L Largactil. See Chlorpromazine Larvicidal action, of various substances against sclero-L-1935, catechol-amine release from isolated chromaffin stomes, 7, 509
Laudexium (Compound 20; Laudolissin): granules by, 12, 61 , histamine release by, 10, 254 -, curarizing and other pharmacological actions and Lachesine, anticholinesterase action of, 9, 76 , antiesterase action and resistance to enzymic hydrolysis, 2, 108 toxicity of, 7, 398 , histamine-releasing action and other side-effects of, in man, 7, 409 , effect on auricle response to electrical stimulation, , and homologues, curarizing and histamine-releas-1, 99 ing actions of, 7, 392
-, response of blood pressure, electrocardiogram, , hydrolysis by cholinesterases, 9, 77 Lachrymal secretion, effect of curare on, 6, 462 pulse rate and respiration to, in conscious man, 7, , effect of dyflos and other dialkyl phosphoro-fluoridates on, 2, 236 409 Laudolissin. See Laudexium -, effect of histamine on, in horse, 7, 30 Lauramidine, effect on pressor action of adrenaline, 1, 31 , effect of tubocurarine on, 5, 54 N-Lauroylethyleneimine, antitumour, carcinogenic and Lactate, effect on oxygen uptake by malaria-parasitized cytotoxic actions and toxicity of, 9, 306 erythrocytes, 3, 3 Lauth's violet, larvicidal action against sclerostomes, 7, , effect on permeability of blood-brain barrier, 5, 151 509 response of auricle to, 5, 89 Lead ions, effect on blood constituents and coproporphy-Lactic acid, enzymic production of, effect of antimonials rin excretion, 3, 141 on, 9, 460 , effect on erythrocyte fragility, and action of production by Dracunculus insignis, 5, 62 dimercaprol (BAL) and its glucoside and plasma on, Lactic dehydrogenase, effect of di(chloroethyl) sulphone on, 4, 60 effect on ganglionic acetylcholine release and -, effect of dicophane (DDT) on, in vitro, 4, 126 transmission, 12, 219 -, effect of specific antisera on, 9, 182 , effect on potassium and sodium exchange of rabbit -, inactivation by quinine, 3, 4 erythrocytes, 9, 463 -, mammalian and schistosome, kinetics of, 8, 431 , intravenous, biliary excretion of, effect of dimer-, preparation of, 9, 182 caprol on, 4, 274 Lactic dehydrogenase antibody, effect of glycolytic ,  $\frac{1}{(BAL)}$ , tissue distribution of, effect of dimercaprol (BAL) on, 3, 223 enzymes on, 9, 184 Lactobacillus casei, effect of 2: 4-diaminopteridines on, -, effect of dimercaprol and parathyroid 7, 161 extract on, in rabbit, 4, 351 , growth of, effect of antimalarials, folic acid and —, toxicity of, effect of dimercaprol (BAL) on, 3, 88 Lead poisoning, blood-pressure, organ- and body-weight, thymine on, 8, 426 Lactones, anthelmintic action of, 3, 99 and renal-function and -histology changes during, Lactyladrenaline, antiperistaltic action of, and effect of in rat, 7, 349 sympatholytics on, 9, 131
-, chromatographic characteristics, colour reactions -, effect of dimercaprol (BAL) in, 3, 88; 4, 348 -, effect of dimercaprol (BAL) and its glucoside in, 3, 137 and pharmacological actions of, 9, 503 -, inhibition of intestinal response to nicotine by, , effect on destruction of vasopressin by liver and effect of sympatholytics on, 9, 131 homogenates, 7, 366 Lactylnoradrenaline, antiperistaltic action of, and effect of sympatholytics on, 9, 131 -, organ-weight changes and water absorption and excretion during, in rat, 7, 358 -, chromatographic characteristics of, 9, 503 -, weight changes due to vasopressin during, in frog, 7, 367 -, inhibition of intestinal response to nicotine by, and effect of sympatholytics on, 9, 131 Lecithin, effect on antifungal action of hexamethylene-bisisoquinolinium, 10, 343 Langendorff heart preparation, coronary dilatory action of thiolobenzilic acid esters and related compounds , effect on bacteriostatic action of chlorhexidine on, 10, 99 (*Hibitane*), **9**, 194 pituitary extract, 6, 75

-, response to adrenaline and methyladrenaline, 7, 340 , egg, effect on toxic action of mustard gas on cerebral pyruvate oxidase, 4, 56 , preparation of, 4, 55 inhibition of mustard gas hydrolysis by, 4, 56 -, response to adrenaline and noradrenaline, 4, 375 Lecithinase, effect of tri-o-cresyl phosphate on, 8, 112 , response to 1 - alkyl - 2 - hydroxyalkylpyrrolidine -, estimation of, 8, 111 esters and their quaternary derivatives, 12, 447 , in rat brain, 8, 112 -, response to amphetamine and octylamines, 7, 45 Leech, muscle of, response to acetylcholine and mus--, response to azide, nitrite and thiocyanate, 4, 3 carine, 12, 47 -, response to benzoylcholine, 7, 335 response to murexine, 12, 183 -, response to 2: 7-diamino-10-methyl-9-phenylphen-anthridinium, 1, 74 Leishmania donovani, effect of amines based on emetine on, 3, 50 -, response to dimercaprol (BAL), 3, 86 , effect of substances related to di(dipentylamino)-

decane on, 3, 63

pyridine in, 10, 435

diaminopyrimidines in, 6, 198

Leishmania donovani infections, experimental, effect of

, effect of 2-di(2-hydroxyethyl)amino-5-nitro-

, response to methadone (amidone) and its optical

Lard, dietary, effect on alopecia due to di(p-amino-

isomers, morphine and pethidine, 4, 101

-, response to proguanil (Paludrine), 4, 15

phenoxy)alkanes, 12, 471

Leprosy, murine, experimental, effect of cortisone and isoniazid in, 11, 326 Leptazol (Metrazol): -, convulsant action of, 1, 156 , antagonism by hexobarbitone and mephenesin (Myanesin), 1, 269 vitro, 7, 494 , antagonism by mephenesin (Myanesin), 2, , effect of adrenaline, noradrenaline and Pitressin on, 8, 63 , effect of adrenergic blocking agents and hexamethonium on, 8, 62 -, effect of hexamethonium on, 7, 83
-, effect of 5-hydroxytryptamine on, 12, 229 -, effect of Rauwolfia alkaloids on, 11, 144 , effect in chicks, and on muscular paralysis by decamethonium, 9, 381 -, effect on antidotal action of atropine and pyridine-2-aldoxime methiodide in organophosphate poisoning, 12, 443 , effect on cerebral-glycogen level at convulsant 8, 458 doses, **6**, 1 , effect on cerebral-inorganic- and -organic-phos-**7**, 93 phate levels, in vitro, 6, 448 -, respiratory stimulant action of, 2, 96 -, response of liver-fluke body movements to, 8, 136 -, sensitivity to, effect of age and dyflos on, in rat, 12, 536 Lergigan. See N-(2-Dimethylamino-1-methylethyl)-(BAL), 2, 59phenothiazine Lergitin. See Phenbenzamine Leucocytes. See Blood cells, white Leucocytosis, induced by chloroxylenol-methylacetamide mixture, leucocytosis-promoting factor and suc-3, 189; 11, 52 cinate, 2, 169 Leucocytosis-promoting factor, effect in experimental leucopenia, 2, 170 Leuconostoc citrovorum, growth of, effect of antifolic acids on, 12, 521 Leuconostoc citrovorum factor, effect on in vitro antimalarial action of proguanil and metabolite, 8, 428 **Leucopenia**, mustine(methylbis -  $\beta$  - chloroethylamine)induced, as test condition for therapy, 2, 169 Lewisol 40, effect on efficacy of oral penicillin preparation, 6, 97 Licheniformin, alone and with solapsone (Sulphetrone), antituberculous action of, 5, 178 tissue distribution and toxicity of, 5, 474 Lidocaine. See Lignocaine Lignocaine (Lidocaine): -, anticonvulsant and other central actions of, 10, 288 , local anaesthetic action of, 10, 240; 11, 104; 12, 313 Limestone, effect on sclerostome larvae, 7, 521  $(\pm)$ -Limonene, effect on tumour growth, 6, 238 (+)-Limonene dioxide, effect on tumour growth, 6, Lipaemia, induced by surface-active agents, in mice, 10, 82 Lipids, biosynthesis in fowl peripheral nerve, effect of dyflos on, 12, 356 , neural, extraction and attempted chromatographic separation of, 12, 357 Liponyssus bacoti, breeding of, 3, 286 Lissamine green, effect in experimental virus infection, 7, 458 Listeria monocytogenes, effect of cephalosporin N and

penicillin on, 8, 253

**5**, 362

Lithium ions, effect on auricle response to acetylcholine,

Lithium L(+)-lactate, preparation of, 8, 431

Litomosoides carinii, adult worms of, effect of diethylcarbamazine (Hetrazan) on, in vitro and in vivo, 5, , diethylcarbamazine uptake by, 10, 408 , effect of methylene violet and other dyes on, in , microfilariae of, localization in tissues before and after diethylcarbamazine (Hetrazan) treatment, in cotton rat, 5, 222 -, surface potentials of, effect of diethylcarbamazine (Hetrazan) on, 5, 230 Litomosoides carinii infections, experimental, chemotherapy of, 5, 239 , effect of cyanine dye and stibamine glucoside -, —, effect of diethylcarbamazine (*Hetrazan*) in, 5, 217 -, —, effect of methylene violet and other dyes in, 7, 494 -, maintenance in cotton rat, 3, 285 Liver, amine oxidase activity in, effect of oral thyroid on, -, effect of oral thyroid and thyroidectomy on, -, antidiuretic-hormone metabolism in, 12, 284 , cell components of, separation of, and distribution of acridines in, 11, 210 damage to, effect on toxicity of dimercaprol -, damage by dicophane (DDT), 4, 124 -, destruction of adrenaline in, effect of amidines and guanidines on, 1, 21 , destruction of adrenaline and noradrenaline in, -, dog, intracellular histamine distribution in, 9, 100 -, dog and guinea-pig, decarboxylase activity in, 5, DOPA-decarboxylase activity in, effect of X-irradiation on, 6, 343 -, effect of halothane (Fluothane) on, 11, 406 extraction of acridines and acidic phosphatides , guinea-pig, absence of pseudo cholinesterase in, 2, 117 -, guinea-pig and rabbit, oxidation of ethylenediamine derivatives and sympatol by, 10, 314 , guinea-pig and rat, cholinesterase activity of, 12, 321 -, histaminase and histidine decarboxylase activities and histamine in, 11, 123 , histamine in, effect of antigen and Compound 48/80 on, in normal and sensitized rabbits, 8, 415 , effect of tryptamine on, in rat, 8, 410 -, homogenates of, from normal and lead-poisoned rats, destruction of vasopressin by, 7, 366 5-hydroxytryptamine and 5-hydroxytryptophan decarboxylase activity in, 11, 90 , localization of di(p-chlorophenyl)acetic acid and dicophane (DDT) in, 4, 120 , localization of intrathecal and intravenous dibromoprocaine in, 4, 336 , localization of intravenous lead in, and effect of dimercaprol (BAL) on, in rabbit, 3, 223 -, effect of dimercaprol and parathyroid extract on, in rabbit, 4, 354 , localization of intravenous mercury in, and effect of dimercaprol on, in rabbit, 6, 484 localization of intravenous tubocurarine in, 4,

299

•	
Liver (cont.)	Lucanthone (cont.)
—, localization of intravenous and subarachnoidal	—, effect on antifilarial action of diethylcarbamazine
palladium colloid in, 7, 577	(Hetrazan), 5, 231
, localization of p-iodoaniline and p-iodophenyl-	—, oral, blood levels after, in man, 4, 76
urethane in, 7, 145	—, toxic effects of, in man, 4, 74
—, localization of methylene violet in, 7, 503	—, schistosomicidal action of, 10, 192
—, localization of nisin in, 7, 444	—, treatment of schistosomiasis with, in man, 4, 68
—, localization of oral p-ethylsulphonylbenzaldehyde	Lumbricus terrestris crop-and-gizzard preparation, effect
thiosemicarbazone and thiacetazone (9311) in, 5, 551	of acetylcholine and 5-hydroxytryptamine on, 10, 475
—, localization of oral proguanil ( <i>Paludrine</i> ) in, 2, 187	Lungs, air-perfused, antibarium action of thiolobenzilic
—, localization of oral sulphadimethoxypyrimidine	acid esters on, 10, 99
and sulphadimidine (Sulphamezathine) in, 2, 153	—, antihistamine receptors of, 7, 450
—, localization of parenteral carbidium in, 5, 297	—, blood volume of, effect on tidal air, 8, 317
—, localization of parenteral p-iodonitrosobenzene	—, damage by phosgene, 2, 43
and p-iodophenylhydroxylamine in, 8, 88	, histaminase and histidine decarboxylase activities
——, localization of solapsone (Sulphetrone) in, in normal	and histamine in, 11, 123
and nephrectomized animals, 3, 23	—, histamine in, effect of tryptamine on, in rat, 8, 412
—, localization of subcutaneous licheniformin A5 in,	,, and release by alkylamines and Compound
5, 477	48/80, 8, 105
—, localization of subcutaneous quinapyramine (An-	—, release by Compound 48/80 and octylamine,
trycide) in, 5, 449	9, 197
—, metabolism of, effect of dicophane (DDT) on, 4,	, histamine and mast cells in, effect of Compound
125	48/80 on, in guinea-pig, 11, 304
, ox, amine oxidase and DOPA-decarboxylase	, localization of intrathecal and intravenous di-
activities in, 6, 319	bromoprocaine in, 4, 336
—, pressor-amine release from, by sympathetic	—, localization of intravenous lead in, and effect of
stimulation, 5, 169	dimercaprol (BAL) on, in rabbit, 3, 223
—, regenerating, enzymes in, and effect of colchicine on, 7, 152	, —, effect of dimercaprol and parathyroid
	extract on, in rabbit, 4, 354
, regeneration after partial hepatectomy, and anaesthetic detoxification by, 4, 93	, localization of intravenous mercury in, and effect
—, effect of colchicine on, in rat, 7, 153, 154	of dimercaprol on, in rabbit, 6, 484 —, localization of intravenous and subarachnoidal
—, respiration of, effect of sodium salicylate on, 9, 262	palladium colloid in, 7, 577
—, role in procaine metabolism, in cat, 3, 133	—, localization of methylene violet in, 7, 503
, steroid-induced hypertrophy of, 12, 134	—, localization of nisin in, 7, 444
——, sympathin of, 5, 169	—,localization of oral p-ethanesulphonylbenzaldehyde
—, weight changes in, in lead-poisoned rat, 7, 350, 362	thiosemicarbazone and thiacetazone (9311) in, 5,
Liver extract, effect on alopecia and weight loss due to	551
di(p-aminophenoxy)alkanes, 12, 471	—, localization of oral proguanil ( <i>Paludrine</i> ) in, 2, 187
Liver fluke, acetylcholine-like substance and true	—, localization of oral sulphadimethoxypyrimidine
cholinesterase in, 8, 135	and sulphadimidine (Sulphamezathine) in, 2, 153
—, body movements of, response to 2:3-dihydro-3-	—, localization of parenteral carbidium in, 5, 297
oxobenz-1: 4-thiazine and its derivatives, 7, 219	—, localization of solapsone (Sulphetrone) in, in
, response to 5-hydroxytryptamine and related compounds and lysergic acid diethylamide, 12, 406	normal and nephrectomized animals, 3, 23
response to organic antimonials 6 588	, localization of subcutaneous licheniformin A5 in, 5, 477
—, —, response to organic antimonials, 6, 588 —, esponse to phenothiazine oxidation pro-	, localization of subcutaneous quinapyramine (An-
ducts, 7, 215	trycide) in, 5, 449
—, —, and response to various substances, 4, 8;	—, weight changes in, in lead-poisoned rats, 7, 350
<b>8</b> , 134	Lung preparation, rabbit, apparatus for, 7, 418
—, in-vitro tests of compounds on, 10, 7	—, response to acetylcholine and alkylisothioureas,
Lobeline, anticholinesterase action of, 9, 76	7, 425
, convulsant action of, effect of hexamethonium on,	2: 6-Lutidine, anthelmintic action of, in vitro, 10, 7
7, 83	Lutidines, larvicidal action against sclerostomes, 7, 509
—, effect on central action of curare and tubocurarine,	Lymphogranuloma venereum, experimental, chemotherapy
7, 20	with antibiotics, 5, 611
, response of blood pressure to, 7, 20	—, effect of nitroakridin in, 3, 185
<b>Louping-ill virus,</b> effect of nitroakridin on, in vivo, 3, 182 <b>Louping-ill infections</b> , experimental, effect of quinoxaline	,, effect of vitamin K in, alone and with 2: 3-dimethylquinoxaline 1: 4-dioxide, 8, 302
1: 4-dioxide in, 8, 298	, treatment with quinoxaline 1: 4-dioxide.
Lubrol, effect on antifungal action of hexamethylenebis-	alone and with aureomycin or procaine penicillin,
isoquinolinium, 10, 343	8, 297
—, effect on bacteriostatic action of chlorhexidine	, treatment with quinoxaline 1: 4-dioxide
(Hibitane), <b>9</b> , 194	derivatives and related compounds, 8, 297
—, larvicidal action against sclerostomes, 7, 509	Lymphogranuloma venereum virus, development of
Lucanthone (Miracil D):	resistance and cross-resistance to quinoxaline and
—, absorption, excretion, tissue distribution and	2: 3-dimethylquinoxaline 1: 4-dioxides and procaine
toxicity of, in animals and man, 3, 167	penicillin, 8, 304
—, effect in experimental filariasis, 5, 256	—— effect of acridines on, in chick embryo, 11, 220

Lymphogranuloma venereum virus (cont.) effect of antibiotics and 2: 3-dimethylquinoxaline 1: 4-dioxide on, 8, 302 Lymphoid tissue, involution by steroids, 12, 133 Lymphosarcoma, effect of E600 on growth of, in tissue culture, 8, 222 Lysergic acid diethylamide, blocking action on intestinal tryptamine receptors, 12, 324 -, central actions of, in cat and man, 11, 176, 178 , effect on central action of 5-hydroxytryptamine and reserpine, in cat, 11, 176 , effect on enzymic destruction of Substance P. in vitro, 12, 361 effect on intestinal response to acetylcholine, histamine and 5-hydroxytryptamine, 9, 243 effect on intestinal response to histamine and Substance P, 12, 361 -, effect on mammalian esterases, 10, 61 , effect on response of human placental vessels to adrenaline, histamine and 5-hydroxytryptamine, 12, -, effect on response of molluscan and snail hearts to adrenaline, 5-hydroxytryptamine and noradrenaline, 10, 475 , effect on spinal-reflex depression by reserpine, 11, , effect on tidal-air reduction by 5-hydroxytryptamine, 11, 289 , effect on uterine response to adrenaline and isoprenaline, 10, 186 , effect on uterine response to 5-hydroxytryptamine, 8, 324 -, effect on uterine response to 5-hydroxytryptamine and nettle stings, 11, 186 , effect on uterine response to 5-hydroxytryptamine and oxytocin, 9, 242 , effect on uterine response to intestinal slow musclecontracting substance, 8, 324 , effect on vasoconstrictor action of adrenaline and 5-hydroxytryptamine, 9, 243 , effect on vasoconstrictor action of adrenaline, 5-hydroxytryptamine, noradrenaline and tryptamine, -, response of human placental vessels to, 12, 410

-, response of liver-fluke body movements to, and inhibitory action of 2-bromolysergic acid diethylamide on, 12, 406 -, response of molluscan and snail hearts to, 10, 475 -, vasoconstrictor action of, 11, 315 M M4. See 2-Amino-1: 2-diphenylethanol M4430. See N<sup>1</sup>-p-Chlorophenyl-N<sup>5</sup>-methyl-N<sup>5</sup>-isopropyldiguanide M5093. See N<sup>1</sup>-p-Chlorophenyl-N<sup>5</sup>-methyldiguanide M5943. See Chlorproguanil M7555. See Quinapyramine See Hexamethylenebis(ethyldimethyl-M&B 1863. ammonium) M&B 1878. See p-Phenylenebis(trimethylammonium) M&B 1899. See p-Phenylenemethylbis(trimethylammonium) M&B 1950. See 2-p-Phenylene-ethylbis(trimethylammonium) M&B 2030. See m-Phenylenemethylbis(trimethylammonium) M&B 2034. See 3-p-Phenylenepropylbis(trimethylammonium)

M&B 2050. See Pentolinium M&B 2056. See 3-p-Phenylenepropylbis(ethyldimethylammonium) M&B 2064. See 2-m-Phenylene-ethylbis(trimethylammonium) M&B 2071. See 4-p-Phenylenebutylbis(trimethylammonium) M&B 2072. See 2-p-Phenylene-ethylbis(ethyldimethylammonium) M&B 2082. See 4-p-Phenylenebutylbis(ethyldimethylammonium) See 3-m-Phenylenepropylbis(trimethyl-M&B 2090. ammonium) M&B 2132. See 2-p-Phenylene-ethylbis(triethylammonium) M&B 2139. See 4-m-Phenylenebutylbis(trimethylammonium) M&B 2175. See 2-p-Phenylene-ethylbis(diethylmethylammonium) M&B 2184. See 3-p-Phenylenepropylbis(triethylammonium) M&B 2268. See 5-p-Phenylenepentylbis(trimethylammonium) M&B 2272. 4-p-Phenylenebutylbis(triethyl-See ammonium) M&B 2278. See 3-p-Phenylenepropylbis(diethylmethylammonium) M&B 2297. See 4-p-Phenylenebutylbis(diethylmethylammonium) M&B 2357. See 6-p-Phenylenehexylbis(trimethylammonium) M&B 2362. See 6-p-Phenylenehexylbis(triethylammonium) M&B 2363. See 5-p-Phenylenepentylbis(triethylammonium) MSb. See Sodium p-melaminylphenylstibonate polymer Macrogol, subcutaneous, carcinogenic action of, 9, 313 Macromolecules, effect in experimental virus infection, 7, 467 Mactra corallina heart, as test preparation, 10, 475 Mactra solida. See Spisula solida Magenta, larvicidal action against sclerostomes, 7, 509 Magnesium ions, effect on auricle response to acetylcholine, 5, 362 , effect on reactivation of TEPP-inactivated cholinesterases, 6, 28 parenteral, effect on convulsant action of methyl fluoroacetate, 3, 124 , response of Mya arenaria heart to, 10, 477 Magnesium salts, larvicidal action against sclerostomes, 7, 509 Maize oil, intramuscular, local effects of, 12, 427 Malachite green, larvicidal action against sclerostomes, 7, 509 Malaria, experimental, effect of conessine and its isomers and quinine in, 3, 242 Malate, effect on auricle response to acetylcholine, 5, 357 , effect on normal and substrate-depleted auricles, **5**, 89, 99 Malate dehydrogenase, effect of di(chloroethyl) sulphone, divinyl sulphone and mustard gas on, 4, 60 Malayan Jack-fruit plant, acetylcholine distribution in, 12, 265 Male fern, anticestodal action and toxicity of, 2, 100 effect on sclerostome larvae, 7, 522 , response of liver-fluke body movements to, and effect of amphetamine on, 4, 10 Maleic acid, antimitotic action of, 3, 264

Menaphthone, effect on blood-clotting system and testes Maleic acid (cont.) , antimitotic action and sulphydryl-group uptake by. weight and on response to sulphadimidine (Sulpha-3, 335 mezathine), in fowl, 2, 82 , effect on testicular hyperplasia induced by sulpha-Maleimide, antimitotic action of, 4, 105 dimidine (Sulphamezathine), in fowl, 2, 85 Malic dehydrogenase, effect of dicophane (DDT) on, in vitro, 4, 126 Mepacrine (atebrin): Malonate, effect on auricle response to acetylcholine, 5, 351, 359 -, antihexokinase action of, 12, 16 -, antimalarial action of, 2, 226 -, antimalarial action and toxicity of, 6, 194 -, response of auricle to, 5, 108 -, effect of acetate, fumarate and pyruvate on, —, antitributyrinase action of, 2, 118 5, 109 -, antiviral action of, 7, 460, 473 Maltotriose sulphate, inhibition of histamine-releasing —, antiviral metabolites of, in mouse liver, 11, 215 action of dextran sulphate by, 10, 91 -, determination in tissues, 11, 209 Mammary gland. See Milk-ejecting action , distribution in tissues and liver-cell components, Mandelamidine, antiviral action of, 12, 66 11, 209 Mandelylalanine, antibacterial action and toxicity of, -, effect in Babesia rodhaini infections, 11, 71 —, effect in experimental filariasis, 5, 254 -, effect in experimental Plasmodium berghei infec-Manganese ions, effect on enzymic oxidation of histamine, 8, 44 tions, in mice, 5, 409 Manganese salts, larvicidal action against sclerostomes, -, effect in experimental tuberculosis, 3, 156 7, 509 -, effect in experimental typhus, and on rickettsiae, Mannich bases, pharmacological actions of, 7, 85 in vitro, 1, 18 Mannokinase, schistosome, effect of antimonials and -, effect on antiviral action of trypan red, 7, 464 oxophenarsine on, 9, 460 -, effect on avian tumours, 7, 479 Manure, larvicidal action against sclerostomes, 7, 509 -, effect on exoerythrocytic forms of Plasmodium Mapharsen. See Oxophenarsine gallinaceum, in vitro, 1, 167 Mapharside. See Oxophenarsine -, effect on glucose metabolism of malaria parasite, Maphenide (Marfanil): 3, 1 -, effect in experimental filariasis, 5, 249 -, effect on tissue responses to adenosine, 4, 81 -, effect on diphtheroid organisms in vitro and on -, effect on ventricular fibrillation, 12, 215 experimental infections in rabbit eye, 1, 242 —, oral, blood levels after, in fowl, 2, 224 -, effect on Plasmodium berghei and gallinaceum, in -, response of anterior preparation of Ascaris to, 3, vivo, 8, 162 106 -, response of cardiac muscle to, effect of acetyleffect on pressor action of adrenaline, 1, 32 Marfanil. See Maphenide Marsilid. See Iproniazid choline and potassium ions on, 12, 74 -, response of hen caecum to, 4, 82 Mast cells, amine release from, effect of Compound Mepacrine di-N-oxide. See 2-Chloro-5-(4-diethylamino-48/80 and reserpine on, in rat, 11, 411 1 - methylbutylamino) - 7 - methoxyacridine di - N --, disintegration by Compound 48/80, 9, 494 oxide pacrine phosphatide, preparation and chemical properties of, 11, 217 , effect of anaphylactic shock and anaphylatoxin on, Mepacrine in rat, 12, 453 -, effect of Compound 48/80 on, in guinea-pig, 11, 304 Mepazine. See Pecazine Mephenesin (Myanesin): -, effect of Compound 48/80, morphine and reserpine -, effect of Compound 48/80 and polymyxins on, 10, 216 -, absorption, excretion and metabolism of, 1, 267 , antagonism of convulsant action of leptazol and strychnine by, 2, 244 5-hydroxytryptamine release from, by histamine -, anticholinesterase action of, 9, 76 liberators, 11, 202 -, chemical and physical properties of, 1, 266 Mebaral. See Methylphenobarbitone -, effect on cholinesterase activity, 11, 9 -, effect on skeletal-muscle response to acetylcholine, Mecamylamine, hypotensive and neuromuscular-blocking actions and tissue levels of, effect of carbon dioxide 2, 241 on, in cat, 12, 457 -, effect on spinal reflexes, 2, 244, 246; 11, 164 Mecholyl. See Methacholine -, effect on spinal reflexes and dorsal potentials, in Medmain. See 5-Dimethylamino-3-ethyl-2-methylindole decerebrated, spinal and strychnine-treated cats, 7, Medullary pressor responses, inhibition by chlorpromaz-ine, in decorticated cat, 9, 389 655 -, local anaesthetic action of, 2, 242 —, mode of action of, 2, 241 Melamine, effect on tumour growth, 6, 211 Melamine-formaldehyde condensation products, cytotoxic -, neuromuscular-blocking action of, 2, 243 action of, 6, 211 -, pharmacological actions and toxicity of, 1, 265 Melanophores, response to adrenaline, effect of ergo-, response of skeletal muscle to, 2, 241 metrine and ergotoxine on, 7, 641 response to ergotoxine and noradrenaline, 7, 464 Mephentermine, response of blood pressure and heart to, , response of liver-fluke body movements to, 12, 406 Melanophore-expanding hormone, pituitary, amino-acid composition and purification of, 8, 435 Meprobamate, effect on cerebral 5-hydroxytryptamine level, 12, 230 Meldola blue, effect in experimental typhus, and on Mepyramine (2786 RP; pyrilamine; Anthisan; Neoanterrickettsiae, in vitro, 1, 18 gan): , effect on Plasmodium berghei and gallinaceum, in antiacetylcholine and antihistaminic actions of, 3, vivo, 8, 162

Management (1994)	Management
Mepyramine (cont.) —, antiadrenaline and antihistaminic actions of, 7,	Mepyramine (cont.) ——, effect on potentiation of intestinal response to
555	histamine by asymdimethylguanidine and methyl-
—, antianaphylactic action of, 7, 625; 8, 172	isothiourea, 4, 317
—, anticholinesterase action of, 9, 76	—, effect on response of human bronchial chains to
—, antifibrillatory action of, 9, 341	histamine, <b>6</b> , 685
—, antihistaminic action of, 6, 637; 10, 338	—, effect on response of Mya arenaria heart to hist-
—, antihistaminic and other pharmacological actions	amine, 10, 476
and toxicity of, 1, 278	—, effect on response of peripheral blood circulation
—, antihistaminic action-physical properties relations	to histamine, in man, 9, 413
in, 10, 270	—, effect on response of skin to histamine, 9, 416
—, antihistaminic action and toxicity of, 8, 55, 171	—, effect on response to intradermal xanthosine, in
—, antiperistaltic action of, and effect of sympatholy-	man, 12, 368
tics on, 9, 134	—, effect on serum-induced myocarditis, in rabbit, 4,
—, atropine-like action on rabbit atrium, 9, 367	216 affect on skaletal muscle response to Commound
—, bioassay of, 3, 175 —, effect on adrenal-ascorbic-acid level and on corti-	—, effect on skeletal-muscle response to Compound 48/80, 10, 414
cotrophin (ACTH) release by histamine, 10, 337	—, effect on spasmogenic action of acetylcholine,
—, effect on adrenal stimulatory action of pilocarpine,	barium ions, cowhage extract and histamine, 8, 266
9, 485	, effect on uterine response to acetylcholine and
—, effect on auricle response to 2-benzyl-1-methyl-	histamine, 3, 176
iminazoline, 3, 258	—, effect on uterine response to adrenaline, 3, 178
—, effect on blood-pressure and intestinal responses to	—, effect on uterine response to 5-hydroxytryptamine,
histamine and urinary extracts, 5, 528	9, 246
—, effect on blood-pressure and nictitating-membrane	—, effect on uterine response to potassium ions, 3, 178
responses to adrenaline and noradrenaline, 4, 65	, effect on vasoconstrictor action of adrenaline, 3,
—, effect on bronchoconstrictor action of histamine,	355
6, 565	——, effect on vasoconstrictor action of adrenaline and
——, effect on cardiac response to histamine, 3, 178	methylisothiourea, 4, 316
—, effect on cardiovascular action of histamine and proguanil ( <i>Paludrine</i> ), <b>4</b> , 15	——, effect on voluntary activity, in mouse, <b>8</b> , 46 ——, inactivation of amine oxidase by, <b>6</b> , 606
—, effect on ganglionic response to histamine and	—, inhibition of histamine release by antigen by, in
5-hydroxytryptamine, 11, 77	vitro, 12, 39
—, effect on ganglionic response to histamine and	—, response of blood pressure to, 10, 236
pilocarpine, 9, 484	—, —, and effect of vagotomy on, 7, 451
—, effect on gastric-secretory response to histamine,	, response of body temperature and oxygen con-
3, 233	sumption to, in normal and adrenalectomized rats,
——, effect on histamine release by Compound 48/80	<b>5</b> , 195
and propamidine, in conscious dog, 6, 509	—, response of bronchial musculature to, 10, 230
—, effect on hypotensive action of Compound 15,	—, response of gastric secretion to, 3, 233
histamine, laudexium ( <i>Laudolissin</i> ) and tubocurarine,	, response of heart to, 3, 178
7, 405 —, effect on hypotensive action of cowhage extract	, response of human bronchial chains to, <b>6</b> , 685 , response of <i>Mya arenaria</i> heart to, <b>10</b> , 476
and histamine, 8, 266	-, response of peripheral blood circulation to, in
—, effect on hypotensive action of histamine and	man, 9, 413
morphine, 7, 544, 546	, response of respiration to, mode of action, 7, 451
—, effect on hypotensive action of kinin, 12, 152	—, response of uterus to, 3, 176
—, effect on hypotensive action of methonium com-	—, side-effects of, in man, 9, 413
pounds, <b>6</b> , 161	—, slow muscle-contracting action of, 10, 233
—, effect on hypotensive action of tolazoline ( <i>Priscol</i> ),	—, spasmolytic action of, 7, 89; 9, 72
in cat, 3, 254	Mercaptans. See Thiols
—, effect on intestinal response to acetylcholine and	2-Mercaptobenzthiazole, larvicidal action against sclero-
histamine, 2, 195	stomes, 7, 509
—, effect on intestinal response to acetylcholine, histamine and 5-hydroxytryptamine, 9, 246	2-Mercapto-4: 6-dimethylpyrimidine, effect on blood- clotting system and body and testes weights, in fowl,
, effect on intestinal response to acetylcholine and	2, 86
5-hydroxytryptamine, 10, 331	2-Mercaptoiminazoline, inactivation of amine oxidase by,
—, effect on intestinal response to benzoylcholine and	6, 258
histamine, 7, 334	2-Mercapto-4-p-methoxybenzyl-5-oxothiazoline, effect in
, effect on intestinal response to histamine, 10,	experimental filariasis, 5, 255
327	2-Mercapto-5-oxo-4-phenylthiazoline, effect in experi-
, effect on intestinal response to histamine and	mental filariasis, 5, 255
5-hydroxytryptamine, <b>8</b> , 416	2-Mercapto-5-oxothiazoline, effect in experimental fila-
—, effect on intestinal response to methylisothiourea,	riasis, 5, 255
4, 317 —, effect on intestinal response to nicotine and	<b>6-Mercaptopurine</b> , effect on pregnancy, in animals, 11, 437 δ-Mercapto-γ-valerothiolactone, as antidote in arsenical
potassium ions, 3, 176	poisoning, 4, 260
, effect on normal and histamine-induced acid and	Mercurated phenothiazine, larvicidal action against
pepsin gastric secretion, 4, 157	sclerostomes, 7, 509
x · £ g	

**12**, 12

Mercuric chloride, anthelmintic action of, in vitro, 10, 7 Methacholine (cont.) response of Mya arenaria heart to, 10, 38 , toxicity of, effect of dimercaprol (BAL) on, 3, 87 (+)-Methadone, effect on adrenal-ascorbic-acid level, Mercurous chloride, effect on renal function, in conscious in adrenal-demedullated, normal and hypophysectorat, 1, 194 Mercury compounds, organic, anthelmintic action of, in mized rats, 10, 262 , in nalorphine-treated rat, 10, 262 vitro, 10, 7 , larvicidal action against sclerostomes, 7, 509 , mechanism of pituitary-adrenal activation by, and Mercury ions, effect on potassium exchange of rabbit toxicity, 10, 260 erythrocytes, 9, 463 pharmacological actions and toxicity of, 4, 98 , excretion and tissue distribution after intravenous (-)-Methadone, analgesic action and toxicity of, 9, 280 effect on adrenal-ascorbic-acid level, in adrenalinjection, effect of dimercaprol on, in rabbit, 6, 483 Mercury poisoning, effect of dimercaprol (BAL) in, 3, 87 demedulated, normal and hypophysectomized rats, Mercury salts, larvicidal action against sclerostomes, 7, **509** in nalorphine-treated rat, 10, 262 Mersalyl acid (Mersalyl); , mechanism of pituitary-adrenal activation by, , antidiuretic action of, effect of dimercaprol (BAL) and toxicity, 10, 260 -, pharmacological actions and toxicity of, 4, 98 on, 3, 87 , response of blood pressure, heart rate and respiraeffect on antidiuretic action of dimercaprol (BAL), 3, 87tion to, and other side-effects of, in man, 9, 108 (±)-Methadone. See Methadone -, effect on renal function, in conscious rat, 1, 194 effect on urinary pH and excretion of ammonia, **Methadone** (amidone; Hoechst 10820;  $(\pm)$ -methadone): , analgesic action of, 6, 577; 7, 200, 434 bicarbonate, creatinine, potassium ions, phosphate , blocking action on intestinal tryptamine receptors, and uric acid, 9, 210 12, 324 , effect on water diuresis, in normal and proteindeficient rats, 12, 279 -, central action of, in cat, 11, 178 , toxicity of, effect of dimercaprol (BAL) on, 3, 87 -, effect on central action of 5-hydroxytryptamine and reserpine, 11, 178 Mesaconic acid, effect on mitosis, 3, 266 Mesantoin. See Methoin -, effect on cough reflex and respiration, 10, 418 Mescaline, effect on enzymic hydrolysis of Substance P, -, effect on intestinal contraction and acetylcholine in vitro, 12, 361 release, 12, 119 -, effect on intestinal propulsion, in conscious dog, 5, 584 -, effect on response of human placental vessels to adrenaline and 5-hydroxytryptamine, 12, 410 , and its optical isomers, pharmacological actions , effect on uterine response to 5-hydroxytryptamine, 9, 247 and toxicity of, 4, 98 , hypnosis-prolonging and hypothermic actions of, -, pharmacological actions and toxicity of, 5, 127 12, 251 -, and related compounds, antihistaminic action--, response of human placental vessels to, 12, 410 physical properties relations in, 10, 270 Methaemoglobinaemia, induction by iodonitrosobenzene -, response of liver-fluke body movements to, 12, 406 and iodophenylhydroxylamine, 8, 87 Mesenchymal tissue, involution by steroids, 12, 133 , induction by p-iodophenylurethane, 7, 144, 148 Mesentery, histamine and mast cells in, effect of Compound 48/80 on, in guinea-pig, 11, 304 -, induction by notatin, 1, 226 , mast cells in, effect of anaphylactic shock and -, induction by phenylhydroxylamine, 7, 149 —, induction by solapsone (Sulphetrone), effect of p-aminosalicylate (PAS) on, 9, 277

Methanesulphonates, response of anterior preparation of anaphylatoxin on, in rat, 12, 453 , effect of Compound 48/80, morphine and reserpine on, 11, 411 , effect of Compound 48/80 and polymyxins Ascaris to, 3, 102 p - Methanesulphonylbenzaldehyde thiosemicarbazone, on, 10, 216 Mesidicaine, anticholinesterase and surface anaesthetic antituberculous action of, 4, 249 p-Methanesulphonylbenzamidine, effect in experimental actions of, 5, 462 diphtheroid infections of rabbit eye, 1, 244 2-Mesitylethyltrimethylammonium. See Choline 2:4:6mesityl ether , effect in experimental filariasis, 5, 248 p-Methanesulphonylbenzylamine, effect in experimental 2-(2:4:6-Mesityloxy)ethyl bromide, preparation and properties of, 9, 475 diphtheroid infections of rabbit eye, 1, 224 Metabolic rate, effect of methylthiouracil and thiouracil 2-(p-Methanesulphonylphenyl)iminazolinium, effect in experimental filariasis, 5, 248 on, 1, 132 Metabolism, effect of sodium salicylate on, 9, 262 Methanol. See Methyl alcohol salt and water, effect of glycyrrhetinic acid on, Methanthiline. See Methanthilinium Methanthilinium (methanthiline): Metal poisoning, effect of dimercaprol (BAL) in, 3, 86 , antianaphylactic action of, 10, 160 Metaphenylene blue, effect on Litomosoides carinii, 7, 495 , atropine-like, autonomic-ganglion-blocking, cur-Methacholine (Mecholyl): are-like and local-anaesthetic actions of, 9, 218 , effect on response of molluscan heart to acetyl--, antagonism to chloral hydrate hypnosis, 12, 251 -, enzymic hydrolysis of, 12, 321 choline, 8, 331 --, pharmacological actions of, 12, 449 -, ganglion-stimulatory action and phase-boundary -, potentiation of pressor action of noradrenaline by, potential of, 10, 220 -, gastric motility induced by, effect of 1: 1-diphenyl-3-piperidinopropan-1-ol on, in man, 6, 563 in spinal and vagotomized dogs, 9, 476 response of molluscan heart to, 8, 331 Methapheniline, response of bronchial musculature to, intracerebral, central action of, in conscious mouse,

10, 230

- Methapyrilene, antihistaminic action-physical properties relations in, 10, 270
- ---, inhibition of histamine release by antigen by, in vitro, 12, 39
- ---, response of bronchial musculature to, 10, 230

Methedrine. See Methylamphetamine

- Methimazole, antithyroid action of, and inhibition of oxidative protein iodination in vitro, 10, 1
- Methionine, dietary, effect on methylation of noradrenaline, in vivo, 5, 604
- ---, ---, effect on pressor-substance release from adrenals by splanchnic stimulation, 4, 207
  - --, effect on Plasmodium berghei, in vivo, 8, 162
- effect on renal excretion of polymyxins and protein, 7, 251
  - —, effect on toxicity of nicotinamide, 8, 50
- —, protective action against nephrotoxicity of polymyxin A, 7, 248

Methocel. See Cellulose ethers

Methoin (Mesantoin):

- —, anticonvulsant action of, 8, 230
- —, effect on cerebral 5-hydroxytryptamine level, 12,
- Methonium compounds, antibacterial action of, 4, 394—, anticholinesterase and curarizing actions, preparation and properties of, 3, 298
- ----, anticonvulsant action of, 7, 80
- ----, development of tolerance and cross-tolerance to, in laboratory animals, 10, 279
- —, effect on neuromuscular-blocking action of decamethonium, 4, 388
- ----, ganglion-blocking and other pharmacological actions of, 6, 155
- —, histamine release by, 4, 393
- —, isolation and colorimetric determination in urine
- and preparation of, 5, 424
  —, neuromuscular-blocking and other pharmacologi-
- cal actions and toxicity of, 4, 381
  —, response of skeletal muscle to, and effect of atropine and tubocurarine on, 4, 390
- ----, surface effects of, 4, 394
- —, variation in species sensitivity to, 4, 386
  - See also Polymethylenebisammonium compounds and Polymethylenebis(trialkylammonium) compounds

Methotrexate. See A-methopterin

- Methoxamine, hypnosis-prolonging and hypothermic actions of, 12, 251
- -, response of blood pressure and heart to, 11, 405
- p-Methoxyacetophenone, anthelmintic action of, 3, 96 p-Methoxyacetophenone thiosemicarbazone, effect in
- experimental tuberculosis, 4, 250

  p-Methoxybenzaldehyde 1-sec.-butylthiosemicarbazone, response of blood pressure, heart rate and respiration
- to, 5, 324

  p Methoxybenzaldehyde 1:1 dimethylthiosemicarbazone, response of blood pressure, heart rate and respiration to, 5, 324
- p-Methoxybenzaldehyde semicarbazone, effect in experimental tuberculosis, 4, 250
- o- and m-Methoxybenzaldehyde thiosemicarbazone, antituberculous action and toxicity of, 4, 249
- p-Methoxybenzaldehyde thiosemicarbazone, antituberculous action of, 5, 193; 8, 125
- —, antituberculous action and toxicity of, 4, 249
- ---, photolability of, 6, 40
- ----, response of blood pressure, heart rate and respiration to, 5, 324
- ----, sensitivity of Mycobacterium to, in vitro, 8, 126

- p-Methoxybenzoylcholine, pharmacological actions of, 11, 267
- p-Methoxybenzylacetone. See p-Methoxyphenethyl methyl ketone
- o-, m- and p-Methoxybenzylideneacetone, anthelmintic action of, 3, 96
- 1-p-Methoxybenzylidene-3-methylacetone. See Ethyl p-methoxyphenylvinyl ketone
- 2-p-Methoxybenzyliminazoline, pharmacological actions of, effect of N-methylation on, 4, 45
- 2-p-Methoxybenzyl-1-methyliminazoline, pharmacological actions of, 4, 45
- 9-p-Methoxybenzyl-10-methylphenanthridinium, antibacterial and trypanocidal actions and toxicity of, 5, 271; 9, 265
- 2-(p-Methoxybenzylthio)iminazoline, response of blood pressure, heart rate and respiration to, 5, 324
- 1 p Methoxybenzylthiosemicarbazide, antituberculous action of, 6, 455
- Methoxycarbonylallyltrimethylammonium, enzymic hydrolysis and pharmacological actions of, 4, 229
- 3 Methoxycarbonylamino 9 p methoxycarbonylaminophenyl-10-methylphenanthridinium, trypanocidal action of, 5, 282
- 7 Methoxy 9: 10 dimethylphenanthridinium, antibacterial and trypanocidal actions and toxicity of, 5, 271
- 5- and 6-Methoxy-2: 3-dimethylquinoxaline 1: 4-dioxide, effect in experimental lymphogranuloma venereum and psittacosis, 8, 299
- 1-Methoxy-2: 3-dimethylquinoxalinium 4-oxide, antiviral action of, 8, 302
- (1 Methoxy 4: 4 dithien 2' ylbut 3 en 2 yl)amine, analgesic, antihistaminic, atropine-like and other pharmacological actions of, 8, 2
- 6 (2 Methoxyethanesulphonyl) 2:3 dimethylquinoxaline 1:4-dioxide, antiviral action of, 8, 301
- 6 (2 Methoxyethoxy) 2:3 dimethylquinoxaline 1:4-dioxide, antiviral action of, 8, 302
- 6-(2-Methoxyethoxy)quinoxaline 1:4-dioxide, antiviral action of, 8, 301
- 1 (5 Methoxyindan 6 ylmethyl) 2 methylpiperidene, oxytocic action, preparation and properties of,
   12, 194
- m-Methoxymandelamidine, antiviral action of, 12, 66 3-Methoxy-4-(p-methoxyphenyl)benzoylmethyl acetate, effect on permeability of synovial membrane, 9,
- 7 Methoxy 9 p methoxyphenyl 10 methylphenanthridinium, antibacterial and trypanocidal actions and toxicity of, 5, 270; 9, 265
- 2 Methoxy 10 methyl 9 p nitrophenylphenanthridinium, antibacterial and trypanocidal actions and toxicity of, 5, 270; 9, 265
- 7 Methoxy 10 methyl 9 m nitrophenylphenanthridinium, antibacterial and trypanocidal actions and toxicity of. 5, 270: 9, 265
- toxicity of, 5, 270; 9, 265

  7 Methoxy 10 methyl 9 p nitrophenylphenanthridinium, antibacterial and trypanocidal actions and toxicity of, 5, 270; 9, 265
- —, trypanocidal action of, 5, 283
- 7 Methoxy 10 methylphenanthridinium, antibacterial and trypanocidal actions and toxicity of, 5, 270; 9, 265
  - ---, trypanocidal action of, 5, 283
- 6-Methoxynaphth-2-ylmethyl acetate, effect on permeability of synovial membrane, 9, 166
- 1-(7-Methoxynaphth-1-yl)-2-piperidinoethanol, effect on pressor action of adrenaline, 1, 100
- —, quinidine-like action and toxicity of, 1, 93

p-Methoxyisonitrosoacetophenone, reactivation of organophosphate-inactivated cholinesterase by, 10, 462 Methoxyphenamine (Orthoxine):

, anticholinesterase and surface anaesthetic actions of, 5, 462

p-Methoxyphenethyl methyl ketone, anthelmintic action of, 3, 97

p-Methoxyphenethyl propyl ketone, anthelmintic action of, 3, 97

1-(p-Methoxyphenethyl)azacycloheptane, amoebicidal action and toxicity of, 3, 49

N-p-Methoxyphenethylhexamethyleneimine, preparation and properties of, 3, 56

p-Methoxyphenethylmethylamine-formaldehyde condensation product. See Compound 48/80

3-p-Methoxyphenoxypropan-1: 2-diol, paralysing action and toxicity of, 1, 265

o'-, m'- and p'-Methoxyphenyl m-aminobenzenesulphonate, antituberculous action of, in vitro, 3, 151

m-Methoxyphenyl benzenesulphonate, antituberculous action of, in vitro, 3, 151

m' - Methoxyphenyl p - chlorobenzenesulphonate, antituberculous action of, in vitro and in vivo, 3, 151, 152 o- and p-Methoxyphenyl heptyl sulphone, antituberculous

action of, in vitro, 3, 149 p-Methoxyphenyl methanesulphonate, antituberculous

action of, in vitro, 3, 150 m'-Methoxyphenyl p-methoxybenzenesulphonate, anti-

tuberculous action of, in vitro, 3, 151 o-, m- and p-Methoxyphenyl methyl sulphone, anti-

tuberculous action of, in vitro, 3, 149 m- and p-Methoxyphenyl pentanesulphonate, antituber-

culous action of, in vitro, 3, 150 o-, m- and p-Methoxyphenyl pentyl sulphone, antibac-

terial action of, in vitro, 3, 149 p-Methoxyphenyl isopentyl sulphone, antituberculous

action of, in vitro and in vivo, 3, 149, 152

o-, m- and p-Methoxyphenyl propyl sulphone, antituberculous action of, in vitro, 3, 149 p-Methoxyphenyl sulphanilate, antituberculous action of,

in vitro, 3, 151

N¹-o-Methoxyphenyldiguanide, circulatory and respiratory reflex actions of, 5, 71

N<sup>1</sup>-p-Methoxyphenyldiguanide, circulatory and respiratory reflex actions of, 5, 71

, effect on histamine-induced gastric secretion, 3, 348 1-o-, -m- and -p-Methoxyphenyldithiobiuret, trypanocidal action and toxicity of, **8**, 420 1- and 5-p-Methoxyphenyl-S<sup>2</sup>-ethylisodithiobiuret, try-

panocidal action and toxicity of, 8, 420

p-Methoxyphenylguanidine, antimalarial action against exoerythrocytic forms of Plasmodium gallinaceum, in vitro, 1, 163

5-p-Methoxyphenylcyclohexa-1: 3-dione, response of an-

terior preparation of Ascaris to, 3, 97

N¹-p-Methoxyphenyl-N¹-methyldiguanide, effect in experimental filariasis, 5, 249

p - (5 - p - Methoxyphenyl - 3 - oxopentyl)phenyldimethyl-

amine, anticholinesterase action of, 9, 143

p - (5 - p - Methoxyphenyl - 3 - oxopentyl)phenyltrimethylammonium, anticholinesterase, paralysing and other pharmacological actions and toxicity of, **9**, 138

1-p-Methoxyphenyl-5-phenyldithiobiuret, trypanocidal action and toxicity of, 8, 420

1 - p - Methoxyphenyl - 2 - phenyl - 1 - thien - 2' - ylethylene, effect on vaginal response to 1-bromo-2: 2-di-(p-ethoxyphenyl)-1-phenylethylene and oestradiol, **5.** 376

1-p-Methoxyphenyl-2-phenyl-1-thien-2'-ylethylene (cont.) -, preparation and properties of, 5, 377

response of vagina to, 5, 376

2-(p-Methoxyphenylpiperid-2-yl)ethanol, effect in experimental filariasis, 5, 257

p-Methoxyphenylisopropyloctyl sulphide, effect on sclerostome larvae, 7, 522

p-Methoxyphenylthiourea, effect in experimental filariasis, 5, 248

N-p-Methoxyphenyl-p-toluenesulphonamide, antituberculous action of, in vitro, 3, 151

5-p-Methoxyphenyl-1:2:4-triazole-3-thiol, effect in experimental tuberculosis, 6, 455

p-Methoxyphenylvinyl propyl ketone, anthelmintic action of, 3, 97

7-Methoxy-2- $\beta$ -piperidinopropionylbenzfuran, analgesic action of, 1, 12

3-Methoxypropyltrimethylammonium, pharmacological actions of, 7, 103

—, preparation of, 7, 113 6-Methoxyquinaldine-4-sulphonic acid, effect in experimental filariasis, 5, 251

6-Methoxyquinol-4-ylalanine, effect in experimental filariasis, 5, 251

1-(6-Methoxyquinol-4-yl)-2-morpholinoethanol, quinidine-like action of, 1, 93

1-(6-Methoxyquinol-4-yl)-2-piperidinoethanol, quinidine-like action and toxicity of, 1, 93

 $\alpha$  - (6 - Methoxyquinol - 4 - yl) -  $\alpha$  - piperid - 4 - ylmethanol, quinidine-like action of, 1, 93

1 - (6 - Methoxyquinol-4 - yl) - 2 - (4 - piperid - 4' - ylpiperidino)ethanol, quinidine-like action of, 1, 93

 $\alpha$  - (6 - Methoxyquinol - 4 - yl) -  $\alpha$  - (4 - propenylpiperid-2-yl)methanol, quinidine-like action of, 1, 9 1 - (6 - Methoxyquinol - 4 - yl) - 2 - (4 - propylpiperidino)-

ethanol, quinidine-like action of, 1, 93

1 - (6 - Methoxyquinol - 4 - yl) - 3 - (3 - propylpiperid - 4 yl)propanol, quinidine-like action and toxicity of, 1,

5-Methoxyquinoxaline 1: 4-dioxide, effect in experimental lymphogranuloma venereum and psittacosis, 8, 299

6-Methoxyquinoxaline 1:4-dioxide, antiviral action of, 8, 301

2-Methoxy-4-sulphonamidophenylstibonic acid, antifilarial action of, 5, 245

Methyl abietate, enhancement of effectiveness of oral penicillin preparation by, 6, 97

Methyl alcohol, effect on cerebrospinal-fluid pressure, in dog, 1, 62

, larvicidal action against sclerostomes, 7, 509 Methyl 2-aminomethyl-5: 5-dimethylthiazolidine-4-carboxylate, antibacterial action of, 3, 306

Methyl  $\alpha$ -benzamido- $\beta\beta$ -dimethylacrylate, antibacterial action and toxicity of, 3, 307 hyl 3-benzoyl-2: 2: 5: 5-tetramethylthiazolidine-4-

Methyl carboxylate, antibacterial action and toxicity of, 3, 307

2-(2-benzyl-4-methyl-5-oxo-oxazolin-2-yl)-5: 5-Methyl dimethylthiazoline-4-carboxylate, antibacterial action and toxicity of, 3, 307

Methyl butyrate, enzymic hydrolysis of, effect of proguanil (Paludrine) on, 2, 118

Methyl  $\beta$ -diethylaminopropionate, effect on tumour growth, 6, 208

Methyl 5: 5-dimethyl-2-phenylthiazolidine-4-carboxylate, antibacterial action and toxicity of, 3, 306

S-Methyl OO-di-p-nitrophenyl thiophosphate, inactivation of ali-esterase and true cholinesterase by, 8, 218 Methyl N-ethyl-N-p-(4-p-methylaminophenoxybut-2-enoxy)phenylcarbamate, schistosomicidal action of, 12, 329

Methyl fluoroacetate, pharmacological actions and toxicity of, 3, 118

Methyl fluoroacetate poisoning, treatment of, in man, 3,

Methyl 3-formyl-2:2:5:5-tetramethylthiazolidine-4carboxylate, antibacterial action and toxicity of, 3, 307

Methyl green, larvicidal action against sclerostomes, 7, 509

Methyl halides, larvicidal action against sclerostomes, 7, 509

Methyl β-hexamethyleneimino-α-methylpropionate, effect on tumour growth, 6, 208

Methyl  $\beta$ -hexamethyleneiminopropionate, effect on tumour growth, **6**, 208

Methyl 2-cyclohexanespiro(5: 5-dimethylthiazolidine-4-carboxylate), antibacterial action and toxicity of, 3, 306

Methyl N-methyl-N-p-(4-p-methylaminophenoxybut-2-enoxy)phenylcarbamate, schistosomicidal action of, 12, 329

Methyl α-methyl-β-morpholinopropionate, effect on tumour growth, 6, 208

Methyl 1-methyl-3-phenylpiperidine-3-carboxylate, analgesic action of, 1, 10

Methyl 1-methyl-4-phenylpiperidine-4-carboxylate, analgesic action of, 1, 6

Methyl a-methyl-β-piperidinopropionate, effect on tumour growth, 6, 208

Methyl 2-morpholino-1-phenylethyl ketone, pharmacological actions of, 7, 85

Methyl β-morpholinopropionate, effect on tumour growth, 6, 208

Methyl norpenicillinate, antibacterial action and toxicity

of, 3, 307

Methyl paraoxon. See Dimethyl p-nitrophenyl phos-

Methyl paraoxon. See Dimethyl p-nitrophenyl phos

Methyl α-phenoxypropionate, preparation and properties of, 7, 128

Methyl phenyl sulphone, antituberculous action of, in

Methyl phenyl sulphone, antituderculous action of, in vitro, 3, 148

Methyl 1-phenyl-2-piperidinoethyl ketone, pharmacological actions of, 7, 85 Methyl β-piperidinopropionate, effect on tumour growth,

6, 208

Methyl p-propoxyphenyl sulphone, antituberculous action of, in vitro, 3, 149

Methyl reserpate, intraventricular, effect in conscious cat, 12, 529

Methyl tetrahydro-3-oxo-2-phenyl-1: 4-thiazine-5-carboxylate, antibacterial action and toxicity of, 3, 307
 Methyl isothiocyanate, effect on tumour growth, 6, 205
 Methyl thiolbenzoate, effect on antituberculous action of disulphides, isoniazid and thiol esters, 12, 436

Methyl thyroxine, solubility and thyroid action of, 5, 318 Methyl p-tolyl sulphone, antituberculous action of, in vitro, 3, 149

Methyl violet, larvicidal action against sclerostomes, 7, 509

---, quinidine-like action of, 1, 99

1 - p - N - Methylacetamidophenoxy - 4 - p' - methylaminophenoxybut-2-ene, schistosomicidal action of, 12, 329

6-Methyladrenaline, pharmacological actions of, 7, 338 α-Methyladrenaline, pressor action of, effect of amidines on, 1, 30

N-Methyladrenaline, pressor action of, effect of amidines on, 1, 30

N-Methyladrenalone, hyperfibrinogenaemic action of, 11, 99

Methylamine, release of histamine from lung tissue by, 8, 103

p-Methylaminobenzaldehyde thiosemicarbazone, antituberculous action of, **4**, 248

3-Methylamino-1: 1-diphenylpropan-1-ol, pharmacological actions and toxicity of, 6, 562

1-Methylaminomethylnaphth-2-ol, antimalarial action of, 12, 171

## Methylamphetamine (Methedrine):

-, central action of, in cat, 11, 178

—, effect on central action of 5-hydroxytryptamine, 11, 175

----, effect on central action of lysergic acid diethylamide, in man, 11, 178

---, effect on voluntary activity, in mouse, 8, 46

—, hypnosis-prolonging and hypothermic actions of, 12, 251

—, intracerebral, central action of, in conscious mouse, 12, 12

---, quinidine-like action of, 1, 100

— -, response of blood pressure to, and effect of atropine on, in anaesthetized and spinal cats, 4, 304

—, response of nictitating membrane to, effect of denervation on, 8, 69

**N-Methylatropinium**, inhibition of gastric secretion by, **11**, 171

3 - Methyl - 3 - azapentamethylenebis(ethyldimethylammonium). See Azamethonium

p-Methylbenzhydroxamic acid, reactivation of organophosphate-inactivated cholinesterases by, 10, 464

m- and p-Methylbenzoylcholine, pharmacological actions of, 11, 267

2-Methylbenzthiazole, effect in experimental filariasis, 5, 254

1 - Methylbenz - 1:2:3 - triazole 3 - oxide, antiviral action of, 8, 302

a-Methylbenzylamines, substituted, morphine-like and other pharmacological actions and toxicity of, 8, 22

2-Methylbutyl phenyl sulphone, antituberculous action of, in vitro, 3, 148

 α-Methylcholine, inhibition of acetylcholine biosynthesis by, 11, 311

S-Methylcysteine, protective action against nephrotoxicity of polymyxin A, 7, 249

N-Methyldiaboline, effect on neuromuscular-blocking action of decamethonium, 4, 388

N<sup>1</sup>-Methyldiguanide, response of blood pressure and respiration to, 5, 73

Methyldihydromorphinone. See Metopon

N - Methyl - 3: 4 - dihydroxy - 6 - methylphenylethanolamine.

See Methyladrenaline

S-(2-Methyl-1: 4-dioxonaphth-3-yl)glutathione, antimitotic action of, 3, 337

(2-Methyl-1: 4-dioxonaphth-3-yl)thioacetic acid, effect on mitosis, 3, 337

5 - Methyl - 4: 4 - diphenyl - 6 - piperidinohexan - 3 - one, analgesic action of, 6, 577

S-Methyl-NN'-diphenylisothiourea, inactivation of amine oxidase by, 6, 258

-, response of blood pressure, heart rate and respiration to, 5, 324

2-Methyl-4: 4'-dipyridyl, response of anterior preparation of Ascaris to, 3, 105

1-Methyldithiobiuret, trypanocidal action and toxicity of, 8, 420

Methylene blue, effect in experimental filariasis, 5, 256 Methylguanidine (cont.) -, effect in experimental typhus, 1, 16 , response of phrenic nerve-diaphragm preparation effect on adenosine-induced auriculo-ventricular to, 4, 318 block, 4, 85 4-Methylcyclohexyl p-tolyl sulphone, antituberculous -, effect on blood-procaine and -procaine esterase action of, in vitro, 3, 148 activity, 3, 133 1-(2-, 3- and 4-Methylcyclohexylaminomethyl)naphth-2- effect on inhibitory action of intestine homool, antimalarial action of, 12, 171 genates on antidiuretic action of serum extracts, 9, 33 N-Methylhistamine, response of intestine to, effect of -, effect on Plasmodium berghei and gallinaceum, in Antergan, atropine and pethidine on, 2, 254 vivo, 8, 162 O-Methylhomocholine. See 3-Methoxypropyltrimethyl--, effect on typhus rickettsiae, in vitro, 1, 18 -, larvicidal action against sclerostomes, 7, 509 ammonium N-Methylhydroxytyramine, slow hyperfibrinogenaemic Methylene dihalides, larvicidal action against scleroaction of, 11, 99 stomes, 7, 509 Methylmedmain. See 5-Dimethylamino-3-ethyl-1: 2-Methylene green, effect in experimental typhus, and on dimethylindole rickettsiae, in vitro, 1, 18 4 - Methyl - 1 - p - methyldiphenylmethylpiperazine, antiacetylcholine action of, 11, 273 Methylene violet, absorption, excretion, pharmacological actions, tissue distribution and toxicity of, 7, 499 3 - {Methyl(1 - methylphenethyl)amino} - 1:1 - diphenylpropan-1-ol, pharmacological actions and toxicity -, antifilarial action of, 7, 494 of, 6, 562 -, effect in experimental filariasis, 5, 256 4-Methylmorpholine, toxicity of, 1, 252 -, effect in experimental typhus, and on rickettsiae, 6-(3-Methylmorpholinomethyl)indan-5-ol, oxytocic acin vitro, 1, 18 -, effect on Plasmodium berghei and gallinaceum, in tion, preparation and properties of, 12, 194 6-(3-Methylmorpholinomethyl)-3: 4: 1-xylenol, vivo, 8, 162 action, preparation and properties of, 12, 194 S-(2-Methyl-1: 4-naphthoquinonyl-3)-glutathione. -, toxic symptoms of, in man, 7, 506 , treatment of filariasis and onchocerciasis with, in See S-(2-Methyl-1: 4-dioxonaphth-3-yl)glutathione man, 7, 505 pp'-Methylenebis(1-benzyl-1-methylpiperidinium), amoe-S-(2-Methyl-1: 4-naphthoquinonyl-3)-thiolacetic acid. See (2-Methyl-1: 4-dioxonaphth-3-yl)thioacetic acid 1-Methyl-2-naphth-1'-ylmethyliminazoline, pharma-cological actions of, 4, 45 bicidal action, preparation, properties and toxicity of, 3, 62 - Methylenebis(N - cyclohexylcarbamoylethyleneimine), antitumour and cytotoxic actions of, 6, 2-Methyl-6-nitrobenzthiazole, effect in experimental filariasis, 5, 254 pp'-Methylenebis(methyldipentylphenylammonium), am-10-Methyl-9-p-nitrophenyl-7-n- and -iso-propoxyphenoebicidal action, preparation, properties and toxicity anthridinium, antibacterial and trypanocidal actions of, 3, 62 and toxicity of, 5, 270 pp' - Methylenebis(N - phenylcarbamoylethyleneimine), Methylolamides, antitumour and cytotoxic action of, effect on tumour growth, 6, 368 **6**, 201 SS'-Methylenebisisothiourea, effect on vasoconstrictor action of adrenaline, 3, 206 Methylolmelamines, and derivatives, effect on tumour growth, 6, 211 -, inactivation of amine oxidase by, 6, 257 2-Methyl-3-oximino-4-oxopentane, as antidote in anti--, pressor action of, 3, 201 cholinesterase poisoning, and toxicity, 11, 417 , response of blood pressure, heart rate and respira-4-Methylpentyl phenyl sulphone, antituberculous action tion to, 5, 324 of, in vitro, 3, 148 2-Methyl-3-pentylquinoxaline 1:4-dioxide, amoebicidal 3: 4 - Methylenedioxybenzaldehyde thiosemicarbazone, antituberculous action of, 4, 249 action and toxicity of, 8, 286 3: 4 - Methylenedioxybenzylideneacetone, anthelmintic , effect in experimental lymphogranuloma venereum action of, 3, 96 and psittacosis, 8, 299 3: 4-Methylenedioxyphenylpropyl benzyl sulphide, effect N - Methyl - N - pentyl - p - toluenesulphonamide, on sclerostome larvae, 7, 522 tuberculous action of, in vitro, 3, 151 Methylephedrine, antianaphylactic action of, 8, 177 Methylpentynol, effect on analgesic action of 4-hydroxy-Methylergometrine, anticholinesterase action of, 10, 61 isophthalic acid, 11, 24 5 - Methylfurfuryltrimethylammonium, parasympatho--, effect on autonomic reactions and performance, 12, 479 mimetic action of, 9, 376 Methylglucamine stibonate, antifilarial action of, 5, 245 , effect on neuromuscular transmission, mechanism of, in frog, 11, 151 N-Methylglycine, ethyl ester, antibacterial action and toxicity of, 3, 307 , hypnotic action and toxicity of, effect of 4-hydroxy-Methylglyoxime, reactivation of organophosphate-inacisophthalic acid on, 11, 24 tivated cholinesterase by, 10, 462 response of isolated muscle preparations to, 10, 133 9-Methylphenanthridines, antibacterial and trypanocidal 6-Methylgramine, effect on response of molluscan heart to adrenaline and 5-hydroxytryptamine, 10, 475 actions and toxicity of, 9, 265 9-Methylphenanthridinium compounds, antibacterial and response of molluscan heart to, 10, 475 6-Methylguanamine, effect on tumour growth, 6, 216 trypanocidal actions and toxicity of, 9, 265 Methylguanidine, effect on histaminase and histidine β-Methylphenethylamine, ionization and pharmacologidecarboxylase activities, 11, 121 cal actions of, 9, 488 , effect on pressor action of adrenaline, 1, 29, 30 Methylphenobarbitone, anaesthetic and ganglion-depres--, larvicidal action against sclerostomes, 7, 509

, response of blood pressure, heart rate and respira-

tion to, 5, 324

sant actions of, 9, 175

effect on cerebral 5-hydroxytryptamine level, 12,

Methylphenobarbitone (cont.)

, effect on convulsant action of methyl fluoroacetate. 3, 124

N-Methyl-α-phenylacetamidine, response of blood pressure and respiration to, 5, 72

Methylphenylcyanamide, effect on tumour growth, 6, 205  $N^1$ -Methyl- $N^1$ -phenyldiguanide, response of blood pressure and respiration to, 5, 72

1-Methyl-1-phenyldithiobiuret, effect in Babesia rodhaini infections, 11, 71

trypanocidal action and toxicity of, 8, 420

10-Methyl-9-phenylphenanthridinium, antibacterial and trypanocidal actions and toxicity of, 5, 269; 9, 265 trypanocidal action of, 5, 283

1-Methyl-4-phenylpiperidine-4-carboxylic acid, analgesic action of, 1, 6

1-Methyl-4-phenyl-4-propionylpiperidine, analgesic action of, 1, 6

2-Methyl-3-phenylquinoxaline 1:4-dioxide, amoebicidal action of, 8, 286

Methylpiperazine, chromatographic separation from diethylcarbamazine and its metabolites, and estimation by carrier technique, 10, 398

infra-red absorption spectrum of, 10, 404

6-(2-Methylpiperidinomethyl)indan-5-ol, oxytocic action, preparation and properties of, 12, 194

3-(2- and 4-Methylpiperidinomethyl)indole, oxytocic action of, 12, 194

1-(2-, 3- and 4-Methylpiperidinomethyl)naphth-2-ol, oxytocic action, preparation and properties of, 12,

3-(2-Methylpiperidinomethyl)naphth-2-ol, oxytocic action, preparation and properties of, 12, 194

6-(2-, 3- and 4-Methylpiperidinomethyl)-3: 4: 1-xylenol, oxytocic action, preparation and properties of, 12,

a-Methyl-m- and -p-isopropoxybenzylamine, morphinelike and other pharmacological actions and toxicity of, 8, 22

1-Methylpropyl phenyl sulphone, antituberculous action of, in vitro, 3, 148

2-(Methylisopropylamino)ethyl a-(2-dimethylaminoethoxy)-aa-diphenylacetate, pharmacological actions of, 6, 634

5-Methyl-4-n- and -iso-propyl-2-piperidinomethylphenol, oxytocic action, preparation and properties of, 12,

2-Methyl-3-propylquinoxaline 1:4-dioxide, amoebicidal action of, 8, 286

antiviral action of, 8, 301

2-Methyl-3-isopropylquinoxaline 1: 4-dioxide, amoebicidal action of, 8, 286

O-Methyl-N-isopropylisourea, effect on tumour growth,

2-Methylpyridine, anthelmintic action of, 3, 104

1-Methylpyrid-2-one, response of anterior preparation of Ascaris to, 3, 104

N1-(4-Methylpyrimid-2-yl)sulphanilamide. See Sulpha-

2-(1-Methylpyrrolidin-2-yl)ethyl esters, pharmacological actions of, 12, 447

1-Methylpyrrolidin-2-ylmethyl benzilate, pharmacological actions of, 12, 447

3-(1-Methylpyrrolidin-2-yl)propyl benzilate, pharmacological actions of, 12, 447

2-Methylquinoxaline 1:4-dioxide, amoebicidal action and toxicity of, 8, 286

, effect in experimental lymphogranuloma venereum and psittacosis, 8, 299

6-Methylquinoxaline 1: 4-dioxide, effect in experimental lymphogranuloma venereum and psittacosis, 8, 299 1-Methylquinoxalinium 4-oxide, antiviral action of, 8, 302

1-Methylquinoxal-2-one 4-oxide, antiviral action of, 8, 302

5-Methyl-2-sulphanilamido-1:3:4-oxadiazole, effect in

experimental tuberculosis, and toxicity, 5, 178
5-Methyl-2-sulphanilamido-1: 3: 4-thiadiazole, effect in experimental tuberculosis, and toxicity, 5, 178

S-Methyl-N-p-sulphonamidophenylthiuronium, effect in experimental filariasis, 5, 248

1-Methyl-4-(N-then-2-ylanilino)piperidine. See Thenalidine

4-Methylthiazole-5-carboxylic acid, basic esters of, central and spasmolytic actions of, 1, 153

p-Methylthiobenzaldehyde thiosemicarbazone, antituberculous action of, 4, 249

Methylthiouracil, antithyroid action of, in rat, 1, 127

-, colorimetric determination in urine, 1, 127 -, effect on adrenals, anterior pituitary and testes, in

rat, 1, 133

goitrogenic action of, in rat, 1, 129

Methylthiourea, response of blood pressure, heart rate and respiration to, 5, 324

S-Methylisothiourea, and analogues of, effect on vasoconstrictor action of adrenaline, 3, 208

response of blood pressure to, 3, 198 -, circulatory and respiratory reflex actions of, in

normal and vagotomized cats, 5, 326 , effect on bronchoconstrictor action of histamine, 4, 318

, effect on intestinal response to histamine, and action of mepyramine (Anthisan) on, 4, 317

-, effect on pressor action of adrenaline, 1, 33 , effect on response of phrenic nerve-diaphragm preparation to tubocurarine, 4, 318

, effect on response of sciatic nerve-gastrocnemius preparation to adrenaline and neostigmine, 4, 320 , effect on skeletal-muscle response to acetylcholine,

4, 318

-, inactivation of amine oxidase by, 6, 257 -, pharmacological actions of, 7, 417

-, protective action against nephrotoxicity of polymyxin A, 7, 252

-, response of blood pressure, heart rate and respiration to, 5, 324
-, response of bronchioles to, 4, 318

-, response of intestine to, and effect of atropine and mepyramine (Anthisan) on, 4, 317

, response of phrenic nerve-diaphragm preparation to, 4, 318

, effect of calcium and potassium ion concentrations on, 4, 319

-, response of rat uterus to, 4, 318

, response of sciatic nerve-gastrocnemius preparation to, and effect of tubocurarine on, 4, 320

-, response of skeletal muscle to, 4, 318

, vasoconstrictor action of, and effect of mepyramine (Anthisan) and tolazoline (Priscol) on, 4, 316

S-Methylthiuronium, effect in experimental filariasis, 5, 248

, hypnosis-prolonging action of, 12, 251

NS - (2 - Methylisothiouronium)ethyleneisothiourea, circulatory and respiratory reflex actions of, in normal and vagotomized cats, 5, 326

O-Methylthyroxine, solubility and thyroid action of, 5,

1-Methyl-4-(a-p-tolylbenzyl)piperazine. antihistaminic action-physical properties relations in, 10, 270

 $N^1$ -Methyl- $N^1$ -p-tolyldiguanide, effect in experimental filariasis, 5, 249 Monoisonitrosoacetone poisoning, prophylaxis against, 11, Metopon, effect on intestinal contraction and acetyl-Morperidine. See Ethyl 1-(2-morpholinoethyl)-4-phenylcholine release, 12, 119 piperidine-4-carboxylate Metrazol. See Leptazol Morphine, analgesic action of, 1, 117, 258; 6, 575; 7, 434 -, in man, 1, 114; 9, 112 -, effect of *N*-allyl-1-*p-cyclo*hexyloxyphenyl-Mexican scorpion. See Centruroides noxius Micrococcus lysodeikticus, effect of cephalosporin P<sub>1</sub> on, 6, 430 ethylamine and nalorphine on, 9, 290 Micrococcus tetragenus, effect of cephalosporin N and , effect of chlorpromazine, pethidine and penicillin on, 8, 253 promethazine on, 9, 395 , —, effect of procyclidine and tricyclamol optical isomers on, 10, 385 Microsporum spp., effect of polymethylenebis-quinolinium and -isoquinolinium compounds on, 10, 343 **Micturition**, induction by methyl ester of  $\gamma$ -crotonic , effect of vital dyes on, 5, 154 -, analgesic and antidiuretic actions of, effect of betaine, 4, 230 Milk, effect on bacteriostatic action of chlorhexidine nalorphine on, in man and rat, 10, 45 (Hibitane), 9, 194 -, analgesic and cardiac actions of, 4, 98 analgesic action and toxicity of, 5, 127; 7, 200; 9, 280 Milk-ejecting action, of synthetic oxytocin and analogues, 12, 209 Milontin. See Phensuximide -, analogue of, pharmacological actions of, 2, 207 Miltown. See Meprobamate antianaphylactic action of, 10, 160 Miotics, bioassay using mouse pupil, 6, 696
Miotic action, of 2249F, 2268F, carbachol, eserine,
furtrethonium (Furmethide), neostigmine and tri--, antihexokinase action of, 12, 16 blocking action on intestinal tryptamine receptors, 12, 324 methyl(5-methylfurfuryl)ammonium, 6, 696 -, central action of, in cat, 11, 177 -, of anticholinesterases, 6, 697; 9, 141 - effect on amine release from mast cells, 11, 412 -, of dyflos and other dialkyl phosphorofluoridates, -, effect on analgesic action of 4-hydroxyisophthalic in animals and man, 2, 236 acid, 11, 24 -, of eserine, antagonism by 2-amino-1: 2-diphenyl--, effect on central action of 5-hydroxytryptamine ethanol, 2, 213 and reserpine, 11, 177 See also Iris -, effect on cholinesterase activity, 11, 7 Miotine, anticholinesterase and anticurare actions of, -, effect on cough reflex, 9, 335; 10, 418 2, 8; 4, 29 -, effect on enzymic hydrolysis of Substance P, in Mipafox, selective inhibition of fowl cholinesterases by, vitro, 12, 361 -, effect on ganglionic action of acetylcholine, 7, 545 in vitro and in vivo, 8, 212 -, sialogenous action of, and submaxillary cholin--, effect on gastric-muscle response to 5-hydroxyesterase inactivation, 9, 447 tryptamine, 12, 348 Miracil A. See 1-(2-Diethylaminoethylamino)-4-methyl-, effect on halothane(Fluothane)-induced cardiac xanthone hypersensitivity to adrenaline, 11, 405 , effect on hypotensive action of histamine and pilo-Miracil B. See 6-Chloro-1-(2-diethylaminoethylamino)-4-methylxanthone carpine, 12, 83 Miracil C. See 1-(2-Diethylaminoethylamino)-4-methyl--, effect on intestinal acetylcholine release, 12, 119 xanthydrol , effect on intestinal acetylcholine release and syn-Miracil D. See Lucanthone thesis, 12, 115 Mitosis, effect of citraconic, fumaric, maleic and mesa-, effect on nictitating-membrane response to preconic acids and naphthahydroquinone derivatives and post-ganglionic stimulation, 12, 79 on, 3, 263 -, effect on thermal-pain threshold, in man, 7, 209 , effect of sulphydryl addition products of maleic -, effect on vasoconstrictor action of adrenaline, acid and 1: 4-naphthaquinones on, 3, 335 angiotonin, 5-hydroxytryptamine, noradrenaline, Molluscs, response to murexine, 12, 178 tryptamine, and vasopressin, 11, 316 Monkey, sensitivity to methonium compounds, 4, , effect on ventricular-fibrillation induction by 386 adrenaline in animals anaesthetized with chloroform, , toxicity of methyl fluoroacetate to, 3, 119 6, 32 Monoamine oxidase. See Amine oxidase Monocaine. See Butethamine -, ganglionic action of, 12, 79 , mechanism of pituitary-adrenal activation by, 10, 260 Monoepoxides, cytotoxic action of, 6, 237 Monomethylmelamine, and derivatives, effect on tumour , permeability of blood-brain barrier to, effect of growth, 6, 211 various substances on, 5, 154 Monoisonitrosoacetone, as antidote in anticholinesterase poisoning, 11, 417; 12, 340 , release of histamine and 5-hydroxytryptamine by, 11, 205 , effect on neuromuscular-blocking action -, release of 5-hydroxytryptamine by, 11, 202 decamethonium, suxamethonium (succinylcholine) -, release of pressor amines from adrenals by, 7, 549 , response of adrenal amine and hypothalamic and tubocurarine, 10, 494 noradrenaline levels to, effect of chlorpromazine , reactivation of organophosphate-inactivated acetyland nalorphine on, 9, 403 cholinesterase by, 10, 492

, response of adrenal ascorbic acid level to, in adrenal-demedullated, histamine-depleted and nor-

, in adrenal-demedullated, hypophysectomized

mal rats, 9, 95

and normal rats, 10, 260

-, reactivation of organophosphate-inactivated cholin-

, reversal of neuromuscular block due to anti-

esterase by, 10, 462

cholinesterases by, **10**, 490 –, toxicity of, **11**, 418, 424

Mouse, brain-to-body-weight relations in, effect of age Morphine, response of adrenal ascorbic acid level to (cont.) on, 3, 309 , in cortisone- and nalorphine-treated rats, 10, -, histamine metabolism in, 11, 472 262 , involuntary and voluntary movements in, effect of , response of adrenal pressor amine levels to, 7, central nervous stimulants on, 8, 46 —, response of Ascaris muscle preparation to, 4, 150 -, lethal dose of arrow poison and ouabain for, 8, 80 -, response of behaviour and skin-histamine level to, -, sensitivity to dialkyl phosphorofluoridates, 2, 236 , sensitivity to histamine, and effect of adrenaline, in adrenal-demedullated and normal rats, 9, 96 adrenalectomy and promethazine on, 5, 512

-, sensitivity to methonium compounds, 4, 386 , response of blood pressure to, and effect of atropine, hexamethonium, mepyramine and vagotomy on, 7, 542 , sensitivity to toxic action of licheniformin A5, 5, -, response of blood pressure, heart rate and respira-478 -, toxicity of methyl fluoroacetate to, 3, 119 tion to, and other side-effects of, in man, 9, 109 , toxicity of phosgene to, 1, 81 response of blood-sugar level and body temperature Mouse pneumonitis virus, sensitivity to p-aminosalicylate to, 8, 24 (PAS), antibiotics and sulphathiazole, 8, 448, 452 -, response of intestine to, 5, 584; 10, 456; 12, 119 Mowrah meal, effect on sclerostome larvae, 7, 521 -, effect of adrenaline, atropine and noradren-Mucigenous action, of sodium dodecyl sulphate, 5, 4 aline on, **6**, 264 Mucous membrane, tracheal, acetylcholine and histamine -, mechanism of, 6, 263 -, —, choline acetylase and acetylcholine synthesis in, 7, 76 -, response of liver-fluke body movements to, 4, 10 -, response of respiration to, 7, 546; 9, 335; 10, 418 , effect of octylamines on, 7, 45 -, -, cholinesterase in, 7, 77 -, spinal-reflex depression by, 11, 165 -, response to isoprenaline (isopropylnoradren-, vasoconstrictor action of, 11, 316 Morphine-like action, of substituted benzylamines, 8, 22 aline), 4, 311 —, vaginal, effect of 5-hydroxytryptamine on, 11, 36 Mucuna pruriens, trichomes of. See Cowhage 6-(4-Morpholinobutylamino)anthrapyrimidine, amoebicidal action of, 7, 486 6-Morpholino-4: 4-diphenylhexan-3-one, pharmacologi-Mumps virus, activity of phenylserine against, 12, 66 Murex brandaris and trunculus, hypobrachial murexine cal actions and toxicity of, 5, 127 content of, 12, 177 3-Morpholino-1: 1-diphenylpropan-1-ol, pharmacologi-Murexine, enzymic hydrolysis of, 12, 320 cal actions and toxicity of, 6, 562 , neuromuscular-blocking and muscle-depolarizing 2 - Morpholinoethyl  $\alpha$  - (2 - dimethylaminoethoxy)- $\alpha\alpha$ -diphenylacetate, pharmacological actions of, 6, 634 2-Morpholinoethyl 4-methylthiazole-5-carboxylate, spasactions of, 12, 388 pharmacological actions of, 12, 176 Muriate of potash, larvicidal action against sclerostomes, molytic action of, 1, 154 7,509 2 - Morpholinoethyl  $\alpha$  - (2 - morpholinoethoxy) -  $\alpha\alpha$ -diphenylacetate, pharmacological actions of, 6, 634 2-Morpholinoethyl thiolobenzilate, spasmolytic action Muscarine, anticholinesterase action of, 12, 51 , effect on suxamethonium- or tubocurarine-induced of, 10, 95 paralysis, 12, 50 -, ganglionic action of, 11, 442 6-(2-Morpholinoethylamino)anthrapyrimidine, amoebi--, response of intestine to, effect of atropine on, 8, 154 cidal action of, 7, 486 Morpholinoethylnorpethidine. See Ethyl 1-(2-morpho--, effect of botulinum toxin on, 8, 152 -, response of smooth muscle to, 12, 47 linoethyl)-4-phenylpiperidine-4-carboxylate 6-(2-Morpholinoethyl)-3: 4: 1-xylenol, oxytocic action, -, stability of, **12**, 48 , substitute for, response of Ascaris muscle preparapreparation and properties of, 12, 194 6-(6-Morpholinohexylamino)anthrapyrimidine, amoebicidal action of, 7, 486 6-Morpholinomethylindan-5-ol, oxytocic action, pretion to, and effect of atropine on, 4, 149 Muscarine-like action, of acetylcholine on blood vessels, **8**, 157 -, of acetylcholine and its N-acetoxy and N-ethyl paration and properties of, 12, 194 3-Morpholinomethylindole, oxytocic action of, 12, 194 analogues, 4, 191 -, of arecoline on Ascaris muscle preparation, 4, 149 1-Morpholinomethylnaphth-2-ol, oxytocic action of, 12, -, of benzoylcholine, 7, 335 —, of benzoylcholine derivatives, 11, 267 6-Morpholinomethyl-3: 4: 1-xylenol, oxytocic action, preparation and properties of, 12, 194 -, of benzyl and methyl esters of  $\gamma$ -crotonic betaine, Morpholinomorphine-4-carbodithioic acid, effect in 4, 233 experimental filariasis, 5, 251 -, of choline fatty acid esters, 12, 30 —, of choline phenyl ethers, 12, 128, 300, 312 6-(5-Morpholinopentylamino)anthrapyrimidine, amoebi--, of 3-diethoxyphosphinyloxy-N-methylquinolinium, cidal action of, 7, 486  $\beta$ -Morpholinopropionitrile, effect on tumour growth, 6, 9, 163 of O-ethylcholine, O-methylhomocholine and O-propylformocholine, 7, 109 206 3-Morpholinopropyl a-methyl-aa-diphenylthiolacetate, spasmolytic action of, 10, 95 -, of furfuryltrimethylammonium compounds, 7, 110 , of furyltrimethylammonium and other furan 3-Morpholinopropyl thiolobenzilate, spasmolytic action of, 10, 95 compounds, 9, 376 -, of methonium compounds, 4, 392 6-(3-Morpholinopropylamino)anthrapyrimidine, amoebi--, of murexine, 12, 176 cidal action of, 7, 486 -, of neostigmine analogues, 7, 235 Motion sickness, mode of action of Lergigan in, 8, 181 -, of nicotine, **4**, 325 , possible antidote for, 10, 432

Motion sickness antagonists, side-effects of, 8, 187

-, of suxamethonium (succinylcholine), 8, 20

Museuvine like action (cont.)	Muscla skalatal (cont.)
Muscarine-like action (cont.) —, of toxiferines, 6, 308	Muscle, skeletal (cont.) ——, ——, localization of intrathecal and intravenous
—, of trimethyloxopentylammonium compounds, 7,	dibromoprocaine in, 4, 336
107	—, —, localization of intravenous lead in, effect of
Muscarine-like substances, miotic action of, 6, 697  —, response of intestine to, effect of botulinum toxin	dimercaprol and parathyroid extract on, 4, 354 ——, ——, in dimercaprol(BAL)-treated and
on, <b>8</b> , 152	normal rabbits, 3, 223
Muscular fasciculations, induction by diethyl p-nitro-	—, —, localization of intravenous mercury in, and
phenyl phosphate, in rabbit, 8, 208	effect of dimercaprol on, in rabbit, 6, 484
Muscle, avian, response to neostigmine analogues, 7, 231 —, bronchial, response to acetylcholine and histamine,	, localization of intravenous tubocurarine in, 4, 299
effect of bronchodilators on, 8, 26	—, —, localization of methylene violet in, 7, 503 —, —, localization of oral p-ethanesulphonylbenz-
—, —, response to antihistaminics, 10, 230 —, —, role in pulmonary reflexes, 8, 315	—, —, localization of oral p-ethanesulphonylbenz-
—, cardiac, potassium-ion movement in, effect of	aldehyde thiosemicarbazone and thiacetazone (9311) in, 5, 551
digoxin and ouabain on, 12, 371	—, —, mechanism of after-discharges caused by
-, -, refractory period of, effect of antazoline	veratrine in, 10, 363
(Antistin) and diphenhydramine (Benadryl) on, 4, 283 —, response to acetylcholine, effect of antazoline	,, normal and eserine- or TEPP-sensitized, response to acetylcholine and benzyl and methyl
(Antistin) and diphenhydramine (Benadryl) on, 4, 282	esters of $\gamma$ -crotonic betaine, 4, 232
—, —, effect of benzoylcholine on, 7, 335	,, paralysis by hayatin methiodide and tubo-
—, —, response to antimalarials and atropine,	curarine, 8, 399
effect of acetylcholine and potassium ions on, 12, 74 —, —, response to benzoylcholine, and effect of	—, —, paralysis by succinylmonocholine, 9, 434 —, —, paralysis by suxamethonium (succinylcholine),
atropine, hexamethonium and nicotine on, 7, 335	and effect of 284C51 and eserine on, 9, 432
, response to digoxin and ouabain, 5, 311, response to nicotine, effect of hexametho-	-, -, reflexes of, effect of curare and related
nium on, 7, 335	curariform substances on, <b>6</b> , 461 ——, release of histamine-like substance from, by
, cholinesterase activity of, effect of intravenous	curare, <b>2</b> , 252
cholinesterase on, 6, 147	—, —, response to acetylcholine, 10, 467
—, end-plate cholinesterase activity of, effect of dyflos	—, —, effect of (2-acetoxyethyl)triethylam-
(DFP) on, 7, 483 —, end-plate potentials of, effect of toxiferines on,	monium on, 4, 192 —, —, effect of alkylisothioureas and asym.
6, 301, 305	dimethylguanidine on, 4, 318
—, gastric, sensitivity to various substances, 12, 344	,, effect of antazoline (Antistin) and
, histamine release from, by Compound 48/80 and octylamine perfusions, 9, 197	diphenhydramine ( <i>Benadryl</i> ) on, <b>4</b> , 284
—, lactic dehydrogenase activity of, effect of specific	—, —, effect of anticholinesterases on, 9, 140 —, —, effect of conessine and its isomers and
antisera on, 9, 182	quinidine on, 3, 238
—, localization of dicophane (DDT) and di(p-chloro-	
phenyl)acetic acid in, 4, 120 ——, localization of p-iodoaniline and p-iodophenyl-	,, effect of dyllos (D11) on, 4, 172
urethane in, 7, 145	—, —, effect of mephenesin (Myanesin), pro-
—, localization of oral sulphadimethoxypyrimidine in,	caine and tubocurarine on, 2, 241
in nephrectomized cat, 2, 155 —, localization of parenteral carbidium in, 5, 297	,, effect of methonium compounds on, 4, 390
—, pilomotor, response to sympathetic stimulation,	4, 390 —, —, effect of neostigmine analogues on, 7, 229
effect of choline 2: 6-xylyl ether on, 12, 300	
—, respiratory, activity during anticholinesterase poisoning, 8, 468	,, effect of proguanil and its metabolite on, 10, 150
—, —, response to toxiferines, 6, 304	—, —, effect of tolazoline ( <i>Priscol</i> ) and its
, response to acetylcholine, effect of intravenous	N-methyl derivative on, 3, 260
cholinesterase on, 6, 151 ——, effect of toxiferines on, 6, 303	—, —, effect of tri(2-acetoxyethyl)methylam- monium on, 4, 193
, skeletal, denervated and innervated, response to	—, —, response to acetylcholine and its <i>N</i> -acetoxy
acetylcholine, effect of F 2512, F 2557, gallamine	and N-ethyl analogues, 4, 191
triethiodide (F 2559) and tubocurarine on, 4, 22 —, —, response to F 2512, F 2557 and galla-	—, —, response to acetylcholine and murexine, 12, 388
mine triethiodide (F 2559), 5, 24	—, response to acetylcholine and neostigmine,
—, —, electrical changes in, due to neuromuscular-	effect of N-benzyl- and N-ethyl-N'N'-dimethyl-N-
blocking agents, 12, 390 —, histamine level in, effect of 5-hydroxytrypt-	naphth-2-ylethylenediamine on, 9, 381 —, response to acetylcholine, potassium ions
amine and tryptamine on, 8, 408	and nerve stimulation, effect of hypnotics on, 10,
—, —, histamine release from, by snake venoms, 9,	133
408 —, histological changes in, due to intramuscular	—, response to adenosine triphosphate, 3, 281 —, response to adrenaline and neostigmine,
iron preparations, 12, 109	effect of N-benzyl- and N-ethyl-N'N'-dimethyl-N-
,, due to various intramuscular injec-	naphth-2-ylethylenediamine on, 9, 381
tions, 12, 427	,, response to alkyltin compounds, 10, 22

Muscle, skeletal (cont.)	Muscle, smooth (cont.)
$-$ , response to $\omega$ -aminoalkyltrimethylammon-	,, response to bradykinin, kallidin and kinin,
ium compounds, 10, 119	<b>12,</b> 149
, response to antazoline (benzylanilinomethyl- iminazoline), 2 - p - methoxybenzyliminazoline and	,, response to cephalosporin P <sub>1</sub> , <b>6</b> , 435 , response to histamine, effect of mepyramine
naphazoline (naphthylmethyliminazoline) and their	(2786 RP) on, 1, 280, 282
1-methyl derivatives, 4, 38	,, response to Hoechst 10581, methadone
,, response to anticholinesterases, 9, 140	(amidone), morphine, pethidine and phenadoxone,
—, —, reversal by oximes, 10, 492 —, —, response to Artocarpus integra extracts, 10,	5, 136 —, response to murexine, 12, 182
248	, response to notatin, 1, 229
—, —, response to chlorpromazine, pethidine and	—, —, response to proguanil (Paludrine), 4, 16
promazine, and effect of nalorphine on, 9, 393 —, response to choline and decamethonium,	, —, response to sympathomimetic amines, 9, 488
effect of tetraethyl pyrophosphate on, 7, 231	—, esponse to synthetic oxytocics, 12, 202 —, response to tolazoline ( <i>Priscol</i> ) and its
,, response to choline 2: 6-xylyl ether, 12,	N-methyl derivative, 3, 259
128	,, response to various substances, test prepara-
, response to Compound 48/80 and histamine, 10, 413	tion for, 11, 147 —, smooth and striated, response to guanidine and
—, response to dyflos ( <i>DFP</i> ), 4, 171	isothiourea derivatives, 4, 315
——, response to hypnotics, 10, 133	, striated, cholinesterase levels in, effect of tri-o-
, response to indirect stimulation, effect of 3-diethoxyphosphinyloxy-N-methylquinolinium on,	cresyl phosphate on, 7, 263 —, —, localization of solapsone (Sulphetrone) in, in
9, 163	normal and nephrectomized animals, 3, 23
——, response to mephenesin (Myanesin), 2, 241	—, —, response to acetylcholine, effect of anti-
, response to murexine, 12, 176	cholinesterases and tubocurarine on, 5, 44
, meshonse to neostigmine, effect of adrenaline, decamethonium, N-ethyl-N'N'-dimethyl-N-naphth-	—, —, —, effect of benzoylcholine on, 7, 332 —, —, —, effect of proguanil ( <i>Paludrine</i> ) on, 4, 16 —, —, —, effect of tubocurarine on, 5, 44
2-ylethylenediamine and procaine on, 9, 380	,, effect of tubocurarine on, 5, 44
—, —, effect of adrenaline and methyladren-	—, —, response to acetylcholine and anticholin-
aline on, 7, 345 —, response to nerve stimulation, effect of	esterases, 5, 38
dyflos (DFP) on, 4, 173	—, —, response to acetylcholine and potassium ions, effect of indole and its derivatives on, 8, 392
——, response to parasympathomimetic furan and	—, —, response to anticholinesterases, 6, 597 —, —, response to benzoylcholine, and effect of
1: 3-dioxolane derivatives, 9, 376	—, —, response to benzoylcholine, and effect of
, response to potassium ions, effect of <i>N</i> -tetra- substituted ethylenediamines on, <b>9</b> , 383	eserine, procaine and tubocurarine on, 7, 332 ——, response to N-benzyl- and N-ethyl-N'N'-
—, response to propylene glycol, 4, 174	dimethyl-N-naphth-2-ylethylenediamine, decameth-
—, —, response to quaternary ammonium com-	onium, gallamine triethiodide, iodoacetic acid and
pounds, 10, 466 ——, response to substances related to acetyl-	leptazol, 9, 379 —, response to carbachol, decamethonium,
choline, 7, 104	nicotine and potassium ions, effect of anticholin-
, response to succinylmonocholine and suxa-	esterases on, 5, 42
methonium (succinylcholine), 9, 387	—, —, response to chlorpromazine and prometha-
—, —, response to thiopentone, 10, 133, 141 —, ,—, sensitization to acetylcholine by eserine,	zine, 11, 339 —, response to eserine and neostigmine, effect
effect of dyflos (DFP) on, 4, 174	of pentamethonium and tubocurarine on, 5, 44
, superfused, as acetylcholine assay prepara-	—, —, response to proguanil ( <i>Paludrine</i> ), 4, 16 —, —, sensitivity to potassium ions, effect of vera-
tion, 9, 370 —, skeletal and smooth, response to acetylcholine,	trum alkaloids on, 5, 33
effect of local anaesthetics, quinidine and spasmo-	—, toxic action of oximes on, 10, 495
lytics on, 3, 108	Muscle action potentials, effect of thiopentone on, 10, 141
—, response to choline phenyl ethers, and effect of tubocurarine on, <b>8</b> , 148	—, effect of veratrum alkaloids on, in curarized muscle, 5, 35
, response to reserpine, 12, 517	Muscle relaxants, 5: 6-dithiadecamethylenebis(trimethyl-
, smooth, response to acetylcholine, effect of cocaine	ammonium) as, in man, 8, 117
on, 8, 329	——, murexine as, 12, 176
,, effect of conessine and its isomers on, 3, 242	See also Neuromuscular-blocking agents  Muscle tone, correlation between cholinesterase inactiva-
—, —, effect of substituted α-methylbenzyl-	tion and, in rabbit duodenum, 10, 26
amines and pethidine on, 8, 24	Muscle-contracting substance, slow, in bee venom, 9, 352
potassium ions, effect of indole and its derivatives	—, —, in human plasma, isolation, identification and properties of, 11, 93
on, 8, 389	, in human urine, 10, 200
, response to acetylcholine and muscarine, 12,	—, —, in human urine, 10, 200 —, in plasma, effect of antigen and Compound
47, response to 2-amino-1: 2-diphenylethanol,	48/80 on, in normal and sensitized rabbits, 8, 417
<b>2</b> , 209	—, —, after Compound 48/80 injection, 6, 502
, response to benzoylcholine, 7, 333	,, after thalassine injection, 9, 49,, in plasma and serum, 11, 93, 111

Muscle-contracting substance, slow (cont.)	Mycobacterium tuberculosis (cont.)
—, —, in rat intestine. See Substance R —, —, in wasp venom, 9, 53, 352 —, response of intestine to, effect of Compound	—, effect of sulphones on, in vitro and in vivo, 3, 146
—, —, in wasp venom, 9, 53, 352	—, effect of sulphonic acid esters on, in vitro, 3, 150,
,, response of intestine to, effect of Compound	151
48/80 on, 6, 505	—, growth inhibition of. See Antituberculous action
Muscle-stimulating action, of 5: 6-dithiadecamethylene-	Mycobacterium spp., in vitro sensitivity to antituberculous
bis(trimethylammonium), 8, 116	agents, 8, 126
Muscle-stimulating substances, in nettle stings, 11, 186	Mycobacterium infections. See Tuberculosis
Musculotropic action, and antinicotinic action of atropine	Mydriatic action, as bioassay method for parasympa-
and spasmolytics, 4, 326	thetic ganglion-blocking agents, 8, 10
Mushroom juice, preparation and polyphenol oxidase	, and hypotensive action of hexamethonium and its
activity of, 11, 67, 89	analogues, 11, 282
Mussel. See Mytilus edulis	—, of 295C51 and 405C49, <b>8</b> , 174 —, of (2-acetoxyethyl)triethylammonium, <b>4</b> , 193
Mustard gas, effect on amino-acid oxidase, 4, 60	—, of adrenaline and methyladrenaline, 7, 343
—, effect on cytochrome system, 4, 59	—, of adrenaline and nicotine, 7, 666
-, effect on malate, pyruvate and succinate dehydro-	, of adrenaline and noradrenaline, effect of chlor-
genase activities, 4, 60	promazine on, 9, 404
—, hydrolysis of, inhibition by lecithin, 4, 56 —, hydrolysis products of, toxicity of, 1, 253	—, effect of iris denervation on, 4, 377
—, intoxication due to, treatment with sodium salt	, of 1-alkyl-2-hydroxyalkylpyrrolidine esters and
solutions, 3, 72	their quaternary derivatives, 12, 451
—, toxic action on cerebral pyruvate oxidase, 4, 51	—, of 2-amino-1: 2-diphenylethanol, 2, 212
toxic action on carebral succinate oxidase 4 50	—, of atropine, reversal by 2249F, 2268F, anticholin-
—, toxic action on cerebral succinate oxidase, 4, 59 —, toxic action of 2, 27  Markov (sixton 2, 27)	esterases, furtrethonium (Furmethide), muscarine-like
Mustine {nitrogen mustard; di(2-chloroethyl)methyl-	substances and trimethyl(5-methylfurfuryl)ammon-
amine}:	ium, <b>6</b> , 697
—, and hydrolytic products, toxicity of, 1, 247	, of atropine, hexamethonium and tetraethylammon-
, leucopenia induced by, as test condition for	ium, <b>6</b> , 616
leucopenia therapy, 2, 169	—, of atropine, methanthelinium and propantheline,
, stability in aqueous solution, 1, 249	9, 218
See also Nitrogen mustards	—, of benzhexol, procyclidine, tricyclamol and
Mutagenic action, of butadiene dioxide, 6, 250	related compounds, and their optical isomers, 10,
, of mono- and poly-functional ethyleneimine	383
derivatives, 9, 320	—, of chlorpromazine, 11, 340
—, of tretamine (2: 4: 6-triethyleneimino-s-triazine), 6,	, of chlorpromazine, pethidine and promethazine, 9, 397
398	, of curare, 6, 462
Mya arenaria heart, as test preparation for acetylcholine, 10, 36	—, of decanamide, 10, 179
—, effect of various substances on, 10, 476	, of 3: 3-diphenyl-allylamines, -propanolamines and
Myanesin. See Mephenesin	-propylamines and their quaternary derivatives, 6,
Mycobacterium avium, effect of phenanthridinium com-	562
pounds on, in vitro, 5, 272	, of dithienylalkenylamines, 8, 2
Mycobacterium avium and tuberculosis, effect of dapsone	—, of hexamethonium, effect of 5-hydroxytryptamine
(diaminodiphenylsulphone), glucosulfone (Promin)	on, 12, 253
and solapsone (Sulphetrone) on, in vitro, 3, 24	, of hexamethylenebis(4-methylmorpholinium), 10,
Mycobacterium phlei, effect of cetrimide and polymethyl-	125
enebisisoquinolinium compounds on, 8, 34	—, of M&B 1950, 8, 308
Mycobacterium phlei, smegmatis and tuberculosis, effect	—, of methonium compounds, tolerance and cross-
of cephalosporin P <sub>1</sub> on, 6, 430	tolerance development to, 10, 281 —, of morpholinoethylnorpethidine, 11, 32
Mycobacterium tuberculosis, ali-esterase activity of, effect of isoniazid and nitrofurfuraldehyde semicarbazone	—, of murexine, 12, 183
	See also Iris
on, 8, 223 —, ali-esterase activity and growth of, effect of dyflos	Myleran. See Busulphan
<i>DFP</i> ), paraoxon and tri-p-nitrophenyl phosphate on,	Myocarditis, serum-induced, effect of antazoline (Bena-
8, 221	dryl) and mepyramine (Neoantergan) on, in rabbit,
, avian and mammalian, lesions produced in chick	4. 216
embryo by, <b>8</b> , 125	, protective action of sodium salicylate in, in
, effect of antimalarials on, 3, 156	rabbit, 5, 9
—, effect of cephalosporin N and penicillin on, 8, 253	Myometrium, excised human, effect of adrenaline, noradrenaline and dihydroergotamine on, 10, 39
—, effect of cortisone on, in normal and immune mice,	Myoneural. See Neuromuscular
12, 240 —, effect of diaminomethylpyrimidines on, in vivo, 3,	N-Myristoylethyleneimine, antitumour, carcinogenic and
, effect of diaminomethylpyrinidiles on, in wwo, 5, 156, 160	cytotoxic actions and toxicity of, 9, 306
, effect of isoniazid on, 11, 192	—, carcinogenic action of, 6, 410
—, effect of streptomycin on, in vitro and in vivo, 2, 23	Mysoline. See Primidone
—, effect of sulphanilic acid esters on, in vitro and	Mytilus edulis heart, as test preparation, 10, 475
in vivo, 3, 151, 152	Mytolon. See Benzoquinonium
—, effect of sulphonamides on, in vitro and in vivo,	Myxomatosis, infectious, experimental, protective action
3, 151, 152, 153	of mepacrine in, 7, 478

Nu 683. See (2-Dimethylcarbamoyloxy-5-phenylbenzyl)trimethylammonium

Nu 1197. See Trimethyl{m-(methyl-p-tolylcarbamoyloxy)phenyl}ammonium

Nu 1250. See m-(N-p-Chlorophenyl-N-methylcarbamoyloxy)phenyltrimethylammonium

Nu 5130, anticurare action of, 5, 42

 effect on striated-muscle sensitivity to acetylcholine, 5, 39

-, inhibition by, of enzymic hydrolysis of acetylcholine, 5, 40

-, response of striated muscle to, 5, 39

Naja naja. See Cobra

Nalorphine, analgesic action of, 11, 29

-, analgesic and antidiuretic actions of, in man and rat, 10, 45

central respiratory action of, in decerebrate dogs, **11**, 15

, effect on adrenal ascorbic acid and cholesterol levels, 9, 296

, effect on analgesic action of codeine and 4-hydroxyisophthalic acid, 11, 24

-, effect on analgesic action of morphine, 9, 290

, effect on analgesic action of morpholinoethylnorpethidine, 11, 29

-, effect on analgesic and antidiuretic actions of morphine, in rat and man, 10, 45

, effect on analgesic action and toxicity of 1-p-cyclohexyloxyphenylethylamine, 9, 290

-, effect on antitussive action of morphine-like analgesics and on cough reflex, 10, 418

-, effect on cholinesterase activity, 11, 7

-, effect on depletion of adrenal ascorbic acid by aspirin, methadone and morphine, 10, 262

, effect on depletion of adrenal ascorbic acid and cholesterol by analgesics, 9, 297

-, effect on depressive action of morphine, 12, 119 -, effect on morphine-like actions of morpholinoethylnorpethidine, 11, 33

, effect on respiratory depressant action of analgesics, 10, 421

, effect on respiratory depressant action of ethylmethylthiambutene, in man, 9, 110

-, effect on response of adrenal amine and hypothalamic noradrenaline levels to morphine, 9, 403

, effect on skeletal-muscle response to chlorpromazine, pethidine and promethazine, 9, 394, effect on toxicity of (+)- and (-)-methadone, in

rat, 10, 261 , response of intestine to, 12, 119

Naphazoline (Privine; 2-naphth-1'-ylmethyliminazoline): , hypnosis-prolonging and hypothermic actions of, 12, 251

, pharmacological actions of, effect of N-methylation on, 4, 45

response of intestine to, effect of tolazoline (Priscol) on, 3, 259

1:4-Naphthahydroquinone di(dihydrogen phosphate), antimitotic action of, 3, 266

and its salts, preparation and properties of, 3, 268 1: 4-Naphthahydroquinone di(hydrogen succinate), preparation and properties of, 3, 269

1:4-Naphthahydroquinone mono(hydrogen succinate), effect on mitosis, 3, 226

preparation and properties of, 3, 269

Naphthalene, larvicidal action against sclerostomes, 7, 509 Naphthalene-1:5- and -2: 7-di(N-ethylenesulphonamide), antitumour and cytotoxic action of, 6, 387

Naphthalene-1:3:5-tri(N-ethylenesulphonamide), effect on tumour growth, 6, 387

1: 4-Naphthaquinones, antimitotic action and sulphydrylgroup uptake by, 3, 335

Naphthazine blue, effect on Litomosoides carinii, 7, 495

Naphth-1-ol, anthelmintic action of, 3, 102

effect on curarizing action of tubocurarine, 4, 359 α-Naphthol. See Naphth-1-ol  $\beta$ -Naphthol. See Betanaphthol

1-Naphthol-2-sulphonate indophenol, effect on Litomosoides carinii, 7, 495

S-1: 4-Naphthoquinon-2-ylglutathione. See S-1:4-Dioxonaphth-2-ylglutathione

S-1: 4-Naphthoquinon-2-ylthiolacetic acid. See S-1: 4-Dioxonaphth-2-ylthioacetic acid

N-β-Naphthoylethyleneimine, carcinogenic action and toxicity of, 9, 306

Naphth-2-yl acetate, response of anterior preparation of Ascaris to, 3, 102

Naphth-2-yl carbamate, anthelmintic action of, 3, 102 Naphth-1- and -2-yl cyclohexyl sulphone, antituberculous action of, in vitro, 3, 148

Naphth-1- and -2-yl cyclopentyl sulphone, antituberculous action of, in vitro, 3, 148

Naphth-1- and -2-yl phenyl sulphone, antituberculous action of, in vitro, 3, 148

Naphth-1-yl propyl sulphone, antituberculous action of, in vitro, 3, 149

Naphth-1- and -2-yl p-tolyl sulphone, antituberculous action of, in vitro, 3, 148

Naphth-2-ylbutyrolactone, response of anterior preparation of Ascaris to, 3, 101

Naphth-1- and -2-ylcarbamoylmethanol, effect permeability of synovial membrane, 9, 166

Napth-1-yldiguanide, effect in experimental filariasis, 5, 249

1-Naphth-1'- and -2'-yldithiobiuret, trypanocidal action and toxicity of, 8, 420

N-Naphth-1-ylethylenediamine, enzymic oxidation of, **10**, 314

S-(2-Naphth-1'-ylethyl)isothiourea, circulatory and respiratory reflex actions of, in normal and vagotomized cats, 5, 325

response of blood pressure and tidal air to, in normal and vagotomized cats, 8, 315

2-Naphth-1'-ylmethyliminazoline. See Naphazoline

S-Naphth-1-ylmethylisothiourea, circulatory and respiratory reflex actions of, in normal and vagotomized cats, 5, 326 1-Naphth-1'-yloxy-3-piperidinopropan-2-ol,

quinidinelike action and toxicity of, 1, 93

1-Naphth-1'-yl-2-piperidinoethanol, effect on intestinal response to acetylcholine, 1, 104

-, effect on pressor action of adrenaline, 1, 100 -, quinidine-like action and toxicity of, 1, 93

Narcotics, effect on cerebral inorganic and organic phosphate levels, in vitro, 5, 465

Narcotine, effect on cough reflex and respiration, 10, 418 Neisseria catarrhalis and meningitidis, effect of nisin on, in vitro, 7, 441

Neisseria gonorrhoeae and meningitidis, effect of cephalo-

-, effect of dapsone and sulphonamides on, in vitro, 7, 190

Neisseria gonorrhoea, meningitidis and pharyngis sicca, effect of cephalosporin P<sub>1</sub> on, 6, 430

Nematodes, acetylcholinesterase activity of, 7, 564

, effect of various substances on free-living stages of, 7, 509

Nematodes (cont.)	Neostigmine (cont.)
—, pharmacology and physiology of, 4, 145	—, effect on neuromuscular-blocking action of,
Nematode infections, experimental, chemotherapy of, 3,	methonium compounds and tubocurarine, 4, 388
91 Nacantanan Cas Manamanina	—, effect on neuromuscular-blocking action of
Neoantergan. See Mepyramine	murexine, 12, 388
Neoarsphenamine (neosalvarsan):	—, effect on neuromuscular-blocking action of
—, antifilarial action of, 5, 247 —, development of resistance to, in <i>Spirochaeta</i>	proguanil, 10, 147
	—, effect on neuromuscular-blocking action of suxa-
recurrentis, in vivo, 7, 33 —, effect on intestinal response to acetylcholine and	methonium (succinylcholine), 8, 20
histamine, 7, 648	—, effect on neuromuscular-blocking action of N-
—, effect on <i>Plasmodium berghei</i> and gallinaceum, in	tetrasubstituted ethylenediamines, 9, 380
vivo, 8, 162	, effect on neuromuscular-blocking action of toxi- ferines, 6, 302
—, histamine-releasing action of, 7, 646	—, effect on neuromuscular-blocking action of tubo-
—, response of anterior preparation of Ascaris to, 3,	curarine, 5, 207; 7, 603
106	—, effect on paralysing action of mephenesin (Myan-
—, response of liver-fluke body movements to, 4, 10	esin), 1, 269
Neosalvarsan. See Neoarsphenamine	—, effect on potentiation of acetylcholine depolarizing
Neosolganol, effect in experimental filariasis, 5, 257	action by edrophonium, 12, 263
Neostam. See Stibamine glucoside	—, effect on response of phrenic nerve-diaphragm
Neostibosan. See Ethylstibamine	preparation to Compound 48/80, 10, 416
Neostigmine (Prostigmin):	-, effect on response of phrenic nerve-diaphragm
, and analogues, anticholinesterase and anticurare	preparation to electrical stimulation, and action of
actions of, 7, 223	adrenaline on, 1, 41
, effect on skeletal-muscle response to acetyl-	—, —, action of atropine, curarine, and procaine
choline, 7, 229	on, 1, 50
—, —, enzymic and spontaneous hydrolysis of, 7,	—, effect on response of sciatic nerve-gastrocnemius
232	preparation to adrenaline and noradrenaline, 4, 378
—, —, response of intestine to, 7, 231	—, effect on response of sciatic nerve-gastrocnemius
, antagonism of curarizing action of Compound 15	preparation to intravenous cholinesterase and
and laudexium (Laudolissin) by, 7, 400	gallamine triethiodide (Flaxedil), 7, 484
—, antagonism of curarizing action of laudexium	—, effect on skeletal-muscle response to Compound
(Laudolissin) and tubocurarine by, in conscious man,	48/80 and tubocurarine, 10, 414
7, 412	—, effect on striated-muscle sensitivity to acetylcholine,
——, anticholinesterase action of, 9, 76, 164	5, 39
, and effect on chromodacryorrhoea induced	——, effect on toxicity of proguanil ( <i>Paludrine</i> ), 4, 14
by acetylcholine in rat, 4, 187 —, kinetics and mechanism of, 4, 223	—, and homologues, anticholinesterase and anticurare
—, and reversal, in vitro and in vivo, 6, 593	actions and toxicity of, 2, 8 —, inactivation of schistosome acetylcholinesterase by,
—, anticholinesterase and anticurare actions of, 4, 29	7, 566
, anticholinesterase, paralysing and other pharma-	—, inhibition of enzymic hydrolysis of acetylcholine
cological actions and toxicity of, 9, 139	by, 5, 40
—, anticurare action of, <b>4</b> , 363; <b>5</b> , 42	—, miotic action of, <b>6</b> , 696
—, atropine-like action on rabbit atrium, 9, 367	—, response of auricle to, 5, 366
—, blocking of anticholinesterase action of tetraethyl	—, —, and effect of acetylcholine on, 2, 139
pyrophosphate by, 4, 224	—, —, and effect of hexamethonium on, 9, 42
—, derivatives of, anticholinesterase and anticurare	, response of blood pressure to, 5, 207; 7, 16;
actions of, <b>4</b> , 29	10, 349; 12, 24
—, effect on acetylcholine sensitivity of heart sensitized	—, response of intestine to, effect of 2-amino-1:2-
by dyflos ( <i>DFP</i> ), <b>4</b> , 170	diphenylethanol on, 2, 209
—, effect on auricle response to acetylcholine, 9, 42	—, response of phrenic nerve-diaphragm preparation
—, effect on auricle response to acetylcholine and	to, <b>6</b> , 597
nicotine, 2, 139	, response of sciatic nerve-gastrocnemius prepara-
, effect on blood-pressure and nictitating-membrane	tion to, and effect of guanidine and methyliso-
responses to adrenaline, 9, 427	thiourea on, 4, 320 —, response of skeletal muscle to, effect of adrenaline
, effect on blood procaine and procaine esterase levels, 3, 133	
—, effect on central action of curare and tubocurarine,	and N-benzyl- and N-ethyl-N'N'-dimethyl-N-naphth-2-ylethylenediamine on, 9, 381
7, 16	—, effect of adrenaline, decamethonium, N-
—, effect on curarizing action of hayatin methiodide	ethyl - $N'N'$ - dimethyl - $N$ - naphth - 2 - ylethylene-
and tubocurarine, 8, 403	diamine and procaine on. 9. 380
—, effect on ganglion-blocking action of tubocurarine,	effect of adrenaline and methyladrenaline on.
3, 113	diamine and procaine on, 9, 380 ——, ——, effect of adrenaline and methyladrenaline on, 7, 345
, effect on intestinal depression by morphine, 12,	, response of striated muscle to, effect of penta-
121	methonium and tubocurarine on, 5, 44
—, effect on neuromuscular-blocking action of benzyl	—, —, and effect of tetraethyl pyrophosphate on,
and methyl esters of $\gamma$ -crotonic betaine, 4, 232	5, 38
—, effect on neuromuscular-blocking action of	-, sensitization of heart to acetylcholine by, effect of
decamethonium and decapyrrolidinium, 10, 130	dyflos ( <i>DFP</i> ) on, <b>4</b> , 169

	101
Neostigmine (cont.)	Nerves, vagus, stimulation of (cont.)
—, toxicity of, 4, 14; 6, 602 —, —, effect of atropine, hexamethonium and	—, —, blood-pressure response to, effect of conessine on, 3, 242
tubocurarine on, 9, 299 Neosuprel. See 1-(3: 4-Dihydroxyphenyl)-2-isopropyl-	,, cardiac response to, effect of 2-amino- 1:2-diphenylethanol on, 2, 209
aminobutan-1-ol	,, cardiac response to, effect of intraven-
Neosynephrine. See Phenylephrine Nephrotoxicity, of licheniformin A5, 5, 478	ous cholinesterase on, 6, 149 ——, ——, cardiac and gastric responses to, effect
—, of polymyxins, 7, 178 —, of polymyxin A and its acetyl and methyl deriva-	of hexamethonium on, 6, 621 ——, ——, effect of methonium compounds on
tives, 7, 248 See also Kidney	responses to, 6, 163
Nerves, cholinergic, paralysis by botulinum toxin, 6, 57	guanil ( <i>Paludrine</i> ) on, <b>4</b> , 16
——, eighth cranial, electrical stimulation of, 8, 181 ——, hepatic, stimulation of, response of blood pressure	—, —, respiratory response to, effect of proguanil ( <i>Paludrine</i> ) on, <b>4</b> , 17
to, and effect of cocaine, ephedrine and guanidine on, 3, 194	, vasomotor, effect of choline 2:6-xylyl ether on, 12, 303
—, —, response of blood pressure to, effect of dihydroergotamine on, in anaesthetized cat, 3, 195	Nerve endings, release of acetylcholine by, effect of decamethonium on, 4, 383
—, hypogastric and inferior mesenteric, stimulation of,	Nerve fibres, sympathetic, degeneration of, effect on
release of pressor amines by, 6, 79 —, phrenic, impulses in, effect of anticholinesterases	enzymes in blood vessels and iris, 9, 423 —, postganglionic, effect of choline 2:6-xylyl
on, 8, 473 —, right vagal cardiac, stimulation of, response of	ether on, 9, 471 —, vagal, effect of 5-hydroxytryptamine on, 8, 238
blood pressure and heart rate to, and effect of vagal cooling on, 8, 353	Nerve-cell stimulants, phase-boundary potentials developed by, 10, 220
, sciatic, cholinesterase activity of, in normal and organophosphate-poisoned fowls, 8, 213	Nervous system, central, depressant action of drugs on, 11, 161
,, effect of tri-o-cresyl phosphate on, 7,	—, —, effect of 5-hydroxytryptamine and its
263 —, metabolism of, effect of dyflos on, in fowl,	antagonists on, 11, 175 —, —, effect of intrathecal normal saline and
12, 356 —, splanchnic, stimulation of, effect on <i>in vitro</i> methyl-	penicillin on, in dog, 4, 329 ——, effect of organic tin compounds on, 10, 23
ation of noradrenaline by adrenal tissue, 4, 241 —, —, effect on methylation of noradrenaline	—, —, effect of organic tin compounds on, 10, 23 —, —, localization of dicophane (DDT) and di(p-chlorophenyl)acetic acid in, 4, 120
in perfused adrenals, 4, 246 —, —, pressor action of, and effect of cocaine	,, substances liberated during activity of, 11, 166  Nettle sting, 5-hydroxytryptamine in, 11, 186
and guanidine on, 3, 195	Neurohypophysectomy, effect on antidiuretic activity and
from adrenals by, 4, 202, 402	pressure of blood, 11, 239 Neurohypophysis. See Pituitary
,, response of blood pressure and dener- vated and innervated nictitating membrane to, in	Neuromuscular junction, antagonistic actions at, 7, 601——, effect of edrophonium at, 12, 47
spinal and eviscerated cats, 4, 202 —, sympathetic, bronchial, transmitter of, 12, 86	—, role of cholinesterases at, 8, 334 Neuromuscular transmission, block in anticholinesterase
—, , —, cardiac, stimulation of, nature of sympathin released by, in dog, 7, 319	poisoning, <b>8</b> , 468 —, effect of alkyltin compounds on, <b>10</b> , 21
—, —, stimulation of, release of pressor amines	—, effect of benzyl and methyl esters of $\gamma$ -crotonic
from adrenals, liver and spleen by, 5, 167 ——, ——, vasoconstrictor action of, effect of	betaine on, 4, 230 —, effect of N-benzyl- and N-ethyl-N'N'-dimethyl-N-
acetylcholine antagonists on, 3, 355 —, —, to rabbit ear, transmitter of, 7, 616	naphth-2-ylethylenediamine on, 9, 379 —, effect of cholinesterase on, in vitro and in vivo, 6,
—, vagus, action potentials of, effect of stimulation of right atrial branch on, 8, 354	149 —, effect of edrophonium on, 12, 260
,, cooling of, effect on blood-pressure and cardiac responses to veratridine, in cat and dog, 6,	—, effect of intravenous true cholinesterase and gallamine triethiodide ( <i>Flaxedil</i> ) on, in dyflos-
679 —, —, effect on blood-pressure and cardiac	(DFP)- and neostigmine-poisoned rats, 7, 482 ——, effect of methylpentynol and paraldehyde on, in
responses to veratridine and vagal stimulation, 8,	frog, <b>11</b> , 151
—, —, effect on of blood-pressure, cardiac and	—, effect of phenyldiguanide on, 5, 71 —, effect of proguanil and its metabolite on, 10, 147
respiratory responses to Veriloid, in cat and dog, 6, 676	Neuromuscular-blocking action, of 489C49, 9, 111 ——, of acetylcholine, decamethomium, murexine and
—, —, effect on respiratory inhibition by 5-hydroxytryptamine and 2-α-naphthylisothiourea,	suxamethonium, 12, 388 —, of 1-alkyl-2-hydroxyalkylpyrrolidine esters and
8, 238,, effect on respiratory reflex action of	their quaternary derivatives, 12, 447 —, of ω-aminoalkyltrim thylammonium, decametho-
diphenhydramine and mepyramine, 7, 451 ,, stimulation of, blood-pressure response to,	nium and suxamethonium, 10, 121 —, of amylobarbitone, 9, 172
effect of 2-amino-1: 2-diphenylethanol on, 2, 211	—, of anticholinesterases, <b>8</b> , 468

Neuromuscular-blocking action (cont.)	New methylene blue, effect in experimental filariasis, 5,
—, of basic ketones and related compounds, 7, 88	256
—, of benzoylcholine, 7, 332	—, effect in experimental typhus, 1, 17
, of benzoylcholine derivatives, 11, 267	—, effect on typhus rickettsiae, in vitro, 1, 18
<ul> <li>—, of benzyl and methyl esters of γ-crotonic betaine,</li> <li>4, 232</li> </ul>	New wool blue, effect in experimental virus infection, 7, 458
, of chlorpromazine and promethazine, 11, 339	Nickel chloride, larvicidal action against sclerostomes,
—, of choline phenyl ethers, 12, 128, 312	7, 509
—, of Compound 48/80, 10, 413	Nickel sulphate, inhibition of 3-diethoxyphosphinyloxy-
—, of curare and related curariform substances, 6, 461	N-methylquinolinium hydrolysis by plasma by, 9,
, of decamethonium, effect of tubocurarine on, 7, 601	162 Nicotinomide determination in blood and uring 8 40
—, of decamethonium and 5: 6-dithiadecamethylene- bis(trimethylammonium), 8, 115	Nicotinamide, determination in blood and urine, 8, 49 —, distribution, pharmacological actions and toxicity
—, of decamethonium, suxamethonium (succinyl-	of, 8, 49
choline) and tubocurarine, effect of oximes on, 10,	—, effect on antifilarial action of diethylcarbamazine
494	(Hetrazan), 5, 231
—, of decamethonium and tubocurarine, effect of	—, effect on Plasmodium berghei, in vivo, 8, 162
neostigmine and analogues on, 7, 225	Nicotine, absorption during smoking, 4, 313
, of gallamine triethiodide, RP 3565 and tetraethyl-ammonium, 7, 1	—, anticholinesterase action of, 9, 76—, antidiuretic action of, in man, 6, 471
—, of hexamethonium and homologues, <b>6</b> , 618	, antiduretic action of, in mail, 0, 477
, of hypnotics, 10, 133	hexamethonium and ethanol on, in rat, 12, 461
—, of mecamylamine, effect of carbon dioxide on, in	—, antihistaminic and residual inhibitory actions on
cat, 12, 457	intestine, 6, 68
—, of mephenesin (Myanesin), 2, 243	—, antiperistaltic action of, and effect of sympatho-
—, of methonium compounds, 7, 535	lytics on, 9, 134
, of methonium compounds, tetraethylammonium and tubocurarine, 4, 381	—, convulsant action of, effect of adrenaline, nor- adrenaline and Pitressin on, 8, 63
—, of murexine, 12, 176	, effect of adrenergic blocking agents and
—, of organophosphate anticholinesterases, reversal	hexamethonium on, in normal and adrenalectomized
by oximes, 10, 490	rats, 8, 62
—, of pentamidine, effect of suramin on, 6, 525	—, —, effect of bromide, methonium compounds
—, of phenylalkyl- $p\omega$ -bis(trialkylammonium) com-	and tetraethylammonium on, 7, 80 ——, effect on anticholinesterase-induced salivation, 9,
pounds, 8, 306 —, of polymethylenebis(4-alkylmorpholinium, 1-alkyl-	446
piperidinium and -pyrrolidinium) compounds, 10,	—, effect on auricle response to pilocarpine, 5, 359
124	, effect on blood-oxytocin level, in rats under
-, of procyclidine and tricyclamol optical isomers,	ethanol anaesthesia, 12, 461
10, 385	—, effect on blood-pressure response to choline phenyl
—, of pyridine-2-aldoxime methiodide, 10, 492 —, of suxamethonium (succinylcholine), 8, 19; 12, 180	ether, 7, 668 —, effect on cardiac response to 2-benzyl-1-methyl-
—, of suxametholium (succurytenome), <b>8</b> , 19, 12, 160 —, of tetraethylammonium, <b>4</b> , 387	iminazoline and nicotine, 3, 258
—, of toxiferines and tubocurarine, 6, 300	, effect on cardiac-muscle response to benzoyl-
—, of tubocurarine, effect of adrenaline, neostigmine	choline, 7, 335
and trimethylpentylammonium on, 7, 603	—, effect on central action of curare and tubocurarine,
—, —, effect of catechol, decamethonium and	7, 19 —, effect on ganglionic action of histamine and
potassium ions on, 7, 229	pilocarpine, 9, 484
—, —, potentiation by basic ketones, 7, 88—, —, reversal by decamethonium and physostig-	—, effect on ganglionic action of muscarine, and
mine, 6, 691	acetylcholine, 11, 446
, of trimethylpentylammonium, effect of tubo-	—, effect on intestinal peristaltic reflex, 4, 42
curarine on, 7, 603	—, effect on intestinal response to acetylcholine, 7, 242
See also Curarizing action	—, effect on intestinal response to acetylcholine, bradykinin, eserine, histamine, 5-hydroxytryptamine
Neuromuscular-blocking agents, inhibition of pseudo and true cholinesterases by, 9, 76	and pilocarpine, 8, 381
—, response of liver-fluke body movements to, 8, 136	—, effect on intestinal response to bradykinin and
See also Muscle relaxants	histamine, 6, 68
Neurovaccinia infections, experimental, effect of mepa-	—, effect on peripheral vasoconstrictor action of
crine and trypan red in, 7, 476	eserine, in rat, 10, 352 ——, effect on potentiation of cardiac response to
Neutral blue, effect on <i>Litomosoides carinii</i> , 7, 495 Neutral red, effect in experimental filariasis, 5, 256	acetylcholine and tetramethylammonium by ouabain,
—, effect in experimental typhus, and on rickettsiae,	9. 326
in vitro, 1, 18	, effect on pressor action of adrenaline and 2-benzyl-
—, effect in experimental virus infection, 7, 458	1-methyliminazoline, 3, 257
—, effect on permeability of blood-brain barrier, 5, 154	—, effect on pressor action of adrenaline, piperidine
-, effect on Plasmodium berghei and gallinaceum, in	and pyrrolidine, <b>4</b> , 114 —, effect on pressor action of 2-( <i>N</i> -benzylanilino-
vivo, <b>8</b> , 162 —, production of inclusion bodies in trypanosomes by,	methyl)-1-methyliminazoline, <b>4</b> , 47
6, 335	, effect on pressor action of eserine, in rat, 10, 349
•	

Nicotine (cont.)	Nicotine (cont.)
—, effect on pressor action of 2-p-methoxybenzyl-1-	-, response of intestine to, 7, 242; 8, 381
methyliminazoline, 4, 47	—, antagonists of, 12, 324
—, effect on pressor action of 1-methyl-2-naphth-1'-	——, effect of alkylisathioureas on 7, 420
ylmethyliminazoline, 4, 46	—, effect of amino-acids and sympathomimetic
—, effect on pressor action of naphazoline (naphthyl-	amines on, 9, 131
methyliminazoline), 4, 45	——, effect of atropine on, 8, 154, 388; 12, 316
—, effect on pressor action of suxamethonium, 10, 267	, effect of atropine, benzoylcholine and
, effect on response of Ascaris muscle preparation to	hexamethonium on, 7, 333
cocaine, <b>4</b> , 148	—, —, and effect of atropine, ephedrine and hexa-
, effect on response of ganglia and nictitating	methonium on, 6, 311
membrane to 5-hydroxytryptamine, 11, 76	—, —, effect of atropine, hexamethonium and
, effect on response of molluscan heart to acetyl-	morphine on, 10, 457
choline, 8, 328	—, —, and effect of botulinum toxin, eserine and
, effect on spinal reflexes, 7, 19; 9, 233; 11, 164	hexamethonium on, 6, 51
, effect on stimulant action of hexamethonium on	, effect of <i>m</i> -bromophenyl choline ether on, <b>8</b> , 152
gastric motility, 6, 621 —, effect on stimulant action of histamine and pilo-	
carpine on adrenals, 9, 485	——, ——, effect of cocaine on, 9, 245 ——, ——, effect of Compound 15, laudexium ( <i>Laudolis</i> -
—, effect on uterine response to urinary extracts, 10,	sin) and tubocurarine on, 7, 403
205	—, effect of hexamethonium on, 9, 246; 12,
—, effect on voluntary activity, in mouse, 8, 46	130, 316
—, effect on water absorption and excretion, in normal	—, effect of hexamethylenebis(ethyldimethyl-
and lead-poisoned rats, 7, 361, 364	ammonium) on, <b>6</b> , 614
—, ganglion-blocking action of, 6, 307	,, and effect of local anaesthetics and tubo-
, ganglion-stimulant action and phase-boundary	curarine on, 4, 34
potential of, 10, 220	—, —, effect of M&B 1950 on, 8, 308 —, —, effect of mepyramine (Neoantergan) on, 3,
—, larvicidal action against sclerostomes, 7, 509	—, —, effect of mepyramine (Neoantergan) on, 3,
—, mydriatic action of, 7, 19	176
—, mydriatic action and toxicity of, 8, 13	—, —, and effect of various substances on, 4, 325
—, pilomotor axon reflex induction by, effect of	, response of liver-fluke body movements to, 8, 136
m-bromophenyl choline ether on, 8, 150	, and effect of amphetamine on, 4, 10
, pressor action of, 7, 124 , effect of (2-acetoxy)triethylammonium on, 4,	, response of molluscan heart to, <b>8</b> , 328
191	, response of nictitating membrane to, effect of choline 2: 6-xylyl ether on, 12, 129
—, effect of amylobarbitone on, 9, 170	—, —, effect of morphine on, 12, 81
, effect of chlorpromazine on, 9, 397	—, response of proguanil( <i>Paludrine</i> )-inhibited auricle
—, effect of choline 2: 6-xylyl ether on, 12, 128	to, 3, 343
——, ——, effect of hexamethonium on, 6, 162	—, response of stomach to, and effect of atropine and
, effect of hexamethonium and hexamethylene-	hexamethonium on, 6, 314
bis(ethyldimethylammonium) on, 6, 615	—, response of striated muscle to, effect of anticholin-
—, —, effect of suxamethonium on, 10, 267	esterases on, 5, 42
—, response of Ascaris muscle preparation to, and	, response of uterus to, 10, 205
effect of tubocurarine on, 4, 148	—, sensitivity of rat gastric muscle to, 12, 346
, response of auricle to, effect of adrenaline, atropine,	, toxic action of, antagonism by various substances,
ephedrine, eserine and hexamethonium on, 9, 15	4, 324
—, and effect of atropine, eserine and neostig-	Nicotine-like action, literature review of compounds
mine ( <i>Prostigmin</i> ) on, 2, 137 ——, and effect of atropine and hexamethonium	with, 7, 118
on, 8, 83	—, of acetylcholine, 8, 158 —, of acetylcholine and its N-acetoxy and N-ethyl
—, effect of tetraethylammonium on, 3, 258	analogues, 4, 191
—, response of blood pressure to, effect of hexa-	, of benzoylcholine, 7, 333, 335
methonium on, 7, 548	—, of benzoylcholine derivatives, 11, 267
—, —, effect of M&B 1950 on, <b>8</b> , 308	—, of benzyl and methyl esters of $\gamma$ -crotonic betaine,
—, response of blood pressure, blood vessels and res-	4. 233
piration to, effect of porphobilinogen and uropor-	—, of 2-(N-benzylanilinomethyl)-1-methyliminazoline,
phyrin on, <b>9</b> , 91	<b>4</b> , 47
—, response of blood pressure and pupils to, 7, 19	—, of 2-benzyl-1-methyliminazoline, 3, 257, 258
—, response of blood pressure and skeletal muscle to,	—, of choline esters and ethers, 7, 117
10, 466	—, of choline phenyl ethers, 12, 128, 312
—, response of blood vessels to, effect of hexamethon-	, of 3-diethoxyphosphinyloxy-N-methylquinolinium,
ium and tetraethylammonium on, 8, 156 —, response of ciliary movement to, 7, 74	9, 163 —, of O ethylcholine, O-methylhomocholine and
, response of denervated auricle and blood vessels	O-propylformocholine, 7, 109
to, and effect of hexamethonium on, <b>8</b> , 348	—, of ethyltrimethylammonium, 7, 538
—, response of denervated and innervated iris to, and	—, of furfuryltrimethylammonium compounds, 7, 110
effect of atropine, ergotoxine, and hexamethonium	—, of methyl fluoroacetate, 3, 122
on, in cat, 7, 665	—, of 1-methyl-2-naphth-1'-ylmethyliminazoline, 4, 46,
, response of heart to, 7, 335	48

Nicotine-like action (cont.) Nictitating membrane (cont.) , response to acetylcholine and potassium ions, effect of amylobarbitone on, 9, 172 -, of murexine, **12**, 176 -, of suxamethonium (succinylcholine), in cat, 8, 20 , response to adrenaline, effect of M&B 1950 on, -, of tetramethylammonium, 7, 8 **8**, 309 , of tolazoline (*Priscol*) and its N-methyl derivative, -, effect of methanthelinium and propantheline 3, 261 on, 9, 221 of trimethyl(2-methyl-3-oxopentyl)ammonium, 7, 108 , response to adrenaline and 2-benzy-1-methyliminazoline, effect of tolazoline (Priscol) on, 3, 257 , of trimethyl(oxopentyl)ammonium compounds, 7, -, response to adrenaline and choline 2:6-xylyl , structure requirements for, 7, 118 ether, 9, 471 -, response to adrenaline, isoprenaline, noradrenaline Nicotine-like stimulant compounds, response of skeletal and third adrenal amine, effect of pilocarpine on, 9, muscle to, 10, 466 isoNicotinhydroxamic acid, reactivation of organo--, response to adrenaline and lactyladrenaline, 9, 504 phosphate-inactivated cholinesterases by, 10, 464 -, response to adrenaline and noradrenaline, 3, 194; 5, 142 Nicotinhydroxamic acid methiodide, effect on human plasma cholinesterases, 10, 356 -, effect of anticholinesterases and iproniazid , reactivation of organophosphate-inactivated cholinon, 9, 426 esterase by, 10, 356, 462 , reactivation of phosphorylated human plasma cholinesterases by, 10, 356 , effect of antihistaminics on, 4, 65 effect of antihistaminics, atropine and cocaine , reactivation of phosphorylated true cholinesterase, on, 6, 123 by, 11, 295 , effect of cocaine and a-cocaine on, in spinal Nicotinic acid, effect on antifilarial action of diethylcat, 10, 438 carbamazine (Hetrazan), 5, 231 , response to adrenaline and sympathetic stimula--, effect on antiviral action of mepacrine, 7, 463 tion, effect of choline 2: 6-xylyl ether on, 12, 298 -, response to adrenalinecarboxylic acid, 6, 132 -, inhibition of histamine release by antigen by, in , response to benzyl and methyl esters of  $\gamma$ -crotonic vitro, 12, 39 isoNicotinic acid hydrazide. See Isoniazid isoNicotinic acid hydrazide methanesulphonate. betaine, 4, 230 , response to choline phenyl ethers, 12, 128, 303, N'-iso Nicotino y lhydrazino methane sulphonic acid , response to choline 2: 6-xylyl ether, procaine and N'-iso Nicotinoylhydrazinomethanesulphonic acid, calcium and sodium salts, absorption, blood levels and tetraethylammonium, 9, 472 , response to Compound 15, laudexium (Laudolissin) excretion following various routes of administration, and tubocurarine, 7, 403

, response to 5: 6-dithiadecamethylenet is(trimethyl-**8**, 358 dissociation constants and other physicoammonium), 8, 117 chemical properties of, 8, 357 , response to F 2512, F 2557 and gallamine trichemical and microbiological determination in ethiodide (F 2559), 4, 23 body fluids and tissues, 8, 356 , metabolites of, chromatographic analysis and -, response to 5-hydroxytryptamine, 11, 74 -, response to intra-arterial adrenaline, 9, 483 determination of, 8, 361 Nicotinyl alcohol (Ronicol): -, response to intraportal noradrenaline and liver -, effect on response of spontaneous and induced sympathin, 3, 195 , response to intraventricular 5-hydroxytryptamine salivation to adrenaline, 9, 450 Nictitating membrane, amine oxidase level in, 7, 99 and reserpine and its metabolites, in conscious cat, -, amine oxidase level and sympathomimetic amine sensitivity of, effect of denervation on, 7, 305 , response to isoprenaline and third adrenal amine, effect of cocaine on, 9, 500 , cholinesterase levels in, and effect of sympathetic response to nerve stimulation, effect of amylobardenervation on, 8, 248 bitone and tetraethylammonium on, 9, 171 , contraction of, effect of acetylcholine and calcium and lead ions on, 12, 219 -, response to nicotine, 7, 19 -, response to noradrenaline, effect of acetylcholine , denervated, hypersensitivity to various substances, and histamine on, and action of adrenalectomy, antihistaminics and atropine, 6, 121 9, 202 -, denervated and innervated, response to adrenaline, -, response to phenyldiguanide, 5, 71 effect of amidines on, 1, 26 , response to ω-phenylenealkylbis(trialkylammonresponse to adrenaline and methyladrenaline, 7, 339, 342 ium) compounds, 8, 306 -, response to piperidine and pyrrolidine, 4, 118 , response to adrenaline, noradrenaline and , response to preganglionic stimulation, effect of splanchnic stimulation, in spinal and eviscerated halothane (Fluothane) on, 11, 403 cats, 4, 202 , response to pre- and post-ganglionic stimulation, response to histamine and pilocarpine, in effect of morphine on, 12, 79 whole and adrenalectomized and eviscerated cats, -, response to proguanil, 10, 148 , response to noradrenaline, effect of cocaine -, response to sympathetic stimulation, 5, 167 on, 7, 312 Nigg virus, sensitivity to p-aminosalicylate (PAS), -, response to sympathomimetic amines, antibiotics and sulphathiazole, 8, 448, 452 Nikethamide, effect on antidotal action of atropine and 8, 69 , and effect of atropine on, 5, 485 pyridine-2-aldoxime methiodide in organophosphate

, nerve supply of, cholinergic fibres in, 9, 206

poisoning, 12, 443

Nikethamide (cont.)

—, effect on antifilarial action of diethylcarbamazine (Hetrazan), 5, 231

—, effect on blood-pressure and respiratory responses to methadone (amidone) and phenadoxone, 5, 133

glycogen level at convulsant doses, 6, 1

, response of anterior preparation of Ascaris to, 3, 104

—, response of liver-fluke body movements to, **8**, 136 Nile blue, effect in experimental filariasis, **5**, 256

Nipple volume, effect of hexoestrol on, in guinea-pig and man, 2, 143

Nisin, antibacterial, biochemical and pharmacological actions and toxicity of, 7, 438

—, excretion and tissue distribution of, 7, 443 —, preparation of intravenous suspension, 7, 442

Nitrates, larvicidal action against sclerostomes, 7, 509 Nitriles, effect on tumour growth, 6, 205

Nitroacridines, antiviral action of, 11, 224

Nitroakridin 3582. See 5-(4-Diethylamino-2-hydroxy-propylamino)-2: 3-dimethoxy-8-nitroacridine

o-Nitrobenzaldehyde thiosemicarbazone, antituberculous action of, 4, 248

---, effect in experimental tuberculosis, and toxicity, 5, 178

m-Nitrobenzaldehyde thiosemicarbazone, antituberculous action of, 4, 248

p-Nitrobenzaldehyde thiosemicarbazone, antituberculous action of, 4, 248; 5, 193

N-p-Nitrobenzenesulphonylethyleneimine, antitumour and cytotoxic actions of, 6, 360

N-p-Nitrobenzenesulphonylguanidine, colorimetric determination in blood, 2, 69

—, oral, blood level after, 2, 65

m-Nitrobenzoylcholine, pharmacological actions of, 11, 267

N-p-Nitrobenzoylethyleneimine, antitumour and cytotoxic actions of, 6, 360

N-p-Nitrobenzylatropinium, inhibition of gastric secretion by, 11, 171

Nitrofurazone (Furacin; nitrofurfuraldehyde semicarbazone):

-, effect in experimental tuberculosis, 4, 249

—, effect on ali-esterases of mammalian tissue and tubercle bacillus, 8, 223

5-Nitrofurfuraldehyde thiosemicarbazone, effect in experimental tuberculosis, 4, 250

Nitrogen mustards, antiviral action and toxic effects of, in ovo and in chicks, 7, 284

----, and hydrolytic products, toxicity of, 1, 247

See also Mustine

o- and p-Nitrophenol, larvicidal and ovicidal actions against sclerostomes. 7, 509

o- and p-Nitrophenols, anthelmintic action of, in vitro, 10, 7

p-Nitrophenyl disopropyl phosphate, anticholinesterase action and toxicity of, 8, 335

—, effect on response of phrenic nerve-diaphragm preparation to acetylcholine, **8**, 337

—, inactivation of cholinesterase by, and reactivation, 10, 356; 11, 295

---, response of phrenic nerve-diaphragm prepara-

tion to, **8**, 337

—, selective inhibition of fowl cholinesterases by, in vitro and in vivo, **8**, 212

p-Nitrophenyl disopropyl phosphate poisoning, antidotes in, atropine and pyridine-2-aldoxime methiodide as, 12, 438 N-o-Nitrophenylethylenediamine, enzymic oxidation of, 10, 314

2-Nitró-2-phenylpropane-1: 3-diol, antiviral action of, 12, 66

isoNitrosoacetophenone, reactivation of organophosphate-inactivated cholinesterase by, 10, 462

iso Nitrosoacetylacetone, as antidote in anticholinesterase poisoning, and toxicity, 11, 417

—, reactivation of organophosphate inactivated cholinesterase by, 10, 462

isoNitrosoacetylfuran, reactivation of organophosphateinactivated cholinesterase by, 10, 462

5-isoNitroso-3-allylrhodanine, anthelmintic action of, in vitro, 10, 7

iso Nitrosodiethyl ketone, as antidote in anticholinesterase poisoning, and toxicity, 11, 417

isoNitrosodimedone, reactivation of organophosphateinactivated cholinesterases by, 10, 464

Nitrourea, effect on tumour growth, 6, 205

Nitrous oxide, effect on spinal reflexes, 9, 233

—, effect on thermal-pain threshold, in man, 7, 211
—, pharmacological actions and physical properties of, 11, 395

Nivaquine A, effect in experimental virus infection, 7, 465

Nomograms, for multiple slope-ratio assays, 10, 296 Nonadecamethylene di-iodide, properties of, 10, 346 Nonadecamethylenebisisoquinolinium, antifungal action and properties of, 10, 343

Nonamethylenebis(2 - acetoxyethyldimethylammonium), enzymic hydrolysis, pharmacological actions and preparation of, 10, 168

Nonamethylenebis{1 - (3 : 4 - dîmethoxybenzyl) - 1 : 2 : 3 : 4 - tetrahydro - 6 : 7 - dimethoxy - 2 - methyl*iso*-

quinolinium, curarizing and histamine releasing actions of, 7, 392

Nonamethylenebis(2 - hydroxyethyldimethylammonium), enzymic hydrolysis, pharmacological actions and preparation of, 10, 168

Nonamethylenebisquinolinium, anticholinesterase action, preparation and properties of, 10, 173

Nonamethylenebisisoquinolinium, antibacterial action, preparation and properties of, 8, 34

Nonamethylenebis(1:2:3:4 - tetrahydro - 6:7 - dimethoxy-2-methylisoquinolinium), curarizing action of, 7, 392

Nonamethylenebis(1:2:3:4-tetrahydro-6:7:8-trimethoxy-2-methylisoquinolinium), curarizing action of, 7, 392

Nonamethylenebis(triethylammonium), curarizing action, preparation and properties of, 3, 298

Nonamethylenebis(trimethylammonium), anticholinesterase action of, 4, 391

—, anticholinesterase and curarizing actions, preparation and properties of, 3, 298

—, ganglion-blocking action of, 6, 155

—, isolation and colorimetric determination in urine, preparation and properties of, 5, 424

, neuromuscular-blocking action of, 4, 387

, response of skeletal muscle to, and effect of atro-

pine and tubocurarine on, 4, 391
—, variation in species sensitivity to, 4, 386

Nonamethylenediamine, catechol amine release from isolated chromaffin granules by, 12, 61

—, enzymic oxidation of, alone and in presence of cadaverine or *iso*pentylamine, 5, 625

—, preparation and properties of, 5, 424 Nonanoylcholine, pharmacological actions of, 12, 30 —, preparation and properties of, 12, 38

N-Nonanoylethyleneimine, antitumour, carcinogenic and	Noradrenaline (cont.)
cytotoxic actions and toxicity of, 9, 306	—, in adrenals of rabbit, and effect of splanchnic
Nonylamine, catechol-amine release from isolated chrom-	stimulation on, 5, 544
affin granules by, 12, 61	—, in adrenals of rat and human phaeochromocytoma,
2-Nonyliminazoline, effect in experimental tuberculosis, and toxicity, 5, 178	6, 16 in advangle of young animals and man 6 665
S-Nonylisothiourea, circulatory and respiratory reflex	—, in adrenals of young animals and man, 6, 665 —, in plasma, effect of reserpine on, 12, 532
actions of, in normal and vagotomized cats, 5, 326	—, infusions of, response of blood flow and respiration
—, effect on vasoconstrictor action of adrenaline, 3,	to, in conscious man, <b>8</b> , 98
208	—, injected by various routes, response of blood
—, inactivation of amine oxidase by, 6, 257	pressure to, and effect of cocaine, ephedrine and
—, pharmacological actions of, 7, 417	guanidine on, 3, 189
, response of blood pressure to, 3, 198	—, response of intestine, nictitating membrane
Noradrenaline, antianaphylactic action of, 8, 177, 416	and uterus to, 3, 194
—, as intestinal and uterine sympathetic transmitter,	—, ionization-pharmacological actions relations in,
<b>6</b> , 79	9, 488
, bioassay of, comparison with colorimetric method,	—, methylation of, by adrenal tissue, in vitro, 4, 234
<b>8</b> , 66	—, —, in perfused adrenals, <b>4</b> , 245
,, in presence of acetylcholine, adrenaline and	—, in vivo methylation of, effect of dietary methionine
histamine, 6, 120	and thiouracil on, 5, 604
—, —, in presence of adrenaline, 4, 401; 5, 142 —, —, with rat blood-pressure preparation, 6, 12	, mydriatic and pressor actions of, effect of chlor-
,, with rat blood-pressure preparation, 6, 12	promazine on, 9, 404
—, blood level of, effect of insulin on, 9, 249	—, paper-chromatographic behaviour of, <b>6</b> , 667
—, cardiac irregularity production by, 11, 133	—, paper-chromatographic separation from adren-
—, cardiovascular and other pharmacological actions	aline, 6, 8
of, 4, 373	—, pharmacological actions of, effect of cocaine and
—, chronotropic action on heart, effect of blood	a-cocaine on, 10, 438
pressure, cocaine and sympathetic denervation on,	——, pressor action of, effect of amidines on, 1, 30
6, 651	, effect of amylobarbitone on, 9, 171
——, destruction by liver, in vitro, 11, 52	—, —, effect of antihistaminics on, 4, 65
—, destruction by polyphenol oxidase, 11, 67 —, destruction in blood and liver, 11, 52	—, —, effect of 2-benzyl-1-methyliminazoline on, 5,
—, destruction in blood and liver, 11, 32 —, destruction in limbs, liver and spleen, 3, 189	
—, effect on adrenal ascorbic acid level, in rat, 6, 294	——, ——, effect of choline 2: 6-xylyl ether on, 12, 131 ——, ——, effect of chlorpromazine on, 9, 396 ——, ——, effect of cocaine, dibenamine and tetraethyl-
—, effect on bronchial-muscle response to acetyl-	effect of cocaine dihenamine and tetraethyl-
choline and histamine, 8, 26	ammonium on, 6, 655
—, effect on bronchospasm and on pulmonary vascular	, effect of dibenamine on, <b>6</b> , 354
action of anticholinesterases, 12, 508, 510	, effect of dibenamine, ergotamine and ergo-
—, effect on convulsant action of leptazol and nicotine,	toxine on, <b>4</b> , 63
8, 63	—, effect of N-tetrasubstituted ethylenediamines
, effect on intestinal response to morphine, 6,	on, 11, 3
268	—, —, potentiation by hexamethonium, methanthe-
—, effect on intestinal response to nicotine, and effect	linium and tetraethylammonium, in spinal and
of sympatholytics on, 9, 131	vagotomized dogs, 9, 476
—, effect on intestinal and uterine response to acetyl-	—, release by stimulation of cardiac sympathetic
choline, 9, 500	nerves, in dog, 7, 319
—, effect on intestinal and uterine response to car-	—, release by stimulation of sympathetic nerves to
bachol, 4, 401	rabbit ear, 7, 616
—, effect on response of foetal guinea-pig intestine to	-, release from adrenals, and effect of splanchnic
adrenaline, 8, 38	stimulation on, in rabbit, 5, 542
—, effect on spinal reflexes, 11, 166—, effect on vasoconstrictor action of acetylcholine,	—, —, by acetylcholine, in cat, 12, 422 —, —, by acetylcholine, histamine, potassium ions
6, 112	and splanchnic stimulation, 4, 402
—, enzymic oxidation of, <b>6</b> , 106; <b>7</b> , 101	—, —, by splanchnic stimulation, 4, 202
—, formation from dihydroxyphenylserine, in vivo, 6,	, response of blood pressure to, effect of dihydro-
127	ergotamine on, in anaesthetized cat, 3, 195
, by mammalian tissue extracts, 5, 431	, response of blood pressure, blood vessels and
—, —, by mammalian tissue extracts, 5, 431 —, —, by tyrosine decarboxylase, in vitro, 3, 316	respiration to, effect of porphobilinogen and
—, formation in adrenals, after depletion by acetyl-	uroporphyrin on, 9, 91
choline, 12, 415	—, response of blood pressure and nictitating mem-
—, by nerve stimulation, 11, 449 —, hyperglycaemic action of, effect of initial blood-	brane to, effect of iproniazid on, 9, 426
—, hyperglycaemic action of, effect of initial blood-	—, —, in spinal cat, 5, 142
sugar level and oral thyroid on, 8, 454	—, —, in spinal and eviscerated cats, 4, 202
—, hypnosis-prolonging and hypothermic actions of,	, response of blood vessels to, and effect of ephedrine
12, 251	on, 6, 115
—, hypotensive action of, and effect of antihistaminics,	, response of ciliary movement to, 7, 74
atropine, pentobarbitone and vagotomy on, 4, 63	, response of eyelid to, in anaesthetized rat, 11, 147
, in adrenals, effect of insulin on, 5, 417; 6, 289	-, response of foetal guinea-pig gut to, and effect of
, in adrenals of dog, 4, 245	adrenaline on, 8, 38

Noradrenaline (cont.) ——, response of frog melanophores to, 7, 464 ——, response of heart-lung preparation to, 12, 92 ——, response of human bronchial muscle to, 6, 685	Nucleotides (cont.)  —, purine, response of blood pressure and intestine to, 12, 366  Nucleotoxic substances, effect on pregnancy in animals,
<ul> <li>, response of human myometrium to, 10, 39</li> <li>, response of intestine to, effect of oral thyroid on, 8, 458</li> </ul>	11, 437 Nupercaine. See Cinchocaine
—, —, effect of storage on, 5, 543 —, response of intestine and uterus to, and effect of	O O/58. See 2: 4-Diamino-6: 7-dimethylpteridine
sympatholytics on, 9, 131  —, response of isolated heart of Mya arenaria to, 10, 38	O/61. See 2: 4-Diamino-6: 7-di(p-methoxyphenyl)pteri- dine
—, response of liver-fluke body movements to, 12, 409 —, response of molluscan and snail hearts to, and antagonism by various substances, 10, 475	O/63. See 2: 4-Diamino-6: 7-diphenylpteridine O/67. See 2: 4-Diamino-6: 7-difurylpteridine O/69. See 2: 4-Diamino-6: 7-diethylpteridine
, response of nictitating membrane to, 11, 75, effect of cocaine and denervation on, 7, 312	O/71. See 2: 4-Diamino-6: 7-dipropylpteridine O/83. See 2: 4-Diamino-6: 7-dicyclohexylpteridine O/87. See 2: 4-Diamino-6: 7-dipentylpteridine
,, effect of denervation on, <b>8</b> , 69 ,, effect of morphine on, <b>12</b> , 80 ,, effect of pilocarpine on, <b>9</b> , 500	O/88. See 2: 4-Diamino-6: 7-diheptylpteridine O/97. See 2: 4-Diaminocamphano(2': 3'-6: 7 or -7: 6)- pteridine
<ul> <li>response of respiration to, 11, 346</li> <li>response of splenic volume to, in adrenalectomized animals, 5, 506</li> </ul>	O/103. See 2: 4-Diamino-6: 7-di-n-hexylpteridine O/104. See 2: 4-Diamino-6: 7-di(cyclohexylmethyl)- pteridine
, response of ureter to, in dog, 11, 44, response of urine and renal blood flow to, 11, 431	O/113. See 2: 4-Diamino-6: 7-di/sobutylpteridine O/114. See 2: 4-Diamino-6: 7-di/o-methoxyphenyl)- pteridine
<ul> <li>response of uterus to, and effect of adrenaline on, in pregnant and nonpregnant cats, 5, 170</li> <li>sensitivity of nictitating membrane to, effect of</li> </ul>	O/120/I. See 2:4-Diamino-1'-methylindolo(2':3'-7:6)- pteridine O/120/II. See 2:4-Diamino-1'-methylindolo(2':3'-
atropine and cocaine on, 6, 123  —, sensitivity of rat gastric muscle to, 12, 347  —, sensitivity of various strains of rats to, 9, 499	6: 7'pteridine O/128. See 2: 4-Diam'no-6: 7-dibutylpteridine O/129. See 2: 4-Diamino-6: 7-diisopropylpteridine
—, sialogenous action of, and effect of cocaine on, 9, 442	O/137. See 2: 4-Diamino-6: 7-dibenzylpteridine O/138. See 2: 4-Diamino-6: 7-di(1-ethylpropyl)pteridine O/142. See 2: 4-Diamino-6: 7-disecbutylpteridine
<ul> <li>—, slow hyperfibrinogenaemic action of, 11, 99</li> <li>—, urinary excretion after intravenous infusion of, in man, 6, 286</li> </ul>	O/150. See 2: 4-Diamino-6: 7-disecpentylpteridine O/154. See 2: 4-Diaminopteridine
, vasoconstrictor action of, effect of 2-bromolysergic acid diethylamide and salicylate on, 12, 500,, effect of chlorpromazine on, 11, 318	O/169. See 2: 4-Diamino-1'-ethylindolo(2': 3'-7: 6)- pteridine O/170. See 2: 4-Diamino-1'-propylindolo(2': 3'-7: 6)-
,, effect of denervation on, 9, 425 , and effect of ephedrine on, 6, 101 ,, effect of lysergic acid derivatives and mor-	pteridine O/171. See 2: 4-Diaminoindolo(2': 3'-7: 6)pteridine O/174. See 2: 4-Diamino-1'-benzylindolo(2': 3'-7: 6)-
phine on, 11, 313  See also Pressor amines and Sympathin and Sympathomimetic amines	isoOMPA, effect on action of nicotine-like stimulant compounds on skeletal muscle, 10, 469
<ul> <li>(±)-Noradrenaline, response of nictitating membrane to, effect of denervation on, 5, 486</li> <li>Noradrenalinecarboxylic acid. See β-(3:4-Dihydroxy-</li> </ul>	——, effect on atrial response to acetylcholine and anticholinesterase, 9, 367 ——, selective inhibition of fowl cholinesterases by
phenyl)serine Noradrenalone, hyperfibrinogenaemic action of, 11, 99 Nor-atabrine, antiviral action of, 11, 220	in vitro and in vivo, 8, 212 —, sialogenous action and submaxillary cholinesterase inhibition by, 9, 447
Norisopethidine. See Ethyl 3-phenylpiperidine-3- carboxylate m- and p-Norsynephrine, inhibition of intestinal response	Oat seeds, effect of ali-esterase inactivators on germination and growth of, 8, 219 Obturator nerve-anterior gracilis preparation, 10, 142
to nicotine by, and effect of sympatholytics on, 9, 131 —, response of intestine to, and effect of sympatholytics on, 9, 131	Octadecamethylenebisquinolinium, properties of, 10, 346 Octadecamethylenebisisoquinolinium, antibacterial action, preparation and properties of, 8, 34
Notatin, chemotherapeutic and pharmacological actions and toxicity of, 1, 225  Nucleic acid, derivatives of, effect on antiviral action of	—, antifungal action of, 10, 343 Octadecamethylenebis(trimethylammonium), anticholinesterase action of, 4, 391
1367, 8, 144 , effect on inhibitory action of propamidine on Escherichia coli respiration, 3, 216	<ul> <li>, isolation and colorimetric determination in urine, preparation and properties of, 5, 424</li> <li>, neuromuscular-blocking action of, 4, 387</li> </ul>
Nucleosides, effect on antiviral action of 1367, 8, 144  —, purine, response of blood pressure, capillary permeability, intestine and uterus to, 12, 366	<ul> <li>response of skeletal muscle to, and effect of atropine and tubocurarine on, 4, 391</li> <li>variation in species sensitivity to, 4, 386</li> </ul>
Nucleotides, effect on antiviral action of 1367, 8, 144	Octadecylamine, paramecia immobilization by, 12, 144

Octadecylamine (cont.)

, release of histamine from lung tissue by, 8, 103

Octamethylenebis(2 - acetoxyethyldimethylammonium), enzymic hydrolysis, pharmacological actions and preparation of, 10, 168

Octamethylenebis(1 - (3:4 - dimethoxybenzyl) - 1:2:3: 4 - tetrahydro - 6:7 - dimethoxy - 2 - methyliso-quinolinium), curarizing action of, 7, 392

Octamethylenebis(N-ethylenesulphonamide), antitumour and cytotoxic actions of, 6, 387

Octamethylenebisguanidine, effect on pressor action of adrenaline, 1, 32

Octamethylenebis(2 - hydroxyethyldimethylammonium), enzymic hydrolysis, pharmacological actions and preparation of, 10, 168

Octamethylenebisquinolinium, anticholinesterase action, preparation and properties of, 10, 173

Octamethylenebisisoquinolinium, antibacterial action, preparation and properties of, 8, 34

Octamethylenebis(1:2:3:4-tetrahydro-6:7-dimethoxy-2-methylisoquinolinium), curarizing action of, 7, 392

Octamethylenebis(triethylammonium), anticholinesterase and curarizing actions, preparation and properties of, 3, 298

Octamethylenebis(trimethylammonium), anticholinesterase action of, 4, 391

, curarizing action, preparation and properties of, 3, 298

-, ganglion-blocking action of, 4, 389; 6, 155

-, isolation and colorimetric determination in urine, preparation and properties of, 5, 424

—, neuromuscular-blocking action of, 4, 387

-, response of skeletal muscle to, and effect of atropine and tubocurarine on, 4, 391

-, variation in species sensitivity to, 4, 386

Octamethylenediamine, catechol-amine release from isolated chromaffin granules by, 12, 61

-, enzymic oxidation of, 5, 625

-, effect of copper ions on, 8, 42

-, histaminase inactivation and paramecia immobilization by, 12, 140

-, histamine inhibition and release by, 12, 140

, preparation and properties of, 5, 424 Octanoic acid, histamine release by, 12, 146

Octanoylcholine, pharmacological actions of, 12, 30

-, preparation and properties of, 12, 38 Octopus vulgaris eye, response to murexine, 12, 182 Octyl bromide, larvicidal action against sclerostomes, 7,

Octyl phenethyl sulphide, effect on sclerostome larvae,

7, 522 Octyl phenyl sulphone, antituberculous action of, in vitro, 3, 148

Octylamine, antiacetylcholine action of, 12, 143

, cardiovascular and respiratory stimulant actions and toxicity of, 7, 42

, histamine release and oedema production by, in perfused tissues, 9, 197

histamine release and paramecia immobilization by, 12, 144

, histamine release from lung tissue by, 8, 103

Octyl-2-amine, cardiovascular and respiratory stimulant actions and toxicity of, 7, 42

2-Octylaminomethylnaphth-1-ol, antimalarial action of, 12, 171

p-Octyloxy-N-phenylbenzamidine, effect in experimental tuberculosis, and toxicity, 5, 178

Octylphenol-formaldehyde polymers, preparation and reaction with ethylene oxide, 10, 76

S-Octylisothiourea, circulatory and respiratory reflex actions of, in normal and vagotomized cats, 5, 326

effect on vasoconstrictor action of adrenaline, 3,

-, inactivation of amine oxidase by, and reactivation, 6, 257

-, pharmacological actions of, 7, 417 , response of blood pressure to, 3, 198

Oedema, induced by Compound 48/80 and octylamine in perfused tissues, 9, 200

, induced by Compound 48/80 and polymyxins, effect of antihistaminics on, 10, 216

-, induced by eggwhite, reduction by di- and tri-phenylmethane derivatives, 8, 32

-, induced by 5-hydroxytryptamine, reduction by salicylate, in rat, 12, 28

, induced by 5-hydroxytryptamine and tryptamine, **8**, 406

-, pulmonary, induced by iron preparations, 9. 103 Oenanthe crocata, pharmacological actions of, 11, 225

Oenanthotoxin, extraction and pharmacological actions of, 11, 225

Oesophagus, ciliary movement in, response to various substances, 7, 69

Oestradiol, response of vagina to, effect of triphenylethylene derivatives on, 5, 376

Oestrogens, effect on gastric secretory response to histamine, in cat, 5, 389

Oestrogenic action, of triphenylethylene analogues, 5, 376 Oestrone, effect on gastric secretory response to histamine, in cat, 5, 392

Oils, effect on absorption of oral penicillin, 6, 90

intramuscular injection of, local effects of, 12,

Oil cell, for phase-boundary studies, 10, 220

Oleic acid, inhibition of histamine release by antigen by, in vitro, 12, 39

N-Oleoylethyleneimine, carcinogenic action and toxicity of, 9, 306

Olfactory bulb, 5-hydroxytryptamine in, 10, 480 Oliguria, induced by nicotinamide, 8, 51

Olive oil, effect on absorption of oral penicillin, 6, 90 Omnopon, effect on convulsant action of methyl fluoroacetate, 3, 124

Onchocerciasis, treatment with methylene violet, in man, 7, 505

Opiates, effect on intestinal contraction and acetylcholine release, 12, 119

Organ bath, automatic, 1, 135; 2, 189

-, constant-flow techniques for, 4, 109

, improved, for study of motility of isolated organs, 6, 182

Organophosphates, antagonism by nicotinhydroxamic acid methiodide, ammonium molybdate and pyridine-2-aldoxime methiodide, 11, 296

, effect on atrial response to acetylcholine and anticholinesterase, 9, 367

, inactivation of ali-esterases and true cholinesterase by, **8**, 218

, inactivation of cholinesterases by, reactivation by hydroxamic acids and oximes, 10, 462

, inactivation of cholinesterases of central nervous system and peripheral nerves by, in fowl, 8, 212

-, inactivation of human plasma cholinesterase by, and reactivation, 10, 356

, inactivation of true cholinesterase by, and reactivation, 11, 295

pp' - 3 - Oxopentamethylenebis(allyldimethylphenyl-Organophosphates (cont.) , neuromuscular block due to, reversal by oximes, ammonium) (284C51; 297C50): anticholinesterase, paralysing and other pharmaco-10, 490 logical actions and toxicity of, 9, 138 -, selective inactivation of pseudo and true cholinesterases by, in vitro, 8, 213 -, atropine-like action on rabbit atrium, 9, 367 Organophosphate poisoning. See Anticholinesterase -, effect on auricle response to acetylcholine, 9, 42 effect on muscle paralysis by suxamethonium poisoning (succinylcholine), 9, 432 Orthoxine. See Methoxyphenamine Osyris compressa, absence of tetramethylammonium , effect on skeletal-muscle response to nicotine-like from, 3, 188 stimulant compounds, 10, 469 Quabain, effect on atrial arrest by eserine, 9, 286 -, response of auricle to, 9, 42 , sialogenous action of, and submaxillary cholinesterase inhibition by, 9, 447 effect on cardiac response to acetylcholine and tetramethylammonium, 9, 325 -, effect on potassium-ion movement in cardiac pp' - 3 - Oxopentamethylenebis(butyldimethylphenylmuscle, 12, 371 ammonium), anticholinesterase and other pharmacological actions and toxicity of, 9, 138 , effect on response of sympathetic ganglia to acetylcholine and tetramethylammonium, 9, 324 - 3 - Oxopentamethylenebis(chlorobenzyldimethylphenylammonium), anticholinesterase and other -, response of blood pressure and heart to, 8, 79 pharmacological actions of, 9, 138 -, response of cardiac output and right auricular pressure of failing heart to, 5, 305 - 3 - Oxopentamethylenebis(diethylmethylphenylammonium), anticholinesterase and other pharmaco--, response of cardiac tissue to, effect of acetylcholine logical actions and toxicity of, 9, 138 and eserine on, 9, 285 -, response of heart to, 9, 325 pp' - 3 - Oxopentamethylenebis(dimethylphenylpropyl--, response of Mya arenaria heart to, 10, 477 ammonium), anticholinesterase, paralysing and other pharmacological actions and toxicity of, 9, 138 toxicity of, 8, 79 - 3 - Oxopentamethylenebis(ethyldimethylphenyl--, effect of calcium and potassium ions on, 2, ammonium), anticholinesterase, paralysing and other pharmacological actions and toxicity of, 9, 138 vomiting induced by, effect of potassium ions on, **2**, 263 3 - Oxopentamethylenebis(trimethylammonium), Ovariectomy, effect on serum cholinesterase levels, in cat, cholinesterase action of, kinetics and mechanism of, 5, 395 Ovaries, effect of chorionic gonadotrophin on, in -, blocking of anticholinesterase action of tetraethyl immature mouse, 6, 446 pyrophosphate by, 4, 224 effect of testosterone phenylpropionate on, in pp' - 3 - Oxopentamethylenebis(trimethylphenylammonrabbit, 8, 275 ium) (62C47): See also Gonads -, anticholinesterase action of, 9, 76 , and effect on chromodacryorrhoea induced Ovicidal action, of various substances against scleroby acetylcholine in rat, 4, 187 stomes, 7, 509 Oxalacetate, effect on auricle response to acetylcholine, anticholinesterase, paralysing and other pharmacological actions and toxicity of, 9, 138 **5**, 357 Oxophenarsine (Mapharside; Mapharsen):
—, effect in experimental filariasis, 5, 247 , response of normal and substrate-depleted auricles to, 5, 89, 99 Oxalate, effect on whole blood, in vitro, 8, 341 , effect on schistosome glycolytic enzymes, 9, 460, , inhibition of histamine-releasing action of dextran toxicity of, effect of dimercaprol (BAL) on, 3, 86 sulphate by, 10, 90 Oxapropanium (2249 F; Dilvasene): Oxophenarsine poisoning, dithiols as antidotes in, 4, 260 o - (5 - Oxo - 2 - phenyloxazolin - 4 - ylidenemethylamino)--, bladder-contracting action and toxicity of, 7, 130 -, miotic action of, **6**, 696 benzoic acid, antibacterial action of, 3, 307 parasympathomimetic action of, 9, 376 Oxycellulose, effect in experimental virus infection, 7 Oxazines, effect in experimental typhus, and on rickettsiae, in vitro, 1, 18 Oxychloroquine, calculated safe dose of, 11, 158 Oxygen consumption, effect of mepyramine (Neoantergan), Oxazolones, antibacterial action and toxicity of, 3, 305 promethazine (Phenergan) and 3300RP on, in normal Oxedrine  $\{(\pm)$ -p-sympatol $\}$ : ionization and pharmacological actions of, 9, and adrenalectomized rats, 5, 195 Oxygen metabolism, of Schistosome mansoni, effect of inhibition on infections, 8, 15 See also Sympatol Oximes, as antidotes in anticholinesterase poisoning, Oxyphenonium, inhibition of pilocarpine-induced saliva-11, 417; 12, 340 tion by, in rabbits, 12, 53 -, determination in blood, 11, 424 , pharmacological actions of, 12, 449 Oxytetracycline (Terramycin): -, metabolism of, in rabbit and dog, 11, 426 -, reactivation of organophosphate-inactivated cholin--, antibacterial action against staphylococci, 6, 434 , antiviral action of, 8, 448, 452 esterase by, 10, 462 , reversal of neuromuscular block due to anti--, compatibility with chlorhexidine (Hibitane), 9, 195 cholinesterases by, 10, 490 , effect in experimental lymphogranuloma venereum 3-Oximino-2-oxopentane, as antidote in anticholinesterand psittacosis, 5, 611 ase poisoning, and toxicity, 11, 417 , effect in experimental staphylococcal infection, 6,

, effect on Plasmodium berghei and gallinaceum, in

vivo, 8, 162

pp' - 3 - Oxopenta - 1 : 4 - dienylenebis(trimethylphenylammonium), nicotine-like action on skeletal muscle,

9, 142

Oxytetracycline (cont.) Pamaquin (cont.) -, oral, absorption and serum level after, 6, 437 -, calculated safe dose of, 11, 158 vibriocidal action of, 10, 153 -, effect in Babesia rodhaini infections, 11, 71 Oxytocic action, bioassay of, effect of acidity changes on -, effect in experimental filariasis, 5, 252 isolated rat uterus in, 10, 424 -, effect in experimental Plasmodium berghei infec--, of angiotonin and posterior pituitary extract, 9, 189 tions, 5, 409 -, of human urinary extracts, 6, 355 -, of 5-hydroxytryptamine and Pituitrin, effect of -, effect in experimental tuberculosis, 3, 156 -, effect in experimental virus infection, 7, 465 -, effect on exoerythrocytic forms of *Plasmodium* dihydroergotamine on, 8, 194 —, of hypothalamus extracts, 8, 193 gallinaceum, in vitro, 1, 167 -, of indole, naphthol and phenol derivatives, 12, 194 , effect on response of various tissues to adenosine, -, of pituitary, effect of anaesthetics and haemorrhage 4, 81 on, 11, 239 Pancreas, effect of alloxan on, in rabbit, 1, 175 , histaminase and histidine decarboxylase activities -, of posterior pituitary extract, 11, 245 -, bioassay of, 3, 328 and histamine level in, 11, 123 of procyclidine and tricyclamol optical isomers, 10, , localization of intravenous lead in, effect of 385 dimercaprol and parathyroid extract on, in rabbit, -, of synthetic oxytocin and analogues, 12, 209 4, 354 , of urinary polypeptides, 12, 223 , localization of oral sulphadimethoxypyrimidine in, See also Uterus in nephrectomized cat, 2, 155 Oxytocic factor, non-specific, in blood, 12, 465 -, localization of subcutaneous quinapyramine (Antry-Oxytocic hormone, pituitary. See Oxytocin cide) in, 5, 449 -, rabbit, hydrolysis of methyl butyrate by, effect of Oxytocin (Pitocin): -, amino-acid composition and purification of, 8, 435 proguanil (Paludrine) on, 2, 118 , and analogues, synthetic, pharmacological actions Pancreatic duct, ligation of, effect on pancreas and on of, 12, 209 induction of experimental diabetes by alloxan, 1, 174 -, bioassay of, effect of pH on, 10, 424 Pancreatic juice, effect on tubocurarine, 4, 300 -, response of intestine to, in conscious dog, 7, 51 Pantothenic acid, effect on antiviral action of mepacrine, -, response of uterus to, effect of indole and skatole on, 8, 392 Papaverine, quinidine-like action of, 1, 93 -, effect of lysergic acid diethylamide on, 9, 242 -, spasmolytic action of, 6, 638 , effect of thioglycollate on, 8, 325 Papaverine-like action, of 1-alkyl-2-hydroxyalkylpyrroli--, secretion of, effect of ethanol, hexamethonium, dine esters and their quaternary derivatives, 12, 447 nicotine and haemorrhage on, 12, 461 of thiolobenzilic acid esters and related compounds, -, sensitivity of rat gastric muscle to, 12, 347 10, 95 -, stability to brain extract, 12, 362 Paphia saxatilis heart, as test preparation, 10, 475 Para-aminosalicylic acid. See p-Aminosalicylic acid Paradione. See Paramethadione Paraffin, liquid, effect on absorption of oral penicillin, pA, new scale for measurement of drug antagonism, 2, **6**, 90 -, intramuscular, local effects of, 12, 427 pAz, and competitive drug antagonism, 4, 277 Paraffins, and halogen derivatives, larvicidal and PAS. See p-Aminosalicylic acid ovicidal action against sclerostomes, 7, 509 Pacatal. See Pecazine Paraformaldehyde, effect on tumour growth, 6, 217 Padutin. See Kallikrein Pain, effect of 295C51 and 405C49 on, 8, 174 Paraldehyde, anaesthesia induced by, effect of analeptics on, 1, 157 -, histamine-induced, 10, 183 , effect on neuromuscular transmission, mechanism -, thermal, effect of analgesics on, in man, 7, 206 of, in frog, 11, 151 -, estimation of threshold to, 1, 115 -, estimation of threshold and maximum , response of cerebrospinal-fluid pressure to, in dog, 1, 62 tolerable levels of, in man, 7, 206 , response of isolated muscle preparations to, 10, 133 in evaluation of analgesics, in rat, 7, 196 Paralysing action, of atropine, hexamethonium and \_\_\_\_, \_\_\_\_, response of rats to, 7, 199
Pain-producing action, of acetylcholine, 12, 152 morphine on peristalsis, 10, 456 , of dyflos, ethyl sarin, sarin, soman and tabun, in -, of bradykinin, kallidin and kinin, 12, 149 fowl, 9, 145 , of nucleosides, nucleotides and purine bases, 12, Paralysis, suxamethonium- and tubocurarine-induced, effect of muscarine on, 12, 50 Pain-producing substance, in nettles, 11, 188 Paramecia, immobilization by aliphatic amines, 12, 143 Palladium colloid, intravenous and subarachnoidal, Paramethadione, effect on 5-hydroxytryptamine levels in blood level and tissue distribution of, 7, 574 body tissues, 12, 228 radioactive, preparation, properties and toxicity of,
 573 Paraoxon. See Diethyl p-nitrophenyl phosphate Parasympatholytic action, of atropine, methanthelinium and propantheline, 9, 218 Palmitamidine, effect on pressor action of adrenaline, , of procyclidine optical isomers, 10, 384 Palmitoylcholine, pharmacological actions of, 12, 30 Parasympathomimetic action. See Muscarine-like action preparation, properties and stability of, 12, 38 Parasympathomimetic agents, response of human Paludrine. See Proguanil bronchial chain to, 6, 683 Pamaquin, antimalarial action of, 2, 226 , response of liver-fluke body movements to, and -, antimalarial action and toxicity of, 6, 194 antagonism by amphetamine, 4, 10

- Parathyroid extract, alone and with dimercaprol, effect on tissue distribution and excretion of intravenous lead, in rabbit, 4, 351
- Paredrine. See Hydroxyamphetamine Paredrinex. See Hydroxyamphetamine

Parethoxycaine. See Diethoxine

Parpanit. See Caramiphen

Pasteurella lepiseptica, muriseptica and pestia, effect of cephalosporin N and penicillin on, 8, 253

Pasteurella septica, effect of dapsone and sulphonamides on, in vitro, 7, 190

Pecazine (Pacatal):

- , hypnosis-prolonging and hypothermic actions of, **12**, 251
- Pelletierine, response of Ascaris muscle preparation to, 4, 147
- , response of liver-fluke body movements to, and effect of amphetamine on, 4, 10

Pendiomide. See Azamethonium

- (+)- and (-)-Penicillamine, antibacterial action of, 3, 306  $(\pm)$ -Penicillamine, and esters, antibacterial action and toxicity of, 3, 306
- Penicillamines, antibacterial action and toxicity of, 3, 305 Penicillin (benzylpenicillin; penicillin G):
- , antibacterial action, microbiological assay, tissue distribution and toxicity of, 8, 252

-, antiviral action of, 8, 448, 452

- —, compatibility with chlorhexidine (*Hibitane*), **9**, 195 -, development of bacterial resistance to, and crossresistance to aminacrine (5-aminoacridine) and diamidines, 3, 214
- , in Spirochaeta recurrentis, in vivo, 7, 33 -, development of resistance and cross-resistance to, in Staphylococcus aureus, in vitro, 8, 444
- -, effect in experimental lymphogranuloma venereum and psittacosis, 5, 611
- -, effect in experimental psittacosis, 3, 184
- , effect in experimental staphylococcal infection. 1, 230; 7, 167
- , effect on antimalarial action of pyrimethamine, 10, 210 -, effect on diphtheroid organism in vitro and on
- experimental infection in rabbit eye, 1, 242 , effect on morphology of lymphogranuloma virus,
- 8, 303 -, effect on Plasmodium berghei and gallinaceum, in vivo, 8, 162
- -, effect on sclerostome larvae, 7, 522
- effect on Staphylococcus aureus, in vitro, 3, 213; 7, 163

-, intrathecal, tolerance of dog to, 4, 329

- -, microbiological assay of, personal error in, 4, 366
- -, oral, blood level after, effect of oil on, 6, 90 , enhancement of effectiveness by oil containing water-repelling agents, 6, 89
  - , potassium salt, intramuscular, local effects of, 12,
- -, procaine salt, in vivo sensitivity of in vitro penicillinresistant staphylococci to, 8, 445
- with aluminium stearate, blood-penicillin level after intravenous injection of, 6, 91
- , with quinoxaline 1:4-dioxide, treatment of experimental lymphogranuloma venereum and psittacosis with, 8, 298
- , response of anterior preparation of Ascaris to, 3, 106
- -, response of liver-fluke body movements to, 4, 10 -, sensitivity of antibiotic-resistant Staphylococcus aureus to, 8, 445

- Penicillin (cont.)
- -, synthetic compounds related to, antibacterial action and toxicity of, 3, 305

Penicillin G. See Penicillin

- Penicillium chrysogenum, mutations induced by butadiene dioxide in, 6, 250
- , mutations induced by tretamine (2:4:6-triethyleneimino-s-triazine) in, 6, 398
- Pentachloroethane, larvicidal action against sclerostomes,
- Pentadecamethylene di-iodide, properties of, 10, 346
- Pentadecamethylenebisisoquinolinium, antifungal action and properties of, 10, 343
- Pentadecamethylenediamine, antiacetylcholine action of, 12, 143
- , catechol-amine release from isolated chromaffin granules by, 12, 61
- -, effect on intestinal response to histamine, 12, 141 -, enzymic oxidation of, 5, 625
- -, histaminase inactivation and histamine inhibition and release by, 12, 140
- Pentaerythrityl abietate, effect on efficacy of oral penicillin preparation, 6, 97
- **Pentamethonium**{pentamethylenebis(trimethylammonium)}:
- -, bioassay of, using mydriasis in mouse, 8, 10 , curarizing action, preparation and properties of,
- 3, 298
- -, effect on intestinal peristaltic reflex, 4, 390
  - , effect on neuromuscular-blocking action of decamethonium, 4, 388
- , effect on neuromuscular-blocking action of decamethonium, tetraethylammonium and tubocurarine,
  - -, effect on nicotine-induced convulsions, 7, 80
- -, effect on response of molluscan heart to acetylcholine, **8**, 329
- , effect on skeletal-muscle response to acetylcholine and decamethonium, 4, 391
- , effect on striated-muscle response to eserine and neostigmine, 5, 44
- , effect on sympathetic and parasympathetic ganglia, in cat, 11, 81
- —, ganglion-blocking action of, 4, 389; 6, 613
- -, ganglion-blocking and other pharmacological actions of, **6**, 155
- , ganglion- and neuromuscular-blocking actions and toxicity of, 7, 534
- -, histamine release by, 12, 147
- -, and homologues, ganglion-blocking action of, 6, 613
- -, isolation and colorimetric determination in urine, preparation and properties of, 5, 424
- -, neuromuscular-blocking action of, 4, 387
- —, response of intestine to, 7, 537
- —, response of molluscan heart to, 8, 329
- toxicity of, 6, 165
- -, variation in species sensitivity to, 4, 386
- Pentamethylenebis(2 acetoxyethyldimethylammonium), enzymic hydrolysis, pharmacological action and preparation of, 10, 168
- Pentamethylenebis(diethylmethylammonium), ganglionblocking action of, 6, 614
- , ganglion- and neuromuscular-blocking actions and toxicity of, 7, 534
- Pentamethylenebis(dimethylphenylammonium), curarizing action, preparation and properties of, 3, 298
- Pentamethylenebis(dimethylpropylammonium), hypotensive and mydriatic actions of, 11, 282

Pentamethylenebis(ethyldimethylammonium), ganglion-Pentamidine (cont.) -, inactivation of amine oxidase by 7, 102 blocking action of, 6, 614 , ganglion- and neuromuscular-blocking actions and -, and reactivation, 6, 261 toxicity of, 7, 534 pharmacological actions and toxicity of, inhibition Pentamethylenebis(N-ethylenesulphonamide), antitumour by suramin, **6**, 514 , trypanocidal action of, 9, 126 and cytotoxic actions of, 6, 387 Pentamethylenebis(N-ethylpiperidinium), hypotensive Pentane-1: 5-diamine. See Cadaverine N-Pentanesulphonylethyleneimine, antitumour, carcinoand mydriatic actions of, 11, 282 genic and cytotoxic actions and toxicity of, 9, 306 Pentane-2:3:4-trione 2:3-dioxime, reactivation Pentamethylenebisguanidine, effect on pressor action of adrenaline, 1, 32 Pentamethylenebis(2 - hydroxyethyldimethylammonium), organophosphate-inactivated cholinesterases by, 10, enzymic hydrolysis, pharmacological actions and preparation of, 10, 168 Pentanoylcholine, pharmacological actions of, 12, 30 , hypotensive and mydriatic actions of, 11, 282 , preparation and properties of, 12, 38 Pentapyrrolidinium. See Pentolinium Pentamethylenebis(4 - methylmorpholinium), hypotensive and mydriatic actions of, 11, 282 Pentobarbitone, anaesthesia induced by, effect of pro-, pharmacological actions of, 10, 124 cyclidine and tricyclamol optical isomers on, 10, 385 Pentamethylenebis(1-methylpyrrolidinium). See Pentoanaesthetic and ganglion-depressant actions of, 9, linium Pentamethylenebisquinolinium, curarizing action, pre--, antagonism of oenanthetoxin by, 11, 228 paration and properties of, 3, 298 , antiacetylcholine action of, on molluscan heart, Pentamethylenebis-strychninium, curarizing action, pre-8, 328 paration and properties of, 3, 298 -, antidiuretic action of blood from animals anaesthe-SS'-Pentamethylenebisisothiourea, hypotensive action of, tized with, effect of haemorrhage on, 11, 236 , effect on action of eserine on spinal reflexes, in cat, -, inactivation of amine oxidase by, 6, 257 , response of blood pressure, heart rate and respira--, effect on analgesic action of 4-hydroxyisophthalic tion to, 5, 324 acid, 11, 25 Pentamethylenebis(trialkylammonium) compounds, phar--, effect on central action of local anaesthetics, 10, 293 macological actions of, 6, 614 -, effect on circulatory and respiratory reflex actions pp' - Pentamethylenebis(trialkylphenylammonium) comof aromatic diguanides and guanidines, 5, 67 pounds, anticholinesterase, paralysing and other pharmacological actions of, 9, 138 -, effect on hypotensive action of adrenaline and noradrenaline, 4, 65 Pentamethylenebis(triethylammonium), curarizing action, -, effect on pressor action of m-bromophenyl choline preparation and properties of, 3, 298 ether, 9, 174 , ganglion-blocking action of, 2, 268; 6, 614 , effect on suxamethonium induced bradycardia, in , ganglion- and neuromuscular-blocking actions and toxicity of, 7, 534 conscious animals, 10, 266 , hypnotic action of, effect of chlorpromazine, pethidine and promethazine on, 9, 396 Pentamethylenebis(trimethylammonium). See Pentamethonium -, effect of sedatives and temperature on, 12, Pentamethylenebis(trimethylphenylammonium), anticholinesterase and other pharmacological actions , hypnotic action and toxicity of, effect of 4-hydroxyand toxicity of, 9, 138 isophthalic acid on, 11, 25 Pentamethylenediamine. See Cadaverine -, inhibition of histamine release by antigen by, in N<sup>1</sup>N<sup>1</sup>-Pentamethylenediguanide, response of blood presvitro, 12, 39 sure and respiration to, 5, 72 8:8'-Pentamethylenedioxybis(1-ethylquinolinium), anti--, response of auricle to, 1, 101 -, response of gastrointestinal function to, in intact rat, 12, 104 cholinesterase action of, 9, 76 Pentamethylenedioxybis(trimethylphenylammon--, response of isolated muscle preparations to, 10, 133 , response of respiration to, effect of amphetamine ium), anticholinesterase action of, 9, 76 pp'-Pentamethylenedioxybis(trimethylphenylammonium) and octylamines on, 7, 43  $(RP\ 3565)$ : -, and effect of leptazol, picrotoxin and triazol 159 on, 2, 95 central action of, 7, 1 2: 3-Pentamethylenequinoxaline 1: 4-dioxide, antiviral -, sensitivity to, effect of age and dyflos on, in rat, 12, 536 action of, 8, 302 Pentamethylomelamine, and derivatives, effect on tumour growth, 6, 211 **Pentolinium** (*M&B* 2050): , antiperistaltic and mydriatic actions of, develop-Pentamidine, in vitro antibacterial action and toxicity of, ment of tolerance and cross-tolerance with methonium compounds to, 10, 279 -, effect on anticholinesterase-induced salivation, 9, 446 3, 212 , effect in experimental virus infection, 7, 465 -, effect on blood-pressure response to adrenaline, hypotensive and mydriatic actions of, 11, 282 , pharmacological actions and toxicity of, 10, 124 , effect on bronchoconstrictor action of acetyl-Pentostam. See Sodium stibogluconate choline, 6, 518 Pentothal. See Thiopentone -, effect on pressor action of sympathomimetic amines, 1, 30 3-n- and -iso-Pentoxypropan-1: 2-diol, paralysing action

-, effect on response of auricle and heart-lung

-, effect on vasoconstrictor action of adrenaline, 1, 24

preparation to adrenaline, 1, 24

and toxicity of, 1, 265

7, 509

Pentyl bromide, larvicidal action against sclerostomes,

Pentyl p-pentoxyphenyl sulphone, antituberculous action of, in vitro, 3, 149 Pentyl phenaceturate, antibacterial action of, 3, 307 and iso-Pentyl phenyl sulphone, antituberculous action of, in vitro, 3, 148 cycloPentyl phenyl sulphone, antituberculous action of, in vitro, 3, 148 Pentyl p-propoxyphenyl sulphone, antituberculous action of, in vitro, 3, 149 Pentyl p-tolyl sulphone, antituberculous action of, in vitro, 3, 149 cycloPentyl p-tolyl sulphone, antituberculous action of, in vitro, 3, 148 Pentylamine, catechol-amine release from isolated chromaffin granules by, 12, 61 histamine release from lung tissue by, 8, 103 isoPentylamine, enzymic oxidation of, 7, 101 —, by ox tissue extracts, 6, 319 -, effect of corbasil on, 8, 75 -, in presence of aliphatic diamines, 5, 628 1-cycloPentylaminomethylnaphth-2-ol, antimalarial action of, 12, 171  $N^1$ -Pentylsulphanilamide, antituberculous action of, in vitro, 3, 151 5-Pentyl-1:3:4-thiadiazole-2-sulphonamide, effect experimental tuberculosis, and toxicity, 5, 178 S-Pentylisothiourea, circulatory and respiratory reflex actions of, in normal and vagotomized cats, 5, effect on vasoconstrictor action of adrenaline, 3, -, inactivation of amine oxidase by, 6, 257 -, pharmacological actions of, 7, 417 , response of blood pressure to, 3, 198 Pepsin, determination in gastric secretion, 4, 153 , effect on intestinal response to acetylcholine and barium ions, 7, 638 -, effect on urinary slow muscle-contracting substance, 10, 202 , inactivation by sodium dodecyl sulphate, in vivo, **5**. 5 response of intestine to, 7, 638 Peptides, effect on antiviral action of phenylserine, 12, 70 Peptone, response of blood pressure and tidal air to, in normal and vagotomized cats, 8, 318 Perchlorate, in-vitro antithyroid action of, estimation of, 10, 1 Perchloroethylene, larvicidal action against sclerostomes, Periarticular tissue, subcutaneous, effect of antiarthritic agents on permeability of, 8, 130 Peripheral-inhibitory action, of atropine, 11, 231 Peristalsis, intestinal. See Intestinal motility isoPestox. See Mipafox Pethidine, analgesic action of, 1, 4, 256, 283; 6, 581; 7, 434 -, in man, 9, 112, 293 analgesic action and toxicity of, 5, 127; 7, 200; -, antiadrenaline action of, 7, 555 -, antianaphylactic action of, 10, 160 —, antihistaminic and curarizing actions of, 4, 197 , antiperistaltic action of, and effect of sympatholytics on, 9, 134

-, atropine-like action of, on rabbit atrium, 9, 367 -, cardiac and spasmolytic actions of, 4, 102 -, derivatives of, analgesic action of, 11, 27, 32 derivatives and related substances, analgesic action of, 1, 4

```
Pethidine (cont.)
     , effect on analgesic action of 4-hydroxyisophthalic
    acid, 11, 24
    -, effect on cough reflex and respiration, 10, 418
      effect on intestinal contraction and acetylcholine
    release, 12, 119
     , effect on intestinal response to acetylcholine and
    histamine, 2, 195
    -, effect on intestinal response to histamine, 7, 648
    effect on intestinal response to histamine and N-methylhistamine, 2, 255
     , effect on smooth-muscle response to acetylcholine,
    8, 24
    , effect on vascular response to adrenaline, histamine and sympathetic stimulation, 3, 354
    -, histamine-releasing action of, 7, 646
    -, pharmacological actions and toxicity of, 9, 392
    -, quinidine-like action of, 1, 93
    -, response of blood pressure, heart rate and respira-
    tion to, and other side-effects of, in man, 9, 108
    -, response of blood vessels to, 3, 354
    -, response of body temperature to, in normal and
    adrenalectomized mice, 3, 247
    -, response of intestine to, in conscious dog, 5, 584
     , toxicity of, 11, 30
isoPethidine. See Ethyl 1-methyl-3-phenylpiperidine-3-
    carboxylate
pH, effect on response of isolated rat uterus to oxytocin,
    10, 424
    -, response of isolated Spisula solida heart to, 10, 479
    -, response of tracheal chain to, 10, 233
Phaeochromocytoma, human, pressor amines in, deter-
    mination of, 6, 16
Phage. See Bacteriophage
Phagocytosis, effect of chlorhexidine (Hibitane) on, 9, 195
     , effect of diethylcarbamazine (Hetrazan) on, 5, 236
Phase-boundary potentials, and ganglion-stimulating action, 10, 220
Phenacaine, quinidine-like action and toxicity of, 1, 93
Phenacemide (phenylacetylurea):

    anticonvulsant action of, 8, 230

           -, effect of Rauwolfia alkaloids on, 11, 141
    -, effect on electrically stimulated metabolism of
    separated cerebral cortex, 8, 225
    -, effect on 5-hydroxytryptamine levels in body tis-
    sues, 12, 228
Phenacetin, effect on analgesic action of 4-hydroxyiso-
phthalic acid, 11, 24
N-Phenaceturylpenicillamine, antibacterial action of, 3,
Phenacetylcholine, ganglion-stimulant action and phase-
    boundary potential of, 10, 220
Phenadoxone, analgesic action of, 6, 577; 7, 434
    -, analgesic action and toxicity of, 7, 200
     , effect on intestinal contraction and acetylcholine
    release, 12, 119
     , excretion, pharmacological actions and toxicity of,
     5, 125
     , and related compounds, antihistaminic action—
     physical properties relations in, 10, 270
isoPhenadoxone, antihistaminic action-physical proper-
    ties relations in, 10, 270
```

Phenamidine, antibacterial and antifungal actions of, in

Phenanthrene-3: 6-diamidine, trypanocidal action and

Phenanthridines, antibacterial and antiviral actions of,

Phenanthrene, anthelmintic action of, 10, 340

vitro, 3, 213

8, 139

toxicity of, 1, 72

```
Phenidium (cont.)
Phenanthridines (cont.)
     , antibacterial and trypanocidal actions and toxicity
                                                                   -, antibacterial and trypanocidal actions and toxicity
                                                                   of, 5, 264; 9, 265
     of, 9, 265
    -, chemotherapeutic action of, 5, 261, 277, 398; 7, 581, 591
                                                                   -, antifilarial action of, 5, 253
-, response of blood pressure and respiration to,
                                                                   1, 72, 73
     trypanocidal action of, 11, 330, 334
Phenanthridine-9-carboxylic acids, antibacterial

    response of intestine to, 1, 75

                                                                  -, trypanocidal action of, 5, 280, 401; 11, 330
     trypanocidal actions and toxicity of, 9, 265
Phenanthridinium compounds, antibacterial and antiviral
                                                                         -, effect of serum on, in vitro and in vivo, 5, 405
                                                                    , trypanocidal action and toxicity of, 1, 65
     actions of, 8, 139
                                                               Phenindamine, antiadrenaline action of, 7, 555
    -, antibacterial and trypanocidal actions of, 5, 261
    -, antifilarial action of, 5, 253
                                                                   -, anticholinesterase action of, 9, 76
    -, prophylactic action against cattle trypanosomiasis
                                                                   -, antifibrillatory action of, 9, 341
    -, treatment of cattle trypanosomiasis with, 7, 581; 9, 37
                                                                   -, effect in experimental filariasis, 5, 248
                                                                  -, effect on uterine response to adrenaline, 10, 186
                                                                   -, inactivation of amine oxidase by, 6, 606
    -, trypanocidal action of, 5, 277, 398
                                                                    , and related compounds, antihistaminic action-
                                                                   physical properties relations in, 10, 270

, response of blood pressure, heart rate and respira-
    -, trypanocidal action and toxicity of, 1, 65
Phenanthridin-9-ylacetaldehyde semicarbazone, antibac-
     terial and trypanocidal actions and toxicity of, 9, 265
                                                                    tion to, 5, 324
1:5- and 4:5-Phenanthroline, anthelmintic action of,
                                                                   -, response of bronchial musculature to, 10, 230
     3, 105
                                                                     slow muscle-contracting action of, 10, 233
1:8-Phenanthroline, response of anterior preparation of
                                                               Pheniramine (prophenpyridamine):
                                                                   -, antiacetylcholine action of, 11, 273
     Ascaris to, 3, 105
                                                                   -, antihistaminic action-physical properties relations
S-Phenanthr-9-ylmethylisothiourea, response of blood
     pressure, heart rate and respiration to, in normal
                                                                   in, 10, 270
     and vagotomized cats, 5, 326
                                                               Phenobarbitone, anaesthetic action of, effect of hepatec-
Phenazine, anthelmintic action of, 10, 340
                                                                   tomy on, 4, 93
Phenazines, effect in experimental typhus, and on ricket-
                                                                    , anaesthetic and ganglion-depressant actions of, 9,
     tsiae, in vitro, 1, 18
                                                                   -, analgesic action of, 1, 258
Phenazine 5: 10-dioxide, and derivatives, effect in
     experimental lymphogranuloma venereum and
                                                                   , antiacetylcholine action of, on molluscan heart,
     psittacosis, 8, 302
     , and related compounds, antiviral action of, 8, 302
                                                                   -, antiacetylcholine and antinicotinic actions of, 4, 323
Phenazone, analgesic action of, 1, 258; 7, 434
                                                                   -, antianaphylactic action of, 10, 160
Phenbenzamine (2339RP; Antergan; Lergitin; N-benzyl-
                                                                   -, anticonvulsant action of, 8, 230
                                                                   , effect on convulsant action of methyl fluoroacetate, 3, 123
     N'N'-dimethyl-N-phenylethylenediamine):
     -, effect on cardiac response to histamine, 3, 178
                                                                   -, effect on corticogram, 10, 293
     , effect on intestinal response to histamine and
     N-methylhistamine, 2, 255
                                                                  -, effect on cough reflex and respiration, 9, 335
     , effect on response of human placental vessels to
                                                                   -, effect on electrically stimulated metabolism of
     5-hydroxytryptamine, 12, 410
                                                                    separated cerebral cortex, 8, 225
     -, pharmacological actions of, 11, 1
                                                                   -, effect on 5-hydroxytryptamine levels in body
    -, response of bronchial musculature to, 10, 230
                                                                    tissues, 12, 228
                                                                    , response of isolated muscle preparations to, 10, 133
     , slow muscle-contracting action of, 10, 233
                                                               Phenol, inhibition of Leuconostoc citrovorum by, 12, 522
Phenergan. See Promethazine
Phenethylamine, and derivatives, ionization and pharmacological actions of, 9, 488
                                                                    -, larvicidal action against sclerostomes, 7, 509
                                                               Phenols, anthelmintic action of, 3, 102
     , enzymic oxidation of, 7, 100
                                                                   -, anticholinesterase and anticurare actions of, 4, 359
     -, quinidine-like action of, 1, 100
                                                                    , larvicidal and ovicidal actions against sclerostomes, 7, 509
     , response of blood pressure, heart rate and respiration to, 5, 324
                                                               Phenol blue, effect on Litomosoides carinii, 7, 495
                                                               Phenol indophenol, effect on Litomosoides carinii, 7, 495
      , response of liver-fluke body movements to, 4, 8;
                                                               Phenol red, intra-articular injection and absorption of,
      , response of nictitating membrane to, and effect of
                                                                   8, 132
     denervation on, 5, 488; 8, 69
                                                                   -, intravenous, blood and tissue distribution of, 8, 130
6-Phenethylguanamine, effect on tumour growth, 6, 217
                                                                   -, renal excretion of, following injection into talo-
 N-Phenethylisopropylamine, ionization and pharmaco-
                                                                    crural articulation, subcutaneous periarticular tissue
                                                                    and veins, 8, 130
     logical actions of, 9, 488
                                                               Phenolic bacteriostatics, anticholinesterase and anti-
curare actions of, 4, 359
 S-Phenethylisothiourea, circulatory and respiratory reflex
     actions of, in normal and vagotomized cats, 5, 326
                                                               Phenosafranine dyes, antifilarial action-structure relations
      , effect on vasoconstrictor action of adrenaline, 3,
                                                                    in, 7, 495
                                                               Phenoselenazine, anthelmintic action of, 10, 340
      inactivation of amine oxidase by, 6, 258
p-Phenetidyldiguanide, effect in experimental filariasis,
                                                               Phenothiazine, anthelmintic action of, 10, 340
     5, 249
                                                                    , cyclic analogues of, anthelmintic action-structure
                                                                    relations in, 10, 340
Phenidium (129C46; 897)
   , absorption by trypanosomes, in vitro, 5, 404
                                                                    -, and derivatives of, larvicidal action against sclerostomes, 7, 509
 —, antibacterial and antiviral actions of, 8, 139
```

Phenothiazine (cont.)

-, derivatives of, in vitro anthelmintic action of, 10, 7 , antihistaminic action-physical properties relations in, 10, 270

-, oxidation products of, response of liver-fluke body movements to, in vitro, 7, 215

-, response of Ascaris muscle preparation to, 4, 147 -, response of liver-fluke body movements to, 4, 10 Phenothiazine S-dioxide, anthelmintic action of, 10, 340 -, response of liver-fluke body movements to, 7, 215

Phenothiazine S-oxide, anthelmintic action of, 10, 340  $\beta$ -Phenothiazin-10-ylpropionic acid, anthelmintic action of, in vitro, 10, 7

Phenothiazone, larvicidal action against sclerostomes, 7,

, response of liver-fluke body movements to, 7, 215 Phenoxazine, anthelmintic action of, 10, 340

Phenoxthine, larvicidal action against sclerostomes, 7, 509 Phenoxthionin, anthelmintic action of, 10, 340

Phenoxybenzamine (SKF688A; Dibenyline; Dibenzyline): , antagonism to inhibition of intestinal response to nicotine by dihydroxyphenylalkylamines, 9, 133

antianaphylactic action of, 10, 160
 antiperistaltic action of, 9, 133

 blocking action on intestinal tryptamine receptors, 12, 324

-, effect on gastric muscle response to various substances, 12, 348

effect on nicotine-induced convulsions, 8, 62

, effect on uterine response to adrenaline and isoprenaline, 10, 186

-, inhibition of intestinal and uterine responses to dihydroxyphenylalkylamines by, 9, 133

-, sensitization of uterus to adrenaline with, 9, 250 -, sympatholytic action and tissue fixation of, 9, 237 Phenoxycholine, response of intestine to, effect of atropine, hexamethonium and morphine on, 10, 457

3-Phenoxypropan-1: 2-diol, paralysing action and toxicity of, 1, 265

2-Phenoxypropan-1-ol, preparation and properties of, 7, 128

Phensuximide, effect on 5-hydroxytryptamine levels in body fluids, 12, 228

**Phentolamine** (Regitine; Rogitine):

, antiadrenaline, antihistaminic and hypotensive actions of, 7, 555

effect on eyelid response to stimulation, in anaesthetised rat, 11, 148

, effect on pressor action of physostigmine, in conscious rat, 12, 26

-, effect on pressor action of suxamethonium, 10, 266 -, effect on response of human placental vessels to adrenaline and 5-hydroxytryptamine, 12, 410

, effect on uterine response to adrenaline, 10, 186 Phenurone. See Phenacemide

Phenyl chloroacetate, anthelmintic action of, 3, 102

Phenyl isocyanate-bisulphite complex, effect on tumour growth, 6, 205

N-Phenyl ethyl carbamate. See Ethyl phenylcarbamate Phenyl n- and iso-propyl sulphone, antituberculous action of, in vitro, 3, 148

Phenyl quinol-6- and -8-yl sulphone, antituberculous action of, in vitro, 3, 150

Phenyl sulphanilate, antituberculous action, of, in vitro, 3, 151

Phenyl p-tolyl sulphone, antituberculous action of, in vitro, 3, 148

Phenyl urethane. See Ethyl phenylcarbamate

Phenylacetamidine, circulatory and respiratory reflex actions of, 5, 71

Phenylacetamidines, effect in experimental tuberculosis.

and toxicity, 5, 178
Phenylacetone. See Benzyl methyl ketone

Phenylacetylcholine, pressor action of, 7, 124 Phenylacetylurea. See Phenacemide

Phenylalanine, antagonism to antiviral action of phenylserine, 12, 70

, ethyl ester, effect on antiviral action of phenylserine, 12, 70

, microbiological assay of, 12, 67

Phenylalanines, and derivatives, antiviral action of, 12, 66 Phenylalanylglycine, antiviral action of, 12, 66

effect on antiviral action of phenylserine, 12, 70 1-N-Phenylamidinononane, effect in experimental tuberculosis, and toxicity, 5, 178

N-Phenylamidinothioureas, p-substituted, effect in experimental tuberculosis, 4, 251

Phenylarsenious acid, effect in experimental virus infection, 7, 465

Phenylarsenoxide, toxicity of, 4, 263

Phenylarsenoxide poisoning, dithiols as antidotes in, 4, 260 Phenylarsine oxide, effect on glucose metabolism of trypanosomes, 3, 8

Phenylbenzamidine, effect on pressor action of adrenaline,

p-Phenylbenzoylmethyl acetate, effect on permeability of synovial membrane, 9, 166

2-Phenylbenzthiazole, response of anterior preparation of Ascaris to, 3, 104

1-Phenylbuta-1: 3-diene, effect on tumour growth, 6, 238 Phenylbutazone, antianaphylactic action of, 10, 160

-, effect on permeability of synovial membrane, periarticular subcutaneous tissue and renal tubules, 9, 166

-, effect on soft-tissue calcification by dihydrotachysterol, 12, 257

γ-Phenylbutyramidine, circulatory and respiratory reflex actions of, 5, 71

Phenylbutyrolactone, anthelmintic action of, 3, 100

Phenylcarbamic acid, esters of, local anaesthetic action, preparation and toxicity of, 1, 273

Phenyldiguanide, and analogues, circulatory and respiratory reflex and other pharmacological actions of, 5, 65

antidiuretic and reflex depressor actions of, 12, 484

circulatory and respiratory reflex actions of, 5, 325

response of respiration to, 7, 451

9 - Phenyl - 2:7 - di(phenylamidino)phenanthridine, antibacterial and antiviral actions and toxicity of, 8, 139

1-Phenyl-2: 2-dithien-2'-ylethylene, effect on vaginal response to 1-bromo-2: 2-di(p-ethoxyphenyl)-1phenylethylene and oestradiol, 5, 376

-, preparation and properties of, 5, 377 , response of vagina to, 5, 376

1-Phenyldithiobiuret, trypanocidal action and toxicity of, 8, 420

Phenyldithiobiurets, p-substituted, effect in experimental tuberculosis, 4, 251

Phenylenealkyl- $p\omega$ -bis(trialkylammonium) compounds, pharmacological actions and toxicity of, 8, 306

1:1'-p-Phenylenebis(dithiobiuret), trypanocidal action and toxicity of, 8, 420

Phenylenebis(trimethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306

- 4-p-Phenylenebutylbis(diethylmethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306
- 4-p-Phenylenebutylbis(ethyldimethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306
- 4-p-Phenylenebutylbis(triethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8,
- -p-Phenylenebutylbis(trimethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306
- o-Phenylenediamine, response of anterior preparation of Ascaris to, 3, 105
- Phenylenedimethylbis(dodecyldimethylammonium), antianaphylactic action of, 12, 39
- 2: 2' m Phenylenedioxybis(tetraethylammonium) (F 2557):
- anticholinesterase and ganglion- and neuromuscular-blocking actions of, 4, 22
- , sensitization of sympathetic ganglia to acetylcholine by, 4, 23
- 2-p-Phenylene-ethylbis(ethyldimethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306
- 2-p-Phenylene-ethylbis(triethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8,
- 2-m-Phenylene-ethylbis(trimethylammonium), ganglionand neuromuscular-blocking actions and toxicity of,
- 2-p-Phenylene-ethylbis(trimethylammonium), staltic and mydriatic actions of, development of tolerance and cross-tolerance with methonium compounds to, 10, 279
- -, excretion, ganglion- and neuromuscular-blocking and other pharmacological actions and toxicity of,
- 6-p-Phenylenehexylbis(triethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8,
- 6-p-Phenylenehexylbis(trimethylammonium). ganglionand neuromuscular-blocking actions and toxicity of, **8**, 306
- p-Phenylenemethylbis(trimethylammonium), and ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306
- 5-p-Phenylenepentylbis(triethylammonium), ganglionand neuromuscular-blocking actions and toxicity of, 8, 306
- 5-p-Phenylenepentylbis(trimethylammonium), ganglionand neuromuscular-blocking actions and toxicity of, 8, 306
- 3-p-Phenylenepropylbis(diethylmethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306
- 3-p-Phenylenepropylbis(ethyldimethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306
- 3-p-Phenylenepropylbis(triethylammonium), ganglionand neuromuscular-blocking actions and toxicity of, 8, 306
- 3-m- and -p-Phenylenepropylbis(trimethylammonium), ganglion- and neuromuscular-blocking actions and toxicity of, 8, 306
- **Phenylephrine** (Neosynephrine; (-)-m-sympatol):
- -, antianaphylactic action of, 10, 160
- hypnosis-prolonging and hypothermic actions of,

- Phenylephrine (cont.)
  - , ionization and pharmacological actions of, 9, 488 -, pressor action of, effect of amidines on, 1, 30
- -, response of liver-fluke body movements to, 8, 136 response of nictitating membrane to, effect of
- denervation on, 8, 69 , slow hyperfibringenaemic action of, 11, 99
- See also Sympatol β-Phenylethanolamine, response of nictitating membrane to, effect of denervation on, 8, 69
- 1-Phenylethylamines, substituted, analgesic and hyperalgesic actions of, 9, 289
- , effect on adrenal ascorbic acid and cholesterol levels, 9, 295
- 1-(1-Phenylethyl)thiosemicarbazides, effect in experimental tuberculosis, 6, 456
- Phenylglycine, antibacterial action and toxicity of, 3, 307 Phenylglyoxime, reactivation of organophosphate-inactivated cholinesterase by, 10, 462
- 6-Phenylguanamine, effect on tumour growth, 6, 217 Phenylguanidine, circulatory and respiratory reflex actions of, 5, 71
- Phenylguanylthioureas, p-substituted, effect in experimental tuberculosis, 4, 251
- 5-Phenylcyclohexa-1: 3-dione, response of anterior preparation of Ascaris to, 3, 97
- 2-Phenylcyclohexanol, larvicidal action against sclerostomes, 7, 509
- Phenylhydroxylamine, methaemoglobinaemia induction by, 7, 149
- Phenylmercuric acetate, larvicidal action against sclerostomes, 7, 509
- Phenylmethanethiol, antibacterial action and toxicity of, 3, 307
- 9-Phenylphenanthridinium compounds, antibacterial and trypanocidal actions and toxicity of, 9, 265
- 9 Phenyl 2: 7 phenanthridinylenebis(1 dithiobiuret), trypanocidal action and toxicity of, 8, 420 o-Phenylphenol, anthelmintic action of, 3, 103
- , sodium salt, larvicidal and ovicidal actions against sclerostomes, 7, 509
- p-Phenylphenol, response of anterior preparation of Ascaris to, 3, 102
- N-Phenylphenylacetamidine, effect in experimental tuberculosis, and toxicity, 5, 178
- 1-Phenyl-2-piperidinoethanol, effect on intestinal response to acetylcholine, 1, 104
- , effect on pressor action of adrenaline, 1, 100
- -, quinidine-like action and toxicity of, 1, 93 Phenylpropanolamine. See Propadrine
- Phenylpropiolic acid, effect on tumour growth, 6, 205 β-Phenylpropionamidine, circulatory and respiratory reflex actions of, 5, 71
- $(\pm)$ -Phenyliso propylamine. See β-Methylphenethylamine S-(3-Phenylpropyl) isothiourea, circulatory and respiratory reflex actions of, in normal and vagotomized cats, 5, 326
- inactivation of amine oxidase by, 6, 258
- Phenylpyridylallylamines, pharmacological actions and toxicity of, 8, 171
- Phenylserines, and derivatives, antiviral action of, 12. 66 threo-Phenylserinehydrazide, antiviral action of, 12, 66 , preparation and properties of, 12, 72
- erythro- and threo-Phenylserinol, antiviral action of, 12.
- threo-Phenylserylhydroxamic acid, preparation and properties of, 12, 73
- threo-Phenylserylhydroxylamine, antiviral action of, 12, 66

- $N^1$ -Phenylsulphanilamide, antituberculous action of, in vitro, 3, 151
- Phenylthiourea, response of anterior preparation of Ascaris to, 3, 103
- Phenylthioureas, p-substituted, effect in experimental tuberculosis, 4, 251
- Phenylthiourethane, derivatives of, local anaesthetic action and toxicity of, 3, 297
- 5-Phenyl-1:2:4-triazole-3-thiol, effect in experimental tuberculosis, 6, 455
- Phenylurea, response of anterior preparation of Ascaris to, 3, 103
- , response of Ascaris muscle preparation to, 4, 147 , response of liver-fluke body movements to, 4, 10 Phenytoin (diphenylhydantoin; Dilantin):
- -, anticonvulsant action of, 8, 230
- effect of Rauwolfia alkaloids on, 11, 141
- -, effect on cerebral glycogen level at convulsant doses,
- , effect on convulsant action of methyl fluoroacetate, 3, 123
- , effect on electrically stimulated metabolism of separated cerebral cortex, 8, 225
- , effect on 5-hydroxytryptamine levels in body tissues, 12, 228
- Phloridzin (phlorizin):
- -, effect on auricle response to acetylcholine, 5, 358 , response of auricle to, 5, 107
- Phloroglucinol, anticholinesterase and anticurare actions
- of, 4, 359 Phloxin, inhibition of histamine- and pilocarpinestimulated acid gastric secretion by, in rat, 9, 9,
- -, response of acid gastric secretion and blood pressure to, in rat, 9, 253
- Pholodine, effect on cough reflex and respiration, 9, 335; 10, 418
- **Pholedrine** (p-hydroxymethylamphetamine):
- response of nictitating membrane to, effect of denervation on, 8, 69
- , slow hyperfibrinogenaemic action of, 11, 99
- Phorone, effect on tumour growth, 6, 246
- Phosgene, toxicity of, 1, 81; 2, 27 -, in previously poisoned animals, 2, 38
- Phosphates, inorganic and organic, cerebral, effect of convulsants and electrical stimulation on, in vitro,
- -, effect of narcotics on, in vitro, 5, 465
- -, —, effect of tetrodotoxin on, 12, 395 -, larvicidal action against sclerostomes, 7, 509
- -, organic. See also Organophosphates
- , urinary excretion of, effect of mersalyl on, 9, 210 See also Phosphorus compounds
- Phosphatides, acidic, isolation from liver and mepacrine binding by, 11, 217
- Phosphofructokinase, of rat brain and worms, effect of
- antimonials and oxophenarsine on, 9, 461 , role in schistosomicidal action of trivalent organic antimonials, 12, 159
- Phosphoglyceraldehyde dehydrogenase, effect on lactic dehydrogenase antibody, 9, 184
- , inactivation by mepacrine and quinine, 3, 4
- Phosphohexose isomerase, effect on lactic dehydrogenase antibody, 9, 184 , schistosome, effect of antimonials on, 9, 460
- Phosphorofluoridates, anticholinesterase action of, 2, 56 See also Dyflos
- Phosphorus chloronitride, effect on tumour growth, 6, 212

- Phosphorus compounds, cardiac, effect of dinitrophenol, hypoxaemia and ischaemia on, 12, 270, 273 See also Phosphates
- **Phosphorylation**, aerobic, effect of dicophane (DDT) on, 4, 126
- -, of glucose, by malaria parasites, 3, 4 , by trypanosomes, 3, 11
- Photostilbamidine. See Stilbamidine, irradiation product
- Phrenic nerve-diaphragm preparation, from anticholinesterase-poisoned rat, response to electrical stimulation, 8, 337
- , from dyflos(DFP)-poisoned rat, response to intravenous true cholinesterase, 7, 484
- -, kitten and rat, response to F 2512, F 2557 and gallamine triethiodide (F2559), 4, 27
- -, rabbit, response to chlorpromazine and promethazine, 11, 339
- -, response to ω-phenylenealkylbis(trialkylammonium) compounds, 8, 306
  - -, rat, as test preparation for curarizing action, 2, 1
- -, behaviour and preparation of, 1, 38 -, cholinesterases of, effect of anticholinesterases on, 8, 334
- -, electrode holder for, 8, 334
- , normal, tetraethyl pyrophosphate(TEPP)-inhibited and reactivated, acetylcholinesterase activity of, 10, 492
- -, response to 489C49, 9, 111
- response to (2-acetoxyethyl)triethylammonium, 4, 192
- , response to acetylcholine, and effect of anticholinesterases on, 8, 335
- , response to acetylcholine and muscarine, 12, 47
- -, response to 1-alkyl-2-hydroxyalkylpyrrolidine esters and their quaternary derivatives, 12, 447
- -, response to alkylisothioureas, electrical stimulation and guanidine, effect of calcium- and potassium-ion concentration on, 4, 319
- , response to alkylisothioureas, guanidine and methylguanidine, 4, 318
- -, response to alkyltin compounds, 10, 21 , response to ω-aminoalkyltrimethylammon-
- ium compounds, 10, 121 -, response to antazoline (Antistin) and diphen-
- hydramine (Benadryl), 4, 284 -, response to anticholinesterases, 6, 597:
- **8**, 334; **9**, 140
  - , —, response to atropine, pethidine, procaine and quinidine, **4**, 198
- -, response to basic ketones and related compounds, 7, 88
- -, response to benzoylcholine, 7, 333 -, response to benzoylcholine derivatives, 11, 267
- -, response to chlorpromazine, pethidine and promethazine, 9, 394
- , response to cholinesterase, 6, 151
- , response to Compound 48/80, histamine and tubocurarine, 10, 413
- , response to conessine and its isomers and quinidine, 3, 239
- -, response to curare and related curariform substances, 6, 461
- -, response to decamethonium, electrical stimulation and tubocurarine, effect of anticholinesterases on, 9, 139
- , response to decamethonium and tubocurarine, effect of alkyltin compounds on, 10, 22

- Phrenic nerve-diaphragm preparation, rat, response to decamethonium and tubocurarine (cont.) -, effect of polymethylenebis(2-acetoxyand -hydroxy-ethyldimethylammonium) compounds on, 10, 168 , response to electrical stimulation, effect of polymethylenebis-ammonium, -quinolinium and -strychninium compounds on, 3, 298 -, effect of various substances on, 1, 40 -, response to neostigmine, effect of adrenaline and methyladrenaline on, 7, 346 -, response to neostigmine analogues, 7, 226 -, response to proguanil (Paludrine), 4, 16 -, response to succinylmonocholine, 9, 434 , response to suxamethonium (succinylcholine), and effect of cholinesterases and thiopentone on, 9, 430 response to tolazoline (Priscol) and its N-methyl derivative, 3, 260 -, response to tubocurarine, 5, 381 potentiation by 489C49, 9, 112 N-Phthalylthyroxine, solubility and thyroid action of, **5**, 318 Physostigmine (eserine): , anticholinesterase action of, 2, 57; 4, 392; 9, 76; 10, 31; 12, 321 , and effect on chromodacryorrhoea induced by acetylcholine in rat, 4, 186 kinetics and mechanism of, 4, 220 -, anticholinesterase and anticurare actions of, 4, 29 , anticholinesterase, paralysing and other pharmacological actions and toxicity of, 9, 139
  -, anticurare action of, 2, 10; 3, 113; 5, 42; 6, 691 -, atrial arrest by, effect of ouabain on, 9, 286 -, atropine-like action on rabbit atrium, 9, 367 -, effect on acetylcholine content of intestine, 12, 117 -, effect on acetylcholine production by isolated rat diaphragm, 9, 156 , effect on acetylcholine sensitivity of heart sensitized by dyflos (DFP), 4, 170 , effect on anticholinesterase action of tetraethyl pyrophosphate, 4, 224 , effect on arecoline and pilocarpine sensitivity of heart sensitized by dyflos (DFP), 4, 171 -, effect on auricle response to acetylcholine, 5, 337, 348 , antagonism by quinidine, 9, 42 -, effect on auricle response to acetylcholine and nicotine, 2, 140 , effect on auricle response to carbachol, 5, 359 -, effect on auricle response to nicotine, 9, 15 , effect on blood-pressure response to adrenaline, 3, 192 -, effect on blood-pressure and nictitating-membrane responses to adrenaline, 9, 426 -, effect on blood-procaine-esterase activity, 3, 133 , effect on bronchoconstrictor action of acetylcholine, 6, 519; 7, 425 -, effect on cardiac-tissue response to ouabain, 9, 285 , effect on central action of curare and tubocurarine, 7, 18 -, effect on corneal reflex, and on response to local anaesthetics, 5, 462 -, effect on enzymic hydrolysis of acetylcholine, 5, 40 , effect on enzymic hydrolysis of acetylcholine and its N-acetoxy and N-ethyl analogues, 4, 194 effect on enzymic hydrolysis of acetylcholine and triacetin, 4, 183 , effect on enzymic hydrolysis of atrolactylcholine and benzoylcholine, 2, 113
- Physostigmine (cont.) effect on enzymic hydrolysis of benzoylcholine, 2, effect on enzymic hydrolysis of butyrylcholine and tributyrin, 8, 113 -, effect on enzymic hydrolysis of α-cocaine, 10, 442 , effect on enzymic hydrolysis of Substance P, in vitro, 12, 361 -, effect on eyelid response to stimulation, in anaesthetized rat, 11, 148 , effect on hypotensive action of Artocarpus integra extracts, 10, 249 -, effect on intestinal depression by morphine, 12, 121 effect on intestinal response to acetylcholine, 7, 420 -, effect on intestinal response to sympathomimetic amines, 9, 132 , effect on mephenesin(Myanesin)-induced paralysis, -, effect on murexine-induced paralysis, 12, 179 , effect on neuromuscular-blocking action of hypnotics, 10, 136, 137 -, effect on neuromuscular-blocking action of methonium compounds, 4, 388 -, effect on neuromuscular-blocking action of proguanil, 10, 147 -, effect on neuromuscular-blocking and pressor actions of benzoylcholine derivatives, 11, 268 -, effect on normal and stimulated metabolism of separated cerebral cortex, 6, 536 , effect on pharmacological actions of acetylcholine and trimethyl-5-methylfurfurylammonium, 7, 134 -, effect on respiratory response to diphenhydramine, in normal and vagotomized cats, 8, 318 , effect on response of Ascaris muscle preparation to acetylcholine, 4, 148 -, effect on response of dyflos(DFP)-sensitized skeletal muscle to acetylcholine, 4, 173 , effect on response of human bronchial chains to acetylcholine, 6, 685 , effect on response of liver-fluke body movements to acetylcholine, 8, 134 -, effect on response of molluscan and snail hearts to acetylcholine, 10, 475 -, effect on response of phrenic nerve-diaphragm preparation to electrical stimulation, and action of adrenaline on, 1, 41 , action of atropine and curarine on, 1, 50 , effect on skeletal-muscle response to acetylcholine and benzyl and methyl esters of  $\gamma$ -crotonic betaine, 4, 232 effect on skeletal-muscle response to Compound 48/80 and tubocurarine, 10, 414 -, effect on smooth-muscle response to acetylcholine and murexine, 12, 183 , effect on smooth-muscle response to acetylcholine and muscarine, 12, 49, 50 -, effect on spinal reflexes, 9, 84; 11, 166 -, effect on spontaneous and induced salivation, 9, 442 , effect on striated-muscle response to acetylcholine, 5, 39 , effect on striated-muscle response to benzoylcholine, 7, 332 -, effect on suxamethonium(succinylcholine)-induced paralysis, 9, 432 -, effect on uterine response to adrenaline, 10, 186 , effect on uterine response to 5-hydroxytryptamine,

9, 247

-, effect on ventricular fibrillation, 12, 215

Physostigmine (cont.)	
—, hypnosis-prolonging and vasoconstrictor action of, 12, 251	IS
—, inactivation of schistosome acetylcholinesterase by	γ,
7, 566 —, miotic action of, 6, 696	
-, antagonism by 2-amino-1: 2-diphenylethar ol, 2, 213	1-
, pressor action of, in anaesthetized, decerebrate an	d
spinal rats, 10, 349 —, response of <i>Ascaris</i> muscle preparation to, 4, 148	
—, response of auricle to, 5, 366	
—, —, effect of acetylcholine, cocaine, hexamethonium and quinidine on, 9, 42	
, response of blood pressure to, 3, 133; 10, 14, 34	19
, in conscious and adrenalectomized rats, 12	2,
, response of blood pressure and respiration to 7, 18	0,
—, response of ciliary movement to, 7, 69, 71	
, response of eyelid to, 11, 148, response of heart to, 10, 352	
—, response of human bronchial chains to, 6, 685	
, response of intestine to, 10, 26	
, response of intestine to, 20, 20, 20,, effect of 2-amino-1: 2-diphenylethanol on,	2,
—, —, and effect of atropine on, 3, 220 —, —, effect of botulinum toxin on, 6, 59	
, effect of nicotine on, 8, 381	
, response of liver-fluke body movements to, 4, 5, -, -, and effect of atropine and tubocurarine o	10
8, 134	11,
—, response of nictitating membrane to, 9, 203	
—, response of striated muscle to, effect of pent methonium and tubocurarine on, 5, 44	a-
,, and effect of tetraethyl pyrophosphate on,	5,
38	
—, sensitization of heart to acetylcholine by, effect dyflos (DFP) on, 4, 169	ΟI
—, sensitization of skeletal muscle to acetylcholine b	y,
effect of dyflos ( <i>DFP</i> ) on, <b>4</b> , 174 —, vasoconstrictor action of, in rat, <b>10</b> , 352	
Physostigmine methiodide, anticurare action on symp	a-
thetic ganglia, 3, 113  Physostigmine poisoning, respiratory failure in, 8, 466	
—, tissue-acetylcholine levels in, 7, 273	
Physostigmine-like action, of Mexican scorpion venor	n,
3, 219 —, of polymethylenebis(4-alkylmorpholinium, 1-alky	y1-
piperidinium and -pyrrolidinium) compounds, 1	
Picolines, anthelmintic action of, in vitro, 10, 7	
—, larvicidal action against sclerostomes, 7, 509	-
Picolinhydroxamic acid, reactivation of organophosphat inactivated cholinesterase by, 10, 462	. <b>C</b> -
Picrotoxin, analeptic action of, 1, 157	
—, convulsant action of, effect of hexamethonium o 7, 83	n,
,, effect of vital dyes on, 5, 154	
—, effect on antidotal action of atropine and pyridin 2-aldoxime methiodide in organophosphate poiso	
ing, <b>12</b> , 443	
—, effect on cerebral glycogen level at convulsant dose 6, 1	es,
, effect on cerebral inorganic and organic phospha	ite
levels, in vitro, 6, 448 —, effect on respiratory depressant action of meth	1a-
done (amidone) and phenadoxone, 5, 133	

```
Picrotoxin (cont.)
     , effect on toxicity of amylobarbitone (Amytal
    Sodium), 1, 160
    -, effect on voluntary activity, in mouse, 8, 46
    -, permeability of blood-brain barrier to, effect of
    various substances on, 5, 154
   -, respiratory stimulant action of, 2, 96
-, toxicity of, 3, 311
Picrylsulphonic acid, ethyleneiminium and sodium salts,
    pharmacological actions of, 12, 494
Pigeon-emesis, ouabain-induced, effect of potassium ions
    on, 2, 263
Pilocarpine, anticholinesterase action of, 9, 76
     , cardiovascular and sialogenous actions of, effect of
    diethyl(3 - hydroxy - 3 : 3 - diphenylpropyl)methyl-
    ammonium on, 6, 565
   —, effect on auricle response to acetylcholine, 5, 348
    -, effect on nictitating-membrane response to adren-
    aline, isoprenaline, noradrenaline and third adrenal
    amine, 9, 500
    -, response of Ascaris muscle preparation to, 4, 149
    -, response of auricle to, 5, 335
          -, effect of fluoride, nicotine and physostigmine
    on, 5, 359
    -, response of dyflos(DFP)-sensitized heart to, effect
     of eserine on, 4, 171
    -, response of human bronchial chains to, 6, 683
  —, response of intestine to, 7, 241
           -, effect of atropine, cocaine, procaine, spas-
     molytics, tetraethylammonium and tubocurarine on,
     4, 327
           -, effect of 3:3-diphenyl-allylamines, -pro-
     panolamines and -propylamines and their quaternary
     derivatives on, 6, 560
           -, effect of hexamethylenebis(ethyldimethyl-
    ammonium) on, 6, 615
-, —, effect of M&B 1950 on, 8, 308
          -, effect of nicotine on, 8, 381
    -, response of liver-fluke body movements to, 4, 10
     , response of nictitating membrane to, effect of
     denervation on, 9, 202
           -, and effect of denervation on, in whole and
     adrenalectomized and eviscerated cats, 9, 482
           -, effect of morphine on, 12, 82
    -, sialogenous action of, effect of adrenaline on, 9, 450
    -, ---, effect of salivary gland denervation on, 9, 453
```

—, —, inhibition of, 12, 53 —, stimulation of acid gastric secretion by, and

antagonism by phloxin, 9, 255

, stimulation of adrenal medulla by, effect of atropine, cocaine, mepyramine and nicotine on, 9, 481
 , stimulation of sympathetic ganglia by, effect of

---, stimulation of sympathetic ganglia by, effect of atropine, cocaine, hexamethonium, mepyramine and nicotine on, 9, 481

Piperazine, chromatographic separation from diethylcarbamazine and metabolites, and estimation by carrier technique, 10, 398

—, derivatives of, antiacetylcholine action of, 11, 273 —, infra-red absorption spectrum of, 10, 404

Piperidine, pharmacological actions of, 4, 111

pressor action of, effect of dibenamine on, 6, 354
Piperidine-1-carboxyamide, effect in experimental filariasis, 5, 257

6-(4-Piperidinobutylamino)anthrapyrimidine, amoebicidal action of, 7, 486

3-Piperidino-1: 1-dithien-2'-ylpropanol, anticholinester-ase action of, 9, 76
2-Piperidinoethyl benzilate, local anaesthetic and quini-

dine-like actions and toxicity of, 1, 93

2 - Piperidinoethyl  $\alpha$  - (2 - dimethylaminoethoxy) -  $\alpha\alpha$  -Piperoxan (cont.) , effect on pressor action of human urinary extracts, diphenylacetate, pharmacological actions of, 6, 634 2-Piperidinoethyl 4-methylthiazole-5-carboxylate, spasmolytic action of, 1, 154 -, effect on uterine response to adrenaline, 10, 186 2-Piperidinoethyl thiolobenzilate, spasmolytic action of, , effect on uterine response to 5-hydroxytryptamine, 9, 243 10, 95 6-(2-Piperidinoethylamino)anthrapyrimidine, amoebicidal action of, 7, 486 effect on vasoconstrictor action of adrenaline and 5-hydroxytryptamine, 9, 243 3-(2-Piperidinoethyl)indole, oxytocic action of, 12, 194 -, inactivation of amine oxidase by, 6, 607 1-(1-Piperidinoethyl)naphth-2-ol, oxytocic action, pre--, inhibition of intestinal and uterine responses to paration and properties of, 12, 194 6-(2-Piperidinoethyl)-3:4:1-xylenol, oxytocic action, preparation and properties of, 12, 194 6-Piperidinohexyl thiolobenzilate, spasmolytic action of, Pitocin. See Oxytocin Pitressin. See Vasopressin 6-(6-Piperidinohexylamino)anthrapyrimidine, amoebicidal action of, 7, 486
2-Piperidinomethyl-5: 6-benzodioxan. See Piperoxan cil on, in rat, 1, 133 (Piperidinomethyl)cresols, oxytocic action, preparation **12**, 166 and properties of, 12, 194 1-(Piperidinomethyl)ethyl a-methyl-aa-diphenylthiolacefication of, 8, 435 tate, spasmolytic action of, 10, 95 1-(Piperidinomethyl)ethyl thiolobenzilate, spasmolytic action of, 10, 95 6-Piperidinomethylindan-5-ol, oxytocic action, preparation and properties of, 12, 194 3-Piperidinomethylindole, oxytocic action of, 12, 194 1-Piperidinomethylnaphth-2-ol, oxytocic action of, 12, See also Vasopressin 2-Piperidinomethylnaphth-1-ol, antimalarial action of, -, in man, **6**, 471 12, 171 oxytocic action of, 12, 194 3-Piperidinomethylnaphth-2-ol, oxytocic action, preparation and properties of, 12, 194 (Piperidinomethyl)phenols, oxytocic action of, 12, 194 2-Piperidinomethyl-4-propylphenol, oxytocic action, pre-paration and properties of, 12, 194 4-Piperidinomethyl-2:5:1- and -2:6:1-xylenol, oxy-245 tocic action, preparation and properties of, 12, 194 5-Piperidinopentyl thiolobenzilate, spasmolytic action of, 6-(5-Piperidinopentylamino)anthrapyrimidine, amoebicidal action of, 7, 486 2-Piperidinophenazine 5: 10-dioxide, antiviral action of, 8, 302 **9**, 68 β-Piperidinopropionitrile, effect on tumour growth, 6, 206 3 - Piperidinopropyl  $\alpha$  - ethoxy -  $\alpha\alpha$  - diphenylthiolacetate, on, 8, 54 spasmolytic action of, 10, 95 3 - Piperidinopropyl a - methyl - aa - diphenylthiolacetate, spasmolytic action of, 10, 95 in horse, 7, 25 3-Piperidinopropyl thiolobenzilate, spasmolytic action of, 10, 95 6-(3-Piperidinopropylamino)anthrapyrimidine, amoebicidal action of, 7, 486 , effect in amoebic dysentery, in monkey, 7, 491 brain barrier, 5, 151 1-Piperidinotridecan-2-ol, effect on pressor action of adrenaline, 1, 100 quinidine-like action and toxicity of, 1, 93 6-Piperidino-3: 4: 1-xylenol, oxytocic action, preparation and properties of, 12, 194 Piperidylamidone, effect on cough reflex and respiration, 10, 418 Piperonyldiguanide, effect in experimental filariasis, 5, 249 **Piperoxan** (F933; 2-piperidinomethyl-5: 6-benzodioxan): , antagonism to inhibition of intestinal response to nicotine by dihydroxyphenylalkylamines, 9, 133 -, antiadrenaline and antihistaminic actions of, 7, 555 -, antiperistaltic action of, 9, 133

dihydroxyphenylalkylamines by, 9, 133 -, quinidine-like action and toxicity of, 1, 93 , sympatholytic action and tissue fixation of, 9, 237 Pituitary, anterior, effect of methylthiouracil and thioura-, role in corticotrophic action of acetylcholine, hormones of, amino-acid composition and puri-, oxytocic and pressor actions of, effect of anaesthetics and haemorrhage on, 11, 239 Pituitary-adrenal axis, mechanism of stimulation by morphine and methadone, 10, 260 Pituitary extracts, pressor action of, bioassay with blood pressure of dibenamine-treated cat, 7, 567 Pituitary extract, posterior (Pituitrin): -, antidiuretic action of, 11, 245 effect of proguanil (Paludrine) on, 4, 19 , antidiuretic and chloruretic actions of, effect of ethanol and hexamethonium on, in rat, 12, 461 antidiuretic, oxytocic and pressor actions of, 11, , cardiac irregularity production by, 11, 134 -, hypnosis-prolonging action of, 12, 251 -, oxytocic action of, bioassay of, 3, 328 , factors affecting, 10, 424 —, effect of dihydroergotamine on, 8, 194 —, effect of 2-haloethylamines on, 9, 72 -, —, effect of phenadoxone on, 5, 137 -, oxytocic and pressor actions of, 9, 189 pressor action of, effect of 2-haloethylamines on, , effect of 2-haloethyl(naphthylmethyl)amines -, response of coronary flow and vessels to, 6, 75 -, response of intestinal motility and temperature to, -, response of intestine to, in conscious dog, 7, 47, 51 -, response of rat to, effect of season on, 12, 100 -, response of ureter to, in dogs, 11, 44
-, with adrenaline, effect on permeability of blood-Pituitrin. See Pituitary extract, posterior Pivaloylcholine, pressor action of, 7, 124 Plasma. See Blood plasma Plasmodium berghei and gallinaceum, effect of anti-biotics, dyes and other substances on, in vivo, 8, 162 Plasmodium cynomolgi, morphological changes induced by proguanil (Paludrine) in, 3, 324 Plasmodium cynomolgi and gallinaceum, effect of proguanil (Paludrine) and serum and liver extract from proguanil-treated animals on, in vitro, 3, 320 Plasmodium gallinaceum, absence of acetylcholine from, , effect of amines based on emetine on, 3, 50

Plasmodium gallinaceum (cont.)
—, effect of antimalarials on, in vitro study method for, 8, 425

-, effect of diguanide metabolites on, 8, 93

-, effect of proguanil, pyrimethamine and sulphonamides on, mechanism of, 10, 208

-, effect of proguanil and related substances on, 8, 427 , effect of substances related to di(dipentylamino)decane on, 3, 63

, exoerythrocytic forms of, effect of antimalarials on, in vitro, 1, 163

, glucose metabolism by, and effect of antimalarials on, 3, 1

-, sensitivity to sulphadiazine, 2, 229

Plasmodium berghei infections, experimental, effect of antimalarials in, 5, 409

, in mice, as screening test for antimalarials, 5, 415

Plasmodium berghei, cynomolgi and gallinaceum infec-tions, experimental, effect of 2:4-diaminopyrimidines, proguanil and other antimalarials in, 6, 185

Plasmodium cathemerium infections, experimental, effect of diaminopyrimidines and proguanil in, 6, 200

Plasmodium gallinaceum infections, experimental, as screening test for antimalarials, 2, 221

, effect of conessine and its isomers and quinine in, 3, 242

, effect of 2-di(2-hydroxyethyl)amino-5-nitropyridine in, 10, 435

Plasmodium gallinaceum and relictum infections, experimental, effect of chlorproguanil (M5943) and proguanil in, 5, 438

Platyhelminthes, body movements of, effect of various substances on, 8, 134

Pneumococcal infections, experimental, effect of solapsone (Sulphetrone) and sulphanilamide in, 3, 24

Pneumococcus, effect of cephalosporin N and penicillin on, 8, 253

Pneumococcus polysaccharide, effect in experimental virus infections, 7, 467

Pneumonia, treatment with sulphadimethoxypyrimidine, in man, 2, 168

Podophyllotoxin, effect on pregnancy, in animals, 11,

Poliomyelitis, experimental, effect of quinoxaline 1:4dioxide in, 8, 298

, human and mouse, experimental, effect of mepacrine and trypan red in, 7, 476

Polycondensed dihydroxydicarboxydiphenylmethane. See Compound 2 P

Polycondensed heptahydroxytricarboxytriphenylmethanes. See Compound 16 P and Compound 30,

Polycondensed hexahydroxytricarboxytriphenylmethane. See Compound 21 P

Polycondensed tetrahydroxydicarboxydiphenylmethane. See Compound 7 P

Polycondensed trihydroxytricarboxytriphenylmethane. See Compound 20 P

Polyethylene polyamine, effect in experimental virus infections, 7, 467

Poly(ethyleneimine), effect on tumour growth, 6, 360 Poly(glyceryl methacrylate), effect in experimental virus infections, 7, 467

Polyglycidyl acetate, effect on tumour growth, 6, 240 Polylysine, antiviral action of, in ovo, 10, 56

Polymers, natural and synthetic, effect in experimental virus infections, 7, 467

Polymethacrylic acid, effect in experimental virus infections, 7, 467

Polymethylenebis(2 - acetoxyethyldimethylammonium) compounds, enzymic hydrolysis, pharmacological actions and preparation of, 10, 168

Polymethylenebis(4 - alkylmorpholinium) compounds, ganglion- and neuromuscular-blocking actions of, 10, 124

Polymethylenebis(1-alkylpiperidinium) compounds, pharmacological actions of, 10, 124

Polymethylenebis(1 - alkylpyrrolidinium) compounds. pharmacological actions and toxicities of, 10, 124

Polymethylenebisammonium compounds, anticholinesterase and curarizing actions, preparation and properties of, 3, 298

hypotensive and mydriatic actions of, 11, 282

See also Methonium compounds

Polymethylenebis{1 - (3:4 - dimethoxybenzyl) - 1:2:3: 4 - tetrahydro - 6:7 - dimethoxy - 2 - methylisoquinolinium) compounds, curarizing action of, effect of methylene chain length on, 7, 392

Polymethylenebis(2 - hydroxyethyldimethylammonium) compounds, enzymic hydrolysis, pharmacological actions and preparation of, 10, 168

Polymethylenebisquinolinium compounds, anticholinesterase action of, 10, 173

anticholinesterase and curarizing actions, preparation and properties of, 3, 298

, antifungal action of, 10, 343

Polymethylenebisisoquinolinium compounds, antibacterial action, preparation and properties of, 8, 34 , antifungal action of, 10, 343

Polymethylenebis-strychninium compounds, anticholinesterase and curarizing actions, preparation and properties of, 3, 298
Polymethylenebis(1:2:3:4-tetrahydro-6:7-dimeth-

oxy-2-methylisoquinolinium) compounds, curarizing action of, effect of methylene chain length on, 7, 392

Polymethylenebis(1:2:3:4-tetrahydro-6:7:8-trimethoxy-2-methylisoquinolinium) compounds, curarizing action of, effect of methylene chain length on. 7, 392

SS'-Polymethylenebisisothioureas, effect on vasoconstrictor action of adrenaline, 3, 206, 209

—, inactivation of amine oxidase by, 6, 257 —, response of blood pressure to, 3, 201

-, response of blood pressure, heart rate and respiration to, 5, 324

Polymethylenebis(trialkylammonium) compounds, ganglion-blocking action of, effect of methylene chainlength and alkyl group on, 7, 534 See also Methonium compounds

Polymethylenebis(triethylammonium) compounds, ganglion-blocking action of, 2, 268

Polymethylenebis(trimethylammonium)compounds. See Methonium compounds

Polymethylenediamines, enzymic oxidation of, 5, 625 , effect of copper ions on, 8, 42

NS-Polymethyleneisothioureas, pressor and vasoconstrictor actions of, 3, 202

Polymethylolamides, antitumour and cytotoxic actions of, 6, 201

Polymethylolmelamines, effect on tumour growth, 6, 211 Polymyxin A, acetyl and methyl derivatives of, nephro-

toxicity of, 7, 252 , nephrotoxicity of, and protection, 7, 248

Polymyxin B, effect on amoebicidal action of 2-di(2-hydroxyethyl)amino-5-nitropyridine, 10, 434 Polymyxin B and E, histamine release by, 10, 215

Polymyxins, antibacterial action of, in vitro and in vivo, **7**, 171

<ul> <li>Polymyxins (cont.)</li> <li>—, chemotherapeutic and pharmacological actions and toxicity of, 7, 170</li> <li>—, effect on blood cells, in vitro, 7, 182</li> <li>—, effect on faecal bacterial flora, in man and rabbit, 7, 174</li> <li>Potassium ions (cont.)</li> <li>—, effect on neuromuscular-blocking and methyl γ-crotonic betaine, 4, 23</li> <li>—, effect on neuromuscular-blocking decamethonium, 4, 389</li> <li>—, effect on pressor-amine release fro</li> </ul>	32 ng action of
<ul> <li>, intramuscular and subcutaneous, local effects of, 7, 182</li> <li>, oral and parenteral, absorption, blood levels and excretion of, 7, 173</li> <li>, renal excretion of, effect of methionine on, 7, 251</li> <li>Polyoxyethylene ether, effect on Plasmodium berghei, in vivo, 8, 162</li> <li>Polyoxyethylene ethers, surface-active, antituberculous action, preparation and structure of, 10, 73</li> <li>Polypale resin, enhancement of effectiveness of oral penicillin preparation by, and toxicity, 6, 97</li> <li>Polypeptides, oxytocic, urinary, purification and comparison with bradykinin, 12, 223</li> <li>, intra-arterial, effect on sympather secretion by denervated adrenals, 7,, movement in cardiac muscle, effect</li> </ul>	ectrical stimula- anglia to cardiac 9 media, effect of 63 11, 357 omimetic-amine 328
, slow muscle-contracting, in wasp venom, 9, 352, Substance P-like, in fish brain and intestine, 11, 323  Polyphenol oxidase preparation, from mushrooms, 11, 67,  12, 517	of reserpine on,
Poly-ut-phenylalanine, antiviral action of, 12, 66 Polyvidone (polyvinylpyrrolidone):  —, effect in experimental virus infection, 7, 467 —, effect on capillary permeability, in dog, 10, 223 Polyvinyl alcohol, effect in experimental virus infection, 7, 467 Polyvinyl sulphate, effect in experimental virus infection, 7, 467 Polyvinyl sulphate, effect in experimental virus infection, 7, 467 Polyvinylpyrrolidone. See Polyvidone Pontamine sky blue, protective action in experimental virus infections, 7, 458 Poppy-seed oil, iodized, toxicity of, and use as bronchographic contrast medium, 8, 168 Porphobilin, response of intestine to, 9, 91 —, effect on blood-pressure, respiratory and vascular responses to acetylcholine, adrenaline, histamine and vagal stimulation, 9, 91 —, effect on intestinal response to acetylcholine, adrenaline, histamine and 5-hydroxytryptamine, 9, 91 —, response of intestine and uterus to, 9, 91 Porphyrins, effect on uterine response to adrenaline, 9, 91 —, response of intestine and uterus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and therus to, 9, 91 —, response of intestine and striated in of indole and derivatives on, 8, 390 —, response of intestine and striated in of indole and derivatives on, 9, 390 —, response of intestine and striated in of indole and derivatives on, 9, 390 —, response of intestine and striated in of indole and derivatives on, 9, 390 —, response of intestine and striated in of indole and derivatives on, 8, 390 —, response of intestine and striated in of indole and derivatives on, 8, 390 —, response of intestine and striated in of indole and derivatives on, 9, 300 —, response	9, 17  min), atropine, ds, and mepyrin, 7, 420  mtergan) on, 3, muscle to, effect of 02  ect of hypnotics thylenediamines ct of anticholinof mepyramine 1, 12, 346 fect of veratrum parated cerebral 35 alyl on, 9, 210 6, 170 entral action of, hoxyphosphinyls by plasma by, action against
—, effect on cardiac-output response to thiocyanate, 4, 165 —, effect on central action of curare and tubocurarine, 7, 22  Totalsum sates, findgame, faivletual sclerostomes, 7, 509  Potassium thiocyanate, response of heart  Potassium xanthogenate, larvicidal action stomes, 7, 509	t to, 4, 3, 4

- Prednisolone, thymus-involuting action of, 12, 133 Prednisone, thymus-involuting action of, 12, 133 Pregnancy, effect of nucleotoxic substances on, in animals, 11, 437 , gonadotrophin excretion during, in humans, 11, 249 Pregnenetriolone, thymus-involuting action of, 12, 133 Pregnenolone, effect on permeability of capillaries, kidneys, periarticular tissue and synovial membrane, 8, 132 Pregnenolone acetate, effect on permeability of capillaries, kidneys, periarticular tissue and synovial membrane, 8, 132 Pressor action, hypothalamic, effect of reserpine on, in conscious cat, 12, 8 -, of acetylcholine, 12, 423 , of acetylcholine, benzoylcholine, carbachol and nicotine, effect of suxamethonium on, 10, 267 of adrenaline, effect of 2-benzyl-1-methyliminazoline on, 3, 258 -, effect of chlorpromazine on, 9, 389 -, effect of chlorpromazine, pethidine and promethazine on, 9, 396 -, effect of choline 2: 6-xylyl ether on, 9, 471 -, effect of cocaine on, 9, 485 , effect of cocaine, ephedrine and tyramine on, 1, 24, 29 -, effect of Compound 48/80 on, 6, 500 -, effect of 2:7-diamino-10-methyl-9-phenylphenanthridinium on, in spinal cat, 1, 74 effect of diethyl(3-hydroxy-3: 3-diphenylpropyl)methylammonium on, 6, 565 , effect of epinine and hydroxytyramine on, 4, 206 , effect of 2-p-methoxybenzyl-1-methyliminazoline on, 4, 47 , effect of naphazoline (naphthylmethyliminazoline) on, 4, 46 -, —, effect of nicotine and tolazoline (*Priscol*) on, 3, 257 -, effect of quinidine-like substances on, 1, 100 -, —, effect of solanum alkaloids on, 5, 119 -, ---, effect of tolazoline (Priscol) on, in cat, 3, 254 effect of vasoconstrictors and vasodilators on, 1, 29 -, of adrenaline, dihydroergotamine and ergotamine, **12**, 232 -, of adrenaline and lactyladrenaline, 9, 504 -, of adrenaline and nicotine, effect of hexamethonium and hexamethylenebis(ethyldimethylammonium) on, **6**, 615 , of adrenaline, nicotine and noradrenaline, effect of amylobarbitone on, 9, 170 , of adrenaline and noradrenaline, effect of anticholinesterases and iproniazid on, 9, 426 effect of antihistaminics on, 4, 65 -, effect of chlorpromazine on, 9, 404 -, effect of dibenamine, ergotamine and ergotoxine on, 4, 63 , of adrenaline and Pituitrin, effect of 2-haloethyl-(naphthylmethyl)amines on, 8, 54 , of 2-aminopyridine, iminazole and NS-polymethyleneisothioureas, 3, 202 -, of angiotonin and posterior pituitary extract, 9, 189 -, of 2-(N-benzylanilinomethyl)-1-methyliminazoline, effect of nicotine on, 4, 47 , of 2-benzyl-1-methyliminazoline, effect of adrenalectomy, nicotine and tolazoline (Priscol) on, 3, 257 , of m-bromophenyl choline ether, effect of barbiturates on, 9, 174
- Pressor action (cont.) -, of choline esters and ethers and nicotine, 7, 122 -, of choline fatty acid esters, 12, 30 -, of choline phenyl ethers, 12, 128, 312 , of eserine and other anticholinesterases, in rat, 10, 349 -, of ethyltrimethylammonium, 7, 538 , of hepatic sympathin and noradrenaline, effect of 2-benzyl-1-methyliminazoline on, 5, 169 -, of human urinary extracts, 6, 35 -, of hypothalamus extracts, 8, 193 , of liver sympathin, effect of cocaine, ephedrine and guanidine on, 3, 194 , of 2-p-methoxybenzyl-1-methyliminazoline, effect of nicotine on, 4, 47 -, of 1-methyl-2-naphth-1'-ylmethyliminazoline, effect of nicotine on, 4, 46 -, of muscarine, 12, 47 -, of naphazoline (naphthylmethyliminazoline), effect of adrenalectomy, nicotine and tetraethylammonium on, 4, 45 , effect of ergotoxine and tolazoline (benzyliminazoline) on, 4, 46 -, of neostigmine and physostigmine, in conscious rat, 12, 24 , of nicotine, effect of (2-acetoxyethyl)triethylammonium on, 4, 191 -, effect of chlorpromazine on, 9, 397 , effect of hexamethonium on, 7, 548 -, of noradrenaline, effect of chlorpromazine on, 9, 396 -, —, effect of cocaine, dibenamine and tetra-ethylammonium on, 6, 655 -, potentiation by hexamethonium, methanthelinium and tetraethylammonium, in spinal and vagotomized dogs, 9, 476 , of pituitary, effect of anaesthetics and haemorrhage on, 11, 239 -, of posterior pituitary extracts, 11, 245 , of splenic nerve stimulation, and effect of cocaine and guanidine on, 3, 195 , of suxamethonium, effect of adrenalectomy. azamethonium (Pendiomide), hexamethonium, phentolamine and yohimbine on, 10, 267 , effect of nicotine on, 10, 267 -, of synthetic oxytocin and analogues, 12, 209 -, of tetraethylammonium, 9, 478 -, of urine from dihydroxyphenylserine-treated rabbit. 6, 129 See also Blood pressure Pressor agents, cardiac irregularity production by, 11. 133 Pressor amines, estimation in suprarenal extracts, comparison of biological and colorimetric methods, **8**, 66 , formation during splanchnic stimulation of adrenals, in cat, 11, 449 , in adrenals, during insulin-induced hypoglycaemia in normal and X-irradiated rats, 6, 346 -, effect of choline 2:6-xylyl ether on, 12, 306 , —, effect of colchicine on, in normal and partially hepatectomized rats, 7, 157 -, effect of X-rays on, 6, 342 —, in ox adrenals, 6, 322 -, in plasma, after stimulation of inferior mesenteric and hypogastric nerves, 6, 79 -, release by intravenous morphine, 7, 549

release from adrenals, by histamine and pilocarpine.

9, 485

Pressor amines, release from adrenals (cont.)	Procaine (cont.)
—, —, by insulin, morphine and tetrahydronaphth-	, local anaesthetic action of, 1, 271, 283; 2, 242;
2-ylamine, 7, 605	3, 238; 4, 101, 281; 5, 137; 7, 88; 10, 240; 11, 4,
	104
—, —, by potassium ions and sympathetic stimula-	
tion, 5, 167	—, local anaesthetic action and toxicity of, 1, 274
—, —, effect of carotid closure on, 5, 508	—, metabolism of, and effect of dyflos (disopropyl-
—, release from adrenals and spleen, effect of choline	fluorophosphonate), methylene blue, neostigmine and
2: 6-xylyl ether on, 12, 301	physostigmine on, in cat, 3, 128
—, release from isolated chromaffin granules, 12, 61	—, neuromuscular blocking-action of, mechanism of,
-, release from liver and spleen, by sympathetic	11, 154
stimulation, 5, 169	—, quinidine-like action and toxicity of, 1, 93
Pressor hormone, pituitary. See Vasopressin	, response of auricle to, and effect of acetylcholine
Pressure, apparatus for applying, 6, 586	on, 9, 46
Primidone (Mysoline):	-, effect of calcium and potassium ions on, 3,
	251
—, anticonvulsant action and toxicity of, 8, 230	
—, effect on cerebral 5-hydroxytryptamine level, 12, 228	—, response of blood vessels to, 3, 354
Priscol. See Tolazoline	—, response of body temperature to, in normal and
Privine. See Naphazoline	adrenalectomized mice, 3, 249
Probanthine. See Propantheline	—, response of intestine to, 4, 38
<b>Procainamide</b> , antianaphylactic action of, 7, 631	, response of liver-fluke body movements to, 8,
—, antifibrillatory action of, 9, 341	136
Procaine, antiacetylcholine and antinicotinic actions of,	, response of molluscan heart to, 8, 329
4, 323	—, response of nictitating membrane to, 9, 472
	Procaine benzylpenicillin. See under Penicillin
—, antiacetylcholine and local anaesthetic actions of,	
3, 108	Procaine esterase, in blood, effect of dyflos (disopropyl-
—, antiadrenaline action of, 7, 555	fluorophosphonate) and liver damage on, 3, 133
—, antianaphylactic action of, 7, 631	Procyclidine (Kemadrin):
——, anticholinesterase and surface anaesthetic actions	—, anticholinesterase action of, 9, 76
of, 5, 462	—, anticholinesterase action of, 9, 76—, optical isomers of, effect on cholinesterase activity,
—, antihistaminic and curarizing actions of, 4, 197	11, 7
—, atropine-like action on rabbit atrium, 9, 367	
, colorimetric determination in blood and urine,	—, —, pharmacological actions of, <b>10</b> , 383 —, resolution of, <b>10</b> , 383
3, 129	$(+)$ -, $(-)$ - and $(\pm)$ -Procyclidine ethiodide, effect on
—, effect in experimental epilepsy, in cats and mon-	cholinesterase activity, 11, 7
keys, 10, 288	—, pharmacological actions of, 10, 383
—, effect on adenosine-induced auriculoventricular	Procyclidine methiodide. See Tricyclamol
block, 4, 85	Proflavine, effect in experimental typhus, and on rickett-
—, effect on cardiac response to acetylcholine, 1, 105	siae, in vitro, 1, 18
—, effect on cholinesterase activity, 11, 9	—, effect in experimental virus infection, 7, 469, 479
—, effect on intestinal response to acetylcholine, 1, 104	—, effect on diphtheroid organism in vitro and on
—, effect on intestinal response to acetylcholine and	experimental infections of rabbit eye, 1, 242
histamine, 4, 33	Proguanil (Paludrine):
—, effect on intestinal response to arecoline and	, antiesterase action of, 2, 116
	, antifilarial action of, 5, 249
pilocarpine, 4, 327	antimalarial action of affect of folio said and other
——, effect on pressor action of benzoylcholine, 7, 335	—, antimalarial action of, effect of folic acid and other
—, effect on respiratory pathways in spinal cord, 4, 344	substances on, in vitro, 8, 428
—, effect on response of molluscan heart to acetyl-	—, —, and effect of folic acid and thymine on, in
choline, <b>8</b> , 329	bacterial systems, 8, 424
—, effect on response of phrenic nerve-diaphragm	—, —, mechanism of, 3, 320
preparation to acetylcholine, electrical stimulation,	—, antimalarial action and toxicity of, 5, 439; 6, 194
and neostigmine (Prostigmin), 1, 54	—, blood level, tissue distribution and toxicity of, 2,
, effect on response to intradermal xanthosine, in	181
man, 12, 368	, effect in Babesia rodhaini infections, 11, 71
—, effect on skeletal-muscle response to acetylcholine,	-, effect in experimental Plasmodium berghei infec-
2, 241	tions, 5, 409
—, effect on skeletal-muscle response to neostigmine,	—, effect in experimental tuberculosis, 3, 156
	—, effect in experimental virus infection, 7, 465
9, 380	
—, effect on striated-muscle response to benzoyl-	—, effect on exoerythrocytic forms of <i>Plasmodium</i>
choline, 7, 332	gallinaceum, in vitro, 1, 167
, effect on vascular response to adrenaline, histamine	—, effect on intestinal response to acetylcholine, 7, 242
and sympathetic stimulation, 3, 354	—, effect on neuromuscular-blocking action of
—, effect on voluntary activity, in mouse, 8, 46	decamethonium and tubocurarine, 10, 147
—, inactivation of amine oxidase by, 11, 61	, effect on Plasmodium berghei and gallinaceum, in
—, inhibition of histamine release by antigen by,	vivo, <b>8</b> , 162
in vitro, 12, 39	, effect on Plasmodium gallinaceum, antagonism,
—, intracisternal, effect on cell content of cerebro-	cross-resistance and potentiation by pyrimethamine
spinal fluid, 3, 81	and sulphonamides, 10, 208
,, effect on suxamethonium-induced brady-	—, effect on response of various tissues to adenosine,
cardia, in conscious animals, 10, 266	4, 81

Prognanil (cant)
Proguanil (cont.) ——, intramuscular, blood level after, in animals, 3, 322,
323
, intravenous, effect on histamine-induced acid gastric secretion, in man, 3, 353
—, and its metabolite, antihexokinase action of, 12, 16 —, —, effect on neuromuscular and synaptic trans-
mission, 10, 147 —, metabolite of, antimalarial action of, and isolation
from facces and urine, 8, 93  —, effect on response of heart-lung preparation
to adenosine, 4, 89
——, pharmacological actions and toxicity of, 4, 14 ——, and related substances, effect on histamine-induced
gastric secretion, 3, 346 —, response of acid gastric secretion to, in man, 3, 350, 352
—, response of auricle to, effect of adrenaline and
choline and its derivatives on, 3, 341  —, response of blood pressure and respiration to, 5, 71  —, response of cardiac muscle to, effect of acetyl- choline and potassium ions on, 12, 74
—, response of intestine to, 7, 242 Promethazine (3277 RP):
, antiacetylcholine and antihistaminic actions of,
——, antiadrenaline and antihistaminic actions of, 7, 555 ——, antianaphylactic action of, 7, 625; 8, 461 ——, anticholinesterase action of, 9, 76
—, antifibrillatory action of, 9, 341 —, antihistaminic action-physical properties relations
in, 10, 270 —, effect in corneal tuberculosis, in rabbit, 8, 120
<ul> <li>—, effect on capillary permeability changes due to compression and polyvidone, 10, 227</li> <li>—, effect on cardiac response to histamine, 3, 178</li> </ul>
<ul> <li>effect on haemoconcentration and toxicity of histamine, in normal and adrenalectomized mice,</li> </ul>
5, 510 —, effect on nicotine-induced convulsions, 8, 62
<ul> <li>—, effect on skin reaction to intradermal Compound</li> <li>15, laudexium (<i>Laudolissin</i>) and tubocurarine, 7, 405</li> <li>—, effect on toxicity of snake venoms, 9, 410</li> </ul>
—, effect on uterine response to acetylcholine and histamine, 3, 176
—, hypnosis-prolonging and hypothermic actions of, 12, 247
—, inactivation of amine oxidase by, 6, 606 —, pharmacological actions of, 11, 339
—, pharmacological actions and toxicity of, 9, 392 —, response of body temperature and oxygen con-
sumption to, in normal and adrenalectomized rats, 5, 195
—, response of bronchial musculature to, 10, 230 —, response of heart to, 3, 178
—, response of uterus to, 3, 176 —, side-effects of, <b>8</b> , 187
—, slow muscle-contracting action of, 10, 233 —, subcutaneous, tissue distribution of, 8, 121
Promin. See Glucosulfone sodium
Prominal. See Methylphenobarbitone Propadrine, antiperistaltic action of, and effect of
sympatholytics on, 9, 131 —, inhibition of intestinal response to nicotine by,
and effect of sympatholytics on, 9, 131 —, ionization and pharmacological actions of, 9, 488
—, response of liver-fluke body movements to, <b>8</b> , 136 <b>Propamidine</b> (1: 3-di-p-amidinophenoxypropane):
—, in vitro antibacterial action and toxicity of, 3, 212

```
Propamidine (cont.)
     , catechol-amine release from isolated chromaffin
    granules by, 12, 61
    , development of bacterial resistance to, and cross-
    resistance with aminacrine (5-aminoacridine), peni-
    cillin and other diamidines, 3, 214
    -, effect on ganglionic transmission, 10, 105
   -, effect on pressor action of adrenaline, 1, 32
    -, histamine release by, effect of mepyramine on, in
    conscious dog, 6, 512
    histamine and 5-hydroxytryptamine release by,
    11, 205
    -, response of blood pressure, heart rate and respiration to, 5, 324
    -, toxicity of, 3, 215
    -, trypanocidal action and toxicity of, 1, 72
p - Propanesulphonylbenzaldehyde thiosemicarbazone,
    antituberculous action of, 4, 249
N-Propanesulphonylethyleneimine, antitumour, carcino-
    genic and cytotoxic actions and toxicity of, 9, 306
Propantheline, antianaphylactic action of, 10, 160
    , atropine-like, autonomic-ganglion-blocking and
    curare-like actions of, 9, 218
    , inhibition of pilocarpine-induced salivation by, in
    rabbits, 12, 53
     , pharmacological actions of, 12, 449
Prophenpyridamine. See Pheniramine
β-Propiolactone, antitumour, carcinogenic and cytotoxic actions and toxicity of, 9, 306
Propionamide, response of blood pressure, heart rate and
    respiration to, 5, 324
Propionate, response of normal and substrate-depleted
    auricles to, 5, 89, 99
Propionylcholine, enzymic, hvdrolysis of, 12, 320
    -, ganglion-stimulant action and phase-boundary
     potential of, 10, 220
    -, pharmacological actions of, 12, 30
    -, preparation, properties and stability of, 12, 38
  —, pressor action of, 7, 124
     , response of blood pressure and skeletal muscle to,
     10, 466
p-isoPropoxybenzaldehyde thiosemicarbazone, antituber-
     culous action of, 4, 249
p-isoPropoxybenzoic acid, preparation and properties of,
     8, 370
p-n- and -iso-Propoxybenzylideneacetone, anthelmintic
     action of, 3, 96
p-Propoxyphenyl propyl sulphone, antituberculous action
     of, in vitro, 3, 149
 1-p-isoPropoxyphenylethylamine, analgesic action and
```

tissue distribution of, 8, 366

isoPropyl alcohol. See Isopropyl alcohol

isoPropyl ethylphosphorofluoridate. See Ethyl sarin Propyl halides, larvicidal action against sclerostomes, 7,

n- and iso-Propyl N-p-(4-p-methylaminophenoxybut-2-enoxy)phenyl-N-methylcarbamate, schistosomicidal

levels, 9, 295

509

action of, 12, 329

, effect on adrenal ascorbic acid and cholesterol

—, effect on analgesic action of 1-p-cyclohexyloxyphenylethylamine, 9, 291
 —, toxicity of, effect of N-allyl-1-p-cyclohexyloxyphenylethylamine on, 9, 290
 1-p-isoPropoxyphenyl[1-14C]ethylamine, synthesis of, 8, 370
 2-Propoxyprocaine, local anaesthetic action of, 10, 240
 Propyl alcohol, larvicidal action against sclerostomes, 7,

n- and iso-Propyl 1-methyl-3-phenylpiperidine-3-carboxylate, analgesic action of, 1, 10

n- and iso-Propyl 1-methyl-4-phenylpiperidine-4-carboxylate, analgesic action of, 1, 6

isoPropyl methylphosphonofluoridate. See Sarin

isoPropyl pyrophosphate. See Tetraisopropyl pyrophosphate

isoPropyl isothiocyanate, effect on tumour growth, 6, 205 n- and iso-Propyl p-tolyl sulphone, antituberculous action of, in vitro, 3, 149
isoPropylallylbarbituric acid. See Aprobarbital

Propylamine, catechol amine release from isolated chromaffin granules by, 12, 61

, histamine release from lung tissue by, 8, 103

1-isoPropylaminomethylnaphth-2 ol, antimalarial action of, 12, 171

6-isoPropylaminomethyl-3: 4: 1-xylenol, oxytocic action, preparation and properties of, 12, 194

N-Propylatropinium, inhibition of gastric secretion by,

 $\omega$ -isoPropyldicyandiamide, effect on tumour growth, 6, 205

isoPropyldiguanide, effect on histamine-induced gastric secretion, 3, 348

, response of blood pressure and respiration to, 5, 72 2-Propyldihydromorphine, effect on adrenal ascorbic acid and cholesterol levels, 9, 296

Propylene glycol, intravenous, effect on water diuresis, 10, 308

, response of blood pressure to, 10, 309

-, response of skeletal muscle to, 4, 174

-, toxicity of, 3, 117

Propylene glycyl carbamate, effect on tumour growth, 6,

Propylene glycyl diethylcarbamate, effect on tumour growth, 6, 209

NS-Propyleneisothiourea. See 2-Amino 4(or 5)-methylthiazoline

isoPropylethylbarbituric acid. See 5-Ethyl-5-isopropylbarbituric acid

O-Propylformocholine. See Trimethyl(propoxymethyl)ammonium

Propyliodone, metabolism, pharmacological actions, toxicity and use as bronchographic contrast medium, 8, 166

, metabolite of, identification and isolation from urine, 8, 169

isoPropylnoradrenaline. See Isoprenaline

N-Propylnormorphine, effect on antitussive action of codeine and methadone, 10, 420

1-Propyl-1-phenyldithiobiuret, trypanocidal action and toxicity of, 8, 420 1-p-Propylphenyldithiobiuret, trypanocidal action and

toxicity of, 8, 420

4-Propylresorcinol, anthelmintic action of, 3, 99

S-Propylisothiourea, circulatory and respiratory reflex , effect on vasoconstrictor action of adrenaline, 3, 208 actions of, in normal and vagotomized cats, 5, 326

-, inactivation of amine oxidase by, 6, 257

-, pharmacological actions of, 7, 417

-, pressor action of, 3, 198

, response of phrenic nerve-diaphragm preparation to, 4, 318

Prostigmine. See Neostigmine

Prostate, effect of sulphadimidine (Sulphamezathine) on, in normal and castrated rats, 2, 87

-, effect of testosterone phenylpropionate propionate on, in rat, 8, 273

Prosympal. See 2-Diethylaminomethylbenzo-1: 4-dioxan Protamine. See Salmine

Protease, in serum, activation by agar, dextran and dextran sulphate, 11, 107

Proteins, in serum, binding of solapsone (Sulphetrone) by, and effect of p-aminosalicylate (PAS) on, 9, 271 oxidative iodination of, in vitro, 10, 1

Protein hydrolysate, combination with iron, physicochemical properties, preparation and toxicity of, **8**, 198

, oral and parenteral, effect in thermal shock, 3, 73

Proteinuria, induction by polymyxins, 7, 178, 249 Proteus vulgaris, bacteriostatic action of chlorhexidine (Hibitane) against, 9, 194

-, effect of cephalosporin N and penicillin on, 8, 253 -, effect of diamidines and halogenated diamidines on, in vitro, 3, 213

, effect of diazapyrenes and tertiary and quaternary phenanthridines on, 8, 139

, effect of phenanthridinium compounds on, in vitro, 5, 272

, effect of quinoxaline 1:4-dioxide on, in vivo and in vitro, 10, 394

Prothrombin time, effect of dicoumarol on, 2, 82

effect of 4: 6-dimethylpyrimidine derivatives on, in fowl, 2, 86

, effect of oral sulphonamides on, in fowl, 2, 79

Protoveratrine, effect on sensitivity of striated muscle to potassium ions, 5, 33

Pruritus, histamine-induced, 10, 183

Pseudomonas aeruginosa, effect of phenanthridinium compounds on, in vitro, 5, 272

Pseudomonas pyocyanea, bacteriophage of, effect of 1367 and nucleic acid derivatives on, 8, 143

-, effect of diazapyrenes and tertiary and quaternary phenanthridines on, 8, 139

, bacteriostatic action of chlorhexidine (Hibitane) against, 9, 194 -, effect of 1367 on, 8, 143

, effect of cephalosporin P<sub>1</sub> on, 6, 432

, effect of cetrimide and polymethylenebisisoquin-olinium compounds on, 8, 34

, effect of diamidines, halogenated diamidines and streptomycin on, in vitro, 3, 213

, effect of diazapyrenes and tertiary and quaternary phenanthridines on, 8, 139

Pseudomonas pyocyanea infections, experimental, effect of quinoxaline 1: 4-dioxide in, 10, 394

Psittacosis, experimental, effect of acridines in, 11, 220 -, effect of antibiotics in, 5, 611

-, effect of mepacrine and trypan red in, 7, 476

, effect of nitroakridin, penicillin and sulphonamides in, 3, 182

effect of quinoxaline 1:4-dioxide in, alone and with aureomycin or procaine penicillin, 8, 297

, effect of quinoxaline 1: 4-dioxide derivatives and related compounds in, 8, 297

Psittacosis virus, development of resistance and cross-resistance to quinoxaline and 2:3-dimethylquinoxaline 1: 4-dioxides and procaine penicillin, 8, 304

Psychomotor stimulants, effect on voluntary activity, in mouse, 8, 46

Pteridine O/129. See 2:4-Diamino-6:7-diisopropylpteridine

Pteridines, effect on Staphylococcus aureus and Streptococcus faecalis, in vitro, 7, 161

Pteroylglutamic acid, antagonists of, in bacterial systems, **12**, 521

Pulmonary reflexes, role of bronchial muscles in, 8, 315 Pulmonary stretch receptors, effect of 5-hydroxytryptamine on, 8, 238; 10, 69

, effect of Veriloid on, in cat and dog, 6, 677

- Pulse, response to vagal stimulation, effect of M&B 1950 on, 8, 308
- Pulse rate, effect of chlorpromazine and hyoscine on, **10**, 430
- r, effect of 5:6-dithiadecamethylenebis(trimethylammonium) on, 8, 118
- Pumpkin seed extract, anthelmintic action of, in vitro, 10, 7 Pupil. See Iris

- Purines, effect on antiviral action of 1367, 8, 144
- , response of blood pressure and intestine to, 12,
- **Putrescine** (tetramethylenediamine; 1: 4-diaminobutane): , catechol-amine release from isolated chromaffin granules by, 12, 61
- , effect on histaminase and histidine decarboxylase activities, 11, 121
- -, enzymic oxidation of, 5, 625
- -, effect of copper ions on, 8, 42
- histaminase inactivation and paramecia immobilization by, 12, 140
- , preparation and properties of, 5, 424
- Pyrethrum, effect on sclerostome larvae, 7, 521
- Pyribenzamine. See Tripelennamine Pyridine, anthelmintic action of, 3, 104; 10, 7
- , and derivatives, larvicidal action against sclerostomes, 7, 509
- Pyridines, anthelmintic action of, 3, 104
- Pyridine-3-aldoxime, reactivation of organophosphateinhibited cholinesterases by, 10, 464
- Pyridine-2-aldoxime methiodide, as antidote in anticholinesterase poisoning, 12, 340, 438
- , effect on neuromuscular-blocking action of decamethonium, suxamethonium (succinylcholine) and tubocurarine, 10, 494
- -, neuromuscular-blocking action of, 10, 492
- -, reactivation of organophosphate-inactivated acetylcholinesterase by, 10, 492
- -, reactivation of organophosphate-inactivated cholinesterases by, 10, 462; 11, 295
- , reversal of neuromuscular block due to anticholinesterases by, 10, 490
- Pyridine-3- and -4-aldoxime methiodide, reactivation of organophosphate-inactivated cholinesterase by, 10, 462
- Pyridium, effect in experimental filariasis, 5, 250
- Pyridoxal phosphate. See Codecarboxylase Pyridoxine, dietary, effect on adrenal pressor-amine and DOPA-decarboxylase levels, in X-irradiated rat, 6,
- , effect on antiviral action of mepacrine, 7, 463
- 2-Pyridylbenzamidine, response of blood pressure and respiration to, 5, 72
- 1-Pyrid-2'- and -3'-yldithiobiuret, trypanocidal action and toxicity of, 8, 420
- 1-Pyrid-3'-yldithiobiuret methochloride, trypanocidal action and toxicity of, 8, 420
- 4-Pyridylpyridinium, response of anterior preparation of
- Ascaris to, 3, 105

  trans 1 Pyrid 2' yl 3 pyrrolidin 1" yl 1 p tolylprop-1-ene. See Triprolidine
- 2-(Pyrid-2-ylthio)iminazoline, inactivation of amine oxidase by, 6, 258
- , response of blood pressure, heart rate and respiration, 5, 324

- S-Pyrid-2-ylisothiourea, inactivation of amine oxidase by, 6, 258
- Pyrilamine. See Mepyramine
- Pyrimethamine (2: 4-Diamino-5-p-chlorophenyl-6-ethylpyrimidine):
- , antibacterial and antimalarial actions and toxicity of, 6, 185
- , antimalarial action of, and effect of folic acid and thymine on, in bacterial systems, 8, 424
- -, effect in *Babesia rodhaini* infections, 11, 71
- , effect in experimental toxoplasmosis, 12, 185, 189
- -, effect on Plasmodium gallinaceum, antagonism, cross-resistance and potentiation by proguanil and sulphonamides, 10, 208
- -, effect on ventricular fibrillation, 12, 215
- , response of cardiac muscle to, effect of acetyl-choline and potassium ions on, 12, 74
- , with sulphadimidine, mode of action on Eimeria tenella, 11, 454
- Pyrimidines, effect on antiviral action of 1367, 8, 144
- , effect on tumour growth, 6, 206
- Pyrimidine-2-hydroxamic acid, reactivation of organophosphate-inactivated cholinesterase by, 10, 462
- Pyrogallaldoxime, as antidote in anticholinesterase poisoning, and toxicity, 11, 417
- , reactivation of organophosphate-inactivated cholinesterase by, 10, 462
- Pyronine B, effect in experimental typhus, and on rickettsiae, in vitro, 1, 18
- **Pyrophosphate**, effect on auricle response to acetylcholine, **5**, 358
  - , response of auricle to, 5, 107
- Pyrrole-2-aldoxime, reactivation of organophosphateinactivated cholinesterases by, 10, 464
- Pyrrolidine, pharmacological actions of, 4, 111
- Pyrrolidinyl alcohols, esters, tertiary and quaternary salts of, pharmacological actions of, 12, 447
- p-Pyrrolidin-1-ylbenzaldehyde 3-ethylisothiosemicarbazone, effect in experimental tuberculosis, and toxicity, 5, 178
- p-Pyrrolidin-1-ylbenzaldehyde guanylhydrazone, effect in experimental tuberculosis, and toxicity, 5, 178
- p-Pyrrolidin-1-ylbenzaldehyde thiosemicarbazone, antituberculous action of, 4, 249
- , effect in experimental tuberculosis, 5, 193
- 3-Pyrrolidin-1'-yl-1: 1-dithien-2"-ylbut-1-ene, analgesic action of, in man, 9, 106
- , response of blood pressure, heart rate and respiration to, and other side-effects, in man, 9, 109
- 2-Pyrrolidin-2'-ylethyl benzilate, pharmacological actions of, 12, 447
- 2-Pyrrolidin-1'-ylmethylnaphth-1-ol, antimalarial action of, 12, 171
- 6-Pyrrolidin-1'-ylmethyl-3: 4: 1-xylenol (Ro 2-6428):
- oxytocic action, preparation and properties of, 12,
- Pyrrolocaine. See 2-Thiazol-3'-ylethyl p-propoxybenzoate
- Pyruvate, effect on auricle response to acetylcholine, 5,
- , effect on auricle response to fumarate, iodoacetate and malonate, 5, 109
- , effect on oxygen uptake by malaria-parasitized erythrocytes, 3, 3
- -, enzymic oxidation of, effect of tri-o-cresyl phosphate on, 8, 111
- -, inhibition by mepacrine and quinine, 3, 4
- -, larvicidal action against sclerostomes, 7, 509

Ouinidine (cont.) Pyruvate (cont.) , response of body temperature to, in normal and , response of normal and substrate-depleted auricles to, 5, 89, 99 adrenalectomized mice, 3, 249 Pyruvate dehydrogenase, effect of di(chloroethyl) sul-, response of cardiac muscle to, effect of acetylresponse of liver-fluke body movements to, 8, 136 phone, divinyl sulphone and mustard gas on, 4, 60 Pyruvate oxidase, cerebral, toxicity of vesicants and other substances to, 4, 51 , response of phrenic nerve-diaphragm preparation -, effect of dicophane (DDT) on, in vitro, 4, 126 Pyruvic decarboxylase, inactivation by stilbamidine, 3, 12 to, 3, 239 , synthetic substitutes for, response of auricle to, 1, 90, 101 toxicity of, 1, 279 Q Quinidine-like action, and chemical structure, 1, 106 Quassia, effect on sclerostome larvae, 7, 522 -, of antihistaminics and procainamide, 9, 341 -, of chlorpromazine and promethazine, 11, 339 Quaternary compounds, ammonium, stimulant action on -, of conessine and its isomers, 3, 240 skeletal muscle, 10, 466 bisQuaternary compounds, heterocyclic, pharmacological actions of, 10, 124 -, of eserine, 9, 286 -, of local anaesthetics and spasmolytics, 1, 90 , of mepyramine (2786RP), 1, 279 Quinacrine, calculated safe dose of, 11, 158 Quinine, antiadrenaline and hypotensive actions of, 7, Quinalbarbitone, anaesthetic and ganglion-depressant actions of, 9, 175 555 -, antihexokinase action of, 12, 16 Quinapyramine (M7555, Antrycide): , absorption by normal and resistant strains of -, antimalarial action of, 2, 226; 3, 242 antimalarial action and toxicity of, 6, 194 Trypanosoma equiperdum, 7, 678 -, antimalarial action against exoerythrocytic forms -, degradation of, in vivo, 5, 453 of Plasmodium gallinaceum, in vitro, 1, 163 -, effect in Babesia rodhaini infections, 11, 71 -, in vitro antithyroid action of, measurement of, 10, 1 -, effect in experimental filariasis, 5, 257 -, effect in experimental Trypanosoma congolense -, calculated safe dose of, 11, 158 infections, and toxicity, 6, 648 -, colorimetric determination of, 5, 429 -, effect in experimental virus infection, 7, 465 , effect in experimental Plasmodium berghei infection, in mouse, 5, 409 -, induction of morphological changes in trypano--, effect in experimental tuberculosis, 3, 156 somes by, **6**, 328 -, effect in experimental virus infection, 7, 465 -, mode of action on trypanosomes, in vitro and in , effect on antifilarial action of diethylcarbamazine (Hetrazan), 5, 231 vivo, 6, 325 -, preparation of Trypanosoma equiperdum strains , effect on glucose metabolism of malarial parasite, resistant to, 7, 674 , production of inclusion bodies in trypanosomes by, -, effect on intestinal response to histamine, 7, 648 6, 328, 334 -, effect on Plasmodium berghei and gallinaceum, in , subcutaneous, absorption, excretion, persistence vivo, 8, 162 and tissue distribution of, 5, 445 -, effect on response of various tissues to adenosine, -, therapeutic and toxic concentrations of, 5, 452 4, 81 –, toxicity of, **6**, 630 , treatment of cattle trypanosomiasis with, 5, 452; 7, 586 -, histamine-releasing action of, 7, 646 -, larvicidal action against sclerostomes, 7, 509 -, oral, blood level after, in fowl, 2, 224 trypanocidal action of, 10, 454 , mechanism of, 6, 325 -, response of Ascaris muscle preparation to, 4, 150 -, response of hen caecum to, 4, 82 , trypanocidal action and toxicity of, 5, 25 , response of liver-fluke body movements to, 4, 10 Quinidine, antiacetylcholine and local anaesthetic actions Ouinine dihydrochloride, intramuscular, local effects of, of, 3, 108 12, 427 , antiadrenaline and hypotensive actions of, 7, 555 Quinoline, anthelmintic action of, in vitro, 10, 7 -, antifibrillatory action of, 9, 341 -, antihexokinase action of, 12, 16 -, antihistaminic and curarizing actions of, 4, 197 larvicidal action against sclerostomes, 7, 509 -, effect in experimental filariasis, 5, 257 isoQuinoline, anthelmintic action of, in vitro, 10, 7 effect on adenosine-induced auriculo-ventricular Quinoline-2- and -4-aldehyde thiosemicarbazone, antiblock, 8, 88 tuberculous action of, 4, 250 Quinol-6- and -8-yl p-tolyl sulphone, antituberculous -, effect on auricle response to acetylcholine and eserine, 9, 42 action of, in vitro, 3, 150 , effect on auricle response to electrical stimulation, Quinol-4-ylalanine, effect in experimental filariasis, 5, 251 1, 279 1-Quinol-5'- and -6'-yldithiobiuret, trypanocidal action -, effect on cardiac response to acetylcholine, 1, 105 and toxicity of, 8, 420 -, effect on chromodacryorrhoea induced by acetyl-1-isoQuinol-4'-yldithiobiuret, trypanocidal action and choline, in rat, 4, 187 toxicity of, 8, 420 , effect on skeletal-muscle response to acetylcholine, 1-Quinol-6'-yldithiobiuret methochloride, trypanocidal action and toxicity of, 8, 420 3, 238 -, effect on vascular response to adrenaline, histamine Quinones, antimitotic action of, mechanism of, 3, 263 and sympathetic stimulation, 3, 354 -, and sulphydryl-group uptake by, 3, 335 -, response of auricle to, 1, 101; 4, 15 Quinoxaline, response of anterior preparation of Ascaris -, effect of acetylcholine and eserine on, 9, 42

to, 3, 105

-, response of blood vessels to, 3, 354

- Quinoxaline 1: 4-dioxide, compatibility with antibiotics, 10, 395
- , and derivatives of, amoebicidal action, physicochemical properties and toxicity of, 8, 286 -, antiviral action of, 8, 297
- treatment of amoebiasis with, in man, 8, 288 -, effect in experimental bacillary infection, 10, 394 , side-effects of, in man, 8, 301

Quinoxaline 1-oxide, antiviral action of, 8, 302

- 2: 3-Quinoxalinylenebis(pyridinium methobromide) 1: 4dioxide, antiviral action of, 8, 301
- 2: 3-Quinoxalinylenebis(trimethylammonium methobromide) 1: 4-dioxide, antiviral action of, 8, 301

## R

- RD 347. See pp'-Di(iminazolin-2-yl)stilbene
- RD 1052. See S-(2-Naphth-1'-ylethyl)isothiourea RD 1056. See S-Phenanthr-9-ylmethylisothiourea
- See 2: 7-Di(iminazolin-2-yl)-9-phenylphen-RD 1367. anthridinine
- RD 1660. See 1-Methyl-1-phenyldithiobiuret
- RD 2579. See Quinoxaline 1: 4-dioxide
- Ro 1-3724/NI. See Triethyl(m-hydroxyphenyl)ammon-
- Ro 1-5348. See 3-Dimethylcarbamoyloxy-N-methylquinolinium
- See m-Hydroxyphenyltrimethylammonium Ro 2-2561. Ro 2-2581. See Trimetaphan
- Ro 2-2650. See m-Benzoyloxyphenyltrimethylammon-
- inm 2-2651. See (m-Acetoxyphenyl)diethylmethylammonium
- 2-2783. See Trimethyl-m-(m-toluoyloxy)phenylammonium
- Ro 2-3198. See Edrophonium
- Ro 2-6428. See 6-Pyrrolidin-1'-ylmethyl-3:4:1-xylenol Ro 3-0000 series, oxytocic action, preparation and
- properties of, 12, 194
- spasmolytic action of, 10, 95 3-0131. See 2-Diethylaminoethyl a-(2-dimethylaminoethoxy)-aa-diphenylacetate
- Ro 3-0190. See 2-Dimethylaminoethyl a-(2-dimethylaminoethoxy)-aa-diphenylacetate
- 3-0255. See 2-Morpholinoethyl a-(2-morpholinoethoxy)-aa-diphenylacetate
- 3-0257. See 2-Diethylaminoethyl α-(2-morpholinoethoxy)-aa-diphenylacetate
- 3-0275. See 2-(Allylmethylamino)ethyl a-(2-dimethylaminoethoxy)-aa-diphenylacetate
- See 2-(Diallylamino)ethyl α-(2-dimethyl-3-0276. aminoethoxy)-aa-diphenylacetate
- Ro 3-0277. See 2-Piperidinoethyl α-(2-dimethylaminoethoxy)-aa-diphenylacetate
- Ro 3-0280. See 2-Morpholinoethyl α-(2-dimethylaminoethoxy)-aa-diphenylacetate
- 3-0281. See 2-Diethylamino-1-methylethyl α-(2dimethylaminoethoxy)-aa-diphenylacetate
- 3-0282. See 2-(Methylisopropylamino)ethyl a-(2dimethylaminoethoxy)-aa-diphenylacetate
- 3-0289. See 2-Diethylaminoethyl a-2-(methylisopropylamino)ethoxy-aa-diphenylacetate
- 3-0340. See m-(Diethoxyphosphinyloxy)phenyltrimethylammonium
- Ro 3-0386. See 5: 6-Dithiadecamethylenebis(trimethylammonium)
- Ro 3–0397. See m-(Disec.-butoxyphosphinyloxy)phenyltrimethylammonium

- Ro 3-0411. See m-(Diisopropoxyphosphinyloxy)phenyltrimethylammonium
- 3-0412. See m-(Dimethoxyphosphinyloxy)phenyltrimethylammonium
- Ro 3-0419. See 3-Diethoxyphosphinyloxyquinoline
- Ro 3-0422 See 3-Diethoxyphosphinyloxy-N-methylauinolinium
- See 3-Thiapentamethylenebis(trimethyl-Ro 3-0438. ammonium)
- 3-0468. See 3-Thiahexamethylenebis(trimethylammonium)
- Ro 3-0472. See 3-Hydroxy-N-methylquinolinium
- See pp'-Pentamethylenedioxybis(trimethyl-RP 3565. phenylammonium)
- RP 3697. See Gallamine triethiodide
- Rabbit, adrenaline and noradrenaline in adrenals of, 6, 668
- , histamine metabolism in, 11, 472
- , lethal dose of arrow poison for, 8, 80
- -, sensitivity to atropine, 12, 54
- -, sensitivity to dialkyl phosphorofluoridates, 2, 236
- -, sensitivity to methonium compounds, 4, 386 , sensitivity to toxic action of licheniformin A5, 5,
- , toxicity of methyl fluoroacetate to, 3, 119
- Rabies, experimental, effect of nitroakridin in, 3, 182
- protective action of mepacrine in, 7, 474 p-Radioiodonitrosobenzene. See p-[131] Iodonitrosobenzene
- p-Radioiodophenylhydroxylamine. See p-[131]-Iodophenylhydroxylamine
- Rastinon. See Tolbutamide
- Rat, albino, cholinesterases of, effect of tri-o-cresyl phosphate on, 7, 266
- growth and thyroid of, effect of methylthiouracil and thiouracil on, 1, 128
- , response to antidiuretic hormone, effect of season on, 12, 100
- , sensitivity to adrenaline and noradrenaline of different strains, 9, 499
- sensitivity to dialkyl phosphorofluoridates, 2,
- -, sensitivity to methonium compounds, 4, 386
- , sensitivity to toxic action of licheniformin A5, 5, 480
- -, toxicity of methyl fluoroacetate to, 3, 119 , toxicity of phosgene to, 1, 81
- Rat poison, from white squill, preparation and constituents of, 8, 440
- Rauwolfia alkaloids, effect on anticonvulsant action of anti-epileptics, 11, 141
- , effect on convulsant action of various substances, 11, 143
- Ravocaine. See 2-Propoxyprocaine
- X-Rays, effect on adrenal pressor-amine levels during insulin-induced hypoglycaemia, 6, 346
- effect on adrenal pressor-amine and hepatic DOPA-decarboxylase levels, 6, 342
  - -, effect on adrenal weight, in rat, 6, 343, 348
- , effect on intestinal response to acetylcholine and histamine, and on intestinal cholinesterases, 7, 58
- Razor shell. See Solen siliqua
- Receptor theory, modified, 11, 379
  Rectal caecum, fowl's, as test preparation for catechol amines, 8, 66
- Red cell volume, packed, effect of polymyxins on, in dog,
- Reflexes, baroceptive, inhibition by ganglion-blocking agents, 9, 477

Defference (court)	December (cont)
Reflexes (cont.)	Reserpine (cont.)
—, cardiovascular, effect of methonium compounds	—, effect on hypothalamic pressor action, in conscious
on, 6, 162	cat, 12, 8
—, carotid sinus, inhibition by ganglion-blocking	, effect on plasma-adrenaline and -noradrenaline
agents, 9, 477	levels, 12, 532
—, —, and splenic contraction, 5, 505	—, effect on response of human placental vessels to
—, hypothalamic, medullary and sciatic pressor, effect	adrenaline and 5-hydroxytryptamine, 12, 410
of chlorpromazine on, in anaesthetized and decorti-	—, hypnosis-prolonging and hypothermic actions of,
cated cats, 9, 389	12, 245
—, hypothalamic, medullary and sciatic vasomotor,	—, intraventricular, effect in conscious cat, 12, 529
effect of chlorpromazine on, 9, 389	—, response of human placental vessels to, 12, 410
—, monosynaptic, effect of asphyxia and tubocurarine	—, response of mast cells to, in rat, 11, 411
on, 6, 540	, response of skeletal and smooth muscle to, 12, 517
—, mono- and poly-synaptic, effect of strychnine and	—, spinal-reflex depression by, and effect of various
tubocurarine on, 6, 551	antagonists on, 11, 165
—, peristaltic, of ileum, effect of ω-phenylenealkylbis-	Resin, fumaric-modified, effect on effectiveness of oral
(trialkylammonium) compounds on, 8, 306	penicillin preparation, 6, 97
—, pilomotor axon, induction by choline phenyl ethers	Resin 731, dehydrogenated, enhancement of effectiveness
and nicotine, 8, 150	of oral penicillin preparation by, and toxicity, 6, 97
—, respiratory, inflation, effect of pentobarbitone and	Resinic acid, aluminium and calcium salts, enhancement
morphine derivatives on, 9, 338	of effectiveness of oral penicillin preparation by,
—, sciatic pressor, inhibition by chlorpromazine, in	6, 89
decorticated cat, 9, 389	Resorcin blue, effect in experimental filariasis, 5, 256
—, spinal, effect of anoxia, ether, nicotine, nitrous	Resorcinol, anticholinesterase and anticurare actions of,
oxide and strychnine on, 9, 233	4, 361
—, —, effect of benzilic acid derivatives on, 6, 640 —, —, effect of carbidium on, 5, 304	—, antithyroid action of, and inhibition of oxidative
—, —, effect of carbidium on, 5, 304	protein iodination in vitro, 10, 1
,, effect of curare and related curiform sub-	—, larvicidal action against sclerostomes, 7, 509
stances on, 6, 462	Resorcinyl methyl ketone. See 2:4-Dihydroxyaceto-
—, —, effect of curare and tubocurarine on, and	phenone
modification by various substances, 7, 14	$\beta$ -Resorcylic acid. See 2:4-Dihydroxybenzoic acid
—, —, effect of eserine on, in cat, 9, 84 —, —, effect of gallamine triethiodide, RP 3565,	Respiration, cerebral, response to convulsants and elec-
—, —, effect of gallamine triethiodide, RP 3565,	trical stimulation, in vitro, 6, 449
tetraethylammonium and tetramethylammonium on,	—, of intestinal muscle, response to reserpine, 12, 517
7, 1	-, of Schistosoma mansoni, effect of inhibition on
—, effect of intrathecal chlorocresol and potas-	infections, 8, 15
sium metabisulphite on, 5, 57	, of separated cerebral cortex, response to acetyl-
—, effect of M&B 1950 on, in cat, <b>8</b> , 310 —, effect of mephenesin ( <i>Myanesin</i> ) on, <b>1</b> , 270;	choline, atropine, cocaine, eserine, hyoscine, hyo-
, effect of mephenesin ( <i>Myanesin</i> ) on, 1, 270;	scyamine and chemical and electrical stimulation,
2, 244, 246	6, 531
,, in decerebrate, spinal and strychnine-	-, reflex action of amidines, diguanides and guani-
treated cats, 7, 655	dines on, 5, 65
—, —, effect of methyl fluoroacetate on, 3, 121, 122 —, —, effect of nicotine on, 7, 19	—, reflex action of <i>iso</i> thioureas on, 5, 324 —, response to 295C51 and 405C49, 8, 174
effect of tubourgrine on 5 51 55	—, response to 489C49, dithienylbutenylamines, (—)-
—, —, effect of tubocurarine on, 5, 51, 55 —, —, effects of various substances on, 11, 161	
—, —, chects of various substances on, 11, 101 —, —, inhibition by anticholinesterases, 8, 474	methadone, morphine and pethidene, in man, 9, 106 —, response to acetylcholine, adrenaline, histamine,
, study methods for, 9, 229	nicotine, noradrenaline and vagal stimulation, effect
—, vasodilator, of amidines, 5, 328	of porphobilinogen and uroporphyrin on, 9, 91
Regitine. See Phentolamine	, response to acetylcholine and muscarine, 12, 47
Renal function, changes in lead-poisoned rat, 7, 349	-, response to according and arrow poison, 8, 79
, effect of calomel, mersalyl and theophylline on, in	—, response to adenosine triphosphate, adenylic acid,
rat, 1, 194	creating phosphate and sodium pyrophosphate, 3,
Renal tubules, permeability of, effect of benzoylmethyl	280
salicylate and phenylbutazone on, 9, 166	-, response to adrenaline and noradrenaline, 11,
Renal volume, effect of hydrogenated ergot alkaloids on,	346
in decerebrate and spinal cats, 8, 202	—, —, in conscious man, <b>8</b> , 98
Renin, cardiac irregularity production by, 11, 134	—, response to (7-amino-9 p-aminophenyl-10-methyl)-
, release of smooth-muscle stimulant from serum by,	and (2: 7-diamino-10-methyl-9-phenyl)-phenenthri-
11, 116	dinium, 1, 72
Reserpic acid, intraventricular, effect in conscious cat,	, response to 2-amino-1: 2-diphenylethanol, 2, 211
12, 529	—, response to amphetamine, in cat, 11, 178
Reserpine, central action of, and its antagonism, 11, 175	—, response to amphetamine and octylamines, 7, 42
, effect on amine release from mast cells, in rat,	, response to analgesics, and antagonism by nalor-
<b>11,</b> 411	phine, 10, 420
—, effect on anticonvulsant action of anti-epileptics,	, response to aryldiguanides and 5-hydroxytrypt-
11, 141	amine, in cat, 12, 484
—, effect on central action of 5-hydroxytryptamine, 11,	, response to basic ketones and related compounds,
175	7, 89

Respiration (cont.)	Respiration (cont.)
	-, response to methadone (amidone) and its optical
230	isomers, <b>4</b> , 100
, response to 5-benzyloxygramine and methyl-	—, response to methonium compounds, 6, 161, 165
medmain, in cat, 11, 177	—, response to methyl ester of $\gamma$ -crotonic betaine, and
—, response to capsaicin and its analogues, 10, 175	effect of atropine and vagotomy on, 4, 229
—, response to carbidium, 5, 301	, response to methyl fluoroacetate, 3, 122
, response to carbon dioxide inhalation, 12, 294	—, response to morpholinoethylnorpethidine, 11, 32
, response to cocaine, procaine and substituted isopropyl phenylcarbamates, 1, 275	, response to murexine, 12, 176, response to nicotinamide, 8, 49
, response to codeine, morphine, pentobarbitone and	-, response to oenanthe tincture and oenanthetoxin,
pholcodine, 9, 335	11, 228
, response to Compound 15, laudexium (Laudolis-	, response to phosgene, 2, 45
sin) and tubocurarine on, 7, 405	—, response to piperidine, pyrrolidine and urinary
, in conscious man, 7, 412	base B concentrates, 4, 117
, response to conessine, 3, 242	, response to polymyxins, 10, 218
, response to curare and related curariform substances, 6, 461	—, response to procaine infusions, 3, 129 —, response to proguanil ( <i>Paludrine</i> ) and vagal
—, response to decamethonium and 5:6-dithiadeca-	stimulation, 4, 17
methylenebis(trimethylammonium), 8, 116, 118	, response to salmine, 4, 137
, response to decamethonium and tubocurarine,	, response to sodium azide, 4, 4
4, 385; 7, 603	—, response to sodium salicylate, 12, 502
—, response to decapyrrolidinium, 10, 130	, response to solapsone (Sulphetrone), 3, 24
, response to diethyl <i>p</i> -nitrophenyl phosphate, in	, response to stimulation of superior laryngeal and
rabbits, 8, 208 —, response to diethyl(3-hydroxy-3: 3-diphenyl-	vagus nerves, effect of Lergigan on, 8, 183 ——, response to substituted a-methylbenzylamines, 8, 24
propyl)methylammonium, <b>6</b> , 565	, response to synthetic oxytocics, 12, 202
—, response to dimercaprol (BAL), 3, 85	—, response to thialbarbitone (Kemithal) and thio-
—, response to dimethyl-1-p-phenoxyphenylethyl-	pentone (Pentothal), 1, 217
amine, 9, 292	, response to toxiferines, 6, 304
—, response to diphenhydramine, mepyramine and	—, response to tubocurarine, 5, 53, 55
phenyldiguanide, mode of action of, 7, 451 —, response to dithienylalkenylamines, 8, 6	—, stimulatory action of palorphine on mechanism
, response to difficulty and other dialkyl phosphoro-	—, stimulatory action of nalorphine on, mechanism of, 11, 15
fluoridates, in animals and man, 2, 236	See also Hyperpnoea
, response to gallamine triethiodide, RP 3565,	Respiratory failure, in anticholinesterase poisoning, 8, 466
tetraethylammonium and tetramethylammonium,	Respiratory volume, in guinea pig, 8, 461
7, 1	See also Tidal volume
, response to hayatin methiodide, <b>8</b> , 399, response to hexamethylenebis(4-methylmorpholin-	<b>Reticulocytosis,</b> production of, in rodents, 12, 17 <b>Rhodamine B,</b> effect on morphology of <i>Trypanosoma</i>
ium), 10, 125	equiperdum, 7, 680
, response to hexobarbitone and methylpentynol,	—, effect on Plasmodium berghei and gallinaceum, in
12, 479	vivo, 8, 162
, response to histamine, in horse, 7, 30	—, trypanocidal action of, 7, 681
, effect of mepyramine (2786 RP) on, 1, 282	Rhodanine, derivatives of, anthelmintic action of, in vitro,
, response to Hoechst 10581, methadone (amidone)	10, 7  Phodomin symthesis of effect of different common honory.
and phenadoxone, and effect of amphetamine, nikethamide and picrotoxin on, 5, 132	<b>Rhodopsin</b> , synthesis of, effect of di(p-aminophenoxy)-alkanes on, in frogs, 12, 468
, response to 5-hydroxytryptamine, 10, 66; 11, 36	Rhoduline red, effect on Litomosoides carinii, 7, 495
—, response to 5-hydroxytryptamine and its antagon-	Rhoduline violet, effect on Litomosoides carinii, 7, 495
ists, 11, 289	Riboflavine, effect on antiviral action of mepacrine, 7, 463
, response to 5-hydroxytryptamine and a-naphthyl-	Ribonucleic acids, effect on antiviral action of 1367, 8,
isothiourea, effect of vagal cooling and vagotomy on,	144  Dibatai bunut infections superimental effect of
8, 238 —, response to inhalation anaesthetics, 11, 399	Rickettsia burneti infections, experimental, effect of 2:3-dimethylquinoxaline 1:4-dioxide on, 8, 301
, response to intracisternal amethocaine, 3, 81	Rift Valley fever, experimental, antiviral action of
—, response to intraperitoneal tryptamine, in rat, 8,	acridines in, 11, 220
410	—, —, effect of mepacrine and other acridines in,
—, response to intrathecal chlorocresol, 5, 57	7, 479
, response to intravenous hydroxybenzoates, 11, 364	—, —, protective action of mepacrine in, 7, 474
, response to intravenous morphine, 7, 546, response to intravenous radioactive palladium	Ringer's solution, intracisternal, effect on cell content of cerebrospinal fluid, 3, 81
colloid, 7, 574	Rivanol. See Ethacridine
, response to intravenous Veriloid, and effect of	Rock phosphate, effect on sclerostome larvae, 7, 521
	Rock phosphate, check on scienostonic farvac, 7, 321
vagal cooling on, in cat and dog, 6, 677	Rodenticidal action, of scilliroside and white squill
vagal cooling on, in cat and dog, 6, 677 —, response to irritant-gas inhalation, in different	Rodenticidal action, of scilliroside and white squill glycosides, 8, 440
vagal cooling on, in cat and dog, 6, 677  —, response to irritant-gas inhalation, in different species, 1, 81	Rodenticidal action, of scilliroside and white squill glycosides, 8, 440 Rogitine. See Phentolamine
vagal cooling on, in cat and dog, 6, 677 —, response to irritant-gas inhalation, in different	Rodenticidal action, of scilliroside and white squill glycosides, 8, 440

Salicylic acid, sodium salt (cont.) Rouleaux formation, effect of dextran sulphate and -, protective action in serum-induced myoheparin on, 8, 345 Rous sarcoma virus, as test organism for antiviral action, carditis, in rabbit, 5, 9 -, response of respiration to, 12, 502 techniques and results with, 7, 277 -, response of tissue respiration to, 9, 262 , effect of diazapyrenes and tertiary and quaternary phenanthridines on, 8, 139 , with and without hyaluronidase, effect on Rubijervine, effect on sensitivity of striated muscle to spreading of intradermal Thorotrast, 9, 349 Saligenin, response of auricle to, 1, 102 potassium ions, 5, 33 Saline, effect on water diuresis, 5, 499 Russell viper venom, coagulant action of, inhibition by , hypertonic, effect on permeability of blood-brain dextran sulphate and heparin, 10, 317 Rutin, inhibition of histamine release by antigen by, barrier, 5, 151 , hypertonic and normal, intramuscular, local effects in vitro, 12, 39 of, 12, 427 , intra-atrial and intravenous, effect on tidal air, in S208. See (m-Dimethylcarbamoyloxyphenyl)triethylnormal and vagotomized cats, 8, 317 -, normal, intracisternal, effect on cell content of ammonium cerebrospinal fluid, 3, 81 See m-Dimethylcarbamoyoxy-NN-dimethyl-S220/5. intrathecal, effect on cell content and pressure aniline N-oxide of cerebrospinal fluid, in dog, 4, 330 SC-1718 and -2159, antiperistaltic and mydriatic actions of, development of tolerance and cross-tolerance , subcutaneous, effect on adrenal ascorbic acid level, with methonium compounds to, 10, 279 in rat, 6, 295 SC-1919. See Butyltriethylammonium See also Sodium chloride Sdt 000 series, antifilarial action of, 5, 245 Saliva, release of smooth-muscle stimulant from serum SKF 501. See 2-Chloroethylethylfluoren-9'-ylamine by, 11, 115 SKF 688A. See Phenoxybenzamine Salivary glands, cholinesterase activity of, effect of Su-3088. See Chlorisondamine tetraethyl pyrophosphate on, in vitro and in vivo, SY 28. See 2-Bromoethylethyl(naphth-1-ylmethyl)amine , sensitivity to acetylcholine, adrenaline and anti-Saccharated iron oxide, anticoagulant, capillary-damaging and haemolysing actions of, 9, 103 cholinesterases, effect of denervation on, 9, 452 , submaxillary, anticholinesterase and sialogenous biochemical and physical properties and pharmacoactions of anticholinesterases in, 9, 447 logical actions of, 10, 376 -, augmented- and diminished-secretion phen-, intravenous, plasma-iron level, urinary iron excreomena in, 9, 449 tion and tissue-fluid distribution after, 8, 371 -, block phenomena in, 9, 448 , physico-chemical properties and toxicity of, 8, 198 -, cholinesterases in, in cat and dog, 9, 447 Safranine, effect in experimental typhus, and on ricket-Salivation, induced by anticholinesterase, effect of tsiae, in vitro, 1. 18 adrenaline and sympathetic stimulation on, 9, 450 Safranine B, effect on Litomosoides carinii, 7, 495 -, induced by carbachol, effect of atropine, hexa-Safranine T, effect in experimental virus infection, 7, 469 methonium and tetraethylammonium on, 6, 615 , effect on Litomosoides carinii, 7, 495 , —, effect of atropine, methanthelinium and propantheline on, 9, 221 Safranine dyes, antifilarial action-structure relations in, 7, 495 -, effect of chlorpromazine on, 9, 397 Safrole oxide, antitumour and cytotoxic actions of, 6, 237 -, effect of M&B 1950 on, 8, 308 Salicylaldoxime, as antidote in anticholinesterase poison--, effect of polymethylenebis(4-methylmorphoing, and toxicity, 11, 417 linium, 1-alkyl-piperidinium and -pyrrolidinium) on, , reactivation of organophosphate-inactivated cholin-10, 124 esterase by, 10, 462 , induced by pilocarpine, effect of diethyl(3-hydroxy-Salicylamide, analgesic action of, 11, 22 3: 3-diphenylpropyl)methylammonium on, 6, 565 Salicylanilide, effect on sclerostome larvae, 7, 521 Salicylate. See under Salicylic acid -, inhibitors of, 12, 53 Salicylhydroxamic acid, reactivation of organophosphate--, induced and spontaneous, effect of anticholinesterases on, 9, 441 inactivated cholinesterase by, 10, 462 , induction by dyflos and other dialkyl phosphoro-Salicylic acid, antianaphylactic action of, 10, 160 fluoridates, in animals, 2, 236 -, effect on curarizing action of tubocurarine, 4, 359 -, induction by methyl ester of  $\gamma$ -crotonic betaine, salts of, excretion in normal and uraemic subjects, 4, 230 10, 484 -, inhibition of. See Antisialogenous action , sodium salt, effect on blood-glucose level, in rat, -, response to adrenaline and parasympathetic and , effect on permeability of capillaries, kidney, sympathetic stimulation, effect of choline 2:6-xylyl ether on, 12, 300 periarticular tissue and synovial membrane, 8, 132 , response to 1-alkyl-2-hydroxyalkylpyrrolidine esters -, effect on vascular action of 5-hydroxytryptand their quaternary derivatives, 12, 447 amine and noradrenaline, 12, 498 -, response to atropine and hexamethonium, 11, 233 glycogenolytic and hyperglycaemic actions -, response to 5-benzyloxygramine, methylmedmain -, inhibition of histamine release by, 11, 357 and morphine, in cat, 11, 177 -, response to choline phenyl ethers, 12, 315 -, inhibition of histamine release by antigen by, -, response to curare, 6, 462 in vitro, 12, 39 -, inhibition of 5-hydroxytryptamine-induced -, response to decapyrrolidinium, 10, 130 oedema by, in rat, 12, 28 , response to 3-diethoxyphosphinyloxy-N-methyl--, intravenous, hyperpnoea due to, 11, 364 quinoline, 9, 163

SOBJECT	INDEX
Salivation (cont.)	Sarin, anticholinesterase and paralysing actions of, in
, response to dimercaprol (BAL), 3, 85	fowl, 9, 145
, response to halothane (Fluothane), 11, 406	, bronchoconstrictor and pulmonary vascular actions
—, response to morpholinoethylnorpethidine, 11, 32	of, 12, 504
—, response to murexine, 12, 176	——, central action of, on respiratory centre, <b>8</b> , 470
, response to muscarine, 12, 51	—, effect on cholinesterase activities in brain, plasma and spinal cord, in fowl, 9, 147
, response to proguanil ( <i>Paludrine</i> ), <b>4</b> , 18 , response to suxamethonium ( <i>succinylcholine</i> ), in	—, effect on induced and spontaneous salivation by
cat and dog, 8, 20	denervated gland, 9, 452
, response to synthetic oxytocics, 12, 202	—, hypotensive action of, <b>8</b> , 473
—, response to toxiferines, 6, 307	—, inactivation of acetylcholinesterase by, reversal by
, response to tubocurarine, 5, 54	oximes, 10, 492
Salmine, intravenous, blood level after, 4, 139	—, inactivation of cholinesterase by, reversal of, 10, 462
—, toxicity of, 4, 135	—, neuromuscular-blocking action of. 8, 468
Salmonella aertryke, effect of diazapyrenes and tertiary and quaternary phenanthridines on, 8, 139	—, —, reversal by oximes, 10, 490 —, response of blood pressure and heart rate to, in
Salmonella cholerae-suis and dublin, effect of dapsone	rat, 10, 12
and sulphonamides on, in vitro, 7, 190	Sarin poisoning, antidotes in, atropine and oximes as,
Salmonella dublin, pullorum and typhi-murium, bacterio-	12, 340
static action of chlorhexidine (Hibitane) on, 9, 194	—, —, hydroxamic acids and oximes as, 11, 417
Salmonella enteritidis, flexneri and typhi-murium, effect	—, effect of blood-cholinesterase activity on, 12, 382
of diamidines and halogenated diamidines on, in	, respiratory failure in, 8, 466
vitro, 3, 213	Schistosoma japonicum and mansoni, effect of di(p-amino-
Salmonella enteritidis, paratyphi, typhi and typhi-murium, effect of cephalosporin N and penicillin on, 8, 253	phenoxy)alkanes on, 10, 191  Schistosoma mansoni, acetylcholinesterase activity of, 7,
Salmonella enteritidis and typhi, effect of cephalosporin	563
P <sub>1</sub> on, <b>6</b> , 432	—, glycolytic enzymes of, effect of antimonials and
Salmonella typhi, effect of cetrimide and polymethylene-	oxophenarsine on, 9, 459
bisisoquinolinium compounds on, 8, 34	, lactic dehydrogenase of, kinetics of, 8, 431
—, effect of dapsone (diaminodiphenylsulphone) and	, respiratory inhibition in, effect on infections with,
solapsone (Sulphetrone) on, in vitro, 3, 24	8, 15
——, effect of nisin on, in vitro, 7, 441 ——, effect of phenanthridinium compounds on, in vitro,	Schistosoma spp., lactic dehydrogenase of, effect of specific antisera on, 9, 182
5, 272	Schistosome homogenates, glycolysis of, effect of anti-
—, effect of polymyxins on, in vitro, 7, 171	monials and oxophenarsine on, 9, 459
Salmonella infections, experimental, effect of diamidines	,, effect of phosphofructokinase and trivalent
in, 3, 216	organic antimonials on, 12, 161
, effect of notatin in, 1, 230	Schistosomiasis, treatment with lucanthone (Miracil D)
—, effect of polymyxins in, 7, 172 —, effect of quinoxaline 1: 4-dioxide in, 10, 394  Sandosten Sea Thenslidine	and Miracil A, B, and C, in man, 4, 68
Sandosten. See Thenalidine	Schistosomicidal action, of p-aminophenoxyalkanes, 11, 367
Sanocrysin, effect in experimental filariasis, 5, 257	, of p-aminophenoxy- and di(p-aminophenoxy)-
Santonic acid, response of anterior preparation of	alkanes, effect of ring-substituents on, 11, 375
Ascaris to, 3, 94	, of di(p-aminophenoxy)alkanes and related com-
d- and l-desmotropoSantonin, response of anterior	pounds, 10, 191; 12, 323
preparation of Ascaris to, 3, 94	, of trivalent organic antimonials, 12, 159
Santonin, anthelmintic action of, 3, 93	Schradan, calculated safe dose of, 11, 159
—, effect on sclerostome larvae, 7, 521 —, response of <i>Ascaris</i> muscle preparation to, 4, 147	Sciatic nerve, localization of intrathecal and intravenous dibromoprocaine in, 4, 336
, response of liver-fluke body movements to, and	Sciatic nerve—gastrocnemius preparation, cat, response to
effect of amphetamine on, 4, 10	489C49, <b>9</b> , 111
<i>l-desmotropo-β-Santonin</i> , response of anterior prepara-	, response to adrenaline, and effect of guani-
tion of Ascaris to, 3, 94	dine, methylisothiourea and neostigmine on, 4, 320
β-Santonin, anthelmintic action of, 3, 94	—, —, response to adrenaline and noradrenaline.
ψ-Santonin, response of anterior preparation of Ascaris	and effect of neostigmine on, 4, 378
to, 3, 94 Santonin oxime, anthelmintic action of, 3, 94	, response to alkylisothioureas and guanidine,
Santoninic acid, anthelmintic action of, 3, 94 Santoninic acid, anthelmintic action of, 3, 94	and effect of neostigmine and tubocurarine on, 4, 320 —, response to benzoylcholine, 7, 333
d- and l-Santonous acid, response of anterior preparation	, response to benzoyicholine, 7, 333
of Ascaris to, 3, 94	promethazine, 9, 393
Saponin, catechol-amine release from isolated chromaffin	-, -, response to curare and related curariform
granules by, 12, 61	substances, 6, 461
Saponins, larvicidal action against sclerostomes, 7, 509	,, response to decamethonium, gallamine (Flax-
Sarcinea lutea, effect of cephalosporin N and penicillin	edil) and tubocurarine, effect of tetraethylammonium
on, 8, 253 Sarcoma Fujinami and Rous effect of menacrine on	on, 5, 204

monary vascular actions atory centre, 8, 470 tivities in brain, plasma ontaneous salivation by nesterase by, reversal by se by, reversal of, 10, 462 ction of. 8, 468 **0**, 490 re and heart rate to, in tropine and oximes as, d oximes as, 11, 417 ase activity on, 12, 382 oni, effect of di(p-aminoinesterase activity of, 7, ect of antimonials and inetics of, **8**, 431 effect on infections with, rogenase of, effect of olysis of, effect of antion, 9, 459 ctokinase and trivalent 161 lucanthone (Miracil D) man, 4, 68 ninophenoxyalkanes, 11, d di(p-aminophenoxy)ituents on, 11, 375 canes and related comonials, 12, 159 , 11, 159 rathecal and intravenous aration, cat, response to ine, and effect of guanineostigmine on, 4, 320 ine and noradrenaline, **, 4**, 378 hioureas and guanidine, d tubocurarine on, 4, 320 choline, 7, 333 omazine, pethidine and and related curariform nonium, gallamine (Flaxof tetraethylammonium on, 5, 204 , response to F 2512, F 2557 and gallamine triethiodide (F 2559), 4, 24 -, response to gallamine triethiodide, RP 3565 and tetramethylammonium, 7, 1

7, 479

Sarcoma, Fujinami and Rous, effect of mepacrine on,

, Jensen, inhibition by triethylenephosphoramide,

Sciatic nerve-gastrocnemius preparation, cat (cont.) Shigella flexneri, shigae and sonnei, effect of cephalosporin N and penicillin on, 8, 253 -, response to neostigmine, effect of adrenaline and methyladrenaline on, 7, 345 effect of cephalosporin P<sub>1</sub> on, 6, 432 -, and effect of guanidine and methyliso-Shigella paradysenteriae, effect of polymyxins on, in vitro, thiourea on, 4, 320 Shigella shigae, effect of nisin on, in vitro, 7, 441 -, response to ω-phenylenealkylbis(trialkylammonium) compounds, 8, 306 Shigella shigae and sonnei, effect of diazapyrenes and -, response to proguanil (Paludrine), 4, 16 tertiary and quaternary phenanthridines on, 8, 139 Shigella sonnei infections, experimental, effect of quin--, response to tetraethylammonium, effect of neostigmine on, 5, 208 oxaline 1: 4-dioxide in, 10, 394 Shock, anaphylactic, effect of 295C51, 405C49 and mepyramine in, 8, 172 -, cat and dog, response to hayatin methiodide and tubocurarine, 8, 399 -, frog, response to cocaine, mephenesin (Myanesin), -, effect on capillary permeability, 8, 416 and procaine, 2, 242 , effect on mast cells and plasma-histamine , —, response to tolazoline (*Priscol*) and its *N*-methyl derivative, 3, 260 level, in rat, 12, 453 -, and histamine release, in rabbit, 8, 412 -, protection against. See Antianaphylactic -, rat, response to cholinesterase, 6, 149, 150 , response to cholinesterase and gallamine action triethiodide (Flaxedil), in dyflos(DFP)- and neostig-, haemorrhagic, histamine and traumatic, effect in mine-poisoned rats, 7, 482 adrenaline, cortisone and deoxycorticosterone in, of adrenalectomized rats, 7, 287 , histamine, effect of 2-diethylaminoethyl  $\alpha$ -(2-Scillaren A, effect on response of sympathetic ganglia to acetylcholine, 9, 324 Scilliroside, cardiotoxic and rodenticidal actions of, 8, 441 dimethylaminoethoxy)-aa-diphenylacetate and di-Sclerostomes, effect of various substances on free-living phenhydramine (Benadryl) in, 6, 638 insulin, effect on permeability of blood-brain barrier, 5, 151 stages of, 7, 509 Scopolamine. See Hyoscine , mustard gas and thermal, treatment with oral and Sea anemone extract, pruritogenic fraction of, histamine and slow muscle-contracting substance release by, parenteral glucose, protein hydrolysates and sodium salt solutions, 3, 72 9, 49 Sedatives, antianaphylactic action of, 10, 160 -, protamine, blood changes during, 4, 139 -, effect of evisceration, cord section and various , potentiation of barbiturate hypnosis by, 12, 245 Seeds, germination and growth of, effect of ali-esterase substances on, 4, 138 Side-effects, of drugs, evaluation of, 8, 187 inhibitors on, 8, 219 Seizures. See under Convulsant Silicofluorides, larvicidal action against sclerostomes, 7, Selenium methylene blue, effect in experimental typhus, 1, 17 Skatole, effect on cholinesterases, 8, 391 , effect on typhus rickettsiae, in vitro, 1, 18 -, effect on intestinal metabolism and response to Semicarbazide, effect on pressor action of adrenaline, 1, acetylcholine, histamine and potassium ions, 8, 389 -, effect on striated-muscle response to acetylcholine Semicarbazones, effect in experimental tuberculosis, 4, 250 and potassium ions, 8, 392 , effect on uterine response to oxytocic hormone, Seminal vesicles, effect of sulphadimidine (Sulphamezathine) on, in normal and castrated rats, 2, 87 8, 392 , effect of testosterone phenylpropionate Skin, histamine release in, by antigen, in sensitized rabbit, 8, 414 propionate on, in rat, 8, 273 , isolated guinea-pig, response to adrenaline, effect -, by atropine, neoarsphenamine, pethidine, quinine, tolazoline (Priscol) and other substances, of atropine and spasmolytics on, 4, 326 7, 646 -, isolated rat, as test preparation for sympatholytics, -, by Compound 15, laudexium (Laudolissin) and tubocurarine, in man, 7, 412 , response to acetylcholine, adrenaline and -, and effect of promethazine on, in man, histamine, and effect of sympatholytics on, 9, 236 7, 405 , localization of intravenous lead in, effect of dimer--, by Compound 48/80, 6, 504; 11, 304 caprol and parathyroid extract on, in rabbit, 4, 354 -, by Compound 48/80 and octylamine perfu-Sequential timing unit, 9, 365 sions, 9, 197 DL-Serine, antiviral action of, 12, 66 by Compound 48/80 and polymyxins, in rat, Serotonin. See 5-Hydroxytryptamine 10, 215 Serum. See Blood serum -, by 5-hydroxytryptamine and tryptamine, 8, Sex-hormone action, of triphenylethylene analogues, 5, 376 408 Sheep abortion virus, isolation and properties of, 8, 448 by morphine, effect of age on, in normal and , sensitivity to p-aminosalicylate (PAS), antibiotics demedullated rats, 9, 96 and sulphathiazole, 8, 448 -, by thalassine, 9, 49 Shigella dysenteriae, paradysenteriae and sonnei, effect of , by wasp venom, 9, 56 dapsone (diaminodiphenylsulphone) and solapsone (Sulphetrone) on, in vitro, 3, 24 localization of intrathecal and intravenous di--, effect of phenanthridinium compounds on, in vitro, bromoprocaine in, 4, 336 , localization of intravenous lead in, in normal and 5, 272 dimercaprol(BAL)-treated rabbits, 3, 223 Shigella flexneri and shigae, effect of cetrimide and polymethylenebisisoquinolinium compounds on, 8, -, effect of dimercaprol and parathyroid extract on, in rabbit, **4**, 354

Skin (cont.)

-, localization of intravenous mercury in, and effect of dimercaprol on, in rabbit, 6, 484

, mast cells of, effect of anaphylactic shock and anaphylatoxin on, in rat, 12, 453

, effect of Compound 48/80, morphine and reserpine on, 11, 411

-, mast-cell population of, effect of age and morphine on, in normal and demedullated rats, 9, 96

; effect of Compound 48/80 on, in guinea-pig,

-, response to electrophoresis of histamine into, effect of mepyramine on, 9, 416

-, response to intradermal histamine and cowhage extract, 8, 264, 266

-, role in vascular response to acetylcholine and nicotine, **8**, 159

-, sensitization of, by exogenous histamine, 10, 183

-, spreading phenomena in, quantitative measurement of, 9, 346

Smoking, effect on urinary excretion of antidiuretic hormone, in man, 6, 476

, nicotine absorbed during, 4, 313

Snails. See Helix

Snake venoms, histamine release from skeletal muscle by, and effect of antihistaminics on, 9, 408

Soaps, larvicidal action against sclerostomes, 7, 509 Sodium alkyl sulphates, larvicidal action against sclerostomes, 7, 509

Sodium aurothiomalate, toxicity of, effect of dimercaprol (BAL) on, 3, 88

Sodium azide, anthelmintic action of, in vitro, 10, 7

, metabolism, pharmacological actions and toxicity of, 4, 1

Sodium benzoate, effect on permeability of synovial membrane, 9, 166

, inhibition of histamine release by, 11, 357

Sodium bicarbonate, effect on urinary salicylate excretion, 10, 485

Sodium bromide, effect on cerebral 5-hydroxytryptamine level, 12, 228

-, effect on electrically stimulated and unstimulated metabolism of separated cerebral cortex, 8, 225

-, effect on nicotine-induced convulsions, 7, 82 —, histamine-releasing action of, 7, 646

, response of liver-fluke body movements to, 4, 10; 12, 409

Sodium carboxymethylcellulose, effect in experimental virus infection, 7, 467

Sodium chloride, histamine-releasing action of, 7, 646 -, inhibition of histamine release by, 11, 357

-, oral and parenteral, treatment of mustard gas and thermal shock with, 3, 72 See also Saline

Sodium clearance rate, effect of sodium cyanate on, in rat, 5, 19

Sodium cyanate, antianaphylactic action of, 10, 160

relaxant action of, on isolated tracheal ring, 10,

Sodium cyanide, inhibition of 3-diethoxyphosphinyloxy-N-methylquinolinium hydrolysis by plasma by, 9, 162

Sodium dihydrogen phosphate, response of Spisula solida heart to, 10, 479

diSodium 1:5-di  $\{p - (2 - hydroxyethyl)(sulphomethyl)$ aminophenoxy) pentane, schistosomicidal action of,

diSodium 1:5-di{p-methyl(sulphomethyl)aminophenoxy\pentane, schistosomicidal action of, 12, 329

tetraSodium 1: 7-di{p-(3-phenyl-1: 3-disulphopropyl)aminophenoxy}heptane, schistosomicidal action of, **12**, 329

diSodium 1: 7-di(p- $\alpha$ -sulphobenzylaminophenoxy)heptane, schistosomicidal action of, 12, 329

diSodium 1:6-di(p-1-sulphoethylaminophenoxy)hexane, schistosomicidal action of, 12, 329

di Sodium di(p-1-sulphoethylaminophenyl) sulphone, anti-

bacterial action and metabolism of, 5, 565, conversion to dapsone, in vivo, 5, 572

-, effect in experimental streptococcal infection, 5, 566 -, effect on Streptococcus agalactiae, in vitro, 5, 568

hydrolysis of, in vitro, 5, 579

diSodium 1:7-di(p-sulphomethylaminophenoxy)heptane, schistosomicidal action of, 12, 329

diSodium 1:6-di(p-sulphomethylaminophenoxy)hexane, schistosomicidal action of, 12, 329

Sodium dodecyl sulphate, response of gastric secretion to, 5, 1

Sodium S-ethyl thiosulphate, antagonism by methyl analogue, 12, 436

, antituberculous action of, 11, 351

Sodium hydroxybenzoates, intravenous, response of respiration to, 11, 364

Sodium iodide, with streptomycin, antituberculous action of, 8, 259

Sodium ions, blood level and urinary excretion of, effect of deoxycortone acetate (DOCA) and glycyrrhetinic acid on, 10, 305

, effect on skeletal-muscle response to stimulation, 10, 135

-, effect on ventricular fibrillation, 12, 215

-, exchange between blood cells and medium, effect of lead ions on, 9, 466

, urinary excretion of, effect of urethane on, in rat, 6, 170

Sodium lactate, oral and parenteral, effect in mustard gas shock, 3, 73

Sodium p-melaminylphenylstibonate polymer, biological standardization and toxicity of, 9, 125

tetraSodium 2-methyl-1: 4-naphthaquinone diphosphate. See Synkavit

Sodium nitrite, effect on pressor action of adrenaline, 1, 29

, hypnosis-prolonging action of, 12, 251

, response of heart to, 4, 3, 4

Sodium norpenicillinate, antibacterial action and toxicity of, 3, 307

Sodium phenylglycidate, effect on tumour growth, 6, 242

Sodium and potassium bismuth tartrate, toxicity of, effect of dimercaprol (BAL) on, 3, 88

Sodium pyrazine-2: 5-dicarboxylate, response of anterior preparation of Ascaris to, 3, 105

Sodium pyrophosphate, response of blood pressure to, 3, 274

, response of respiration to, 3, 280

Sodium salicylate. See under Salicylic acid

Sodium salts, inorganic, larvicidal action against sclero-stomes, 7, 509

Sodium stibogluconate (Pentostam):

, antifilarial action of, 5, 245

, effect on schistosome phosphofructokinase activity, 9, 461

Sodium sulphate, response of gastric secretion to, 5, 7 monoSodium thiosulphate, S-substituted, antituberculous action of, 11, 351

Sodium 2:4:5-trichlorophenate, larvicidal and ovicidal actions against sclerostomes, 7, 509

Spasmolytics, antiacetylcholine and local anaesthetic Sodium triphosphate, response of blood pressure to, 3, 274 actions of, 3, 108 For other sodium salts, see under the individual acids antianaphylactic action of, 10, 160 and anions Solanidine, effect on cardioaccelerator action of adrenantinicotinic action and specific antagonisms of, 4, aline, 5, 524 Solanum alkaloids, cardiac action of, 5, 118 , quinidine-like action of, 1, 103 , inhibition of cardioaccelerator action of adrenaline Spasmolytic action, of 295C51, 405C49 and chlorphenirby, 5, 517 amine (chlorprophenpyridamine), 8, 174 -, of adiphenine (*Trasentin*), 1, 154 -, of adiphenine (*Trasentin*), atropine and mepyramine Solapsone (Sulphetrone): , alone and with licheniformin or streptomycin, -, of adiphenine (1 (Anthisan), 7, 89 antituberculous action of, 5, 178 -, alone and with streptomycin, treatment of experi-, of adiphenine (Trasentin), benzilic acid derivatives, mental tuberculosis with, 3, 37 diphenhydramine (Benadryl) and papaverine, 6, 636 of 1-alkyl-2-hydroxyalkylpyrrolidine esters and -, antibacterial action and metabolism of, 5, 565 their quaternary derivatives, 12, 447, of 2-amino-1: 2-diphenylethanol, 2, 209 -, antituberculous action of, 5, 83 -, antituberculous and other pharmacological actions , of atropine, 2-haloethylamines, mepyramine and papaverine, 9, 72 and toxicity of, 3, 15 blood level, biliary and urinary excretion, protein -, of basic ketones and related compounds, 7, 85 binding and tissue distribution of, effect of p-aminosalicylate (PAS) on, 9, 271 -, of benzhexol, procyclidine, tricyclamol and related -, conversion to dapsone, in vivo, 5, 572 compounds and their optical isomers, 10, 383 -, of butyl-, heptyl- and methyl-isothiourea, 4, 317 -, determination of, in body fluids and tissues, 3, 15 , in urine, 5, 569 -, of conessine and its isomers, 3, 242 effect in experimental streptococcal infection, 5, -, of derivatives of benzilic and thiobenzilic acid esters, 10, 95 -, effect on Streptococcus agalactiae, in vitro, 5, 568 -, of dimethyl-1-p-phenoxyphenylethylamine, 9, 292 -, hydrolysis of, in vitro, 5, 579 , of 3: 3-diphenyl-allylamines, -propanolamines and -propylamines and their quaternary derivatives, 6, -, oral, blood level after, in guinea-pig, 3, 30 , oral and parenteral, absorption, excretion and tissue distribution of, 3, 16, 21 -, of mepyramine (2786 RP), 1, 278, 282 , side-effects of, effect of p-aminosalicylate (PAS) on, -, of methadone and its optical isomers and pethidine, **9, 27**7 4, 101 -, treatment of experimental tuberculosis with, 3, 29 , of methadone (amidone), pethidine and phenadoxone, 5, 136 -, of thiazolecarboxylic acids, 1, 153 -, urinary excretion of, 5, 576 , of thiolobenzilic acid esters and related compounds, Solasodanol, effect on cardioaccelerator action of 10, 95 adrenaline, 5, 521 , properties and structure of, 5, 518 Spermatogenesis, effect of testosterone phenylpropionate Solasodine, and its derivatives, inhibition of cardioon, in rabbit and rat, 8, 275 Spermine, enzymic oxidation of, 10, 118; 12, 514 accelerator action of adrenaline by, 5, 517 , effect on cardioaccelerator action of adrenaline, , effect of ethylenediamine derivatives on, 10, properties and structure of, 5, 517 response of blood pressure and respiration to, 5, 72 Solasonine, effect on cardioaccelerator action of adren-Spermine oxidase, inactivation by amidines, 10, 451 aline, 5, 522 , oxidation of 12-aminododecyltrimethylammonium , properties and structure of, 5, 517 and spermine by, 10, 118 , oxidation of cystamine and homocystamine by, Solen siliqua heart, response to acetylcholine, ergometrine, 12, 513 5-hydroxytryptamine and lysergic acid diethylamide, 10, 476 , oxidation of ethylenediamine derivatives by, 10, 314 Spermine oxidase preparation, 10, 116 Solmagine, effect on cardioaccelerator action of adrenaline, 5, 522 Spinal cord, ablation of, effect on potentiation of pressor Solustibosan, antifilarial action of, 5, 245 action of noradrenaline by ganglion-blocking agents, Solvitose. See Starch ethers Soman, anticholinesterase and paralysing actions of, in , amine oxidase activity in, in tri-o-cresyl phosphatepoisoned fowl, 8, 112 fowl, 9, 145 Soman poisoning, respiratory failure in, 8, 466 , cholinesterase activity in, in normal and organo-Soneryl. See Butobarbitone phosphate-poisoned fowls, 8, 213 , in tri-o-cresyl phosphate-poisoned fowl, 7, Sontoquin, effect in experimental filariasis, 5, 252 **690** , effect on exoerythrocytic forms of Plasmodium effect of dyflos and sarin on, in fowl, 9, 147 gallinaceum, in vitro, 1, 167 Sorgeum grass, effect on sclerostome larvae, 7, 519 , cholinesterase and tributyrinase activities in, effect of tri-o-cresyl phosphate on, 7, 263 Sparteine, quinidine-like action of, 1, 93 Spasmogenic action, of acetylcholine, barium ions, histamine and potassium ions, effect of adiphenine (*Trasentin*), atropine, basic ketones and related , dorsum potentials of, effect of mephenesin on, in decerebrate, spinal and strychnine-treated cats, 7, 655 -, frog, perfused, experiments with, 11, 161 localization of intrathecal and intravenous dicompounds, and mepyramine (Anthisan) on, 7, 88 -, of acetylcholine and muscarine, 12, 47 bromoprocaine in, 4, 336 , localization of intravenous lead in, effect of dimer--, of choline fatty acid esters, 12, 30 -, of murexine, 12, 176 caprol on, in rabbit, 4, 356

Splenic volume (cont.)

Spinal cord (cont.)

, pseudocholinesterase activity in, effect of dyflos

-, response to basic ketones and related compounds, 7, 89 (DFP) on, in rat, 8, 215 , pseudocholinesterase and tributyrinase activities -, response to benzilic acid derivatives, 6, 640 in, in tri-o-cresyl phosphate-poisoned fowl, 8, 113 , response to carbidium, 5, 303 -, reflex activity of. See under Reflexes -, response to 2: 7-diamino-10-methyl-9-phenylphen-, respiratory pathways in, effect of spinal anaestheanthridinium, in decerebrate and spinal cats, 1, 74 tics on, 4, 343 -, response to dimercaprol (BAL), 3, 85 , transection of, effect on blood pressure, in intact, -, response to histamine, effect of mepyramine decerebrate and spinal cats, 8, 202 (2786 RP) on, 1, 281 Spinal reflexes. See under Reflexes -, response to proguanil (Paludrine), 4, 17 Spreading action, of intradermal hyaluronidase, 9, 346 Spirochaeta duttoni. See Spirochaeta recurrentis Squalus acanthias, Substance P-like polypeptide in, 11, Spirochaeta recurrentis, development of resistance to neoarsphenamine and penicillin in, in vivo, 7, 33 Spirochaeticidal action, improved evaluation of, 7, 36 Squill, white, glycosides of, cardiotoxic action of, 8, 440 Spisula solida, 5-hydroxytryptamine in, 10, 480 -, rodenticidal constituents of, identification Spisula solida heart, as test preparation for 5-hydroxyand preparation of, 8, 440 tryptamine, 10, 474 Stable ADS, of serum, identification with 5-hydroxy-Splanchnotomy, effect on response of plasma-adrenaline tryptamine, 9, 31 Stannic salts. See under Tin level to stimulation of cardiac sympathetic nerves, in dog, 7, 320 Staphylococcal infections, experimental, effect of aureo-Spleen, destruction of adrenaline and noradrenaline in, mycin, cephalosporin P<sub>1</sub> and oxytetracycline (Terra-3, 193 mycin) in, 6, 438 -, effect of chloramphenicol, 2: 4-diamino-6:7--, 5-hydroxytryptamine level in, effect of antidibenzylpteridine, penicillin and sulphathiazole in, convulsants on, 12, 228 , 5-hydroxytryptamine level and 5-hydroxytrypto-7, 166 phan decarboxylase activity in, 11, 90 -, effect of diamidines in, 3, 216 -, effect of notatin in, 1, 230 , localization of intrathecal and intravenous dibromoprocaine in, 4, 336 effect of phenanthridinium compounds in, , localization of intravenous lead in, in normal and 5, 261 dimercaprol(BAL)-treated rabbits, 3, 223 -, effect of sulphonamides in, 2, 157 -, effect of dimercaprol and parathyroid Staphylococcus aureus, antibiotic-resistant, sensitivity to antibiotics, 2: 4-diamino-6: 7-dibenzylpteridine and extract on, in rabbit, 4, 354 , localization of intravenous mercury in, and effect sulphathiazole, 8, 444 of dimercaprol on, in rabbit, 6, 484 , bacteriostatic action of chlorhexidine (Hibitane) -, localization of intravenous and subarachnoidal on, 9, 194 palladium colloid in, 7, 577 development of cross-resistance to cephalosporin -, localization of p-iodoaniline and p-iodophenyl-N and penicillin by, 8, 254 urethane in, 7, 145 , development of resistance to aureomycin and cephalosporin P<sub>1</sub> by, 6, 432 -, development of resistance and cross-resistance to -, localization of methylene violet in, 7, 503 -, localization of nisin in, 7, 444 -, localization of oral proguanil (Paludrine) in, 2, 187 aminacrine (5-aminoacridine), diamidines and peni-, localization of oral sulphadimethoxypyrimidine cillin by, 3, 214 and sulphadimidine (Sulphamezathine) in, 2, 153 development of resistance and cross-resistance to , development of resistance and coop of the 2: 4-diamino-6: 7-dibenzylpteridine, penicillin and -, localization of parenteral carbidium in, 5, 297 -, localization of parenteral p-iodonitrosobenzene and sulphathiazole, in vitro, 8, 444 p-iodophenylhydroxylamine in, 8, 88 -, effect of aluminium resinate on, in vitro, 6, 96 -, localization of solapsone (Sulphetrone) in, in -, effect of antibiotics, 2:4-diaminopteridines and normal and nephrectomized animals, 3, 23 sulphathiazole on, in vitro, 7, 161 -, localization of subcutaneous licheniformin A5 in, -, effect of aureomycin, helvolic acid and oxytetracycline (Terramycin) on, 6, 434 -, effect of bacitracins on, 6, 418 localization of subcutaneous quinapyramine (Antrycide) in, 5, 449 -, effect of cephalosporin P<sub>1</sub> on, 6, 430 ox, cholinesterase activity in, 12, 321 -, effect of cephalosporins and penicillin on, 8, 253 -, release of pressor amines from, by sympathetic effect of cetrimide and polymethylenebisisoquinostimulation, 5, 169 linium compounds on, 8, 34 -, effect of choline 2: 6-xylyl ether on, 12, 301 -, effect of diamidines, halogenated diamidines and ---, response to adrenaline and methyladrenaline, 7, 345 penicillin on, in vitro, 3, 213 ---, response to alkyltin compounds, 10, 22 , effect of diazapyrenes and tertiary and quaternary -, sympathin of, **5**, 169 phenanthridines on, 8, 139 -, weight changes in, in lead-poisoned rat, 7, 350 -, effect of nisin on, in vitro, 7, 441 Splenic volume, response to adrenaline, effect of amidines -, effect of phenanthridines on, 9, 265 on, 1, 26 , effect of phenanthridinium compounds on, in vitro, 5, 272 , response to adrenaline, carotid occlusion and noradrenaline, in normal and adrenalectomized animals, 5, 505 Staphylococcus aureus and salivarius, effect of dapsone (diaminodiphenylsulphone) and solapsone (Sulphe--, response to adrenaline and noradrenaline, 4, 377 trone) on, in vitro, 3, 24 , response to adrenaline and tolazoline (*Priscol*), 3, 254

467

Starch ethers, effect in experimental virus infection, 7,

Stayblite, hydrogenated, enhancement of effectiveness of Stomach (cont.) oral penicillin preparation by, and toxicity, 6, 97 Stearoylcholine, pharmacological actions of, 12, 30 , water absorption from, effect of atropine on, in rat, 5, 6 preparation and properties of, 12, 38 , weight changes in, in lead-poisoned rat, 7, 362 N-Stearoylethyleneimine, antitumour, carcinogenic and See also Gastrointestinal tract Stomach contents, excretion of intravenous lead in, effect cytotoxic actions and toxicity of, 9, 306 -, carcinogenic action of, 6, 393 -, cytotoxic action of, 6, 630 of dimercaprol on, in rabbit, 4, 356 Stovarsol. See Acetarsol Steroids, cortico-, thymus-involuting action of, 12, 133 Straub heart preparation, response to acetylcholine, atropine, benzoylcholine and nicotine, 7, 335 Stibamine glucoside (Neostam): Streptococcal infections, experimental, effect of acetylated -, effect in experimental filariasis, 5, 242 sulphonamides in, 2, 159 , effect in experimental Litomosoides carinii infections, in cotton rat, 5, 235 , effect of dapsone and soluble derivatives in, 5, 566 Stibophen (fouadin): -, effect of nisin on, 7, 446 -, antifilarial action of, 5, 245 , effect on Plasmodium berghei and gallinaceum, in -, effect of notatin in, 1, 230 vivo, 8, 162 -, -, effect of oral penicillin preparation in, 6, 94 effect of solapsone (Sulphetrone) and sul-, effect on response of liver-fluke body movements to amphetamine, 6, 589 phanilamide in, 3, 24 -, effect on schistosome glycolytic enzymes, 9, 459 -, effect of sulphonamides in, 2, 157 response of liver-fluke body movements to, 6, Streptococcus agalactiae effect of dapsone and soluble derivatives on, in vitro, 5, 568 schistosomicidal action of, 12, 159 Streptococcus agalactiae and haemolyticus, effect of Stibosan, antifilarial action of, 5, 245 diazapyrenes and tertiary and quaternary phencis-Stilbamidine, effect of ultraviolet irradiation on anthridines on, 8, 139 biological and spectrochemical properties of, 1, 234 Streptococcus agalactiae and pyogenes, effect of phentrans-Stilbamidine, and dimer, excretion and storage in anthridinium compounds on, in vitro, 5, 272 Streptococcus faecalis, effect of aminopterin (4-aminopterbody of, in sheep, 3, 165 , effect of ultraviolet irradiation on biological and oylglutamic acid), 2: 4-diaminopteridines and chlorspectrochemical properties of, 1, 234 amphenicol on, in vitro, 7, 161 Stilbamidine, absorption by quinapyramine(Antrycide)-resistant and normal Trypanosoma equiperdum, 7, 678 -, effect on adrenalinecarboxylic acid, 5, 436 -, growth of, effect of antifolic acids on, 12, 521 Streptococcus faecalis, lactis, pneumoniae and pyogenes, , antibacterial and antifungal actions of, in vitro, 3, bacteriostatic action of chlorhexidine (Hibitane) on, -, effect in experimental virus infection, 7, 465 9, 194 -, effect on exoerythrocytic forms of Plasmodium Streptococcus faecalis and pyogenes, effect of cetrimide gallinaceum, in vitro, 1, 167 and polymethylenebisisoquinolinium compounds on, -, effect on glucose metabolism by trypanosomes, 3, 8 **8.** 34 Streptococcus haemolyticus, pneumoniae and viridans, effect of cephalosporin P<sub>1</sub> on, 6, 430 -, effect on pressor action of adrenaline, 1, 32 -, excretion and storage in body, in man, 3, 165 -, hydrolysis of, 3, 76, 163 Streptococcus haemolyticus and pyogenes, effect of -, irradiation product of, constitution and hydrolysis bacitracins on, 6, 418 Streptococcus pneumoniae and pyogenes, effect of dapsone and sulphonamides on, in vitro, 7, 190 of, 3, 75 sensitivity of quinapyramine(Antrycide)-resistant Streptococcus pyogenes, development of resistance and cross-resistance to aminacrine (5-aminoacridine), Trypanosoma equiperdum to, 7, 676 Stilbene, irradiation products of, 3, 77 Stilbenesulphonic acid, derivatives of, protective action diamidines and penicillin by, 3, 214 in experimental virus infection, 7, 459 , effect of compounds related to penicillin on, in Stilboestrol, antitumour action of, 6, 142 vitro and in vivo, 3, 305 , effect on gastric secretory response to histamine -, effect of dapsone (diaminodiphenylsulphone) and and serum cholinesterases, in cat, 5, 395 solapsone (Sulphetrone) on, in vitro, 3, 24 Stilboestrol dipropionate, effect on gastric secretory res--, effect of nisin on, in vitro, 7, 441 , effect of sulphonamides on, in vitro, 2, 156 ponse to histamine, in cat, 5, 389 Streptococcus pyogenes and viridans, effect of cephalosporin N and penicillin on, 8, 253 Stomach, histaminase and histidine decarboxylase activities and histamine level in, 11, 123 histamine level in, effect of tryptamine on, in rat, , effect of diamidines and halogenated diamidines 8, 412 on, in vitro, 3, 213 -, 5-hydroxytryptamine level and 5-hydroxytrypto-phan decarboxylase activity in, 11, 90 Streptomycin, alone and with p-aminosalicylic acid, antituberculous action of, 5, 81 , localization of intravenous lead in, in normal and , alone and with p-aminosalicylic acid (PAS), dapdimercaprol(BAL)-treated rabbits, 3, 223 sone, sodium iodide or thiosemicarbazones, treat--, —, effect of dimercaprol on, in rabbit, 4, 356 -, localization of intravenous mercury in, and effect ment of experimental tuberculosis with, 8, 259 , alone and with p-aminosalicylic acid, dapsone or of dimercaprol on, in rabbit, 6, 484 thiacetazone (9311), effect in experimental tuber-, localization of oral p-ethanesulphonylbenzaldehyde culosis, **5**, 553 thiosemicarbazone and thiacetazone (9311) in, 5, 551 alone and with p-aminosalicylic acid or solapsone -, rat, Substance R in, 8, 325 (Sulphetrone), antituberculous action of, 5, 178

, alone and with solapsone (Sulphetrone), treatment

of experimental tuberculosis with, 3, 37

-, response to nicotine, effect of atropine and hexa-

methonium on, 6, 314

Strychnine ethobromide, curarizing action of, antagonism Streptomycin (cont.) by catechol and phenol, 4, 359 , antimalarial action against exoerythrocytic forms Strychnine poisoning, effect on tissue-acetylcholine levels, of Plasmodium gallinaceum, in vitro, 1, 163 antituberculous action of, 2, 23; 5, 188; 8, 125; 7, 272 Stylomycin, effect in Babesia rodhaini infections, 11, 71 **9**, 438; **12**, 435 Styrene, effect on tumour growth, 6, 238 -, compatibility with chlorhexidine (*Hibitane*), 9, 195 -, effect in experimental corneal tuberculosis, 4, 211 p-Styrylbenzoylmethyl acetate, effect on permeability of , effect on antimalarial action of pyrimethamine, synovial membrane, 9, 166 Subathizone. See p-Ethylsulphonylbenzaldehyde thio-**10**, 210 -, effect on Escherichia coli and Pseudomonas pyosemicarbazone cyanea, in vitro, 3, 213 Subcutaneous tissue, periarticular, permeability of, effect , effect on Plasmodium berghei and gallinaceum, in of benzoylmethanol derivatives and phenylbutazone vivo, 8, 162 on, 9, 166 Substance L (Richstein's), thymus-involuting action of, -, sensitivity of Mycobacterium to, in vitro, 8, 126 , synergism with quinoxaline 1:4-dioxide against **12**, 133 Proteus vulgaris and Pseudomonas pyocyanea, 10, 395 Substance P, biological and chemical properties, extrac-, with benzaldehyde thiosemicarbazones, antitubertion and purification of, 11, 137 culous action of, 6, 85 , effect on spinal reflexes, 11, 166 , enzymic hydrolysis of, effect of lysergic acid Streptothricin, antimalarial action against exoerythrocytic forms of Plasmodium gallinaceum, in vitro, 1, diethylamide and other substances on, 12, 361 response of blood pressure, intestine and uterus to, 163 Stress, adrenocortical activity in, effect of chlorpromazine 10, 204 , response of intestine to, effect of lysergic acid on, 10, 336 diethylamide on, 12, 361 , induction of corticotrophin (ACTH) secretion by, effect of deoxycortone acetate (DOCA) on, 8, 242 -, response of intestine and uterus to, 8, 325 Stress phenomenon, and histamine release, 10, 51 ---, response of Spisula solida heart to, 10, 479 Strontium ions, radioactive, gastrointestinal absorption, -, slow muscle-contracting substance released by, skeletal retention and excretion of, 12, 336 response of intestine to, effect of Compound 48/80 k-Strophanthin-y, effect on cardiac response to acetylon, 6, 505 choline and tetramethylammonium, 9, 326 Substance, R, in rat intestine and stomach, 8, 326 effect on response of sympathetic ganglia to acetyl-, pharmacological actions, purification and stability choline, 9, 324 of, 8, 323 Strophanthin-g. See Ouabain -, release from rat intestine, 8, 322 Strychnine, antiadrenaline action of, 7, 555 -, response of intestine to, 8, 325 -, response of uterus to, effect of atropine, lysergic -, antihexokinase action of, 12, 16 -, cerebral vasodilator action of, effect of dihydroacid diethylamide and thioglycollate on, 8, 325 ergotamine and ergotamine on, 12, 235 Substance S (Richstein's), thymus-involuting action of, , convulsant action of, antagonism by hexobarbitone **12**, 133 and mephenesin (Myanesin), 1, 269 Succinate, effect in experimental leucopenia, 2, 171 , antagonism by mephenesin (Myanesin), 2, -, effect on auricle response to acetylcholine, 5, 352 244 -, effect on auricle response to fluoride, 5, 110 -, effect of hexamethonium on, 7, 83 effect on oxygen uptake by malaria-parasitized -, effect of Rauwolfia alkaloids on, 11, 144 erythrocytes, 3, 3 -, effect of vital dyes on, 5, 154 -, response of normal and substrate depleted auricles -, effect on action of mephenesin on spinal reflexes to, 5, 89, 99 and dorsal potentials, in decerebrate and spinal cats, Succinate dehydrogenase, effect of di(chloroethyl) sul-7, 659, 660 phone, divinyl sulphone and mustard gas on, 4, 60 , effect on cerebral glycogen level at convulsant doses, Succinate oxidase, cerebral, toxic action of di(chloroethyl) sulphone and mustard gas on, 4, 59 , effect on cerebral inorganic and organic phosphate effect of dicophane (DDT) on, in vitro, 4, 126 levels, in vitro, 6, 448 Succinimide, antimiotic action of, 4, 105 -, effect on enzymic hydrolysis of Substance P, in Succinylcholine. See Suxamethonium Succinyldicholine. See Suxamethonium vitro, 12, 361 Succinylmonocholine, apnoea production and urinary e, effect on mono and poly-synaptic reflexes, 6, 551 excretion of, in man, 9, 385 , effect on response of Ascaris muscle preparation to -, enzymic hydrolysis of, 9, 434 acetylcholine, 4, 148 -, muscle paralysis by, 9, 434 -, effect on spinal reflexes, 9, 233; 11, 165 , preparation of, 9, 436 effect on spinal-reflex depression by reserpine, 11, Succinylsulphathiazole (Sulfasuxidine): effect on blood-clotting system and body and testes effect on toxicity of amylobarbitone (Amytal weight, in fowl, 2, 81 Sodium), 1, 160 response of anterior preparation of Ascaris to, 3, -, effect on voluntary activity, in mouse, 8, 46 106 -, permeability of blood-brain barrier to, effect of Sudan grass, effect on sclerostome larvae, 7, 519 various substances on, 5, 154 Sulfasuxidine. See Succinylsulphathiazole -, response of Ascaris muscle preparation to, 4, 148 Sulfoxone sodium (Diasone): -, response of liver-fluke body movements to, 4, 8; -, antibacterial action and metabolism of, 5, 565 8, 136 -, conversion to dapsone, in vivo, 5, 572

—, effect in experimental streptococcal infection, 5, 566

—, toxicity of, 3, 311

Sulfoxone sodium (cont.)	Sulphadimidine (cont.)
, effect on Streptococcus agalactiae, in vitro, 5, 568	—, response of anterior preparation of Ascaris to,
Sulphacetamide, effect on diphtheroid organism in vitro,	3, 106
and on experimental infections in rabbit eye, 1,	—, toxicity of, 2, 88, 156
242	, treatment of experimental caecal coccidiosis with,
—, effect on sclerostome larvae, 7, 522	in fowl, 1, 139
Sulphadiazine (sulphapyrimidine):	—, antagonism by p-aminobenzoic acid in, in
—, acetylation of, in rabbit, 12, 188	fowl, 1, 149
—, antibacterial action of, in vitro, 2, 155; 7, 189	—, —, resistance to second infection after, in fowl,
—, antimalarial action of, 2, 226	1, 142
, antimalarial action against exoerythrocytic forms	—, treatment of experimental toxoplasmosis with,
of Plasmodium gallinaceum, in vitro, 1, 163	12, 185, 189
—, antituberculous action of, in vivo, 3, 153	, with pyrimethamine, mode of action on Eimeria
—, calculated sate dose of, 11, 158	tenella, 11, 454
—, effect in experimental filariasis, 5, 251	Sulphaguanidine, antibacterial action of, in vitro, 7, 189
, effect in experimental Plasmodium berghei infec-	—, and derivatives, gastrointestinal absorption and
tions, 5, 409	hydrogen bonding of, 2, 65
, effect in experimental psittacosis, 3, 184	—, effect on pressor action of adrenaline, 1, 33
—, effect in experimental staphylococcal and strepto-	—, goitrogenic action of, 3, 18
coccal infections, 2, 157	—, oral, blood level atter, 1, 144; 2, 65
—, effect on blood-clotting system, body and gonad	—, response of anterior preparation of Ascaris to,
weights, and haemoglobin level, in fowl, 2, 79	3, 106
—, effect on lymphogranuloma venereum virus, in	, treatment of experimental caecal coccidiosis with, in fowl, 1, 142
chick embryo, 5. 614 —, effect on <i>Plasmodium berghei</i> and <i>gallinaceum</i> , in	, vibriocidal action of, 10, 153
vivo, 8, 162	Sulphamerazine (sulphamethylpyrimidine; N¹-4-methyl-
—, goitrogenic action of, 3, 18	pyrimid-2-ylsulphanilamide):
—, oral, blood level arter, in fowl, 1, 144; 2, 225	—, acetylation of, in rabbit, 12, 188
—, treatment of experimental caecal coccidiosis with,	antibacterial action of, in vitro, 7, 189
in fowl, 1, 142	—, antituberculous action of, in vivo, 3, 153
Sulphadimethoxypyrimidine (2-p-aminobenzenesulphon-	—, effect in experimental staphylococcal and strepto-
amido-4: 6-dimethoxypyrimidine):	coccal infections, 2, 157
, and analogues, oral, absorption and blood per-	, effect on blood-clotting system, body and gonad
sistence of, 2, 271	weights, and haemoglobin level, in fowl, 2, 79
—, antibacterial action of, in vitro, 2, 155	, treatment of experimental caecal coccidiosis with,
, antituberculous action of, in vitro and in vivo, 3, 153	in fowl, 1, 142
—, effect in experimental staphylococcal and strepto-	Sulphamethazine. See Sulphadimidine
coccal infections, 2, 157	Sulphamethylpyrimidine. See Sulphamerazine
—, oral, absorption, blood persistence and excretion	Sulphamezathine. See Sulphadimidine
of, in man, 2, 163	Sulphanilamide (p-aminobenzenesulphonamide):
—, free and conjugated forms in blood after, 2,	—, acetylation of, in rabbit, 12, 188
158	—, antibacterial action of, in vitro, 7, 189
,, localization in cerebrospinal fluid, in man, 2, 167	, effect in experimental Plasmodium berghei infec-
2, 10/	tions, 5, 409
—, oral and parenteral, absorption, blood persistence, tissue distribution and excretion of, 2, 150	—, effect in experimental pneumococcal and strepto- coccal infections, 3, 24
, physico-chemical properties of, 2, 161	—, effect in experimental staphylococcal and strepto-
—, toxicity of, 2, 156	coccal infections, 2, 157
treatment of pneumonia with, in man, 2, 168	—, effect on pressor action of adrenaline, 1, 33
Sulphadimethylpyrimidine. See Sulphadimidine	—, histamine-releasing action of, 7, 646
Sulphadimidine (sulphadimethylpyrimidine; Sulphametha-	—, oral, blood level after, in mouse, 3, 21
zine; $N^{1}$ -4: 6-dimethylpyrimid-2-ylsulphanilamide):	—, permeability of blood-brain barrier to, in young
—, acetylation of, in rabbit, 12, 187	and adult mice, 3, 312
—, antibacterial action of, in vitro, 2, 155; 7, 189	—, —, effect of various substances on, 5, 157
—, antituberculous action of, in vivo, 3, 153	—, response of anterior preparation of Ascaris to, 3,
—, effect in experimental psittacosis, 3, 184	106
—, effect in experimental staphylococcal and strepto-	—, response of Ascaris muscle preparation to, 4, 147
coccal infections, 2, 157	—, response of liver-fluke body movements to, 4, 10
—, effect on adenosine-induced auriculo ventricular	Sulphanilamide-azocasein, enzymic hydrolysis of, effect
block, 4, 85	of dyflos ( <i>DFP</i> ) and tri-o-cresyl phosphate on, <b>8</b> , 112
, effect on blood-clotting system, body and gonad	Sulphanilamido. See p-Aminobenzenesulphonamido-
weights, and haemoglobin level, in fowl, 2, 79	Sulphanilic acid, esters of, effect on tubercle bacillus, in
—, effect on body and testes weights, in rat, 2, 87	vitro and in vivo, 3, 151, 152
, effect on lymphogranuloma venereum virus, in	—, permeability of blood-brain barrier to, effect of
chick embryo, 5, 614	various substances on, 5, 157
—, effect on thyroid, in fowl, 2, 86	Sulphapyrazine, effect on blood-clotting system, body
—, induction of haemorrhagic lesions by, in fowl, 2,	and gonad weights, and haemoglobin level, in fowl,
83, 88 —, oral, blood level after, 1, 144; 2, 150	2, 79 —, effect on body and testes weights, in rat, 2, 87
—, oral, brook level arter, 1, 144, 2, 130	, officer off body and testes weights, in fat, 2, 6/

## Sulphapyrazine (cont.) Sulphonamides (cont.) -, oral, blood level after, in fowl, 1. 144 -, effect on Plasmodium gallinaceum, antagonism, cross-resistance and potentiation by proguanil and , treatment of experimental caecal coccidiosis with, pyrimethamine, 10, 208 in fowl, 1, 142 antagonism by p-aminobenzoic acid in, in , effect on tubercule bacillus, in vitro and in vivo, 3, 151, 152, 153 fowl, 1, 149 , and related substances, absorption from gastro-, resistance to second infection after, in fowl, 1, 142 intestinal tract, 2, 65 , response of anterior preparation of Ascaris to, 3, Sulphapyridine, antibacterial action of, in vitro, 7, 189 , effect in experimental staphylococcal and strepto-106 , treatment of experimental caecal coccidiosis with. coccal infections, 2, 157 -, oral, blood level after, in fowl, 1, 144 in fowl, 1, 139 , treatment of experimental toxoplasmosis with, 12. -, response of anterior preparation of Ascaris to, 3, 104 185, 189 p-Sulphonamidobenzamidine, effect in experimental -, response of Ascaris muscle preparation to, 4, 147 , treatment of experimental caecal coccidiosis with, filariasis, 5, 248 , effect on blood-pressure response to adrenaline, in fowl, 1, 142 Sulphapyrimidine. See Sulphadiazine 1, 23 -, effect on pressor action of sympathomimetic Sulphaquinoxaline, effect in experimental filariasis, 5, 249 amines, 1, 30 Sulphates, larvicidal action against sclerostomes, 7, 509 **Sulphathiazole** (N¹-thiazol-2-ylsulphanilamide): -, effect on response of auricle and heart-lung -, acetylation of, in rabbit, 12, 187 preparation to adrenaline, 1, 24 -, alone and with 2:4-diamino-6:7-dibenzylpterieffect on vasoconstrictor action of adrenaline, 1, 25 dine, effect in experimental staphylococcal infection, p-Sulphonamidobenzamidoxine, effect in experimental filariasis, 5, 248 7, 166 -, effect on Staphylococcus aureus, in vitro, 7, , effect on pressor action of adrenaline, 1, 33 Sulphones, antibacterial action and metabolism of, 5, 565 163 -, sensitivity of antibiotic-resistant staphylo--, antitubercular action of, in guinea-pig, 10, 113 , effect in experimental filariasis, 5, 249 cocci to, 8, 444 -, antibacterial action of, in vitro, 7, 189 , effect on tubercle bacillus, in vitro and in vivo, 3, antimalarial action against exoerythrocytic forms of Plasmodium gallinaceum, and effect of amino-Sulphonic acids, esters of, effect on tubercle bacillus, benzoic acids on, 1, 163 in vitro, 3, 150, 151 Sulphonylureas, hypoglycaemic, effect on carbohydra'e -, antithyroid action of, and inhibition of oxidative protein iodination, in vitro, 10, 1 metabolism and glucose 6-phosphatase activity, 12, -, antituberculous action of, in vivo, 3, 154 350 , antiviral action of, 8, 448, 452 Sulphoxides, antitubercular action of, in guinea-pig, -, effect in experimental staphylococcal and strepto-10, 113 coccal infections, 2, 157 Sulphur, effect on sclerostome larvae, 7, 521 -, effect on blood-clotting system, body and gonad weights, and haemoglobin level, in fowl, 2, 79 -, urinary excretion of, effect of dicophane (DDT) on, 4, 122 -, effect on body and testes weights, in rat, 8, 87 Sulphur metabolism, effect of 6-aminoanthrapyrimidine -, effect on toxicity of 2: 4-diaminopteridines, 7, 165 on, 8, 293 -, oral, blood level after, in fowl, 1, 144 Sulphydryl groups, uptake by maleimide and other imides, 4, 107 response of anterior preparation of Ascaris to, 3, Sulphydryl inhibitors, effect on schistosome glycolytic 104, 106 -, response of Ascaris muscle preparation to, 4, 147 enzymes, 9, 460 Superfusion, apparatus and technique for, 8, 321 -, response of liver-fluke body movements to, 4, 10 -, treatment of experimental caecal coccidiosis with, , as acetylcholine and 5-hydroxytryptamine assay in fowl, 1, 142 method, 9, 370 -, as histamine assay method, 9, 360, 370 -, treatment of experimental toxoplasmosis with, 12, -, as method for study of drug antagonism, 10, 326 185 Superphosphate, larvicidal action against sclerostomes, Sulphetrone. See Solapsone Sulphides, larvicidal action against sclerostomes, 7, 509 7, 509 Suprarenal glands. See Adrenals organic, effect in experimental tuberculosis, 5, 178 Suramin (Antrypol; Bayer 205): Sulphites, larvicidal action against sclerostomes, 7, 509 p-Sulphomethoxybenzamidine, effect on pressor action -, antihistaminic action of, 6, 521 -, effect in Babesia rodhaini infections, 11, 71 of adrenaline, 1, 32 p-Sulphomethoxybenzylamine, effect on pressor action -, effect in experimental filariasis, 5, 257 -, effect in experimental virus infections, 7, 458 of adrenaline, 1, 32 Sulphonamides, acetyl derivatives of, effect in experieffect on adenosine-induced auriculoventricular mental streptococcal infection, 2, 159 block, 4, 85 effect on bacteriostatic action of chlorhexidine —, acetylation of, in rabbit, 12, 187 -, antibacterial action of, relative potencies and (Hibitane), 9, 194 specificity of, 7, 189 , effect on bronchoconstrictor action of acetylcholine, -, colorimetric determination in blood, 1, 144 6, 521 -, effect in experimental filariasis, 5, 249 , effect on bronchoconstrictor action of histamine, 6,520 -, effect on lymphogranuloma venereum virus, in

-, effect on intestinal response to histamine, 6, 521

chick embryo, 5, 614

Suramin (cont.) ——, inhibition of some pharmacological actions and toxicity of pentamidine, 6, 514 ——, response of anterior preparation of Ascaris to, 3,	Sympatholytics (cont.) ——, effect on vasoconstrictor action of isoprenaline and third adrenal amine, 9, 500 ——, inactivation of amine oxidase by, 6, 607
106  —, sensitivity of quinapyramine(Antrycide)-resistant  Trypanosoma equiperdum to, 7, 676  —, trypanosidal action of, 5, 30  —, mechanism of, 6, 338	<ul> <li>Sympatholytic action, and antinicotinic action of atropine and spasmolytics, 4, 326</li> <li>—, of choline 2: 6-xylyl ether, 12, 128</li> <li>—, of dibozane, ergotamine, Hydergine, phenoxybenzamine (Dibenzyline), and SY 28, 9, 236</li> </ul>
Surfen C, effect in experimental filariasis, 5, 252 Survival time, relation to dosage of toxic agents, 2, 27 Suxamethonium (succinylcholine; succinyldicholine):  —, apnoea production, plasma-cholinesterase levels and urinary excretion of, 9, 385	Sympathomimetics, response of human bronchial chains to, 6, 686  —, response of liver-fluke body movements to, 8, 136  Sympathomimetic amines, and antagonists, test preparation for, 11, 147
	, antianaphylactic action of, 8, 177, 461, antiperistaltic action of, effect of eserine on, 9, 132, bioassay of, comparison with chemical assay
—, enzymic hydrolysis of, inhibitor of, 11, 12 —, muscle-depolarizing action of, 12, 390 —, neuromuscular-blocking action of, 10, 121; 12, 180, 390 —, effect of oximes on, 10, 494	methods, 6, 670  —, effect of ascorbic acid and ephedrine in, 7, 618  —, bioassay and paper-chromatographic separation of, 7, 325  —, effect on bronchial-muscle response to acetyl-
<ul> <li>—, paralysis of diaphragm by, effect of muscarine on, 12, 50</li> <li>—, paralysis of muscle by, and effect of 284C51 and eserine on, 9, 432</li> </ul>	choline and histamine, 8, 26 —, hyperfibrinogenaemic action of, 11, 99 —, hypnosis-prolonging and vasoconstrictor actions of, 12, 251
<ul> <li>—, pharmacological actions of, in cat, 8, 19</li> <li>—, response of blood circulation to, 10, 265</li> <li>—, response of blood pressure and heart rate to, in conscious and anaesthetized animals, 10, 265</li> <li>—, stability and enzymic hydrolysis of, 9, 429</li> </ul>	<ul> <li>in adrenal extracts, 9, 503</li> <li>induction of cardiac arrhythmias during chloroform and cyclopropane anaesthesia by, mechanism of protective action of dibenamine in, 6, 492</li> <li>inhibition of intestinal response to nicotine by,</li> </ul>
Sweat glands, response to sympathetic stimulation, effect of choline 2: 6-xylyl ether on, 12, 300  Sweating, adrenaline-induced, in horse, 7, 27 , insulin-induced, effect of hexamethonium on, 7, 258	and effect of sympatholytics on, 9, 131  —, ionization and pharmacological actions of, 9, 488  —, isoprenaline-like, in adrenals of cat, man and monkey, 9, 498
<ul> <li>Sympathectomy, effect on pressor action of adrenaline, piperidine, pyrrolidine and urinary base B concentrates, 4, 113</li> <li>Sympathin, adrenal, composition of, in rabbit, 5, 545</li> <li>—, adrenal, liver, splenic and uterine, nature of, 5, 165</li> </ul>	<ul> <li>—, quinidine-like action of, 1, 100</li> <li>—, release by stimulation of sympathetic nerves to rabbit ear, 7, 616</li> <li>—, response of blood pressure to, effect of amidines on, 1, 21</li> </ul>
, cardiac, nature of, in dog, 7, 319, intestinal and uterine, nature of, 6, 79, liver, pressor action of, effect of 2-benzyl-1-methyl- iminazoline on, 6, 169	<ul> <li>—, —, and effect of anaesthetic and atropine on,</li> <li>4, 304</li> <li>—, response of intestine and uterus to, and effect of sympatholytics on, 9, 131</li> <li>—, response of nictitating membrane to, effect of</li> </ul>
<ul> <li>—, effect of dietary protein on, 6, 659</li> <li>—, response of blood pressure to, and effect of cocaine, ephedrine and guanidine on, 3, 194</li> <li>—, esponse of intestine, nictitating membrane</li> </ul>	amine oxidase activity and denervation on, 7, 305  —, effect of denervation on, 5, 485; 8, 69  —, response of rat gastric muscle to, 12, 247  —, secretion by denervated adrenals, and effect of
and uterus to, 3, 194  —, of rabbit ear, nature of, 7, 616  See also Noradrenaline  Sympatholytics, antiacetylcholine and antinicotinic actions of, 4, 324	haemorrhage and intra-arterial potassium chloride on, 7, 325  (-)-m-Sympatol. See Phenylephrine m-Sympatol, antiperistaltic action of, and effect of sympatholytics on, 9, 131
<ul> <li>—, bioassay of, with isolated rat seminal vesicles, 9, 236</li> <li>—, effect on antiperistaltic action of atropine, cocaine, hexamethonium, mepyramine, nicotine, pethidine and tubocurarine, 9, 134</li> </ul>	—, inhibition of Intestinal response to nicotine by, and effect of sympatholytics on, 9, 131  (-)-p-Sympatol, enzymic oxidation of, 10, 118  (±)-p-Sympatol, See Oxedrine  Sympatol, antiperistaltic action of, and effect of sym-
<ul> <li>—, effect on hypotensive action of isoprenaline and third adrenal amine, 9, 499</li> <li>—, effect on inhibitory action of amino-acids and sympathomimetic amines on intestinal response to</li> </ul>	patholytics on, 9, 131 ——, enzymic oxidation of, effect of ethylenediamine derivatives on, 10, 315 ——, inhibition of intestinal response to nicotine by,
nicotine, 9, 133  —, effect on intestinal and uterine responses to aminoacids and sympathomimetic amines, 9, 132  —, effect on pressor action of physostigmine, in conscious rat, 12, 26	and effect of sympatholytics on, 9, 131  Synaptic transmission, effect of proguanil and its metabolite on, 10, 147  See also Ganglionic transmission  Synephrine, antifibrillatory action of, 9, 341

Synkavit, acute toxicity of, antagonism by cysteine and Tachyphylaxis (cont.) glutathione, 11, 128 , of intestinal response to 5-hydroxytryptamine and -, effect on antiviral action of mepacrine, 7, 463 nicotine, 8, 378 , effect on prolongation of prothrombin-clotting , of neuromuscular-blocking action of 5:6-dithiatime by sulphadimidine (Sulphamezathine), in fowl, decamethylenebis(trimethylammonium), 8, 118 **2**, 82 -, of pressor action of choline 2: 6-xylyl ether, 9, 471 , of respiratory response to 2-naphth-1'-ylethyliso-Synovial permeability, effect of antiarthritic agents on, 8, 130 thiourea, 8, 316 -, reduction by various substances, 9, 166 , of vasoconstrictor action of alkylisothioureas, 7, , test for, 8, 130 425 Synthalin, response of blood pressure and respiration to, Tartar emetic. See Antimony potassium tartrate Taurocholic acid, sodium salt, catechol-amine release 5, 72 Synthalin B. See Dodecamethylenebisguanidine from isolated chromaffin granules by, 12, 61 Syntropan. See Amprotropine -, effect on intestinal response to histamine, 7, 648 Syphacia obvelata, effect of phenothiazine and analogues on, 10, 340 -, histamine release by, 7, 646 Systox, calculated safe dose of, 11, 158 Tauroglycocholic acid, sodium salt, antituberculous action of, in chick embryo, 8, 125 , response of liver-fluke body movements to, Teepol X, larvicidal action against sclerostomes, 7, 509 See N-Benzyl-N'N'-dimethyl-N-naphth-2-ylethylenediamine Temperature, ambient, effect on auricle response to acetylcholine, 5, 364 See N-Ethyl-N'N'-dimethyl-N-naphth-2-ylethylenediamine -, effect on hypothermic action of mepyramine TB 1/698. See Thiacetazone (Neoantergan) and promethazine (Phenergan), in rat, TB 3/1374. See p-Ethylsulphonylbenzaldehyde thio-5, 195 semicarbazone , effect on production of cardiac arrhythmias TE 10. See Triethyl{2-(2:6-xylyloxy)ethyl}ammonium by adrenaline during cyclopropane-induced anaesbromide thesia, 6, 495 , effect on sperm-shedding response to gonado-TEM. See Tretamine trophins, in frog and toad, 11, 249 TEPA. See Triethylenephosphoramide TEPP. See Tetraethyl pyrophosphate -, effect on toxicity of dimercaprol (BAL), 3, TM 1. See Choline phenyl ether 116 TM 10. See Choline 2: 6-xylyl ether , ambient and body, effect on barbiturate hypnosis, TM 17. See Choline 2:4:6-mesityl ether 12, 245 TM 18. See Choline m-tolyl ether , effect on chloral hydrate hypnosis, 12, 251 T.R.C. 43. See 5-Methyl-2-sulphanilamido-1:3:4--, body, response to 295C51 and 405C49, 8, 174 thiadiazole response to acetylcholine antagonists, in T.R.C. 245. See 5-Methyl-2-sulphanilamido-1:3:4normal and adrenalectomized mice, 3, 246 oxadiazole -, response to alkyltin compounds, 10, 20 TTE 10. See Diethyl-2-(2: 6-xylyloxy)ethylamine TTM 10. See Dimethyl-2-(2: 6-xylyloxy)ethylamine -, response to chlorpromazine, 10, 429 , response to chlorpromazine, hexamethon-Tabun, anticholinesterase and paralysing actions of, in ium, pethidine and promethazine, 9, 392 fowl, 9, 145 , response to chlorpromazine and prometha--, central respiratory and neuromuscular-blocking zine, 11, 339 actions of, 8, 470 -, response to cyanate, 1, 190 , sialogenous action of, and submaxillary cholin--, response to dithienylalkenylamines, 8, 7 esterase inactivation, 9, 447 -, response to haemorrhage, and effect of **Tabun poisoning, respiratory failure in, 8, 466** cortisone and deoxycortone acetate (DOCA) on, in Tachycardia, induced by adrenaline, in animals anaestheadrenalectomized rats, 7, 289 tized with chloroform and cyclopropane, 6, 32 -, response to humoral agents, in horse, 4, 35 induced by isoprenaline and third adrenal amine, -, response to mepyramine (Neoantergan), promethazine (*Phenergan*) and 3300RP, in normal 9, 500 -, induced by nicotinamide, in dog, 8, 50 and adrenalectomized rats, 5, 195 Tachyphylaxis, correction for, in bioassay, 11, 252 -, of blood-pressure response to alkylisothioureas, 3, 200 response to methadone (amidone) and its optical isomers, 4, 102 ,—, response to morphine and substituted -, of blood-pressure response to pyrrolidine, 4, 112 a-methylbenzylamines, 8, 24 -, response to notatin, in rabbit, 1, 227 , of blood-pressure and bronchial responses to antihistaminics, 10, 236 -, response to phenadoxone, 5, 37 , of cardiovascular action of veratrum alkaloids, -, response to polymyxins, 7, 181 6, 679 See also Hypothermic action -, of histamine releasing action of polymyxins, 10, 217 -, skin, response to hexobarbitone and methylpenty-, of hypotensive action of intravenous morphine, nol, 12, 479 7, 543, 546 Tensilon. See Edrophonium -, of hypotensive action of L 1935, 10, 257 Terpenes, larvicidal action against sclerostomes, 7, 509 Terramycin. See Oxytetracycline -, of hypotensive action of veratridine, 8, 396 of intestinal response to 5-hydroxytryptamine, 10, Testes, effect of methylthiouracil and thiouracil on, in 332 rat, 1, 133