90 Bufo marinus. See Toad Bufodiene aglycone, inotropic action of, 21, 395 **Bufotenine** (5-hydroxy-N'N'-dimethyltryptamine): , effect on adenine nucleotides, inorganic phosphate and phosphocreatinine in brain, in rat, 25, 631 -, effect on response of blood pressure to 5-hydroxytryptamine and phenyldiguanide, 14, 531 -, effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, 471 -, enzymic oxidation of, 15, 43, 627 -, neurone-depressant action of, 18, 230 --, pK value of, **14**, 91 -, response of blood pressure to, 14, 531 response of stomach-strip preparation to, 14, 265 -, and effect of amine-oxidase inhibitors on, 14, 88 -, response of *Tapes* heart to, **25**, 490 -, response of *Venus* heart to, **15**, 377 Bufotenine ethiodide and methiodide, response of stomachstrip preparation and uterus to, 14, 265 Bulbocapnine, effect on apomorphine-induced emesis and dexamphetamine-induced agitation, 22, 308 , induction of catatonia by, 22, 308 Buphenine, effect on uptake of noradrenaline by heart at high and low perfusion concentrations, 25, 34 Busulphan, antifertility action of, in rat, 14, 154 -, antitumour action of, in rat, 24, 24 -, effect on trypanosomes, in mouse, 14, 451 Butane-1,4-dithiol, effect on Mycobacterium tuberculosis, **15**, 485 Butanol, depressant action on various biological systems, 15, 185 Butarsen, pKa values of, 14, 435 substances on, 14, 433

, trypanocidal action of, effect of p-aminobenzoic acid and related compounds and various other

, in-vitro effect of pH on, 14, 449

-, trypanocidal action on normal and drug-resistant trypanosomes and toxicity of, in mouse, 14, 425

, trypanosome strains resistant to, cross-resistance, development and sensitivity of, in mouse, 14, 425

Buthalitone, anaesthetic action, plasma concentration, oil/water partition coefficient and protein binding of, 14, 261

Buthotus minax. See Scorpion
Butobarbitone, effect on insomnia and nocturnal restlessness, in psychiatric patients, 16, 82 Butoxyamine, antibacterial action of, 15, 243

2-Butoxycarbonylmethylene-4-oxothiazolidine, effect on adjuvant-induced arthritis, in rat, 24, 632

N¹-Butoxy-diguanide, antibacterial action of, 15, 243

Butyl (2,3 - epithiopropylthio)formate, antitubercular action and toxicity of, 15, 485

Butylamine, response of Venus heart to, 15, 368

3-(2-Butylaminoethyl)indole (N-butyltryptamine): , metabolism, pharmacological actions, synthesis and toxicity of, 23, 43

N-Butylatropinium bromide, response of chick amnion to, 21, 287

6-Butyl-6-cyclohexylpiperid-2-one, central depressant action and toxicity of, 25, 790

1-Butyl-4-dichloroacetylpiperazine, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 294
3-Butyl-1-ethyl-6-thioxanthine, choline salt, broncho-

dilator, coronary dilator and other pharmacological actions and toxicity of, 17, 197

N-Butvl-2-hydroxyiminomethylpyridinium, as antidote in organophosphate poisoning, 14, 192

N-Butyl-2-hydroxyiminomethylpyridinium (cont.) , reactivating action on organophosphate-inactivated cholinesterase and synthesis of, 14, 195

S-Butylisothiourea, pain-producing action of, in man, 14, 532

1-Butyl-3-methyl-6-thioxanthine, choline salt, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 197

3-Butyl-1-methyl-6-thioxanthine, choline salt, bronchodilator, coronary dilator and other pharmacological

actions and toxicity of, 17, 197

3-Butyl-7-methyl-6-thioxanthine, bronchodilator according to dilator actions and toxicity of, 17, 201 bronchodilator and

1-Butyl-3-methylxanthine, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, **17**, 197

3-Butyl-1-methylxanthine, choline salt, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 197

5-Butyl-1-(5-nitrofurfurylideneamino)hydantoin, intravenous, localization in aqueous humour, cerebrospinal fluid and plasma, in dog, 24, 266

 $(\pm)$ -N-Butylnoradrenaline, effect on uptake of noradrenaline by heart at low perfusion concentration, **25**, 34

6-Butyl-6-phenylpiperid-2-one, central depressant action and toxicity of, 25, 790

5-Butyl-5-phenylpyrrolid-2-one, central depressant action and toxicity of, 25, 790

1-Butyl-2,2,6,6-tetramethylpiperidine, ganglion-blocking action of, 13, 502

5-Butyl-2-thiohydantoin, antithyroid action of, 13, 351 N-Butyltryptamine. See 3-(2-Butylaminoethyl)indole N-Butylveratramine, toxicity of, 22, 394

Butyric acid, sodium salt, intestinal absorption of, effect of cetrimide and phloridzin on, in mouse, 24, 205

Butyrocholinesterase. See Cholinesterases, true Butyrylcholine, response of Tapes heart to, and effect of

benzoquinonium on, 25, 485 y-Butyrobetaine, effect on ventral root potentials in

spinal cord, 16, 262 y-Butyrolactone, central-nervous-depressant action of,

neurochemical aspects of, 20, 563

, effect on acetylcholine,  $\gamma$ -aminobutyric acid and 5-hydroxytryptamine in brain, in mouse and rat, 20,

-, effect on spinal reflexes, 22, 322

Butyrylcholine, response of auricular beat to, effect of guanethidine, phenoxybenzamine and other sympatholytics on, 17, 232

, response of heart beat to, and effect of atropine, cocaine, dexamphetamine, ephedrine, hexamethonium, levamfetamine, pronethalol, pseudoephedrine and tyramine on, 23, 401

, effect of propranolol on, 23, 404 N-2-Butyryloxyethyl-aa-dichloro-N-p-methylsulphonylbenzylacetamide, amoebicidal action of, 18, 131

4-Butyrylphloroglucinol 1,3-dimethyl ether, anthelmintic action of, 24, 714

4-Butyrylphloroglucinol 1-methyl ether, anthelmintic action of, 24, 714

3-Butyrylthiopropylene sulphide, antitubercular action and toxicity of, 15, 485

C

See pp'-3-Oxopentamethylenebis(trimethyl-62C47. phenylammonium) 172C58. See [2-(4-Benzoyl-2,6-dimethylphenoxy)ethyl]-

trimethylammonium

- 189C56. See N<sup>1</sup>-(5,5-Di-p-chlorophenyl-5-cyanopentyl)- $N^1N^1N^2$ -trimethylethyleneammonium-2-morpholinium
- 284C51. See pp'-3-Oxopentamethylenebis(allyldimethyl-

phenylammonium)
383C57. See o-Bromobenzyltrimethylammonium

- Cadaverine, enzymic oxidation of, effect of homo-oxylylene diamine and xylylene diamines on, 14,
- -, effect of N-methylpicolylamines and picolylamines on, 19, 548
- Caeruloplasmin, oxidation of 5-hydroxytryptamine and related compounds by, 15, 625

Caffeic acid, anti-inflammatory action of, 18, 347

- Caffeine, and its citrate, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 201
- , effect on action of adrenaline on response of potassium-depressed phrenic nerve-diaphragm pre-paration to electrical stimulation, 23, 193
- , effect on apomorphine-induced emesis and pecking, in pigeon, **16**, 140
- , effect on induction of gastric haemorrhage and erosion and sedation by reserpine, 14, 115
- -, effect on neuronal excitation, 18, 236 -, effect on response of potassium-depressed phrenic nerve-diaphragm preparation to electrical stimulation, and action of phloridzin and pronethalol, 23, 188, 192
- , effect on response of small intestine to staphylococcal a-toxin, 14, 63
- -, non-induction of pecking by, in pigeon, 15, 288 , response of heart beat to, and effect of bathpotassium and -sodium concentrations on, 23,
- -, response of striated muscle to, effect of bath-fluid composition, chlorocresol, fluoride, fructose 1,6diphosphate, glucose 1-phosphate, iodoacetate and procaine on, 24, 512

- ——, ——, mechanism of, 24, 515 Calcium acetylsalicylate. See Acetylsalicylic acid
- Calcium aspirin. See Acetylsalicylic acid Calcium caseinate, dietary, effect on 5-hydroxytryptamine in tissues, in rat, 15, 518
- See also Casein Calcium ions, concentration in perfusion fluid, effect on beat of Langendorff heart preparation, and variation with temperature, 14, 185
- , effect on electrically induced ventricular fibrillation, and variation with temperature, 14, 183
- -, concentration in organ bath, effect on action of ouabain on response of uterus to electrical stimulation, 21, 231
- , —, effect on electrical and mechanical activities in mammalian vein, 25, 596, 599
- -, effect on heart beat, and action of caprylate, hydrogen peroxide, oleate, ouabain, paullinia tannin and tannic acid, 21, 79
  - -, and action of potassium and sodium ions, 23, 67
- -, effect on in-vitro histamine release and mastcell damage by antihistamines, 15, 399
- , effect on in-vitro histamine release and mastcell damage in sensitized tissues by antigen and compound 48/80, 15, 85
- , effect on ionic content of small intestine, 24, 437
- , effect on kinetic constants of hyoscine and mepyramine antagonism on longitudinal muscle strip, 24, 432

- Calcium ions, concentration in organ bath (cont.)
  - -, effect on neuromuscular blocking action of decamethonium, and influence of nerve-stimulation frequency, 20, 13
  - , effect on neuromuscular blocking action of streptomycin, 15, 507
- , effect on neuromuscular blocking action of tubocurarine, and influence of nerve-stimulation frequency, 20, 8, 9
- , effect on release of acetylcholine from ileum, and action of strontium ions, 21, 558
- , effect on release of noradrenaline from postganglionic fibres, 22, 547
- , —, effect on response of electrically driven auricle, 21, 397
- , effect on response of electrically driven auricle to ouabain, 21, 395
- , effect on response of heart beat to adrenaline and ouabain, 23, 66
- , effect on response of periarterial nerve-ileum preparation to electrical stimulation and nor-
- adrenaline, and action of magnesium ions, 22, 540 , effect on response of potassium-depressed phrenic nerve-diaphragm preparation to electrical
- stimulation, and action of phloridzin and pronethalol, 23, 188, 192
- , effect on response of small intestine to acetylcholine, 24, 437
- -, effect on response of small intestine to histamine, 5-hydroxytryptamine and nicotine, and action of strontium ions, 21, 558
- , effect on response of striated muscle to scorpion venom, 14, 337
- -, effect on response of uterus to ouabain. 21, 231
- , effect on response of vas deferens to electrical stimulation, and action of amphetamine, carbachol, histamine, 5 - hydroxytryptamine, noradrenaline,
- potassium ions and tyramine, 25, 244, —, effect on response of vas deferens to noradrenaline, and action of amphetamine, carbachol, histamine, 5-hydroxytryptamine, potassium ions and tyramine, 25, 251
- , in small intestine, effect of bath-calcium concentration on, 24, 437
- , intraventricular, effect on drug-induced tremor, in cat, 15, 578
- role in response of striated muscle to chlorocresol, **24**, 516
- , response of electrically driven auricle to, and effect of temperature on, 25, 557
- Calculi, experimental induction in urinary tract, in rat, 19, 306
- California virus infections, experimental, effect of isatin  $\beta$ -thiosemicarbazone in, 15, 108
- Calophyllolide, anticoagulant action of, 20, 29
- Calorigenic action, of adrenaline and noradrenaline, 15, 392
- of mephentermine, 16, 312
- Camoform. See Bialamicol
- Candida albicans, effect of alkoxydiguanides on, 15, 245 effect of dichloroacetamide derivatives and related
  - compounds on, 17, 286 , in-vitro effect of 3,4-xylidine derivatives and related
- compound on, 13, 434
- Cane sugar. See Sucrose Capillaries. See Blood vessels
- Capillary permeability, effect of angiotensin, bradykinin, histamine and substance P on, and action of mepyramine, 19, 176

Capillary permeability (cont.) Caramiphen (cont.) , effect of bradykinin on, action of bradykinin-, effect on response of *Tapes* heart to acetylcholine, potentiating factor from venom of Bothrops spp., 24, **25**, 488 Carassius auratus. See Goldfish Carbachol (carbaminoyl choline; carbamylcholine): , effect of bradykinin and histamine on, action of acetylsalicylate, amidopyrine, mepyramine and -, comparison of action on noradrenaline response phenylbutazone on, 15, 606 and reversal of sympathetic block in vas deferens preparations, 25, 243 , action of hexadimethrine, 24, 710 , effect of bradykinin and kallikrein on, action of , depolarization of striated muscle by, 25, 201 analgesic-antipyretic drugs on, in rabbit, 17, 112 , depolarizing and ganglion-blocking actions of, in -, effect of compound 48/80, dextran and histamine rat, 24, 89 on, in diabetic rat, 19, 406 -, effect on action of bath-calcium concentration and , effect of compound 48/80, mellitin and phospholipase A on, and action of bromolysergic acid guanethidine on response of vas deferens preparations to electrical stimulation, and action of atropine, diethylamide and diphenhydramine, in rat, 25, 61 **25**, 244 , effect of dextran on, action of ascorbic acid, in rat, , effect on action of procaine and reserpine on **24**, 732 response of vas deferens preparations to electrical , effect of dextran, kallikrein, ovomucoid trypsin stimulation, 25, 244 inhibitor, permeability factor and tetrahydrofurfuryl , effect on antitubercular action of isoniazid, 15, 7 alcohol on, action of hexadimethrine on, 22, 99 -, effect on blood-pyruvate, in cat, 25, 148 -, effect of dextran, ovomucoid, and yeast mannam and zymosan on, and action of mepyramine, methysergide, mono- and di-saccharides and related substances, in rat, 25, 602 , effect on distribution of isoniazid between blood and tissues, 15, 5 -, effect on dorsal-root potentials of spinal cord, 17, 225 -, effect of hexadimethrine on, 22, 99 , effect on response of hypogastric nerve-vas -, effect of histamine on, action of flavanoids, deferens preparation to electrical stimulation, 19, propylene glycol, sugars and sulphan blue (Evans 94; 21, 191; 24, 642 Blue), 13, 12 -, effect on response of vas deferens to electrical , effect of histamine, 5-hydroxytryptamine and passtimulation, 21, 194 , effect on response of vas deferens to transmural sive cutaneous anaphylaxis on, action of chlorstimulation, 25, 244 promazine, lysergide (lysergic acid diethylamide), mepyramine and promethazine, in mouse, 20, , ganglion-stimulating action of, effect of central depressants, procainamide and tetraethylammonium , effect of histamine and synthetic bradykinin-like on, 23, 258 polypeptide on, 15, 549 , —, effect of centrally active agents and other drugs on, 23, 262 effect of intracutaneous kaolin on, action of hexadimethrine, mepyramine, permeability factor and , induction of acid gastric secretion by, and effect of soya-bean trypsin inhibitor on, 22, 98 antihistaminases and hexamethonium on, in rat, 13, , effect of intraperitoneal acetic acid on, action of anti-inflammatory corticosteroids, central nervous -, effect of atropine on, in rat, 13, 121 stimulants and narcotic and non-narcotic analgesics -, response of blood pressure to, effect of lignocaine on, in mouse, 22, 246 on, in non-atropinized cat, 13, 489 -, effect of oxytocin and vasopressin on, 19, 176 -, effect of pronethalol on, 23, 594 , effect of plasma-proteases on, relation to hypotensive action, 25, 257 , response of chick amnion to, and effect of atropine on, **21**, 286 -, effect of skin extract on, 21, 492 , response of circular and longitudinal strips from -, role of histamine and 5-hydroxytryptamine in, in ileum to, 21, 544 -, response of electrically driven auricle to, and effect rat, 13, 65 See also Blood vessels of temperature on, 25, 561 Capillary-permeability-increasing factor, in guinea-pig -, response of innervated and partially and comserum  $\gamma$ -globulin, 21, 491 pletely denervated striated muscle to, 17, 64 Caprylic acid, response of heart beat depressed by -, response of semispinalis muscle to, 15, 413 acetylcholine, calcium-lack, ether, potassium-excess -, response of small intestine to, effect of atropine and and thiopentone to, 21, 81 morphine on, 13, 297 , effect of bretylium and hexamethonium on, , response of hypodynamic heart to, in calcium-free **17**, 83 Ringer solution, 19, 186 -, effect of codeine and morphine on, 15, 426 Captodiame, effect on ganglionic transmission, 23, 244 , effect on hypnotic action and metabolism of , effect of hexamethonium on, and action of BW 284C51, 19, 7, 9 pentobarbitone, in rat, 18, 35 Caramiphen, antiacetylcholine and antitremor actions of, , response of sterno-trachealis preparation to, 18, 18, 247 , antiacetylcholine, antitremor, local anaesthetic and -, response of striated muscle to, effect of ethyl mydriatic actions and toxicity of, 14, 561 pyrophosphate, neostigmine, physostigmine and -, effect in experimental local tetanus, 13, 336 tacrine on, 25, 182 -, effect on behaviour and on amines and their acid metabolites in brain, 24, 768 , response of superior cervical ganglion to, and effect

-, effect on hypothermic action of Tremorine, 14, 561

-, effect on hypothermia, tremor and other peripheral

parasympathetic effects induced by Tremorine, 25,

447, 350

, response of *Tapes* heart to, **25**, 485 , response of terminal tract of bile duct to, and effect of adrenaline and isoprenaline on, 20, 226, 227

19, 113

of chloral hydrate and physostigmine (eserine) on,

Carbachol (cont.) , response of uterus to, and effect of carbon dioxide on, 13, 495 , with atropine, effect on response of Finkleman ileum preparation to electrical stimulation, 19, 87 Carbaminoyl choline. See Carbachol N-[5-p-(Carbamoylmethylamino)phenoxypentyl]benzamide, effect on schistosomes and vision and toxicity of, 14, 468 5-Carbamoylmethyl-2-thiohydantoin, antithyroid action of, **13**, 351 3-Carbamoyloxy-2,2-dichloro-1-p-chlorophenylpropanol, antitetanus action of, 25, 74 3-Carbamoyloxy-2,2-dichloro-1-phenylpropanol, antitetanus action of, 25, 74 (p-Carbamoylphenylarsinidinedithio)diacetic acid. Arsenamide 7-p-Carbamoylphenyldiazoamino - 10 - ethyl - 9 - phenyl phenanthridinium, trypanocidal action of, 17, 402 3-Carbamoyl-1-(3,4-xylylcarbamoylmethyl)pyridinium, effect on influenza virus in tissue culture, properties and synthesis of, 13, 424 Carbamylcholine. See Carbachol Carbimazole, effect on toxicity of histamine and 5hydroxytryptamine, in mouse, 17, 140 Carbohydrates, effect on in-vitro histamine release and mast-cell damage, 19, 405 , effect on skin reaction induced by intracutaneous dextran, 19, 408 -, intermediate metabolites of, effect on response of muscle respiration to hydrallazine, 14, 43 Carbomycin, in-vitro toxicity to skin, 14, 168 Carbon dioxide, effect on response of blood vessels to noradrenaline, in rat, 18, 459, 460 , effect on response of intestine to acetylcholine, histamine, potassium ions and electrical stimulation, **14**, 19 -, effect on response of uterus to adrenaline, methylergometrine, oxytocin and potassium ions, 14, 19 -, effect on response of uterus to carbachol and 5-hydroxytryptamine, 13, 495 , response of respiration to, effect of codeine and noscapine on, in man, 24, 532 , effect of ethamivan on, in absence of hypoxia in healthy young man, 19, 142 -, effect of lysergide (lysergic acid diethylamide) on, 13, 255 Carbon-dioxide tension, effect on release of acetylcholine from electrically stimulated superior cervical ganglion, in cat, 21, 245 Carbon monoxide, effect on Mytilus oxidase, 15, 630 Carbon tetrachloride, in-vitro cesticidal action of, 15, 437 , toxic action on liver cells, 19, 219 Carbonic acid. See Carbon dioxide 2-(o-Carboxybenzamido) glutaramic acid, chromatography of, 25, 329 effect on glutamate decarboxylase and glutamate

dehydrogenase, 25, 355

graphy of, 25, 329

dehydrogenase, 25, 355

of, **25**, 329

-, effect on glutamine synthetase, 25, 353

properties and synthesis of, 25, 324

-, effect on glutamine synthetase, 25, 353

4-(o-Carboxybenzamido) glutaramic acid, chromato-

2-(o-Carboxybenzamido)glutaric acid, chromatography

effect on glutamate decarboxylase and glutamate

, metabolism of, in rabbit, 25, 343
, properties and synthesis of, 25, 324
, stability in aqueous solution, 25, 332

2-(o-Carboxybenzamido)glutaric acid (cont.) -, metabolism of, in rabbit, 25, 343 -, properties and synthesis of, 25, 324 , stability in aqueous solution, 25, 332 a-(o-Carboxybenzamido)glutarimide, chromatography of, **25**, 329 , effect on glutamine synthetase, 25, 353 -, extraction from faeces, 25, 341 -, extraction from urine, 25, 340 , hydrolysis in aqueous solution, 25, 332 N¹-(1-Carboxydecyloxy)diguanide, antibacterial action N¹-(1-Carboxyheptyloxy)diguanide, antibacterial action of, 15, 243  $N^{1}$ -(1-Carboxyhexyloxy)diguanide, antibacterial action of, 15, 243 5- and 7-Carboxyisatin  $\beta$ -thiosemicarbazone, antiviral action, properties and synthesis of, 15, 101 3-Carboxy-8-methoxycoumarin, anticoagulant action of, 20, 29 Carboxymethylcellulose. See Sodium carboxymethylcellulose and 5-(Carboxymethyl)isatin  $\beta$ -thiosemicarbazone, antiviral action, properties and synthesis of, 15, 101 5-Carboxymethyl-1-methylisatin  $\beta$ -thiosemicarbazone, antiviral action, properties and synthesis of, 15, 101 5-Carboxymethyl-2-thiohydantoin, antithyroid action of, **13**, 351  $N^{1}$ -(1-Carboxyoctyloxy)diguanide, antibacterial action of, 15, 243  $N^{1}$ -(1-Carboxypentyloxy)diguanide, antibacterial action of, 15, 243 Carboxypeptidase, resistance of eledoisin to, 19, 333 -, resistance of physalaemin to, 25, 370 Carboxypeptidase B, destruction of bradykinin by, effect of chlorpromazine on, 22, 333 , hydrolysis of hippuryl-L-arginine by, effect of adrenergic and ganglionic blocking agents, phenothiazine derivatives, phenoxybenzamine and tran-quillizers on, 22, 334 -, —, effect of chlorpromazine on, 22, 334 -, and action of zinc ions, 22, 337 a-p-Carboxyphenoxypropionic acid, effect on formaldehyde-induced inflammation, in mouse, 16, 165 4-Carboxyphenylarsenoxide, trypanocidal action of, effect of p-aminobenzoic acid on, 14, 436 7-p-Carboxyphenyldiazoamino-10-ethyl-9-phenylphenanthidinium, trypanocidal action of, 17, 402 Carbromal, ganglion-blocking action of, and relation to anaesthetic action, 23, 241 Carbutamide, antidiabetic action of, mechanism of, 14, 377 Carcass, localization of cloxacillin in, in rat, 21, 344 Carcinogens, effect on male fertility, in rat, 14, 149 Cardiac contractility, effect of sympathomimetic amines on, action of liothyronine (tri-iodothyronine) and reserpine, 21, 174 Cardiac glycosides. See Ouabain Cardiac nerve-pulmonary artery preparation, rabbit, response to electrical stimulation, effect of acetylcholine, atropine, bretylium, hemicholinium, physostigmine and yohimbine on, 22, 177 , effect of reserpine on, 22, 179 Cardiac output, effect of bradykinin on, and action of pronethalol, in bronchitic and healthy men, 25, 457 , effect of caprylate, digitoxigenin, hydrogen peroxide, oleate, ouabain, paullinia tannin, tannic acid and veratridine on, in calcium-free Ringer solution,

, effect of excitation of chemoreceptors of heart and

**19.** 186

lungs on, in cat, 13, 372

Cardiac output (cont.)  —, effect of lignocaine on, in anaesthetized, decerebrate, procainized and vagotomized dogs, 14, 523  —, effect of SK&F 90,109 on, 23, 495  —, in low-calcium and calcium-free Ringer solution, 19, 184	Carotid occlusion, response of blood pressure to (cont.)  —, effect of NN-disubstituted guanidines on, 24, 287  —, effect of 5-hydroxytryptamine on, in dog, 14, 413  —, effect of lysergide (lysergic acid diethylamide)
See also Heart beat Cardio-accelerator action. See under Heart beat Cardioactive agents, interactions of, 21, 78 Cardiotonic action, of splenic extracts, 14, 392 Cardiotonic agents, response of hypodynamic heart to, effect of calcium ions on, 19, 183 Cardiotoxic action, determination of, 18, 313	on, 13, 251  —, —, effect of mecamylamine and pempidine and its N-ethyl homologue on, 13, 509  —, —, effect of methicillin on, in cat, 17, 74  —, —, effect of methyldopa on, 22, 76  —, —, effect of olive oil emulsion and Paspalum scrobiculatum extract on, 18, 14
<ul> <li>—, of digoxigenin and digitoxigenin and their derivatives, 18, 314</li> <li>—, of ouabain, effect of β-anhydrodigoxigenin, 14-deoxydigoxigenin and dihydrodigitoxigenin on, 18, 314</li> <li>—, of sodium dihydrogen phosphate, perchlorate and sulphate, 14, 84</li> <li>Cardiovascular action, of acetylcholine, effect of halothane</li> </ul>	—, —, effect of pempidine on, 15, 217 —, —, effect of phenothiazine derivatives on, 22, 158 —, —, effect of (+)- and (-)-N-(1-phenylethyl)- guanidine on, 24, 402 —, —, effect of procainamide on, 22, 145 —, effect of substituted 1,3,4-thiadiazoles on, 13 361 —, —, effect of N-[2-(2,6-xylyloxy)ethyl]guanidine
on, 20, 588  —, effect of P-286 on, and action of dichloro- isoprenaline and reserpine, in atropinized dog, 20, 580	on, 25, 537  —, response of blood pressure and heart beat to, effect of pronethalol and propranolol on, 24, 782  —, response of blood pressure and respiration to,
<ul> <li>—, of acetylcholine, adrenaline, histamine, nicotine, noradrenaline and vasopressin, effect of benzethidine, furthidine and pethidine on, 15, 256</li> <li>—, of BW 392C60, 20, 49</li> <li>—, of benzethidine, furethidine and pethidine, 15, 255</li> </ul>	effect of dioxone on, 16, 239  —, response of blood vessels to, 19, 516, 522  —, response of respiration to, effect of hydroxydione sodium succinate on, 15, 462  See also Arteries and Blood vessels  Carotid sinus, denervation of, effect on response of blood
<ul> <li>, of bethanidine, 20, 41</li> <li>, of gadolinium and samarium chlorides, 17, 530</li> <li>, of halothane, 20, 589</li> <li>, of histamine, in normal and Haemophilus pertussis-vaccinated rats, 13, 76</li> </ul>	pressure to 5-hydroxytryptamine, in dog, 14, 412 ——, effect on response of blood pressure to leptodactyline, 15, 17 ——, stimulation of, effect on ouabain-induced atrial arrhythmias, 17, 12
<ul> <li>—, of pempidine, 13, 342</li> <li>—, of (+)-, (-)- and (±)-N-(1-phenylethyl)guanidine, 24, 401</li> <li>—, of reserpine, in cat, 17, 381</li> <li>—, of sympathetic stimulation, effect of morphine on,</li> </ul>	<ul> <li>, —, hypotensive action of, effect of lysergide (lysergic acid diethylamide) on, 13, 253</li> <li>Casein, effect on response of small intestine to bradykinin and kallidin, 24, 491</li> <li>, and hydrolysates, effect on peristaltic reflex, 15, 219</li> </ul>
17, 548 , of Syntocinon and valyl <sup>3</sup> -oxytocin on, in man, 14, 567 , of uridine nucleotides, 22, 259  See also Blood vessels and Heart beat	—, —, effect on trypanocidal action of butarsen, 14, 434  See also Calcium caseinate  Cashew nut extract, in-vitro cesticidal action of, 15, 437  Castration, effect on urinary excretion of histamine, in
Carisoprodol, effect on hypnotic action and metabolism of pentobarbitone, in rat, 18, 33  Carnitine, effect on excitability, potassium-releasing ability and spontaneous activity of striated muscle, 14, 420	male rat, 16, 51  —, —, and action of aminoguanidine, in male and female rats, 19, 66  —, effect on urinary excretion of histamine and methylhistamine, in intact, and testosterone- and histidine-
Carotid chemoreceptors, response to cyanide and nicotine, effect of hexamethonium on, 16, 15  Carotid occlusion, effect on response of blood vessels to noradrenaline, in rat, 18, 459, 460  —, release of catechol amines from tissues by, 23, 370	treated male and female rats, 19, 68  Catabolism, of histamine, effect of liothyronine on, in rat, 17, 483  Catatonia, induction by bulbocapnine, chlorpromazine, methotrimeprazine, prochlorperazine, 9620 RP,
<ul> <li>—, response of blood pressure to, effect of γ-aminobutyric acid on, 23, 384, 386</li> <li>—, effect of γ-aminobutyric acid, 4-hydroxy-butyrate and meprobamate on, 22, 320</li> <li>—, effect of amitriptyline, chlorpromazine, chlor-</li> </ul>	thioproperazine and trifluoperazine, 22, 308  —, induction by chlorpromazine and reserpine, effect of thalidomide on, in mouse, 15, 115  —, induction by chlorpromazine and thioproperazine, 22, 307
prothixene, desmethylimipramine, desmethylpromazine, imipramine and promazine on, 23, 334, 340  —, —, effect of BW 392C60 on, 20, 49, 50  —, —, effect of bethanidine on, 20, 42  —, effect of bretylium on, 14, 542; 16, 103	<ul> <li>, induction by prostaglandins, 22, 190</li> <li>, induction by thioproperazine, effect of antiparkinsonian drugs on, 22, 310</li> <li>Catechin, response of heart to, 18, 169</li> <li>Catechol, central action of, in chick, 25, 707</li> </ul>
——, effect of chlorisondamine on, and action of neostigmine followed by atropine, 21, 326, 327——, effect of N-p-cyclohexylbenzyltropinium derivatives on, 21, 16	<ul> <li>inhibitory action on histidine decarboxylase, 15, 552</li> <li>Catechol amines, absence from central nervous tissue extracts, 25, 301</li> </ul>

Catechol amines (cont.) Cattle, absorption, distribution and excretion of pyrithid-, acetylated, chromatographic separation of, 24, 539, ium (Prothidium) in, 15, 235 -, effect on response of cerebral cortical neurones to Caudate nucleus, homogenates of, fractionation and analysis of fractions, 21, 483 synaptic excitation and L-glutamate, 20, 471 , excitatory and inhibitory actions of, potentiation -, homovanillic acid in, 20, 210 5-OR indolyl compounds in, effect of imipramine by bretylium, 16, 327 , in adrenals, effect of dimethylphenylpiperazinium and reserpine on, 19, 153 , localization of acetylcholine, dopamine, homoon. 24, 41 vanillic acid, 5-hydroxyindolylacetic acid, 5-hydroxyeffect of imipramine, reserpine, syrosingopine and tetrabenazine on, 21, 59 tryptamine and lactic-dehydrogenase in, 21, 482 effect of yohimbine on, and action of imipramine, Celite, induction of kinin formation by, effect of hexa-21, 59 dimethrine on, 22, 93 Cells, enterochromaffin, 5-hydroxytryptamine in, histochemical study, 25, 308 -, in blood plasma, chromatographic separation and colorimetric estimation of, 14, 10 -, effect of iproniazid on, 19, 370 Cellobiose, effect on action of polysaccharides on capillary permeability, in rat, 25, 605 , effect of phenoxybenzamine on, and action of iproniazid, 19, 365 Central action, of adrenaline, dopamine, 5-hydroxytrypt--, in denervated and innervated vas deferens, 20, 305 amine, noradrenaline and tryptamine, effect of , in heart, effect of guanethidine on, action of hemicholinium, and effect of choline, 22, 241 monoamine-oxidase inhibitors on, 17, 261 of amethocaine, lignocaine and procaine, relation -, and action of  $\beta$ -methylxylocholine, 22, to local anaesthetic action, 15, 201 , of bulbocapnine, methotrimeprazine, prochlorperazine, 9620 RP and trifluoperazine, 22, 308 238 , effect of hemicholinium and  $\beta$ -methylxylocholine on, 22, 240 , of chlorpromazine and thioproperazine, and effect , effect of reserpine on, 20, 58 of antiparkinsonian drugs on, 22, 306 , in tissues, effect of guanethidine and guanoxan on, of choline 3-isobutyl-1-methyl-6-thioxanthinate, 24, 41, 42 theophyllinate and 6-thiotheophyllinate, 16, 73 , in visceral organs and ganglia, and effect of dopa, , of compound 48/80, and effect of atropine, mepyrnialamide and reserpine on, histochemical study, in amine, pentobarbitone, promethazine, strychnine guinea-pig, rabbit and rat, 25, 307 and tranquillizers on, in mouse, 14, 243 , of dexamphetamine, effect of bulbocapnine, chlor--, metabolites of, effect on response of hypogastric nerve-vas deferens preparation to electrical stimula-tion, and action of guanethidine, pheniprazine, pyrogallol and reserpine, 24, 643, 646 promazine, methotrimeprazine, propchlorperazine, 9620 RP, thioperazine and trifluoperazine on, 22, 308 , peripheral stores of, effect of amphetamine and -, effect of chlorpromazine, phenoxybenzamine, reserpine on, mechanism of, 23, 536 phentolamine and thioproperazine on, 22, 306 -, receptors for, in submaxillary gland, in rat, 25, 134 , of haloperidol, on somatic reflexes, 25, 751 release from adrenals, effect of SK&F 90,109 and , of hexamethonium, mecamylamine, pempidine and 90,238 on, **23**, 496 saline, 13, 345 -, release from adrenals by angiotensin, bradykinin , of histamine, in Haemophilus pertussis-vaccinated and histamine, and effect of antiadrenaline agents. and unvaccinated rats, 13, 78 antihistamines and ganglion-blocking agents on, in -, of 5-hydroxytryptamine, effect of centrally active cat and dog, 25, 728 drugs on, quantitative assessment, 20, 106 , release from adrenals by angiotensin, bradykinin, , vasomotor effects of, in dog, 14, 411 lobeline and nicotine, and effect of ganglion-blocking agents on, in dog, 25, 738 , of (+)- and (-)-hyoscyamine and -hyoscine, in mouse, 24, 140 -, of lignocaine, 14, 522 , release from adrenals by nicotine, in anaesthetized and spinal cats, 25, 515 -, of mecamylamine, 21, 39 , of mecamylamine and pempidine and its N-ethyl , release from adrenal medulla during splanchnic homologue, 13, 513 stimulation, 13, 390 , release from heart, effect of guanethidine on, and -, of pronethalol, 24, 307 -, of reserpine, effect of methyldopa on, 22, 366 action of bretylium and pheniprazine, 20, 59 , release from tissues during carotid occlusion, 23, -, peripheral and parasympathetic effects of, **24.** 120 , release from tissues by histamine, and effect of , of sarin, and effect of atropine and pralidoxime (pyridine-2-aldoxime methyl methanesulphonate) on, adrenalectomy, hexamethonium and mepyramine on, 23, 367 in anaesthetized dog, 15, 170 , release from tissues by nicotine and phenethylamine, 23, 366 , of sympathomimetic and related amines, in chick and fowl, 25, 705 Central nervous depressants, antitetanus action in , release and uptake by heart, effect of bretylium

experimental local tetanus, 13, 334

choline and carbachol, 23, 260

neuromuscular junctions, 22, 415

in pigeon, 16, 140

, effect on apomorphine-induced emesis and pecking,

-, effect on release of acetylcholine from ganglion and

-, ganglion-blocking action of, mechanism of, 23, 257

-, effect on ganglionic transmission, 23, 222, 241 -, effect on ganglion-stimulating action of acetyl-

and under names of individual substances Catechol o-methyl-transferase inhibitors, effect on response of hypogastric nerve-vas deferens preparation to electrical stimulation, 24, 643, 644

, uptake by heart at high perfusion concentrations,

See also Pressor amines; Sympathomimetic amines;

and guanethidine on, 20, 58

**25**, 18

-, sensitive assay method for, 22, 204

Central nervous depressants (cont.) , ganglion-blocking and neuromuscular blocking actions of, 22, 419 -, interaction with thalidomide, 15, 114 , non-induction of pecking by, in pigeon, 15, 288 See also Anaesthetics; Barbiturates; Hypnotics; and Tranquillizers Central nervous depressant action, of asarone, 20, 438 -, of benzethidine, furethidine and pethidine, 15, 256 of  $\gamma$ -butyrolactone, neurochemical aspects of, **20**, 563 , of chlorpromazine, glutethimide, meprobamate, phenobarbitone and substituted piperidones and pyrrolidones, 25, 790 -, of chlorpromazine and perphenazine, 25, 435 , of chlorpromazine and reserpine, and effect of acorus oil, asarone and  $\beta$ -asarone on, 20, 438 , of deserpidine, rescinnamine, syrosingopine and tetrabenazine, 14, 114 -, of 4-hydroxybutyrate, 22, 320 -, of (+)- $\alpha$ -methylnoradrenaline, in chick, 25, 694 , and effect of chlorpheniramine, cocaine, dexamphetamine, dichloroisoprenaline, Hydergine, hyoscine, levamfetamine [(-)-amphetamine], (-)-amethyltryptamine, methysergide, phenoxybenz-amine, pronethalol and reserpine on, in chick, 25, phenoxybenz-682 -, of phenothiazine derivatives, 22, 154 -, of phenyldiguanide, 14, 533 -, of primary alcohols, 15, 185 -, of propranolol, 25, 714 -, of prostaglandins, 22, 189 -, of reserpine, **14**, 108, 113 -, effect of α-alkyltryptamines on, in mouse, 24, effect of amine-oxidase inhibitors and central stimulants on, 14, 114 -, effect of bethanidine on, 20, 48 , effect of methyldopa on, 22, 368 -, of substituted piperidones and pyrrolidones, 25, 790 -, of substituted 1,3,4-thiadiazoles, 13, 358 -, of thalidomide, **15**, 112 effect of methyl phenidate and methylamphetamine on, in mouse, 15, 116 , of thalidomide and its metabolites, 25, 358 See also Anaesthetic action; Antitremor action; Hypnotic action; and Tranquillizing action Central nervous stimulants, effect on apomorphine-induced emesis and pecking, in pigeon, 16, 140 -, effect on behaviour, in pigeon, 15, 288; 17, 9 -, effect on behaviour, blood pressure and electro-encephalogram, in mouse, 24, 652 , effect on capillary permeability and squirming responses to intraperitoneal acetic acid, in mouse, **22**, 250 -, effect on depressant action of thalidomide, in mouse, 15, 116 -, effect on ganglionic transmission, in cat, 23, 241

erosion and sedation by reserpine, 14, 114

audiogenic seizures, in mouse, 14, 415

-, of α-alkyltryptamines, in mouse, 24, 49

pargyline on, in mouse, 24, 56

in mouse, 24, 55

-, effect on monoamine-oxidase inhibitors on,

-, of α-alkyltryptamines and harmaline, effect of

682 noradrenaline, methysergide and phenoxybenzamine on, in chick, 25, 682 **14**, 501 -, of Tremorine, 14, 560 on, 25, 442 **23**, 257 , effect on induction of gastric haemorrhage and , effect on protective action of thiopentone against —, effect on toxicity of yoh:mbine, 21, 56
Central nervous stimulant action, of 1-L-α-alanyl-2-iso-propylhydrazide, in mouse, 24, 55

Central nervous stimulant action (cont.)
—, of a - alkyltryptamines, 5 - hydroxytryptophan, monoamine-oxidase inhibitors and tryptamine, effect of aromatic-aminoacid-decarboxylase inhibitors on, in mouse, 24, 57 -, of bretylium, 14, 545 -, of dexamphetamine, and effect of chlorpheniramine, cocaine, dichloroisoprenaline, Hydergine, hyoscine,  $(\pm)$ -a-methylnoradrenaline, methysergide, phenoxybenzamine and reserpine on, in chick, 25, -, of dioscine and dioscornine, 13, 214 -, of 5-hydroxytryptophan, effect of α-alkyltrypt-amines on, in mouse, 24, 54 , of levamfetamine [(-)-amphetamine] and (-)-amethyltryptamine, in chick, 25, 694 -, of mepesulphate, in cat, 17, 533 -, of mecamylamine and pempidine and its N-ethyl homologue, 13, 513
-, of methyl phenidate and methylamphetamine, effect of thalidomide on, in mouse, 15, 116 , of (+)- $\alpha$ -methyltryptamine, and effect of chlorpheniramine, Hydergine, hyoscine,  $(\pm)$ - $\alpha$ -methyl-

, of Paspalum scrobiculatum extracts, and effect of barbiturates, ether and mephenesin on, 18, 11 -, of pronethalol, 25, 714

-, of stereoisomeric amphetamines and 1-phenylethylamines, relation to amine-oxidase inhibition,

, effect of amitriptyline, chlorpromazine, chlorprothixene, desmethylimipramine, desmethylpromazine, imipramine and promazine on, 23, 343, 348 , effect of antiparkinsonian compounds and

various other substances on, 14, 561 , and effect of centrally active and other drugs

, effect of (+)- and (-)-hyoscyamine and -hyoscine on, in mouse, 24, 143 See also Antidepressants

Centrally active agents, effect on exploratory activity and defaecation, in rat, 25, 432 , effect on ganglionic transmission, mechanism of,

Cephaloram, antibacterial action of, and synergism with

other antibiotics, 22, 22 Cephalosporin C, antibacterial action of, and synergism

with other antibiotics, 22, 22

biological properties and toxicity of, 16, 170 Cephalosporin CA (pyridine), antibacterial action against Staphylococcus aureus, and synergism with other antibiotics, 22, 22

-, biological properties and toxicity of, 16, 170 , effect in experimental streptococcal infection, in

mouse, 16, 177
Cephalosporin N, in-vitro toxicity to skin, 14, 168 Cephalosporin P<sub>1</sub>, antibacterial action against Staphylococcus aureus, synergism with other antibiotics, 22,

Cephalosporinase activity, of staphylococci, 16, 175 Cephalothin, binding by human serum proteins, 25, 638 Cerebral cortex, electrical activity of, effect of ether, leptazol, lignocaine and pentobarbitone on, 21, 6 potentials of. See Electroencephalogram

Cerebral ventricles, administration of antiparkinsonian agents, calcium chloride, chloralose, magnesium chloride, sympathomimetic amines and urethane into, effect on drug-induced tremor, in cat, 15, 578

Cerebral ventricles (cont.) , perfused, outflow from aqueduct and cisterna, effect of acetylcholine and histamine on, 13, 164, —, —, effect of adrenaline, histamine and tubocurarine on, in anaesthetized cat, 13, 156 -, endogenous acetylcholine in, following anticholinesterase injection, 13, 165 , persistence of acetylcholine and histamine in perfusion fluid, 13, 164 Cerebrospinal fluid, collection for examination, 19, 154 , dextran in, following infusion of low-molecularweight material, 21, 224 , effect on response of Venus heart to acetylcholine and 5-hydroxytryptamine, 19, 295 , 5-hydroxytryptamine in, effect of 5-hydroxytryptophan, pheniprazine (JB-516) and reserpine on, 19, 296 , 5-OR indolyl compounds in, effect of imipramine and reserpine on, 19, 153 -, localization of ampicillin in, 18, 362 -, localization of bemegride in, 14, 36 -, localization of cloxacillin in, in rabbit, 21, 347 -, localization of mecamylamine and pempidine in, in rat, 14, 205 -, localization of methicillin in, 17, 76 , localization of nitrofurans in, comparison with aqueous humour and plasma, in dog, 24, 266 response of Venus heart to, 19, 295 Cesticidal action, of quaternary nitrogen compounds in vitro, 24, 240 Cesticides, in-vitro screening test for, with Hymenolepis nana, 15, 436 Cetrimide (cetyltrimethylammonium bromide): , effect on induction of kinin formation by glass, 22, , effect on intestinal absorption of butyrate, glucose and methionine, in mouse, 24, 205 -, effect on trypanocidal action of butarsen and physical and other properties of, 14, 435 -, in-vivo local antibacterial action and intradermal toxicity of, 13, 231 -, in-vitro sensitivity of Corynebacterium ovis to, 13, 232 Cetyltrimethylammonium bromide. See Cetrimide Chalcone, effect on action of histamine on capillary permeability, 13, 14 effect on response of smooth muscle to histamine. 13, 14 Cheeping, of birds, effect of dexamphetamine,  $(\pm)$ -amethylnoradrenaline and (+)- $\alpha$ -methyltryptamine on, and action of other centrally active drugs, 25, 685 , effect of levamfetamine [(-)-amphetamine], (+)-a-methylnoradrenaline and (-)-a-methyltrypt-amine on, in chick, 25, 694 -, effect of methysergide on, 25, 696 , —, effect of sympathomimetic and related amines on, 25, 705 , recording and measurement of, 25, 675 Chenopodium oil, in-vitro cesticidal action of, 15, 437 , effect on Ascaris lumbricoides body movements, 13, Chick. See Fowl Chlamys opercularis, digestive glands, gill plates and gonads of, oxidation of 5-hydroxytryptamine and

tryptamine by homogenates of, 15, 45 Chloral hydrate, analgesic action of, in mouse, 24, 174

, effect on acetylcholine release and on ganglionic

and neuromuscular transmission, and action of

, effect of bemegride on, 24, 173

Chloral hydrate (cont.) -, effect on ganglionic transmission, 23, 244 , effect on hypnotic action and metabolism of pentobarbitone, in rat, 18, 35 , effect on neuromuscular-blocking action of tubocurarine, 19, 116 , effect on response of small intestine to acetyl-choline and nicotine, 19, 116 effect on response of striated muscle to acetylcholine and potassium ions, 19, 117 , effect on response of superior cervical ganglion to acetylcholine, carbachol, nicotine, potassium ions and tetramethylammonium, 19, 113 , effect on synaptic transmission, 19, 112 , hypnotic action of, effect of phenyldiguanide on, 14, 533 , effect of stereoisomeric amphetamines and 1-phenylethylamines on, 14, 502 , response of nictitating membrane to, and effect of tetramethylammonium on, 19, 114 , response of small intestine to, and effect of hyoscine and mepyramine on, 19, 116 , response of striated muscle to, 19, 117 Chloralose, effect on response of blood pressure and respiration to hydroxydione sodium succinate, 15, effect on response of small intestine to acetylcholine, 19, 117 , effect on response of superior cervical ganglion to acetylcholine, 19, 113 -, effect on synaptic transmission, 19, 113 -, intraventricular, effect on drug-induced tremor, in cat, 15, 578 Chloramphenicol, derivatives of, antimicrobial action of, effect of dichloroacetylation on, 17, 286 , effect in experimental infections with Diplococcus pneumoniae, Klebsiella pneumoniae, typhimurum, Staphylococcus aureus and Streptococcus pyogenes, in mouse, 18, 365 -, effect in experimental Leptospira zanoni infections, in mouse, 20, 237 –, in-vitro effect on Hymenolepis nana, **15**, 437 -, effect on Theileria annulata in tissue culture, 13, 459 -, excretion in bile, 17, 420 , in-vitro sensitivity of Australian leptospiral serotypes to, 20, 232 -, in-vitro toxicity to skin, 14, 168 , with and without streptomycin, effect on body and splenic weights, 5-hydroxytryptamine in organs, and intestinal flora, in mouse and rat, 16, 90 Chlorazol black, subcutaneous, effect on haemoglobin nitrite sensitivity reaction, 19, 492 Chlorbismol, intravenous, response of pulmonary blood flow and blood pressure to, in cat, 13, 376 Chlorbutol, effect on hypnotic action and metabolism of pentobarbitone, in rat, 18, 33 ganglion-blocking action of, 23, 243 Chlorcyclizine, effect on response of heart beat to adrenaline and noradrenaline, 13, 7 , response of heart beat to, 13, 8 Chlordiazepoxide, effect on enzymic destruction of brady-kinin by brain extracts, 22, 333 effect on exploratory activity, defaecation and gait, in rat, 25, 432 , effect on head-twitch response to 5-hydroxytryptophan and on pinna reflex, in mouse, 20, 113 effect on hypnotic action and metabolism of pentobarbitone, in rat, 18, 35 effect on hypothermia and tremor induced by Tremorine, 25, 447, 450

choline, 22, 415

Chlordiazepoxide (cont.)

effect on response of small intestine to bradykinin,

effect on uptake of 5-hydroxytryptamine by blood platelets, 16, 291

Chlorhexidine, effect in experimental Leptospira zanoni infections, in mouse, 20, 237

, in-vitro sensitivity of Australian leptospiral serotypes to, 20, 232

Chloride, excretion of, by perfused kidney, effect of aldosterone on, action of SC-11480 and spironolac-

-,  $\frac{}{}$ , effect of SC-11480 and spironolactone on, 20, 445

, urinary excretion of, effect of adrenaline, bretylium

and noradrenaline on, 17, 465 effect of chlorothiazide, choline 3-isobutyl-1methyl-6-thioxanthinate, theophyllinate and 6-thiotheophyllinate on, 16, 70

Chlorisondamine, antidiuretic action of, 13, 511

, effect on action of imipramine on toxicity of yohimbine, 21, 57

, effect on imipramine-induced tachycardia, in reserpinized rat, 23, 337

, effect on response of blood pressure to carotid occlusion, and action of neostigmine followed by atropine, 21, 323

-, effect on response of blood pressure to carotid occlusion and dimethylphenylpiperazinium, and action of neostigmine followed by atropine, 21, 327

-, effect on response of nictitating membrane to preganglionic stimulation, and action of neostigmine followed by atropine, 21, 323

–, effect on toxicity of yohimbine, 21, 59

-, effect of repeated administration on response of nictitating membrane and submaxillary gland to adrenaline, 14, 229

-, ganglion-blocking action of, effect of guanidine and derivatives on, 19, 420

, response of blood pressure and autonomic ganglionic transmission to, effect of neostigmine on, and action of atropine, 21, 323

Chlormerodrin, diuretic action of, mechanism of, in rat, 24, 1

Chlormethylenecycline, effect on development of chick embryo, 25, 317

, stability of, possible relation to deposition in foetal skeleton and induction of malformations, 23,

(N-a-Chloroacetylglycyl)-3,4-xylidide, properties and synthesis of, 13, 429

3 - Chloroacetylthiopropylene sulphide, antitubercular action and toxicity of, 15, 485

 $N^1$ -(6-Chloro-1,3-benzodioxan-8-ylmethoxy)diguanide, antibacterial action of, 15, 244

o-Chlorobenzoic acid, effect on free fatty acids in plasma, in rat, 25, 190

2-(2-p-Chlorobenzoyl-2-dichloroacetamidoethylamino)ethyl hydrogen sulphate, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17,

3-p-Chlorobenzoylthiopropylene sulphide, antitubercular action and toxicity of, 15, 485

(p-Chlorobenzyl)(2-chloroethyl)ethylamine, response of blood pressure to, and effect of adrenalectomy, adrenaline, hexamethonium, noradrenaline and reserpine on, 16, 77

1-p-Chlorobenzyl-4-dichloroacetylpiperazine, amoebicidal and antifungal actions of, 17, 294

N-o-Chlorobenzyl-N'N"-dimethylguanidine, adrenergic neurone blockade and other acute effects induced by,

, effect on response of blood pressure to guanethidine, noradrenaline and tyramine, 22, 242

N-(p-Chlorobenzyl)guanidine, adrenergic neurone-blocking action of, 24, 395

-, effect on cardiac noradrenaline, eyelid and monoamine oxidase, 24, 408

S-(o- and p-Chlorobenzyl)isothiourea, effect on vasoconstrictor action of adrenaline and 5-hydroxy-tryptamine, 14, 532

S-(m-Chlorobenzyl)isothiourea, pain-producing action of, in man, 14, 532

N<sup>1</sup>-p-Chlorobenzyloxydiguanide, antibacterial action of. 15, 244

1-Chlorobutane-2,3-dithiol. See 2,3-Dimercaptobutyl chloride

3 - Chlorobutane - 1,2 - dithiol. See 2,3 - Dimercapto -1-methylpropyl chloride

p-Chloro- $\beta$ -2-chloroethylamino- $\alpha$ -dichloroacetamidopropiophenone, amoebicidal, antifungal, anti tubercular and trichomonicidal actions of, 17, 287

5-Chlorocoumaran-3-one, synthesis of, 23, 502, 504 (5-Chlorocoumaran-3-yl)ethyldimethylammonium, effect

on adrenergic neurone transmission, 23, 497 , synthesis of, 23, 501

N-(5-Chlorocoumaran-3-yl) guanidine, adrenergic neurone-blocking action of, 23, 497, synthesis of, 23, 505

(5-Chlorocoumaran-3-yl)trimethylammonium, effect on adrenergic neurone transmission, 23, 497 , synthesis of, 23, 501

Chlorocresol, effect on response of striated muscle to caffeine, 24, 514

-, response of striated muscle to, effect of bath-fluid composition, cyanide, dyflos, edetate, fluoride, fructose 1,6-diphosphate, gallamine triethiodide, glucose 1-phosphate, iodoacetate, mipafox, procaine and tubocurarine on, 24, 511

, mechanism of, 24, 515

5-Chloro-6-dichloroacetamido-2-ethylthiobenzothiazole, amoebicidal and antitubercular actions of, 17, 294

p-Chloro- $\alpha$ -dichloroacetamido- $\beta$ -4-(p-isopropylbenzyl)piperazin-1-ylpropiophenone, antifungal and antitubercular actions of, 17, 287 5-Chloro-6-dichloroacetamido-2-mercaptobenzothiazole,

amoebicidal and antitubercular actions of, 17, 294 p-Chloro-α-dichloroacetamido-β-4-methylpiperazin-1-

ylpropiophenone, antifungal action of, 17, 287

5-Chloro-6-dichloroacetamido-2 - methylthiobenzothiazole, amoebicidal and antitubercular actions of, 17, 294

5 - Chloro - 2 - dichloroacetamido - 6 - nitrobenzothiazole, amoebicidal and antitubercular actions of, 17, 294

5 - Chloro - 2,6 - di(dichloroacetamido)benzothiazole, amoebicidal and antitubercular actions of, 17, 294

7-Chloro-4-(4-diethylamino-1-methylbutylamino)quinoline di[di(p-dichloracet-N-methylamidophenyl phosphate], effect in hepatic amoebiasis, in hamster, 14, 491

6 - Chloro - 2,4 - diethyleneiminopyrimidine, antifertility action of, in rat, 14, 151

6-Chloro-3,4-dihydro-2-methyl-7-methylsulphamoyl-2H-1,2,4-benzo[e]thiadiazine 1,1-dioxide, metabolism and mechanism of diuretic action of, 18, 61

7-Chloro-1,2-dihydro-1-methyl-2-oxo-5-phenyl-3H-1,4-

benzodiazepine. See Diazepam α-Chloro-3,4-dimethoxyacetanilide, properties and synthesis of, 13, 425

- 5-Chloro-3-dimethylaminocoumaran, effect on adrenergic neurone transmission, 23, 497
  - synthesis of, 23, 501, 505
- 3-Chloro-5-(3-dimethylaminopropyl)-10,11-dihydro-5Hdibenzo[a,d]cycloheptene, effect on response of small intestine to bradykinin, 25, 50
- p-Chlorodiphenylacetyltropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562
- p Chlorodiphenylacetyltropeine methobromide, anti acetylcholine and antitremor actions of, 14, 564
- 1-(p-Chlorodiphenylmethyl)-4-methyl-1,4-diazacycloheptane. See Homochlorcyclizine
- α-Chloro-N-diphenyl-2- and -4-ylacetamide, properties and synthesis of, 13, 425
- 5-Chloro-2-ethoxycarbonylcoumaran-3-one, synthesis of, 23, 504
- 2 Chloroethyl p methanesulphonylbenzylcarbamate, effect on Entamoeba histolytica, 18, 132
- 5-(2-Chloroethyl)-4-methylthiazole [4-methyl-5-(β-chloroethyl)thiazole]:
- , effect on apomorphine-induced emesis and pecking,
- in pigeon, 16, 141
- , effect on hyperthermic action and toxicity of amphetamine, in grouped mice, 19, 253 , hypothermic action of, 19, 253
- Chloroform, anaesthesia induced by, effect of pronethalol on, 24, 308
- , induction of cardiac arrhythmias by adrenaline during, effect of pronethalol on, 24, 308
- —, effect on acetylcholine in brain, in dog, 24, 348 -, effect on response of blood pressure and heart beat to pronethalol, and action of noradrenaline and posterior pituitary extract, 21, 462
- , effect on response of small intestine to acetylcholine, histamine, potassium ions and transmural stimulation, 25, 104
- -, effect on substance P in brain, in mouse, 21, 113 -, response of small intestine to, and effect of cocaine, hexamethonium, lachesine and mepyramine on, 22,
- , toxicity of, effect of pronethalol and vasoconstric-
- tion on, 24, 308, 309  $\alpha$ -Chloro-N-2-hydroxyethyl-N-p-methylsulphonylbenzyl-
- acetamide, amoebicidal action of, 18, 132 4-, 5-, 6- and 7-Chloroisatin  $\beta$ -thiosemicarbazone, antiviral action, properties and synthesis of, 15, 101
- p-Chloromercuribenzenesulphonic acid, effect on kininase activity of human erythrocytes, plasma and saliva, 23, 442
- p-Chloromercuribenzoic acid, effect on in-vitro histamine release and mast-cell damage in sensitized tissues by antigen and compound 48/80, 15, 84
- -, effect on neuronal excitation, 18, 236
- , effect on neurone-depressant action of 5-hydroxytryptamine, 18, 236
- 2-Chloro-10-[3-(4-methylcarbamoylpiperidino)propyl]phenothiazine, effect in experimental local tetanus, **13**, 336
- 2-Chloro-9-(1-methylpiperid-4-ylidene)thiaxanthen, effect on response of small intestine to bradykinin, 25,
- 2-Chloro-2-methylpropane-1,2-dithiol. See 1,1-Di(mercaptomethyl)ethyl chloride 4-Chloro-5-methylresorcinol, anti-inflammatory action
- and toxicity of, 22, 221
  5-Chloro-2-methyltryptamine. See 3-(2-Aminoethyl)-5-
- chloro-2-methylindole 6-Chloro-α-methyltryptamine. See 3-(2-Aminopropyl)-6chloroindole

- α-Chloro-6-nitroaceto-3,4-xylidide, properties and synthesis of, 13, 425
- 4-Chloro-2-nitro-α-piperidinoacetanilide, properties and synthesis of, 13, 425
   2-Chloro-10-{3-[4-(3-oxobutyl)piperazin-1-yl]propyl}-
- phenothiazine, effect in experimental local tetanus, **13**, 336
- Chlorophenols, dissociation constants, pharmacological actions and toxicity of, 13, 20
- 3-p-Chlorophenoxyacetylthiopropylene sulphide, antitubercular action and toxicity of, 15, 485
- 3-p-Chlorophenoxypropane-1,2-dithiol, effect on Myco-
- bacterium tuberculosis, 15, 485
  3 p Chlorophenylacetylthiopropylene sulphide, antitubercular action of, 15, 485
- 3-(α-Chloro-α-phenylacetylthio)propylene sulphide, antitubercular action and toxicity of, 15, 485
- 1-(m- and -p-Chlorophenylcarbamoylmethyl)pyridinium, antiviral action in tissue culture, properties and synthesis of, 13, 424
- [4-(m-Chlorophenylcarbamoyloxy)but-2-ynyl]trimethylammonium, response of blood pressure to, effect of atropine on, in rat, 23, 36
- -, effect of cocaine on, in rat, 23, 37
  - , effect of hexamethonium on, and action of atropine and cocaine, in rat, 23, 36, , —, effect on nicotine and P-286 on, in rat, 23, 38
  - -, response of blood pressure and urinary bladder to, in rat, 24, 591
  - , response of nictitating membrane to, and effect of ganglionectomy on, 18, 504
  - , sialogenous action of, and effect of adrenalectomy, atropine, cocaine, ganglionectomy, hexamethonium, methadone, morphine and xylocholine (choline 2,6-xylyl ether) on, 18, 501
- 7-p-Chlorophenyldiazoamino-10-ethyl-9-phenylphenanthridinium, trypanocidal action of, 17, 402
- N (1 p Chlorophenylethyl)guanidine, adrenergicneurone-blocking action and synthesis of, 24, 395
- , effect on cardiac noradrenaline, dopamine-βoxidase, eyelid and monoamine oxidase, 24, 408
- 5-p-Chlorophenyl-5-ethylpyrrolid-2-one, central depressant action and toxicity of, 25, 790
- p-Chlorophenylguanidine, effect on trypanocidal action of pentamidine, 14, 437 N - (1 - p - Chlorophenylpropyl)guanidine, adrenergic
- neurone-blocking action and synthesis of, 24, 395
- , effect on cardiac noradrenaline, eyelid and monoamine oxidase, 24, 408
- trans-1-p-Chlorophenyl-1-pyrid-2'-yl-3-pyrrolidin-1"ylprop-1-ene, effect on action of morphine on gastrointestinal propulsion, in rat, 14, 32
- effect on gastrointestinal propulsion, in rat, 14, 32 p-Chloro-a-piperidinoacetanilide, antiviral action in tissue culture, properties and synthesis of, 13, 424 5-Chloro-a-piperidinoaceto-o-toluidide, antiviral action
- in tissue culture, properties and synthesis of, 13, 424 3-Chloropropane-1,2-dithiol. See 2,3-Dimercaptopropyl
- chloride a-Chloropropiono-3,4-xylidide, properties and synthesis of, 13, 425
- 3-( $\beta$ -Chloropropionylthio)propylene sulphide, antitubercular action and toxicity of, 15, 485
- 3-Chloropropylene sulphide, effect on Mycobacterium tuberculosis, 15, 491
- 2-Chloro-10-(3-pyrrolidin-1'-ylpropyl) phenothiazine, effect on induction of oedema by compound 48/80, dextran, eggwhite, histamine and 5-hydroxytryptamine, in rat hindpaw, 13, 67
- Chloroquine, in-vitro cesticidal action of, 15, 437

Chloroquine (cont.) Chlorpromazine (cont.) -, effect in hepatic amoebiasis, in hamster, 14, 490 , effect on action of a-methyltryptamne and trypt-, effect on arthritis induced by mycobacterial adamine on behaviour and cerebral electrical activity, juvant, in rat, 21, 127 in cat, 24, 664, 665 , effect on bronchoconstrictor action of bradykinin , effect on action of nalorphine on morphine miosis, and slow-reacting substance produced in anaphylin rabbit, 24, 793, 795 axis, 23, 209 -, effect on adrenergic activity, in rat, 23, 96 , effect on Theileria annulata in tissue culture, 13, 459 , effect on antitetanus action of acepromazine, Chlorothiazide, binding by serum albumin, 17, 502 mephenesin and thiopentone, 16, 300 -, diuretic action of, 16, 70 , effect on apomorphine-induced emesis and pecking, , effect of acetazolamide, aminoisometradine, in pigeon, 16, 141 mersalyl and saline-loading on, in rat, 14, 368 , effect on apomorphine-induced pecking, in pigeon, , effect of bretylium and phenoxybenzamine 17, 8 on, 17, 468 , effect on arousal threshold, blood pressure and -, effect on distribution, excretion and hypotensive electrocorticogram, and action of amphetamine on, action of pempidine, in animals and man, 17, 488 in cat, **14**, 341 , effect on ascorbic acid in adrenals, in stressed, non-1-(5-Chloro-o-tolylcarbamoylmethyl)pyridinium, antiviral action in tissue culture, properties and synthesis stressed, hypophysectomized and hydrocortisoneof, 13, 424 2-Chloro-1,1,2-trifluoroethyl ethyl ether, response of treated rats, 19, 458 , effect on ascorbic acid in adrenals, body weight small intestine to, and effect of cocaine, hexaand sexual immaturity, in female mouse, 20, 497 methonium, lachesine and mepyramine on, 22, 358 -, effect on behaviour and on amines and their acid 5-Chlorotryptamine. See 3-(2-Aminoethyl)-5-chlorometabolites in brain, 24, 766 -, effect on carotid sinus reflexes, 13, 257 indole Chlorpheniramine, effect on bronchoconstrictor action of -, effect on catechol amines in central nervous system, histamine, in guinea-pig, 15, 563 in dog, 18, 595 , effect on central action of dexamphetamine,  $(\pm)$ -a-, effect on conditioned responses, electroconvulsions methylnoradrenaline and (+)-α-methyltryptamine, and fighting behaviour, and action of asarone and in chick, 25, 698  $\beta$ -asarone, in animals, 20, 438 , effect on head-twitch response to 5-hydroxytrypto-, effect on depolarization of striated muscle by acetylcholine, and action of neostigmine, 15, 92 phan, in mouse, 20, 113 , effect on in-vitro mast-cell damage induced by , effect on distribution of isoniazid between blood antigen, 15, 400 and tissues, 15, 5 -, effect on response of blood pressure to nor--, effect on *in-vitro* enzymic activity of liver, **15**, 175 adrenaline, phenethylamine and tryptamine, in , effect on enzymic destruction of bradykinin by chick, 25, 718 brain extracts, 22, 332 , effect on enzymic destruction of bradykinin by carboxypeptidase B, chymotrypsin and serum, 22, -, in-vitro mast-cell damage induced by, and effect of metabolic inhibitors, calcium-lack and high temperature on, 15, 399 333 Chlorphenoxamide, amoebicidal, antifungal, antitubercu--, effect on exploratory activity and defaecation, in lar and trichomonicidal actions of, 17, 293 rat, 25, 432 , derivatives of, antimicrobial actions of, 17, 293 -, effect on free fatty acids in plasma, and action of salicylate, in rat, 25, 190 Chlorpromazine, antiacetylcholine and antitremor actions , effect on ganglion-blocking action of adrenaline of, 18, 247 , antiadrenaline action of, and relation to anti-tetanus action, 25, 566 and mescaline, 23, 235 -, effect on gonadotrophin in pituitary, in rat, 20, 503 , antiemetic action of, 21, 436 , effect on head-twitch response to 5-hydroxytrypto--, antitetanus action of, 25, 74 phan and on pinna reflex, in mouse, 20, 113 , in intact, spinal and decerebrate rabbits, 18, -, effect on hydrolysis of hippuryl-L-arginine by carboxypeptidase, and action of zinc ions, 22, 334 -, and effect of acepromazine on, 16, 297 -, effect on 5-hydroxytryptamine in brain, in mouse, 24, 502 , in experimental local tetanus, 13, 335 , antitetanus and other central and peripheral actions of, 17, 507 , effect on 5-hydroxytryptophan-induced accumulation of 5-hydroxytryptamine in brain, in mouse, 24, , effect in various tests involving autonomic func-505 tions and reserpine antagonism, comparison with , effect on hyperthermic action and toxicity of amphetamine, in grouped mice, 19, 250 imipramine and other drugs, 23, 330 -, effect on hypnotic action of ether, 18, 12 -, effect on acid gastric secretion induced by histamine, and action of aminoguanidine and iproniazid, -, effect on hypnotic action of hexobarbitone, action in rat, 22, 520 of methyldopa, 22, 367 , effect on action of bradykinin on behaviour, in , action of thalidomide, in mouse, 15, 115 guinea-pig, 21, 160 , effect on hypnotic action and metabolism of

, effect on action of gastrin and histamine on acid

, effect on action of histamine, 5-hydroxytryptamine

gastric secretion, in rat, 23, 481

mouse, 24, 502

and passive cutaneous anaphylaxis on capillary permeability, in mouse, 20, 391

-, effect on induction of oedema by compound 48/80, dextran, egg-white, histamine and 5-hydroxytryptamine, in rat hindpaw, 13, 67

-, effect on induction of oedema by egg-white, and

pentobarbitone, in rat, 18, 33

action of isoniazid, 15, 4

, effect on hypothermia and tremor induced by Tremorine, 25, 447, 450

Chlorpromazine (cont.)	Chlorpromazine (cont.)
—, effect on metabolism of 5-hydroxytryptamine, in	—, effect on toxicity of yohimbine, and action of
mouse, 24, 497	reserpine, 21, 55, 56, 57
——, effect on miotic action of morphine, in rabbit, 24,	—, effect on uptake of histamine and 5-hydroxytrypt- amine by mast cells, 23, 414
—, effect on motor-nerve discharges, in rabbit, 25, 270	—, effect on uptake of 5-hydroxytryptamine by blood
—, effect on mydriasis and rage induced by morphine,	platelets, 16, 291
18, 14	—, effect on urinary excretion of creatinine and 5-
—, effect on neuronal excitation, 18, 236	hydroxyindol-3-ylacetic acid, and influence of
—, effect on neurone-depressant action of 5-hydroxy-	ambient temperature, in mouse, 24, 500
tryptamine, <b>18</b> , 236	—, effect on uterotrophic action of oestradiol, in
—, effect on oestrous cycle, in albino mouse, 22, 162	ovariectomized mouse, 20, 500
—, effect on overt emotional activity, in normal,	—, ganglion-blocking action of, 23, 226
control and septum-destroyed rats, 17, 473 —, effect on pheniprazine-induced accumulation of	—, —, and action of mescaline, 23, 235 —, hyperglycaemic action of, effect of adrenalectomy,
5-hydroxytryptamine in brain, and influence of	ambient temperature, dibenamine, phentolamine and
ambient temperature, in mouse, 24, 503	reserpine on, in rat, 23, 93
—, effect on release of acetylcholine by motor-nerve	—, —, relation to hypothermic action, in rat, 23,
stimulation, 15, 92	97
—, effect on release of oxytocin in lactating rat, 17, 300	—, hypnotic action and toxicity of, 25, 794
—, effect on response of aortic strip to adrenaline and	—, hypotensive, sedative and tranquillizing actions of,
noradrenaline, 23, 508	22, 154
, effect on response of auricular beat to butyryl-	, hypothermic action of, effect of iproniazid,
choline, noradrenaline and tyramine, 17, 233 —, effect on response of auricular beat and small	isoniazid and proadifen (2-diethylaminoethyl 3,3-diphenylpropylacetate) on, 14, 252
intestine to acetylcholine, and action of atropine, 20,	—, induction of catatonia by, effect of thalidomide on,
531	in mouse, 15, 115
—, effect on response of blood pressure to adrenaline,	-, inhibition of imidazole-N-methyl transferase by,
<b>25</b> , 567	<b>22</b> , 522
, effect on response of blood pressure to adrenaline,	—, lytic action on Escherichia coli, 24, 466
bretylium, guanethidine and noradrenaline, 20, 372	—, mydriatic action of, and effect of nalorphine on, in
—, effect on response of blood pressure to adrenaline	rabbit, 24, 793
and noradrenaline, in rabbit, 25, 568	, neuromuscular blocking action of, 15, 88
—, in spinal cat, 25, 571 —, and action of cocaine, dichloroisoprenaline	—, pharmacological actions and toxicity of, comparison with thioproperazine, 22, 301
and hexamethonium, 23, 513	, response of body temperature to, effect of mono-
—, effect on response of blood pressure to adrenaline,	amine-oxidase inhibitors on, in rabbit, 25, 161
noradrenaline and physostigmine, in rat, 21, 273	, response of striated muscle to, effect of tubo-
—, effect on response of blood pressure to isoprenaline,	curarine on, 15, 92
and action of dichloroisoprenaline, 23, 513	, sedative action of, and effect of asarone and
—, effect on response of blood pressure to physalaemin,	$\beta$ -asarone on, 20, 438
25, 383	—, toxicity of, in rabbit, 25, 164
—, effect on response of blood pressure, heart beat and nictitating membrane to adrenaline, isoprenaline	—, tremor induced by, and effect of antiparkinsonian agents, calcium ions, chloralose and sympatho-
and noradrenaline, in anaesthetized and spinal	mimetic amines on, in cat, 15, 579
vagotomized cats, 25, 569	—, with and without iproniazid, effect on 5-hydroxy-
, effect on response of cerebral cortical neurones to	tryptamine in brain, in mouse, 15, 140
L-glutamate and synaptic excitation, 20, 471	, with and without pentobarbitone, effect on central
—, effect on response of large and small intestine to	and lethal actions of compound 48/80, in mouse, 14,
eledoisin, 19, 341	Chamber of the company of the compan
, effect on response of large and small intestine to	Chlorpromazine sulphoxide, effect on apomorphine- induced emesis, in dog, 21, 439
physalaemin, 25, 372 —, effect on response of nictitating membrane to	, effect on conditioned and unconditioned responses
bretylium and guanethidine, 20, 372	and forced locomotor activity, 22, 157
—, effect on response of seminal vesicles to adrenaline	—, effect on response of auricular beat to butyryl-
and noradrenaline, 23, 508	choline, noradrenaline and tyramine, 17, 233
, effect on response of sex organs to gonadotrophin,	Chlorpromethazine, effect on response of small intestine
in immature mouse, 20, 501	to bradykinin, 25, 50
, effect on response of uterus to 5-hydroxytrypt-	Chlorpropamide, effect on dextran-induced anaphylactoid
amine, 15, 142 —, effect on social behaviour, in laboratory rats, 24,	reaction, in rat, 20, 555 Chlorprothixene, effect in various tests involving auto-
583	nomic functions and reserpine antagonism, compari-
—, effect on stress-induced block of milk ejection, in	son with chlorpromazine, imipramine and other
lactating guinea-pig, 17, 306	drugs, 23, 330
, effect on substance P in brain, in mouse, 21, 113	, effect on head-twitch response to 5-hydroxytrypto-
—, effect on synthesis of acetylcholine by brain, 15, 93	phan and on pinna reflex, in mouse, 20, 113
, effect on toe-pinch-induced pain, in guinea-pig, 17,	—, effect on toxicity of yohimbine, and action of
34 —, effect on toxicity of schradan, and influence of	reserpine, 21, 55, 56, 57 ——, effect on uptake of 5-hydroxytryptamine by blood
environmental temperature, 14, 253	platelets, 16, 291
	r

Chlorprothixene (cont.) , and its cis-isomer, effect on ganglionic transmission. **23**, 228 Chlortetracycline, binding by human serum proteins, 25, , effect in experimental Leptospira zanoni infections, in mouse, 20, 237 -, effect in experimental moniliasis, 13, 1 -, effect on development of chick embryo, 25, 317 effect on Theileria annulata in tissue culture, 13, 459 -, in-vitro sensitivity of Australian leptospiral serotypes to, 20, 232 stability of, possible relation to deposition in foetal skeleton and induction of malformations, 23, 445 -, in-vitro toxicity to skin, 14, 168 , with streptomycin, effect on urinary excretion of 5-hydroxyindolylacetic acid, in rat, 16, 95 -, with and without streptomycin, effect on body and splenic weights, 5-hydroxytryptamine content of organs, and intestinal flora, in mouse and rat, 16, Cholecystokinin, response of terminal tract of bile duct to, and effect of adrenaline on, 20, 226 Cholesterol. See Hypercholesterolaemia Choline, anticurare action of, and effect of benzoquinonium on, 14, 459 , bisquaternary analogues of, neuromuscular blocking action of, and effect of choline, edrophonium, neostigmine, physostigmine and tubocurarine on, 25, 392 -, depolarizing action at autonomic ganglia, and effect of hexamethonium on, 18, 575 -, detection in blood, 23, 368 , effect on action of central nervous depressants on acetylcholine release and transmission in ganglion, 22, 424 -, effect on action of decamethylenebis(2-hydroxyethyldimethylammonium) on release of acetylcholine from diaphragm by nerve stimulation, 25, 399, effect on action of 3,6-di(3-diethylaminopropoxy)pyridazine di(methiodide) on response of blood pressure to adrenaline, noradrenaline and physostigmine, in rat, 21, 276 , effect on action of hemicholinium on effect of guanethidine on catechol amines in heart, 22, 241 , effect on action of hemicholinium on release of acetylcholine from ileum, 21, 562 , effect on action of hemicholinium on response of blood pressure to physostigmine (eserine), 19, 454 -, effect on action of hemicholinium on response of hypogastric nerve-vas deferens preparation to electrical stimulation, 19, 95 , effect on action of hemicholinium on response of nerve-muscle preparations to electrical stimulation, **17**, 189 -, effect on action of tetraethylammonium and triethylcholine on response of phrenic nerve-diaphragm and tibialis anterior preparations to acetylcholine and electrical stimulation, 19, 212 -, effect on action of triethylcholine on acetylcholine output and response of phrenic nerve-diaphragm preparation to electrical stimulation, 24, 113 -, effect on action of triethylcholine on peristaltic

reflex of ileum, 21, 210

-, effect on action of triethylcholine on response of

nerve-muscle preparations to electrical stimulation,

, effect on action of tubocurarine on response of

striated muscle to acetylcholine, 14, 460

Choline (cont.) , effect on induction of muscle weakness by tetraethylammonium and triethylcholine, in rabbit, 19, , effect on neuromuscular blocking action of benzoquinonium, 14, 459 , effect on neuromuscular blocking action of hemicholinium, 22, 446 , effect on neuromuscular blocking action of hemicholinium and nicotine, 15, 590 , effect on neuromuscular blocking action of leptodactyline, 15, 16 , effect on neuromuscular blocking action of neostigmine and triethylcholine, 19, 208 , effect on neuromuscular blocking action of polymethylenebis (2 - hydroxyethyldimethylammonium) compounds, 25, 395, 397, 398, effect on release of acetylcholine from electrically stimulated superior cervical ganglion, in cat, 21, 244 -, effect on release of acetylcholine from mammalian motor-nerve endings, 15, 421 , effect on response of sciatic nerve-muscle preparations to acetylcholine, 17, 188 , effect on response of striated muscle to acetylcholine, 14, 460; 15, 24 , effect on response of striated muscle to decamethonium, 14, 461 -, effect on response of uterus to oxytocin, and action of atropine, 16, 47 , effect on toxicity of tetraethylammonium and triethylcholine, 19, 212 -, effect on toxicity of triethylcholine, 17, 178, 181 -, in splenic extracts, 14, 398 -, neuromuscular blocking action of, 14, 458 , response of blood pressure to, and effect of hexamethonium on, 23, 62 , response of cardiac muscle to, 14, 396 -, response of partially and completely denervated striated muscle to, 17, 62 , response of stomach strip to, effect of blood on, 23, 362 -, response of striated muscle to, 14, 158, 456 , effect on acetylcholine, decamethonium and sarin on, 15, 24 , response of *Tapes* heart to, 25, 485 Choline acetylase, in-vitro effect of decamethylenebis(2hydroxyethyldimethylammonium) on, 25, 400 -, in atrium, and effect of temperature on, 14, 493 -, in brain, effect of hyoscine on, in rat, 23, 126 , in innervated and denervated vas deferens, 20, 304 in ventricle, 14, 495 Choline-acetylase inhibitors, effect on intestinal acetylcholine release and response to anticholinesterases

choline release and response to anticholinesterases and lumen distention, 13, 467

Choline acetyl-transferase, in brain homogenates, effect of

ether on, 25, 230 Choline esters, of acrylic, imidazole and propionic acids,

neuromuscular blocking and other pharmacological actions and toxicity of, 13, 378

—, unsaturated, enzymic hydrolysis and pharmaco-

unsaturated, enzymic hydrolysis and pharmaco logical actions of, 13, 308

Choline ethers, of imidazole, neuromuscular blocking and other pharmacological actions and toxicity of, 13, 378

Choline 3-isobutyl-1-methyl-6-thioxanthinate, pharmacological actions and toxicity of, 16, 59

Choline phenyl ether, effect on junctional transmission, 18, 521

Choline phenyl ether (cont.)

response of small intestine to, effect of bromolysergic acid diethylamide, dimethylphenylpiperazinium, hexamethonium, 5-hydroxytryptamine, hyoscine, lysergide (lysergic acid diethylamide), mecamylamine, nicotine, pempidine, pentolinium, phenoxybenzamine and procaine on, 21, 308

, effect of mipafox on, and action of hyoscine, 21, 308

Choline theophyllinate, bronchodilator and coronary dilator actions and toxicity of, 17, 197

pharmacological actions and toxicity of, 16, 59 Choline 2-thiotheophyllinate, bronchodilator and coronary

dilator actions and toxicity of, 17, 201 Choline 6-thiotheophyllinates, bronchodilator, coronary dilator and other pharmacological actions and toxicities of, 17, 197

pharmacological actions and toxicity of, 16, 59

Choline 2,6-xylyl ether. See Xylocholine

Cholinergic agents, effect on response of large intestine to acetylcholine and nerve stimulation, 23, 157

Cholinergic blocking action, of adrenergic blocking agents, **20**, 418

Cholinergic blocking agents, effect on dorsal-root potentials of spinal cord, 17, 226

Cholinergic fibres, in postganglionic sympathetic nerves,

—, sympathetic, revelation by guanethidine, 17, 245 Cholinergic mechanisms, in hypogastric nerve-vas deferens preparation, 24, 641

Cholinesterases, hydrolysis of  $\beta$ -substituted acryloyl-

cholines by, 13, 313

-, in blood, effect of intraventricular organophosphates on, in conscious dog, 18, 19

-, in blood and brain, effect of oximes on, in normal and sarin-poisoned rats, 13, 400

effect of sarin on, in rat, 13, 400

, in blood, brain, spinal cord and striated muscle, effect of atropine and pralidoxime (pyridine-2aldoxime methiodide) on, in sarin-poisoned rat, 13, 402

, in brain, in organophosphate poisoning successfully treated with atropine and pralidoxime, 15, 432 -, in chick amnion, effect of atropine on, 21, 291

-, in chick amnion and hen plasma, effect of dyflos, mipafox, neostigmine and physostigmine on, 18, 558 -, in intact and ground striated muscle, 13, 292

-, in plasma, in-vitro hydrolysis of neostigmine by,

and effect of dyflos on, 19, 498

-, inactivated by physostigmine (eserine), effect of pralidoxime (pyridine-2-aldoxime methiodide) on. 13.

-, inactivated by sarin, reactivation by acetylcholine and pralidoxime (pyridine-2-aldoxime methiodide), 13, 292

, localization in central nervous system, in cat, guinea-pig, rat and rabbit, 16, 225

, —, and selective neurotoxicity of organophosphorus compounds, in chicken, 16, 218

mammalian, *in-vitro* hydrolysis of acetylcholine and murexine by, **13**, 104

, pseudo and true, inactivation by dyflos, neostig-

mine and physostigmine (eserine), 13, 152 -, true, in-vitro hydrolysis of acetylcholine and mur-

exine by, 13, 104

-, inactivation by diquaternary oximes, 14, 188 , inactivation by neostigmine and pempidine, 13, 345

, inactivated by organophosphates, reactivation by diquaternary oximes, 14, 188

Cholinesterases, true, inactivated by organophosphates (cont.)

-, reactivation by pyridinium aldoximes 14, 195

Cholinolytic agents. See Antiacetylcholine agents Choriomengitis, pseudolymphocytic. See Ectromelia Chromaffin tissue, extramedullary, secretory responses of,

Chromatography, paper, of brain extracts, 20, 450, 452 Chromodacryorrhoea, induction by chlorophenols, 13, 22 Chronotropic action. See Heart beat

Chymotrypsin, destruction of bradykinin by, effect of

chlorpromazine on, 22, 333, effect on plasma kinin, saliva-colostrokinin, and

urine-colostrokinin, 14, 551 -, effect on physalaemin, 25, 369

-, effect on response of small intestine to adenosine triphosphate, angiotensin, barium ions, eledoisin, glycine bradykinin, kinins, potassium ions and substance P, 24, 486

effect on response of small intestine to bradykinin, kallidin and methionyl-lysyl bradykinin, and action

of dyflos, 24, 486

-, effect on response of small intestine and uterus to acetylcholine, bradykinin, histamine and 5-hydroxytryptamine, 22, 371

effect on response of uterus to acetylcholine, bradykinin and 5-hydroxytryptamine, 22, 376

, effect on response of uterus to eledoisin, kallidin

and oxytocin, 24, 492 -, fluorescent- and <sup>131</sup>I-labelled, preparation of, 15, 304 -, inhaled, pharmacological actions of, 15, 304

, inhaled and subcutaneous, distribution and excretion of, 15, 306

-, response of goldfish intestine to, 17, 459

-, response of small intestine to, effect of mepyramine on, 22, 372

-, response of uterus to, 22, 376

-, stability of eledoisin to, 19, 332

-, stability of smooth-muscle-stimulating substance in nasal mucosa to, 13, 116

Chymotrypsinogen, effect on response of small intestine to kallidin, 24, 491

, effect on response of small intestine and uterus to acetylcholine, bradykinin and histamine, 22, 371

-, effect on response of uterus to bradykinin, 22, 376

-, response of small intestine to, 22, 374

response of uterus to, 22, 376

Ciba 28882-Ba. See 2,4-Di(diethylamino)-6-(2-phenylacetylhydrazino)-1,3,5-triazine

Cigarettes, apparatus for controlled smoking of, 25, 515 Cigarette smoke. See Tobacco

Ciliary movement, effect of acetylcholine and tubocurarine on, 14, 323

, effect of atropine and physostigmine (eserine) on, 14, 326

Cinchocaine, effect on inflammation, in mouse foot, 18,

, mechanism of action in central nervous system,

Cinchonidine, effect on response of small intestine to acetylcholine, 14, 55

Cinchophen, effect on bronchoconstrictor action of bradykinin, 15, 601

, effect on bronchoconstrictor action of bradykinin and slow-reacting substance produced in anaphylaxis, 23, 209

, effect on capillary permeability and squirming responses to intraperitoneal acetic acid, in mouse, 22, 246

Cinchophen (cont.) , effect on in-vitro histamine release and mast-cell damage in sensitized tissues by antigen, 15, 85 , effect on response of small intestine to bradykinin and histamine, 15, 607 Cinnoline 528, trypanocidal action on normal and drugresistant trypanosomes and toxicity of, in mouse, 14, Citrate, metabolism of, in normal and stilbamidineresistant trypanosomes, and effect of fluoroacetate on, 14, 447 -, response of striated muscle to, 14, 337 -, with and without sodium thiosulphate, as antidote in mustard-gas poisoning, in rat, 13, 395 Citric acid, intraperitoneal, capillary permeability and squirming responses to, in mouse, 22, 248 Citrulline, inactivation of histidine decarboxylase by, 15, 552 Clam. See Saxidomus giganteus and Venus mercenaria Clostridium perfringens, effect on dry weight and histamine content of caecal contents of germ-free rat, 19, 389 Clostridium spp., sensitivity to cephalosporin C and its pyridinium derivative, 16, 173 Cloxacillin, absorption, distribution, excretion, metabolism, pharmacological actions and toxicity of, 21, 339 -, antibacterial action of, effect of serum on, 25, 645 , binding by human serum proteins, and effect of novobiocin, phenylbutazone, γ-resorcylic acid, salicylate, sulphadimidine and sulphamethoxypyridazine and of various experimental factors on, **25**, 639 , binding by serum proteins of various species, 25, 638 , effect in experimental staphylococcal infections, in animals, 21, 339 Clupeine sulphate, response of blood pressure to, 22, 116 Cobalt compounds, as antidotes in cyanide poisoning, 23, effect on action of cyanide on oxygen utilization, **23**, 468 , effect on inactivation of cytochrome-oxidase system by cyanide, 23, 460 , effect on kininase activity of human erythrocytes, plasma and saliva, 23, 442 , effect on response of small intestine to cyanide, 23, 460 -, intravenous, distribution in tissues, 23, 459 -, potentiation of phosphorylphosphatase activity by, and effect of pralidoxime iodide on, 17, 276 , response of blood pressure, large and small intestine and respiration to, 23, 459 in-vitro reversal of trypanocidal action of oxine by, 14, 445 toxicity of, 23, 457 Cobefrine. See  $(\pm)$ - $\alpha$ -Methylnoradrenaline Cobinamide, as antidote in cyanide poisoning, 23, 455 Cobra, venom of. See under Venom Cocaine, effect on action of acetylcholine on response of small intestine to histamine, 13, 18

-, effect on action of adrenaline and noradrenaline on response of uterus to acetylcholine, 21, 361 -, effect on action of bretylium on response of blood

pressure to adrenaline and physostigmine (eserine),

-, effect on action of bretylium on response of intestinal motility to nerve stimulation, 14, 538

, effect on action of bretylium on response of nictitat-

ing membrane to adrenaline and nerve stimulation.

in rat, **16**, 103

14, 540

Cocaine (cont.) , effect on action of bretylium and guanethidine on response of blood pressure to physostigmine, in rat. **24.** 626 effect on action of chlorpromazine on response of blood pressure to adrenaline and noradrenaline, 23, , effect on action of dopamine, ephedrine and noradrenaline on response of small intestine to histamine, 16, 29 effect on action of hexamethonium on response of blood pressure to AHR602, dimethylphenylpiperazinium, McN-A-343, noradrenaline and physostigmine, in rat, 23, 36 , effect on action of large doses of isoprenaline on response of blood pressure to adrenaline, isoprenaline, noradrenaline and tyramine, in cat, 21, 384 effect on action of mephentermine on response of blood pressure to noradrenaline, 25, 626 , effect on action of morphine on response of nictitating membrane to noradrenaline and sympathetic stimulation, 17, 544 effect on action of noradrenaline on response of blood pressure to tyramine, 20, 545 , effect on action of reserpine on noradrenaline in rat tissues, 20, 547 , effect on action of SK&F 90,109 and 90,238 on response of nictitating membrane to sympathetic stimulation, 23, 489 -, effect on action of sympathomimetic amines. mechanism of, 14, 385 , effect on action of xylocholine (choline 2,6-xylyl ether) on secretion of noradrenaline at splenic nerve endings, 14, 481 , effect on adenine nucleotides, inorganic phosphate and phosphocreatine in brain, 20, 462 , effect on adrenergic blocking action of guanethidine, 20, 23 , effect on adrenergic blocking action of xylocholine (choline 2,6-xylyl ether), 14, 477 effect on adrenergic neurone-blocking action of bethanidine, 20, 38 effect on adrenergic neurone-blocking action of bretylium, guanethidine and xylocholine, 430 -, effect on amines in aortic plasma, 16, 111 , effect on apomorphine-induced emesis and pecking, in pigeon, **16**, 140 , effect on central action of adrenaline, phenethylamine and tryptamine, in chick, 25, 714 , effect on central action of dexamphetamine and  $(\pm)$ -a-methylnoradrenaline, in chick, 25, 698 , effect on induction of gastric haemorrhage and erosion and sedation by reserpine, 14, 115 -, effect on nictitating membrane, in cat, 17, 339 , effect on noradrenaline in aorta walls, in rabbit, 13, , effect on noradrenaline in heart and spleen, in pithed rat, 16, 352

response of splenic muscle to acetylcholine, adrenaline and histamine, 19, 435

—, effect on release of acetylcholine from ileum, 21, 557

—, effect on response of aorta, dog retractor penis and

, effect on protection by 5-hydroxytryptamine or tyramine against action of phenoxybenzamine on

-, effect on noradrenaline in tissues, 20, 547

uterus to dexamphetamine, 21, 433
—, effect on response of auricular beat to adrenaline, 14, 386

## Cocaine (cont.) Cocaine (cont.) , effect on response of auricular beat to adrenaline , effect on response of small intestine to histamine, nicotine and peptone, 15, 225 and noradrenaline, and action of reserpine on, 14, , effect on response of small intestine to nicotine and volatile anaesthetics, 22, 359 , effect on response of auricular beat to sympathetic effect on response of small intestine to sympathetic -, effect on response of auricular beat to tyramine, 20, 248 stimulation, 14, 373 stimulation and histamine, 16, 27 , effect on response of small intestine to staphylo-, effect on response of auricular beat to vagal stimulacoccal a-toxin, 14, 64 , effect on response of splenic muscle to adrenaline, tion, 17, 234 effect on response of blood pressure to adrenaline, 5-hydroxytryptamine and tyramine, 19, 432 , effect on response of splenic muscle to 5-hydroxy-**24**, 617, 618 tryptamine and tyramine, action of noradrenaline on, , effect on response of blood pressure to adrenaline, 19, 437 noradrenaline and tyramine, in cat, 17, 352 -, effect on response of blood pressure to blood plasma, 19, 365 -, effect on response of splenic muscle from reser-pinized animals to 5-hydroxytryptamine and tyr--, effect on response of blood pressure to catechol amine, 19, 436 amines and phenethylamine, in chick, 25, 719 , effect on response of sympathetic nerve-ductus deferens preparation to electrical stimulation, 16, 190 , effect on response of blood pressure to eledoisin, **20**, 522 , effect on secretion of noradrenaline at splenic-nerve endings, 14, 481 , effect on response of blood pressure to guanethi--, effect on sialogenous action of 4-m-chlorophenyldine, noradrenaline and tyramine, 22, 241 carbamoyloxybut - 2 - ynyltrimethylammonium, di--, effect on response of blood pressure to normethylphenylpiperazinium and pilocarpine, 18, 504 adrenaline, 25, 626 , in pithed rat, 16, 352 , effect on sialogenous action of sympathomimetic effect on response of blood pressure to reserpine, amines, 15, 328 **25.** 627 -, effect on spontaneous activity of venous preparations, 24, 743 effect on response of blood pressure to reserpine during ganglionic blockade, 16, 11 -, effect on toxicity of yohimbine, 21, 57 effect on uptake of bretylium and guanethidine by effect on response of blood pressure to tyramine, heart, in rat, 25, 174 **18**, 483 , and action of dihydroxyphenylalanine and -, effect on uptake of histamine, 5-hydroxytryptamine and noradrenaline by mast cells, 23, 413 noradrenaline, in rat, 16, 320 , effect on uptake of 5-hydroxytryptamine by blood -, effect on response of blood pressure and heart beat to phenoxybenzamine during ganglionic blockade, platelets, 16, 291 , effect on uptake of noradrenaline by heart at high 16, 11 perfusion concentration, 25, 24 , effect on response of blood pressure and nictitating , effect on uptake of noradrenaline by heart and membrane to adrenaline, a-methylnoradrenaline, noradrenaline and tyramine, 20, 546 spleen, in pithed rat, 16, 352 , effect on response of blood pressure and nictitating effect on uptake of noradrenaline by perfused heart, 21, 533 membrane to bretylium and guanethidine, 20, 365 , effect on response of fundal strip preparation to -, effect on uptake of noradrenaline by tissues, 20, 547 tryptamine, 17, 313 -, effect on uptake and release of noradrenaline by atrium, 16, 347 -, effect on response of fundus to 5-hydroxytryptamine and tryptamine, 18, 477 effect on vasoconstrictor action of adrenaline. , effect on response of heart beat to antihistamines, auricular-nerve stimulation and tyramine, 18, 480 , effect on vasoconstrictor action of adrenaline and **13**, 8 , effect on response of heart beat to butyrylcholine, noradrenaline, 14, 387 **23**, 401 , interactions between noradrenaline and tyramine -, effect on response of heart beat to sympathoand, at noradrenaline stores, 20, 540 -, local anaesthetic action of, 18, 478 mimetic amines, 13, 464 -, effect on response of heart beat and small intestine -, non-induction of pecking by, in pigeon, 15, 288 to adrenaline, isoprenaline and noradrenaline, 21, -, response of auricular beat to, and effect of reserpine on, 14, 386 -, response of blood pressure to, 17, 354 , effect on response of heart-lung preparation to reserpine and tyramine, 14, 388 -, effect on response of nictitating membrane to -, effect of reserpine on, 25, 627 -, response of nictitating membrane to, effect of adrenaline, noradrenaline, sympathetic stimulation reserpine on, 22, 8 a-Cocaine, effect on response of blood pressure to norand tyramine, in cat, 17, 341 , effect on response of nictitating membrane to nor-adrenaline, 22, 5 adrenaline and on uptake of noradrenaline by heart, in pithed rat, 16, 356 , effect on response of nictitating membrane to Cocaine-like actions, of diphenhydramine on denervated heart and nictitating membrane, 13, 7, 9 sympathetic stimulation, and action of reserpine, —, of 3-phenoxypropylguanidine, 18, 475 Cockle, Tapestry. See Tapes watlingi , effect on response of seminal vesicle to adrenaline Codeine, analgesic action of, in guinea-pig, 17, 33 and noradrenaline, 18, 477

, —, quantitative estimation of, 25, 81 , analgesic and lenticular-opacity-producing actions and toxicity of, 17, 434

-, antitussive action of, 16, 212

, effect on response of small intestine to electrical

, effect on response of small intestine to histamine, 5-hydroxytryptamine and nicotine, 21, 557

stimulation, 19, 47

Codeine (cont.)	Compound 48/80 (cont.)
, effect on action of bradykinin on behaviour, in	—, in-vitro mast-cell damage in sensitized tissues by,
guinea-pig, 21, 160	and effect of calcium-lack, heating and metabolic
, effect on capillary permeability and squirming	inhibitors on, 15, 84
responses to acetic acid, in mouse, 22, 246	, response of blood pressure to, 13, 182
, effect on gastrointestinal propulsion, pain threshold	Compound 50. See 1H,4H-Octafluorocyclohexene
and respiration, in rat, 14, 28	Compound 53. See 4H-Nonafluorocyclohexene
, effect on head-twitch response to 5-hydroxytrypto-	Compound 7419, induction of morphological changes in
phan and on pinna reflex, in mouse, 20, 113	trypanosomes by, in mouse, 21, 259
——, effect on intestinal motility, 16, 214	Compound 8154, induction of morphological changes in
, effect on peristaltic reflex, and action of nalorphine, in rat, 14, 30	trypanosomes by, in mouse, 21, 259 Compound 12,065. See p-(2,6-Diaminopyrimidin-4-yl-
, effect on response of respiration to carbon dioxide-	
excess and hypoxia, in man, 24, 532	amino)phenylarsine oxide Compound 13,130. See Ethyl dithiolterephthalate
—, effect on response of small intestine to smooth-	Conditioned avoidance response, effect of (+)- and (-)-
muscle stimulants, 15, 428	hyoscyamine and -hyoscine on, 24, 143
—, response of respiration to, 22, 305	Conditioned reflexes, effect of amitriptyline, chlorpro-
—, toxicity of, <b>16</b> , 211	mazine, chlorprothixene and imipramine on, in rat,
Co-enzyme A, effect on enzymic synthesis of acetyl-	23, 344
choline in atrium, 14, 494	—, effect of arecoline on, action of amitriptyline,
Colchicine, effect on trypanosomes, in mouse, 14, 451	atropine, desmethylimipramine and imipramine, in
Cold. See Cooling and Stress	rat, <b>23</b> , 344
Colisan, antiprotozoal action of, 17, 165	—, effect of asarone and $\beta$ -asarone on, 20, 436
—, biological actions of, mechanism of, 18, 302	Conductance, molar, of polymethylenebis(trialkyl-
—, haemolytic action of, 17, 163	ammonium) salts, 23, 136
—, pharmacological actions of, 15, 313	Congasin. See Di(4-amino-2-methylquinol-6-yl)melamine
Colistin, and sulphomethyl derivatives of, antibacterial	Congo red, effect on trypanosomes, in mouse, 14, 425
and pharmacological actions, constitution and	—, subcutaneous, effect on haemoglobin nitrite sen-
toxicity of, 23, 552	sitivity reaction, 19, 492
—, —, electrophoretic analysis of, 23, 568 —, —, intramuscular, distribution and excretion of,	Convulsant action, of allylnornicotine and nicotine, 18,
,, intramuscular, distribution and excretion of,	300
in dog and man, 23, 562 Colomycin. See Colistin, sulphomethyl derivatives of	, of bemegride and leptazol, in mouse, 14, 416
Colon. See Intestine, large	—, of chlorophenols and phenol, 13, 21 —, of 3,5-dimethylbutylethylbarbituric acid and lept-
Compound 22. See 2-Chloro-1,1,2-trifluoroethyl ethyl	azol, 19, 230
ether	—, of dioscine and dioscornine, 13, 213
Compound 46. See 1-Methoxynonafluorocyclohexene	, of dioxone and leptazol, in morphine-treated rab-
Compound 48/80, effect on capillary permeability, and	bit, 16, 235
action of bromolysergic acid diethylamide and	—, of ethyl pyrophosphate (tetraethylpyrophosphate),
diphenhydramine, in rat, 25, 61	19, 227
, effect on histamine in plasma, 25, 776	—, —, effect of pentobarbitone on, 18, 22
, effect on histamine in skin, 20, 510, 512	—, of ferrocenes, in mouse, 24, 357
, effect on histidine decarboxylase in liver and	, of leptazol, effect of aldosterone and hydro-
pyloric stomach, 16, 363 —, effect on indium intoxication, 19, 509	cortisone (cortisol) on, in rat, 19, 271 ——, effect of benzethidine, furethidine and
—, effect on mast cells, 25, 62	pethidine on, 15, 257
—, in-vitro histamine release and mast-cell damage by,	—, effect of 3,4-dihydroxyphenylalanine, 5-
effect of antihistamines on, 15, 400	hydroxytryptophan, iproniazid and lysergide
,, effect of pyridine and diphosphopyridine	(lysergic acid diethylamide) on, in mouse, 14, 109
nucleotidase inhibitors on, 15, 405	—— effect of methyldona on 22 368
, release of histamine from mast cells by, and effect	-, effect of Paspalum scrobiculatum extracts on,
of dinitrophenol on, <b>25</b> , 63	18, 13
—, in-vitro release of histamine in sensitized tissues by,	—, —, effect of reserpine on, action of $\alpha$ -alkyltrypt-
and effect of antipyretics, calcium-lack, heating and	amines, in mouse, 24, 52
metabolic inhibitors on, 15, 84	—, —, and action of bromolysergic acid diethylamine, iproniazid and lysergide (lysergic acid
—, in-vitro release of histamine from skin by, and	diethylamine, iproniazid and lysergide (lysergic acid
effect of dinitrophenol on, 25, 61 —, histamine release from tissues by, 23, 368	diethylamide), in mouse, 14, 108
—, mistamme release from tissues by, 23, 508 —, —, and effect of staphylococcal anti-α-toxin on,	—, —, action of methyldopa, 22, 368 —, —, effect of tetrabenazine on, and action of
25, 772	iproniazid, in mouse, 14, 108
—, induction of oedema by, inhibition by various	—, of leptazol and strychnine, effect of chlorproma-
substances, in rat hindpaw, 13, 65	zine, 5-ethyl-5-phenylpyrrolid-2-one, glutethimide,
—, intracerebral, central and lethal actions of, and	meprobamate and phenobarbitone on, 25, 794
effect of atropine, mepyramine, pentobarbitone,	,, effect of mephenesin, meprobamate and
promethazine, strychnine and tranquillizers on, in	substituted 1,3,4-thiadiazoles on, 13, 359
mouse, 14, 243 ——, effect on anaesthetic action of pentobarbitone	—, —, effect of thalidomide on, in mouse, 15,
and an etruckning convulsions in mause 14 244	114
and on strychnine convulsions, in mouse, 14, 244	114 —, of mepesulphate, in cat, 17, 533
and on strychnine convulsions, in mouse, 14, 244  —, intracutaneous, skin reaction induced by, effect of alloxan diabetes on, 19, 406	114

Convulsant action (cont.) Corticotrophin (cont.) , of nicotine, effect of hexamethonium, mecamyl-, effect on ascorbic acid in adrenals, in hydrocortiamine and pempidine and its N-ethyl homologue on, sone-treated rat, 15, 97 13, 515 , action of hydrocortisone, in rat, 13, 100 , effect on free fatty acids in plasma, and action of , of oximes, and effect of pentobarbitone on, in conscious dog, 18, 23 salicylate, in rat, 25, 190 , effect on histamine and 5-hydroxytryptamine in , of Paspalum scrobiculatum extracts, and effect of barbiturates, ether and mephenesin on, 18, 11 -, effect on milk ejection, in lactating guinea-pig, 17, 307 tissues, in rat, 15, 537 -, of organophosphates, in conscious dog, 18, 20 -, of phenyldiguanide, 14, 533 -, of physostigmine, and effect of atropine on, 22, 565 -, effect on triglycerides in liver, and action of salicylate, in rat, 25, 191 -, of picrotoxin, in mouse, 24, 654 , of picrotoxin and strychnine, effect of  $\gamma$ -amino-butyric acid, 4-hydroxybutyrate and meprobamate -, endogenous, in-vitro stability in rat blood, 14, 215 , in pituitary, depletion by mustine, reserpine and on, 22, 324 saline, in rat, 15, 165 -, long-acting, effect on adrenal and body weights and -, of procaine, in dog, **24**, 345 -, of triethylcholine, 17, 178 growth of human tumour, in weanling rat, 14, 308 -, of tryptamine, effect of chlorpromazine, metho--, release of, effect of benactyzine, chlorpromazine, trimeprazine, prochlorperazine, 9620 RP, thiophenobarbitone and reserpine on, in stressed, nonproperazine and trifluoperazine on, 22, 308 stressed, hypophysectomized and hydrocortisoneeffect of chlorpromazine and thioproperazine treated rats, 19, 458 on, 22, 306 , —, effect of hydrocortisone, prednisolone and prednisone on, in rat, 13, 100 on, 22, 300 -, of volatile anaesthetics, relation to smooth-muscle-stimulant action, 22, 360 -, effect of reserpine on, and action of hypo-Convulsant action. See also Central stimulant action physectomy and stress, 18, 337 -, release by ether, effect of benactyzine, chlorproand Seizures Convulsions, electro-, effect of asarone and  $\beta$ -asarone on, mazine, phenobarbitone and reservine on, in rat, 19. 20, 436 459 effect of chlorpromazine, 5-ethyl-5-phenyl-Cortisol. See Hydrocortisone pyrrolid-2-one, glutethimide, meprobamate and Cortisone, effect in experimental moniliasis, 13, 1 phenobarbitone on, 25, 794 -, effect in experimental murine leprosy, in rat, 13, 95 , effect on adrenal and body weights, in rat, 15, 537 , effect of mecamylamine and pempidine and , effect on adrenal weight and on acetylcholine and its N-ethyl homologue on, and on respiration after, 13, 514 5-hydroxytryptamine in brain, in rat, 19, 229 , effect on apomorphine-induced pecking, in pigeon, 17, 8 , effect of mephenesin, meprobamate and substituted 1,3,4-thiadiazoles on, 13, 359 Cooling, effect on fibrillation threshold of heart-lung , effect on arthritis induced by mycobacterial adpreparation, 17, 169 iuvant, in rat, 21, 127 , effect on response of small intestine to acetyl-choline, bradykinin, dimethylphenylpiperazinium, -, effect on body weight, in rat, 13, 95 effect on bronchoconstrictor action of bradykinin, **15**, 601 histamine, 5-hydroxytryptamine, nerve stimulation, nicotine and tetramethylammonium, 20, 163 , effect on bronchoconstrictor action of bradykinin See also Hypothermia and histamine, 15, 294 , effect on capillary permeability and squirming responses to acetic acid, in mouse, 22, 251 Copper ions, in-vitro cesticidal action of, 15, 437 , effect on behaviour, in pigeon, 17, 9 , response of small intestine to, 19, 448 -, effect on histamine in lungs and small intestine, in guinea-pig, 25, 664 Corbadrine. See a-Methylnoradrenaline Coronary dilator action, of adrenaline and noradrenaline, -, effect on histamine in tissues, in guinea-pig, 24, 574 , effect on histamine and 5-hydroxytryptamine in 15, 392 See also Blood vessels and Vasodilator action tissues, in rat, 15, 532 Coronary flow. See under Blood flow , effect on histidine decarboxylase in liver and Cortensor. See Heptaminol pyloric stomach, 16, 362 Cortexolone, effect on histamine in lungs and small intestine, in guinea-pig, 25, 664
Corticosteroids. See Steroids, cortico-, effect on inflammation induced by formaldehyde and histamine, in mouse, 16, 165 -, effect on local reaction to intradermal Coryne-Corticosterone, in adrenals and plasma, effect of reserpine bacterium ovis and old tuberculin, in guinea-pig, 13, on, and action of hypophysectomy and stress, 18, 338 235 , in plasma, effect of acetylcholine, histamine and -, effect on wound healing, 20, 512 isoprenaline on, in anaesthetized rat, 25, 552 with and without X-irradiation, effect on growth of human tumour in small laboratory animals, 14, -, effect of adrenaline, isoprenaline and noradrenaline on, in anaesthetized rat, 25, 550 Corticotrophin (adrenocorticotrophic hormone; ACTH): Cortrophin ZN. See Corticotrophin, long-acting bioassay of, in hydrocortisone-treated rat, 15, 95; Corynebacterium diphtheriae, sensitivity to alkoxydiguanides, 15, 245 **20**, 95 , sensitivity to benzylpenicillin, cephaloram and cephalosporin C, 22, 24 -, in hypophysectomized rat, 20, 95 effect on action of metyrapone on histamine in

, sensitivity to cephalosporin C and its pyridinium

Corynebacterium ovis, intradermal injection of, local

reaction to, in guinea-pig, 13, 233

derivative, 16, 173

tissues, 24, 577

-, effect on adrenal weight, in rat, 15, 537

5-hydroxytryptamine in brain, in rat, 19, 229

, effect on adrenal weight and on acetylcholine and

Cyanide, antidote for, cobalt compounds as, 23, 455

Corvnebacterium ovis (cont.)

, in-vitro and in-vivo sensitivity to benzylpenicillin, -, thiosulphate as, **23**, 462 cetrimide, dequalinium, hedaquinium and oxytetra-, effect on cytochrome-oxidase system, action of cycline, 13, 231 cobalt compounds, 23, 460 Cough. See Antitussive action , effect on in-vitro histamine release and mast-cell Coumaran, derivatives of, adrenergic neurone-blocking damage in sensitized tissues by antigen and compound 48/80, 15, 84 and other pharmacological actions and toxicity of, **23**, 486 , effect on kininase of human erythrocytes, plasma Coumaran-3-ones, synthesis of, 23, 502 and saliva, 23, 442 N-Coumaran-3-ylguanidine, adrenergic neurone-blocking , effect on oxidation of 5-hydroxytryptamine by action of, 23, 497 Mytilus gill-plate homogenates, 15, 43 -, synthesis of, 23, 505 , effect on oxygen utilization, and action of cobalt compounds, 23, 468 Coumaran-3-yltrimethylammonium, effect on adrenergic neurone transmission, 23, 497 , effect on response of striated muscle to chloro-, synthesis of, 23, 501 cresol, 24, 512 Coumarin, and its derivatives, structure-anticoagulant -, induction of ventricular fibrillation by, 13, 149 -, intracisternal, response of respiration to, in action relations in, 20, 29 Creatine, effect on ganglionic and neuromuscular blockanaesthetized dog, 15, 171 ade, 19, 414 , response of blood pressure to, effect of lysergide , effect on ventral root potentials in spinal cord, 16, (lysergic acid diethylamide) on, 13, 252 response of carotid chemoreceptors to, effect of 262 , inhibitory action on histidine decarboxylase, 15, hexamethonium on, 16, 15 552 response of respiration to, effect of lysergide Creatinine, effect on ganglionic and neuromuscular (lysergic acid diethylamide) on, 13, 255 blockade, 19, 414 -, response of small intestine to, effect of cobalt -, effect on neuronal excitation, 18, 236 compounds on, 23, 460 -, effect on ventral root potentials in spinal cord, 16, 262 -, toxicity of, 23, 457 -, in-vitro trypanocidal action on normal and stilb--, urinary excretion of, effect of chlorpromazine on, amidine-resistant trypanosomes, 14, 445 Cyanine 863, effect on Theileria annulata in tissue culture, and influence of ambient temperature, in mouse, 24, 13, 459 -, effect of diet on, in rat, 15, 515 , effect on urinary excretion of neostigmine, in hen -, effect of 5-hydroxytryptophan on, and action and rat, 25, 237 of chlorpromazine, in mouse, 24, 502 , effect on urinary excretion of neostigmine and its Creatinine clearance, effect of noradrenaline on, action of metabolites, in rat, 25, 765 Cyanoacetic acid, effect on response of uterus to bradyhexamethonium and phenoxybenzamine, in dog, 14, kinin and oxytocin, 25, 422 382 -, in cat perfused kidney, effect of SC-11480 and 1-(2-Cyanoethyl)isatin  $\beta$ -thiosemicarbazone, spironolactone on, 20, 445 action, properties and synthesis of, 15, 101 Creatinine hydrochloride, pK value of, 14, 91 α-Cyano-N-2-hydroxyethyl-N-p-methylsulphonylbenzylacetamide, amoebicidal action of, 18, 132 o-Cresol-2, 6-dichlorophenolindophenol, oxidation reduction potential and in-vitro trypanocidal action 4-Cyano-4-hydroxy-1-phenethylpiperidine, analgesic and on normal and stilbamidine-resistant trypanosomes lenticular-opacity-producing actions and toxicity of, of, 14, 447 **17**, 434 Cyanosis, induction by triethylcholine, 17, 178 o-Cresotic acid (3-methylsalicylic acid): -, and its acetyl derivative, in plasma after oral 4-Cyano-o-xylene, properties and synthesis of, administration, in man, 25, 474 -, —, urinary excretion of, after oral administration, in man, 25, 470 Cyanuric acid, effect on trypanocidal action of organic arsenicals and pentamidine, 14, 436 -, in-vitro hydrolysis of, 25, 476 Cyclizine, effect on apomorphine-induced emesis and pecking, in pigeon, 16, 141 Cyclobarbitone, effect on insomnia and motility, in psychiatric patients, 20, 319 in blood after intraperitoneal injection, in rat, 13, 422 -, with and without salicylate, effect on oxygen , effect on pulse rate and performance of simple consumption, in rat, 13, 419 tasks and subjective effects, in man, 18, 490 m- and p-Cresotic acid, in blood after intraperitoneal injection, in rat, 13, 422 -, response of heart beat to, in man, 24, 15 , with and without salicylate, effect on oxygen , response of respiration to, in man, 24, 214 consumption, in rat, 13, 419 Cyclobarbitone-amphetamine mixtures, differential pharo-Cresotinic acid. See o-Cresotic acid macological actions of, in man, 24, 14 Crotalus spp., venom from, effect on pharmacological actions of bradykinin, 24, 169 , effect on pulse rate and performance of simple tasks and subjective effects, in man, 18, 490 Crotonoylcholine, enzymic hydrolysis and pharmacologip-Cyclohex-2-enyloxyaniline, effect on Schistosoma mancal actions of, 13, 308 soni and toxicity of, 13, 242 Crytococcus neoformans, sensitivity to cephalosporin C N-p-Cyclohexylbenzyltropinium derivatives, pharmacoand its pyridinium derivative, 16, 173 logical actions and toxicity of, 21, 10 5-Cyclohexyl-5-ethylpyrrolid-2-one, Curare-like action, of benzoquinonium, 13, 523 central depressant -, of guanidine, 19, 424 action and toxicity of, 25, 790 -, of tetraethylammonium, 19, 209 3 - Cyclohexyl - 2 - methylaminobicyclo [2,2,1] heptane, —, of triethylcholine, 19, 199, 209 Curarizing action. See Neuromuscular blocking action ganglion-blocking action and synthesis of, 15, 209 5-Cyclohexyl-5-methylpyrrolid-2-one, central depressant action and toxicity of, 25, 790

Cyclohexylnaphth-1-ylacetyltropeïne, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

1 Cyclohexyloxyaniline, effect on Schistosoma mansoni and toxicity of, 13, 242

Cyclohexylphenylacetyltropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

Cyclohexylphenylacetyltropeïne methobromide, acetylcholine and antitremor actions of, 14, 564

5-Cyclohexyl-5-propylpyrrolid-2-one, central depressant action and toxicity of, **25**, 790 N<sup>1</sup>N<sup>1</sup>-Cyclopentamethylene - N<sup>4</sup>-2-diethylaminoethylsul-

phanilamide, antiviral action in tissue culture, 13,

N<sup>1</sup>N<sup>1</sup>-Cyclopentamethylene-N<sup>5</sup>-3,4-xylyldiguanide, antiviral action in tissue culture, properties and synthesis of, 13, 424

Cyclopentamine, effect on uptake of noradrenaline by heart at low perfusion concentration, 25, 34

Cyclopentylamine, central action of, in chick, 25, 705 -, effect of methysergide on, in chick, 25, 712

Cyclopropane, analgesic action of, 22, 596

 $N^1N^1$ -Cyclotetramethylene- $N^5$ -3,4-xylyldiguanide, viral action in tissue culture, properties and synthesis of, 13, 424

Cycrimine, antiacetylcholine and antitremor actions of, 18, 247

Cyproheptadine, anti-inflammatory action of, 18, 352

, effect in anaphylactic microshock, in guinea-pig, 21, 414

, effect on head-twitch response to 5-hydroxytryptophan, in mouse, 20, 113

-, effect on parturition, in mouse, 22, 388

, effect on response of small intestine to bradykinin, **25**, 50

, effect on toxic action of 5-hydroxytryptamine on pregnancy, in mouse, 21, 150

-, interruption of pregnancy by, and effect of progesterone on, in mouse, 21, 152

Cysteamine, effect on gastric emptying, in normal and X-irradiated rats, 13, 260

L-Cysteic acid, effect on ventral root potentials in spinal cord, 16, 262

Cysteine, autoxidation of, effect of kininase and magnesium and manganese ions on, 19, 443

effect on response of small intestine and uterus to bradykinin, mechanism of, 25, 405

, effect on trypanocidal action of pentamidine, 14,

-, inhibition of histidine decarboxylase by, 15, 556 inhibition of kininase by, and effect of metals on, 19, 442

-, response of small intestine and uterus to, 25, 406

(±)-Cysteine, in-ovo and in-vitro effect on antiviral action of  $\omega$ -aminoacetophenone derivatives, 13, 408 L-Cysteine, effect on response of uterus to bradykinin

and oxytocin, 25, 422

Cytochrome oxidase system, inhibition by cyanide, effect of cobalt compounds on, 23, 460

Cytoplasmic granules, fractionation of, 15, 520

, intestinal, adenosine triphosphate, 5-hydroxytryptamine and succinic dehydrogenase in, in dog, 15, 520

D

DDMP. See 1,1-Dimethyl-4-phenylpiperazinium DEF. See Tributyl phosphorotrithiolate

**Dapsone** [di(p-aminophenyl) sulphone]:

, determination in presence of di(p-aminophenyl) sulphoxide, 15, 160

-, effect on Schistosoma mansoni, 13, 239

-, effect on Theileria annulata in tissue culture, 13, 459 , urinary excretion by different animal species treated with di(p-aminophenyl) sulphoxide, 15, 163

Darmstoff, response of large intestine to, 19, 342

Dartal. See Thiopropazate

Deamino-oxytocin, response of uterus to, effect of thioglycerol on, 25, 427

Decamethonium, and its analogues, response of biventer cervicis preparation to, 19, 485

, applied topically to cervical spinal cord, effect on scratch reflex, in anaesthetized and decerebrate cats, 25, 415

, response of tibialis anterior muscle to, in anaesthetized and decerebrate cats, 25, 411

-, anticurare action of, 14, 459

, effect of benzoquinonium on, 13, 527 -, autonomic blocking action of, and effect of gall-

amine triethiodide on, in cat, 18, 194

, effect on action of triethylcholine on response of nerve-muscle preparations to electrical stimulation, **17.** 188

, effect on induction of kinin formation by glass, 22,

-, effect on neuromuscular blocking action of benzo-

quinonium, 13, 523; 14, 460 effect on neuromuscular blocking action of

bretylium and guanethidine, 17, 374

, effect on response of denervated striated muscle to adrenaline, 24, 106

effect on response of heart beat to acetylcholine and vagal stimulation, in cat, 18, 198

, effect on response of molluscan smooth muscle to acetylcholine, 14, 405

, effect on response of nerve-muscle preparations to electrical stimulation, and action of bath-calcium concentration and stimulation frequency, 20, 13

-, effect on response of panniculus carnosus-skin preparation to transmural stimulation, and action of neostigmine, 21, 33

-, effect on response of phrenic nerve-diaphragm preparation to electrical stimulation, 22, 60

, effect on response of phrenic nerve-diaphragm and tibialis anterior preparations to acetylcholine and nerve stimulation, 19, 202

-, effect on response of sciatic nerve-gastrocnemius preparation to electrical stimulation, 14, 508

, effect on response of striated muscle to acetylcholine, 13, 523

, and action of sarin, 15, 24

effect on response of striated muscle to choline, 15,

effect on response of *Tapes* heart to acetylcholine, **25**, 488

-, neuromuscular blocking action of, 13, 522; 14, 458 , effect of adrenaline and mecamylamine on, 13, 524

-, effect of benzoquinonium on, 13, 523

, effect of bretylium and guanethidine on, 17, 377

-, and effect of choline on, 25, 398 -, effect of guanidine and its derivatives on, 19,

416

Decamethonium, neuromuscular blocking action of (cont.) , and effect of neostigmine and tubocurarine on, 18, 204 -, effect of pempidine on, 13, 345 -, effect of proadifien (2-diethylaminoethyl 3,3diphenylpropylacetate) on, 18, 563 -, paralysis induced by, effect of ambenonium and methoxyambenonium on, in cat, 15, 476 -, response of biventer cervicis preparation to, 15, 411 -, response of denervated diaphragm to, effect of temperature on, 15, 347 -, response of denervated and innervated striated muscle to, 17, 64 -, response of semispinalis muscle to, and effect of hexamethonium and tubocurarine on, 15, 413 -, response of sterno-trachealis preparation to, 18, 614 -, response of striated muscle to, 14, 457 -, effect of acetylcholine on, 15, 24 , effect of acetylcholine and anticholinesterases on, 15, 26 , effect of benzoquinonium and tubocurarine on, 13, 523 , effect of choline and edrophonium on, 14, 461 effect of methylpentynol and its carbamate on, 14, 292 -, effect of neostigmine and tacrine on, 25, 182, 183 , effect of sarin and tubocurarine on, 15, 26 -, vasodilator action of, 18, 196 , effect of guanethidine and SY 28 on, 18, 197 Decamethylenebis (2-acetoxyethyldimethylammonium), response of biventer cervicis preparation to, and effect of physostigmine on, 19, 485 -, synthesis of, **19**, 486 Decamethylenebisamidine, trypanocidal action of, effect of melamine on, 14, 437 , trypanocidal action on normal and drug-resistant trypanosomes and toxicity of, in mouse, 14, 425 1,1'-Decamethylenebis(4-aminoquinaldinium), in-vitro cesticidal action of, 24, 240 NN'-Decamethylenebis(atropinium), antiacetylcholine, ganglion-blocking and neuromuscular blocking actions of, 18, 276 NN'-Decamethylenebis(3-benzoyloxytropanium), acetylcholine, ganglion-blocking and neuromuscular blocking actions of, 18, 276 Decamethylenebis(diethylmethylammonium), response of biventer cervicis preparation to, 19, 485 Decamethylenebis(dimethylamine), response of biventer cervicis preparation to, 19, 485 Decamethylenebis(ethyldimethylammonium), response of biventer cervicis preparation to, 19, 485 Decamethylenebis (2-hydroxyethyldimethylammonium), effect on release of acetylcholine from diaphragm by nerve stimulation, and action of choline, 25, 398 , effect on response of sciatic nerve-tibialis anterior preparation to acetylcholine, 25, 395 , effect on *in-vitro* synthesis of acetylcholine by brain homogenate, 25, 400 , neuromuscular blocking action of, and effect of choline, edrophonium, neostigmine, physostigmine and tubocurarine on, 25, 392 , response of biventer cervicis preparation to, 19, 485 NN'-Decamethylenebis (4-hydroxyiminomethylpyridinium), inhibitory action on cholinesterase, reactivat-Demecarium poisoning, antidotes in, pyridinium aldoxing action on organophosphate-inactivated cholin-

esterase and toxicity of, 14, 188

poisoning, **14**, 186

, with atropine, as antidote in organophosphate

1,1'-Decamethylenebisisoquinolinium, in-vitro cesticidal action of, 24, 240 NN'-Decamethylenebis(3-mandeloyloxytropanium), antiacetylcholine, ganglion-blocking and neuromuscular blocking actions of, 18, 276 NN'- Decamethylenebis (3-phenylacetoxytropanium), antiacetylcholine, ganglion-blocking and neuromuscular blocking actions of, 18, 276 , antiacetylcholine and neuromuscular blocking actions of, 15, 76 Decamethylenebis(triethylammonium), response of biventer cervicis preparation to, 19, 485 NN'-Decamethylenebis [NNN-trimethyl-m-(N-methylcarbamoyloxy)anilinium]. See Demecarium NN'-Decamethylenebis (tropinium), antiacetylcholine, ganglion-blocking and neuromuscular blocking actions of, 18, 278 NN'-Decamethylenebis (3-tropoyloxytropanium). See NN'-Decamethylenebis(atropinium) Decane diamidine. See Decamethylenebisamidine **Decanol**, depressant action on various biological systems, **15**, 185 Decapitation, effect on response of blood pressure to oxytocin and vasopressin, in chicken, 16, 131 Decarboxylase, in brain and intestine, effect of methyldopa on, in mouse, 15, 322 -, kidney, decarboxylation of 5-hydroxytryptophan and methyldopa by, 15, 322 Decarboxylase inhibitors, effect on head-twitch response to 5-hydroxytryptophan, in mouse, 20, 113 , effect on 5-hydroxytryptophan decarboxylase, and on uptake of 5-hydroxytryptophan by brain slices, 20, 184 Decerebration, effect on response of blood pressure to oxytocin and vasopressin, in chicken, 16, 131 Decerebrate rigidity, effect of mephenesin, meprobamate and substituted 1,3,4-thiadiazoles on, in cat, 13, 359 Decurarizing action. See Anticurare action S-Decylisothiourea, effect on response of blood pressure to 5-hydroxytryptamine and phenyldiguanide, 14, 531 , effect on response of respiration to 5-hydroxytryptamine and phenyldiguanide, 14, 532 Decyloxyamine, antibacterial action of, 15, 243 p-Decyloxyaniline. See 1-p-Aminophenoxydecane N<sup>1</sup>-Decyloxydiguanide, antimicrobial action and toxicity of, **15**, 243 , effect in experimental staphylococcal infection, in mouse, 15, 245 Defaecation, induction by leptodactyline, 15, 15 induction by mecamylamine and pempidine and its N-ethyl homologue, 13, 510 -, induction by procaine, in dog, 24, 341 -, induction by reserpine, in dog, 21, 356 Delerium ambulatorium, induction by compound 48/80, and effect of atropine, mepyramine, pentobarbitone, promethazine, strychnine and tranquillizers on, in mouse, 14, 243 **Demecarium** {NN'-decamethylenebis[NNN-trimethyl-m-

(N-methylcarbamoyloxy)anilinium]}:

imes as, 14, 198

proteins, 25, 638

pyrogallol and tranylcypromine, 24, 642

effect on response of hypogastric nerve-vas deferens

preparation to electrical stimulation, and action

of dexamphetamine, levamfetamine, pheniprazine,

Demethylchlortetracycline, binding by human serum

Demethylchlortetracycline (cont.)

-, effect on development of chick embryo, 25, 317

, stability of, possible relation to deposition in foetal skeleton and induction of malformations, 23, 445 Demyelination, by dialkylfluoridates, in hen, 15, 279

Dengue 1 virus infections, experimental, effect of isatin  $\beta$ -thiosemicarbazone in, 15, 108

Deoxycortone, effect on adrenal and body weights, in rat, 15, 537

-, effect on histamine in lungs and small intestine, in guinea-pig, 25, 664

effect on histamine and 5-hydroxytryptamine in tissues, in rat, 15, 532

-, effect on histidine decarboxylase in liver and pyloric stomach, 16, 362

Deoxycortone acetate, effect on growth of human tumour in weanling rat, 14, 308

14-Deoxydigoxigenin, cardiotoxic and inotropic actions of, 18, 314

effect on cardiotoxic action of ouabain, 18, 314

2-Deoxy-D-glucose, effect on action of polysaccharides on capillary permeability, in rat, 25, 605

Depolarizing action, of acetylcholine, 18, 585

, effect of chlorpromazine on, and action of neostigmine, 15, 92

-, of anticholinesterases, 18, 572

-, of decamethylenebis (2 - hydroxyethyldimethylammonium), 25, 394

Depolarizing agents, bioassay of, using semispinalis cervicis muscle, 15, 412

reciprocal potentiating action on striated muscle, 15, 23

, response of biventer cervicis-nerve preparation to, **15**, 411

Depolarization, in mammalian vein by potassium ions, relation to action potentials, 25, 595

Depressants, central. See Central nervous depressants Depressant action. See Central depressant action

Dequalinium, effect on local reaction to intradermal diphtheria toxin and old tuberculin, in guinea-pig, 13, 235

, in-vivo local antibacterial action and intradermal toxicity of, **13**, 231

-, in-vitro sensitivity of Corynebacterium ovis to, 13, 232

Desacetylcephalosporin C, antibacterial action against Staphylococcus aureus, and synergism with other antibiotics, 22, 22

Desacetylcephalosporin C lactone, antibacterial action against Staphylococcus aureus, and synergism with other antibiotics, 22, 22

Desamino<sup>1</sup>-oxytocin, response of uterus to, in man, 23, 176 Deserpidine, effect on arousal threshold and electrocorticogram, in cat, 14, 346

, induction of gastric haemorrhage and erosion and sedation by, 14, 114

Design of experiments, for detecting teratogenic effects of drugs, 23, 312

Desipramine (desmethylimipramine):

, effect in various tests involving autonomic functions and reserpine antagonism, comparison with chlorpromazine, imipramine and other drugs, 23, 330 , effect on head-twitch response to 5-hydroxytrypto-

phan and on pinna reflex, in mouse, 20, 113

—, effect on toxicity of yohimbine, 21, 55

—, effect on uptake of (±)-adrenaline by heart, 24, 391 , effect on uptake of bretylium and guanethidine by

heart, in rat, 25, 174

-, effect on uptake of noradrenaline by heart at high perfusion concentration, 25, 24

Desmethylimipramine. See Desipramine

Desmethylpromazine, effect in various tests involving autonomic functions and reserpine antagonism, comparison with chlorpromazine, imipramine and other drugs, 23, 330

Dexamethasone, effect in arthritis induced by mycobacterial adjuvant, in rat, 21, 127

-, effect on blood-pyruvate, in cat, 25, 147

-, effect on bronchoconstrictor action of bradykinin and slow-reacting substance produced in anaphylaxis, 23, 209

, effect on histamine in lungs and small intestine, in guinea-pig, 25, 664

, effect on histamine and 5-hydroxytryptamine in tissues, in rat, 15, 532

, effect on wound healing, 20, 512

**Dexamphetamine** [(+)-amphetamine]: -, central action of, in chick, 25, 705

, effect of bulbocapnine, chlorpromazine, methotrimeprazine, prochlorperazine, 9620 RP, thio-properazine and trifluoperazine on, 22, 308

, and effect of chlorpheniramine, cocaine, dichloroisoprenaline, Hydergine, hyoscine,  $(\pm)$ - $\alpha$ methylnoradrenaline, methysergide, phenoxybenz-amine and reserpine on, in chick, 25, 682

, effect of chlorpromazine, phenoxybenzamine, phentolamine and thioproperazine on, 22, 306

, effect of pronethalol on, in chick, 25, 715 -, central action and inhibitory action on amine oxidase of, 14, 501

, and its derivatives, urinary excretion of, and effect of urinary pH on, in man and rat, 24, 293

, effect of high concentrations on action of phenoxybenzamine on response of aorta and retractor penis to adrenaline, dexamphetamine and 5-hydroxytryptamine, 21, 432

effect of high concentrations on action of phenoxybenzamine on response of small intestine to acetylcholine, adrenaline, dexamphetamine, histamine and 5-hydroxytryptamine, 21, 430

effect of high concentrations on action of phenoxybenzamine on response of stomach strip to acetylcholine, dexamphetamine and 5-hydroxytryptamine. 21, 427

effect of high concentrations on action of phenoxybenzamine on response of uterus to adrenaline. dexamphetamine and 5-hydroxytryptamine, 21, 431

, effect on action of acetylcholine, demecarium, dimethylurethane and physostigmine on response of hypogastric nerve-vas deferens preparation to electrical stimulation, 24, 645

, effect on action of bretylium and guanethidine on response of blood pressure to noradrenaline and physostigmine, in rat, 24, 625

, effect on action of bretylium and guanethidine on response of small intestine to sympathetic stimulation, 24, 383

, effect on action of bretylium and guanethidine on response of vas deferens to transmural stimulation, 21, 576

, effect on action of dimethylphenylpiperazinium on response of small intestine to sympathetic stimulation, 24, 382

, effect on action of guanethidine on noradrenaline

in heart and spleen, 20, 25, effect on action of guanoxan on release of noradrenaline from sympathetic nerve endings, 24, 34

, effect on in-vivo action of 5-hydroxytryptophan on endogenous 5-hydroxytryptamine in brain and heart, 19, 164 Dexamphetamine (cont.) Dexamphetamine (cont.) -, effect on in-vivo action of iproniazid and Ro 4-1284 , response of aorta and retractor penis to, effect of on endogenous 5-hydroxytryptamine in brain, 19, phenoxybenzamine on, and action of high con-166 centrations of adrenaline, dexamphetamine and , effect on action of reserpine on response of nictitat-5-hydroxytryptamine, 21, 432 ing membrane to sympathetic stimulation, 18, 434 -, response of aorta, retractor penis and uterus to, and effect on adrenergic blocking action of bretylium, effect of cocaine on, 21, 433 **20**, 19, 23 -, response of blood pressure to, 17, 354 , effect on adrenergic blocking action of guan--, in pithed rat, **18**, 111 ethidine, 20, 17 , tachyphylaxis of, and effect of nialamide on, , effect on adrenergic neurone-blocking action of 21, 88 bethanidine, 20, 40 , response of body temperature to, effect of mono-, effect on adrenergic neurone-blocking action of amine-oxidase inhibitors on, in rabbit, 25, 161 bretylium, guanethidine and xylocholine, 18, 421 -, response of fundal strip preparation to, 17, 315 -, effect on behaviour, in pigeon, 17, 9 -, response of nictitating membrane to, in cat, 17, 339 -, effect on behaviour and on amines and their acid -, response of noradrenaline-depleted aorta, retractor penis and uterine strips to, 21, 432 metabolites in brain, 24, 763 , effect on behaviour, blood pressure and electro--, response of small intestine to, 18, 429 encephalogram, in mouse, 24, 652, effect on central action of  $(\pm)$ - $\alpha$ -methylnoradrenal-, effect of phenoxybenzamine on, and action of high concentrations of acetylcholine, adrenaline, ine, in chick, 25, 695 dexamphetamine, histamine and 5-hydroxytrypt--, effect on cheeping frequency, and action of αamine and of morphine, 21, 430 methylnoradrenaline (Cobefrine), in chicks, 25, , response of stomach strip to, effect of catechol amines on, 22, 206 , in-vivo effect on 5-hydroxytryptamine in brain, 19, effect of phenoxybenzamine on, and action of high concentrations of dexamphetamine and 5--, effect on 5-hydroxytryptamine receptors, 21, 427 hydroxytryptamine, 21, 428 , effect on noradrenaline in brain and sympathetic , response of uterus to, effect of phenoxybenzamine ganglia and pharmacological actions of, in cat and on, and action of high concentrations of adrenaline, dexamphetamine and 5-hydroxytryptamine, 21, 431 rabbit, 18, 117 , effect on release of noradrenaline from sympathetic , toxicity of, **25**, 164, 699 See also Amphetamine and Levamfetamine nerve endings, 24, 34 -, effect on response of blood pressure to adrenaline, Dexamphetamine-barbiturate mixtures, effect on volunnoradrenaline and tyramine, in cat, 17, 352 tary activity, in rat, 21, 295 Dextran, effect on capillary permeability, action of ascorbic acid, in rat, 24, 732 , effect on response of blood pressure to guanoxan, **24**, 33 -, effect on response of blood pressure to physostig--, action of hexadimethrine, 22, 99 mine, in guanethidine- and reserpine-treated rats, 24, -, ---, and action of mepyramine, methysergide, mono- and di-saccharides and related substances, in effect on response of blood pressure and nictitating rat, 25, 602 membrane to noradrenaline, 20, 20 and ferric complex, effect on indium intoxication, -, effect on response of fundal strip preparation to 19, 508 tryptamine, 17, 313 , induction of anaphylactoid reaction by, and effect -, effect on response of heart beat to butyrylcholine, of adrenalectomy, chlorpropamide, insulin and noradrenaline and tyramine, 23, 401, effect on response of hypogastric nerve-vas liothyronine (tri-iodothyronine) on, in rat, 20, 555 -, effect of ascorbic acid and L-xylose on, in deferens preparation to electrical stimulation, 20, guinea-pig, 24, 731 25 induction of oedema by, effect of iproniazid on, , and action of phenoxybenzamine and reserp-**14**, 485 ine, 24, 643 -, inhibition by various substances, in rat hind--, effect on response of nictitating membrane to paw, 13, 65 adrenaline, noradrenaline, sympathetic stimulation , inflammatory action of, effect of hexadimethrine and tyramine, in cat, 17, 350 and protamine sulphate on, 24, 706 -, effect on response of nictitating membrane to sympathetic stimulation, 20, 19 , intracutaneous, effect on mast cells, 19, 407 -, skin reaction induced by, effect of alloxan , effect on response of nictitating membrane and diabetes and glucose on, 19, 406 , in-vitro histamine release and mast-cell damage by, small intestine to sympathetic stimulation, 18, 429 effect of calcium-lack, carbohydrates, dinitrophenol, ethylmaleimide, heat, iodoacetate, mepyramine and nicotinamide on, 19, 405 , effect on response of small intestine to nerve stimulation, 20, 23; 24, 382 , effect on uptake of noradrenaline by heart at low , low-molecular-weight, in cerebrospinal fluid folperfusion concentration, 25, 34 lowing infusion of, 21, 224 , effect on urinary excretion of catechol amines, and -, rapid infusion of, effect on plasma volume action of mecamylamine and reserpine, in normal and serum-proteins, 21, 220 rat and rat without adrenal medullae, 23, 533 , urinary excretion of, 21, 224 -, non-induction of anaphylactoid reaction by, in rat, 20, 550 -, inhibition of amine oxidase by, 14, 257 -, intravenous, response of nictitating membrane to, and effect of guanethidine on, 20, 18 Dextran sulphate, low-molecular-weight, chronic toxicity -, metabolism of, in man, 24, 295 of, in rabbit, 13, 109 ---, neurone-depressant action of, 18, 235 Dextrins, induction of anaphylactoid oedema by, 21, 235

Dextromethorphan, analgesic and lenticular-opacityproducing actions of, 17, 437

**Dextromoramide** (R 875):

-, analgesic action and side-effects of, in man, 13, 30 , analgesic and lenticular-opacity-producing actions and toxicity of, 17, 434

, effect on pain threshold and respiration, in rat, 14, 28

-, lenticular-opacity-producing action of, effect of nalorphine on, 22, 291

Dextrorphan, analgesic and lenticular-opacity-producing actions of, 17, 437

Dextrose. See Glucose Dextrotortion. See Tortion, contralateral

Di-. See also Bi- and Bis-

Diabetes, alloxan-induced, effect on skin reaction induced by intracutaneous compound 48/80, dextran and histamine, 19, 406

1,5-Di(3-acetamido-4-aminophenoxy)pentane, effect on Schistosoma mansoni and toxicity of, 13, 241

2,6-Diacetamido-5-chlorobenzothiazole, amoebicidal and antitubercular actions of, 17, 294

1,3-Di(p-acetamidophenoxy)propane, effect on Schistosoma mansoni, 13, 240

1.4-Diacetoxy-2,3-di(acetylthio)butane, effect on Mycobacterium tuberculosis, 15, 485

2.6-Diacetoxy-3.5-dichloro-4-methylbenzoic acid, antiinflammatory action, synthesis and toxicity of, 22,

3,5-Diacetoxy-2,4,6-tribromotoluene, anti-inflammatory action, synthesis and toxicity of, 22, 221

Diacetyl monoxime, as antidote in sarin poisoning, in rat, 13, 402

, effect on cholinesterase in blood and brain, in normal and sarin-poisoned rats, 13, 400

-, effect on neuromuscular blocking action of anticholinesterases, 14, 320

-, effect on neuromuscular blocking action of tubocurarine, **14**, 318

-, effect on neuromuscular transmission, 14, 317 –, effect on phosphorylphosphatase, 17, 276

, effect on response of striated muscle to electrical stimulation, 14, 318

-, intraperitoneal, blood level after, in rat, 13, 400 , intravenous and intraventricular, effect on action of ethyl pyrophosphate, in conscious dog, 18, 24

, intraventricular, effect on behaviour, in conscious dog, 18, 23

, response of blood pressure and respiration to, in cat, 14, 319

NN'- Diacetyl - NN'- di (p - aminophenoxy) propylenedi amine, effect on Schistosoma mansoni, 13, 239

Diacetylfilicinic acid, anthelmintic action of, 24, 714 2,4-Diacetyl-6-methylphloroglucinol, anthelmintic action and synthesis of, 24, 714

2,4-Diacetyl-6-methylphloroglucinol 1-methyl ether, anthelmintic action of, 24, 714

2,4-Diacetyl-6-methylphloroglucinol 1,3,5-trimethyl ether, anthelmintic action of, 24, 714

Diacetylphloroglucinol, anthelmintic action of, 24, 714 2,4-Diacetylphloroglucinol 1,5-dimethyl ether, anthelmintic action of, 24, 714

2,4-Diacetylphloroglucinol 1-methyl ether, anthelmintic action of, 24, 714

2,4-Diacetylphloroglucinol 1,3,5-tribenzoate. See 2,4-Diacetyl-1,3,5-tribenzoyloxybenzene 2,4-Diacetylphloroglucinol 1,3,5-trimethyl ether, anthel-

mintic action of, 24, 714 Di(acetylthiomethyl)methyl tosylate, antitubercular action and toxicity of, 15, 485

2.3-Di(acetylthio)propanol, antitubercular action and toxicity of, 15, 485

2,3-Di(acetylthio)propoxyacetic acid, effect on Mycobacterium tuberculosis, 15, 485 2,3-Di(acetylthio)propyl acetate, antitubercular action

and toxicity of, 15, 485

2,3-Di(acetylthio)propyl benzoate, antitubercular action

and toxicity of, 15, 485 2,4 - Diacetyl - 1,3,5 - tribenzoyloxybenzene, anthelmintic action of, 24, 714

1,3-Diacetyl-2,4,5-trihydroxybenzene, anthelmintic action of, **24**, 714

Dialkylaminoacylarylamides, synthesis of, 13, 425

Dialkylphosphinic fluorides, neurotoxicity, properties and synthesis of, 15, 271

Dialkylpyrophosphonates, neurotoxicity, properties and synthesis of, 15, 271

α-Diallylaminoaceto-3,4-xylidide, antiviral action in tissue culture, properties and synthesis of, 13, 424

1.5-Di(p-N-allyl-N-methylaminophenyl)pentan-3-one. See pp' - 3 - Oxopentamethylenebis(allyldimethyl phenylammonium)

Diamidines, effect on Theileria annulata in tissue culture, 13, 459

-, induction of morphological changes in trypanosomes by, in mouse, 21, 259

, trypanocidal action on normal and drug-resistant trypanosomes, in mouse, 14, 423

2,7-Di(m-amidinophenyldiazoamino)-10-ethyl-9-phenylphenanthridinium, trypanocidal action and toxicity of, 17, 396

2,7-Di(m-amidinophenyldiazoamino)-10-methyl-9-phenylphenanthridinium, trypanocidal action and toxicity of, 17, 396

Di(p-amidinophenyl)-s-triazine diaceturate. See Berenil

Diamine oxidase, effect on gastrin, 23, 482
—, inhibition by aminoguanidine, in dog, 13, 47

-, inhibition by serpentine, 16, 146, 151

 -, in small intestine, effect of adrenalectomy and corticosteroids on, 16, 364

, role in renal removal of histamine, in dog, 13,

, substrate specificity of, 14, 364

Diamine-oxidase inhibitors, effect on action of choline esters and histamine on acid gastric secretion, in rat. 13, 59

effect on action of chlorpromazine on histamineinduced acid gastric secretion, in rat, 22, 522

, effect on action of gastrin on acid gastric secretion, in rat, 23, 481

mω-Diaminoacetophenone, and its derivatives, in-ovo effect on influenza virus, 13, 406

1,3-Di(p-aminoanilino)propane, effect on Schistosoma mansoni, 13, 239

2,4-Diamino-6-(p-arsonoanilino)-1-methylpyrimidinium, synthesis and trypanocidal action of, 13, 244

2,6-Diamino-4-(p-arsonoanilino)-1-methylpyrimidinium, synthesis and trypanocidal action of, 13, 244

Di-p-aminobenzophenone, effect on Schistosoma mansoni, 13, 239

Di(p-aminobenzyl) ether, effect on Schistosoma mansoni, 13, 239

pp'-Diaminobiphenyl, effect on Schistosoma mansoni, 13,

2,7-Diamino-x-(m-carbamoylphenylazo)-10-ethyl-9phenylphenanthridinium, trypanocidal action of, 17,

2,7-Diamino-9-p-(p-carbamoylphenyldiazoamino)phenyl-10-ethylphenanthridinium, trypanocidal action of, 17, 402

2,7-Diamino-9-p-(p-carboxyphenyldiazoamino)phenyl-10-ethylphenanthridinium, trypanocidal action of, 17, 402

2,6-Diamino-5-chlorobenzothiazole, amoebicidal and

antitubercular actions of, 17, 294

- 1,5-Di(4-amino-2- and -3-chlorophenoxy) pentane, effect on Schistosoma mansoni, retinotoxic action and toxicity of, 13, 241
- 2.7-Diamino-x-(o-chlorophenylazo)-10-ethyl-9-phenylphenanthridinium, trypanocidal action of, 17, 403
- 2,7-Diamino-9-p-(p-chlorophenyldiazoamino)phenyl-10ethylphenanthridinium, trypanocidal action of, 17, 402
- pp'-Di(2-amino-6-chloropyrimidin-4-ylamino) arsenobenzene, properties, synthesis and trypanocidal action of, 13, 244
- 2,4-Diamino-6,7-dibutylpteridine, with sulphadimidine, effect in experimental Eimeria infection, in chick, 15,
- 2,4-Diamino-6,7-di(cyclohexylmethyl)pteridine, with sulphadimidine, effect in experimental Eimeria infection, in chick, 15, 298
- 2,7-Diamino-x-(p-diethylaminoethoxycarbonylphenylazo)-10-ethyl-9-phenylphenanthridinium, cidal action and toxicity of, 17, 396
- 1.5-Di(4-amino-2-diethylaminomethylphenoxy)pentane, effect on Schistosoma mansoni and toxicity of, 13, 241 5,ω-Diamino-2,4-dihydroxyacetophenone, derivatives of,
- in-ovo antiviral action of, 13, 406
- 5,ω-Diamino-2,4-dihydroxypropiophenone, in-ovo effect on influenza virus, 13, 406
- 2,4-Diamino-6,7-di-isopropylpteridine, potentiation of action of sulphadimidine in experimental Eimeria infection by, in chick, 15, 298
- 2,7-Diamino-x-(p-dimethylaminophenylazo)-10-ethyl-9phenylphenanthridinium methobromide, trypanocidal action and toxicity of, 17, 396
  pp'-Di(2-amino-1,6-dimethyl-4-pyrimidiniumamino)-
- arsenobenzene, synthesis and trypanocidal action of, 13, 244
- 2,4-Diamino-6,7-dipentylpteridine, with sulphadimidine, effect in experimental *Eimeria* infection, in chick, 15,
- 2.7-Diamino-10-ethyl-x-(m-nitrophenylazo)-9-phenylphenanthridinium, trypanocidal action of, 17, 403
- 2.7-Diamino-10-ethyl-9-phenyl-x-(m-sulphamoylphenylazo)phenanthridinium, trypanocidal action of, 17,
- 2,7-Diamino-10-ethyl-9-p-(p-sulphamoylphenyldiazoamino)phenylphenanthridinium, trypanocidal action of, 17, 402
- 2,ω-Diamino-4-hydroxyacetophenone, and its derivatives, in-ovo effect on influenza virus, 13, 406
- 3,ω-Diamino-4-hydroxyacetophenone, and its derivatives, in-ovo and in-vitro antiviral action of, 13, 404 4,ω-Diamino-3-hydroxyacetophenone, in-ovo antiviral
  - action of, 13, 404
- $5,\omega$ -Diamino-2-hydroxyacetophenone, and its derivatives, in-ovo antiviral action of, 13, 404 3,ω-Diamino-4-hydroxy-ω-methylacetophenone, deriva-
- tives of, in-ovo effect on influenza virus, 13, 406 3,ω-Diamino-4-hydroxypropiophenone, derivatives of, in-ovo effect on influenza virus, 13, 406
- 1,5-Di(4-amino-2-methoxyphenoxy)pentane, effect eye, schistosomicidal action and toxicity of, 13, 241
- 2,4-Diamino-1'-methylindolo [2',3';6,7] pteridine, with sulphadimidine, effect in experimental *Eimeria* infection, in chick, **15**, 298
- 2.7-Diamino-10-methyl-9-p-nitrophenylphenanthridinium, trypanocidal action and toxicity of, 17, 396

- pp'-Di(2-amino-6-methylpyrimidin-4-ylamino)arsenobenzene, properties, synthesis and trypanocidal action of, 13, 244
- Di(4-amino-2-methylquinol-6-yl)melamine, effect trypanocidal action of organic arsenicals, 14, 436
- , trypanocidal action on normal and drug-resistant trypanosomes and toxicity of, in mouse, 14, 425
- , trypanosome strains resistant to, cross-resistance, development and sensitivity of, 14, 425
- 1,3-Di(4-amino-2-methylquinol-6-yl)urea, effect on trypanocidal action of organic arsenicals, 14, 434, 436 , trypanocidal action on normal and drug-resistant
- trypanosomes and toxicity of, in mouse, 14, 425 1,3-Di(4-amino-3-nitrophenoxy)propane, effect on Schistosoma mansoni and toxicity of, 13, 241
- 2.4-Diaminophenol, in-ovo effect on influenza virus and
- toxicity to chick embryo, 13, 406 Di(aminophenoxy)alkanes, effect on Schistosoma man-
- soni, 13, 240 Di(p-aminophenoxy)alkanes, and related monoamines, schistosomicidal and retinotoxic actions and toxicity
- of, **13**, 238 1,4-Di(p-aminophenoxy)benzene, effect on Schistosoma mansoni and toxicity of, 13, 240
- 1.4-Di(p-aminophenoxy)butane, schistosomicidal and retinotoxic actions and toxicity of, 13, 239
- cis- and trans-1,4-Di(p-aminophenoxy)but-2-ene, schistosomicidal and retinotoxic actions and toxicity of. 13, 240
- 1,4-Di(p-aminophenoxy)but-2-yne, effect on Schistosoma mansoni and toxicity of, 13, 240
- 1,4 Di(p-aminophenoxy)cyclohexane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- 1,4-Di(p-aminophenoxy)cyclohex-2-ene, schistosomicidal action and toxicity of, 13, 240
- 1,10-Di(p-aminophenoxy)decane, effect on Schistosoma mansoni and retinotoxic action and toxicity of, 13, 239
- 1,5-Di(p-aminophenoxy)-3,3-dimethylpropane, effect on Schistosoma mansoni and toxicity of, 13, 240
- 1,12-Di(p-aminophenoxy)dodecane, effect on eye and Schistosoma mansoni and toxicity of, 13, 239
- 1,2-Di(p-aminophenoxy)ethane, effect on Schistosoma mansoni, retinotoxic action and toxicity of, 13, 239
- Di(2-p-aminophenoxyethyl) ether, effect on Schistosoma mansoni, 13, 239
- 1,2-Di(p-aminophenoxy)ethylene, effect on Schistosoma mansoni, 13, 239
- 1,7-Di(p-aminophenoxy)heptane, schistosomicidal and retinotoxic actions and toxicity of, 13, 239
- 1,6-Di(p-aminophenoxy)hexa-2,4-diyne, effect on Schistosoma mansoni and toxicity of, 13, 240
- 1,6-Di(p-aminophenoxy)hexane, schistosomicidal retinotoxic actions and toxicity of, 13, 239 Di(p-aminophenoxy)methane, effect on Schistosoma man-
- soni, retinotoxic action and toxicity of, 13, 239
- 1,4-Di(p-aminophenoxymethyl)benzene, effect on Schistosoma mansoni, 13, 240
- 1,5-Di(p-aminophenoxy)-3-methylpropane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- 1,9-Di(p-aminophenoxy)nonane, schistosomicidal retinotoxic actions and toxicity of, 13, 239
- 1,8-Di(*p*-aminophenoxy)octane, schistosomicidal retinotoxic actions and toxicity of, 13, 239
- 1,5-Di(p-aminophenoxy)-3,3-pentamethylenepentane, effect on Schistosoma mansoni and toxicity of, 13, 240
- 1,5-Di(p-aminophenoxy)pentane, schistosomicidal and retinotoxic actions and toxicity of, 13, 239
- 1,4-Di(5-p-aminophenoxypentoxy)benzene, effect on Schistosoma mansoni, 13, 240

- NN'-Di(5-p-aminophenoxypentyl)benzamide, schistosomicidal action, retinotoxicity and toxicity of, 14, 468
- NN'-Di(5-p-aminophenoxypentyl)glutaramide, effect on schistosomes and vision and toxicity of, 14, 468
- NN'-Di(5-p-aminophenoxypentyl)oxamide, schistosomicidal action, retinotoxicity and toxicity of, 14, 468 NN'-Di(5-aminophenoxypentyl)phthalamide, schistoso-
- micidal action, retinotoxicity and toxicity of, 14, 468 NN'-Di(5-p-aminophenoxypentyl)terephthalamide, effect on schistosomes and vision and toxicity of, 14, 468
- 1,3-Di(5-p-aminophenoxypentyl)urea, effect on schisto-somes and vision and toxicity of, 14, 468
- 1,5-Di(p-aminophenoxy)-3-phenylpropane, effective Schistosoma mansoni and toxicity of, 13, 240
- 1,3-Di(p-aminophenoxy)propane, schistosomicidal and retinotoxic actions and toxicity of, 13, 239
- 1,3-Di(p-aminophenoxy)propan-2-ol, effect on Schistosoma mansoni and toxicity of, 13, 240
- NN'-Di(p-aminophenoxy)propylenediamine. See 1,3-Di(p-aminoanilino)propane
- Di(p-aminophenyl) disulphide, effect on Schistosoma mansoni, 13, 239
- Di(p-aminophenyl) ether, effect on Schistosoma mansoni, **13**, 239
- Di(p-aminophenyl) sulphide, effect on Schistosoma mansoni, 13, 239
- Di(p-aminophenyl) sulphone. See Dapsone Di(p-aminophenyl) sulphoxide, determination in presence of dapsone, 15, 160
  - -, effect on Schistosoma mansoni, 13, 239
- excretion and metabolism in various animal species, **15**, 160
- Di(p-aminophenyl)amine, effect on Schistosoma mansoni, **13**, 239
- 1,2-Di(p-aminophenyl)ethane, effect on Schistosoma mansoni, 13, 239
- Di(p-aminophenyl)methane, effect on Schistosoma mansoni, 13, 239
- 1,5-Di(p-aminophenyl)pentane, effect on Schistosoma mansoni, retinotoxic action and toxicity of, 13, 239
- 1,3-Di(p-aminophenylthio)propane, effect on Schistosoma mansoni, 13, 239
- DL-αε-Diaminopimelic acid, effect on ventral root potentials in spinal cord, 16, 262 2,4-Diamino-1'-propylindolo[2',3': 6,7]pteridine, poten-
- tiation of action of sulphadimidine in experimental Eimeria infection by, in chick, 15, 298
- 2.4-Diaminopteridines, 6,7-disubstituted, potentiation of action of sulphadimidine in experimental *Eimeria* infections by, in chick, **15**, 298

  pp'-Di(2-aminopyrimidin-4-ylamino)arsenobenzene, pro-
- perties, synthesis and trypanocidal action of, 13, 244
- p-(2,6-Diaminopyrimidin-4-ylamino)phenylarsine oxide, curative action in experimental trypanosomiasis and toxicity of, 13, 436
- p-(2,6-Diaminopyrimidin-4-ylamino)phenylarsonic acid, properties, synthesis and trypanocidal action of, 13,
- 1-[p-(2,6-Diaminopyrimidin-4-ylamino)phenyl]-3-hydroxy-1-arsa-2,5-dithiacyclopentane. See Melarsen oxide/BAL
- p-(2,6-Diaminopyrimidin-4-ylamino) phenyloxoarsine, properties, synthesis and trypanocidal action of, 13,
- 1,5-Di(4-amino-m-tolyloxy)pentane, effect on Schistosoma mansoni and toxicity of, 13, 241
- Diamorphine (heroin):
- , analgesic and lenticular-opacity-producing actions and toxicity of, 17, 434
- -, effect on pain threshold and respiration, in rat, 14, 28

- Diamorphine (cont.)
- -, effect on response of small intestine to smoothmuscle stimulants, 15, 428
  - , lenticular-opacity-producing action of, effect of nalorphine on, 22, 291
- Dianil blue 2R, effect on trypanosomes, in mouse, 14, 425 Diaphragm, localization of bretylium in, 15, 267
- , localization of methylpentynol and its carbamate in, in cat, 13, 368
- , in-vitro release of histamine from, by antihistamines, 15, 397
- ,—, by compound 48/80 and staphylococcal α-toxin, 25, 772
- , response to acetylcholine and potassium ions, effect of temperature and tubocurarine on, 15, 345
- -, response to decamethonium, electrical stimulation and suxamethonium, effect of temperature on, 15, 345
- -, in-vitro uptake of glucose by, effect of hypoglycin-A on, 13, 129
- Diarrhoea, induction by bethanidine and guanethidine, 20, 47
- , induction by Tremorine, 14, 560
- **Diazepam** (Wy 3467):
- , effect on response of small intestine to bradykinin, 25, 50
- Di(aziridin-1-yl) sulphoxide [di(ethyleneiminesulphoxide]:
  \_\_\_\_\_, antifertility action of, in rat, 14, 152
- -, diuretic action, synthesis and toxicity of, 21, 581 , diuretic action and toxicity of, in mouse and rat,
- **25**, 224 -, in-vitro hydrolysis of, 21, 593
- -, metabolism of, in dog, mouse, rabbit and rat, 21,
- , urinary excretion of ethyleneimine after administra-
- tion of, in mouse and rat, 25, 223 Di(aziridin-1-yl) [38S]sulphoxide, estimation of radio-activity and synthesis of, 21, 590
- Di(aziridin 1 yl)formaldehyde, diuretic action and toxicity of, in mouse and rat, 25, 224
- -, effect on male fertility, in rat, 14, 151 , urinary excretion of ethyleneimine after administra-
- tion of, in mouse and rat, 25, 223 Diazonium salts, inactivation of eledoisin, histamine, 5-hydroxytryptamine, octopamine and tyramine by,
- 19, 333 Dibenamine, antifibrillatory action of, 17, 425
- , effect on action of morphine on gastrointestinal motility, 14, 32
- -, effect on adrenaline- and stress-induced block of milk ejection, 17, 306
- -, effect on amines in aortic plasma, 16, 111
- , effect on chlorpromazine-induced hyperglycaemia, in rat, 23, 96
- -, effect on gastrointestinal motility, 14, 32
- -, effect on neuronal excitation, 18, 236
- , effect on neurone-depressant action of 5-hydroxytryptamine, 18, 236
- , effect on response of aorta to nicotine and noradrenaline, 14, 240
- , effect on response of auricular beat to butyrylcholine, noradrenaline and tyramine, 17, 233
- effect on response of blood pressure to adenosine, adrenaline, 5-hydroxytryptamine and noradrenaline, in rat, **15**, 136
- , effect on response of blood pressure to  $\beta\beta$ -dimethylacryloylcholine, 13, 311
- , effect on response of blood pressure to noradrenaline and on uptake of noradrenaline by heart, in pithed rat, 16, 357

Dibenamine (cont.)

, effect on response of blood pressure to oxytocin and vasopressin, in chicken, 16, 134

-, effect on response of blood pressure to peptone, in

atropinized and spinal rats, 13, 180

- effect on response of duodenum and terminal tract of bile duct to adrenaline, noradrenaline and phenylephrine, 20, 223, 228
- , effect on response of molluscan smooth muscle to acetylcholine and electrical stimulation, 14, 405
- -, effect on response of rectal caecum to histamine and substance P, 17, 150
- -, effect on response of respiration to  $\beta\beta$ -dimethylacryloylcholine and isovalerylcholine, 13, 309
- , effect on response of small intestine to acetylcholine, 25, 10

- effect on response of smooth muscle at junction of bile duct with duodenum to sympathomimetic amines, 23, 108
- -, effect on toxicity of yohimbine, 21, 57

-, response of blood pressure and heart beat to, in ganglionic blockade, 16, 12

-, response of blood pressure, urinary adrenaline and noradrenaline excretion, and urine secretion to, in cat, 14, 381

Dibenyline. See Phenoxybenzamine

Dibenzanthracene, effect on male fertility, in rat, 14, 154 4-(5*H*-Dibenzo[*a*,*d*]cyclohepten-5-yl)-1-methylpiperidine, effect on response of small intestine to bradykinin, **25**, 50

3-(2-Dibenzylaminoethyl) indole (NN-dibenzyltryptamine):

, metabolism, pharmacological actions, synthesis and toxicity of, 23, 43

1,5-Di(p-benzylaminophenoxy)pentane, effect on Schistosoma mansoni, 13, 240

NN-Dibenzylguanidine, effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282 response of blood pressure to, 24, 288

1,3-Di(p-benzylideneaminophenoxy)propane, effect on Schistosoma mansoni, 13, 240

Dibenzyline. See Phenoxybenzamine

NN-Dibenzyltryptamine. See 3-(2-Dibenzylaminoethyl)indole

Dibromo - N-2 - hydroxyethyl - N-p - (p - nitrophenoxy) benzylacetamide, amoebicidal action of, 17, 293

2,6-Dibromo-4-methylresorcinol, anti-inflammatory action of, 22, 221

4,6-Dibromo-2-methylresorcinol, anti-inflammatory action and toxicity of, 22, 221

3,5-Dibromo-2,4,6-trihydroxyacetophenone, anti-inflammatory action and toxicity of, 22, 221

Dibutyl dimethylpyrophosphate, neurotoxicity, properties and synthesis of, 15, 271

Dibutyl phosphorochloridate, effect on nervous system, in hen, 15, 271

Dibutyl phosphorofluoridate, demyelination by, in hen, 15, 279

-, neurotoxicity, properties and synthesis of, 15, 271

α-Dibutylaminoaceto-3,4-xylidide, properties and synthesis of, 13, 425

3-(2-Dibutylaminoethyl)-5-hydroxyindole, effect on response of uterus to acetylcholine, 5-hydroxytryptamine and tryptamine, 14, 267

, response of stomach-strip preparation and uterus to, 14, 265

3-(2-Dibutylaminoethyl)indole (NN-dibutyltryptamine): effect on response of stomach-strip preparation to 5-hydroxytryptamine and tryptamine, 14, 99

3-(2-Dibutylaminoethyl)indole (cont.)

, effect on response of uterus to acetylcholine, 5hydroxytryptamine and tryptamine, 14, 99

-, metabolism, pharmacological actions, synthesis and toxicity of, 23, 43

-, response of stomach-strip preparation and uterus to, 14, 99

NN-Dibutylguanidine, effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282 , response of blood pressure to, 24, 288

Dibutylphosphinic fluoride, neurotoxicity, properties and synthesis of, 15, 271

1,3-Dibutyl-6-thioxanthine, bronchodilator, coronary constrictor and other pharmacological actions and toxicity of, 17, 197

NN-Dibutyltryptamine. See 3-(2-Dibutylaminoethyl)indole

2,4 - Dibutyryl - 6 - methylphloroglucinol, anthelmintic action and synthesis of, 24, 714

2,4-Dibutyrylphloroglucinol, anthelmintic action and synthesis of, 24, 714

2,4-Dibutyrylphloroglucinol 1,3,5-trimethyl ether, anthelmintic action and synthesis of, 24, 714

4,6-Dibutyrylpyrogallol, anthelmintic action and synthesis of, 24, 714

2,4- and -4,6-Dibutyrylresorcinol, anthelmintic action and synthesis of, 24, 714

2,3-Di(butyrylthio)propyl butyrate, antitubercular action and toxicity of, 15, 485

Dicestal. See Dichlorophen

Dichloroacetamides, amoebicidal action of, 18, 128

a-Dichloroacetamido-β-4-diethylcarbamoylpiperazin-1yl-p-nitropropiophenone, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 287

 $\alpha$  - Dichloroacetamido -  $\beta$  - 4 - ethoxycarbonylpiperazin - 1 yl-p-nitropropiophenone, amoebicidal, antifungal, antitubercular and trichomonocidal actions of, 17,

 $\alpha$ -Dichloroacetamido- $\beta$ -4-formylpiperazin-1-yl-p-nitropropiophenone, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 287

 $\alpha$ -Dichloroacetamido- $\beta$ -4-(p-isopropylbenzyl)piperazin-1-yl-p-nitropropiophenone, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 287

 $\alpha$ -Dichloroacetamido- $\beta$ -4-methylpiperazin-1-ylpropiophenone, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 287

 $\alpha$  - Dichloroacetamido-p - nitro- $\beta$ - piperidinecarboxyhydrazinopropiophenone, amoebicidal, antifungal, antitubercular and trichomonicidal action of, 17, 287

1-Dichloroacetamidopiperazine, derivatives of, antimicrobial action of, 17, 294

Dichloroacetamidopropiophenone, derivatives of, antimicrobial action of, 17, 287

a,5-Dichloroaceto-o-toluidide, properties and synthesis of, 13, 425

1-Dichlo10acetyl-4-dodecylpiperazine, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 294

1-Dichloroacetyl-4-p-isopropylbenzylpiperazine, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 294

1-Dichloroacetyl-4-p-(p-nitrophenoxy)benzylpiperazine, amoebicidal and trichomonicidal actions of, 17, 294

1-Dichloroacetyl-4-phenethylpiperazine, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 294

- 3-Dichloroacetylthiopropylene sulphide, antitubercular action and toxicity of, 15, 485
- $N^1$  (3,4 Dichlorobenzyloxy)diguanide, antibacterial action of, 15, 244
- αα-Dichloro-N-2-(β-carboxypropionyloxy)ethyl-N-p-methylsulphonylbenzylacetamide, amoebicidal action of, 18, 131
- aa-Dichloro-N-2-chloroethyl-N-p-methanesulphonylbenzylacetamide, amoebicidal action of, 18, 132
   aa-Dichloro-N-(5-chloro-6-nitrobenzothiazol-2-yl)-N-
- aa-Dichloro-N-(5-chloro-6-nitrobenzothiazol-2-yl)-N-methylacetamide, amoebicidal and trichomonicidal actions of, 17, 293
- αα-Dichloro-N-p-chlorophenyl-N-2-hydroxyethylacetamide, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 293
- βp-Dichloro-α-dichloroacetamidopropiophenone, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 287
   αα-Dichloro-N-2-dichloroacetoxyethyl-N-p-methanesul-
- αα-Dichloro-N-2-dichloroacetoxyethyl-N-p-methanesulphonylbenzylacetamide, amoebicidal action of, 18, 131
- aa-Dichloro-N-2,4-dichlorobenzyl-N-2-hydroxyethylacetamide, amoebicidal action of, 18, 131
- aa-Dichloro-N-3,4-dimethoxybenzyl-N-2-hydroxyethylacetamide, amoebicidal action of. 18, 131
- 3,7-Dichloro-5-(3-dimethylaminopropyl)-5*H*-dibenz-[*b,f*]azepine, effect on response of small intestine to bradykinin, **25**, 50
- 3,7-Dichloro-5-(3-dimethylaminopropyl)-10,11-dihydro-5*H*-dibenz[*b*,*f*]azepine, effect on response of small intestine to bradykinin. 25, 50
- intestine to bradykinin, 25, 50

  aa-Dichloro-N-2-ethoxyethyl-N-p-methanesulphonylbenzylacetamide, amoebicidal action of, 18, 131
- Di(2-chloroethyl) sulphide. See Mustard gas
- N-[5-p-Di(2-chloroethyl) aminophenoxypentyl] phthalimide, effect on schistosomes and vision and toxicity of, 14, 468
- αα-Dichloro-N-4-fluoronaphth-1'-ylmethyl-N-2-hydroxyethylacetamide, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 293
- p-{p-[(Dichloro-N-2-hydroxyethylacetamido)methyl]phenoxy}phenyl methanesulphonate, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 293
- aa-Dichloro-N-2-hydroxyethyl-N-p-hydroxyphenylacetamide, amoebicidal and trichomonicidal actions of, 17, 293
- αα-Dichloro-N-2-hydroxyethyl-N-5-(2-methoxy-4-nitrophenoxy)pentylacetamide, amoebicidal action of, 18, 131
- αα-Dichloro-N-2-hydroxyethyl-N-p-methylbenzylacetamide, amoebicidal action of, 18, 131
- αα-Dichloro-N-2-hydroxyethyl-N-o-methanesulphonylbenzylacetamide, amoebicidal action of, 18, 131
- aa-Dichloro-N-2-hydroxyethyl-N-p-methanesulphonyl-benzylacetamide, amoebicidal and antibacterial actions and toxicity of, 18, 128
- —, effect in dysenteric amoebiasis, in man, 18, 137 αα-Dichloro-N-2-hydroxyethyl-N-p-methylthiobenzyl-
- acetamide, amoebicidal action of, 18, 131 αα-Dichloro-N-2-hydroxyethyl-N-2-morpholinoethylacetamide, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 293
- aa-Dichloro-N-2-hydroxyethyl-N-p-(p-nitrophenoxy)benzylacetamide. See Chlorphenoxamide
- aa-Dichloro-N-2-hydroxyethyl-N-tetradecylacetamide, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 293
- aa-Dichloro-o- and -p-hydroxy-N-2-hydroxyethylacetanilide, amoebicidal action of, 18, 133

- aa-Dichloro-p-hydroxy-N-methylacetanilide. See Diloxanide
- aa-Dichloro-N-(2-indol-3'-ylethyl)acetamide, amoebicidal, antifungal, antitubercular and trichomonicidal actions of, 17, 294
- αα-Dichloro-N-2-isobutoxyethyl-N-p-methanesulphonylbenzylacetamide, amoebicidal action of, 18, 131
- Dichloroisoprenaline [dichloroisoproterenol: 1-(3,4-dichlorophenyl)-2-isopropylaminoethanol]:
- —, central action of, in chick, 25, 698, 705
- —, effect on action of adrenaline on effect of tubocurarine on response of fast- and slow-contracting muscles to indirect stimulation, 19, 480
- —, effect on action of adrenaline and isoprenaline on potassium content and uptake of auricle, 19, 274
- —, effect on action of adrenaline and isoprenaline on response of fast- and slow-contracting muscles to indirect stimulation, 19, 479
- indirect stimulation, 19, 479

  —, effect on action of adrenaline and isoprenaline on response of hypogastric nerve-vas deferens preparation to electrical stimulation, 24, 197
- —, effect on action of chlorpromazine on response of blood pressure to adrenaline, isoprenaline and noradrenaline, 23, 514
- —, effect on action of imipramine on toxicity of yohimbine, 21, 58
- —, effect on action of isoprenaline on excretion of diodone, inulin, sodium ions and water, in rat, 20, 137
   —, effect on action of large doses of isoprenaline on response of blood pressure to adrenaline, ethylnor-
- response of blood pressure to adrenaline, ethylnoradrenaline, isoprenaline and noradrenaline, in cat, 21, 385
  ——, effect on action of large doses of isoprenaline on
- response of heart beat to isoprenaline, in cat, 21, 386
  —, effect on action of P-286 on response of blood
- pressure to acetylcholine, in atropinized dog, 20, 581—, effect on action of reserpine on response of blood pressure to tolazoline, 22, 67
- —, effect on action of reserpine on response of blood pressure and heart beat to adrenaline and isoprenaline, 21, 177
- —, effect on action of sympathomimetic amines on response of normal and potassium-depressed phrenic nerve-diaphragm preparation to electrical stimulation, 23, 187, 191
- —, effect on central action of adrenaline, in chick, 25, 714
- —, effect on central action of dexamphetamine, in chick, 25, 695, 698
- ---, effect on central action of dexamphetamine and
- (±)-α-methylnoradrenaline, in chick, 25, 698
  ——, effect on excretion of diodone, inulin, sodium ions
- and water, and action of isoprenaline, in rat, 20, 137
  —, effect on hyperlipaemia and hypercholesterolaemia induced by surface-active agent, in rat, 23, 451
- aemia induced by surface-active agent, in rat, 23, 451
  —, effect on noradrenaline in blood plasma, in cat and rat, 22, 110
- —, effect on noradrenaline in tissues, 22, 106
- —, effect on potassium content and uptake of auricle, 19, 277
- —, effect on response of auricular beat to adrenaline and isoprenaline, 19, 277
- —, effect on response of auricular beat to noradrenaline and nicotine, 15, 503
- —, effect on response of auricular beat to noradrenaline and tyramine, and action of noradrenaline and tyramine, 20, 248
- ---, effect on response of blood pressure to acetylcholine, adenosine, adrenaline, 5-hydroxytryptamine, isoprenaline and noradrenaline, in rat, 15, 135

Dichloroisoprenaline (cont.) , effect on response of blood pressure to adrenaline, in phenoxybenzamine-treated dog, 16, 12 , effect on response of blood pressure to bretylium and guanethidine, 20, 365 -, effect on response of blood pressure to noradrenaline and on uptake of noradrenaline by heart, in pithed rat, 16, 357 , effect on response of blood pressure to phenoxybenzamine in ganglionic blockade, 16, 12 , effect on response of blood vessels to acetylcholine, in man, 19, 241 -, effect on response of blood vessels to adrenaline, in man, 19, 235 -, effect on response of blood vessels to isoprenaline. in man, 19, 242 -, effect on response of blood vessels to noradrenaline, in man, 19, 238, 241 -, effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, 471 -, effect on response of denervated striated muscle to sympathomimetic amines, 24, 105 -, effect on response of duodenum and terminal tract of bile duct to adrenaline, isoprenaline, noradrenaline and phenylephrine, 20, 223, 228 -, effect on response of fast- and slow-contrasting muscle to indirect stimulation, 19, 479 , effect on response of heart beat to adrenaline, in phenoxybenzamine-treated and untreated dog, 16, 12 , effect on response of heart beat to adrenaline, histamine, nicotine and noradrenaline, 15, 500 -, effect on response of heart beat to bretylium, guanethidine, noradrenaline and tyramine, 20, 57 -, effect on response of heart beat to isoprenaline, in syrosingopine-treated cat, 25, 582 , effect on response of heart beat to ouabain, and action of isoprenaline, 21, 462, effect on response of heart beat to tolazoline, 22, effect on response of hypogastric nerve-vas deferens preparation to electrical stimulation, 24, 197 -, effect on response of hypogastric nerve-vas deferens preparation to isoprenaline, 24, 201 -, effect on response of large intestine to acetylcholine and nerve stimulation, 23, 158, 160 -, effect on response of normal and reserpine-treated auricle to adrenaline, 15, 503 -, effect on response of normal and reserpine-treated auricle to histamine, 15, 500 -, effect on response of rectal caecum to adrenaline and substance P, 17, 149 , effect on response of smooth muscle at junction of bile duct with duodenum to sympathomimetic amines, 23, 106 , effect on response of terminal tract of bile duct to acetylcholine and histamine, 20, 228 -, effect on response of uterus to adrenaline, 16, 124 -, effect on response of uterus to adrenaline and noradrenaline, 22, 106 -, effect on response of vas deferens to transmural stimulation, 24, 201 , effect on sialogenous action of adrenaline, isoprenaline and methacholine, in rat, 25, 136, effect on stress-induced block of milk ejection, in lactating guinea-pig, 17, 306 -, effect on toxicity of yohimbine, 21, 57 -, effect on uptake of histamine, 5-hydroxytryptamine and noradrenaline by mast cells, 23, 414 -, effect on uptake of noradrenaline by heart at low

perfusion concentration, 25, 34

Dichloroisoprenaline (cont.) , effect on uptake of noradrenaline by tissues, in cat and rat, 22, 106, 107 -, response of auricular beat to, 19, 277 -, response of heart beat to, 15, 504; 20, 58; 21, 467 -, and effect of adrenaline and phenoxybenzamine on, in ganglionic blockade, 16, 12 -, response of terminal tract of bile duct to, 20, 228 , sialogenous action of, and effect of dihydroergotamine and phenoxybenzamine on, in rat, 25, 136 Dichloroisoproterenol. See Dichloroisoprenaline aa-Dichloro-N-isopropyl-N-p-methanesulphonylbenzylacetamide, amoebicidal action of, 18, 132  $\alpha\alpha$  - Dichloro - N-p - methanesulphonyl - N-3 - methoxy propylbenzylacetamide, amoebicidal action of, 18, 132 aa - Dichloro - p- (p - methanesulphonylbenzoyloxy) - N methylacetanilide, amoebicidal action of, 18, 133 aa-Dichloro-p-(p-methanesulphonylbenzyloxy)-N-methylacetanilide, amoebicidal action of, 18, 133 aa-Dichloro-p-methanesulphonyl-N-methylacetanilide, amoebicidal action of, 18, 131 aa-Dichloro-N-5-(2-methoxy-4-nitrophenoxy)pentylacetamide, effect on Entamoeba histolytica, 18, 131 4,6 - Dichloro - 5 - methylresorcinol, anti - inflammatory action and toxicity of, 22, 221 aa-Dichloro-N-5-(p-nitrophenoxy)pentylacetamide, effect on Entamoeba histolytica, 18, 131 Dichlorophen, in-vitro cesticidal action of, 15, 437 Dichlorophenarsine, trypanocidal action of, effect of p-aminobenzoic acid on, 14, 436 2,4- and 2,6-Dichlorophenol, dissociation constants, pharmacological actions and toxicity of, 13, 21 Di(p-chlorophenyl)acetyltropeïne, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562 1-(3,4-Dichlorophenylcarbamoylmethyl)pyridinium, antiviral action in tissue culture, properties and synthesis of, 13, 424

 $N^1$ -(5,5-Di-p-chlorophenyl-5-cyanopentyl)- $N^1N^1N^2$ -trimethylethylene-1-ammonium-2-morpholinium, effect

on response of nictitating membrane to adrenaline, dimethylphenylpiperazinium, ephedrine, noradrenaline and tyramine, 19, 31 1-(3,4-Dichlorophenyl)-2-isopropylaminoethanol. See

Dichloroisoprenaline

3,4-Dichloro-a-piperidinoacetanilide, antiviral action in tissue culture, properties and synthesis of, 13, 424 αα-Dichloro-N-p-(N-pyrimidin-2-ylsulphamoyl)phenylacetamide, amoebicidal, antifungal, antitubercular

and trichomonicidal actions of, 17, 294 aα-Dichloro-N-p-sulphamoylphenylacetamide, amoebi-

cidal, antifungal, antitubercular and trichomonicidal actions of, 17, 294

Dichlorphenamide, response of respiration to, in man, 22,

Dicoumarol, anticoagulant action of, 20, 29

Dicoumarols, methylated, anticoagulant action of, 20, 29 Dicyandiamide, effect on ganglionic and neuromuscular blockade, 19, 414

Dicyandiamidine, effect on ganglionic and neuromuscular blockade, 19, 414

4,4'-Di[14C]cyanostilbene, synthesis of, 14, 138

Dicyclohexyl phosphorofluoridate, neurotoxicity, properties and synthesis of, 15, 271 6,6-Dicyclohexylpiperid-2-one, central depressant action

and toxicity of, 25, 790

Dicyclopropyl ketoxime, antitetanus action of, 17, 507 2,4 - Didecanoyl - 6 - methylphloroglucinol, anthelmintic action and synthesis of, 24, 714

- 2,4-Didecanoylphloroglucinol, anthelmintic action and synthesis of, 24, 714
- 1,5-Di(3,4-diaminophenoxy)pentane, effect on Schistosoma mansoni and toxicity of, 13, 241
- 1,3-Di(2,4-diaminophenoxy) propane, effect on Schistosoma mansoni and toxicity of, 13, 241
- pp'-Di(2,6-diaminopyrimidin-4-ylamino)arsenobenzene, properties, synthesis and trypanocidal action of, 13,
- 1,5-Di [p-(2-diethylaminoethylamino)phenoxy]pentane, effect on Schistosoma mansoni, 13, 240
- 1-p-[Di(2-diethylaminoethyl)amino]phenoxy-5-phenoxypentane, schistosomicidal action and toxicity of, 13,
- 1,5-Di(p-diethylaminophenoxy)pentane, effect on eye, schistosomicidal action and toxicity of, 13, 240
- 2,4-Di(diethylamino)-6-(2-phenylacetylhydrazino)-1,3,5triazine, effect on action of suxamethonium on muscle spindles, 19, 379
- , response of de-efferented muscle spindles and  $\gamma$ -motoneurones to, 19, 375
- 3,6-Di(3-diethylaminopropoxy) pyridazine di (methiodide), effect on response of blood pressure to adrenaline, noradrenaline and physostigmine, and action of choline, in rat, 21, 273
- 1,8-Di [p-di (2-hydroxyethyl) aminophenoxy] octane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- 1,5-Di [p-di(2-hydroxyethyl) aminophenoxy] pentane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- N-[5-p-Di(2,3-dihydroxypropyl)aminophenoxypentyl]benzamide, effect on schistosomes and vision and toxicity of, 14, 468
  1,8-Di(p-dimethylaminophenoxy)octane, effect on eye,
- schistosomicidal action and toxicity of, 13, 240
- 1,5-Di(p-dimethylaminophenoxy) pentane, schistosomicidal and retinotoxic actions and toxicity of, 13,
- 1,3-Di(p-dimethylaminophenoxy)propane, effect on eye, schistosomicidal action and toxicity of, 13, 240
- 1,5-Di(p-dipropylaminophenoxy)pentane, effect on eye and Schistosoma mansoni and toxicity of, 13, 240
- Di(2,3-epithiopropyl) disulphide, antitubercular action and toxicity of, 15, 485
- Diet, effect on 5-hydroxytryptamine in tissues, in mouse and rat, 15, 513
  - effect on urinary excretion of creatinine and 5hydroxyindolylacetic acid, 15, 514
- effect on weight of body and small intestine, in rat, **15**, 515
- See also Starvation Diethazine, antiacetylcholine and antitremor actions of,
- 18, 247 , antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 561
- -, effect in experimental local tetanus, 13, 336
- , effect on behaviour and on amines and their acid metabolites in brain, 24, 768
- , intraventricular, effect on drug-induced tremor, in cat, 15, 578
- p-4,4-Diethoxybutyloxyaniline, effect on Schistosoma mansoni and toxicity of, 13, 242
- 1-Diethoxycarbonylmethylisatin  $\beta$ -thiosemicarbazone,
- antiviral action, properties and synthesis of, 15, 101 3 (Diethoxyphosphinyloxy) NNN trimethylanilinum methosulphate poisoning, antidotes in, atropine and pyridinum aldoximes as, 14, 196
- Diethyl (2-diethylaminoethyl)phosphorothiolate, effect on nervous system, in hen, 15, 271

- Diethyl dimethylaminothioethyl phosphate poisoning, successful treatment with atropine and pralidoxime. cholinesterase in brain after, 15, 432
- Diethyl dimethylpyrophosphate, neurotoxicity, properties and synthesis of, 15, 271
- Diethyl ether. See Ether
- Diethyl ethylmethylpyrophosphate, neurotoxicity, properties and synthesis of, 15, 271
- Diethyl phosphorochloridate, effect on nervous system, in hen, 15, 271
- Diethyl phosphorocyanidate, effect on nervous system, in hen, 15, 271
- Diethyl phosphorofluoridate, demyelination by, in hen, **15**, 279
- neurotoxicity, properties and synthesis of, 15, 271 Diethyl phosphorofluoridothionate, demyelination by, in hen, 15, 279
- neurotoxicity, properties and synthesis of, 15, 271 Diethyl phosphostigmine. See 3-(Diethoxyphosphinyloxy)-NNN-trimethylanilinium methosulphate
- α-Diethylaminoaceto-3,4-xylidide, antiviral action i tissue culture, properties and synthesis of, 13, 424
- 2-Diethylaminoethyl a-cyclohexyl-a-phenylacetate (Trasentin 6H)
- , antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 564
- β-Diethylaminoethyl 3,3-diphenylpropylacetate. Proadifen
- 2-Diethylaminoethyl aa-diphenylyalerate. See Proadifen 1-p-(2-Diethylaminoethylamino) phenoxy - 5-phenoxy pentane, schistosomicidal action and toxicity of, 13,
- 7-(2-Diethylaminoethyl)-1,3-dimethyl-6-thioxanthine, and its methiodide, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 201
- 1-(2-Diethylaminoethyl)-2-p-ethoxybenzyl-5-nitrobenzimidazole, analgesic action of, in guinea-pig, 17, 33
- 3-(2-Diethylaminoethyl)-5-hydroxyindole, response of stomach-strip preparation to, and effect of amineoxidase inhibitors on, 14, 88
- , response of stomach-strip preparation and uterus to, 14, 265
- 3-(2-Diethylaminoethyl)indole (N'N'-diethyltryptamine): , effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, 471
- effect on response of stomach-strip preparation to
- 5-hydroxytryptamine and tryptamine, 14, 99 effect on response of uterus to acetylcholine, 5-
- hydroxytryptamine and tryptamine, 14, 99 , metabolism, pharmacological actions, synthesis and
- toxicity of, 23, 43
- -, neurone-depressant action of, 18, 230
- -, response of stomach-strip preparation to, 14, 99 -, and effect of amine-oxidase inhibitors on, 14,
- response of Venus heart to, 15, 377
- 7-(2-Diethylaminoethyl)-3-isobutyl-1-methyl-6-thioxanthine, bronchodilator and other pharmacological
- actions and toxicity of, 17, 201

  N-Diethylaminoethyl-N-isopentyl-N'N'-di-isopropylurea, effect on action of acetylcholine on bloodglucose, 20, 590
- , effect on cardiovascular action of acetylcholine, in atropinized dog, 20, 580
- , effect on response of blood pressure to acetylcholine, in adrenal ectomized atropinized dog, 24, 452
- effect on response of blood pressure to adrenaline, AHR602, dimethylphenylpiperazinium, McN-A-343, noradrenaline and physostigmine, in rat, 23, 37

- N- Diethylaminoethyl N- isopentyl N'N'-di isopropylurea (cont.)
- , effect on response of blood pressure to adrenaline, dimethylphenylpiperazinium, noradrenaline physostigmine, in rat, 21, 273

, response of blood pressure and heart beat to, in rat, 23, 37

- 1 Diethylaminoethyl 2 p methoxybenzyl 5 nitrobenz imidazole, effect on impulse transmission in nerve fibres, 22, 507
- 3 (2 Diethylaminoethyl) 2 methylindole, effect on response of stomach-strip preparation to 5-hydroxytryptamine and tryptamine, 14, 99
- , effect on response of uterus to acetylcholine, 5-hydroxytryptamine and tryptamine, 14, 99
- , response of stomach-strip preparation and uterus to, 14, 99
- 5-(2-Diethylaminoethyl)-3-phenyl-1,2,4-oxadiazole. Oxolamine
- α-Diethylamino-p-hydroxy-N-methylacetanilide, amoebicidal action of, 18, 133
- 2-Diethylaminomethyl-1,4-benzodioxan (883F: Prosympal):
- , effect on response of auricular beat and small intestine to acetylcholine, 20, 531
- -, effect on response of blood pressure to adrenaline and physalaemin, 25, 383, 387
- -, effect on response of blood pressure to eledoisin, 20, 524
- , effect on response of blood pressure to leptodactyline, 15, 17
- -, effectonresponse of heart beat to leptodactyline, 15,19
- , effect on sialogenous action of physalaemin, 25, 376 10-(3-Diethylamino-2-methylpropyl)phenothiazine. Oxomemazine
- 1,5-Di(p-ethylaminophenoxy)pentane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- Diethylcarbamazine, in-vitro effect on Hymenolepis nana, **15**, 437
- in-vitro effect on infective larvae of Wuchereria
- bancrofti, 13, 318  $N^1$  Diethyl  $N^4$  (2 diethylaminoethyl)sulphanilamide, antiviral action in tissue culture, 13, 424
- Diethyldithiocarbamic acid, effect on Mytilus oxidase, 15,
- , effect on tyrosinase, 18, 417
- Diethyleneiminosulphoxide. See Di(aziridin-1-yl) sulphoxide
- 1,3-Di(ethylenesulphamoyl)propane, antifertility action
- of, in rat, 14, 151 NNN'N'-Diethyleneurea. See Di(aziridin-1-yl)formaldehyde
- NN-Diethylguanidine, effect on ganglionic and neuromuscular blockade, 19, 414
- , effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282
- -, effect on neuromuscular transmission, 19, 419, 420
- -, ganglion-blocking action of, 19, 424 response of blood pressure to, 24, 288
- Diethyl(m-hydroxyphenyl)methylammonium, effect on curarized endplate potentials, relation to anticurare
- action, 23, 575 -, effect on motor-nerve endings, 24, 232
- -, effect on response of popliteal nerve-gastrocnemius preparation to electrical stimulation, and action of benzoquinonium and tubocurarine, 24, 225
- Diethyl(p-hydroxyphenyl)methylammonium, effect on response of popliteal nerve-gastrocnemius preparation to electrical stimulation, and action of benzoquinonium and tubocurarine, 24, 225

- N'N'-Diethyl-5-hydroxytryptamine. See 3-(2-Diethylaminoethyl)-5-hydroxyindole
- Diethylmethyl(7 methylcoumaran 3 yl)ammonium, adrenergic neurone-blocking action of, 23, 497
- , synthesis of, **23**, 501 Diethylmethylphenylammonium, effect on motor-nerve endings, 23, 234
- , effect on response of popliteal nerve-gastrocnemius preparation to electrical stimulation, and action of benzoquinonium and tubocurarine, 24, 225
- Diethylmethyl(3-pyridylmethyl)ammonium, effect junctional transmission, 18, 510
- synthesis and properties of, 18, 516
- Diethylmethyl(2-xylyloxyethyl)ammonium, adrenergic neurone-blocking action of, 23, 497
- Diethylnicotinamide, effect on histamine release and mastcell damage by antigen and compound 48/80, 15, 407
- 5,5-Diethyl-1,3-oxazine-2,4-dione, effect on response of blood pressure and respiration to carotid occlusion and stimulation of Hering's and vagus nerves, 16, 239
- , response of circulation and respiration to, in anaesthetized, decerebrate and spinal animals, 16, 231 Diethylphosphinic fluoride, neurotoxicity, properties and
- synthesis of, 15, 271 Diethylphosphorylcholinesterase, reactivation by
- quaternary oximes, 14, 188 Diethylpyrophosphorylacetocholinesterase, reactivation by
- pyridinium aldoximes, 14, 195 1,3-Diethyl-6-thioxanthine, choline salt, bronchodilator,
- coronary dilator and other pharmacological actions and toxicity of, 17, 197
- N'N'-Diethyltryptamine. See 3-(2-Diethylaminoethyl)indole
- Digitonin, in-vitro haemolytic action of, effect of quinine on, **13**, 176
- Digitoxigenin, and its derivatives, cardiotoxic and inotropic actions of, 18, 311
- , duration of cardiac action, excretion and lethal dose of, in guinea-pig, 14, 174
- -, response of electrically driven auricle to, 21, 398 , response of hypodynamic heart to, in calcium-free
- Ringer solution, 19, 186 Digitoxigenin acetate, cardiotoxic and inotropic actions
- of, 18, 314 Digitoxigeninone, duration of cardiac action, excretion
- and lethal dose of, in guinea-pig, 14, 174 Digitoxigenone, cardiotoxic and inotropic actions of, 18,
- 314
- Digitoxin, cardiotoxic and inotropic actions of, 18, 314 duration of cardiac action, excretion and lethal
- dose of, in guinea-pig, 14, 174 , response of electrically driven auricle to, and effect
- of temperature on, 25, 559 Digoxigenin, and its derivatives, cardiotoxic and inotropic
- actions of, 18, 311 , duration of cardiac action, excretion and lethal dose of, in guinea-pig, 14, 174
- Digoxigenin diacetate, cardiotoxic and inotropic actions of, 18, 314
- Digoxigenone, cardiotoxic and inotropic actions of, 18,
- Digoxin, cardiotoxic and inotropic actions of, 18, 314
- duration of cardiac action, excretion and lethal dose of, in guinea-pig, 14, 174
- Diguanidines, trypanocidal action on normal and drugresistant trypanosomes, in mouse, 14, 423
- 2,4-Diheptanoyl-6-methylphloroglucinol, anthelmintic action and synthesis of, 24, 714
- 2,4-Diheptanoylphloroglucinol, anthelmintic action and synthesis of, 24, 714

- 2,4-Dihexanoyl-6-methylphloroglucinol, anthelmintic action and synthesis of, 24, 714
- 2,4-Dihexanoylphloroglucinol, anthelmintic action and synthesis of, 24, 714
- p-Di(2-hydrazinoethoxy)benzene, effect on 5-hydroxytryptamine in foetus and placenta, in mouse, 22, 387
- Dihydrochlorprothixene, effect on ganglionic transmission, 23, 228
- , effect on response of small intestine to bradykinin, **25**, 50
- Dihydrocodeine, analgesic and lenticular-opacity-producing actions and toxicity of, 17, 434
- 20,22-Dihydrodigitoxigenin, cardiotoxic and inotropic actions of, 18, 314
- , effect on cardiotoxic action of ouabain, 18, 314 20,22-Dihydrodigoxigenin, cardiotoxic and inotropic
- actions of, 18, 314 20,22-Dihydrodigoxin, cardiotoxic and inotropic actions of, 18, 314
- Dihydroergotamine, effect on action of imipramine on toxicity of yohimbine, 21, 58
- , effect on apomorphine-induced emesis and pecking, in pigeon, 16, 142
- -, effect on carotid sinus reflexes, 13, 256
- , effect on central and pressor actions of adrenaline,
- in chick, 25, 714
  -, effect on electroencephalogram and on response to
- reticular stimulation, in cat, 13, 489 , effect on hydrolysis of hippuryl-L-arginine by
- carboxypeptidase B, 22, 335 , effect on hyperlipaemia and hypercholesterolaemia induced by surface-active agent, in rat, 23, 451
- , effect on induction of salivation by parasympathetic stimulation, 22, 122
- , effect on induction of salivation by sympathetic stimulation, 22, 120
- , effect on peristaltic reflex, and action of 5-hydroxy-
- tryptamine, 13, 452 -, effect on pressor action of blood plasma, 19, 365 , effect on response of auricular beat to butyryl-
- choline, noradrenaline and tyramine, 17, 233 , effect on response of blood pressure to acetylcholine, adenosine, adrenaline, 5-hydroxytrypt-
- amine, isoprenaline and noradrenaline, in rat, 15, 135 , effect on response of blood pressure to bradykinin, in male and oestrous, dioestrous and oestrogen-treated female rats, 19, 504
- , effect on response of blood pressure to  $\beta\beta$ -dimethylacryloylcholine, 13, 311
- effect on response of blood pressure to eledoisin,
- 20, 519, 524 -, effect on response of blood pressure to nor-
- adrenaline and peptone, 13, 180
  -, effect on response of blood pressure to oxytocin and vasopressin, in chicken, 16, 133
- effect on response of blood pressure, heart beat and nictitating membrane to bretylium and guanethidine, 20, 364
- , effect on response of hypogastric nerve-vas deferens preparation to electrical stimulation, 20, 302 -, effect on response of rectal caecum to 5-hydroxy-
- tryptamine, 17, 150 -, effect on response of splenic muscle to acetylcholine, adrenaline, histamine and 5-hydroxytryptamine, 19,
- , effect on response of vas deferens to acetylcholine, noradrenaline, potassium ions and transmural stimulation, 21, 576
- effect on response of vas deferens to noradrenaline, 20, 301

- Dihydroergotamine (cont.)
- , effect on response of venous preparations to catechol amines, 24, 744
- , effect on sialogenous action of adrenaline, isoprenaline, methacholine and sympathetic stimulation, in rat, 25, 135
- , effect on sialogenous action of dichloroisoprenal-ine, in rat, 25, 136
- -, effect on sialogenous action of guanethidine, 22, 121 , effect on sialogenous action of methacholine, 22,
- effect on sialogenous action of pronethalol, in rat, **25**, 137
- , effect on spontaneous activity of venous preparations, 24, 743
- -, effect on toxicity of yohimbine, 21, 57 -, effect on uptake of 5-hydroxytryptamine by blood platelets, 16, 291
- -, response of molluscan heart to, 18, 440
  - -, response of molluscan smooth muscle to, 14, 405 , response of tracheal muscle preparations to, effect of prostaglandins on, 22, 513
- Dihydro- $\beta$ -erythroidine, effect on dorsal-root potentials of spinal cord, 17, 226
- , effect on electroencephalogram and on response to reticular stimulation, in cat, 13, 488
- -, effect on reflex transmission in spinal cord, 19, 537 , effect on response of Tapes heart to acetylcholine, **25**, 487
- Dihydromorphinone, effect on response of small intestine to smooth-muscle stimulants, 15, 428
- Dihydromurexine, neuromuscular blocking and other pharmacological actions and toxicity of, 13, 378
- Dihydrostreptomycin, neuromuscular blocking action of,
- Dihydroxyacetone, effect on action of polysaccharides on capillary permeability, in rat, 25, 605
- Dihydroxybenzenes, substituted, anti-inflammatory action and toxicity of, 22, 221
- Dihydroxybenzoic acids, anti-inflammatory action of, 18, 347
- effect on oxygen consumption, in rat, 13, 419
- 2,6-Dihydroxybenzoic acid, effect on action of bradykinin and kallikrein on capillary permeability, in rabbit,
- -, effect on kallikrein activity, 17, 107
- , effect on response of blood pressure to acetylcholine, bradykinin, histamine, 5-hydroxytryptamine, kallidin and kallikrein, in dog, 17, 110
- 2,4- and -3,5-Dihydroxybenzophenone, anti-inflammatory action and toxicity of, 22, 221
- 3,5-Dihydroxybenzyl alcohol, anti-inflammatory action and toxicity of, 22, 221
- 3,4-Dihydroxycinnamic acid, anti-inflammatory action of, 18, 347
- 4,7-Dihydroxycoumarin, anticoagulant action of, 20, 29 1,5-Di[p-(2-hydroxyethylamino)phenoxy]pentane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- N-p-[5-p-Di(2-hydroxyethyl)] aminophenoxypentoxy]phenylacetamide, schistosomicidal and retinotoxic actions and toxicity of, 13, 242
- N-[5-p-Di(2-hydroxyethyl)]aminophenoxypentyl]benzamide, schistosomicidal action, retinotoxicity and toxicity of, 14, 468
- N-[5-p-Di(2-hydroxyethyl)aminophenoxypentyl]phthalimide, schistosomicidal action, retinotoxicity and toxicity of, 14, 468
- 1,5-Di[p-(2-hydroxyethylmethylamino)phenoxy]pentane, schistosomicidal action and toxicity of, 13, 240

NN-Di(2-hydroxyethyl)-p-5-phenylpentoxyaniline, schistosomicidal action and toxicity of, 13, 242

3,4-Dihydroxy-ω-isopropylaminoacetophenone, and in-vitro effect on influenza virus, 13, 408

3,4-Dihydroxymandelic acid, effect on response of hypogastric nerve-vas deferens preparation to electrical stimulation, and action of guanethidine, pheniprazine, pyrogallol and reserpine, 24, 643, 646

2,6-Dihydroxy-4-methyl-3,5-dinitrosobenzoic acid, antiinflammatory action, synthesis and toxicity of, 22,

3,4-Dihydroxy-N-methylphenethylamine (*Epinine*):

-, central action of, in chick, 25, 705 , effect on adrenergic neurone-blocking action of bretylium, guanethidine and xylocholine, 18, 421

-, effect on response of small intestine to sympathetic stimulation, 18, 423

-, enzymic oxidation of, 13, 93

-, oxidation products of, response of blood pressure to. 13, 93

-, response of blood pressure to, 13, 92

effect of noradrenaline on, in anaesthetized rabbit, 13, 472

effect of reserpine on, and action of noradrenaline and vasopressin, in anaesthetized rabbit,

response of small intestine to, 18, 423

(+)- $\beta m$ -Dihydroxy-N-methylphenethylamine, oxidation by amine oxidase, 14, 257

(-) -  $\beta m$  - Dihydroxy - N - methylphenethylamine. See Phenylephrine

(+)- $\beta p$ -Dihydroxy-N-methylphenethylamine, oxidation by amine oxidase, 14, 257

 $(\pm)$ - $\beta p$ -Dihydroxy-N-methylphenethylamine. See Oxedrine

11a,15-Dihydroxy-9-oxoprosta-5,13-dienoic acid. See Prostaglandin E2

11 a,15-Dihydroxy-9-oxoprost-13-enoic acid. See Prostaglandin E<sub>1</sub>

11 a,15-Dihydroxy-9-oxoprosta-5,13,17-trienoic acid. See Prostaglandin E<sub>3</sub>

3,4-Dihydroxyphenethylamine. See Dopamine

3,4-Dihydroxyphenyl-L-alanine. See L-Dopa

3,4-Dihydroxyphenyl-DL-alanine. See DL-Dopa

 $\beta$ -3,4-Dihydroxyphenylethylamine. See Dopamine [2-(3,4-Dihydroxyphenyl) ethyl] trimethylammonium, pharmacological actions of, comparison quaternary methyl derivatives of noradrenaline and tyramine, 23, 55

 $(\pm)$ -[2-(3,4-Dihydroxyphenyl)-2-hydroxyethyl]trimethylammonium, pharmacological actions of, comparison with quaternary methyl derivatives of dopamine and

tyramine, 23, 55

3,4-Dihydroxyphenyl-a-methylalanine. See Methyldopa  $\beta$ -(3,4-Dihydroxyphenyl)propionic acid. See Hydro-

caffeic acid

N-[5-p-Di(2-hydroxypropyl)aminophenoxypentyl]benzamide, schistosomicidal action, retinotoxicity and toxicity of, 14, 468

N-[5-p-(2,3-Dihydroxypropylamino)] phenoxypentyl ]benzamide, schistosomicidal action, retinotoxicity and toxicity of, 14, 468

D- and L-2,4-Di-iodohistidine, inhibition of histidine decarboxylase by, 15, 552

Di- $\beta$ -isatinazine, effect in experimental ectromelia and vaccinia infections, 15, 107

Di-isobutyl phosphorochloridate, effect on nervous system, in hen, 15, 271

Di-isobutyl phosphorofluoridate, neurotoxicity, properties and synthesis of, 15, 271

3-(2-Di-isobutylaminoethyl)indole (NN-di-isobutyltryptamine):

, metabolism, pharmacological actions, synthesis and toxicity of, 23, 43

NN-Di-isobutylguanidine, effect on ganglionic and neuromuscular transmission and toxicity of, 24,

response of blood pressure to, 24, 288

NN-Di-isobutyltryptamine. See 3-(2-Di-isobutylaminoethyl)indole

2,4-Di-isobutyryl-6-methylphloroglucinol, anthelmintic action and synthesis of, 24, 714

2,4-Di-isobutyrylphloroglucinol, anthelmintic action and synthesis of, 24, 714
2,4-Di-isobutyrylphloroglucinol 1,3,5-trimethyl ether,

anthelmintic action and synthesis of, 24, 714

Di-isonitrosoacetone, toxicity of, 13, 202

Di-isopropyl dimethylpyrophosphate, neurotoxicity, properties and synthesis of, 15, 271

Di-isopropyl phenylphosphoramidate, effect on nervous system, in hen, 15, 271

Di-isopropyl phosphorofluoridate. See Dyflos

3-(2-Di-isopropylaminoethyl)-5-hydroxyindole, response of stomach-strip preparation and uterus to, 14, 265 3-(2-Di-isopropylaminoethyl)indole (NN-di-isopropyl-

tryptamine): effect on response of stomach-strip preparation to 5-hydroxytryptamine and tryptamine, 14, 99

effect on response of uterus to acetylcholine, 5hydroxytryptamine and tryptamine, 14, 99

-, metabolism, pharmacological actions, synthesis and toxicity of, 23, 43

-, response of stomach-strip preparation and uterus to, 14, 99

1,5-Di(p-isopropylaminophenoxy) pentane, effect on Schistosoma mansoni and toxicity of, 13, 240

 $\gamma$ -Di-isopropylamino- $\alpha$ -phenyl- $\alpha$ -pyrid-2-ylbutyramide. See Disopyramide

Di-isopropylfluorophosphonate. See Dyflos

NN-Di-isopropylguanidine, effect on bradycardia and hypotension induced by vagal stimulation, 24, 287

-, effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282

, response of blood pressure to, 24, 287

NN'-Di-isopropylphosphorodiamidic fluoride. See Mipafox

Di-isopropylphosphorylacetocholinesterase, reactivation by pyridinium aldoximes, 14, 195

*NN*-Di-isopropyltryptamine. See 3-(2-Di-isopropylaminoethyl)indole 2,4-Di-isovaleryl-6-methylphloroglucinol,

anthelmintic action and synthesis of, 24, 714 2,4-Di-isovalerylphloroglucinol, anthelmintic action and

synthesis of, 24, 714

Diloxanide, amoebicidal and antibacterial actions and

toxicity of, 18, 131 -, derivatives of, antimicrobial action of, 17, 293

-, and its esters and analogues, effect in hepatic

amoebiasis, in hamster, 14, 491 Dimecamine, and its methiodide, effect on response of

phrenic nerve-diaphragm preparation to electrical stimulation, and action of bath-calcium concentration, neostigmine, pH, stimulus frequency and tetanus, 22, 56

-, response of biventer cervicis preparation to, **22**, 62

**Dimefox**, intraventricular, effect on blood-cholinesterase, in conscious dog, 18, 22

-, pharmacological actions of, in conscious dog, 18, 22

- Dimercaprol, antitubercular action and toxicity of, 15,
- , effect on response of uterus to acetylcholine and oxytocin, 25, 422
- , glucose derivative of, effect on Mycobacterium tuberculosis, 15, 488
- 2,3-Dimercaptobutane-1,4-diol, effect on Mycobacterium tuberculosis, 15, 485
- 2,3- and 2,4-Dimercaptobutanol, effect on Mycobacterium tuberculosis, 15, 485
- 1,3-, 1,4- and 3,4-Dimercaptobutan-2-ol, effect on Mycobacterium tuberculosis, 15, 485
- 2,4-Dimercaptobutyl acetate, effect on Mycobacterium tuberculosis, 15, 485
- 2,3-Dimercaptobutyl chloride, antitubercular action and toxicity of, 15, 485
- 1,1-Di(mercaptomethyl)ethyl chloride, antitubercular action and toxicity of, 15, 485
   αα-Di(mercaptomethyl)glycollic acid, effect on Myco-
- bacterium tuberculosis, 15, 485
- 1,3-Dimercapto-2-methylpropan-2-ol, effect on Mycobacterium tuberculosis, 15, 485
- 2,3-Dimercapto-1-methylpropyl chloride, antitubercular action and toxicity of, 15, 485
- 2.3-Dimercaptopropanol. See Dimercaprol
- 1,3-Dimercaptopropan-2-ol, effect on Mycobacterium tuberculosis, 15, 485
- aβ-Dimercaptopropionic acid, effect on Mycobacterium tuberculosis, 15, 485
- 2,3-Dimercaptopropyl acetate, antitubercular action and toxicity of, 15, 485
- 2,3-Dimercaptopropyl anisate, antitubercular action and toxicity of, 15, 485
- 2,3-Dimercaptopropyl benzoate, antitubercular action and toxicity of, 15, 485
- 2,3-Dimercaptopropyl (benzylthio)acetate, antitubercular
- action and toxicity of, 15, 485

  2,3-Dimercaptopropyl butyrate, antitubercular action and toxicity of, 15, 485
- 2,3-Dimercaptopropyl chloride, antitubercular action and toxicity of, 15, 485 2,3-Dimercaptopropyl o- and p-chlorobenzoate, anti-
- tubercular action and toxicity of, 15, 485 2,3-Dimercaptopropyl 2,4-dichlorobenzoate, antitubercu-
- lar action and toxicity of, 15, 485 2,3-Dimercaptopropyl p-dimethylaminobenzoate, effect
- on Mycobacterium tuberculosis, 15, 491 2,3-Dimercaptopropyl (ethylthio)acetate, antitubercular
- action and toxicity of, 15, 485 2,3-Dimercaptopropyl  $\beta$ -(methylthio)propionate, anti-
- tubercular action and toxicity of, 15, 485 2,3- Dimercaptopropyl α-naphthoate, antitubercular
- action and toxicity of, 15, 485
- 2,3-Dimercaptopropyl palmitate, effect on Mycobacterium tuberculosis, 15, 491
- 2,3 Dimercaptopropyl phenylacetate, antitubercular action and toxicity of, 15, 485
- 2,3-Dimercaptopropyl propionate, antitubercular action and toxicity of, 15, 485 2,3-Dimercaptopropyl p-(toluene-p-sulphonamido)benzo-
- ate, antitubercular action and toxicity of, 15, 485 3-(2,3-Dimercaptopropylthio)-2-mercaptopropanol, anti-tubercular action and toxicity of, 15, 485
- 1,3-Di(2-mercaptopropylthio)propane. See SS'-Propylenebis(3-thiopropane-2-thiol)
- 2,11-Dimercaptoundecanol, antitubercular action and toxicity of, 15, 485
- 7-(2,6-Dimethoxybenzamido)cephalosporanic acid, antibacterial action against Staphylococcus aureus, and synergism with other antibiotics, 22, 22

- 6-(2,6-Dimethoxybenzamido) penicillanic acid. See Methicillin
- 3,4-Dimethoxybenzoic acid. See Veratric acid
- 1,5-Di[p-(2-methoxyethylamino)phenoxy]pentane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- 2,4-Dimethoxy-6-hydroxybutyrophenone. See 4-Butyrylphloroglucinol 1,3-dimethyl ether
- 3,4-Dimethoxyphenethylamine, effect on uptake of nor-adrenaline by heart at high and low perfusion concentrations, 25, 34
- 1-(3,4-Dimethoxyphenylcarbamoylmethyl) pyridinium, effect on influenza virus in tissue culture, properties and synthesis of, 13, 424
- 6,7- and 7,8-Dimethoxy-4-phenylcoumarin, anticoagulant action of, 20, 29
- 3,4-Dimethoxy-a-piperidinoacetanilide, effect on influenza virus in tissue culture, properties and synthesis of, 13, 424
- 3,4-Dimethoxy-a-piperidinopropionanilide, effect on influenza virus in tissue culture, properties and synthesis of, 13, 424
- 3,4-Dimethoxypropane-1,2-dithiol, effect on Mycobacterium tuberculosis, 15, 485
- 5.6-Dimethoxytryptamine. See 3-(2-Aminoethyl)-5,6-dimethoxyindole
- Dimethyl phosphorofluoridate, neurotoxicity, properties and synthesis of, 15, 271
- $\beta\beta$ -Dimethylacryloylcholine, enzymic hydrolysis and pharmacological actions of, 13, 308
- , neuromuscular blocking and other pharmacological actions of, 13, 382
- *NN*-Dimethyl- $\beta$ -alanine, effect on ventral root potentials in spinal cord, 16, 262
- α-Dimethylaminoaceto-3,4-xylidide, effect on influenza virus in tissue culture, properties and synthesis of, 13,
- 2-Dimethylaminoethyl acetate, response of small intestine to, 25, 9
- 1-p-Dimethylaminobenzyl-2-(5-methylisoxazol-3-ylcarbonyl)hydrazide, effect on central stimulant action of α-alkyltryptamines, 5-hydroxytryptophan, monoamine-oxidase inhibitors and tryptamine, in mouse, 24, 57
- 1-p-Dimethylaminobenzyl-2-DL-serylhydrazide, effect on central stimulant action of a-alkyltryptamines, 5hydroxytryptophan, monoamine-oxidase inhibitors and tryptamine, in mouse, 24, 57
- 3-Dimethylaminocoumarans, synthesis of, 23, 502, 505 2-Dimethylamino-2,3-dimethylbicyclo [2,2,1]heptane, ganglion-blocking action, synthesis and toxicity of, 15, 209
- 4-(2-Dimethylaminoethoxy)-5-isopropyl-2-methylphenyl
- acetate. See Thymoxamine S-2-Dimethylaminoethyl OO-diethyl phosphorothiolate methiodide. See Echothiophate
- Dimethylaminoethyl ferrocene, convulsant action of, 24, 357
- 5-(2-Dimethylaminoethyl)-5H-dibenz[b,f]azepine, effect on response of small intestine to bradykinin, 25, 50
- 5-Dimethylamino-3-ethyl-1,2-dimethylindole. See Methyl medmain
- 3-(2-Dimethylaminoethyl)-5-hydroxyindole. See Bufotenine
- 3-(2-Dimethylaminoethyl)-6-hydroxyindole (6-hydroxy-N'N'-dimethyltryptamine):
- effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, 471
- -, enzymic oxidation of, 15, 627 ---, neurone-depressant action of, 18, 230

- 3 (2 Dimethylaminoethyl) 7 hydroxyindole, neurone-
- depressant action of, 18, 230
  3-(2-Dimethylaminoethyl)-4-hydroxy-1-methylindole (4-hydroxy-NNN'-trimethyltryptamine; methylpsilocine):

enzymic oxidation of, 15, 627

- 3-(2-Dimethylaminoethyl)-5-hydroxy-1-methylindole (5hydroxy-NNN'-trimethyltryptamine: methylbufoten-
- enzymic oxidation of, 15, 627
- 3-(2-Dimethylaminoethyl)indole (N'N' - dimethyltryptamine):
- -, effect on amine oxidase, 16, 153
- , effect on behaviour and cerebral electrical activity, in cat, **24**, 659
- -, effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, 471
- , effect on response of morphine-treated small intestine to histamine, 5-hydroxytryptamine and nicotine, 14, 556
- -, effect on response of phenoxybenzamine-treated small intestine to 5-hydroxytryptamine, 14, 556
- -, effect on response of stomach-strip preparation to acetylcholine, 5-hydroxytryptamine and tryptamine, 14, 269
- -, effect on response of stomach-strip preparation to 5-hydroxytryptamine and tryptamine, 14, 99
- , effect on response of uterus to acetylcholine, 5hydroxytryptamine and tryptamine, 14, 99
- , metabolism, pharmacological actions, synthesis and toxicity of, 23, 43
- -, neurone-depressant action of, 18, 230
- , response of morphine and phenoxybenzamine-treated small intestine to, 14, 557
- -, response of stomach-strip preparation to, and effect
- of amine-oxidase inhibitors on, 14, 88 effect of 2-bromolysergic acid diethylamide on, 14, 106
- , response of stomach-strip preparation and uterus to, 14, 99
- , response of *Venus* heart to, 15, 377
- 4-(2-Dimethylaminoethyl)-5-isopropyl-2-methylphenyl acetate. See Thymoxamine 5-Dimethylamino-3-ethyl-2-methylindole. See Medmain
- 3 (2 Dimethylaminoethyl) 2 methylindole, effect on amine oxidase, 16, 153
- effect on response of stomach-strip preparation to 5-hydroxytryptamine and tryptamine, 14, 99
- effect on response of uterus to acetylcholine, 5-hydroxytryptamine and tryptamine, 14, 99
- -, response of stomach-strip preparation to, 14, 88 -, response of stomach-strip preparation and uterus
- to, 14, 99 1-(2-Dimethylaminoethyl)-1-(5-nitrofurfurylideneamino)urea, intravenous, distribution in aqueous humour,
- cerebrospinal fluid and plasma, in dog, 24, 266 3-Dimethylamino-7-methylcoumaran, effect on adrenergic neurone transmission, 23, 497
- 5-Dimethylaminomethyl-6,7,8,9,10,11-hexahydrocyclooct[b]indole, effect on response of small intestine to bradykinin, 25, 50
- 3-Dimethylaminomethylindole. See Gramine
- (+)- and (-)-10-(3-Dimethylamino-2-methylpropyl)-2methoxyphenothiazine, antiacetylcholine and antitremor actions of, 18, 247
- and (-)-10-(3-Dimethylamino-2-methylpropyl)phenothiazine, antiacetylcholine and antitremor actions of, 18, 247
- 1,8-Di(p-methylaminophenoxy)octane, effect on schistosomicidal action and toxicity of, 13, 240

- 1,5-Di(p-methylaminophenoxy) pentane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- N-p-(5-p-Dimethylaminophenoxypentoxy) phenyl N-p-(5-p-Dimethylaminophenoxypentoxy)ethylacetamide, schistosomicidal action and toxicity of, 13, 242
- N-(5-p-Dimethylaminophenoxypentyl)benzamide, schistosomicidal action, retinotoxicity and toxicity of, 14,
- N-(5-p-Dimethylaminophenoxypentyl)phthalimide, schistosomicidal action, retinotoxicity and toxicity of, 14, 468
- 1,3-Di(p-methylaminophenoxy)propane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240
- 2-Dimethylamino-3-phenylbicyclo[2,2,1]heptane, lion-blocking action and synthesis of, 15, 209
- 5-(2-Dimethylaminopropyl)-10,11-dihydro-5H-dibenz-[b, f] azepine, effect on response of small intestine to bradykinin, 25, 50
- 5-(3-Dimethylaminopropyl)-5,6,7,8,9,10-hexahydrocyclohept[b]indole, effect on response of small intestine to bradykinin, 25, 50
- 3-(3-Dimethylaminopropyl)indole, response of Venus heart to, 15, 377
- (+)- and (-)-10-(2-Dimethylaminopropyl)phenothiazine, antiacetylcholine and antitremor actions of, 18, 247
- p-[2,6-Di(methylamino)pyrimidin 4 ylamino]phenyl arsonic acid, properties, synthesis and trypanocidal action of, 13, 244
- p-[2,6-Di(methylamino)pyrimidin 4 ylamino]phenyl oxoarsine, properties, synthesis and trypanocidal action of, 13, 244
- NN-Dimethyl-DL-aspartic acid, effect on ventral root potentials in spinal cord, 16, 262
- 3,4-Dimethylbenzaldehyde, properties and synthesis of, 13, 430
- 3,4-Dimethylbenzamidine, antiviral action in tissue culture, properties and synthesis of, 13, 424
- N-(2,4-Dimethylbenzyl)guanidine, adrenergic neuroneblocking action and synthesis of, 24, 395
- , effect on cardiac noradrenaline, eyelid and mono-
- amine oxidase, 24, 408

  2,3-Dimethylbicyclo[3,2,1]-3-azaoctane, ganglion-blocking action, synthesis and toxicity of, 15, 209

  5-(1,3-Dimethylbut-2-enyl)-5-ethylbarbituric acid, effect
- on ganglionic transmission, in cat, 23, 250 3,3-Dimethylbutyl acetate, response of small intestine to,
- and effect of atropine on, 25, 7
- Di(1-methylbutyl) phosphorofluoridate, neurotoxicity, properties and synthesis of, 15, 271
- 3,5-Dimethylbutylethylbarbituric acid, effect on acetylcholine in brain, in rat, 19, 230
- NN-Dimethylguanidine, effect on ganglionic and neuro-muscular blockade, 19, 414
- , effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282
- , effect on neuromuscular transmission, 19, 419, 420 asym.-Dimethylguanidine, effect on circulatory and respiratory reflexes, 14, 533
- pain-producing action of, 14, 533
- 2,3-Dimethyl-2-methylaminobicyclo[2,2,1]heptane, pharmacological actions and urinary excretion of, 15, 209
- 3,3-Dimethyl-2-methylaminobicyclo[2,2,1]heptane, ganglion-blocking action, synthesis and toxicity of, 15,
- 1,3-Dimethyl-7-(2-oxo-4-piperidinobutyl)-6-thioxanthine, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 201
- [2-(2,6-Dimethylphenoxy)propyl]trimethylammonium, effect on action of guanethidine on catechol amines in heart, 22, 240

[2-(2, 6-Dimethylphenoxy)propyl] trimethylammonium (cont.) -, effect on catechol amines in heart, 22, 240 -, effect on pressor action of blood plasma, 19, 365 , effect on uptake of noradrenaline by heart, 22, 240 4,5-Dimethyl-o-phenylenediamine, N-acyl derivatives of, antiviral action in tissue culture, properties and synthesis of, 13, 424 effect on antiviral action of N-(2-piperidinoethyl) 3,4-xylidine, 13, 434 1,1-Dimethyl-4-phenylpiperazinium, effect on action of hexamethonium and nicotine on response of blood pressure to peptone, 13, 182 effect on action of reserpine on response of Finkleman ileum preparation to electrical stimulation, 19, 90 , effect on catechol amines in adrenals, 24, 41 -, effect on noradrenaline in brain and sympathetic ganglia and pharmacological actions of, in cat and rabbit, 18, 116 -, effect on release of acetylcholine from small intestine by, 24, 689 , effect on release of adrenaline and noradrenaline from adrenals, in dog, 24, 563 -, —, and action of prenylamine, 24, 570 -, effect on release of catechol amines from inferior mesenteric ganglion, 22, 199 , effect on response of circular strip of ileum to acetylcholine, histamine, 5-hydroxytryptamine and nicotine in presence of anticholinesterase, 20, 408 , effect on response of Finkleman ileum preparation to electrical stimulation, and action of noradrenaline, **19**, 89 , effect on response of Finkleman ileum preparation to noradrenaline, 19, 90 , effect on response of hypogastric nerve-vas deferens preparation to electrical stimulation, and action of carbachol and tyramine, 21, 190 -, and action of noradrenaline, 19, 94 , effect on response of small intestine to acetylcholine, choline phenyl ether, dimethylphenylpiperazinium, histamine, 5-hydroxytryptamine and nicotine, 21, 314 , effect on response of small intestine to noradrenaline, 24, 378, 380 -, effect on response of small intestine to sympathetic stimulation, and action of dexamphetamine, dop-amine, hexamethonium and noradrenaline, 24, 375 -, effect on response of vas deferens to electrical stimulation, and action of carbachol and tyramine, **21**, 190 , effect on response of vas deferens to noradrenaline, **21**, 197 -, pharmacological actions of, 14, 505 -, antagonism by SK&F 90,109, 23, 497 -, response of blood pressure to, and effect of adrenal ectomy on, 20, 371 -, effect of BW 392C60 on, 20, 50 -, effect on bethanidine on, 20, 42, 43 -, in normal and adrenalectomized cats, **20**, 45 -, effect of bretylium on, 19, 24 -, in normal and adrenalectomized cats, 14, 542 -, effect of bretylium, guanethidine, guanoxan and reservine on, 24, 39 -, effect of chlorisondamine on, and action of

neostigmine followed by atropine, 21, 327

on, 23, 340

effect of desipramine (desmethylimipramine)

- 1.1-Dimethyl-4 phenylpiperazinium, response of blood pressure to (cont). effect of N-diethylaminoethyl-N-isopentyl-N'N'-di-isopropylurea on, in rat, 21, 278 , effect of hexamethonium on, and action of atropine and cocaine, in rat, 23, 36 -, effect of nicotine and P-286 on, in rat, 23, 38 -, effect of oxolamine on, 16, 214 -, —, effect of (+)-, (-)- and ( $\pm$ )-N-(1-phenylethyl)guanidine on, **24**, 401 , response of blood pressure and nictitating membrane to, effect of guanethidine on, 19, 31 , response of blood pressure, nictitating membrane and urinary bladder to, effect of mecamylamine and pempidine and its N-ethyl homologue on, 13, 508 , response of blood pressure and urinary bladder to, and effect of atropine, bretylium, guanethidine, hemicholinium, hexamethonium, hyoscine, neostigmine, nicotine, pempidine and physostigmine on, in rat, 24, 591 -, response of human taenia coli preparation to, effect of hexamethonium, physostigmine, procaine and pronethalol on, 23, 166 , response of inferior eyelid to, and effect of hexamethonium on, 15, 226 -, response of nictitating membrane to, 15, 227 , and effect of adrenalectomy and ganglionectomy on, 18, 504 -, effect of bretylium on, 14, 540; 19, 23 , effect of ganglionic blockade on, 19, 31 , response of scrotum to, in rat, 24, 592 -, response of small intestine to, 24, 689 , effect of anoxia, cooling and hexamethonium on, 20, 150 effect of bromolysergic acid diethylamide, dimethylphenylpiperazinium, hexamethonium, 5hydroxytryptamine, hyoscine, lysergide (lysergic acid diethylamide), mecamylamine, nicotine, pempidine, pentolinium, phenoxybenzamine and procaine on, 21, 308 , effect of hexamethonium on, 15, 226 effect of hyoscine on, and action of phenoxybenzamine, 20, 150 effect of mecamylamine and pempidine and its N-ethyl homologue on, 13, 511 effect of mipafox on, and action of hyoscine, **21**, 308 , effect of morphine and phenoxybenzamine on, and action of anoxia, 20, 150 , effect of oxolamine and papaverine on, 16, 214 , —, effect of (+)- and (-)-N-(1-phenylethyl)-guanidine on, 24, 404 , response of urinary bladder preparation to, 24, 181 , sialogenous action of, and effect of adrenalectomy, atropine, cocaine, ganglionectomy, hexamethonium, methadone, morphine and xylocholine (choline 2,6-xylyl ether) on, 18, 501 , sympathetic blocking action of, mechanism of, 24, 375 N'N'-Dimethyl-4-phosphoryloxytryptamine. See Psilocybin 3,4-Dimethylpiperazin-1-yl N-propylbenzilate, effect on acetylcholine in brain, in rat, 23, 127 3,4-Dimethyl-ω-piperidinoacetanilide, effect on *Theileria* 
  - annulata in tissue culture, 13, 459
    4,5-Dimethyl-2-(3-piperidinopropylamino)thiazole, antiviral action in tissue culture, properties and synthesis of, 13, 424
    1,1-Dimethylpiperid-3-yl benzilate, effect on acetyl-

choline in brain, in rat, 23, 127

2,2 - Dimethyl - 6 - propylpiperidine, ganglion - blocking action of, 13, 502

Dimethyl[2-(2-, 3- and 4-pyridyl)ethyl]amine, effect on cholinesterase and junctional transmission, 18, 510

---, properties and synthesis of, 18, 512

Dimethyl(2-, 3- and 4-pyridylmethyl)amine, effect on cholinesterase and junctional transmission, 18, 510—, properties and synthesis of, 18, 512

p-(4,6-Dimethylpyrimidin-2-ylamino)phenylarsonic acid, synthesis and trypanocidal action of, 13, 244

2 - Dimethylsulphamoyl - 10 - [3 - (4 - methanesulphonyl - piperazin-1-yl)propyl]phenothiazine, effect on dexamphetamine-induced agitation and tryptamine-induced convulsions, 22, 308

—, induction of catatonia by, 22, 308

Dimethylthiambutene, effect on gastrointestinal motility, in rat, 14, 29

—, effect on peristaltic reflex, and action of nalorphine on, in rat, 14, 30

1,5-Di(p-4-methylthiazol-2-ylaminophenoxy) pentane, effect on Schistosoma mansoni, 13, 240

3,7-Dimethyl-6-thioxanthine, choline salt, bronchodilator, coronary dilator and diuretic actions and toxicity of, 17, 201

NN-Dimethyl-t-octylamine, ganglion-blocking action of, 13, 502

aa-Dimethyltryptamine. See 3-(2-Amino-2,2-dimethylethyl)indole

4, a-Dimethyltryptamine. See 3-(2-Aminopropyl)-4methylindole

5,α-Dimethyltryptamine. See 3-(2-Aminopropyl)-5methylindole

 $N'\alpha$ -Dimethyltryptamine. See 3-(2-Methylaminopropyl)-indole

N'N'-Dimethyltryptamine. See 3-(2-Dimethylaminoethyl)indole

Dimethylurethane, effect on response of hypogastric nerve-vas deferens preparation to electrical stimulation, and action of atropine, dexamphetamine, levamfetamine, pheniprazine, pyrogallol and tranylcypromine, 24, 642

2,4 -  $Di(\alpha$  - methylvaleryl)phloroglucinol, anthelmintic action and synthesis of, **24**, 714

Dimethyl(2-xylyloxyethyl)amine, effect on adrenergic neurone transmission, 23, 497

**Dimidium**, effect on trypanocidal action of butarsen, 14, 434

—, induction of morphological changes in trypanosomes by, in mouse, 21, 259

—, trypanocidal action on normal and drug-resistant trypanosomes and toxicity of, in mouse, 14, 425

1,5-Di(p-morpholinophenoxy)pentane, effect on Schistosoma mansoni, 13, 240

Dineopentyl ferrocene, convulsant and haematinic actions and toxicity of, 24, 354

3,5-Dinitro-o-cresol, effect on body temperature, carbon dioxide output and oxygen consumption, in rat, 13, 26

Dinitrophenol, effect on oxygen consumption of chick amnion, 21, 291

—, effect on release of histamine from mast cells by compound 48/80, mellitin and phospholipase A, 25, 63

---, effect on release of histamine from skin by compound 48/80 and phospholipase A, 25, 61

—, effect on response of chick amnion to atropine, 21, 289

—, effect on spontaneous *in-vitro* release of histamine from skin, 25, 61

—, response of chick amnion to, 21, 287

Dinitrophenols, acidities and response of respiration to, in rat, 14, 401

----, effect on body temperature, carbon dioxide output and oxygen consumption, in rat, 13, 26

—, induction of methaemoglobinaemia by, in rat, 14, 402

2,4-Dinitrophenol, *in-vitro* effect on enzymic activity of liver, **15**, 176

effect on *in-vitro* histamine release and mast-cell damage by dextran, and action of glucose on, 19, 410
 effect on phosphate metabolism of normal and

stilbamidine-resistant trypanosomes, 14, 445
—, effect on reduced glutathione in liver, in rat, 16, 182
—, effect on respiration of normal and stilbamidine-

resistant trypanosomes, 14, 446
—, in-vitro trypanocidal action on normal and stilb-

amidine-resistant trypanosomes, 14, 445 2,4-Dinonanoylphloroglucinol, anthelmintic action and synthesis of, 24, 714

2,4-Dioctanoylphloroglucinol, anthelmintic action and synthesis of, 24, 714

Diodone, excretion of, effect of dichloroisoprenaline on, and action of isoprenaline, in rat, 20, 137

----, effect of isoprenaline on, and action of dichloroisoprenaline and pronethalol (*Nethalide*), in rat, 20, 137

\_\_\_\_\_, effect of pronethalol (*Nethalide*) on, in rat, 20, 137

Dioscine pharmacological actions stability and toxicity

**Dioscine**, pharmacological actions, stability and toxicity of, 13, 213

Dioscornine, pharmacological actions, stability, structure and toxicity of, 13, 213

NN'-4,7-Dioxo-3,8-dioxadecamethylenebis(3-acetoxy-tropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,7-Dioxo-3,8-dioxadecamethylenebis(3-benzoyloxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,7-Dioxo-3,8-dioxadecamethylenebis(3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN' - 4,9 - Dioxo - 3,10 - dioxadodecamethylenebis(3 - acetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,9-Dioxo-3,10-dioxadodecamethylenebis(3-benzoyloxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,9-Dioxo-3,10-dioxadodecamethylenebis(1-benzylpiperidinium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,9-Dioxo-3,10-dioxadodecamethylenebis(1-methylpiperidinium), hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,9-Dioxo-3,10-dioxadodecamethylenebis(3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-5,8-Dioxo-4,9-dioxadodecamethylenebis(3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-6,7-Dioxo-5,8-dioxadodecamethylenebis(3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4, 9-Dioxo-3, 10-dioxadodecamethylenebis (3- $\beta$ -phenylpropionyloxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15. 76

15, 76

NN'-5,12-Dioxo-4,13-dioxahexadecamethylenebis (3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,6-Dioxo-3,7-dioxanonamethylenebis(3-benzoyloxytropanium), antiacetylcholine and neuromuscular blocking actions of, 15, 76

NN'-4,6-Dioxo-3,7-dioxanonamethylenebis(3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,5-Dioxo-3,6-dioxaoctamethylenebis (3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,11-Dioxo-3,12-dioxatetradecamethylenebis (3-acetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,11-Dioxo-3,12-dioxatetradecamethylenebis (3-benzoyloxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,11-Dioxo-3,12-dioxatetradecamethylenebis (3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-5, 10-Dioxo-4, 11-dioxatetradecamethylenebis (3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,10-Dioxo-3,11-dioxatridecamethylenebis(3-benzoyloxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,10-Dioxo-3,11-dioxatridecamethylenebis(3-phen-ylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-5,9-Dioxo-4,10-dioxatridecamethylenebis(3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-4,8-Dioxo-3,9-dioxaundecamethylenebis(3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

NN'-5,7-Dioxo-4,8-dioxaundecamethylenebis(3-phenylacetoxytropanium), antiacetylcholine, hypotensive and neuromuscular blocking actions of, 15, 76

Dioxone. See 5,5-Diethyl-1,3-oxazine-2,4-dione Dipentyl phosphorofluoridate, demyelination by, in hen, 15, 279

—, neurotoxicity, properties and synthesis of, **15**, 271 **Diphenhydramine**, antiacetylcholine and antitremor actions of, **18**, 247

—, antiacetylcholine, antitremor, local anaesthetic and

mydriatic actions and toxicity of, 14, 561
—, effect in experimental local tetanus, 13, 336

—, effect on adenine nucleotides, inorganic phosphate and phosphocreatine in brain, 20, 462

—, effect on apomorphine-induced emesis and pecking, in pigeon, 16, 142

-, effect on bronchoconstrictor action of acetylcholine, histamine and 5-hydroxytryptamine, in guinea-pig, 15, 563

---, effect on bronchoconstrictor action of histamine, 14. 52

----, effect on head-twitch response to 5-hydroxy-tryptophan, in mouse, 20, 113

—, effect on *in-vitro* histamine release and mast-cell damage by antigen and compound 48/80, 15, 400

—, effect on hypothermia, tremor and other peripheral parasympathetic effects induced by Tremorine, 25, 447, 450

—, effect on response of heart beat to histamine and noradrenaline, 21, 456

—, effect on response of heart beat and nictitating membrane to sympathomimetic amines, 13, 6

----, effect on response of normal and reserpine-treated auricle to histamine, 15, 500

---, effect on response of small intestine to histamine and 2-pyrid-2'-ylethylamine, 14, 51

Diphenhydramine (cont.)

—, in-vitro induction of mast-cell damage by, and effect of metabolic inhibitors, calcium-lack and high temperatures on, 15, 399

----, *in-vitro* release of histamine by, and effect of metabolic inhibitors, calcium-lack and high temperatures on, **15**, 397

, response of blood pressure, pulmonary blood flow and vascular resistance to, and effect of vagotomy on, 13, 374

—, response of coronary flow and heart beat to, 21, 456—, response of heart beat to, 13, 8

Diphenoxyalkanes, effect on Schistosoma mansoni and toxicity of, 13, 241

2,4-Diphenylacetylphloroglucinol, anthelmintic action and synthesis of, 24, 714

Diphenylacetylsalicylic acid, effect on inflammation, in mouse foot, 18, 347

3-Diphenylacetylthiopropylene sulphide, antitubercular action and toxicity of, 15, 485

Diphenylacetyltropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

—, antihistaminic action of, 14, 565

Diphenylacetylpseudotropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

 aa - Diphenylbutyryltropeïne, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

Diphenylglycolloyltropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

Diphenylglycolloyltropeïne methobromide, antiacetylcholine and antitremor actions of, 14, 564

NN-Diphenylguanidine, effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282

, response of blood pressure to, 24, 288

Diphenylheptylglycollic acid, effect on response of small intestine to pyridostigmine, 13, 468

Diphenylhydantoin. See Phenytoin

 αα-Diphenylisovaleryltropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

αα-Diphenyl-γ-piperidinobutyramide (Hoechst 9980):
 —, effect of repeated administration on response of submaxillary gland to adrenaline, 14, 230

—, effect on induction of salivation by sympathetic stimulation, 22, 120

—, effect on response of hypogastric nerve-vas deferens preparation to acetylcholine, electrical stimulation and noradrenaline, 20, 303

—, effect on response of vas deferens to acetylcholine, 20, 301

----, effect on sensitivity of denervated salivary gland to adrenaline, 15, 358

—, effect on sialogenous action of adrenaline and guanethidine, 22, 121

—, effect on sialogenous action of Synephrine, 22, 122 αα-Diphenylpropionyltropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

 αα-Diphenylpropionyltropeine methobromide, antiacetylcholine and antitremor actions of, 14, 564

Diphenylpropoxyacetyltropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 563

 aa - Diphenylvaleryltropeine, antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562 Diphenylylbutylacetic acid, effect on peristaltic reflex, 13,

—, effect on release of acetylcholine from small intestine, 13, 468

—, effect on response of small intestine to anticholinesterases, 13, 468

1-(Diphenyl-4-ylcarbamoylmethyl)pyridinium, antiviral action in tissue culture, properties and synthesis of, 13, 424

Diphenylylethylacetic acid, effect on peristaltic reflex, 13, 469

—, effect on response of small intestine to pyridostigmine, 13, 468

α-p-Diphenylyloxypropionic acid (B.C.8402):

—, effect on formaldehyde and histamine-induced inflammation, in mouse, 16, 165

Diphenylylpentylacetic acid, effect on response of small intestine to pyridostigmine, 13, 468

Diphenylylpropylacetic acid, effect on response of small intestine to pyridostigmine, 13, 468

Diphosphopyridine nucleotidase inhibitors, effect on histamine release and mast-cell damage by antigen and compound 48/80, 15, 405

Diphtheria toxin, intradermal, local reaction to, effect of benzylpenicillin and dequalinium on, 13, 235

Dipipanone, effect on pain threshold and respiration, in rat, 14, 28

1,5-Di(p-piperidinophenoxy)pentane, effect on Schistosoma mansoni, 13, 240

Diplococcus pneumoniae infections, experimental, effect of ampicillin, benzylpenicillin, chloramphenicol, phenethicillin, phenoxymethylpenicillin and tetracycline in, in mouse, 18, 365

2,4-Dipropionylphloroglucinol, anthelmintic action and

synthesis of, 24, 714

2,4-Dipropionylphloroglucinol 1,3,5-trimethyl ether, anthelmintic action and synthesis of, 24, 714

4,6-Dipropionylpyrogallol, anthelmintic action of, **24**, 714 2,4- and 4,6-Dipropionylresorcinol, anthelmintic action and synthesis of, **24**, 714

2,3-Di(propionylthio)propyl propionate, antitubercular action and toxicity of, 15, 485

Dipropyl phosphorofluoridate, neurotoxicity, properties and synthesis of, 15, 271

Dipropyl o-tolyl phosphate, effect on nervous system, in hen, 15, 271

a-Dipropylaminoaceto-3,4-xylidide, antiviral action in tissue culture, properties and synthesis of, 13, 424

3-(2-Dipropylaminoethyl)-5-hydroxyindole, response of lysergide- (*lysergic acid diethylamide*-), morphine- and phenoxybenzamine-treated small intestine to, 14, 557

----, response of stomach-strip preparation to, and effect of amine-oxidase inhibitors on, 14, 88

----, response of stomach-strip preparation and uterus to, 14, 265

3 - (2 - Dipropylaminoethyl)indole (N'N' - dipropyltrypt - amine):

, effect on response of stomach-strip preparation to 5-hydroxytryptamine and tryptamine, 14, 99

—, effect on response of uterus to acetylcholine, 5-hydroxytryptamine and tryptamine, 14, 99

—, metabolism, pharmacological actions, synthesis and toxicity of, 23, 43

—, pK value of, **14**, 91

—, response of lysergide- (lysergic acid diethylamide-), morphine- and phenoxybenzamine-treated small intestine to, 14, 557

----, response of stomach-strip preparation to, and effect of amine-oxidase inhibitors on, 14, 88

3-(2-Dipropylaminoethyl)indole, response of stomachstrip preparation to (cont.)

---, effect of 2-bromolysergic acid diethylamide on, 14, 106

----, response of stomach-strip preparation and uterus to, 14, 99

3 - (2 - Dipropylaminoethyl) - 2 - methylindole, effect on response of stomach-strip preparation to 5-hydroxy-tryptamine and tryptamine, 14, 99

—, effect on response of uterus to acetylcholine, 5-hydroxytryptamine and tryptamine, 14, 99

----, response of stomach-strip preparation and uterus to, 14, 99

1,5-Di(p-propylaminophenoxy)pentane, schistosomicidal and retinotoxic actions and toxicity of, 13, 240

NN-Dipropylguanidine, effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282

—, response of blood pressure to, 24, 288

N'N'-Dipropyl-5-hydroxytryptamine. See 3-(2-Dipropyl-aminoethyl)-5-hydroxyindole

Dipropylphosphinic fluoride, neurotoxicity, properties and synthesis of, 15, 271

1,3-Dipropyl-6-thioxanthine, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 197

N'N'-Dipropyltryptamine. See 3-(2-Dipropylaminoethyl)indole

Dipyridamole, effect on recovery of myocardium from acute anoxia, 24, 257

aa'- and 2,2'-Dipyridyl. See aa'-Bipyridyl

pp' - Di(pyrimidinylamino)arsenobenzenes, properties, synthesis and trypanocidal action of, 13, 244
 1,5-Di(p-pyrimidin-2-ylaminophenomy)arsenobenzenes,

1,5-Di(p-pyrimidin-2-ylaminophenoxy)pentane, effect on Schistosoma mansoni, 13, 240

1,4-Dipyrrolidin-1'-ylbut-2-yne (Tremorine):

, induction of hypothermia, tremor and peripheral parasympathomimetic effects by, and effect of centrally active and other drugs on, 25, 442

—, induction of peripheral parasympathomimetic effects and tremor by, effect of amitriptyline, chlor-promazine, chlorprothixene, desipramine (desmethylimipramine), desmethylpromazine, imipramine and promazine on, 23, 343, 348

-, induction of tremor by, and effect of hyoscine on,

in mouse, 14, 351

—, induction of tremor and other actions of, effect of antiparkinsonian compounds, tropine derivatives and various other substances on, 14, 559

1,5-Di(p-pyrrolidin-1-ylphenoxy)pentane, effect on Schistosoma mansoni, 13, 240

Diquinolyl. See Biquinolyl

**Disaccharides**, effect on action of polysaccharides on capillary permeability, in rat, 25, 605

Di-s-butyl phosphorofluoridate, neurotoxicity, synthesis and toxicity of, 15, 485

Disodium p-melaminylphenylarsonate. See Melarsen Disodium pp'-pentamethylenedioxybis(anilinomethanesulphonate). See pp'-Pentamethylenedioxybis(anilinomethanesulphonic acid)

Disopyramide, effect on contraction, conduction velocity, electrical threshold, maximum driving frequency

and spontaneous activity of auricle, 21, 473

—, effect on response of heart beat to ouabain, and action of isoprenaline, 21, 462

—, response of heart beat to, 21, 468

**Disulphide polypeptides,** antagonism by thiols and other substances, **25**, 418

Disulphonamides, methylated, metabolism and mechanism of diuretic action of, 18, 61

- Di-t-butyl ferrocene, convulsant and haematinic actions and toxicity of, 24, 354
- Dithioglycollic acid, effect on response of uterus to oxytocin, 25, 422
- Dithiolans, in-vitro and in-vivo effect on Mycobacterium tuberculosis, 15, 488
- Dithizone, in-vitro trypanocidal action on normal and stilbamidine-resistant trypanosomes, 14, 445
- Diptophal, antitubercular action of, 15, 122 Di-t-pentyl ferrocene, convulsant and haematinic actions and toxicity of, 24, 354
- Di(2,2,2-trifluoroethyl) ether, response of small intestine to, and effect of cocaine, lachesine, hexamethonium and mepyramine on, 22, 358
- Diuresis, diodone, inulin, sodium and water, effect of dichloroisoprenaline, isoprenaline and pronethalol (Nethalide) on, in rat, 20, 137
- -, osmotic, effect of veratridine on, 14, 78
- -, saline, effect of chlorisondamine, hexamethonium, mecamylamine, pempidine and pentolinium on, 13,
- -, water, effect of D- and L-tryptophan on, in rat, 17, 519 , effect of veratridine on, and action of atropine, 14, 75 See also Urine flow
- Diuretics, effect on distribution, hypotensive action and urinary excretion of pempidine, in animals and man, 17, 488
- Diuretic action, of acetazolamide, aminoisometradine, chlorothiazide, mersalyl and saline loading, in rat, 14, 368
- -, of [2-(4-benzoyl-2,6-dimethylphenoxy)ethyl]trimethylammonium, bretylium and catechol amines,
- -, of chlormerodrin, mechanism of, in rat, 24, 1
- , of chlorothiazide and choline 3-isobutyl-1-methyl-6-thioxanthinate, theophyllinate and 6-thiotheophyllinate, 16, 70
- , of ethyleneimine and its derivatives, 21, 581; 25, 223
- , of methylated disulphonamides, mechanism of, 18,
- of neuromuscular blocking agents applied topically to cervical spinal cord, 25, 415
- -, of phenoxybenzamine, 14, 142
- -, of synthetic oxytocin analogue, 14, 135 , of 6-thio-theobromines and -theophyllines, 17, 199 See also Urine flow
- 2,4-Divalerylphloroglucinol, anthelmintic action and synthesis of, 24, 714
- 4,6-Divalerylresorcinol, anthelmintic action and synthesis of, 24, 714
- 1,1'-Docosamethylenebis(4-aminocinnolinium), effect on Hymenolepis nana, 24, 240
- Docosamethylenebisisoquinolinium, cesticidal action and toxicity of, 24, 240
- 1,1'-Docosamethylenebisquinolinium, cesticidal action and toxicity of, 24, 240
- Dodecamethylenebisguanidine, trypanocidal action of, effect of melamine on, 14, 437
- , trypanocidal action on normal and drug-resistant trypanosomes and toxicity of, in mouse, 14, 425
- Dodecamethylenebisisoquinolinium, effect on Theileria annulata in tissue culture, 13, 459
- NN'-Dodecamethylenebis (3-mandeloyloxytropanium), antiacetylcholine, ganglion-blocking, and neuro-muscular blocking actions of, 18, 278
- 1,1'-Dodecamethylenebisquinolinium, in-vitro cesticidal action of, 24, 240

- Dodecamethylenebis(trialkylammonium) salts, biochemical properties, pharmacological actions and molar conductances of, 23, 131
- Dodecyloxyamine, antibacterial action of, 15, 243
- antimicrobial action and N¹-Dodecyloxydiguanide, toxicity of, **15**, 243
- Dog, behaviour of, effect of apomorphine on, 17, 10
- response of blood pressure to eledoisin in, and effect of atropine, ganglion-blocking agents, local anaesthetics, reserpine and sympatholytics on, 20, 517
  - -, toxicity of oximes to, 13, 203
- -, urinary kallikrein from, formation of kinins from plasma by, 15, 181
- Dolium galea, absence of eledoisin in, 19, 330
- Dopa. See L-Dopa
- **L-Dopa** (dopa;  $(-\hat{})$ -dopa; 3,4-dihydroxyphenyl-L-alanine): central action of, and effect of pargyline on, in chick, 25, 715
- , decarboxylation by enzyme from ox adrenal medulla, human phaeochromocytoma and human argentaffinoma, 18, 177
- effect on acetylcholine in brain and on behaviour, in iproniazid-treated rat, 19, 230
  - , effect on action of bretylium and cocaine on response of blood pressure to tyramine, in rat, 16, 322, 323
- , effect on action of reserpine on response of blood pressure to physostigmine (eserine), in rat, 16, 101
- effect on action of reserpine on response of small
- intestine to sympathetic stimulation, 18, 428
  -, effect on action of N-[2-(2,6-xylyloxy)ethyl]guanidine on response of Finkleman ileum preparation to sympathetic stimulation, 25, 539
- -, effect on adenine nucleotides, inorganic phosphate and phosphocreatinine in brain, in rat, 25, 631
- , effect on amines and their acid metabolites in brain, 24, 768
- -, effect on behaviour and body temperature, in mouse, **15**, 323
- -, effect on catechol amines in ganglia, nerves and small intestine, histochemical study, 25, 311
- , effect on hypothermia and tremor induced by Tremorine, 25, 447, 450
- , effect on response of blood pressure to tyramine, in rat, 16, 321
- , in reserpinized rat, 15, 48
- -, effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, 471
- -, effect on response of denervated artery from reserpinized and untreated animals to tyramine, 18,44 , effect on response of hypogastric nerve-vas deferens preparation from reserpinized guinea-pig to elec-
- trical stimulation, 22, 79 , effect on response of iris to sympathetic stimulation
- and tyramine, in reserpinized cat, 15, 49 , effect on response of small intestine from reserpin-
- ized rabbit to sympathetic stimulation, 22, 78 –, effect on salivary gland secretion, 15, 328
- , effect on uptake of noradrenaline by heart at low perfusion concentration, 25, 34
  - -, enzymic oxidation of, 15, 45 -, inhibition of histidine decarboxylase by, 15, 552
- response of blood pressure to, and effect of iproniazid on, 13, 92
- -, with iproniazid, effect on leptazol-induced convulsions, in mouse, 14, 109 DL-Dopa (3,4-dihydroxyphenyl-DL-alanine):
- effect on action of methyldopa on body temperature and voluntary activity, in mouse, 15,

DL-Dopa (cont.) **Dopamine** (cont.) , effect on response of nictitating membrane and , effect on adrenergic neurone-blocking action of bretylium, guanethidine and xylocholine, 18, 421 small intestine to sympathetic stimulation, 18, 423 , effect on response of perfused lung to sympathetic -, effect on head-twitch response to 5-hydroxytryptostimulation, 16, 199 phan, in mouse, 20, 113 , effect on response of cerebral cortical neurones to , effect on response of potassium-depressed phrenic nerve-diaphragm preparation to electrical stimula-L-glutamate and synaptic excitation, 20, 471 effect on response of small intestine to sympathetic tion, and action of phloridzin, 23, 188 stimulation, 18, 423 , effect on response of small intestine to histamine, -, effect on uptake of 5-hydroxytryptamine by blood and action of atropine, bretylium, cocaine and morphine, 16, 27 platelets, 16, 291 , effect on uptake of 5-hydroxytryptophan by brain -, effect on response of small intestine to sympathetic stimulation, 24, 380 slices and on 5-hydroxytryptophan decarboxylase, , effect on response of small intestine from reserpin-**20**, 183 -, response of small intestine to, 18, 423 ized rabbit to sympathetic stimulation, 22, 78 Dopa decarboxylase, from ox adrenal medulla, human , effect on response of Tapes rectum to 5-hydroxyphaeochromocytoma and human argentaffinoma, substrate specificity of, 18, 175 tryptamine, 25, 493 -, effect on uptake of 5-hydroxytryptamine by blood **Dopamine** (3.4-dihydroxyphenethylamine): platelets, 16, 291 , effect on uptake of noradrenaline by heart at high , bioassay of, using hypotensive action in guinea-pig, and low perfusion concentrations, 25, 34 **13**, 93 -, effect on urinary excretion of electrolytes, 17, 467 -, central action of, in chick, 25, 705 -, chemical assay of, in tissue extracts, **24**, 538, 760, 761 -, enzymic oxidation of, 13, 93; 15, 43 , in brain, effect of antiparkinsonian agents, central depressants and stimulants, dopa, guanethidine, pentobarbitone and reserpine on, 24, 759 -, comparison of action on noradrenaline response and reversal of sympathetic block in vas deferens preparations, 25, 243 -, effect of prenylamine and reserpine on, 24, -, diuretic action of, 17, 464 -, effect on action of bretylium and guanethidine on -, in heart after parenteral infusion, 24, 554 response of small intestine to sympathetic stimula--, in nervous tissues, 24, 541 tion, 24, 383 -, in tissues, effect of dopamine and 6-hydroxydopamine on, 24, 552 -, effect on action of dimethylphenylpiperazinium on response of small intestine to sympathetic stimula-, intraventricular, central actions of, effect of tion, 24, 380 pheniprazine (phenylisopropylhydrazine) on, 17, 261 effect on action of guanethidine on response of -, neurone-depressant action of, 18, 235 -, oxidation products of, response of blood pressure blood pressure to physostigmine, 17, 446 , effect on action of guanethidine on response of to, 13, 93 -, response of aorta to, and effect of noradrenaline vas deferens preparations to electrical stimulation, on, 13, 473 25, 244 -, response of blood pressure to, in anaesthetized -, effect on action of reserpine on response of nictitating membrane to sympathetic stimulation, vagotomized cat, 13, 474 **18**, 434 -, in reserpinized spinal cat, 13, 476 , effect on action of reserpine on response of small -, effect of bethanidine on, 20, 43 , —, effect of ergotamine and noradrenaline on, in spinal cat, 13, 473 intestine to sympathetic stimulation, 18, 428 -, effect on action of N-[2-(2,6-xylyloxy)ethyl]guanidine on response of Finkleman ileum prepara--, and effect of iproniazid on, 13, 91 tion to sympathetic stimulation, 25, 539 , effect of noradrenaline on, in anaesthetized , effect on adrenergic neurone-blocking action of rabbit, 13, 472 -, effect of noradrenaline and vasopressin on, bethanidine, 20, 38 , effect on adrenergic neurone-blocking action of in anaesthetized reserpinized rabbit, 13, 472 bretylium, guanethidine and xylocholine, 18, 421 -, —, in decapitated rabbit, 13, 473 -, effect of reserpine on, in anaesthetized -, effect on noradrenaline in heart, 24, 553 rabbit, 13, 471 -, effect on response of aorta to noradrenaline, 13, 473 , effect on response of blood pressure to adrenaline, , and action of noradrenaline, in anaesthetized guinea-pig, 13, 471 , effect on response of blood pressure to tyramine, -, response of heart beat to, 13, 93 in reserpinized animals, 15, 48
-, effect on response of blood vessels to sympathetic , and effect of noradrenaline and reserpine on, **13**, 463 stimulation, in reserpinized rabbit, 19, 519 -, and effect of reserpine on, 13, 463 -, response of large intestine to, 23, 157 -, effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, 471
-, effect on response of denervated arteries from -, response of perfused lung to, 16, 195 -, response of small intestine to, 18, 423; 24, 380 reserpinized and untreated animals to tyramine, 18,44 -, effect of cocaine on, 21, 365 -, effect on response of hypogastric nerve-vas deferens -, response of Tapes heart to, and effect of methysergide on, 25, 488
-, response of *Tapes* rectum to, 25, 493 preparation from reserpinized guinea-pig to electrical stimulation, 22, 79 -, effect on response of iris to sympathetic stimulation response of Venus heart to, and effect of bromoand tyramine, in reserpinized cat, 15, 49 lysergic acid diethylamide on, 15, 365 -, effect on response of nictitating membrane to , sialogenous action of, and effect of cocaine, sympathetic stimulation, in reserpinized cat, 15, 49 sympathetic denervation and tyramine on, 15, 328

**Dopamine** (cont.) , subcellular ocalization dog of, in caudate nucleus, 21, 482 See also Catechol amines Dopamine methobromide. See [2-(3,4-Dihydroxyphenyl)ethyl ltrimethylammonium **Dopamine**  $\beta$ -oxidase, effect of adrenal ectomy on, in man, 20, 278 , inhibition by aralkylguanidines and guanethidine, **24**, 413

Dorsal root potentials, in-vivo effect of bromolysergic acid diethylamide, lysergide (lysergic acid diethylamide) and substance P on, 16, 254

Dotriacontamethylenebisisoquinolinium, in-vitro effect on Hymenolepis nana, 24, 240

Drugs, and placebos, consistent differences in individual reactions to, 14, 512

-, reaction in animals to, effect of previous single experience on, 20, 99

, unspecific actions of, 15, 185

Drug antagonism, between analeptics and hypnotics, 14, 415

, competitive and non-competitive, 14, 49 Drug antagonists, quantitative uses for, 14, 48

Drug resistance, in trypanosomes, 14, 423, 431, 443 Dummies. See Placebos

Duodenum. See Intestine, small

Dyes, redox, oxidation-reduction potentials and effect on normal and stilbamidine-resistant trypanosomes, 14,

, teratogenic, and related substances, subcutaneous, effect on haemoglobin nitrite sensitivity reaction, 19, 492

, tissue staining by, 19, 495

-, triphenylmethane, trypanocidal action on normal and drug-resistant trypanosomes, in mouse, 14, 423 Dyflos (di-isopropyl phosphorofluoridate; di-isopropylfluorophosphonate):

, anticholinesterase action of, 13, 152

-, demyelination by, in hen, 15, 279 -, effect on action of acetylcholine on response of striated muscle to choline and decamethonium, 15,

-, effect on action of adrenergic blocking agents on response of pelvic nerve-rectum preparation to acetylcholine, 20, 423

, effect on action of chymotrypsin on response of small intestine to bradykinin, kallidin and methionyllysyl bradykinin, 24, 491

-, effect on formaldehyde-induced inflammation, in atropinized normal and adrenalectomized mice, 16,

-, effect on histochemical cholinesterase activity in central nervous system, in chicken, 16, 223

, effect on in-vitro hydrolysis of neostigmine by plasma cholinesterase, 19, 501

, effect on hypotensive and permeability-increasing actions of plasma-proteases, 25, 264

, effect on response of leech muscle to acetylcholine, 13, 153

, effect on response of striated muscle to chlorocresol, 24, 511

, effect on response of striated muscle to choline and decamethonium, 15, 25

, effect on response of tracheal muscle to acetylcholine, histamine, neostigmine, nicotine and physostigmine, 21, 139

, intracarotid and intraventricular, effect on release of acetylcholine from perfused cerebral ventricles, 13, 165

Dyflos (cont )

-, intraventricular, effect on blood-cholinesterases, in conscious dog, 18, 19

, pharmacological actions of, in conscious dog, 18, 19

-, neurotoxicity of, in hen, 17, 21

-, neurotoxicity, properties and synthesis of, 15, 271 -, permeability of blood-brain barrier to, 13, 170

-, response of smooth muscle of chick amnion to, 18, 554

, response of tracheal muscle to, 21, 138

Dyflos poisoning, antidotes in, atropine and pyridinium aldoximes as, 14, 197

, effect on histochemical cholinesterase activity in central nervous system, in chicken, 16, 224

, successful treatment with atropine and pralidoxime iodide, cholinesterase in brain after, 15, 432

E

EDTA. See Edetic acid

Ear, histamine in, effect of metyrapone on, and action of corticotrophin, in guinea-pig, 24, 574

-, perfused, atropinized, outflow of, response to acetylcholine, effect of bretylium and xylocholine (choline 2,6-xylyl ether) on, 15, 63, 120

-, from reserpinized rabbit, outflow of, response to nicotine, effect of noradrenaline on, 15, 51

-, outflow of, response to electrical stimulation, nicotine, and noradrenaline, effect of hemicholinium on, 15, 594

, response to noradrenaline and sympathetic stimulation, effect of acetylcholine on, in rabbit, 15, 61

, response to sympathetic stimulation, effect of physostigmine (eserine) on, in rabbit, 15, 59 , —, esponse to sympathetic stimulation and tyramine, effect of bretylium and xylocholine (choline 2,6-xylyl ether) on, 15, 63, 120

Echothiophate, response of small intestine to, effect of atropine, pralidoxime and 1,1'-trimethylenebis(4hydroxyiminomethylpyridinium) on, 18, 287

Edetic acid, cobalt complex of, as antidote to hydrocyanic acid, and effect of thiosulphate on, 23, 455 , toxicity of, 23, 460

-, effect on actions of bradykinin, 19, 446

effect on kininase activity of pathogenic bacteria, **25.** 68

-, effect on Mytilus oxidase, 15, 630

effect on response of auricular beat to noradrenaline, 25, 653

effect on response of hypodynamic heart to ouabain, in calcium-free Ringer, 19, 186

, effect on response of striated muscle to chlorocresol, 24, 512

, inhibition of kininase by, and effect of metals on, 19, 442

, inhibition of kininase in human erythrocytes, plasma and saliva by, 23, 442

, response of auricular beat to, 25, 653

Edrophonium, anticholinesterase activity and facilitation of neuromuscular transmission by, 20, 63

-, anticurare action of, 14, 459

-, applied topically to cervical spinal cord, response of tibialis anterior muscle to, in anaesthetized and decerebrate cats, 25, 411

-, depolarizing action at autonomic ganglia, 18, 579 effect on action of acetylcholine on neuromuscular blocking action of benzoquinonium, 13, 528

Edrophonium (cont.)

effect on action of benzoquinonium and tubocurarine on response of striated muscle to acetylcholine and indirect stimulation, 20, 66

-, effect on action of pyridinium aldoximes on response of phrenic nerve-diaphragm preparation to electrical stimulation, 14, 199

-, effect on action of triethylcholine on response of sciatic nerve-diaphragm preparation to electrical stimulation, 17, 187

, effect on action of tubocurarine on response of striated muscle to acetylcholine, 14, 460

-, effect on action potentials evoked in motor nerve and striated muscle by motor-nerve shocks, 20, 326 -, effect on formaldehyde-induced inflammation, in atropinized mouse, 16, 165

effect on neuromuscular blocking action of benzoquinonium, 14, 459

-, effect on neuromuscular blocking action of benzoquinonium and tubocurarine, 13, 525

-, effect on neuromuscular blocking action of bisquaternary tropeïnes, 15, 78

-, effect on neuromuscular blocking action of decamethylenebis (2 - hydroxyethyldimethylammonium),

, effect on neuromuscular blocking action of hemicholinium, 22, 446

-, effect on neuromuscular blocking action of quaternary methyl derivatives of dopamine and tyramine, 23, 61

, effect on response of striated muscle to acetylcholine, 14, 460

-, effect on response of striated muscle to decamethonium, 14, 461

, effect on response of striated muscle to electrical stimulation, action of benzoquinonium, 13, 527

-, neuromuscular blocking action of, 14, 458 , response of striated muscle to, 14, 456

Efficacy, of quaternary ammonium compounds related to acetylcholine, relation to chemical structure, 21,

Eggwhite, induction of oedema by, inhibition by various substances, in rat hindpaw, 13, 65

non-induction of anaphylactoid reaction by, in rat, 20, 554

Eicosamethylenebis(4 - aminocinnolinium), effect on Theileria annulata in tissue culture, 13, 459

1,1'-Eicosamethylenebis(4-aminoquinaldinium), effect on Hymenolepis nana, 24, 240

1,1'-Eicosamethylenebisisoquinolinium, in-vitro cesticidal action of, 15, 437

, cesticidal action and toxicity of, 24, 240

, effect on Theileria annulata in tissue culture, 13, 459 Eicosamethylenebis(trialkylammonium) salts, biochemical properties, pharmacological actions and molar conductances of, 23, 131

Eimeria infection, experimental, effect of sulphadimidine in, potentiation by 6,7-disubstituted 2,4-diamino-pteridines, in chick, 15, 298

Electrical activity, in brain, effect of tryptamine and its homologues on, and action of adrenalectomy, adrenaline, amphetamine, atropine, bromolysergic acid, chlorpromazine and physostigmine, in cat, 24, 659

, in brain and muscle, effect of sympathomimetic

and related amines on, in chick and fowl, 25, 705
-, —, recording and measurement of, in behavioural studies, 25, 673

-, in motor nerves, effect of chlorpromazine and mephenesin on, in rabbit, 25, 270

Electrocardiogram, effect of adenosine, gluten ultrafiltrate and morphine on, 21, 241

-, effect of adrenaline and heptanolamines on, and action of cocaine, 18, 54

, effect of amphetamine, atropine, physostigmine and tranquillizers on, in cat, 14, 340 , effect of angiotensin and pepsitensin on, 18, 267

, effect of benzethidine, furethidine and pethidine on,

-, effect of cloxacillin on, 21, 342

effect of digoxigenin and digitoxigenin and their derivatives on, 18, 314

-, effect of dioxone on, 16, 239

-, effect of eledoisin on, in dog, 20, 520

, effect of ergometrine on, in normal and atherosclerotic hearts, 15, 333

, effect of gadolinium and samarium chlorides on, **17**, 531

-, effect of histamine on, in Haemophilus pertussisvaccinated and unvaccinated rats, 13, 76

-, effect of 5-hydroxytryptamine on, in man, 14, 248 -, effect of hypoxaemia, ergometrine, picrotoxin and vasopressin on, action of synthetic oxytocin, in rabbit, 17, 218

, effect of mephenesin, meprobamate and substituted 1,3,4-thiadiazoles on, 13, 360

-, effect of methicillin on, in cat and guinea-pig, 17, 74 , effect of olive oil emulsion and Paspalum scrobiculatum extract on, 18, 14

-, effect of physalaemin on, 25, 385

-, effect of k-strophanthoside on, 18, 56

-, effect of N-[2-(2,6-xylyloxy)ethyl]guanidine on, 25, 537

Electroencephalogram, effect of histamine and pentobarbitone on, in normal and Haemophilus pertussisvaccinated rats, 13, 78

, effect of leptazol and picrotoxin on, in mouse, 24, 655

-, effect of lignocaine and o-methyl- $\alpha$ -propylaminopropionanilide on, 16, 39

-, effect of reticular stimulation and touch on, and action of peripheral nervous depressants, 13, 486

Electrolytes, urinary excretion of, effect of adrenaline, bretylium and noradrenaline on, 17, 465

, effect of dopamine and tyramine on, 17, 467 Electromelia virus infections, experimental, effect of isatin thiosemicarbazones and related compounds in, 15,

Eledoisin, bioassay of, test preparations for, 19, 341, 347

-, bronchoconstrictor action of, and effect of acetylsalicylate, adrenaline, atropine and mepyramine on, -, distinction from other tissue constituents, 19, 349

distinction from physalaemin and substance P, 25, 376

, effects in conscious and anaesthetized animals, 19, 339

-, effect of diazonium salts and proteolytic enzymes on, 25, 370

, effect on haemodynamics and metabolism, in dog, **22**, 585

, effect on response of blood pressure to angiotensin and catechol amines, 20, 519, 521

-, extraction, purification and stability of, 19, 326

, occurrence and distribution in *Eledone* spp. and other molluscs, 19, 326

-, response of blood pressure to, 19, 351; 25, 384, 387 , effect of atropine, ganglion-blocking agents, local anaesthetics, reserpine and sympatholytics on, in various animal species, 20, 516

Eledoisin (cont.) Entamoeba histolytica infections, experimental, effect of dichloro-N-2-hydroxyethyl-N-p-methanesulphonyl-, response of blood pressure, large and small intestine and uterus to, 25, 376 benzylacetamide and related compounds and dil-, response of gall bladder and seminal vesicles to, 19, oxanide in, in rat, 18, 128 Environment, controlled, provision for behavioural studies on small experimental animals, 25, 671 -, response of heart beat to, **20**, 517, 521 -, response of large and small intestine to, 25, 372, 373, 374 Enzymes, histamine-metabolizing, role in renal removal of histamine, in dog, 13, 48, 52 -, in brain, effect of chlorophenols and phenol on, 13, 22 -, and effect of adrenaline, atropine, bromolysergic acid diethylamide, chlorpromazine, hexa-, in brain and spinal cord, effect of organophosmethonium, lysergide (lysergic acid diethylamide), phorus compounds on, in hen, 23, 301 mepyramine, morphine, nicotine, noradrenaline and proteolytic, effect on eledoisin and physalaemin, 25, 369 papaverine on, 19, 340 , effect of bradykinin on, 19, 344, 345 , response of small intestine to, effect of chymotrypsin on, 24, 486 -, from Schistosoma mansoni, purification and properties of, 14, 68 -, response of ureter and urinary bladder to, 19, 348 -, resistance of eledoisin to, 19, 332 , sensitization of smooth muscle to plasma -, response of uterus to, 25, 375 -, and effect of atropine and bradykinin on, 19, kinins by, 24, 485 347 Enzyme inhibitors, effect on histamine catabolism, in -, effect of chymotrypsin on, 24, 492 man, 15, 351 -, in-vitro trypanocidal action on normal and stilb-Eledone spp., eledoisin in, 19, 330 , eledoisin and other amines in, 19, 326 amidine-resistant trypanosomes, 14, 443 Ellagic acid, anticoagulant action of, 20, 29 Eosinophils, horse, extracts of, antihistaminic action of, Embryo, chick, development of, effect of tetracyclines on, **25**, 317 Ephedrine, effect on adrenergic neurone-blocking action of bretylium, guanethidine and xylocholine, 18, See also Foetus and Pregnancy Embryotoxicity, of DL-glutamine, in rabbit, 25, 358 , of thalidomide and its metabolites, in rabbit, 25, , effect on behaviour and on amines and their acid metabolites in brain, 24, 763 Emetics, effect on behaviour, in pigeon, 17, 9 , effect on capillary permeability and squirming Emetic action, of apomorphine, in dog, 17, 10 responses to acetic acid, in mouse, 22, 251 , effect on inflammation induced by formaldehyde. effect of antiemetics, antihistamines, autonomic blocking agents, and central nervous depresin mouse, 16, 165 sants and stimulants on, in pigeon, 16, 137 -, effect on neurone-depressant action of 5-hydroxy-, effect of bulbocapnine and thioproperazine tryptamine, 18, 236 , effect on response of auricular beat to dimethylon, 22, 308 phenylpiperazinium, 14, 507 -, effect of bulbocapnine, chlorpromazine, prochlorperazine and thioproperazine, 22, 308 , effect on response of cerebral cortical neurones to -, effect of phenothiazine derivatives L-glutamate and synaptic excitation, 20, 471 , effect on response of heart beat to butyrylcholine, 23, 401 relation to chemical structure, 21, 436 , effect of thioproperazine on, action of antiparkinsonian drugs, 22, 311 , effect on response of hypogastric nerve-vas , of apomorphine and other central agents, 15, 286 deferens preparation to electrical stimulation, 22, 412 -, of methyldopa, **22**, 369 , effect on response of ileo-colic sphincter to acetylcholine and atropine, 18, 402 -, of nicotine and promethazine, in pigeon, 17, 8 -, of organophosphates, in conscious dog, 18, 20 effect on response of ileo-colic sphincter to nicotine, -, of Paspalum scrobiculatum extracts, 18, 11, 13 18, 399 —, of pethidine, **15**, 257 —, of physalaemin, **25**, 370 —, of procaine, in dog, **24**, 341 , effect on response of nictitating membrane and small intestine to sympathetic stimulation, 18, 429 , effect on response of potassium-depressed phrenic -, of reserpine, in dog, 21, 356 nerve-diaphragm preparation to electrical stimulaeffect of methyldopa on, 22, 369 tion, and action of pronethalol, 23, 188 -, of salicylate, mechanism of, 21, 45 , effect on response of rectal caecum to adrenaline, -, of steroids, in cat, 25, 148 histamine, 5-hydroxytryptamine, noradrenaline and of theophyllines and 6-thiotheophyllines, 17, 200 substance P, 17, 147 Emetine, effect in hepatic amoebiasis, in hamster, 14, 490 -, effect on response of small intestine to histamine, effect on behaviour, in pigeon, 17, 9 and action of atropine, bretylium, cocaine and Emotional activity, effect of chlorpromazine on, in normal and septum-destroyed rats, 17, 473 morphine, 16, 29 -, effect on response of small intestine to staphylo-Encéphalé isolé preparation, 14, 340 coccal a-toxin, 14, 63 -, effect on sialogenous action of tyramine, 15, 329 Entamoeba, effect of Colisan and staphylococcal haemo-, effect on uptake of bretylium and guanethidine by heart, in rat, 25, 174 lysins on, 17, 165 Entamoeba histolytica, effect of bradykinin on, 18, 309 -, effect of dichloroacetamide derivatives and related -, effect on uptake of noradrenaline by heart at low compounds on, 17, 286 -, effect of β-haemolysin and paromomycin on, 18, 304 perfusion concentration, 25, 34 -, inhibition of monoamine oxidase by, 19, 82 -, intraventricular, effect on drug-induced tremor, in , induction of experimental hepatic amoebiasis with, cat, 15, 578 14, 488 -, neurone-depressant action of, 18, 235

Ephedrine (cont.) -, response of blood pressure to, effect of mephentermine on, in dog, 24, 528 , response of blood vessels to, effect of hexamethonium, nerve section and reserpine on, in rat, 18, 460 , response of cardiac muscle to, effect of reserpine on, **18**, 588 -, response of goldfish intestine to, 17, 456 , response of heart beat to, and effect of reserpine on, **13**, 462 —, response of ileo-colic sphincter to, 18, 398 , response of nictitating membrane to, effect of bretylium on, 19, 21 , effect of ganglion blockade on, 19, 31 -, response of rectal caecum to, 17, 147 -, response of small intestine to, 18, 429 -, response of Venus heart to, 15, 367 -, salts of, paper-chromatographic behaviour of, 18, -, sialogenous action of, and effect of cocaine, sympathetic denervation and tyramine on, 15, 328 -, in-vitro trypanocidal action on normal and stilbamidine-resistant trypanosomes, 14, 445 (+)-Ephedrine, effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, -)-Ephedrine. See Ephedrine ψ-Ephedrine. See Pseudoephedrine Epidermophyton floccosum, sensitivity to alkoxydiguanides, 15, 245 Epinephrine. See Adrenaline Epinine. See 3,4-Dihydroxy-N-methylphenethylamine Episulphides, antitubercular action and toxicity of, 15, 485 Epithelial cells, squamous, of human oral mucous membranes, kininase and kinin-forming activities of, 23, 2,3- and 3,4-Epithiobutanethiol, antitubercular action and toxicity of, 15, 485 3,4-Epithiobutane-2-thiol, antitubercular action and toxicity of, 15, 485 (2,3-Epithiopropyl)diethylamine, effect on Mycobacterium tuberculosis, 15, 491 N-(2,3-Epithiopropylthiocarbonylmethyl) benzamide. antitubercular action and toxicity of, 15, 485 N-(2,3-Epithiopropylthiocarbonylmethyl) phthalimide, antitubercular action and toxicity of, 15, 485 N-[p-(2,3-Epithiopropylthiocarbonyl)phenyl]acetamide, antitubercular action and toxicity of, 15, 485  $\beta$ -(2,3-Epithiopropylthiocarbonyl)propionic acid, antitubercular action and toxicity of, 15, 485 Ergometrine, bioassay of, with human postpartum uterus, 13, 207 -, effect on action of ergotamine and phenoxybenzamine on response of aorta, retractor penis and uterus to adrenaline, ergotamine and ergometrine, , effect on response of cerebral cortical neurones to L-glutamate and synaptic excitation, 20, 471 -, neurone-depressant action of, 18, 229, 235 -, response of aorta, retractor penis and uterus to, effect of ergotamine and phenoxybenzamine on, and action of ergometrine, 19, 125, response of atherosclerotic heart from cholesterolfed rabbit to, 15, 333 -, response of molluscan heart to, 18, 440 -, response of molluscan smooth muscle to, 14, 405 , response of uterus to, effect of adrenaline and phenoxybenzamine on, 19, 125 Ergonovine. See Ergometrine

Ergot alkaloids, smooth-muscle excitatory receptors for identification of, 19, 120 Ergot alkaloids, hydrogenated (Hydergine): -, central action of, in chick, 25, 696 , effect on central action of adrenaline, 6-hydroxy-tryptamine and tryptamine, in chick, 25, 714 , effect on central action of dexamphetamine,  $(\pm)$ - $\alpha$ -methylnoradrenaline and (+)- $\alpha$ -methyltryptamine, in chick, 25, 697 , effect on response of blood pressure to eledoisin, 20, 523 -, effect on response of blood pressure to noradrenaline and phenethylamine, in chick, 25, 718 , effect on response of human taenia coli preparation to isoprenaline and noradrenaline, 23, 166 -, effect on response of hypogastric nerve-vas deferens preparation to electrical stimulation, 24, 681 , effect on response of small intestine to acetylcholine, 24, 678 -, effect on response of small intestine to sympathetic stimulation, 24, 683 effect on response of striated muscle to acetylcholine, 24, 676 , response of blood flow and blood pressure to, in reserpinized dog, 22, 69 , response of blood pressure, urinary excretion of adrenaline and noradrenaline, and urine secretion to, in cat, 14, 381 Ergotamine, anticholinesterase action of, 15, 528 , effect on action of iproniazid, nialamide, phenelzine and tranyleypromine on spontaneous uterine activity, -, effect on carotid sinus reflex, 13, 256 -, effect on electroencephalogram and on response to reticular stimulation, in cat, 13, 489 -, effect on neuronal excitation, 18, 234 , effect on potentials in vas deferens before and during hypogastric and intramural nerve stimulation, **23**, 607 -, effect on response of aorta to nicotine and noradrenaline, 14, 240 adrenaline, 19, 124 and action of ergometrine, 19, 125 -, effect on response of blood pressure to adrenaline and noradrenaline, in cat, 21, 385

, effect on response of aorta and retractor penis to

, effect on response of aorta, retractor penis and uterus to adrenaline, ergotamine and ergometrine,

, effect on response of blood pressure to dopamine, in spinal cat, 13, 473

, effect on response of blood pressure to peptone, 13,

180 , effect on response of vas deferens to acetylcholine,

noradrenaline and sympathetic stimulation, 15, 527 , response of aorta to, effect of phenoxybenzamine on, action of acetylcholine, histamine and 5-hydroxytryptamine, 19, 125

-, response of aorta and retractor penis to, and effect of adrenaline and ergotamine on, 19, 123

-, response of aorta, retractor penis and uterus to, effect of phenoxybenzamine on, and action of ergometrine, 19, 125

, response of blood pressure and nictitating membrane to, and effect of phenoxybenzamine on, 19, 122 , response of molluscan smooth muscle to, 14, 405 , response of Tapes heart to, 25, 491

Ergothionine, inhibition of histidine decarboxylase by, 15,

Ergotoxine, effect on apomorphine-induced emesis and pecking, in pigeon, 16, 142

Ergotoxine (cont.) Ether, anaesthetic action of, effect of chlorpromazine and , effect on ganglion-blocking action of adrenaline, Paspalum scrobiculatum extract on, 18, 12 **23**, 235 -, effect of pronethalol on, 24, 311 -, kinetics of, in mouse, 25, 88 -, effect on ganglionic transmission, 23, 235 -, anaesthetic action and toxicity of, in newborn -, response of molluscan heart to, 18, 440 , response of Tapes heart to, 25, 491 animals, 15, 454 Erythrocytes, effect of Colisan on, and action of brady--, analgesic action of, in mouse, 22, 596 kinin, 18, 305 -, effect on acetylcholine in brain, in dog, 24, 348 -, effect of iron-dextran, -dextrin, -sorbitol, and -, effect on blood sugar, 15, 282 saccharated iron oxide on, 17, 362 -, effect on choline-acetyltransferase, 25, 230 -, effect of phospholipase A on, 25, 63 -, effect on electrical activity of cerebral cortex, 21, 6 -, human, kininase of, effect of various inhibitors on, 23, 442 , effect on free fatty acids in plasma, and action of adrenaline, 5-hydroxytryptamine, isoprenaline and localization of iron in, after parenteral iron noradrenaline, 25, 546 haematinics, in rat, 22, 275 effect on hypnotic action and metabolism of pento--, localization of pempidine in, in rat, 14, 204 barbitone, in rat, 18, 35 and effect of diuretics on, in man and in , effect on induction of Straub phenomenon by vitro, 17, 493 morphine, 15, 541 , effect on response of blood pressure and heart beat , localization of stilbamidine in, 14, 140  $\beta$ -Erythroidine, effect on response of denervated striated to pronethalol, and action of noradrenaline and muscle to acetylcholine and sympathomimetic amines, 24, 106 posterior pituitary extract, 21, 462 choline, histamine, potassium ions and transmural Erythromycin, antibacterial action and tissue distribution of, 19, 101 stimulation, 25, 104 -, effect on substance P in brain, in mouse, 21, 113 , effect in experimental Leptospira zanoni infections, -, effect on Tremorine-induced tremor, 14, 562 in mouse, 20, 237 -, effect in experimental staphylococcal infections, 19, 104 -, effect on urinary excretion of sympathin, in normal -, effect on *Theileria annulata* in tissue culture, 13, 459 and demedullated rats, 13, 40 , response of heart beat to, and effect of caprylate. hydrogen peroxide, oleate, ouabain, paullinia tannin , in-vitro sensitivity of Australian leptospiral seroand tannic acid on, 21, 79 types to, 20, 232 response of respiration to, in mouse, 25, 96 Ethidium. See Homidium , in-vitro toxicity to skin, 14, 168 Escherichia coli, kininase in, 25, 67 Ethinamate, ganglion-blocking action of, 23, 242 -, kinin-forming activity of, 25, 71 Ethionine, effect on action of centrally acting compounds -, lytic action of chlorpromazine on, 24, 466 on hypnotic action and metabolism of pentobarbitone, in rat, 18, 35 , sensitivity to α-amino-oxy-acids and -hydrazides, alkoxyamines, and alkoxy- and arylmethoxy-di-, effect on hypnotic action and metabolism of pentoguanides, 15, 244 barbitone, in rat, 18, 35 , sensitivity to benzylpenicillin, cephaloram and cephalosporin C, 22, 24 effect on in-vitro metabolism of pentobarbitone by liver slices from rats pretreated with centrally acting , sensitivity to cephalosporin C and its pyridinium compounds, 18, 37 derivative, 16, 173 , in-vitro metabolism of pentobarbitone by liver -, sensitivity to colistin and polymyxins and their sulphomethyl derivatives 23, 557 slices from rat pretreated with, 18, 37 Ethonium ions, effect on motor-nerve endings, 24, 232 -, sensitivity to diloxanide and M&B 4321, 18, 132 -, effect on neuromuscular transmission, in cat, 24, 223 -, sensitivity to 3,4-xylidine derivatives and related compounds, 13, 434 , response of denervated striated muscle to, 24, 234 Escherichia coli infections, experimental, effect of colistin and polymyxins and their sulphomethyl derivatives Ethopropazine, antiacetylcholine and antitremor actions of, 18, 247 in, in mouse, 23, 559 , antiacetylcholine, antitremor, local anaesthetic and mydriatic actions and toxicity of, 14, 561 Eserine. See Physostigmine Esterases, in brain and spinal cord, inhibition by organo--, effect in experimental local tetanus, 13, 336 -, effect on histochemical cholinesterase activity in central nervous system, in chicken, 16, 224 phosphorus compounds, in hen, 23, 301 Esterase activity, and capillary permeability-increasing action, of serum γ-globulin, 21, 492 -, effect on response of blood pressure to adrenaline Ethamivan, effect on response of respiration to carbon and noradrenaline, in spinal cat, 25, 572 Ethoheptazine, metabolism and urinary excretion of, 20, dioxide, in absence of hypoxia in healthy young man, 19, 142 292 Ethane-1,2-dithiol, effect on Mycobacterium tuberculosis, Ethosuximide, effect on head-twitch response to 5-**15**, 485 hydroxytryptophan, in mouse, 20, 113 Ethanesulphonic acid, pharmacological actions of, 14, 358 Ethoxyamine, antibacterial action of, 15, 243 , sodium salt, preparation of, 14, 359 1 - Ethoxycarbonylaziridine (N - ethoxycarbonylethylene -Ethanethiol (thioethane): imine; ethyl ethylenecarbamate); , effect on response of uterus to bradykinin and , antifertility action of, in rat, 14, 152 oxytocin, 25, 422 N-Ethoxycarbonylethyleneimine. See 1-Ethoxycarbonyl-Ethanol. See Ethyl alcohol aziridine Ethanolamine, effect on ventral root potentials in spinal 1- and 5-Ethoxycarbonylmethylisatin β-thiosemicarbaz-

101

one, antiviral action, properties and synthesis of, 15,

cord, 16, 262

Ethchlorvynol, response of respiration to, in man, 24, 214

- 5 Ethoxycarbonylmethyl 1 methylisatin  $\beta$ -thiosemicarbazone, antiviral action, properties and synthesis of 15. 101
- N<sup>1</sup>-Ethoxydiguanide, antibacterial action of, 15, 243 Ethoxydiphenylacetyltropeine, antiacetylcholine, anti-

tremor, local anaesthetic and mydriatic actions and toxicity of, 14, 562

- Ethoxydiphenylacetyltropeïne methobromide, antiacetylcholine and antitremor actions of, **14**, 564
- Ethoxyethylnorpethidine. See Ethyl 1-(2-ethoxyethyl)-4-phenylpiperidine-4-carboxylate
- 5-p-Ethoxyphenyl-5-ethylpyrrolid-2-one, central depressant action and toxicity of, 25, 790
- 3-Ethoxypropane-1,2-dithiol, effect on Mycobacterium tuberculosis, 15, 485
- 3-Ethoxypropylene sulphide, effect on *Mycobacterium* tuberculosis, 15, 491
- Ethyl 1-(2-p-acetamidophenoxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl acetoacetate, response of pulmonary blood flow and blood pressure and respiration to, and effect of vagal cooling and vagotomy on, in cat, 13, 374

Ethyl alcohol (alcohol; ethanol):

- ---, in-vitro cesticidal action of, 15, 437
- ——, depressant action on various biological systems, 15, 185
- ----, in-vitro effect on blood, 13, 387
- —, effect on hypnotic action and metabolism of pentobarbitone, in rat, 18, 35
- —, effect on release of oxytocin, in lactating rat, 17, 298
   —, effect on response of small intestine to acetyl-choline and electrical stimulation, 14, 289
- —, effect on spinal reflexes, 14, 296
- ---, effect on synaptic transmission, 19, 113
- —, effect on trypanocidal action of butarsen, 14, 434 —, hypnotic action of, effect of amitriptyline, chlor-promazine, chlorprothixene, desipramine (desmethylimipramine), desmethylpromazine, imipramine and promazine on, in mouse, 23, 341
- —, —, effect of chlorpromazine, 5-ethyl-5-phenylpyrrolid-2-one, glutethimide, meprobamate and phenobarbitone on, 25, 794
- —, effect of reserpine on, action of amitriptyline, chlorpromazine, chlorprothixene, desipramine (desmethylimipramine), desmethylpromazine, imipramine and promazine, in mouse, 23, 339
- —, intravenous, effect on plasma- and urine-haemoglobin, in sheep, 13, 387
- ---, response of striated muscle to, 14, 292
- —, toxicity of, effect of thalidomide on, in mouse, 15, 115
- Ethyl p-aminobenzoate, effect on trypanocidal action of butarsen, 14, 434
- Ethyl p-5-(p-aminophenoxy)pentoxybenzoate, effect on Schistosoma mansoni and toxicity of, 13, 241
- Ethyl 5-p-aminophenoxypentylcarbamate, schistosomicidal action, retinotoxicity and toxicity of, 14, 468
- Ethyl N-(5-p-aminophenoxypentyl)oxamate, effect on schistosomes and vision and toxicity of, 14, 468
- Ethyl aziridin-1-ylcarbamate. See NN-Ethyleneurethane Ethyl 1-(2-benzyloxyethyl)-4-phenylpiperidine-4-carboxylate. See Benzethidine
- Ethyl biscoumacetate, anticoagulant action of, 20, 29 Ethyl 1-(2-butoxyethyl)-4-phenylpiperidine-4-carboxyl-
- ate, analgesic action and toxicity of, 15, 247 Ethyl chloride, analgesic action of, in mouse, 22, 596
- Ethyl 4-chloro-2-methoxycarbonylphenoxyacetate, synthesis of, 23, 504

- Ethyl 1-(2-m- and -p-chlorophenoxyethyl)-4-phenylpiperidine - 4 - carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 1-(2-cyclohexyloxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl di(4-hydroxycoumarin-3-yl)acetate. See Ethyl biscoumacetate
- Ethyl 1-(2-diphenyl-4'-yloxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, **15**, 247 Ethyl dithiolisophthalate. *See* Ditophal
- Ethyl dithiolterephthalate, antitubercular action of, 15, 122 Ethyl (2,3 - epithiopropylthiocarbonyl)acetate, anti -
- tubercular action and toxicity of, 15, 485
  Ethyl (2,3 epithiopropylthiocarbonyl)formate, antitubercular action and toxicity of, 15, 485
- Ethyl (2,3 epithiopropylthio)formate, antitubercular action and toxicity of, 15, 485
- Ethyl 1-(4-ethoxybutyl)-4-phenylpiperidine-4-carboxylate, analgesic and other pharmacological actions and toxicity of, 15, 247
- Ethyl 1-(2-p-ethoxycarbonylphenoxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 1-[2-(2-ethoxyethoxy)ethyl]-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 1-(2-ethoxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 1-(6-ethoxyhexyl)-4-phenylpiperidine-4-carboxylate, analgesic action of, 15, 247
- Ethyl 1-(5-ethoxypentyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 1-(3-ethoxypropyl)-4-phenylpiperidine 4-carboxylate, analgesic and other pharmacological actions and toxicity of, 15, 247
- Ethyl ethylenecarbamate. See 1-Ethoxycarbonylaziridine Ethyl 1-(2-ethylthioethyl)-4-phenylpiperidine 4-carboxyl-
- ate, analgesic action and toxicity of, 15, 247
  Ethyl 1-(2-isopropoxyethyl)-4-phenylpiperidine-4-car-
- boxylate, analgesic action and toxicity of, 15, 247 Ethyl 1-(2-methoxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 1-(2-o-, -m- and -p-methoxyphenoxyethyl)-4-phenylpiperine - 4 - carboxylate, analgesic action and
- toxicity of, 15, 247

  Ethyl 1-(3-methoxypropyl)-4-phenylpiperidine-4-carboxylate, analysis action of 15, 247
- boxylate, analgesic action of, 15, 247 Ethyl methylphosphonofluoridate, demyelination by, in
- hen, 15, 279
  —, neurotoxicity, properties and synthesis of, 15, 271
- Ethyl 1-(2-methylthioethyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247 Ethyl 1-(2-papth-2'-y-loyvethyl)-4-phenylpiperidine-4-
- Ethyl I-(2-naphth-2'-yloxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic action of, 15, 247
- Ethyl 1-(2-o-, -m- and -p-nitrophenoxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 1-(4-phenoxybutyl)-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, **15**, 247 Ethyl 1-[2-(2-phenoxyethoxy)ethyl]-4-phenylpiperidine-
- Ethyl 1-[2-(2-phenoxyethoxy)ethyl]-4-phenylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 1-(2-phenoxyethyl)-4-phenylpiperidine-4-carboxylate, analgesic and other pharmacological actions and toxicity of, 15, 247
- Ethyl 4-phenyl-1-(2-phenylthioethyl)piperidine-4-carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 4-phenylpiperidine-4-carboxylate, 1-substituted derivatives, analgesic action and toxicity of, 15, 247
- Ethyl 4-phenyl-1-(2-propoxyethyl)piperidine-4-carboxylate, analgesic action and toxicity of, 15, 247

- Ethyl 4-phenyl-1-(4-tetrahydrofurfuryloxybutyl)piperidine-4-carboxylate, analgesic action and toxicity of, **15**, 247
- Ethyl 4-phenyl-1-(2-tetrahydrofurfuryloxyethyl)piperidine-4-carboxylate. See Furethidine Ethyl 4-phenyl-1-(3-tetrahydrofurfuryloxypropyl)piperid-
- ine-4-carboxylate, analgesic action of, 15, 247
- Ethyl 4-phenyl-1-tetrahydrofurfurylpiperidine-4-carboxylate, analgesic action and toxicity of, 15, 247,
- Ethyl 4-phenyl-1-(4-tetrahydrofurylbutyl)piperidine-4carboxylate, analgesic action and toxicity of, 15, 252
- Ethyl 4-phenyl-1-(2-tetrahydrofurylethyl)piperidine-4carboxylate, analgesic action and toxicity of, 15, 252 Ethyl 4-phenyl-1-(5-tetrahydrofurylpentyl)piperidine-4-
- carboxylate, analgesic action and toxicity of, 15, 252 Ethyl 4-phenyl-1-(3-tetrahydrofurylpropyl)piperidine-
- 4-carboxylate, analgesic action and toxicity of, 15,
- Ethyl 4-phenyl-1-(2-tetrahydropyran-4'-ylethyl)piperidine-4-carboxylate, analgesic action and toxicity of, **15**, 247
- Ethyl 4-phenyl-1-(2-tetrahydropyran-2'-ylmethoxyethyl)piperidine - 4 - carboxylate, analgesic action and toxicity of, 15, 247
- Ethyl 4-phenyl-1-(4-tetrahydropyran-2'-yloxybutyl)piperidine - 4 - carboxylate, analgesic action of, 15,
- Ethyl 4-phenyl-1-(2-tetrahydropyran-2'-yloxyethyl)piperidine-4-carboxylate, analgesic action of, 15,
- Ethyl 4-phenyl-1-(2-o-, -m- and -p-tolyloxyethyl)piperidine-4-carboxylate, analgesic action and toxicity of,
- Ethyl propyl dimethylpyrophosphate, neurotoxicity, properties and synthesis of, 15, 271
- Ethyl propyl phosphorofluoridate, neurotoxicity, properties and synthesis of, 15, 271
- Ethyl 3-pyridylacetate, properties and synthesis of, 18, 516
- Ethyl pyrophosphate (tetraethyl pyrophosphate):
- -, effect on acetylcholine in brain, in rat, 19, 227 effect on action of acetylcholine on neuromuscular blocking action of benzoquinonium, 13, 528
  - , effect on action of anticholinesterases on response of striated muscle to electrical stimulation, and action of benzoquinonium, 13, 527
- , effect on neuromuscular blocking action of benzo-
- quinonium and tubocurarine, 13, 525 -, effect on response of striated muscle to acetyl-choline, 25, 181
- effect on response of striated muscle to carbachol, **25**, 182
- inhibition of true cholinesterase by, reactivation by diquaternary oximes, 14, 188
- -, intraventricular, effect on blood-cholinesterase, in conscious dog, 18, 22
- pharmacological actions of, in conscious dog, 18, 21
- -, effect of atropine and oximes on, in conscious dog, 18, 24
- , neuromuscular blocking action of, effect of diacetyl monoxime on, 14, 320
- -, neurotoxicity of, 15, 271
- -, sialogenous action of, and effect of atropine and cocaine on, in normal parasympathetic and denervated parotid glands, 13, 193
- Ethyl pyrophosphate poisoning, antidotes in, atropine and oximes as, 14, 5, 186, 196
- Ethylamine, response of Venus heart to, 15, 368

- 3-(2-Ethylaminoethyl)indole (N'-ethyltryptamine):
- effect on response of stomach-strip preparation to 5-hydroxytryptamine and tryptamine, 14, 99
- , effect on response of uterus to acetylcholine, 5hydroxytryptamine and tryptamine, 14, 99
- -, metabolism, pharmacological actions, synthesis and toxicity of, 23, 43
- -, response of stomach preparation to, and effect of amine-oxidase inhibitors on, 14, 88
- , response of stomach-strip preparation and uterus to, 14, 99
  - response of Venus heart to, 15, 377
- Ethyldimethyl(5- and 6-methylcoumaran-3-yl)ammonium, effect on adrenergic neurone transmission, 23,
- synthesis of, 23, 501
- Ethyldimethyl(7 methylcoumaran 3 yl)ammonium. adrenergic neurone-blocking and other pharmacological actions and toxicity of, 23, 486
- synthesis of, 23, 501 1'-Ethyl-3,6-dimethyl-2-phenyl-4-pyrimidinyl-2'-cyanine.
- See Cyanine 863
- 6-Ethyl-2,2-dimethylpiperidine, ganglion-blocking action of, 13, 502
- Ethyldimethyl(pyrid-3-ylmethyl)ammonium, effect on junctional transmission, 18, 510
- properties and synthesis of, 18, 516
- 7-Ethyl-1,3-dimethyl-6-thioxanthine, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 201
- 8-Ethyl-1,3-dimethyl-6-thioxanthine, choline salt, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 197
- 8-Ethyl-1,3-dimethylxanthine, bronchodilator, coronary dilator and other pharmacological actions and
- toxicity of, 17, 197
  Ethyldimethyl(2-xylyloxyethyl)ammonium, adrenergic neurone-blocking action of, 23, 497
- NN'-Ethylenebis(4-hydroxyiminomethylpyridinium), antidote in organophosphate poisoning, 14, 192
- -, effect on cholinesterase, reactivating action on organophosphate - inactivated cholinesterase and toxicity of, 14, 188
- -, reactivating action on organophosphate-inactivated cholinesterase, pharmacological actions, synthesis and toxicity of, 14, 195
- , with atropine, as antidote in organophosphate poisoning, **14**, 186
- NN'-Ethylenebis(3-mandeloyloxytropanium), antiacetylcholine, ganglion - blocking and neuromuscular blocking actions of, 18, 278
- Ethylenediaminetetra-acetic acid. See Edetic acid
- NN-Ethylene-N'N'-dimethylurea, diuretic action and toxicity of, 21, 581

  Ethyleneimine, derivatives of, effect on male fertility, in
- rat, 14, 149
- , urinary excretion of ethyleneimine after administration of, in mouse and rat, 25, 223
- -, and its derivatives, effect on renal function, 21, 581
- -, determination in urine, 21, 591
  - diuretic action and toxicity of, in mouse and rat, **25**, 224
- -, in-vitro and in-vivo formation from di(aziridin-1-yl) sulphoxide, 21, 592
- -, urinary excretion of, in mouse and rat, 25, 224
- , after administration of derivatives, in mouse and rat, 25, 224
- NN-Ethylene-N'-isopropylurea, diuretic action, synthesis and toxicity of, 21, 581

NN-Ethylene-N'-methylurea, diuretic action and toxicity of, 21, 581

NN-Ethylene-N'-phenylurea, diuretic action and toxicity of, **21**, 581

NN-Ethyleneurea, diuretic action and toxicity of, 21, 581 NN-Ethyleneurethane, diuretic action and toxicity of, 21,

- Ethylfluoren-9-yl(2-iodoethyl)amine, response of blood pressure to, and effect of adrenalectomy, adrenaline, hexamethonium, noradrenaline and reserpine on, 16,
- 2-Ethyl-1,2,3,4,6,7-hexahydro-2-hydroxy-3-isobutyl-9,10-dimethoxy-11bH-benzo[a]quinolizine, effect on 5-hydroxytryptamine in brain, action of dexamphetamine, aa-dimethyltryptamine, etryptamine, harmaline and a-methyltryptamine, 19, 166

Ethyl(2-hydroxyethyl)naphth-1-yl[14C]methylamine, synthesis of, **23**, 293
N-Ethyl-2- and -4-hydroxyiminomethylpyridinium, as

antidotes in organophosphate poisoning, 14, 192

, reactivating action on organophosphate-inactivated cholinesterase and synthesis of, 14, 195

 $\alpha$  - Ethyl -  $\gamma$  - hydroxy - N - (5 - nitrofurfurylidene) butyro hydrazide, effect in experimental urinary tract

infections with *Proteus vulgaris*, in rat, **19**, 310 a-Ethyl-5-hydroxytryptamine. See 3-(2-Aminobutyl)-5hydroxyindole

and 5-Ethylisatin  $\beta$ -thiosemicarbazone, antiviral action, properties and synthesis of, 15, 101

N-Ethylmaleimide, effect on in-vitro histamine release and mast-cell damage by antihistamines, 15, 399

, effect on in-vitro histamine release and mast-cell damage by dextran, 19, 410

, effect on in-vitro histamine release and mast-cell damage in sensitized tissues by antigen and com-

pound 48/80, 15, 84 , effect on response of uterus to bradykinin and oxytocin, 25, 422

5-Ethyl-5-*p*-methoxyphenylpyrrolid-2-one, central depressant action and toxicity of, 25, 790

2-Ethyl-2-methylaminobicyclo[2,2,1]heptane, ganglionblocking action, synthesis and toxicity of, 15, 209

2-Ethyl-3-methylbicyclo [3,2,1]-3-azaoctane, ganglion blocking action, synthesis and toxicity of, 15, 209 ganglion-

N-Ethyl-N-methylguanidine, effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282 response of blood pressure to, 24, 288

1-Ethyl-3-methyl-6-thioxanthine, choline salt, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 197

3-Ethyl-1-methyl-6-thioxanthine, choline salt, broncho-dilator, coronary dilator and other pharmacological actions and toxicity of, 17, 197

Ethylnoradrenaline, response of blood pressure to, effect of isoprenaline on, in cat, 21, 381
-, —, and action of dichloroisoprenaline and

pronethalol, in cat, 21, 385

α-Ethylnoradrenaline, central action of, in chick, 25, 705 ( $\pm$ )-a-Ethylnoradrenaline, effect on uptake of noradrenaline by heart at low perfusion concentration,

 $(\pm)$ -N-Ethylnoradrenaline, effect on response of potassium-depressed phrenic nerve-diaphragm prepara-tion to electrical stimulation, and action of phloridzin, 23, 188

, effect on uptake of noradrenaline by heart at high and low perfusion concentrations, 25, 34

N-Ethyl-N-phenylguanidine, effect on ganglionic and neuromuscular transmission and toxicity of, 24, 282 -, response of nictitating membrane to, 24, 288

4-o-Ethylphenyl-4-hydroxy-1-phenethylpiperidine, analgesic and lenticular-opacity-producing actions and toxicity of, 17, 434

N-Ethyl-p-5-phenylpentoxyaniline, schistosomicidal action and toxicity of, 13, 242

6-Ethyl-6-phenylpiperid-2-one, central depressant action and toxicity of, 25, 790
(-)- and (±)-5-Ethyl-5-phenylpyrrolid-2-one, central

depressant action and toxicity of, 25, 790

10-Ethyl-9-phenyl-7-p-sulphamoylphenyldiazoaminophenanthridinium, trypanocidal action of, 17, 402 1-Ethylpiperid-3-yl  $\alpha$ -cyclopentyl- $\alpha$ -phenylglycollate,

effect on adenine nucleotides, inorganic phosphate and phosphocreatinine in brain, in rat, 25, 631 1-Ethylpyrrolidin-2-ylmethyl a-cyclopentyl-a-phenylgly-

collate, effect on acetylcholine in brain, in rat, 23, 127

N-Ethyl-t-butylamine, ganglion-blocking action of, 13, 502

1-Ethyl-2,2,6,6-tetramethylpiperidine, ganglion-blocking and other pharmacological actions, properties and toxicity of, 13, 501

3-Ethylthioacetylthiopropylene sulphide, antitubercular action and toxicity of, 15, 485

5-Ethyl-2-thiohydantoin, antithyroid action and toxicity of, 13, 351

3-Ethylthiopropylene sulphide, effect on Mycobacterium tuberculosis, 15, 491

N-Ethyl-t-octylamine, ganglion-blocking action of, 13,

Ethyltrimethylammonium, response of blood pressure to, and effect of hexamethonium on, 23, 62

a-Ethyltryptamine. See Etryptamine N'-Ethyltryptamine. See 3-(2-Ethylaminoethyl)indole

4-Ethynyl-4-hydroxy-1-phenethylpiperidine, analgesic and lenticular-opacity-producing actions and toxicity of, **17**, 434

Etisul. See Ditophal

Etonitazene, effect on head-twitch response to 5-hydroxytryptophan and on pinna reflex, in mouse, 20, 113

Etryptamine [α-ethyltryptamine; 3-(2-aminobutyl)indole]:
—, in-vivo effect on action of 5-hydroxytryptophan on endogenous 5-hydroxytryptamine in brain and heart, **19**, 164

, in-vivo effect on action of iproniazid and Ro 4-1284 on endogenous 5-hydroxytryptamine in brain, 19,

, effect on behaviour and cerebral electrical activity, in cat, 24, 659

, effect on head-twitch response to 5-hydroxytryptophan, in mouse, 20, 110

, in-vivo effect on 5-hydroxytryptamine in brain, 19, 162

, effect on response of stomach-strip preparation to 5-hydroxytryptamine and tryptamine, 14, 99

, effect on response of uterus to acetylcholine, 5hydroxytryptamine and tryptamine, 14, 99

, response of morphine- and phenoxybenzamine-treated small intestine to, 14, 557

, response of stomach-strip preparation to, 14, 88, 99 Euglobulin, preparation of pepsitensin from, 18, 256 Euthria cornea, absence of eledoisin in, 19, 330

Evans blue. See Azovan blue Extracellular fluid, distribution in blood and tissues,

effect of isoniazid on, 15, 5 Eye, anterior chamber of, localization of (2-bromoethyl)-

ethyl(naphth-1-ylmethyl)amine in, in rat, 23, 290

-, localization of bemegride in, 14, 36 -, localization of methylpentynol and its carbamate in, in cat, 13, 368

Eye (cont.) Fatty acids, free, in plasma (cont.) , outflow of aqueous humour from, effect of phentolfactors affecting, in rat, 22, 577 amine on, 23, 377 —, mobilization by isoprenaline, in rat, 25, 545 , effect of sympathomimetic amines on, and -, in-vitro release from adipose tissue by action of phentolamine and sympathetic denervaadrenaline, (+)-, (-)- and  $(\pm)$ -isoprenaline and noradrenaline, 25, 551 tion, 23, 374 , response to atropine, hyoscine and its metho-Fear, effect on apomorphine-induced pecking, in pigeon, bromide, methanthelinium, oxyphenonium and 17.9 propantheline, in man, 13, 187, 190 Feeding sensations, effect on apomorphine-induced peck-, response to gadolinium and samarium chlorides, ing, in pigeon, 17, 9 **17**, 528 Fencamfamin, effect on hypothermia and tremor induced by Tremorine, 25, 447, 450 -, response to Gluta renghas leaf extract, 15, 444 , response to mecamylamine and pempidine and its Ferric dextran. See Iron dextran N-ethyl homologue, 13, 517 Ferricyanide, oxidation-reduction potential and in-vitro , response to methyldopa, 15, 325
See also Aqueous humour; Iris; Lenticular opacity; trypanocidal action on normal and stilbamidineresistant trypanosomes of, 14, 447 Miotic action; Mydriatic action; Ferritin, response of sensitized and non-sensitized Nystagmus; denervated striated muscle to, 25, 615 Retinotoxicity; and Vitreous humour Eyelid, inferior, response to 1,1-dimethyl-4-phenyl-Ferrocenes, convulsant and haematinic actions, toxicity piperazinium and peptone, effect of hexamethonium and urinary excretion of, 24, 352 on, 15, 226 Fertility, effect of alkylating agents on, in male rat, 14, See also Ptosis 149 -, effect of methylene di(methanesulphonate) on, in F male rat, 24, 25 See also Reproduction 883F. See 2-Diethylaminomethyl-1,4-benzodioxan Fibrillation, auricular, induction by aconitine, mechanism Faeces, excretion of ampicillin (BRL 1341) in, 17, 415; of, and role of cholinergic factors in, 21, 368 **18**, 360, 362 , induction in heart-lung preparation, inhibi--, excretion of cloxacillin in, in rat, 21, 344 tion by antifibrillatory agents, 13, 107

-, auricular and ventricular, induction in mammalian heart by electrical stimulation, effect of , excretion of methicillin [sodium 6-(2,6-dimethoxybenzamido)penicillanate] in, in rat, 15, 571 -, excretion of neostigmine in, in rat, 25, 239 cooling and denervation on, 17, 167 , excretion of thalidomide and its metabolites in, 25, -, ventricular, causes of, 15, 67 , electrically induced, effect of ionic concentra-Fallopian tubes, response to prostaglandins, 21, 184; 24, tions and temperature on, 14, 183
-, —, induction of, metabolic factors in, 13, 144 Fasting, effect on glycogen in heart, 22, 127 -, role of anoxia and potassium-ion concentraeffect on glycogenolytic and hypoglycaemic actions tion in, 15, 67 of adrenaline, noradrenaline and isoprenaline, in See also Antifibrillatory action and Heart beat rat, 22, 267 Fibrinogen, in plasma, effect of catechol amines on, in effect on toxicity of salicylate, in rat, 25, 193 dog, 17, 392 Fat, body, localization of bemegride in, 14, 36 Fibrinolysis, effect of hexadimethrine on, 22, 96 , localization of (2-bromoethyl)ethyl(naphth-Fighting behaviour, effect of asarone and  $\beta$ -asarone on, 1-ylmethyl)amine in, in rat, 23, 290 **20**, 436 -, localization of heparin in, 18, 626 Filicinic acid, derivatives of, anthelmintic action and , —, localization of methylpentynol and its carbamate in, in cat, 13, 368 synthesis of, 24, 714 Finkleman ileum preparation. See Periarterial nerve--, localization of pronethalol and propranolol ileum preparation in, **25**, 587 Flavanoids, bioassay of, using capillary permeability response to histamine in mouse, 13, 11 Fatty acids, esterified, in serum, effect of surface-active agent on, and action of adrenolytics and sympatho-, effect on response of small intestine to histamine, 13, 14 lytics, in rat, 23, 450 , free, in plasma, effect of acetylcholine, histamine Flavanones, anti-inflammatory action of, 18, 349 Flavones, anti-inflammatory action of, 18, 349 and isoprenaline on, in anaesthetized rat, 25, 552 , effect of acetylsalicylate, p-amino-Fludrocortisone (9a-fluorohydrocortisone): salicylate, anthranilate, benzoate, o-chlorobenzoate, , effect on adrenal and body weights, in rat, 15, 537 gallate, o-nitrobenzoate, phthalate, sulphosalicylate , effect on growth of human tumour in weanling rat, and salicylamide on, in rat, 25, 190 14, 308 -, —, effect of adrenaline, isoprenaline and noradrenaline on, in anaesthetized rat, 25, 550 -, effect on histamine in lungs and small intestine, in guinea-pig, 25, 664 , effect of amphetamine, chlorpromaz-, effect on histamine and 5-hydroxytryptamine in ine, corticotrophin and noradrenaline on, and action tissues, in rat, 15, 532 of salicylate, in rat, 25, 190

-, —, effect of ether on, and action of adrenaline, 5-hydroxytryptamine, isoprenaline and , effect on histidine decarboxylase in liver and pyloric stomach, 16, 362 Flufenamic acid, effect on bronchoconstrictor action of noradrenaline, 25, 546 acetylcholine, histamine, 5-hydroxytryptamine and -, effect of pentobarbitone on, in rat, 25, kinins, 20, 345 , effect on bronchoconstrictor action of bradykinin

and slow-reacting substance produced in anaphyl-

axis, 23, 209

-, effect of salicylate on, in normal,

adrenalectomized and thyroid-depressed rats, 25, 187

Flufenamic acid (cont.)

, effect on response of blood pressure to bradykinin, 20, 350

Fluopromazine (trifluopromazine):

-, antiemetic action of, 21, 436

-, effect on apomorphine-induced emesis and pecking, in pigeon, **16**, 141

effect on apomorphine-induced pecking, in pigeon, 17, 8

, effect on enzymic destruction of bradykinin by brain extracts, 22, 333

, effect on hypnotic action and metabolism of pentobarbitone, in rat, 18, 33

-, effect on oestrous cycle, in albino mouse, 22, 162 -, hyperglycaemic action of, relation to hypothermic action, in rat, 23, 97

, hypotensive, sedative and tranquillizing actions of, **22**, 154

Fluoride, effect on action of adrenaline on response of potassium-depressed phrenic nerve-diaphragm preparation to electrical stimulation, 23, 193

-, effect on glutamine synthetase, 25, 353

, effect on phosphate metabolism of normal and stilbamidine-resistant trypanosomes, 14, 445

, effect on response of potassium-depressed phrenic nerve-diaphragm preparation to electrical stimulation, 23, 193

, effect on response of striated muscle to caffeine and chlorocresol, 24, 513

-, induction of ventricular fibrillation by, and effect of cooling and magnesium ions on, 13, 145

-, in-vitro trypanocidal action on normal and stilbamidine-resistant trypanosomes, 14, 445

Fluorine, organophosphorus compounds containing, neurotoxicity of, 15, 271

Fluoroacetic acid, effect on citrate metabolism of normal and stilbamidine-resistant trypanosomes, 14, 447

, in-vitro trypanocidal action on normal and stilbamidine-resistant trypanosomes, 14, 445

9a-Fluorohydrocortisone. See Fludrocortisone 5-, 6- and 7-Fluoroisatin  $\beta$ -thiosemicarbazone, antiviral action, properties and synthesis of, 15, 101

Fluoromar. See 2,2,2-Trifluoroethyl vinyl ether  $9\alpha$ -Fluoro- $11\beta$ ,17 $\alpha$ ,21-trihydroxy- $2\alpha$ -methylpregn-4-ene-3,20-dione. See 2-Methylfludrocortisone

5-Fluorouridine 5'- mono- and -tri-phosphate, response of goldfish intestine to, 22, 256

Flutter, auricular, induction by aconitine, mechanism of, and role of cholinergic factors in, 21, 368 See also Heart beat

Foetus, effect of cloxacillin and thalidomide on, in rabbit, 21, 343

, 5-hydroxytryptamine in, effect of monoamineoxidase inhibitors, season and subcutaneous 5hydroxytryptamine on, in mouse, 22, 380

-, localization of bemegride in, 14, 36 -, localization of (2-bromoethyl)ethyl(naphth-1-ylmethyl)amine in, after injection into maternal blood, in rat, 23, 290

, localization of iron in, after parenteral iron haematinics, in pregnant rat, 22, 275

, localization of methylpentynol and its carbamate in, in pregnant cat, 13, 368

-, localization of pempidine in, in rat, 14, 205

-, skeleton of, induction of malformations by tetracyclines in, possible relation to stability of drugs, 23,

, skeleton and teeth of, induction of malformations by sulphamoprine in, in mouse and rat, 23, 305 See also Embryo and Pregnancy

Folic acid, absorption from small intestine, and effect of folic acid in plasma and tissues and osmolarity of gut contents on, in rat, 19, 313

-, — , and effect of gliadin, gluten and methotrexate on, in rat, 19, 318

-, effect on trypanocidal action of butarsen, 14, 434 Formaldehyde, anthelmintic action of, 17, 332

-, effect on indium intoxication, 19, 509 -, in-ovo and in-vitro effect on influenza virus, 13, 408

-, effect on trypanocidal action of butarsen, 14, 434 -, induction of oedema by, effect of adrenaline,

methotrimeprazine and noradrenaline on, in rat hindpaw, 13, 68

, effect of iproniazid, phenylbutazone and salicylamide on, 14, 484

, inflammatory action of, and effect of analgesicsantipyretics, antiesterases, a-aryloxypropionates, cortisone, ephedrine, mepyramine, methocarbamol, tolazoline and other substances on, in mouse, 16, 163

, —, effect of hexadimethrine and protamine sulphate on, 24, 706

-, effect of various substances on, 18, 346

Formalin. See Formaldehyde

3-Formamidocoumarans, synthesis of, 23, 502 Formic acid, anthelmintic action of, 17, 332

3-Formylindole thiosemicarbazone, effect in experimental ectromelia and vaccinia infections, properties and synthesis of, 15, 101

3-Formyl-1-methyloxindole thiosemicarbazone, effect in experimental vaccinia infections, properties and synthesis of, 15, 101

Fowl, neurotoxic action of tri-o-cresyl phosphate and its cyclic phosphate metabolite in, 18, 465

, normal and organophosphate-poisoned, histochemical cholinesterase activity in central nervous system of, 16, 218

response of blood pressure to eledoisin in, and effect of atropine, ganglion-blocking agents and local anaesthetics on, 20, 522

, trachea of, anatomy, innervation and myology of, **18**, 612

with and without a normal intestinal flora, 5hydroxytryptamine in gastrointestinal tract of, 19, 389

Freund's adjuvant, arthritis induced by, effect of 2butoxycarbonylmethylene - 4 - oxothiazolidine and phenylbutazone on, in rat, 24, 632

Frog, stomach muscle of, release of polypeptides from, by direct and indirect stimulation, 22, 403

Fructose, effect on action of histamine on capillary permeability, 13, 13

effect on in-vitro histamine release and mast-cell damage by dextran, 19, 410 **D-Fructose**, effect on action of polysaccharides on capil-

lary permeability, in rat, 25, 605 Fructose 1,6-diphosphate, effect on response of striated

muscle to caffeine and chlorocresol, 24, 513 Fucidin, oral, effect on wound healing, in rat, 19, 321

-, stability in aqueous solution, 19, 321

Fumagillin, effect in hepatic amoebiasis, in hamster, 14, 490

Fundal strip preparation, rat, response to dexamphetamine and imipramine, 17, 315

-, ---, response to 5-hydroxytryptamine and trypt-amine, effect of cocaine and 3-phenoxypropylguanidine on, 18, 477

, response to tryptamine, effect of cocaine, dexamphetamine, imipramine, monoamine-oxidase inhibitors and pyrogallol on, 17, 313

Fundus, rat, oxidation of 5-hydroxytryptamine, tryptamine, and tyramine by, and effect of substances which antagonize 5-hydroxytryptamine more than tryptamine on fundal strip, 16, 156

Furaltadone, intravenous, distribution in aqueous humour, cerebrospinal fluid and plasma, in dog, 24,

266

Furethidine, analgesic and other pharmacological actions

and toxicity of, 15, 247

pharmacological actions and toxicity of, 15, 254 3-Furfuryl-1-methyl-6-thioxanthine, bronchodilator, coronary dilator and other pharmacological actions and toxicity of, 17, 197

3-Furfuryl-1-methylxanthine, bronchodilator, coronary dilator and other pharmacological actions and

toxicity of, 17, 197

3-(2-Furoylthio)propylene sulphide, antitubercular action and toxicity of, 15, 485, 496

β-Fur-2-ylacryloylcholine, neuromuscular blocking and other pharmacological actions of, 13, 382

 $\beta$ -Fur-2-ylpropionylcholine, neuromuscular blocking and other pharmacological actions of, 13, 382

Fusidic acid, binding by human serum proteins, 25, 638 , sensitivity of Staphylococcus aureus to, synergism

with other antibiotics, 22, 28

## G

G-22150. See 5-(2-Dimethylaminopropyl)-10,11-dihydro-5H-dibenz[b, f]azepine

G-28364. See 3,7-Dichloro-5-(3-dimethylaminopropyl)-10,11-dihydro-5H-dibenz[b,f]azepine

G-31406. See 5-(2-Dimethylaminoethyl)-5H-dibenz[b, f]azepine

G-31515. See 3,7-Dichloro-5-(3-dimethylaminopropyl)-

5*H*-dibenz[*b*, *f*]azepine G-32052. *See* 5-[3-(4-Methylpiperazin-1-yl)propyl]-5*H*dibenz[b,f]azepine

G acid, extraction from human plasma, 17, 52

Gadolinium chloride, pharmacological actions and toxicity of, 17, 526 Gait, effect of amphetamine-barbiturate mixtures on, in

rat, 20, 102; 21, 301

, effect of catechol amines and indolylamines on, action of pheniprazine (phenylisopropylhydrazine), **17**, 262

, effect of centrally active drugs on, in rat, 25, 435, 436

effect of organophosphorus compounds on, in hen, **23**, 296

-, effect of pheniprazine (phenylisopropylhydrazine) on, 17, 262

-, high-stepping, induction by tri(p-ethylphenyl) phosphate, in hen, 17, 22

Galactose, effect on in-vitro histamine release and mastcell damage by dextran, 19, 410

D-Galactose, effect on action of polysaccharides on capillary permeability, in rat, 25, 605

Gall, crown, tomato plants infected with, extracts of, antihistaminic action of, 22, 486

, crown and oak, extracts of, antihistaminic action and preparation of, 18, 87

Gall bladder, response to eledoisin, 19, 349

Gallamine triethiodide, applied topically to cervical spinal cord, effect on scratch reflex, in anaesthetized and decerebrate cats, 25, 415

response of tibialis anterior muscle to, in anaesthetized and decerebrate cats, 25, 411

Gallamine triethiodide (cont.)

, effect on action potentials of phrenic nervediaphragm preparation, 24, 363

effect on autonomic nerve-blocking action of decamethonium, in cat, 18, 197

effect on response of heart beat to noradrenaline. **21**, 364

-, effect on response of phrenic nerve-diaphragm preparation to electrical stimulation, 17, 187

-, and action of bath-calcium concentration and temperature and physostigmine, 24, 360

-, effect on response of sciatic nerve-soleus and -tibialis anterior preparations to nerve stimulation, **24**, 363

-, effect on response of small intestine to staphylococcal a-toxin, 14, 63

-, effect on response of sterno-trachealis preparation to indirect stimulation, 18, 614

-, effect on response of striated muscle to chlorocresol, 24, 511

-, effect on response of *Tapes* heart to acetylcholine, **25**, 487

-, effect on vasodilator nerve fibres, 18, 197

-, neuromuscular blocking action of, 15, 79 -, in phrenic nerve-diaphragm preparation from thiamine-deficient rat, 20, 194

, effect of guanidine and derivatives on, 19,

, effect of proadifien (2-diethylaminoethyl 3,3diphenylpropylacetate) on, 18, 563

Gallic acid, effect on free fatty acids in plasma, in rat, 25.

-, peroxide in, 18, 169

response of heart beat to, 18, 169

Gamma globulin. See γ-Globulin
Ganglia, action of 5-hydroxytryptamine and phenyldiguanide at, 13, 445

-, action of leptodactyline at, 15, 15

-, autonomic, action of acetylcholine, choline, nicotine and tetramethylammonium at, and effect of anticholinesterases and hexamethonium on, 18,

, action of N-p-cyclohexylbenzyltropinium derivatives at, 21, 20

-, action of edrophonium at, 18, 579

action of hydroxydione sodium succinate at, **15**, 460

, action of neostigmine at, and effect of denervation, dyflos, hexamethonium and physostigmine on, 18, 572

-, —, action of physostigmine (eserine) at, and effect of hexamethonium on, 18, 580

-, dorsal root, histochemical cholinesterase activity in, in normal and chickens, 16, 221, 224 organophosphate-poisoned

, extraction of catechol amines from, 24, 539 localization of o-bromobenzyltrimethylammonium,

[2-(4-benzoyl-2,6-dimethylphenoxy)ethyl]trimethylammonium and pentacynium in, 17, 93

, sympathetic, action of acetylcholine and pre-ganglionic stimulation at, effect of methylpentynol and its carbamate on, 14, 303

effect of neostigmine on, and action of atropine and tubocurarine, 20, 217 -, action of dimethylphenylpiperazinium at, 14,

506 , action of histamine at, 14, 180

, —, action of neostigmine at, and effect of atropine, dimethyltubocurarine, hexamethonium and tubocurarine, 18, 80

<b>~</b>	
Ganglia, sympathetic (cont.)	Ganglion-blocking action (cont.)
, action of nicotine at, effect of neostigmine and physostigmine, 18, 82	—, of central depressants, 22, 419 —, —, mechanism of, 23, 257
, action of nicotine and its analogues and	—, of central depressants and other drugs, 23, 222
isomers at, 18, 519	, of centrally active drugs, effect of repetitive pre-
—— action of physostigmine at 18 80	ganglionic stimulation on, 24, 76
—, —, action of sympathetic stimulation at, effect	,, and relation to anaesthetic action, 23, 241
of $(+)$ - and $(-)$ -nicotine on, 25, 208	, of chlorisondamine, hexamethonium, mecamyl-
—, action potentials in, effect of atropine-like	amine, pempidine and pentolinium, 19, 420
substances and hexamethonium on, 15, 147	, of N-p-cyclohexylbenzyltropinium derivatives, 21,
—, —, effect of procainamide on, 22, 148 —, asynchronous postganglionic firing induced	18 —, of <i>NN</i> -disubstituted guanidines, <b>19</b> , 424; <b>24</b> ,
by neostigmine from, effect of atropine, pre-	282
ganglionic stimulation and tubocurarine on, 20, 214	-, of hexamethonium, effect of atropine, dyflos,
,, catechol amines in, and effect of dopa and	neostigmine and physostigmine on, 18, 77
nialamide on, histochemical study, 25, 307	—, —, effect of chloral hydrate and physostigmine
,, denervated and innervated, action of acetyl-	(eserine) on, 19, 114
choline at, effect of chloral hydrate, chloralose,	—, of hexamethonium, mecamylamine and pempidine,
physostigmine ( <i>eserine</i> ) and trichloroethanol on, <b>19</b> , 113	13, 340 of havamethonium mecamulamina nompidina and
,, action of carbachol at, and effect of	, of hexamethonium, mecamylamine, pempidine and its N-ethyl homologue, and tetraethylammonium,
chloral hydrate and physostigmine (eserine) on, 19,	13, 506
113	—, of hexamethonium, nicotine, tetraethyl- and tetra-
,, action of nicotine, potassium ions and	methyl-ammonium, effect of histamine on, 14, 180
tetramethylammonium at, effect of chloral hydrate	—, of hexamethonium and procainamide, 22, 143
and physostigmine (eserine) on, 19, 114	—, of histamine, <b>14</b> , 179
——, ——, dopamine and noradrenaline in, 24, 541 ——, ——, electrical responses during stimulation of,	, of mecamylamine congeners and pempidine
effect of hexamethonium, methylpentynol and	bridged congeners, <b>15</b> , 207 ——, of methylpentynol and its carbamate, <b>14</b> , 297
paraldehyde on, in rat, 14, 281	—, of methylpentynol and his carbamate, 14, 297—, of methylpentynol and paraldehyde, in cat and rat,
—,—, electrically stimulated release of acetyl-	14, 277
choline from, and effect of carbon-dioxide tension,	, of $(+)$ - and $(-)$ -nicotine, 25, 208
choline, pH and physostigmine on, in cat, 21, 244	—, of polyalkylpiperidines, 13, 502
—, —, noradrenaline in, effect of dexamphetamine,	-, of polymethylenebis(trialkylammonium) salts, 23,
dimethylphenylpiperazinium, methoserpidine, phen-	142 of SW 8 E 00 100 and 00 228 22 407
iprazine and phenylhydrazinobutane on, in cat and rabbit, <b>18</b> , 109	—, of SK&F 90,109 and 90,238, <b>23</b> , 497 —, of t-alkylamines, <b>13</b> , 502
—, —, effect of 6-hydroxydopamine on, 24,	—, of trichloroethanol, 22, 424
556	, of triethylcholine, 17, 191
,, and their postganglionic nerves, localization	, sympathetic, and blocking action on neuro-
of bretylium in, 15, 265	muscular and sympathetic postganglionic nervous
,, release of acetylcholine from, effect of methyl-	transmission, of bretylium, guanethidine and
pentynol and its carbamate on, 14, 305	xylocholine, <b>20</b> , 378
——, ——, effect of pempidine on, <b>13</b> , 341 ——, ——, effect of procainamide on, <b>22</b> , 146	See also Ganglionic transmission  Ganglion-blocking agents, anticonvulsant action of, 13,
, release of adrenaline and noradrenaline	345
from, at rest and in response to nerve stimulation,	—, effect of repeated administration of, on response of
<b>22</b> , 196	nictitating membrane and submaxillary gland to
,, effect of acetylcholine, AHR 602,	adrenaline, 14, 229
angiotensin, bradykinin, dimethylphenylpiperazin-	—, effect on acetylcholine in brain, heart and small
ium, pilocarpine and tyramine on, 22, 199 —, -, role in pressor action of peptone, 13, 182	intestine, and action of reserpine, in dog, 24, 120—, effect on action of adrenaline on response of heart
—, transmission in. See Ganglionic transmission	beat to phenoxybenzamine, 16, 12
Ganglion-blocking action, of acetylcholine, amylo-	—, effect on action of dichloroisoprenaline (dichloro-
barbitone, atropine, benactyzine, bretylium, car-	isoproterenol) on response of blood pressure to
bachol, hexamethonium, mephenesin, methylpenty-	phenoxybenzamine, 16, 12
nol and its carbamate, nicotine, paraldehyde, pro-	affact on action of mignethiding on magnetic of
	-, effect on action of guanethidine on response of
caine, tetraethylammonium, tetramethylammonium	blood pressure and heart beat to reserpine, 16, 10
and tubocurarine, mode of action of, in rat, 24, 89	blood pressure and heart beat to reserpine, 16, 10 —, effect on action of guanethidine and reservine on
and tubocurarine, mode of action of, in rat, 24, 89—, of acetylcholine and tetramethylammonium, and	blood pressure and heart beat to reserpine, 16, 10 ——, effect on action of guanethidine and reserpine on response of blood pressure and heart beat to
and tubocurarine, mode of action of, in rat, 24, 89—, of acetylcholine and tetramethylammonium, and effect of atropine on, 23, 80—, of atropine, bretylium, central depressants, hexa-	blood pressure and heart beat to reserpine, 16, 10—, effect on action of guanethidine and reserpine on response of blood pressure and heart beat to phenoxybenzamine, 16, 7—, effect on action of imipramine on toxicity of
and tubocurarine, mode of action of, in rat, 24, 89—, of acetylcholine and tetramethylammonium, and effect of atropine on, 23, 80—, of atropine, bretylium, central depressants, hexamethonium, mephenesin, nicotine, procaine, tetra-	blood pressure and heart beat to reserpine, 16, 10 —, effect on action of guanethidine and reserpine on response of blood pressure and heart beat to phenoxybenzamine, 16, 7 —, effect on action of imipramine on toxicity of yohimbine, 21, 57
and tubocurarine, mode of action of, in rat, 24, 89—, of acetylcholine and tetramethylammonium, and effect of atropine on, 23, 80—, of atropine, bretylium, central depressants, hexamethonium, mephenesin, nicotine, procaine, tetraethylammonium and tubocurarine, in rat, 23, 273	blood pressure and heart beat to reserpine, 16, 10  —, effect on action of guanethidine and reserpine on response of blood pressure and heart beat to phenoxybenzamine, 16, 7  —, effect on action of imipramine on toxicity of yohimbine, 21, 57  —, effect on enzymic destruction of bradykinin by
and tubocurarine, mode of action of, in rat, 24, 89 —, of acetylcholine and tetramethylammonium, and effect of atropine on, 23, 80 —, of atropine, bretylium, central depressants, hexamethonium, mephenesin, nicotine, procaine, tetraethylammonium and tubocurarine, in rat, 23, 273 —, of atropine and its methonitrate, hexamethonium,	blood pressure and heart beat to reserpine, 16, 10  —, effect on action of guanethidine and reserpine on response of blood pressure and heart beat to phenoxybenzamine, 16, 7  —, effect on action of imipramine on toxicity of yohimbine, 21, 57  —, effect on enzymic destruction of bradykinin by brain extracts, 22, 333
and tubocurarine, mode of action of, in rat, 24, 89 —, of acetylcholine and tetramethylammonium, and effect of atropine on, 23, 80 —, of atropine, bretylium, central depressants, hexamethonium, mephenesin, nicotine, procaine, tetraethylammonium and tubocurarine, in rat, 23, 273 —, of atropine and its methonitrate, hexamethonium, mecamylamine, methanthelinium, oxyphenonium,	blood pressure and heart beat to reserpine, 16, 10  —, effect on action of guanethidine and reserpine on response of blood pressure and heart beat to phenoxybenzamine, 16, 7  —, effect on action of imipramine on toxicity of yohimbine, 21, 57  —, effect on enzymic destruction of bradykinin by brain extracts, 22, 333  —, effect on hydrolysis of hippuryl-L-arginine by
and tubocurarine, mode of action of, in rat, 24, 89 —, of acetylcholine and tetramethylammonium, and effect of atropine on, 23, 80 —, of atropine, bretylium, central depressants, hexamethonium, mephenesin, nicotine, procaine, tetraethylammonium and tubocurarine, in rat, 23, 273 —, of atropine and its methonitrate, hexamethonium,	blood pressure and heart beat to reserpine, 16, 10  —, effect on action of guanethidine and reserpine on response of blood pressure and heart beat to phenoxybenzamine, 16, 7  —, effect on action of imipramine on toxicity of yohimbine, 21, 57  —, effect on enzymic destruction of bradykinin by brain extracts, 22, 333  —, effect on hydrolysis of hippuryl-L-arginine by carboxypeptidase B, 22, 335  —, effect on release of catechol amines from adrenals
and tubocurarine, mode of action of, in rat, 24, 89 —, of acetylcholine and tetramethylammonium, and effect of atropine on, 23, 80 —, of atropine, bretylium, central depressants, hexamethonium, mephenesin, nicotine, procaine, tetraethylammonium and tubocurarine, in rat, 23, 273 —, of atropine and its methonitrate, hexamethonium, mecamylamine, methanthelinium, oxyphenonium, pentolinium, poldine methosulphate, propantheline	blood pressure and heart beat to reserpine, 16, 10  —, effect on action of guanethidine and reserpine on response of blood pressure and heart beat to phenoxybenzamine, 16, 7  —, effect on action of imipramine on toxicity of yohimbine, 21, 57  —, effect on enzymic destruction of bradykinin by brain extracts, 22, 333  —, effect on hydrolysis of hippuryl-L-arginine by

Canalian blooking agents (cout)	Condinuis transmission (cont.)
Ganglion-blocking agents (cont.)	Ganglionic transmission (cont.)
—, effect on response of blood pressure to eledoisin,	—, effect of guanidine and its derivatives on, 19, 414
<b>20</b> , 519, 522, 523	, effect of hexamethonium on, and action of atropine,
—, effect on response of blood pressure and heart beat	dyflos, neostigmine and physostigmine, 18, 77
to dibenamine and phentolamine, 16, 12	—, effect of lysergide (lysergic acid diethylamide) on,
, effect on response of blood vessels to noradrenaline,	13, 255
in rat, <b>18</b> , 453	——, effect of neostigmine and physostigmine on, 18, 78
—, effect on response of circular strip of ileum to	——, ——, and action of hexamethonium, 18, 581
acetylcholine, histamine, 5-hydroxytryptamine and	—, effect of nicotine and its analogues and isomers on,
nicotine in presence of anticholinesterase, 20, 408	<b>18,</b> 510
, effect on response of heart beat to dichloroiso-	, in response to repetitive stimulation, effect of
prenaline (dichloroisoproterenol), action of adrenal-	centrally active drugs on, 24, 76
ine and phenoxybenzamine, 16, 12	—, sympathetic, effect of acetylcholine on, action of
, effect on response of hypogastric nerve-vas	substance P, in cat, 15, 11
deferens preparation to electrical stimulation, 21, 190	—, —, effect of anti - 5 - hydroxytryptamine and
——, effect on response of large intestine to acetyl-	ganglion-blocking agents on, 17, 411
	offset of 5 hydroxystrumtoming on 17 406
choline, nerve stimulation and noradrenaline, 23, 160	—, —, effect of 5-hydroxytryptamine on, 17, 406—, —, effect of polymethylene bis-onium salts on,
—, effect on response of nictitating membrane to	—, —, effect of polymethylene bis-onium salts on
adrenaline, dimethylphenylpiperazinium, ephedrine,	23, 142
	offert of substance D on in set 15 10
noradrenaline and tyramine, 19, 31	,, effect of substance P on, in cat, 15, 10
—, effect on response of tracheal muscle to neostig-	See also Ganglion-blocking action
mine, nicotine and physostigmine, 21, 140	Ganglioside, from brain, pharmacological actions of, 18,
—, effect on response of urinary bladder to nerve	325
stimulation, in rat, 24, 596	Gastric juice, excretion of chymotrypsin in, 15, 308
affect on response of was deferens to electrical	
—, effect on response of vas deferens to electrical	—, excretion of methylpentynol and its carbamate in,
stimulation, 21, 190	in cat, 13, 368
—, effect on sympathetic ganglionic transmission, 17,	Gastric motility, effect of vagal stimulation on, action of
411	atropine, poldine and propantheline, in rat, 17, 41
—, effect on toxicity of yohimbine, 21, 59	Gastric secretion, acid, continuous recording of, in rat,
—, vagal blockade induced by, effect of guanidine on,	13, 54
19, 424	—, —, effect of acetylcholine on, and action of
Ganglion cells, distribution in hypogastric nerve, 20, 305	neostigmine, in rat, 13, 57
, potentials of, effect of paraldehyde on, and on	, effect of carbachol on, and action of anti-
	, chect of carbachor on, and action of anti-
action of acetylcholine, 14, 282	histaminases and hexamethonium, in rat, 13, 57
Ganglion-stimulating action, of acetylcholine and car-	,, action of atropine, in rat. 13, 121
	—, —, action of atropine, in rat, 13, 121 —, —, effect of gastrin and histamine on, and action
bachol, effect of central depressants, procainamide	, enect of gastrin and histamine on, and action
and tetraethylammonium on, 23, 258	of aminoguanidine, bromolysergic acid diethyl-
—, of acetylcholine, carbachol and potassium ions,	amide, chlorpromazine and iproniazid, in rat, 23, 476
effect of centrally active agents and other drugs on,	—, —, effect of histamine on, action of amino-
<b>23</b> , 262	guanidine and iproniazid, 22, 522
—, of methylpentynol carbamate, 22, 420	—, —, action of atropine, poldine methyl-
——, of murexine, <b>13</b> , 103	sulphate and propantheline, in rat, 17, 41
——, of neostigmine, <b>18</b> , 76	,, and action of body temperature and
—, of peptone, <b>15</b> , 224	weight and histaminase inhibitors, in rat, 13, 56
, or peptone, 13, 224	weight and instantinase influtions, in rat, 13, 30
—, sympathetic, of crotonoylcholine, $\beta\beta$ -dimethyl-	,, action of bromolysergic acid diethyl-
acryloylcholine and pent-2-enoylcholine, 13, 312	amide and chlorpromazine, and effect of amino-
Ganglionectomy, effect on response of salivary glands to	
	guanidine and iproniazid, in rat, 22, 520
noradrenaline, 16, 316	—, —, action of vasopressin, 13, 119
Ganglionic pathway, in mediation of pressor action of	—, —, action of vasopressin, 13, 119 —, —, effect of methacholine on, action of
	atronine atronine methonitrate homotronine and
physostigmine, in rat, 23, 34	atropine, atropine methonitrate, homatropine and
Ganglionic transmission, autonomic, effect of chlorisond-	methanthelinium, 13, 120
amine and hexamethonium on, action of neostig-	,, and action of histaminase inhibitors
mine, and effect of atropine, 21, 323	on, in rat, 13, 57
—, effect of acetylcholine and carbachol on, action of	—, —, effect of reserpine on, in normal and
central depressants, procainamide and tetraethyl-	vagotomized mice, 14, 113
ommonium 22 258	
ammonium, 23, 258	—, —, inhibitors of, bioassay of, 13, 118
——, effect of acetylcholine, choline, hexamethonium,	-, stimulants of, bioassay of, 13, 60
nicotine and tetramethylammonium on, 18, 582	-, effect of histamine on, action of methylpentynol
	and its conhamate 14 205
—, effect of atropine, bretylium, central depressants,	and its carbamate, 14, 295
hexamethonium, mephenesin, nicotine, procaine,	—, effect of mecamylamine, and pempidine and its
tetraethylammonium and tubocurarine on, in rat,	N-ethylhomologue on, 13, 510
	Gastrin, bioassay of, 23, 477
<b>23</b> , 273	Jasum, Uluassay Ul, 23, 4//
——, effect of central depressants on, mechanism of, 23,	—, —, using a Youden square, 21, 67
257	, effect of diamine oxidase and monoamine oxidase
—, effect of central depressants and other drugs on, 23,	on 23 482
	on, <b>23</b> , 482
222	, parenteral, effect on acid gastric secretion, and
—, effect of central depressants and stimulants on, in	action of aminoguanidine, bromolysergic acid di-
	ethylamide, chlorpromazine and iproniazid, in rat.
cat, 23, 241	
——, effect of ganglioside and neuraminic acid on, 18,	<b>23</b> , 476
327	—, purification of, <b>23</b> , 479
	, parameters or, mo, Tr

- Gastrocnemius muscle preparation, denervated, response to acetylcholine, dimethylphenylpiperazinium and nicotine, 14, 509
- , response to electrical stimulation, effect of bretylium on, 14, 544
- Gastrointestinal motility, effect of adrenaline, atropine, trans-1-p-chlorophenyl-1-pyrid-2'-yl-3-pyrrolidin-1"-ylprop-1-ene, dibenamine, nalorphine, papaverine, pentobarbitone and tribromoethyl alcohol on, in rat, 14, 32

-, effect of analgesics on, in rat, 14, 26

, effect of bethanidine and guanethidine on, 20, 47

-, effect of bretylium on, 14, 545

-, effect of mecamylamine and pempidine and its N-ethyl homologue on, 13, 510

- -, effect of morphine on, action of adrenaline, atropine, trans-1-p-chlorophenyl-1-pyrid-2'-yl-3-pyrrolidin-1"-ylprop-1-ene, dibenamine, nalorphine, papaverine, pentobarbitone and tribromoethyl alcohol, in rat, 14, 32 See also Intestinal motility
- Gastrointestinal tract, histamine and 5-hydroxytryptamine in, in animals with and without a normal bacterial flora and with only one microbial species,

-, localization of bemegride in, 14, 36

- , localization of methyridine in, in mouse and sheep,
- -, localization of thalidomide and its metabolites in, in rabbit, 25, 345

-, perfusion of, in rat, **19**, 313

- -, response to phenyldiguanide and S-(3-phenylpropyl)isothiourea, 14, 533 See also Gut; Intestine; and Stomach
- Gelatin, and hydrolysates, effect on peristaltic reflex, 15,219 Geniculate bodies, lateral, extracts of, preparation and chromatography of, 25, 295, 298, 301, 303
- -, smooth-muscle stimulants in, 25, 295 Gentiobiose, effect on action of polysaccharides on capillary permeability, in rat, 25, 605
- Gentisic acid, effect on bronchoconstrictor action of bradykinin and slow-reacting substance produced in anaphylaxis, 23, 209
- , effect on inflammation, in mouse, 18, 347; 16, 165
- , effect on reduced glutathione in liver, in rat, 16, 182 Glass, induction of kinin formation by, effect of benz-ethonium, cetrimide, decamethonium, hexamethonium, pentamethonium, protamine sulphate, soyabean trypsin inhibitor and toluidine blue on, 22, 94
- effect of hexadimethrine on, 22, 92 Gliadin, effect on intestinal folic acid absorption, in rat, 19, 318
- Globin, degradation by proteolytic enzyme from Schistosoma mansoni, 14, 70
- γ-Globulin, from guinea-pig serum, esterase activity and capillary permeability-increasing action of, 21, 493
- preparation of pepsitensin from, 18, 256 y-Globulin permeability factor, of guinea-pig serum,
- kallikrein in, 21, 491 Glomerular filtration rate, effect of isoprenaline, orciprenaline and pronethalol on, 25, 153
- , effect of veratridine on, in conscious rat, 14, 77 Glucagon, effect on response of potassium-depressed phrenic nerve-diaphragm preparation to electrical stimulation, and action of phloridzin and pronethalol, 23, 188, 192

Glucose (dextrose):

effect on action of 2,4-dinitrophenol on in-vitro histamine release and mast-cell damage by dextran, 19, 411

Glucose (cont.)

- , effect on action of histamine on capillary permeability, **13**, 13
- , effect on action of polysaccharides on capillary permeability, in rat, 25, 604, 605
- , effect on in-vitro histamine release and mast-cell damage by dextran, 19, 409
- effect on skin reaction induced by intracutaneous dextran, 19, 408
- -, effect on trypanocidal action of butarsen, 14, 434 , in blood. See Blood, sugar in; Hyperglycaemia; and Hypoglycaemia
- , intestinal absorption of, effect of cetrimide and phloridzin on, in mouse, 24, 205
- , intravenous infusion of, effect on action of diuretics on inulin clearance and on potassium, sodium and water excretion, in rat, 14, 368
- , effect on inulin clearance and on potassium, sodium and water excretion, in rat, 14, 368
- , role in induction of ventricular fibrillation, 13, 146 Glucose 6-phosphatase, in liver, effect of hypoglycin-A on, 13, 127
- Glucose 1-phosphate, effect on response of striated muscle to caffeine and chlorocresol, 24, 513
- Glucose tolerance, effect of hypoglycin-A on, 13, 128 N-(5-p-D-Glucosylaminophenoxypentyl) benzamide, schistosomicidal action, retinotoxicity and toxicity of, 14, 468
- Gluta renghas leaves, aqueous extract of, pharmacological actions of, 15, 440
- Glutamate decarboxylase, effect of thalidomide and its metabolites on, 25, 355
- Glutamate dehydrogenase, effect of glutaric acid, isophthalic acid and thalidomide and its metabolites on, **25**, 355

Glutamic acid, chromatography of, 25, 329—, effect on peristaltic reflex, 15, 219

- -, effect on trypanocidal action of butarsen, 14, 434 , *in-vitro* oxidation by liver, effect of chlorpromazine, 2,4-dinitrophenol, reserpine and salicylate on, 15, 175
- , response of blood pressure to, 22, 116 D-Glutamic acid, effect on L-glutamate decarboxylase, 25,
- effect on ventral root potentials in spinal cord, 16,
- , neuronal excitation by, 23, 313 L-Glutamic acid, effect on uptake of 5-hydroxytrypto-
- phan by brain slices and on 5-hydroxytryptophan decarboxylase, 20, 183
- -, effect on ventral root potentials in spinal cord, 16, 262
- —, neuronal excitation by, 23, 313
- -, —, effect of derivatives of lysergic acid, phenethylamine and tryptamine and other compounds on, 20, 473
- , effect of 5-hydroxytryptamine on, 18, 221 DL-Glutamic acid, effect on glutamate dehydrogenase, 25,
  - effect on ventral root potentials in spinal cord, 16,
- Glutamine, chromatography of, 25, 329
- L-Glutamine, effect on glutamate decarboxylate and glutamate dehydrogenase, 25, 355
- , effect on teratogenic action of thalidomide, in rabbit, 25, 356
- DL-Glutamine, effect on glutamate decarboxylase, 25, 355 -, effect on teratogenic action of thalidomide, in rabbit, 25, 356
- -, embryotoxic action of, in rabbit, 25, 358

Glutamine synthetase, effect of thalidomide and its metabolites on, 25, 353 Glutaric acid, effect on glutamate dehydrogenase, 25, 355 a-Glutarobetaine, effect on ventral root potentials in spinal cord, 16, 262 Glutathione, effect on peristaltic reflex, 15, 219 effect on trypanocidal action of organic arsenicals, **14**, 436 -, reduced, estimation of, 16, 181 -, in liver, effect of benzoate, 2,4-dinitrophenol, gentisate, hydroxybenzoates, phenazone and salicylate on, in male and female rats, 16, 180 Gluten, effect on intestinal absorption of folic acid, in rat, , wheat, antiperistaltic factor from, and effect of incubation with adenosine deaminase and intestinal mucosa on, 21, 238 -, ultrafiltrate from, effect on electrocardiogram, 21, 241 -, effect on neuromuscular transmission, 21, 240 -, effect on response of phrenic nervediaphragm preparation to electrical stimulation, 21, 240 -, effect on response of small intestine to coaxial stimulation, 21, 242 , response of blood pressure, heart beat and striated muscle to, 21, 240, 241 -, spasmogenic action of, 21, 240 Gluten fractions, effect on release of acetylcholine and synthesis by small intestine, 15, 575 , effect on response of small intestine to acetylcholine, electrical stimulation and substance P, 15, -, inhibitory action on peristaltic reflex, **15**, 219 -, —, mechanism of, **15**, 574 Glutethimide, effect on ganglionic transmission, 23, 244 -, effect on pain, in mouse, 24, 174 , effect on hypnotic action and metabolism of pentobarbitone, and action of ethionine and proadifen (SKF525A) on, in rat, 18, 30 -, hypnotic action and toxicity of, 25, 794 , in-vitro metabolism of pentobarbitone by liver slices from rat pretreated with, and effect of ethionine on, 18, 35 DL-Glyceraldehyde, effect on action of polysaccharides on capillary permeability, in rat, 25, 605 Glycerol, intravenous, effect on haemoglobin in plasma and urine, in sheep, 13, 387 Glyceryl trinitrate (nitroglycerin): , response of atherosclerotic heart to, 15, 336 Glycide 3,4-xylyl ether, properties and synthesis of, 13, 429 Glycine, effect on peristaltic reflex, 15, 219 -, effect on trypanocidal action of butarsen, 14, 434 , effect on ventral root potentials in spinal cord, 16, -, intravenous, incorporation into pancreatic protein, and effect of atropine on, in rat, 13, 72 6- and 7-Glycine bradykinin, response of small intestine to, effect of chymotrypsin on, 24, 486 Glycocyamine, effect on ventral root potentials in spinal cord, 16, 262 , inhibitory action on histidine decarboxylase, 15, 552 Glycogen, in endometrium and horns of uterus, and

effect of adrenaline on, 16, 125

Glycogenolytic action, of adrenaline, 16, 126

127

, stores of, effect of fasting and hypoglycin-A on, 13,

Glycogenolytic action (cont.) , of adrenaline and isoprenaline, effect of fasting on. in rat, 22, 271 Glycollic acid, effect on response of uterus to bradykinin and oxytocin, 25, 422 Glycosides, cardiac, and their aglycones, duration of action, excretion and lethal doses of, 14, 174 -, potentiation of cardiac response to adenosine by, in guinea-pig, 14, 175 See also Ouabain Glycylglycine, effect on peristaltic reflex, 15, 219 Glycylglycylglycine, effect on peristaltic reflex, 15, 219 Glycyl-3,4-xylidide, effect on influenza virus in tissue culture, properties and synthesis of, 13, 424 Glyoxime, toxicity of, 13, 202 Glyoxylamides, substituted, pharmacological actions, synthesis and toxicity of, 23, 43 Goldfish, isolated intestine of, assay of substance P on. 17, 451 Gonadotrophic action, and gastric antisecretory action, of chorionic gonadotrophin and urogastrone, 20, 534 Gonadotrophin, chorionic, gonadotrophic and gastric antisecretory actions of, 20, 534 , response of sex organs to, effect of chlorpromazine and perphenazine on, in immature mouse, 20, 501 Gonadotrophins, in pituitary, effect of chlorpromazine and perphenazine on, in rat, 20, 503 Gramine, response of Venus heart to, 15, 377 Granulomata, cotton-pellet-induced, effect of iproniazid on, 14, 485 Griseofulvin, in-vivo and in-vitro metabolism of, effect of phenobarbitone on, 22, 137 Growth. See Body weight Growth-retarding action, of cortisone and hydrocortisone acetates, in rat, 13, 95 -, of dextran sulphate, 13, 110 , of hydrocortisone, prednisolone and prednisone, in rat, 13, 99 Guanethidine, adrenergic action of, mechanism of initial phase of, 20, 362 , adrenergic blocking action of, mechanism of, 25, 171 -, blocking action on neuromuscular and sympathetic ganglion and postganglionic nervous transmissions, **20**, 378 , effect on action of adrenaline and noradrenaline on response of uterus to acetylcholine, 21, 361 , effect on action of anticholinesterases, catecholamine metabolites, monoamine-oxidase inhibitors and pyrogallol on response of hypogastric nerve-vas deferens preparation to electrical stimulation, 24, 645 , effect on action of imipramine on toxicity of yohimbine, 21, 57 effect on action of reserpine on response of Finkleman ileum preparation to electrical stimulation, 19, 90, 92 effect on amines and their acid metabolites in brain, 24, 768 , effect on catechol amines in heart, action of hemicholinium, and effect of choline, 22, 241 , and action of  $\beta$ -methylxylocholine, 22, 238 -, effect on catechol amines in tissues, 24, 42 -, effect on ganglionic action potentials, 24, 36 -, effect on gastrointestinal propulsion, 20, 47 , effect on hyperlipaemia and hypercholesterolaemia induced by surface-active agent, in rat, 23, 450 effect on hypothermia and tremor induced by Tremorine, 25, 447, 450 , effect on neuromuscular blocking action of decamethonium and tubocurarine, 17, 377

## 146 Guanethidine (cont.) -, effect on noradrenaline in brain and sympathetic ganglia, and pharmacological actions of, in cat and rabbit, 18, 114 , effect on noradrenaline in heart, 18, 122; 23, , and action of reserpine, 20, 574 , effect on noradrenaline in heart and spleen, action of dexamphetamine, 20, 25 , effect on noradrenaline in heart, dopamine-βoxidase, eyelid and monoamine oxidase, 24, 409 , effect on pressor action of blood from spleen, 20, , effect on pressor amines in denervated and innervated iris, 20, 46 , effect on release of catechol amines from rat heart, and action of bretylium and pheniprazine, 20, 59 -, effect on release of noradrenaline from spleen in response to sympathetic stimulation, 20, 130, 172 -, effect on release of noradrenaline from splenic nerve endings, in cat, 18, 161 -, effect on release of vasopressor substances from adrenal medulla in response to sympathetic stimulation, 20, 175 , effect on response of auricular beat to butyrylcholine, noradrenaline and tyramine, 17, 234 -, effect on response of auricular beat to sympathetic and vagal stimulation, 17, 257, effect on response of blood flow to adrenaline and noradrenaline, 25, 503 , effect on response of blood pressure to adrenaline and guanethidine, 19, 27 -, effect on response of blood pressure to adrenaline, noradrenaline and physostigmine (eserine), in rat, **21**, 273 , and action of noradrenaline, 19, 451 , effect on response of blood pressure to amphetamine and tyramine, 19, 30 , effect on response of blood pressure to angiotensin and noradrenaline, in man, 21, 403 , effect on response of blood pressure to dimethyl-

phenylpiperazinium, noradrenaline and tyramine,

-, effect on response of blood pressure to nor-

adrenaline, and action of dexamphetamine, methyl

, effect on response of blood pressure to physostig-

mine, and action of cocaine, dexamphetamine, imipramine, methyl phenidate and methylamphet-

, effect on response of blood pressure to reserpine,

, effect on response of blood pressure to sympathetic

-, effect on response of blood pressure to tyramine, 18, 482

-, effect on response of blood pressure and heart beat to phenoxybenzamine in ganglionic blockade, 16, 9

, effect on response of blood pressure and heart beat

-, effect on response of blood pressure and nictitating

, effect on response of blood vessels to acetylcholine

, effect on response of blood vessels to adrenaline,

noradrenaline and sympathetic stimulation, 25, 502

, effect on response of blood vessels to noradrenaline,

-, effect on response of Finkleman ileum preparation

membrane to dimethylphenylpiperazinium, 19, 31

and action of iproniazid on, in rabbit, 19, 79

to reserpine in ganglionic blockade, 16, 10

and sympathetic stimulation, 19, 519

to electrical stimulation, 19, 92

phenidate and methylamphetamine, in rat, 24, 625

24, 39

amine, in rat, 24, 624

stimulation, 20, 172, 175

in man, 21, 165

Guanethidine, effect on response of Finkleman ileum preparation to electrical stimulation (cont.) , and action of hexamethonium, noradrenaline and physostigmine (eserine), 19, 88 , effect on response of Finkleman ileum preparation to sympathetic stimulation, 25, 539 , effect on response of heart beat to nicotine, noradrenaline and tyramine, 19, 80 , effect on response of heart beat and small intestine to adrenaline, isoprenaline and noradrenaline, 21, 361 , effect on response of hypogastric nerve-vas deferens preparation to electrical stimulation, and action of carbachol and tyramine, 21, 150 , and action of histamine, 5-hydroxytryptamine and noradrenaline, 19, 93 , effect on response of hypogastric nerve-vas deferens preparation to intramural stimulation, 23, 605 , effect on response of large intestine to nerve stimulation and noradrenaline, 23, 158, 160 -, effect on response of large and small intestine to noradrenaline and parasympathetic and sympathetic stimulation, 19, 258 , effect on response of nictitating membrane to adrenaline and noradrenaline, 19, 27 , effect on response of nictitating membrane to amphetamine and tyramine, 19, 27 , effect on response of nictitating membrane to dexamphetamine, 20, 18 -, effect on response of nictitating membrane to electrical stimulation, 19, 25
-, effect on response of nictitating membrane to sympathetic stimulation, 22, 561 , effect on response of nictitating membrane and small intestine to sympathetic stimulation, and action of cocaine, monoamine-oxidase inhibitors and

action of cocaine, monoamine-oxidase inhibitors and sympathomimetic amines, 18, 421

—, effect on response of salivary glands to noradrenaline, 16, 315

adrenaline, 16, 315

—, effect on response of small intestine to periarterial nerve stimulation, action of noradrenaline, 19, 267

—, effect on response of small intestine to sympathetic stimulation, and action of dexamphetamine, dop-

amine and noradrenaline, 24, 383
—, —, action of methyldopa, α-methyldopamine and α-methylnoradrenaline, 22, 82
—, effect on response of smooth-muscle preparations

----, effect on response of smooth-muscle preparations to acetylcholine and cholinergic-nerve stimulation, 20, 418
 ---- effect on response of smooth muscle preparations

-—, effect on response of smooth muscle preparations to sympathetic stimulation, 22, 349

—, effect on response of spleen to adrenaline, noradrenaline and sympathetic stimulation, 25, 501

---, effect on response of sympathetic nerve-intestinal segment preparation to electrical stimulation, and action of atropine, hexamethonium, hyoscine, mepyramine, neostigmine, physostigmine and vagotomy, 17, 245

effect on response of urinary bladder to dimethylphenylpiperazinium and nicotine, in rat, 24, 594
effect on response of urinary bladder to nerve

stimulation, 24, 182, 596

 , effect on response of vas deferens to acetylcholine, noradrenaline and transmural stimulation, 21, 576

---, effect on response of vas deferens preparations to electrical stimulation, and action of amphetamine, angiotensin, arecoline, carbachol, dopamine, histamine, 5-hydroxytryptamine, metaraminol, methacholine, neostigmine, noradrenaline, physostigmine, potassium ions and tyramine, 25, 244
 ---, and action of carbachol and tyramine 21, 190

Guanethidine (cont.) Guanidine (cont.) -, pain-producing action of, 14, 533 , effect on response of vas deferens to noradrenaline, **21**, 197 , response of blood pressure to, 19, 421 Guanidines, N-aralkyl. See N-Aralkylguanidines
—, NN-disubstituted, effect on ganglionic and neuro--, and action of angiotensin, carbachol, dopamine, histamine, 5-hydroxytryptamine, metaraminol, neostigmine, potassium ions and tyramine, muscular transmission, and toxicity of, 24, 282 , effect on response of blood pressure to **25**. 250 , effect on tachycardia induced by imipramine, in carotid occlusion, nicotine and vagal stimulation, reserpinized rat, 23, 337 24, 287 -, effect on toxicity of yohimbine, 21, 57 Guanidinoacetic acid, depression of cortical neurones by, , effect on uptake of histamine, 5-hydroxytryptamine **23**, 313 and noradrenaline by mast cells, 23, 414 y-Guanidinobutyric acid, effect on ventral root potentials , effect on uptake and release of catechol amines by in spinal cord, 16, 262 heart, in rat, 18, 161; 20, 58

–, hypotensive action of, mechanism of, 19, 74 β-Guanidinopropionic acid, depression of cortical neurones by, 23, 313 -, inhibition of monoamine oxidase by, 19, 82 , effect on ventral root potentials in spinal cord, 16, 262 -, local anaesthetic action of, 25, 539 -, mode of action of, with particular reference to δ-Guanidinovaleric acid, effect on ventral root potentials sympathetic nervous system, 20, 171 in spinal cord, 16, 262 -, nerve-blocking action of, 18, 197 Guanoxan, pharmacological actions of, 24, 29 Guinea-pig, effect of apomorphine on behaviour of, 17, 10 neuromuscular blocking action of, and effect of decamethonium, physostigmine, potassium ions, temperature and tubocurarine on, 17, 372 , histochemical cholinesterase activity in central nervous system of, 16, 225 , pharmacological actions of, comparison with *in-vitro* histamine release from tissues of, by antihistamines, 15, 397 bretylium, 19, 13 -, positive inotropic response to, mechanism of, 20, 56 -, metabolism and excretion of di(p-aminophenyl) sulphoxide in, 15, 160 pressor action of, origin of, 20, 173, 174 -, purgative action of, 17, 445 -, response of blood pressure to eledoisin in, 20, 522 -, response of blood pressure to, 19, 27 -, toxicity of oximes to, 13, 203 Gut, trout, mechanism of autonomic nervous control of, -, effect of adrenalectomy on, 22, 241 , and effect of adrenalectomy, iproniazid, **13**, 216 reserpine and splenectomy on, in cat, rabbit and rat, response to nerve stimulation, and effect of **19**, 76 adrenaline, atropine, hexamethonium, nicotine and piperoxan on, 13, 221 , effect of adrenalectomy and phenoxybenz--, spontaneous motility of, and effect of various amine on, 20, 174 effect of BW392C60, bretylium and cocaine substances on, 13, 217 on, 22, 241 See also Gastrointestinal tract , and effect of development of tachyphylaxis to α-methyltyramine and tyramine on, 21, 89 Н -, effect of 3-phenoxypropylguanidine on, 18, 483 See also hypotensive action of; and pressor action of above HP 1325. See p-Di(2-hydrazinoethoxy)benzene H-acid, subcutaneous, effect on haemoglobin nitrite , response of heart beat to. 19, 79 sensitivity reaction, 19, 492 , and effect of dichloroisoprenaline on, 20, 56 Haematinics, iron, parenteral, distribution of, in lactatand effect of noradrenaline and reserpine on, ing, nonpregnant and pregnant rats, 22, 275 Haematinic action, of iron-dextran injection and oral 20, 570 , effect of reserpine on, and action of norferrocenes, 24, 352 Haematological effects, of gadolinium and samarium ions, adrenaline, 20, 58 , response of nictitating membrane to, 19, 24, 79; in rat, 17, 528 Haemoglobin, degradation by proteolytic enzyme from Schistosoma mansoni, 14, 70 **20**, 40; **25**, 535 , response of peripheral blood vessels to, and effect of phenoxybenzamine on, in man, 21, 165 , intracellular, in-vitro oxidation by nitrite, effect of , sialogenous action of, effect of dihydroergotamine teratogenic and related dyes and other substances and Hoechst 9980 on, 22, 121 on, 19, 492 sympathetic blocking action of, effect of cocaine, Haemoglobinaemia, induction by propylene glycol, in dexamphetamine and noradrenaline on, 20, 17 sheep, 13, 385 -, sympathetic blocking and tissue-amine-depleting Haemoglobinuria, induction by acetyltropeïne derivatives actions of, 17, 442 -, uptake by heart, effect of guanethidine and reserpine on, in rat, 25, 172 and antiparkinsonian compounds, 14, 565 , induction by propylene glycol, in sheep, 13, 385 Haemolysins, staphylococcal. See under Staphylococcus Guanidine, and its derivatives, effect on neuromuscular and ganglionic blockade, 19, 414 a-Haemolysin. See a-Toxin β-Haemolysin, effect on Entamoeba histolytica and Paramecium caudatum, 18, 304 effect on circulatory and respiratory reflexes, 14, , effect on response of small intestine to bradykinin, -, effect on response of nictitating membrane to **18**, 307 Haemolytic action, of bile salts, digitonin and saponin, adrenaline, indirect stimulation and noradrenaline, effect of quinidine on, in vitro, 13, 175

–, of Colisan and staphylococcal haemolysins, 17, 163 effect on vagal blockade induced by ganglionblocking agents, 19, 424 -, of iron-dextran and saccharated iron oxide, 17, 362