97
- Liver, Role of, in metabolic destruction of quinine, 62
- Luduena, F. P., Kirtland, H. B., Jr., Gonzalez, R. I., Tainter, M. L., Tainter, E. G., Lawrence, W. S., Neuru, E. N., and Lackey, R. W. Influence of various drugs on threshold for electrical convulsions, 42
- Marsh, D. G., Thompson, C. R., Shelton, R. S., Becker, T. J., and Warren, M. R. Pharmacological studies on *dl*- $\beta$ -phenyl-*n*-propylmethylamine, a volatile amine, 187
- N*-Methylcytisine, Pharmacological action of, 334
- Mills, C. A., Chen, K. K., Anderson, Robert C., and Steldt, Frank A. Environmental temperature and drug action in mice, 127
- Molecular configuration, Relation of, to rate of deamination of sympathomimetic amines by aminase, 85
- Montes, Gonzalo, Krayer, Otto, and Wood, Earl H. Studies on veratrum alkaloids. IV. Sites of heart rate lowering action of veratridine, 215
- Morphine, Antagonistic effect on, of *N*-allyl-normorphine, 27
- Morrison, James L. Influence of addition of chlorine to side chain on certain actions of acetylcholine, 1
- Munro, Jean S., and Boyd, Eldon M. Ether anesthesia and output of fluids from respiratory tract, 346
- Nelson, Erwin E., and Hitchcock, Philip. Metabolism of paraldehyde. I. Determination of paraldehyde in tissues, blood and expired air, 281  
II, 286
- Neuru, E. N., Lackey, R. W., Luduena, F. P., Kirtland, H. B., Jr., Gonzalez, R. I., Tainter, M. L., Tainter, E. G. and Lawrence, W. S. Influence of various drugs on threshold for electrical convulsions, 42
- Oberst, Fred W. Method for determination of demerol in urine and results of its application, 10  
Studies on fate of heroin, 266
- Oldham, Frances K., and Kelsey, F. E. Distribution of quinine oxidase in animal tissues, 77  
and Kelsey, F. E. Influence of pregnancy on quinone oxidase of rabbit liver, 81
- Oxygen, soybean lecithin, carbamyl choline and furfuryl trimethyl ammonium iodide, Effect of, on experimental polycythemia, 37
- Paraldehyde, Determination of, in tissues, blood and expired air, 281  
Metabolism of, 286
- Pentobarbital sodium and pentothal sodium, Effect of, on fetus, 250
- Pentothal sodium and pentobarbital sodium, Effect of, on fetus, 250
- Peters, Lawrence. Comparison of mechanism of action of arsenicals and sulfonamides, 32
- pH, Urinary, Effect of, on elimination of quinine in man, 136
- dl*- $\beta$ -Phenyl-*n*-propylmethylamine, a volatile amine, Pharmacological studies on, 187
- Phosphorus, radioactive, Skin absorption of triorthocresyl phosphate shown by, 225
- Physostigmine breakdown products and related epinephrine derivatives, chemical studies on, 364  
Breakdown products of, their inhibitory effect on cholinesterase and their pharmacological action, 309

- Destruction of, in buffered solutions and in serum, 295
- Pilocarpine injections, Increased blood specific gravity in anesthetized dogs following, 16
- Plachte, Frank L., Ellis, Sydney, and Krayer, Otto. Studies on physostigmine and related substances. III Breakdown products of physostigmine; their inhibitory effect on cholinesterase and their pharmacological action, 309
- Straus, Oliver H., and Ellis, Sydney. Studies on physostigmine and related substances. II. Destruction of physostigmine in buffered solutions and in serum, 295
- Plasma, binding in, Blood levels of sulfadiazine, sulfamerazine and sulfamethazine, in relation to, 320
- Polycythemia, experimental, effect on, of oxygen, soybean lecithin, carbamyl choline and furfuryl trimethyl ammonium iodide, 37
- Pregnancy, Influence of, on quinone oxidase of rabbit liver, 81
- Pregnant animals, Metabolism of quinine in, 70
- Pressor action of some optical isomers of sympathomimetic amines, Comparison of, 329
- Quinine, elimination of, in man, Effect on, of urinary pH, 136  
metabolic destruction of, Rôle of liver in, 62  
Metabolism of, in pregnant animals, 70  
oxidase, Distribution of, in animal tissues, 77
- Quinone oxidase of rabbit liver, Influence of pregnancy on, 81
- Raiziss, George W., and Callomon, Fritz T. Effect of oral administration of succinyl sulfapyrazine on bacterial (coliform) flora of intestine of normal mice, 200
- Respiration, Experiments on pharmacology of, in rabbit, 235
- Richards, Richard K. Influence of sodium bisulfite on toxicity of epinephrine, 111
- Robinson, Harry J., Siegel, Henry, and Graessle, Otto E. Studies on sulfapyrazine, 354
- Robson, J. M., and Ansari, M. Y. Fate of D.B.E. ( $\alpha$  di(*p*-ethoxyphenyl) $\beta$ -phenyl bromo-ethylene) in the body, 340
- Rodman, F. B., and Wright, Harold N. Physico-chemical properties of arsphenamines in relation to distribution and retention in tissues, 140
- Salle, A. J. Effect of repeated applications of sublethal concentrations of germicides on living embryonic tissue fragments, 271
- Schlenk, F., and Ewing, P. L. Pharmacological actions of adenine-thiomethyl-pentose, 164
- Schmidt, L. H., and Sesler, Clara L. Comparative activity of sulfonamides against *Klebsiella pneumoniae* (Friedlander's bacillus), 117
- Schwartz, J. J., Haag, H. B., and Larson, P. S. Effect of urinary pH on elimination of quinine in man, 136
- Scott, C. C., and Chen, K. K. Pharmacological action of *N*-methylcytisine, 334
- Lee, H. M., Chen, K. K., and Swanson, E. E. Comparison of pressor action of some optical isomers of sympathomimetic amines, 329
- Sesler, Clara L., and Schmidt, L. H. Comparative activity of sulfonamides against *Klebsiella pneumoniae* (Friedlander's bacillus), 117
- Shannon, James A., Fisher, Saul H., Troast, Leonard, and Waterhouse, Alice. Relation between chemical structure and physiological disposition of series of substances allied to sulfanilamide, 373
- Shelton, R. S., Becker, T. J., Warren, M. R., Marsh, D. G., and Thompson, C. R. Pharmacological studies on *dl*- $\beta$ -phenyl-*n*-propylmethylamine, a volatile amine, 187
- Shock and anoxia, Dephosphorylation of cocarboxylase in tissues during, 169  
induced by hemorrhage, studies on. V. Effect of cellular damage on *in vitro* hydrolysis and synthesis of cocarboxylase by liver tissue, 240  
induced by hemorrhage, Studies on. VI. Cocarboxylase phosphatase in dog serum, 246

- Siegel, Henry, Graessle, Otto E., and Robinson, Harry J. Studies on sulfapyrazine, 354
- Smith, Ralph G., and Willson, J. Robert. Peripheral circulatory action of *Veratrum viride*, 208
- Snyder, Franklin F., and Dreisbach, Robert. Effect on fetus of pentobarbital sodium and pentothal sodium, 250
- Sodium bisulfite, Influence of, on toxicity of epinephrine, 111
- Soybean lecithin, carbamyl choline, furfuryl trimethyl ammonium iodide and oxygen, effect of, on experimental polycythemia, 37
- Steldt, Frank, A., Mills, C. A., Chen, K. K. and Anderson, Robert C. Environmental temperature and drug action in mice, 127
- Sturner, James H., and Hodge, Harold C. Skin absorption of triorthocresyl phosphate as shown by radioactive phosphorus, 225
- Straus, Oliver H., Ellis, Sydney, and Plachte, Frank L. Studies on physostigmine and related substances. II. Destruction of physostigmine in buffered solutions and in serum, 295
- Succinic dehydrogenase preparation, Reduction by, of symmetrical trinitrotoluene, 23
- Succinyl sulfapyrazine, Effect of oral administration of, on bacterial (coliform) flora of intestine of normal mice, 200
- Sulfadiazine, sulfamerazine and sulfamethazine, Blood levels of, in relation to binding in plasma, 320
- Sulfamerazine, sulfamethazine and sulfadiazine, Blood levels of, in relation to binding in plasma, 320
- Sulfamethazine, sulfadiazine and sulfamerazine, Blood levels of, in relation to binding in plasma, 320
- Sulfanilamide, series of substances allied to, Relation between chemical structure and physiological disposition of, 373
- Sulfapyrazine, Studies on, 354
- Sulfonamides and arsenicals, Comparison of mechanism of action of, 32  
Comparative activity of, against *Klebsiella pneumoniae* (Friedlander's bacillus), 117
- Swanson, E. E., Scott, C. C., Lee, H. M., Chem, K. K. Comparison of pressor action of some optical isomers of sympathomimetic amines, 329
- Sympathomimetic amines, some optical isomers of, Comparison of pressor action of, 329
- Tainter, E. G., Lawrence, W. S., Neuru, E. N., Lackey, R. W., Luduena, F.P., Kirtland, H. B., Jr., Gonzalez, R. I. and Tainter, M. L. Influence of various drugs on threshold for electrical convulsions, 42
- Tainter, M. L., Tainter, E. G., Lawrence, W. S., Neuru, E. N., Lackey, R. W., Luduena, F. P., Kirtland, H. B., Jr. and Gonzalez, R. I. Influence of various drugs on threshold for electrical convulsions, 42
- Temperature, environmental, and drug action in mice, 127  
environmental, effect of, on toxicity of 2,4-dinitrophenol in mice, 176
- Thompson, C. R., Shelton, R. S., Becker, T. J., Warren, M. R., and Marsh, D. G. Pharmacological studies on *dl*- $\beta$ -phenyl-*n*-propylmethylamine, a volatile amine, 187
- Tissues, blood and expired air, Determination of paraldehyde in, 281  
fragments, living embryonic, Effect on, of repeated applications of sublethal concentrations of germicides, 271
- Triorthocresyl phosphate, Skin absorption of, as shown by radioactive phosphorus 225
- Trinitrotoluene, symmetrical, Reduction of, by succinic dehydrogenase preparation, 23
- Troast, Leonard, Waterhouse, Alice, Shannon, James A., and Fisher, Saul H. Relation between chemical structure and physiological disposition of series of substances allied to sulfanilamide, 373
- Unna, Klaus. Antagonistic effect of *N*-allyl-normorphine upon morphine, 27
- Urinary pH, Effect of, on elimination of quinine in man, 136
- Urine, Method for determination of demerol in, and results of its application, 10
- Veratridine, Sites of heart rate lowering action of, 215

- Veratrum viride*, Peripheral circulatory action of, 208
- Warren, M. R., Marsh, D. G., Thompson, C. R., Shelton, R. S., and Becker, T. J. Pharmacological studies on *dl*- $\beta$ -phenyl-*n*-propylmethylamine, a volatile amine, 187
- Waterhouse, Alice, Shannon, James A., Fisher, Saul H., and Troast, Leonard. Relation between chemical structure and physiological disposition of series of substances allied to sulfanilamide, 373
- Westfall, Benton, B. Reduction of symmetrical trinitrotoluene by succinic dehydrogenase preparation, 23
- Westfall, B. A., and Burch, Buford H. Increased blood specific gravity in anesthetized dogs following pilocarpine injections, 16
- Weymouth, Frank W., Field, John, 2d, and Fuhrman, Geraldine J. Effect of environmental temperature on toxicity of 2,4-dinitrophenol in mice; 176
- Willson, J. Robert, and Smith, Ralph G. Peripheral circulatory action of *Veratrum viride*, 208
- Wood, D. R., and Jaco, N. T. Effect of hemorrhage on anesthetic dosage, 259
- Wood, Earl H., Montes, Gonzalo, and Krayner, Otto. Studies on veratrum alkaloids. IV. Sites of heart rate lowering action of veratridine, 215
- Wright, Harold N., and Rodman, F. B. Physico-chemical properties of arspenamines in relation to distribution and retention in tissues, 140
- Yi, C. L., and Henderson, V. E. Experiments on pharmacology of respiration in rabbit, 235