Air flow meter, Unico Flo-Master 1129

packaged, Toroidal, for process heating 145

Air injection reactor system for smoke pollution 249

Air jacket recirculating principle for annealing

Air Registration Board, aircraft maintenance

Air system equipment (trade publication) 1100

Air tables, by D. P. Jordan and M. D. Mintz (book)

Air Transport Association of America, ATA 100

piston and prospects of British. Letter 1113

automatic landing system, flight control and,

Belfast military freighter with Smiths Series 5

Boeing 747 airliners, Pan American Airways

Boeing supersonic transport aircraft develop-

Breguet Jaguar supersonic strike figher/trainer

CL-215 amphibian water-bomber or transport,

Concorde supersonic airliner, comparison with

Boeing 707 airliner crash near Tokyo 666

Britannia airliners, maintenance of 489

Olympus 593 turbojet testing for 992

structures laboratory project, RAE

Dornier Skyservant feeder airliner 941

Gyroplane, A2 one-man, McCandless 537

helicopter, AAFSS folding-blade 193

Jetstream twin turbo-prop 232, 329 Ling-Temco-Vought A-7A Corsair-2 262

Ling-Temco-Vought X142 278

maintenance of airliners 485

Handley Page Jetstream, details of 232, 329

hydraulic motors for, Vickers Sperry Rand 608

hydraulic pumps for, Vickers Sperry Rand 608

hydraulic system inspection and maintenance 492

hydraulic system swivel pipe couplings (trade

Lockheed C5-A high-wing jet submission

Lockheed supersonic transport aircraft develop-

of the World, by W. Green and G. Pollinger

One-Eleven airliners, maintenance of 486

Sikorsky stowed rotor V/STOL 193

Trident airliner, maintenance of 491

US-West German fighter project 852

Viscount airliners, maintenance of 489

circulation-control rotor studies 993

Aircraft access and handling equipment 489

Aircraft carrier, purchase of, Labour/Tory policies

Aircraft communication and flight control equip-

1

supersonic transport developments 223

Vickers VC10 airliners, maintenance of 486

V/STOL, lift-jet engine for, Allison/Rolls-Royce

de Havilland Canada Twin Otter feeder airliner

flight control and automatic landing system,

Smiths Series 5, Belfast military freighter

Farn-

progress and cost report 482

flight control and automatic landing system

Smiths Series 5, Belfast military freighter with

Air League, Memorandum on Defence 173

Air Show, German, Hanover, exhibits at 941

Air League's defence memorandum 173

airliner(s), maintenance of 485

requirements of BEA 852

Air pollution. See Pollution; Smoke

Air heater(s)

GW Heat-Pak 308

furnace 948

Air motors, Gast 963

schedules 485

classification 486

safety of 485

order for 758

Canadair 645

U.S. SST 223

borough 1072

ments 223

1120

1120

941

941

with 1120 Galion airbus 666

HBN-100 airbus 941

publication) 832

transport 758

ments 223

(book) 414

852

on 471

safety of airliners 485

servicing equipment 489

VFW-G14 short-haul 941

VTOL, and urbanization 278

see also Aviation; Airport

arrester gear for 282

Air stream mill 460

47

Aircraft

## Α

- Abarth, exhibits at Geneva Salon 590
- Abbotsinch Airport, Glasgow 852
- raising steel roof for hangar 354 Aberdare Holdings Group 168
- Abram, J., on Tensor Calculus through Differential
- Geometry (book) 363 Abramovitz, G., fluorescent desk lamp 866
- Abrasive-belt grinding. See Grinding
- Abrasive disc, flexible, with bayonet locking 909
- Abrasive materials, centrifugal pumps for 1096 Abrasive wheel cut-off machine 650
- ABS. See Acrylonitrile-butadiene-styrene
- Abu Simbel temples, removal to higher ground
- 127–9 Academic freedom and management education, by
- Sir Noel Hall 59 Acbars Ltd., Graffenstaden horizontal milling
- machine 763 Accelerators, linear induction motor 840
- Access Equipment Ltd., hydraulic work platforms
- 490 Accident(s)
- Boeing 707 airliner crash near Tokyo 666
- industrial, publication on 320 railway, due to wheelburn at Hest Bank 851
- road, prevention activities, Ford 336. Letter 940
- simulation and investigation, Ford 336, 337 street lighting in 284
- see also Explosion
- Accident records in buildings 573. Letters 626, 754
- Accles and Pollock Ltd., tube (trade publication) 1016
- Accommodation, mobile site, caravan as 401
- Accudata 104 dc amplifiers 964
- Accuratool automatic capstan lathe 763 Acetate sheet, Claritex, for building sites 540
- Acetylene, explosion hazards 1078
- Wulff process 1160
- Acetylene making, hydrocarbon cracking for 1160
- Acetylene making plant, Chemieanlagen 1158
- ACF Industries, rail tank cars 233 Ackermann steering for Hydrocar amphibious vehicle 229
- Acor Electrostatic copying machine 509
- Acradrive hydraulic servo motors, Cincinnati 648
- Acramatic numerical control systems 648, 871 Acridet 110 chemical cleaner 459
- for boiler cleaning 819
- Acrow Ltd., tunnels for Plover-Cove reservoir 596 Acrylic finish, textured, Armour 1632 46
- Acrylic sheet, extrusion of 1111
- Acrylonitrile-butadiene-styrene for CRV 5 motor car body 949
- Action Data Automation Weapon System 427
- Actuators, electric 401 hydraulic, Armstrong double acting, for winch 409
  - linear induction motors as 839

Ad. Auriema Ltd., panel cable connector 1129 temperature recorder 1041 vacuum furnace 917

- Adams, Graham, Ltd., semi-trailer/tractor unit 807 Adcock & Shipley (Sales) Ltd., Bridgeport Line-a-Mill milling machine with line tracing 1088
- Moog Hydra-Point milling machine 408 Additive, anti-friction, for Castrol engine oils 912
- Additive-treated diesel oil 995
- Adhesive(s)
- building applications (trade publication) 104 epoxy resin, for floor coverings 46
- Advance(s)
- in automatic control (book) 877
- in machine tool design and research 1965, by S. A. Tobias and F. Koenigsberger (book) 1057
- Advance Domestic Appliances Ltd., Westinghouse SUF4NXW dishwasher, 31, 35
- Advance Electronics Ltd., low-frequency oscillator 1042
- signal generator 1137
- timer/counter 1137
- valve voltmeter 962 Advanced propulsion systems (trade publication)
- 1100 Advertising and management consultants 799 AEC Ltd.,
- Mercury 505 tractor with Dynasty semi-trailer 413
- motor vehicle tractors for container carriage 438

- production control system 144
- AEG Ltd., gas turbine development 528 Telefunken KL65X tape recorder 133, 135
- AEI. See Associated Electrical Industries Ltd.
- AEI-Birlec Ltd., automatic billet heating plant 38 induction melting furnaces (trade publication) 743
- AEI Construction (Cables & Lines), cable laying to Western Isles 802
- polythene insulated cable in Persian Gulf 961 AEI Electronics, Axiamatic numerical control
- equipment 869
- closed-circuit television application in church 961
- computer for Oldbury power station 1118 light element attachment for micro-analyser
- 1170 AEI Electronics (Manchester) Ltd., ion pressure gauge 742
- AEI-Herr Ltd., strip processing plant 37
- AEI-Hotpoint, Automatic-1501 washing machine 866
- model 6204 electric cooker 386 AEI International, Central Costanera power station 773
- AEI Lamp & Lighting Co. Ltd., Kite-mark approval licences 639
- Xenon tube lamps 545
- AEI (Manchester) Type AL2 electric locomotive 720
- AEI 1040 computer, Oldbury power station 1118 AEI (Rugby) Ltd., multiple-unit trains for London Midland Region 21
- Type ALI electric locomotive 719
- AEI Telecommunications, activities at Hartlepool factory 1111
- Aeon Products (London) Ltd., rubber suspension kit for Landrovers 822
- Aerex Ltd., Axiform axial-flow fan 1008
- Reflow axial-flow recirculating fan 509 Aerial(s)
- steerable
- Cassegrain arrangement 1124-6
- design and construction of large 1122
- horn antenna at Andover, Maine 1122
- horn reflector 1124
- microwave problems, G. L. Hutchinson 1122 multi-dish 1126
- multi-element or phased 1126
- paraboloidal reflectors for 1123
- spherical dish 1126
- structural design aspects 1070
- Aerial observation cars for Lebanon 100
- Aerial ropeways and funicular railways, by Z. Schneigert (book) 785
- Aeroglide air cushion conveyor 1010
- Aeronauts, The, by L. T. C. Rolt 313
- Aeroplane, invention of, by C. Gibbs-Smith (book) 785
- Aerosol 2A-X, easier-to-use 37

dictating system 784

- Aerospace Development Council 222
- Aerospace Research and Development, meetings of 744

Ager, D. V., on Introducing Geology (book) 656

Air conditioning. See International Heating, Ven-

Air conditioning control equipment, Satchwell 686

Air conditioning system design, handbook of

Air Flo Heating Supplies Ltd., warm air ducting

tilating and Air Conditioning Exhibition

Aertssen, G., ships' trials results 669 Aga Dictating Machine Co. Ltd., Agavox centralized

Agavox centralized dictating system 784

Agg, P., Iso Grifo motor car 1076

Aigner, V., switching surges 1163

Air bar guide for web strip 553

Air buoy for SCUBA diving 718

Air-conditioning plant

(book) 1183

Air conditioning unit

clean room 740

liner Queen Elizabeth 671

packaged, Cyclopac 686

Air control valve, ASCO 1130

(trade publication) 1184

Air diffuser, Liniajust 643

Stylovent Mark 3 206

microcircuit production 607

Air compressor. See Compressor Air conditioner, Computaire 739

Air, compressed. See Compressed air

Air accessories (trade publication) 656

Air conditioning equipment, Felvic 828

- ment, maintenance of 491
- Aircraft engine
- Conway by-pass jet engine 518
- gas turbine, principles of 517, 518
- gas-turbine vertical-take-off, Rolls-Royce 946 jet, review of 25 years of 944
- lift-jet for V/STOL aircraft, Allison/Rolls-Royce 852
- merger examination by Rolls-Royce and Bristol Aeroplane 1064
- Olympus 593 turbo-jet engine 518
- testing for Concorde supersonic airliner 992 Olympus 593B, development of 482
- overhaul procedure 491
- turbofan, review of progress and types 945 turbojet, review of progress and types 944 turboprop, review of progress and types 945 turboshaft, review of progress and types 946
- Aircraft engine control by computer, NGTE 993 Aircraft Ground Equipment Ltd., aircraft servicing equipment 488
- Aircraft hangar, raising steel roof for 354 Aircraft industry
- Air League's plan for 173
- European collaboration in, H. Conway 842 Ministry of Technology's responsibility for 1147 mismanagement allegation. Letter 1113 Plowden Report on 222
- Aircraft structures laboratory, RAE Farnborough 1072
- Airmaster Engineering Ltd., dust extraction unit (trade publication) 1058
- Airmax fans 547
- Airmec Ltd., Autoset Type N410 positional controller 871
- inductive proximity switch 954
- Airpax Electronics Inc., amplifier (trade publication) 970
- long reach magnetic pick-up 1004 Airport
- Abbotsinch 852
- raising steel roof for hangar 354
- Dulles international, Washington 240-1, 243
- John F. Kennedy 236
- London, maintenance organization 485
- terminal buildings 236, 242, 243
- Mangere international, New Zealand 241
- Renfrew, closure of 852
- Woolsington, redevelopment 1166 Airport passenger terminals, symposium 173, 236 Airport terminal buildings
- design 236
- finger type 238
- hub type 238
- London (Heathrow) 236, 242, 243
- satellite form 237
- starfish design 236
- Toronto 231, 241
- Airscrew-Weyroc Ltd., exhibits at HIVAC 686 Aitkin, A. P. H., textile mill in Guinea 849 A.I. Welders Ltd., activities of 892
- Ajax Equipment, hopper overflow return device 909
- AK Fans Ltd., Airmax fans 547
- Akers, L. E., structural chipboard 1050
- Akroyd, T. N. W., fire and building regulations 626. Letter 754
  - prestressed concrete 618
- Aladdin Industries Ltd., activities of 1111
- Alarm system
- burglar (trade publication) 970
- computer-based, Oldbury nuclear power station 1118 remote telephone, Dialarm (trade publication) 743
- trade publication 610
- Albers, A., model tests on cable roof 780
- Alcan Industries Ltd., 80-ton aluminium alloy rail tank wagon 512
- Aldershot district heating system, Perma-Pipe mains for 388
- Aleksandrov, N. N., on Production Technology and Properties of Heat Resisting Cast Iron (book) 1183

Alfa Romeo Spider motor car 1077

- Algebra, matrix, for engineers, by J. M. Gere and W. Weaver (book) 364
- Algeria, pipeline for, opening of third 573
- Alignment, optical mask, and exposure system 952
- All American Engineering Co., aircraft arrester gear 282 Allan, W. B., fibre optics 1188
- Allan, W. H., 70 mph Jaguar 626
- Allaway, F. H., noise in factories and offices 530

2

Allen, Austin, injection moulding machine 1095

Allen Clark Research Centre, Caswell 1181 Allen, G. Freeman, on British Rail after Beeching (book) 555

American Institute of Timber Construction, Timber

American Motors, AMX experimental coupe 760

American railroads and the transformation of the

American Society of Mechanical Engineers, con-

gas turbine conference, 428 522, 581 American Society for Metals, Diffusion in Body-

ante-bellum economy, by A. Fishlow (book)

Construction Manual (book) 1183

ference on mechanisms 786

Ammonia for fertilizer industry 1160

exhibits at ISE exhibition 952

integrated-circuit, Electrosil 964

Amplifier micro-circuit, Marconi 263

Analogue-to-digital converter 1045

Amsterdam, grain handling installation 597

oxygen, battery powered portable 1094

Anderson-Grice Co. Ltd., stone saw 307

Anemometer, miniature, Projectina 691

and Continuous Beams (book) 48

Angle irons, slotted (trade publication) 924

Anglo-American Racers, activities of 1036 Anglometric English/Metric micrometer 910

J. de S. Coutinho (book) 104

Atomic Energy (book) 513

Apollo series spacecraft projects 580

Analyser, fluorescence (trade publication) 1142

and design, gas turbine fuel controls (book) 1057

by vacuum spectrometer, thin suction samples

of framed structures, by J. M. Gere and W.

Anderston Clyde Engineers Ltd., container handling

Anderton Springs Ltd., circlip data (trade pub-

Andre Rubber Co. Ltd., Rota and Rotaflon bearings

Anger, G., on Deflection Ordinates for Single-Span

Angus, George, & Co. Ltd., oil-seal test equipment

Anic S.p.a., water demineralizing plant for Sicily

Annals of reliability and maintainability Vol. 4, by

Annealing furnace, air jacket recirculating principle

Anodic oxidation for thin film integrated circuits 253

Anthony, L. J., on Sources of Information on

Anti-discharge varnish for electrical stress 965

Anti-seize and jointing compounds (trade pub-

APECO Ltd., Super-Stat electrostatic copying machine 649

Apex Construction Ltd., Series 175 hydraulic

Application of matrix theory to electrical engineering,

Applied Bessel functions, by F. E. Relton (book) 923

Applied chemistry for engineers, manual of, by

F. G. Buttler and G. R. Cowie (book) 556

Applied differential equations, by G. Feineman, S. Garrett and A. Kraus (book) 743

Applied science, in schools, 4. Letters 169, 425

Applied science department, Reading University

Applied science/engineering project work, con-

Apprentice competition, international (Utrecht)

Apprenticeship partnership, Engineering Industries

Apprenticeship scheme, Inner London Group 1108

APT Electronic Industries Ltd., APTEC Transcoder

Apprentice(s), project training, Letter 65

Apprentice training, British Railways 679

National foundry, awards in 983

by W. E. Lewis and D. G. Pryce (book) 923

chopper, low-drift 1092

dc, Accudata-104 964

trade publication 970

Centred Cubic Metals (book) 48 AMF Thermatool Inc., high frequency resistance

Ammonia making, Casale process for 1162

Ammonia synthesis plant, Power-Gas Corp.

Ammonia making plant, Grande Paroisse 1162

Amphenol Ltd., BNC range of connectors 952

Amphibious vehicle. See Motor vehicle, amphibious

micro-electronic dc, Solitron Devices Inc. 1129

1162

1057

Amplifiers

Analysis

for 1088

lication) 464

814

305

1079

for 948

lication) 1142

presses 39

1068

1151

ference on 984

toolmaking 935

Group 1108

teaching machines in 18

tape editing set 953

Weaver (book) 208

equipment for ships 712

welding 249

- Allen, H. N. G., message to ENGINEERING 65
- Allen, John, & Sons, Merlin ride-on rotary mower 667
- Allen, P., on Round the World on Narrow-Gauge Railways (book) 1015
- Allen, P. W., & Co., ultra-violet hand lamp 260 Allen West Automation Ltd., data collection and recording systems 953
- T-law logicon trainer 545
- Allen West & Co. Ltd., exhibits at Electrical Engineers' Exhibition 545
- Allen, W. H., Sons & Co. Ltd., pump manufacture rationalization move 372
- Allison, R. F., on High Fidelity Systems (book) 1141 Allison Torqmatic semi-automatic gearbox 807
- Allmanna Svenska Elektriska AB, anti-discharge varnish for electrical stress 965
- Allott, C. S., & Sons, Ferrybridge C power station 445
- Alloy(s), binary, constitution of: first supplement, by R. P. Elliott (book) 877
- see also under specific alloy types
- Alloy Steel Rods Ltd., high precision rod mill 1139
- Allsop, E. W., manpower conference 477
- Allwood, R. J., computer analysis of motor-car
- underbody 479
- Almquist, stainless steel cladding, 141
- Alpine truck-mounted crane 959
- Alsthom, gas turbine development 528 Pierre-Benite power scheme 864
- quill drive 720 rubber cone pivot body suspension 720
- Alternators
- Ferrybridge C power station 451
- hydrogen cooled 1040
- turbo, for Chavalon sur Vouvry power station 1039
- water/hydrogen cooled type 452
- see also Generator; Turbo Alternator control, Gecostat 16/80 static exciter for 1003
- Alumina, flame-sprayed coatings 539
- Aluminium
- Arvida road bridge in 427
- in industrialized building, L. P. Bowen 1048

Aluminium billet lathe, John Holroyd 1136

Aluminium building sheet, ribbed, vinyl coating of

Aluminium evaporation plant for micro-circuit pro-

Aluminium Federation, survey of aluminium in

Aluminium foil for telephone cable jointing and

Aluminium Foils Ltd., aluminium foil for telephone

Aluminium Laboratories Ltd., aluminium alloy rail

Aluminium plant at Fort William, British Aluminium

Aluminium-silicon alloy(s), hypereutectic 1174

Aluminium-silicon alloy pistons, die casting of 1173

Aluminium-zinc-magnesium alloy, Hiduminium-48

Amalgamated Engineering Union, formula for

Amalgamated Union of Engineering and Foundry

Amalgamated Union of Foundry Workers, formula

America. See North America; United States; Latin

American automobile, by J. B. Rae (book) 785

American Brake Shoe Co., Multipress hydraulic press 828

American Institute of Metallurgical Engineering,

gold-silver diffusion, Hilliard and Cook 652

amalgamation with Foundry Workers' Union

Aluminium bronze, die casting of 1174

cable jointing and repair 1087

- irrigation pipe fittings 152 melting and holding furnace for 948
- structural design, by L. P. Bowen (book) 969 world survey 427
- Aluminium alloy(s), melting furnace 1054

1090

duction 606

service 427

repair 1087

848, 892

621

Workers 621

America

tank wagon 513

(trade publication) 743

for amalgamation 621

American, see also United States

Ambulift lifting device for patients 995

Aluminium alloy articulated road tanker 513

Aluminium bulk container 1044

Aluminium alloy footbridge 330 Aluminium alloy rail trank wagon, 80-ton 512

steel industry, computers for 997

numerical control systems 871

Diamond Jubilee medal awards 941

careers masters conventions 328

Autoset Type N410 positional controller 871

Avalanche diode, Engineering Outline 657

educational role of establishments 473

sea station communications system 667

AutoWard fully automatic plug programmed

Auxiliary Rolling Machinery Ltd., slitting machine

Aveling-Barford Ltd., on Hundred Years of Road

Avery weighing machine for artificial kidney

Aviation Traders (Engineering), maintenance of

Avica Equipment Ltd., hydraulic swivel couplings

Avon Mark 1533-L gas generator, Rolls-Royce 292

supercritical boiler for Drakelow C power

Babcock & Wilcox (Materials Handling) Ltd.,

Bagshawe & Co. Ltd., conveyor system (trade

Bahrain, ground station for satellite communica-

Baier MF63 chasing machine for brick walls 551

Bailey & Mackey Ltd., pressure operated switch

Bain, William, & Co. (Wire Products) Ltd., plastic

Baird, K., skills analysis training at Perkins Engines

Bakelite Ltd., bulk handling plant for polyethylene

Baker, G., president of Engineering Employers'

Baker, Sir John, teaching of engineering design 751

Baker Perkins Ltd., Ribbon-Flo continuous sand

Bale-O-Matic holding furnaces, Morganite oil-

Balfour Beatty & Co. Ltd., Dungeness B nuclear

Baling press, hydraulically powered, Greenwood

3

Bahco Ltd., portable workshop fan 1178

covered chain link fencing 303

Baines, G., Chester inner ring road 812

Baker, R. G., any wrought iron? 626

Balancing machines, armature 552

Kainji dam project 73, 77, 80

Baling machine, Electrobale 357

rail/road low loader vehicle 1091

Bakerloo Line, history of 536

power station 942

& Batley Ltd. 1009

Ball bearings. See Bearings

scrap, Eldair 600

Baird, J. L., fibre optics 1185

Federation 423

mixer 1056

fired 499

mechanized gangways for Hong Kong ocean

Axia Fans Ltd., tubular centrifugal fans 962

Axiamatic numerical control equipment 869

Aylen, I. G., assistant secretary, CEI 59

Babb, A. S., stress analysis of rails 851

Ferrybridge C power station 445

station 343, 344, 345

telescopic gangways 234

collaboration with schools 327

tion Exhibition

see also Motor car

Holloway 633

(Munich) 786

design projects 328

graduate recruitment 327

capstan lathe 767

steel strip slitting line 154

Rollers (book) 313

equipment 603

dissolution of 1147

Aviation, Ministry of

airliners 486

(trade publication) 832

Axiform axial-flow fan 1008

Babcock & Wilcox Ltd.

terminal 1127

tions 1154

778

67

1044

publication) 1100

В

Avo transistor and diode tester 951

1179

university scholarships 328

Automotive Products Group

1131

see also Instruments, Electronics and Automa-

Automation Engineering Systems Ltd., Varysec

Automill-2 milling machine, numerical control of

Automobile, American, by J. B. Rae (book) 785

Automobile Association, computer centre at

Automobile Technical Congress, International

- Lektrokit rack system with enclosure panels 205 APTEC Transcoder tape editing set 953
- Aquaglider air-assisted planing vessel 70 Aquapac Coalmaster boilers 187

Arc welding. See Welding

- Arch, W. H., lifting heavy loads to great heights 940
- ARCH 1000 computers, Elliott 251 Archaeology

industrial

- by K. Hudson (book) 363
- note on 1099
- Archdale, James, & Co. Ltd., heavy duty tape controlled drilling machine 766
- Archer, L. B., hospital bedstead 574
- Architect, becoming an (trade publication) 48 naval. See Naval architect
- Architectural Consortium for Education, Metropolitan, formation and activities 1108
- Architecture, school, home counties consortium on 1108

Archives, Business 860

- Arkon Instruments Ltd., pressure and draught measurement recorder 687
- Arlett, synchronous motors for slow speed 304 Armature balancing machines 552
- Armour Hess Chemicals Ltd., road surfacing (trade publication) 1142

Armour 1632 textured acrylic finish 46 Armstrong-Blum Manufacturing Co., Marvel hori-

- zontal hydraulic bandsaw 148
- Armstrong double acting hydraulic actuators for winch 409 ARO Machinery Co. Ltd., spot welding gun for
- concrete reinforcement 147 Arrester gear for aircraft 282
- Arrow Ltd., high torque gearbox 352
- Art in engineering 887
- Art exhibition of engineering components proposal 329
- Arthur, H., postgraduate courses 934
- Arthur Report on postgraduate courses 934 Arthurs, A. M., on Probability Theory (book) 103
- Artificial hand, nerve-controlled, NRDC 688
- Artificial kidney treatment, equipment for 603 Arup, O., award of RIBA Gold Medal for Archi-

tecture 9 road planning 111

- Arup, Ove, & Partners, suspension buildings 907 Sydney Opera House 733
- Tolworth Broadway building 907
- Arvida road bridge in aluminium 427
- Asbestos jointing (trade publication) 656 Ascension Island, paraboloid disk aerial 1124
- ASCO air control valve 1130
- ASEA, diodes and semiconductors 782 lightweight electric motors 782
- ASEA (Great Britain) Ltd., anti-discharge varnish for electrical stress 965 impulse tester for hidden fault detection 829
- low frequency test set for insulation 1004 motors with built-in brakes 1005 pushbutton and signal lamp units 352

Ashford, J. P., long term creep behaviour 780

Ashton, W. D., on The Theory of Road Traffic Flow (book) 969

Askegaard, V., model tests on cable roof 780

- Aslib, Engineering Group's conference 609
- Asquith Machine Tool Corp., take-over bids for 323 Asquith Power-thrust radial drilling machines with Hymatic-Hydrovane packaged unit compressor 830
- Asquith, William, Ltd., horizontal drilling machine with numerical control 94
- Assembly work, tape-recorded instructions for 193 Associated British Combustion Ltd., automatic control in tanker *Esso Lancashire* 396
- Associated Electrical Industries Ltd. axial condenser for Ferrybridge C power station
- 452
- cascade voltage transformer 548
- Central Costanera power station 773
- Drakelow C power station 343 electric motor cars 640
- Ferrybridge C power station 445
- gas turbine development 429
- Harlow Research Laboratories 252
- merger of domestic appliance interests 1025 moisture meter for moulding sand 1046
- packaged gas-turbine power station 292
- peak load transformer 548
- Pencil Follower data processing unit for tape programming 1014
- Res-i-Glas 2-F Hi-Tem thermosetting glass fibre

tape for transformer insulation 1092 thin film integrated circuits 252

- Type AL6 electric locomotive for British Railways 719, 724
- vacuum contactor 548
- voltage regulating relay 545
- see also AEI
- Associated Lead Manufacturers Ltd., bulk handling of soda ash 194
- Association of Scientific Workers, memorandum on science teachers 421
- Association of Supervising Electrical Engineers, electric wiring and industrialized building, by C. G. Godden 380
- Electrical Engineers' Exhibition 543, 695
- Aswan High Dam, removal of temples 127–9 AT & E (Bridgnorth) Ltd., Suncall sun-powered
- emergency telephone 1154 ATA (Grinding Processes) Ltd., flexible abrasive disc with bayonet locking 909
- Atkins, A. A., collaboration with schools 327
- Atkinson, G. S., Rugby College of Engineering Technology 845
- Atkinson Vehicles Ltd., semi-trailer/tractor unit 807
- Atlas-Agena B launch vehicle 1117 Atlas-Centaur space launching vehicle, first opera-
- tional flight of 1073, 1074 Atlas Copco (Great Britain) Ltd., V-type com-
- pressor needing no bolting down 407 Atlas Lighting Ltd., Kite-mark approval licences 639
- Atlas Malleable and General Iron Works Ltd., machine tool production unit (trade publication) 1058
- Atmosphere control plant, critical, Pathfinder (trade publication) 264
- Atmosphere pollution. See Pollution; Smoke
- Atometer Total 6122 personal radiation meter 911 Atomic and space physics, by A. E. S. Green and P. J. Wyatt (book) 47
- Atomic energy. See Nuclear energy
- Atomic Energy Research Establishment, course on critical path methods 786
- Atomic power. See Nuclear power Atomic Power Constructions Ltd., Dungeness B
- nuclear power station 942 Atomic power station See Nuclear power station
- Atomic reactor. See Nuclear reactor
- Atomic Weapons Research Establishment, district heating 187
- Attenuation in noise in machines 1061
- Attwood, B., Television Audience Measurement 981
- Attwood, C., on Products of Numbers (book) 1183 Audco Ltd., wafer-type butterfly valve 823
- Audi motor car 1077
- Auger, C. P., on Engineering Eponyms (book) 47 Auger filler for powders and granular materials 1138
- Auriema, Ad. Ltd., panel cable connector 1129 temperature recorder 1041
- vacuum furnace 917

trolled Pidofat-25 765

Ingenieurtag 1966 610

BEAMA committee 668

D. S. Townend 896

laundry industry 573

ships 72, 396

924

conference on 364

- Auris, tanker, gas-turbine propulsion 400
- Austen, Charles, Pumps Ltd., oil-free diaphragm pump 692
- Austen, Allen, injection moulding machine 1095 Austin Motor Co. Ltd., small gas turbines 432
- Auto Feed pneumatic drill 454
- Autodelta Sprint GTA motor car 1076, 1077
- Autodrill six-spindle turret drilling machine 767 Automatic control. See Control, automatic; Automation
- Automatic Equipment Ltd., transverse spraying machine 259
- Automatic landing system, flight control and, Smiths Series 5, Belfast military freighter with 1120

Automatic machine, chucking, programme con-

Automatic operation of broadcasting equipment,

Automatic Parking and Traffic Control Systems

Automatic transmission, Borg Warner Model 8 493

Automation, an engineering task, Deutscher

industrial, Italian exhibition of (London) 1131

shipyard, international symposium on (Genoa)

Ltd., clocks (trade publication) 970

pressed concrete garage production 251

Balloon, history of 313

- Ballotini Manufacturing Ltd., Clearlane road marking paint 92
- Ballscrews, Rotax 920
- Bamford, J. C. (Excavators) Ltd., continuous finishing plant for excavators and earth moving equipment 1140
- Banbury Buildings Ltd., pressed concrete garages 251

Band saw. See Saw

- Bar straightening machines, optical/mechanical 260 Barber, J. N. R., BIM conference 525
- Barbut, W. D., aircraft industry 1113
- Barclad busbar system 546
- Barco self-aligning swivel joints 653
- Bardeen-Cooper-Schrieffer (BCS) theory of superconductivity 791
- Barduct busbar system 546
- Baring Bros. & Co. Ltd., Central Costanera power station 773
- Barlow, H. M., radar for railways 91 Barnard, R. J., EITB regional officer for Wales 935. Correction 983
- Barnes, E. G., on The Rise of the Midland Railway 1844-1874 (book) 1099
- Barnwell Memorial Lecture. See Royal Aeronautical Society
- Barracuda, Plymouth, motor car 1077
- Barrage, Pierre-Benite construction scheme 861 Wash proposal 340

Barrel, polyethylene, Harcostar 1005

- Barrett, A. J., Engineering Sciences Data Unit 9 Barro Computer Services Ltd., annual essay competition 894
- Barrow, tip, motorized, Prime-Mover 356
- Barrus, E. P. (Concessionaires) Ltd., Lufkin Chrome-Clad steel tapes and rules 404 Barrus, E. P., Ltd., air buoy for SCUBA diving 718
- Jari underwater weed mower 201 Johnson outboard motors 718
- BART. See Bay Area Rapid Transit Barwell, C., marketing conference 1026
- Basic concepts of measurement, by B. Ellis (book) 413
- Basic tables in electrical engineering, by G. A. Korn (book) 923
- Basotrol two-stage gas valve 462
- Bass, John, Ltd., clean room for assembly of parts 740
- Bates, A. P., alloys 1174 hypereutectic aluminium-silicon
- Bath-Sankey stretch-draw equipment 405
- Bath University, Data Retrieval System for building
- industry 1087 Battelle Memorial Institute, coatings for protection
- from de-icing agents 540 thermal diffusivity measurement with lasers 1013
- Battersea College of Technology, conference on space structures 156
- Battery (ies), for electric motor cars 640 lead acid 651 lead acid (trade publication) 698
- Battery charger modules, miniature 101
- Battery discharge indicator, audible, Oldham 1087
- Battery powered golf-trolley, Lectrol 850 Batzer, T. H., on Practical Vacuum Techniques
- (book) 104 Bausch & Lomb, Flexiscope fibre optics inspection
- device 1187 Baxter, M. D., Reading Schools Engineering Club
- 64 Bay Area Rapid Transit commuter railway, San
- Francisco 496
- Bayerischen Motoren Werke. See BMW
- Bayliss, Jones & Bayliss Ltd., stretch-draw hydraulic press 405 Beach Buggy version of Mini-Moke utility vehicle
- 71
- Beacon, flashing, Rotoflash 402. Correction 715
- Beam(s), continuous, single-span and, deflection ordinates for, by G. Anger and K. Tramm (book) 48
- Beam laminating press, continuous gluing 41 Bearings
- ball and roller (book) 1141
- bridge, Tetron 956
- gas 211

4

- advantages and applications 216 aerodynamic 211
- aerodynamic, journals 214
- aerodynamic, thrust 215

- aerostatic 211
- aerostatic, journals 212
- aerostatic, thrust 214 basic types 211
- design of, course on 656
- squeeze film 211
- hydrostatic, computer design of 304
- roller, spherical 262
- Rota, for load transfer in elevated road 814

Bexuda Modufil exact volume automatic liquid

Biarritz grab dredger for dam construction 595

Bibliographic guide to refrigeration 1961-1964

Bielomatik, colour code identification washers

Bierman, G. M., grain handling at Rotterdam 598

Binary alloys, constitution of: first supplement, by

Bingley, Son & Mollit Ltd., Quartermaster self-

Binney, H. A. R., British Standards 117. Letter

Biology and medicine, physical instrumentation in,

Bird, M., supervisors in iron and steel industry 1153 Birmingham and Midland Sheet Metal Workers

Birmingham Salvage Department, Heenan-Nichols

Torr Plan quick-cooled vacuum furnace 742

Bismuth telluride alloys for thermo-electric

Black, Sivalls & Bryson Inc., reverse-buckling

Blackman, R. V. B., on Jane's Fighting Ships 1965–66 (book) 877

Blader, F. B., shock effects in goods transport 810

Blast cleaning plant, Centriblast, scanner panel

Block(s), clay, in industrialized building systems 1047

Block & Anderson Ltd., Canola-130 calculating

Blackman, Keith, Ltd., propeller type fans 687

Blanking, strip steel for, Hardflex 646

Blast furnace slag, Slagceram from 1133

terminal (trade publication) 1100

Blister packaging of components, STC 1012

Block production equipment, concrete 956

Blondin cableways for Kainji dam project 74

Blowers, Root's type L-800 and X-420 260,

Blue-Arrow Service, LabKit printed circuit edge

Blue Funnel Group, diesel engines for cargo ships

Blundell, B. F., on Introduction to Industrial

marine engine version of motor car engine 71

Board, building, Venesta Instant, for clean rooms

Board of Trade, training scheme for managers at

Boby, Williams, & Co. Ltd., Imacti Immedium

Boeing supersonic transport aircraft developments

Bofors, AB, gas turbine for fighting vehicles 124

Bogie(s) for electric locomotives, Types AL1-AL6

Bohle numerically controlled turret head milling,

assisted circulation type, La Mont 775

Ferrybridge C power station 447, 449, 450

boring, drilling, and tapping machine 765

Binnie & Partners, Plover Cove reservoir 593

water resources of Great Ouse Basin 338

by D. J. Dewhurst (book) 1015

Biggs, W. D. engineering design course 751

fillers 462

(book) 363

(trade publication) 924

Bighead lagging stud 100

Biennale de l'Equipement Electrique 786

Billet heating, automatic plant for 38

Billet heating furnace, gas-fired 948

steering device for yachts 69

R. P. Elliott (book) 877

Biological laboratory, CERL 896

continuous grate 1053

Bir-Vac Ltd., electron gun 917

refrigeration 368

rupture disc 909

see also Lifting tackle

machine 633

connectors 778

Priam cargo liner 72

50th anniversary 576

BMW-1600 motor car 533

Bo decade counter 206

Finishing Equipment 610

motor car products range 576

BMC Services Ltd., kangaroo courts 519

history of motor car production 576

Harvard Business School 619

drain type water filter 728

Boat show, International, exhibits at 69-71

Boeing 707 airliner, crash near Tokyo 666 Boeing 747 airliner, Pan American Airways order

957

802

603

for 758

719-27

see also Truck

three-axle steering 459

Aquapac Coalmaster 187

223

Boiler(s)

BMW

for 1054

169

Society 665

Billingham group heating scheme 185

- Rotaflon, for load transfer in elevated road 814
- self-lubricating (trade publication) 878
- Bear-Tex impregnated nylon 153
- Beason, R., metals under high pressure 1029 Beatty, W. F., civil engineering works for LMR
- electrification scheme 28 Bechtel Corp., California water supply pump evaluation 896
- combined generating and salt water distillation plant 285
- Beck, D., art of engineering 329, 887
- Becker Equipment & Lifts Ltd., Bexuda Modufil exact volume automatic liquid fillers 462
- Beckett, J. D. H., operator training 120
- Beckmann, P., suspension buildings 907
- Bedford County Hall, faulty structural design 426
- Bedstead, hospital, standard design for 574 Beeching, British rail after, by G. Freeman Allen (book) 555
- Beefeater gin distillery, development scheme 1071
- Belcher, P. R., Templug hardness-change inserts 504
- Belfast, grain handling installation 597
- Belfast military freighter with Smiths Series 5 flight control and automatic landing system 1120
- Bell, C., kilometre 377
- Bell & Gossett Ltd., oil-less piston-type compressor 356
- Bell & Howell Ltd., tape recorder-reproducer 300 **Bell Telephone Laboratories** Casing process for bonding of plastics 741
- telephone coin unit with one slot 535 transit time devices 91 typesetting using CRO Screen 192
- Bellamy, R. G., training officers 980
- Bellaschi, P. L., transformer faults 1163
- Belling Compact Three electric cooker 386
- Bellows couplings (trade publication) 1100
- Belmos flame proof mining type control gear 550
- Belmos Peebles Switchgear Ltd., air break circuit breakers 550
- Belshaw, B., industrial development officer, Hartlepools 1110
- Beltveyor bulk handling system 459
- Bending machine, tube 95
- Bending moments, longitudinal, of ship models, D. I. Moor 669
- Bendix, swinging caliper disc type brakes 818 Benjamin Electric Ltd., exhibits at Electrical Engineers' Exhibition 546
- heavy duty fluorescent fitting 546
- Bennet, E. F. P., stainless steel cladding 478-479. Letter 526
- Bennett, H. J., Dungeness A nuclear power station 1021

Beresford, James, & Son Ltd., sludge pumps 147

Berk Ltd., Graco-Adjusta-Stroke pump metering

Berridge, D. R., supercritical steam operation,

Bergman, G. D., solid state switching 564

Graco airless spraying equipment 194

Graco Bulldog pump for pvc paste 1012

portable metal sprayer equipment 1137

Berry, G., role of municipal engineers 1105

Berry, Henry, & Co. Ltd., die-spotting press 256

Bertram, James, & Son Ltd., twin wire paper-

Beryllium, metallurgy and properties, by H. H. Hausner (book) 314

Besco-Hydrobend hydraulic press brake 309

Best & Lloyd Ltd., fluorescent desk lamp 866

Besco-Ringroller Model V2 rolling machine 876

Bessel functions, applied, by F. E. Relton (book)

Bevercotes colliery, mechanization techniques 986

Bexley, radio telephones for vehicle control 233

Drakelow C power station 350

oil hydraulic straightening press 919

Bertone exhibits at Geneva Salon 591

making machine 202

Beta tester for transisters 1177

923

Bentham, F. P., theatre lighting 536 Benton, Edward, & Co. Ltd., Creteangle pan

concrete mixer 955

attachment 649

see also Concorde supersonic airliner

container 1044

Instruction 371

van 1096

lication) 48

activities of 162

annual report 523

procedure 491

exhibits 890

formation of 471

future plans of 1086

amplification 414

British Institute of Management

annual conference 524

Avon) 477

404

1025

ciation

894

British Aluminium Co. Ltd., aluminium bulk

British Association for the Advancement of Science,

grant to promote schools interest in technology

Education, BACIE Register of Programmed

British Association for Commercial and Industrial

British Automatic Conveyor and Equipment Co.

British Belting & Asbestos Ltd., side-loading box

British Cast Iron Research Association, moisture

British Celanese Ltd., Claritex wire reinforced

British Coal Utilization Research Association

British Constructional Steelwork Association,

British Crane and Excavator Corp., Coles Illustrious

British Domestic Appliances Ltd., formation of

British Electrical and Allied Manufacturers' Asso-

British European Airways, airliner engine overhaul

British Fair and Fortnight in Oslo, comment on

announcement of BH7 and BH8 hovercraft and

British Hydromechanics Research Association, conference on fluid switching and power

British Industrial Exhibition (Mexico City) 1016

conference on manpower use (Stratford-upon-

dual extrusion cables with EPR-CSP insulation

exhibits at Electrical Engineers' Exhibition 547

British Insulated Callender's Construction Co. Ltd.,

British Iron and Steel Federation, alternative

conference on high-temperature properties of

ironmaking research laboratory, Tees-side 1133

British Joint Computer Conference (Eastbourne)

British Launderers' Research Association, annual

British Leather Manufacturers Research Association,

British Lift Slab Ltd., raising structural steel roof

British Marine Equipment Council, formation and

5

British Mechanical Engineering Federation 162

overhead equipment for London Midland

electric motors (trade publication) 1016

British Enkalon, porcupine card trolley 351

marine automation committee 668

future aircraft requirements 852

British Hovercraft Association 329-30

formation and activities of 1080

formation and activities of 1080

heavy load transporter 1086

hovertrain development 1086

new laboratories at Cranfield 1156

Urwick lecture by Sir Noel Hall 59

British Insulated Callender's Cables Ltd.

British Institution of Training Officers 473

flexible cables (trade publication) 786

power factor correcting capacitor 547

proposals to nationalization 1148

British Iron and Steel Research Association

corrosion advice bureau and booklets 92

protection box in glass fibre 547

Region 23-25, 29

ICT 1905 computer 803

steel 314

report 573

activities of 912

functions 934

annual report 933

for aircraft hangar 354

856

British Hovercraft Corp. Ltd. 419

Hoverfreight 1157

maintenance of airliners 486

composite building construction (trade pub-

aluminium plant at Fort William 848, 892

annual meeting (Nottingham) 832

meeting on supervisory training 570

Ltd., elevator-conveyor 406

meter for moulding sand 1046

Elliott 4120 computer 803

diesel-electric crane 957

acetate sheet for building sites 540

- monotube, Chavalon sur Vouvry power station 1038
- radiant, for Central Costanera power station 775 radiant type, by E. G. Hutchings 154
- Ruston Paxman Super Ultrasonic packaged 1071
- supercritical, for Drakelow C power station 343 344, 345
- Vekos Powermastei, at Billingham 186 Boiler internal surfaces, cleaning of, West Thurrock 819

passivation of, West Thurrock 819 Boiler replacement for steam locomotives 233

Boiler tube

bursting tests on 456, 458

- failure of, chemical cleaning to investigate 459 trade publication 743
- welding of 458
- Boiling
- convective heat transfer 975
- nucleate and film 975
- pool and forced convection 975 Boiling heat transfer and two phase flow, by L. S.
- Tong (book) 785 Bolidens Gruv AB, X-ray analyser for ore 913
- Bolliger, H. R., gas turbines in Venezuela 583
- Bolt(s), ISO Metric, GKN 910
- Boltless Systems, racking system (trade publication), 264
- Bond Equippe GT4S motor car, road test and specification 298. Letter 377
- Bond, R. C., overhaul of electric locomotives and multiple-unit stock 27
- Bonding, electrochemical, of diamond to metal surface 652
- of plastics, Casing process for 741 Bonding machine, thermo-compression, for micro-
- circuits 607 Bonding system, microcircuit, Hughes 603
- Bookcases and cabinets (trade publication) 314
- Booster, gas, high-pressure 94
- Booth, E. S., National Tower Testing Station 1071
- Booth, James, Aluminium Ltd., Duralcote Fascia Rib Lips vinyl coating of ribbed aluminium building sheet 1090
- Borg-Warner, CRV 5 motor car with plastics body 949

Model 8, automatic transmission 493 Boring machine

- horizontal
- Hybormill 763
- Wotan Teletrol 765
- jig, microscope (trade publication) 1100 stern tube 96
- tape controlled coordinate positioning, Jameson 767
- Boring and milling machine, Kearns 920
- Max-E-Mill 920 Borner, R., on Minerals, Rocks and Gemstones
- (book) 697
- Boron, by G. K. Gaule (book) 743 Boron diffusion for microcircuits 606
- Borsig AG, refrigeration plant, Borsig 782
- Bostik Ltd., aluminium foil for telephone cable
- jointing and repair 1087
- Botlek installation for grain handling 598
- Botterill, J. S. M., quicksands: fluidization 478 Boughton ripper attachment for Merton tractor
- shovel 302 Bow, bulbous, theory of 394
- Bowater Packaging Ltd., fibre and fibre/steel drums for packaging 1091
- Bowden, A. T., split compressor differential engine 585
- Bowen, L. P., aluminium in industrialized building 1048
- Structural Design in Aluminium (book) 969
- Bowers, N. K., marine gas turbines 586
- Bowlby, Sir Anthony, on change to metric screw thread system 45
- Bowles, P., Reading Schools Engineering Club 64 Bowley, M., on British Building Industry (book) 556
- Bowman, T. P., management consultant 799
- Box making machine, Calematic 1095
- BPS Machinery & Spares Co. Ltd., Bohle numerically controlled turret head milling, boring, drilling and tapping machine 765
- B. & R. Relays Ltd., relays 696 relay for switching of dc inductive loads 1013
- Brabham racing motor car 85
- Braby of Britain Group, aluminium bulk container 1044

- yachting version of water distillation plant 71 Bracey, F., & Sons, Vibramat grain cleaner 259 Bradshaw, R. E., structural ceramics 1047 Brake(s)
- Didke(S)
- clutches and (trade publication) 1058 disc, electric motor, ASEA 1005
- Fiat-Baldwin, on Fiat–124 motor car 634 Ford Mk. IV Zephyr Zodiac range, Girling 772 hoist blocks with 918
- electromagnetic, EOT crane 1134
- for semi-trailer, Girling/Rubery Owen 413
- press, photoelectric guard for 1011
- swinging caliper disc type 818
- vacuum controlled air, Types AL1–AL6 electric locomotives 719–27 Warner electric 1003
- Braking, anti-lock, Dunlop Maxaret 1115
- Bramall, B., British high speed transport system 1113–1114
- Bramigk & Co. Ltd., Ohrnell conveyor systems 506 Branch, G. D., creep-rupture testing and bursting tests for boiler tubes 456, 458
- Brazing, induction (trade publication) 786
- Brazing furnace, Efco, for Ful-braiz steel tube 1098 Breadboard mechanical components (trade publication) 878
- Breakdown. See Accident
- Breather-drier, thermoelectric, Drycol 544
- Breguet, Jaguar supersonic strike fighter/trainer aircraft 941
- Bremermann, H. J., on Distributions, Complex Variables and Fourier Transforms (book) 314 Brenell Mk. 5 Type M, Series 3 tape recorder 132, 134
- Brew, Richard D. & Co. Inc. vacuum furnace 917 Brick(s), clay, in industrialized building systems 1047
- Brick walls, chasing machine for, Baier MF63i 551 Bridge(s)
  - aluminium alloy footbridge 330
  - Arvida road, in aluminium 427
  - highway, behaviour under load 378
  - ore unloading, MAN 1133
- railway, conversion for road use 480. *Letter* 715
- road, standardization of components 123 suspension, international symposium on 1142 Pierre Bénite scheme 862
- Wrestlers' Road, collapse of 378
- Bridge construction, O. A. Kerensky 535
- Bridge hearing, Tetron 956
- Bridgeport Line-a-Mill milling machine with line tracing 1088
- Bridon Dyform prestressing wire 1155 Brierley, Z. Ltd., drill grinding machines 40
- Rotacone grinding fixture for drills 921
- Brinell hardness tester, portable 198
- Bristol
- Cumberland Basin split level interchange, street
- lighting for 637
- grain handling installation 598 Bristol Aeroplane Co., merger examination with
- Rolls-Royce 1064 Bristol College of Science and Technology,
- industrial monuments survey 857
- Bristol Control, servo control system for feedback control teaching system 954
- Bristol Duplex tractor mounted compressor 358 Bristol Erickson quick change tooling 766

gas-turbine propulsion for Royal Navy 333

Olympus gas turbine for hovercraft 1157

Olympus 593 turbo-jet engine 518

Olympus turbojet power plant 450

turboprop engine development 945

Britannia airliners, maintenance of 489

project 682. Letter 804

Britannic House, British Petroleum Co 575

turbojet engine development 944

Marine Olympus and Proteus gas turbines 332

Marine Proteus gas turbine for hovercraft 1157

Olympus 593B aircraft engine development 482

Britain's railways under steam, by J. B. Snell

British Acoustical Society, formation and activities

British Admiral, tanker, engine and boiler control

British Aircraft Corp., Mustard space transporter

conference for science and maths masters 894

Bristol Siddeley Engines Ltd.

marine gas turbines 586

(book) 1015

of 1030

room 397

Ferrybridge C power station 445

gas-turbine generator plant 429

publications 969

British MonoRail, linear motor for overhead crane 873

British Motor Corp. Ltd.

- alleged fatigue failure of Birfield constant velocity couplings 378
- Beach Buggy version of Mini-Moke utility vehicle 71
- 1100 Countryman and Traveller versions 531 kangaroo courts at Cowley & Theale 519 British Moulding Machine Co. Ltd., greensand
- moulding Machine Co. Ltd., greensand moulding machines 1056
- British National Association of Drop Forgers and Stampers, tolerances for steel drop forging 1052
- British National Export Council, activities of 422 Caribbean Market report 936 training scheme for managers at Harvard
- Business School 619 British Northrop Sales, textile mill for Guinea 849
- British Overhead Irrigation Ltd., aluminium irrigation pipe fittings 152
- automatic watering system for Sunningdale golf course 850

British Overseas Airways Corp.

- airliner engine overhaul procedure 491 Boeing 707 airliner crash near Tokyo 666 Kennedy Airport 237 maintenance of airliners 485
- British Overseas Fairs Ltd., interest in Canadian market 421

British Oxygen Co. Ltd.

- neon filled flash tubes 505
- nitrous oxide as leak detector 300
- pulsed arc welding equipment 783 Wulff process for acetylene 1160
- British Paint, Colour and Varnish Manufacturers, instruments for cleaned surfaces quality assessment 378
- British Petroleum Co. Ltd., Britannic House 575 disaster of Sea Gem oil drilling rig 9 Pencil Follower for oil well log data 819 Sea Quest drilling platform 140
- British Plastics Year Book 1966 (book) 1141
- British Power Press Manufacturers Association,
- gauge and tool and power press exhibition 921 British Precision Springs Ltd., hobs and cutters

(trade publication) 364 British Productivity Council 8

- How to Organize QR Campaigns 163, 222
- British Racing and Sports Car Club, Racing Car Show 174
- British Rail after Beeching, by G. Freeman Allen (book) 555
- British Rail Hovercraft Ltd., formation of 471, 534 British Railways

annual report 1106

apprentice training 679

automatic discharge coal wagon maintenance 232

automatic heating for railway points 301

- carriage and wagon construction 679 chairman's views on modernization position and prospects 522
- civil engineering work for London Midland Region electrification scheme 24–25, 28
- colour-light signalling for London Midland Region electrification scheme 26
- economic position and prospects 1106 electric locomotives for London Midland Region
- 21 Types AL1-AL6 719-27

electrical multi-unit trains 21-22

- electrification of London Midland Region (book) 263
- electrification and modernization of London Midland Region 19
- electrification extension to Glasgow 758

Freightliner trains. See Freightliner

interviews with engineers associated with London, Liverpool and Manchester electrification scheme 27

locomotive construction and repair 679

Matisa track recording trolley 968

museums at Clapham (London), York and Swindon 859

90 ton rail tank cars 233

6

- overhead equipment for London Midland Region 23–25, 29
- Parkeston Quay—Zeebrugge freight service 1033
- passenger train speed development research 667 power supply system for London Midland

- Region 24, 28
- radar for railways 91
- road/rail containers for powders and liquids 1070

Brittle fracture, in gas plant 230

BRM motor car 87

499

356

at Monaco 994, 1034

conference on 364

H16 3-litre motor car 898

Bronze, flame spraying of 1071

BHI type-620 reverser 153

Brown Boveri, gas turbines 428

design 779

for Glen Line 426

gas turbine development 528

Queen Elizabeth liner refitting 670

Brown, K. M., Cornish engine. Letter 117

Brownhill, F. D., optical torquemeter 310

industrial gas turbines 429

Brown & Sharpe Ltd., 'Flicr' valve

plug-in hydraulic valves 504

motor terminal assembly 697

publication) 656

Bruce Peebles & Co. Ltd.

Letters 804, 940

trains 442

London 575

Building(s)

В

ference 982

510

illuminated push button 546

melting furnace for 1054

(book) 1183

Brookhirst Igranic Ltd.

cation) 786

169

Brittle materials, strength tests on 204

in pressure vessel under hydraulic test 714

Broadcasting equipment, automatic operation of,

Brockhouse/Lester pressure diecasting machines

Brookdeal Electronics Ltd., phase sensitive detector

Brookes, A. M. P., on Advanced Electric Circuits

Ministart manual starter for 3-phase motors 546

Brooks Instrument Ltd., needle valves (trade publi-

Brooks Ventilation Units Ltd., Hi-Volume vertical jet

Broughall, J. A., electrification scheme for LMR 30

Broughton, H. F., on Economic Site Organization

Broughton, J. & Son (Engineers) Ltd., hydraulic cylinders 1176

Broughton, J. L., British Standards 8. Letter 117,

Brown, A. G., Electronics Ltd., high speed timer 690

Brown, B., Experimental Nucleonics (book) 1057

Brown, E. A., modelling technique for power station

Brown, John, and Co. (Clydebank) Ltd., cargo liner

Brown, R., suggested for arms export selling 889

Brown & Tawse Plant Ltd., air accessories (trade

Browne, Sir Humphrey, NCB Reliability Con-

Belmos flame proof mining type control gear 550

pump glandless pump/water-filled motor unit

rotor assembly for large electric motors 550

Brunner, W. F., on Practical Vacuum Techniques (book) 104

Brunton, W. G., chartered engineers 626, 754.

Brush(es), carbon, by E. I. Shobert (book) 413

Brush Type 4 diesel locomotive for Freightliner

Brydson, J. A., on Plastic Materials (book) 785

BSA Harford Heating Ltd., Super Opiomatic gland-

Buck & Hickman Ltd., Tape-O-Matic numerical control system 870

Buckle, G. H., & Partners, Britannic House,

Budworth, David, Ltd., for Hydrocar vehicle 229

Buenos Aires Central Costanera power station 773

Buck, L. W., on Sheet Metal Workers 665

Budd Co., nickel temperature sensors 644

Budworth 25 in ducted air fan 227

adhesives in (trade publication),

circular, Kingsway, London 908

dimensions in, coordination of, BS 534

industrialized (trade publication) 610

& T Designs (Richmond) Ltd., Circuitape hydraulic circuit symbols 1130

Buxton flame proof air circuit breaker 548

Delecta medium voltage switchgear 549

Bruderer automatic punching press 1011

Brush Electrical Engineering Co. Ltd.

less circulating pump 463

823

Brown, E. B., on Modern Optics (book) 364 Brown, F. H. S., CEGB bulk supply tariff 891

Brown, G., prices and incomes policy 220

radiation-cooled transmitter tubes 781 Brown Bros (Aircraft) Ltd., Hit blind rivets 301

and Building Supervision (book) 1057

pendant push-button switch station 965

roof extract ventilation unit 685

Bromfield, E.A., technician engineers 526

- silencing of test house for diesel-electric locomotives 92
- strike threat, comment on 319
- Sulzer diesel engines for Type 4 locomotives 541 testing station for diesel-powered rolling stock 872
- traffic timetables for London Midland Reglon 21 training facilities 679
- welded rails for Eastern Region 535
- workshop location and duties 677
- workshop organization 677
- workshop plan details and progress 672
- workshop redundancy 676
- workshop reorganization schemes 677 workshop supplies 679
- workshops 672
- British Railways Board, views on Freightliner trains 437
- British Relay Ltd., pay-television 12
- British Resin Products Ltd., polychloroprene rubber (trade publication) 786
- British Road Federation, conference on people and cities 111
- British Ropes Ltd., Bridon Dyform prestressing wire 1155
  - impact loadings of ropes, Letter 1029
  - wire rope terminals (trade publication) 878
- British Ropeway and Conveyor Services Ltd., aerial observation cars for Lebanon 100
- British Scientific Instrument Research Association, instruments for cleaned surfaces quality assessment 378
- British Sealed Beams Ltd., expansion at Corby 63 British Ship Research Association, automatic
- analysis of ship vibration 961 economic and ship design factors 715
- British Standards Institution
- annual conference on metric system 610
- capacitors for lamp circuits 1070
- cast iron testing 204 Class 600 gas fittings 291
- conference on change to metric system 757
- containers for freight transport 354
- coordination of dimensions in building 534
- copper tube for water services 379
- electronic parts standards simplification 1014 Guide to Design Considerations on the Strength of Screw Threads, 622 Latter, 949
- of Screw Threads 632. Letter 849 imperial metric conversion slide 740
- international standard dynamic test for seat belts 426
- Kitemark for chromium plating 125
- Kitemark for street lighting lanterns 635
- Metric Standards for Engineering 632
- Ministry of Technology's sponsorship of 270
- production of standards. Letters 8, 117, 169
- snatch test for seat belts 505 street lighting systems 284
- teaching machine programs 218

procedure 491

Bruern 859

Britten-Norman Ltd.

CC-1 hovercraft 1084 CC-2 hovercraft 1084

CC-4 hovercraft 1085 CC-5 hovercraft 427, 1085

CC-6 hoverferry announcement 1157

505

maintenance of airliners 486

British Week in Hong Kong 373

British Welding Research Association brittle fracture in gas plant 230

flux cored wires for CO<sub>2</sub> welding 1132

- technical requirements of Canadian and other markets 422
- tolerances for steel drop forging 1052

British Steel Piling Co. Ltd., pile frames 198 British Steelmakers Creep Committee, conference

- on high-temperature properties of steel 314 British Tap and Die Co. Ltd., chassis punches (trade publication) 314
- British Thompson-Houston Export Co. Ltd., Central Costanera power station 773 British Trailer Co., trailers for container carriage 438

British United Airways, airliner engine overhaul

British Waterways Board, museum at Stoke

laser-beam welding for micro-circuit connections

pressure vessel failure under hydraulic test 714

Britain's new railway, by O. S. Nock (book) 263

aluminium in, L. P. Bowen 1048 and the structural engineer, conference on 698, 1047 cladding of (book) 831 conference on 1047 conference on, PERA 530 electric wiring services for 380 exhibition of systems (Crystal Palace) 943 flooring for (book) 1015 'Grid' method (trade publication) 610 position and prospects of 943 selection of contractor 321 service installation for 380 thermal insulation (book) 1099 trade publication 698 loadings on, CERA. Letter 849 metric system in, BS 534 Public Building frame construction 1006 sound control and thermal insulation of, by P. D. Close (book) 785 suspension, structural details 907 tall, human response tests for 905 shear wall concept in 906 structural cores in 907 structural problems in, symposium 903 wind loading in 903 wind movement in 904 wind tunnel testing for 905 timber, fire regulations in 1050 vibration in, isolation of, R. A. Waller 808 see also Concrete Building Agency, National 322 Building board, Venesta Instant, for clean rooms 603 Building construction, composite (trade publication) 48 Building cradle, 'Space Climber' 102 Building Exhibition (Southport) 698 **Building industry** British, by M. Bowley (book) 556 Data Retrieval System for 1087 position and prospects 270 Building material, aerated concrete, Siporex 1093 Building regulations, E. Williams 573. Letters 626 754 **Building Research Station** concrete slab process 943 highway bridge behaviour 378 structures laboratory 853 traffic noise research 374 vibrating wire strain gauge 742 Building sheet, ribbed aluminium, vinyl coating of 1090 Building site weather protection by acetate sheets 540 Building structures, earthquake resistant 177-80 Building supervision, economic site organization and, by H. F. Broughton (book) 1057 Bulbous bow, theory of 394 Bulk handling Beltveyor system 459 Flo-bin semi-bulk system 1121 Liqua-bin semi-bulk system 1121 Bulk handling plant for polyethylene, Bakelite 1044 Bullblock for copper tube plant 146 Bullock, R. H. W., working party on machine-tool industry 1063 Bulpitt & Sons Ltd., Swanmaid dishwasher 34, 36 Bunker discharge system, Hepflo 507 Bunn, G. C., CEI education requirements 273 Bureau of Standards. See United States National Burgess, H. J., building in timber 1049-50 Burgess Products Co. Ltd., Instant Heat soldering

gun kit 600 petrol-driven paint spraying unit 406 Burghard, G. F., standards for electronic parts 1180 Burglar alarm (trade publication) 970 Burke, J., on Kinetics of Phase Transformation in Metals (book) 514 Burke, R., project training for apprentices. Letter 65 Burkin, A. R., on Chemistry of Hydrometallurgical Processes (book) 1015 Burmeister & Wain diesel engines for Blue Funnel Group cargo ships 802 Burndept Electronics Ltd., ultrasonic cleaning tank 1008 Burner(s) gas assembly conversions 685 automatic, Hamworthy Engineering 829 automatic push-button control 1042 nozzle mixing jet 947 multi-purpose 480

pre-mix jet development 947 test plant for, industrial and domestic 948 heavy-oil, pump for 508 oil, automatic, Electto-Oil 876 automatic push-button control 1042 CUB, Tecalemit 963 radiant tube 947 Burnerd, F., & Co. Ltd., precision scroll grinding machine 922 Burr(s), rotary, tungsten carbide (trade publication) 104 Burrows, W. H., Graphical Techniques for Engineering Computations (book) 364 Burst cartridge detectors, Oldbury nuclear power station 1118 Bursting tests on boiler tube 456, 458 Burton, M., mating in birds 941 Busbar ducting (trade publication) 786 Busbar system Barclad 546 Barduct 546 Busbar trunking (trade publication) 1016 Bush, Metalastik, for diesel engines 190 Bush Beach & Segner Bayley Ltd., transfer pumps 649 two-part compound mixer 148 Business administration studies 279 Business archives 860 Business Efficiency Exhibition (Leeds) 599 Business Equipment Buyers' Guide 48 Business position and prospects for 1966 8 Business schools, position and prospects 170-1 Butler, G., on Corrosion and its Prevention in Waters (book) 969 Butterfield, T. L. E., tank design 124 Butterley Co. Ltd., concrete block production equipment 956 Butters Cranes Ltd., self-climbing erection of derricks 824. Letter 940 Buttler, F. G., on A Manual of Applied Chemistry for Engineers (book) 556 Buzzard, R. B., Company weaknesses 520 Byrne, J., general secretary, ETU 1152

Sec. Aller С C5-A high-wing jet submission transport aircraft, Lockheed 758 Cabinet(s) bookcases and (trade publication) 314 tape storage 599 Cable(s) Atlantic, laying by Great Eastern 14 coaxial, and electromagnetic waves 927 flexible (trade publication) 786 jointing power (trade publication) 970 mineral-insulated copper sheathed 384 paper, production of 410 polythene insulated, in Persian Gulf 961 prestressing, Freyssinet multi-strand, for elevated road 814, 815 submarine, to Western Isles 802 telephone, aluminium foil for, jointing and repair 1087 wire and, symposium (Atlantic City) 970 see also Power transmission; Wire rope Cable connector, panel 1129 Cable coupler system for industrialized building installation 382 Cable Covers Ltd., single strand concrete prestressing system 403 Stressomatic jack wire tensioning system 1155 Cable insulation, dual extrusion for 404

Cable making plant, Crompton Parkinson 410 Cable reeling drum, Malcolm Cross Ltd. 358 Cable reeling unit, constant tension 200

Caledex Machine Co. Ltd., Calematic box making machine 1095 Calematic box making machine 1095 Calibration service for instruments, Ministry of Technology 804 Calibrator, laser interferometer, for machine tools 1092 California, combined generating and salt water distillation plant 285 water supply pump evaluation, NEL 896 Callaghan at International Boat Show 69 Calvert, D. S., hypereutectic aluminium-silicon alloys 1174 Cambridge Consultants Ltd., activities of 620 Cambridge Instrument Co. Ltd., galvanometers (trade publication) 970 Cambridge University, conference on teaching of engineering design 751, 753. Letter 940 engineering design courses 751 gas laser for structural research 1164 Camera Polaroid model-180 1002 processor, Filmsort-2000, for micro-film recording 508 single lens reflex, Minolta 1114 Swinger, in plastics, Polaroid Land 1030 CAMI di Paviglianiti, hardness tester 1131 Campbell-Gray Ltd., plant hire (trade publication) 970 Campbell, Lord, on civil engineering industry 797 Campbell, W., engineering projects symposium 750 Cams, design, manufacture and testing. Letter 326 Camshaft milling machine 737 Canada, Exports to, campaign to boost 421 Canadair Ltd., CL-215 amphibian water-bomber or transport 645 Canadian Industries Ltd., urethane foam insulation for Hortonsphere spherical vessel 913 Canal bank erosion, nylon mesh to combat 403 Canning, W., & Co. Ltd., electroplating plastics (trade publication) 970 Cannon CE1 electric cooker 386 Cannon, L., ETU president 1152 Canola-130 electronic calculating machine 633 Canon Camera Co., Canola-130 electronic calculating machine 633 Cantilever fluorescent desk lamp 866 Canvey Island, methane supply pipeline from 286 Capacitor(s) lamp circuit, BS 1070 power factor correcting, BICC 547 vacuum plant for wax impregnation of 1138 Capital goods' award scheme (CoID) 283 Capital projects, control and management of, by J. W. Hackney (book) 655 Capper, P. L., on Problems in Engineering Soils (book) 877 Captain, gun turrets in, 15 Car, motor. See Motor car Car, rail. See Railcar Carameros, A. H., large gas turbines 582 Caravan as mobile site accommodation 401 Carbide tools (trade publication) 1184

- Carbon brushes, by E. I. Shobert (book) 413
- Carbon dioxide storage vessel with polyurethane insulation 1046
- Carbon fibres for reinforced plastics, RAE 1133
- Cardox (Great Britain) Ltd., hand-held hydraulic drilling machine for coal, rock, etc. 1129
- Career, engineering as, DES booklet 795, 894
- Career selection methods by sixth formers 1112
- Careers masters, influence on sixth formers' career selection 1112
- Careers masters convention, Automotive Products Group 328
- Careers Research and Advisory Centre, film, 'Creativity at School' 324

Cable roof, prediction of behaviour of, Askegaard and Albers 780 Cable & Wireless Ltd., ground stations for satellite communications 1154 paraboloid dish aerial 1124 Cachalot twin-chamber deepwater diving system 37 Caithness Glass Ltd., activities of 893 Calculation and design of metal springs, by S. Gross (book) 656 Calculating machine, adjusting disc in Hardflex steel 647 electronic, Canola-130 633 Calculator, desk, controller for, ROBOX-103 401 Calculus, tensor, through differential geometry, by J. Abram (book) 363 Caldecot, Viscount, space transporter vehicle 682

Carena 8S8 sound projector (trade publication) 1142 Cargo handling, progress in, by J. D. M. Hearth (book) 831 see also Grain handling Cargo handling equipment in timber carrier Stella 139 Cargo liner Glenalmond 426 Jordaens, sea trials on 669 Pembrokeshire 426 Priam, launching of 72 research and development trends 395 Cargo ship. See Ship Caribbean, market report, BNEC 936 trade mission to 936

- Carmichael & Sons (Worcester) Ltd., GVW bulk mixed-powder road tanker 806 Carousel shot blast machine 1054
- Carpets and underfloor heating 285
- Carriage, railway, construction by British Railways 679
- Carron, Sir William, BIM conference 524 Carter, B. & F., & Co. Ltd., Type 23 revolution counter 40
- Carter Controls of America, hydraulic cylinders 301 Carter Thermal Engineering Ltd., Gyra-Flo centrifugal fan 651
- Cartons, gluing machine for 260
- Casale process for ammonia making 1162
- Cashmore, John, Ltd., steel strip slitting line 154 Cashmore, Joseph F. Milton, & Partners, Britannic
- House, London 575
- Casing process for bonding of plastics 741
- Cassegrain steerable aerial arrangement 1124-6 Cassie, W. F., on Problems in Engineering Soils (book) 877
- Cast iron
- cryogenic 101
- gas pipe, working pressures 291 grey, influence of nitrogen 1174
- heat resisting, production technology and properties of, by N. N. Aleksandrov and N. I. Klochnev (book) 1183 strength tests on 204
- Casting(s)
- cryogenic (trade publication) 698 die. See Die casting
- trade publication 556
- Castle, B., Minister of Transport 57 retention of 70 mph speed limit 983 road developments 888 transport policy 420
- Castrol Plastics Ltd., activities of 1111
- Castrol XL oil with anti-friction additive 912
- Castrolite oil with anti-friction additive 912
- Catalytic reforming reactor for naphthas 1160
- Caterpillar 769 dump truck 406
- Catherwood, F., appointment to National Economic Development Council 841
- Cathode-ray tube, dark-trace, STC 351
- dual trace instrument, M-O Valve 951
- screen method of typesetting 192 Cathode-ray tube face, fibre optics 1187
- Cathode sputtering for thin film integrated circuits 254
- Cathodeon Electronic Ltd., beta tester for transistors 1177
- Cathodic & Electrolytic Engineers Co. Ltd., smoother ships' hull system 283
- Catmur Machine Tool Corp., machine shop equipment (trade publication) 156
- Cat's-eyes in roads, compressed air drilling rig for 455
- CAV, vehicle supercharging, E. Kellet 668
- Cea-Perego SFA, numerical control equipment 1176 Ceemarcyne cold setting resins for hard surfacing 462
- Ceiling(s), suspended (trade publication) 658
- Ceiling panels, illuminated, Isora 153
- Cell, fuel. See Fuel cell
- Cement, high-alumina, in structural engineering. Letter 479
- see also Concrete
- Cement and Concrete Association, concrete design (trade publication) 698 prestressed concrete elevated road structure 814
- Western Avenue elevated road extension model tests 816
- Cement mixer, Kenway tractor-mounted 303
- Cement specimens length comparator 308
- Census, national sample 273. Letters 326, 425
- Centaur Engineering, CRV5 motor car with plastics body 949
- Centaur space launching vehicle 1074
- Centaxial Fans Ltd., axial flow fans 686 Centenaries in engineering 14-15
- Central Costanera power station, Buenos Aires 773
- Central Electricity Generating Board dc transmission line from Kingsnorth to Willesden
  - 484

8

- district heating 188 exhibits at Electrical Engineers' Exhibition 543
- future power station projects 851
- gas turbine plant 428
- National Tower Testing Station, opening of 1071 new bulk supply tariff 891 power station efficiencies 573
- power station projects on Thames Estuary 994

- supercritical turbo-generators 1115
- weather maps for power demand forecasting 819 Central Electricity Research Laboratories, biological laboratory 896

Chesters residential centre for management studies

Chevrolet Corvair motor car engine for CRV 5

Chilver, A. H., cooling towers and wind loading

swaying prevention with helical strake stabilizers

China goods, Polytite skin packaging for 353

Mechanical Controls (book) 655

Chipboard, structural applications, L. E. Akers 1050

Chironis, N. P., on Mechanisms, Linkages, and

Chloride Electrical Storage, batteries for electric

Chlorination sterilisation of swimming pool 296

Chlorosulphonated polyethylene cable insulation

Christiani & Nielsen, Limfjords immersed-tube

Christie, M. B., for climbers 1029 Christoph Emmerich K.G., telephone uniselector

Christy & Norris Ltd., automatic control of meal

Chubb & Son's Lock and Safe Co. Ltd., tape

Churchill, Charles H. Ltd., contouring lathe with

Churchill Gear Machines Ltd., Rigidhobber gear

Churchill-Redman, contouring lathe with numerical

CIBA (A.R.L.) Ltd., adhesives in building (trade

glass-reinforced products (trade publication)

CIGRE conference on electric power systems 1163

Cincinnati Milling Machines Ltd., Acradrive

Acramatic 100 series numerical control system

Circuit(s), electronic, handbook of, by R. Feinberg

Circuit packs, integrated, Transitron Electronic 152

'Cirscale' electric tachometers (trade publication)

City and Guilds of London Institute, International

Civil & Civic Pty. Ltd., Sydney Opera House 736 Civil engineering industry, Lord Campbell 797

Civil Engineering Research Association, loadings on buildings. Letter 849

Civil Service, Scientific, shortage of engineering

Civil Service Commissioners, annual report 936.

C. & L. Developments Ltd., Ford 3000 remote-

stainless steel, of steam/water drum 141-3.

turbine, modelling technique as design aid 779

graduates 936. Letter 1029

CJB-Divcon Ltd., deep diving chamber 93 CL-215 amphibian water-bomber or transport,

Apprentice Competition (Utrecht) 1151

Circuit symbols, hydraulic, Circuitape 1130

Citenco Ltd., fractional hp electric motor 963

Circuitape hydraulic circuit symbols 1130

Acramatic numerical control systems 648

hydraulic servo motors 648

Cintimatic machining centre 767

Cinema film. See Film, cinema

Circle cutting machine 922

thin film, integrated 252

See also Microcircuit

Circular saw. See Saw

Civic Trust for Wales 167

Letter 1029

Canadair 645

explosive 1104

Cladding

controlled tractor 1032

Letters 326, 478, 526

wall, Curv-Line Q-Panel 101

toggle (trade publication) 314

Clamp(s), shuttering beam, SGB 1132

industrial buildings (book) 831

970

(book) 831

Cintimatic machining centre 767

Circlip data (trade publication) 464

Chevelle motor car, slush guard for 759

Chevrolet motor car, slush guard for 759

Chimney(s), Cosi-Clad insulated 206

China, science and civilization 112

Chopper amplifier, low-drift 1092

trade mission to, IBE 664

motor cars 640

tunnel 1164

mill production 461

storage cabinet 599

numerical control 764

hobbing machine 147

control 764

1058

871

publication) 104

Christy, R. K., industrial accidents 320

Chromium plating, Kitemark for 125

Chrysler Dodge Charger motor car 532

Chromatograph, modular process, Pye 951

plastic-body vehicle 949

280

1166

805

404

1045

- Central Training Council
- and Industrial Training Boards 707
- foremen training (booklet) 570-571 industrial training boards sandwich course for training officers 980
- memorandum on programmed instruction 422 Centrax Ltd., gas-turbine propulsion for Royal Navv 333
- Centre for Environmental Studies 521
- Centre-Lift 410 range of electric overhead travelling cranes 1134
- Centre Point building St. Giles Circus 903
- Centreless grinding. See Grinding
- Centriblast blast cleaning plant, Scanner panel for 1054
- Centrifugal pump. See Pump
- Centrifuge slip ring lubricant 353
- Ceramic coatings, flame spraying of 539
- Ceramic tiles, shuttle kiln for 947
- Ceramic tools, turning performance on alloy steel (book) 513
- Ceramics
- advanced technologies, by J. E. Hove and W. C. Riley (book) 610
- modern, principles and concepts by J. E. Hove and W. C. Riley (book) 556 structural, R. E. Bradshaw 1047
- ultrasonic machining, UKAEA 554
- Cesare Galdabini, servo control of straightening press 193
- Chain(s), earth-moving equipment tyres 783 See also Lifting tackle
- Chain link fencing, Plastabond 303
- Chambers, H. D., screw-thread changeover 849 Chambers, Sir Paul, report on ICI 664
- Chandos, Lord, Dungeness A nuclear power station 1021
- Chapanis, A., on Man-Machine Engineering (book) 1099
- Research Techniques in Human Engineering (book) 1015
- Chapman Committee on naval architects 476
- Chapman, J. H. B., report on naval architects
- 476
- Chapple, F. J., assistant general secretary, ETU 1152
- Charger chassis, constant voltage 549
- Chartered engineer, abbreviation for. Letters 626 715, 754, 804, 940
  - comment on. Letter 377
- educational requirements 474
- Lord Show on 623
- Sir John Hunter's remarks 172 Chasing machine, brick walls, Baier MF63i 551
- Quersa, safety guard for 555 Chassis press, 4,000 ton, John Thompson Motor Pressings Ltd. 874

Chemical Equipment Engineering Ltd., pilot filters

Chemical and Petroleum Engineering Exhibition,

Chemical process control, introduction to, by D. D. Perlmutter (book) 655

and physics, handbook of, by R. C. Weast

applied, for engineers, manual of, by F. G. Buttler

of hydrometallurgical processes, by A. R. Burkin

organic, investigations in the field of, by L. C.

Chem-Mark marking of metals (trade publication)

Chervonenkis, O. A., on Handbook for Computing

Elementary Functions (book) 923

Chester, inner ring road 811, 812

Willemsens and G. J. M. van der Kerk (book)

Chemidus Plastics Ltd., extruded upvc sheet 822 Chemieanlagen-Export und Import GmbH, chemical

- Chassis punches (trade publication) 314
- Chavalon sur Vouvry power station 1037

Chemical engineer, further education 1184

Checker Aerocar motor car 1076

Chemical analysis. See Analysis

of stainless steel 407

plant exhibits 1158

exhibits at 1158

(book) 923

(book) 1015

in 1866 15

364

1016

Chemistry

International (Olympia) 1079

desulphurization of diesel oil 1158

and G. R. Cowie (book) 556

- tube, Triclamp 820
- Clamp structural plastics system 1049
- Clamping device, hydraulic, Nipper 875
- Clarifier, coolant, MEL Equipment 148
- Claritex acetate sheet for building sites 540
- Clark, Bernard, & Partners, Bedford County Hall 426
- Clark, D. G., on Industrial Manager: His Background and Career Pattern (book) 923
- Clark, P. C. T., marketing conference 1027
- Clarke, Nicholls & Marcel, exposed structural steelwork 540

Clarklift fork lift truck 957

- Clarkson (Engineers) Ltd., Hiflow milling cutters with tungsten carbide throw-away tips 201
- Clarkson, J., on Elastic Analysis of Flat Grillages (book) 877

Clausen, H.

- creative draughtsmen 526
- governing without engineers 1029
- grasping the design nettle 940 what size machine tool firms? 326
- Claxton, E., compound catenary equipment for LMR 30
- Clay bricks and blocks, in industrialized building systems 1047
- Claymore Manufacturing Co., intercom for four stations 502
- Clayton Aniline, Stretford process for hydrogen sulphide purification 1160
- Clayton Dewandre, Milomatic lubricator for valve gear 305
- Clean room, air conditioning unit for 740 Semtex synthanite flooring for 740 Venesta Instant building board for 603
- Clean room personnel, Mancleaner unit for 740
- Cleaner, steam, Steamatic 3000 39 vacuum, dual-purpose, Vacmaster 1178
- heavy duty, industrial, Trash-Vac 829 Cleaning, chemical, of boiler tube 459
- of boiler internal surfaces, West Thurrock 819 of scaffold tube 740 steam, of excavators and earth moving equipment
- 1140

Cleaning compound, S23 261

Cleaning plant blast, Scanner panel for 1054

- Cleaning tank, ultrasonic 1008
- Clear Opening ventilator, Colt 245
- Clearlane road marking paint 92
- Cleary, E. J. impact of Severn Bridge 1066 Cleco Air Tools, percussion tools (trade publica-
- tion) 364 Cleco Tools Division, drills (trade publication) 156
- Clegg, W. B., Europe's space transporter 804
- Cleveland automatic typing gauge block calibration system (trade publication), 156
- Clifford & Snell, plug-in mount heat-sink 502 Clock(s)
- digital, for process control and data logging 407 trade publication 970
- Close, P. D., on Sound Control and Thermal Insulation of Buildings (book) 785
- Cloud production experiments, NASA 251 Clutch(es)
- and brakes (trade publication) 1058 electric, in coil winding machine, Warner 1095 electrostatic torque, GEC 689 flexible coupling and, Pneumaflex 782 Porsche single dry-plate 229 Warner electronically controlled 1003
- See also Coupling
- Clywedog regulating reservoir 340
- C. & N. (Electrical) Ltd., coordinate marking-out

- ceramic, flame spraying of 539
- for protection from de-icing agents 540
- moisture curing protective, Quentglaze 500 of springs 250
- polyvinyl chloride, for refrigerator trays 1012
- spray, polyvinyl chloride 462
- steel sheet, pvc plastisol for, Sternite-S 46
- VeoVa 911 monomer for 261
- vinyl, of ribbed aluminium building sheet 1090 Coating machine for shell cores and moulds, Fordath-2000 1055
- Coating whirler, Lee-Smith 1009
- Cobalt Information Centre 155
- Cochran & Co. Ltd., Cosi-Clad insulated chimney 206
- Cockerell, C. S., dispute with NRDC 419 founder of hovercraft industry 1080 views on British Hovercraft Corp. 471
- Cockcroft, Sir John, on Organization of Research Establishments (book) 1057
- Cohen, George, Machinery Ltd., Eldair scrap baling press 600
- Jones 15–7 crawler crane 959
- Cohen, George, 600 Group Ltd., copying lathe (trade publication) 1058
- plant for steel scrap from discarded motor cars 902
- Cohen, J., on Human Robots in Myth and Science (book) 609
- Coil components production, Plessey 1180
- Coil winding (trade publication) 1058
- Coil winding machines, Westminster 1095
- Coil winding processes and equipment, Plessey 1181
- Coining press. See Minting press
- Coinmaster minting press 865
- Coke-oven gas purification and separation 1160 Cold rooms, coolers for 687
- Cole, R. H., Electronics Ltd., armature balancing machines 552
- coil winding (trade publication) 1058 heater bands 96
- Coleman, C. B., semi-bulk handling containers 1121
- Coleman, T., on The Railway Navvies (book) 264 Coles Illustrious diesel-electric crane 957
- Coleshill oil gasification plant, breakdown at 72, 230
- Collapse load in plastic design 746
- Collating machine, Electromatic Pacemaster-64 738
- Colleges of advanced technology, prospects for 1966 7
- university status developments 472
- Colliery
- Bevercotes, mechanization techniques 987 Cynheidre 118
- Lea Hall, management structure 991 mechanization at 990
- See also Mine
- Colliery closure and production statistics, NCB 985 Colliery management, legal qualification requirements 985
- salaries in 988
- Colliery mechanization development 985, 990
- Collimator for optical torguemeter 310-13
- Collins, H. E., NCB mechanization 985
- Collision. See Accident
- Collossus Powerbeam 360 container crane 713
- Colomet vinyl paint finish for roof decking 206 Color-Rad colour measuring equipment 352
- Colour code identification washers (trade publication) 924

- Comite Consultatif International Telegraphique et Telephonique 26
- Commercial and Industrial Insulation Ltd., urethane from insulation for Hortonsphere spherical vessel 913
- Commercial Union building, structural details 907 Committee on Manpower Resources for Science
- and Technology 934
- Commonwealth. See also Australia, Canada, etc. Communication

signals, systems and, by B. P. Lathi (book) 1183

trunk waveguide, by A. E. Karbowiak (book) 208

satellites and field station system, US Army 667

Communications equipment, Surveyor A space-

Compagnia Technica Industrie Petroli, refinery for

Compagnie Nationale du Rhône, Pierre-Bénite

Comparator, length, for cement and concrete

Compensators, expansion, for steam pipe 822

Compiler processor project, Imperial College 803

Complex Variables, by H. J. Bremermann (book)

Compoflex Co. Ltd., Plastiflex flexible pvc ducting

Composite building construction (trade publica-

Compressed air drilling rig for cats-eyes in roads

Compression socket couplers for industrialized

centrifugal, in turbojet aircraft engines 944

oil-less piston-type, Bell & Gossett Ltd. 356

compiler processor project, Imperial College 803

digital, for dyeing machine control, Vaco-Pilot

Elafloor extruded polyvinyl chloride floor for, 100

in university research, Flowers Report on 221

Hydrovane packaged 690, 830, 1138

tractor mounter, Bristol Duplex 358

Computaire air conditioner 739

Elliott ARCH-1000 251

investment grants 796

V-type, needing no bolting down 407

AEI 1040, Oldbury power station 1118

data communication by telephone 376

design of hydrostatic bearings 304

Honeywell H20 digital control 953

aircraft engine control by, NGTE 993

diesel-driven, James Howden/English Electric

Communication theory, information and, by A. M.

- facsimile, for police 285
- guided light energy 304

Rosie (book) 743

for elderly persons 173

sea station system 667

Compact electrode holder 1042

power station scheme 861

Com-Pak mercury arc rectifier 721

Compartment tray, polystyrene 309

Companies Bill, requirements of 269

Company weaknesses, R. B. Buzzard 520

Competition, apprentices'. See Apprentice

Compound engines for Royal Navy 15

Compound mixer, two-part 148

building installations 382

modulation meter for 691

optical transmitter/receiver link 742

Communications

laser in 53

craft 1074

Suez Oil 1158

samples 308

314

262

455

Compressor

1031

Computer(s)

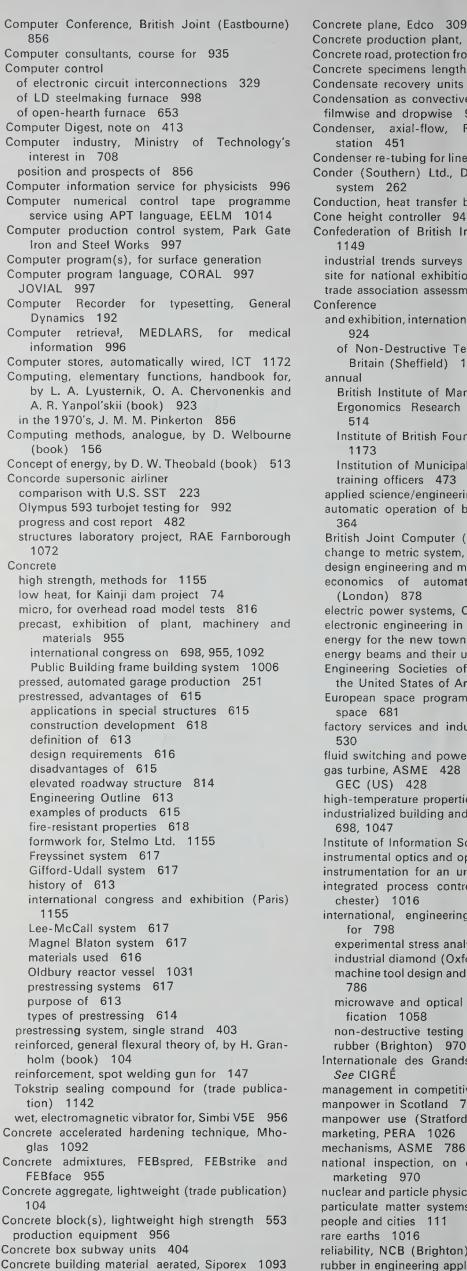
1096

tion) 48

tables 952 CO2. See Carbon dioxide CO2 welding. See Welding Coach, railway. See Carriage; Railcar Coal and the power industries in postwar Britain, by E. S. Simpson (book) 655 Coal Board. See National Coal Board Coal gas. See Gas Coal handling plant, Ferrybridge C power station 449 Coal industry, position and prospects 424 warning on run down in 752 Coal mine. See Colliery; Mine Coal mining in South Wales 118–119 Coal mining industry. See Coal industry Coal slurries, filtration of 251 Coal trains, merry-go-round 449 Coanda effect 1114 Coanda, H., fluid flow theories 1114 Coating(s)

Colour Galbestos sheeting 249 Colour measuring equipment, Color-Rad 352 Colston Appliances Ltd., Colston Mk. 4 dishwasher 33, 36 Colt Ventilation and Heating Ltd. Clear Opening ventilator 245 MF roof ventilator 247 VO ventilating light shutter 246 Combined Optical Industries Ltd., Polaroid Land Swinger camera 1030 Combined Optical Products Ltd., Magnum and Hi-Define industrial magnifiers 910 Combustion, heat transfer by 977 Combustion control process, Houseman-Varo 643 Combustion Engineering Association, conference on Energy for the New Towns 1184 Combustion Engineering Inc., supercritical boiler for Drakelow C power station 345 Comino-Dexion Group, open steel flooring (trade publication) 656

KDF7, for Czech steelworks 997, 999 KDN 2, for LD furnace control 998 Leo 360, for Czech steelworks 997, 999 microcircuits for, Ferranti 605 microminiature, Plessey 954 MOT projects 803 NCR-315, AEC 144 numerical methods and, by Shan S. Kuo (book) 463 Oldbury nuclear power station alarm system 1118 on-line applications 856 pipe stress analysis by 1172 position and prospects of 856 steel industry automation 997 Systems 4-75, EELM 856 transient torque/speed characteristics determination 821 Computer analysis of motor-car underbody 479 Computer Centre, Automobile Association 633



- Concrete design (trade publication) 698
- Concrete floor slabs, extruder for, Spiroll 956
- Concrete making, hot water plant for 402
- Concrete mixers, Multi-Hydrobot water control for 955

pan, Creteangle 955

- Concrete pipe, wire reinforcement cage for 956
- Concrete production plant, Schlosser 956 Concrete road, protection from de-icing agents 540 Concrete specimens length comparator 308 Condensate recovery units 409 Condensation as convective heat transfer 975 filmwise and dropwise 975 Condenser, axial-flow, Ferrybridge C power station 451 Condenser re-tubing for liner Queen Elizabeth 671 Conder (Southern) Ltd., Drysweep silo-emptying system 262 Conduction, heat transfer by 976 Cone height controller 947 Confederation of British Industry, exports survey industrial trends surveys 372 site for national exhibition centre 1025 trade association assessment 322 Conference and exhibition, international fluid power (London) of Non-Destructive Testing Society of Great Britain (Sheffield) 1100 British Institute of Management 524 Ergonomics Research Society (Manchester) Institute of British Foundrymen (Scarborough) 1173 Institution of Municipal Engineers 1105 training officers 473 applied science/engineering project work 984 automatic operation of broadcasting equipment British Joint Computer (Eastbourne) 856 change to metric system, BSI 757 design engineering and management PERA 610 economics of automated materials testing (London) 878 electric power systems, CIGRE 1163 electronic engineering in oceanography 464 energy for the new towns 1184 energy beams and their uses 970 Engineering Societies of Western Europe and the United States of America. See EUSEC European space programme (Hamburg), Eurospace 681 factory services and industrial buildings, PERA fluid switching and power amplification 414 gas turbine, ASME 428 GEC (US) 428 high-temperature properties of steel 314 industrialized building and the structural engineer 698, 1047 Institute of Information Scientists (Oxford) 832 instrumental optics and optical design 970 instrumentation for an urban society 878 integrated process control applications (Manchester) 1016 international, engineering societies, proposals for 798 experimental stress analysis (Berlin) 780 industrial diamond (Oxford) 1099 machine tool design and research (Birmingham) microwave and optical generation and amplification 1058 non-destructive testing (Montreal) 104 rubber (Brighton) 970 Internationale des Grands Reseaux Electriques. See CIGRÉ management in competitive Britain (BIM) 524 manpower in Scotland 744 manpower use (Stratford-upon-Avon) 477 marketing, PERA 1026 mechanisms, ASME 786 national inspection, on quality, reliability and marketing 970 nuclear and particle physics 1142 particulate matter systems (Milwaukee) 786 people and cities 111 rare earths 1016 reliability, NCB (Brighton) 982 rubber in engineering applications 1100
- science, technology and government (Bath) 1142
- solid state physics 1142 space structures (Battersea) College of Technology) 156
- teaching of engineering design (Scarborough) 264, 656, 751, 753. Letter 940

team approaches to complex problem solving 924 training of shop steward 414

water pollution research (Munich) 1016

X-ray spectrochemical methods 924

Conflict and human relations training, by R. J. Hacon (book) 877

Conforming Matrix Corp., masking method for precision painting 195 Congress, International, Automatic control (London

- 1966) 48
- International Federation of Automatic Control 1156
  - Precast Concrete Industry (London) 698, 955, 1092

Conn, G. K. T., on Evolution of the Nuclear Atom (book) 156

Connectors

BNC range 952

duct, flexible, Durodyne 301

panel cable 1129 precision coaxial. Letter 754

relays and switches, by G. A. Dummer and N. E. Hyde (book) 414

sockets, and plugs (trade publication) 556

Connel Ferry-Ballachulish service, railway conversion to road 480. Letter 715

Connell, W., gas turbine development seminar 528 Conrad, G. T., Jr., transistor failure prediction 1182 Conservative Party manifesto 469

- Consolidated Pneumatic Tool Co. Ltd., compressed air drilling rig for cats-eyes in roads 455
- Constanite material lift 1011
- Constitution of binary alloys: first supplement, by R. P. Elliott (book) 877
- Construction and professional management, by H. Rubey and W. W. Milner (book) 1183
- Construction equipment for airborne military operations 284
- Construction Industry Training Board, 1 per cent levy of 1024

Constructors John Brown Ltd.

- Algerian oil pipeline 573
- deep diving chamber 93
- electrolytic sewage purification using sea water 1168 electrolytic sewage treatment plant for Guernsey

232

helically welded stainless steel tube 102

Consultair Ltd., pneumatic counters 153 Consulting practice in universities in US 1067

Contact operations using explosives 1104

Contactor

block-type 401

vacuum, AEI 548

Contactor-relay, UCO Unit System 361

Container(s)

bulk, aluminium 1044

- bulk powder road/rail, Prestank 1070 1121
- Flo-bin, for semi-bulk handling

for freight transport, B.S.I. 354

- freight 806 Liqua-bin, for semi-bulk handling 1121

road/rail, for powders and liquids, BR 1070

road/rail tipping, Demtip 1070 standardisation recommendations 712

- tank, road/rail, Demtank 1070
- Container carriage by road vehicles 438
- Container crane, Colossus Powerbeam-360 713 single-boom, Super Colossus 712 twin-boom 713
- Container design for Freightliner trains 438

Container handling, Drott Travelifts for 438

- Container handling equipment for ships 712
- Container ships, discussion on 392
- for Hook of Holland route 1033
- Container system, Twin-Tainer 961
- Container traffic on international shipping routes 139
- Continental Chemical Corp., Stepon stair carpet protection in Surlym A ionomer resin 1115
- Continental Engineering, Stamicarbon NV/DSM process for urea synthesis 1162
- Continuous maximum principle, by L. T. Fan (book) 1057
- Contract(s) of Employment Act 7

Contract plant replacement scheme 1064

Control(s)

- and management of capital projects by J. W. Hackney (book) 655
- automatic

advances in (book) 877

congress of international federation of 1156 dynamic analysis and, an introduction to, by

E.

P. O. A. L. Davies (book) 264 in ships 396 International congress on (London 1966) 48 of meal mill production 461 see also Automation economy and technological progress, V. A. Trepeznikov 1156 hydraulic, for winch 409 mechanical, mechanisms, and linkages, by N. P. Chironis (book) 655 Control accessories for electric motors 695 Control centre, multi-motor, English Electric 696 Control engineering, progress in (Vol. 3), by R. H. Macmillan, T. J. Higgs and P. Naslin (book) 1099 variational methods in, introduction to, by A. R. M. Noton (book) 877 Control equipment, air conditioning, Satchwell 686 heating, Satchwell 686 pneumatic, Maxam 829 thyristor dc motor/speed, Mullard 696 Control gear, Belmos flame proof mining type 550 electrical (trade publication) 970 Control systems electric, for domestic appliances 386 in ships, BEAMA committee 668 linear automatic, statistical dynamics of, by V. V. Solodovnikov (book) 463 load/strain, Instron 688 time-domain analysis and design of, by R. C. Dorf (book) 831 Control units (trade publication) 1016 Controller for desk calculator, ROBOX-103 401 integrating, Satchwell-588 386 Petite range, Lancashire Dynamo 953 Smiths Industries' Autoset 386 Controls Co. (UK) Ltd., automatic oil lifter 643 Controltac No. 9650 marking film with an adhesive coating 462 Convection, forced 974 heat transfer by 973, 976 laminar and turbulent flow 974 natural 974 Conversion slide for metric system, BSI 740 Converter, analogue-to-digital 1045 sratic power, Mackie 545 Conveyor air cushion Aeroglide 1010 Jet Stream 958 box system 506 cooling, for briquetting plant 205 elevator mobile self-contained 406 for grain handling 597 gravity feed, Esel 97 hydrostatic drive for 916 mobile, Speedyfeeder Mark 2 1136 overhead chain, Vertichain 154 packing room installation, STC 1013 Reptil automatic systems 506 vertical steel band 506 Conveyor lubricator, automatic dispensing 97 Conveyor system air cushion, Aeroglide 1010 for mail sorting office. Southampton 1000 Ohrnell 506 trade publication 1016, 1100 Conway by-pass jet engine 518 Conway, H., European cooperation 842 Conway, H. G., metric threads 65. Letter 225 Cook, H. E., gold-silver diffusion 652 Cookers, electric, at domestic appliances show Coolant clarifier, MEL Equipment 148 Coolers for cold rooms 687 water, Crawley Bros Ltd. 355 Heenan and Froude Ltd. 454 Cooling conveyors for briquetting plant 205 Cooling systems, motor car engine, Stratton, Stringer and Taylor 666 thermoelectric, Frigi-Pak 950 **Cooling towers** and wind loading 1166 collapse of 447 reinforcement of 447 wind tunnel tests on 941 Cooper, A. R., appointments held by 752 Cooper Electroheat Ltd., welding and heat treatment of stainless steels 38 Cooper-Maserati, F1 motor car 174 monocoque racing motor car 83 Co-ordatrol automatic turret drilling machine 766

Co-ordatrol numerical control equipment 869 determination 821 Coordinate tables with numerical control, Grimston-AEI 95 Copath linear interpolator 307 Copenhagen Plastics Exhibition, CRV 5 motor car with plastic body 949 Copier/duplicator, Rank Xerox-2400 1014 Copp, D. L., gas distribution grid 291 Copper, flame spraying 1071 sixty centuries of, by B. W. Smith (book) 104 Copper alloys flame spraying of 1071 Copper billets, automatic heating plant 38 Copper brazed steel tube, double wall, Ful-braiz 1098 Copper tube for water services, BS 379 Copperad Ltd., Minivector central heating unit 644 Coppersmiths. See National Union of Sheet Metal Workers and Copying machine, Arcor Electrostatic 509 electrostatic, Super-Stat 649 Omal Electromat 962 CORAL computer program language 997 Corby new town, development position and prospects 61-63 Cordero, H. G., on Iron and Steel Works of the World (book) 208 Core blowing machine, automatic hot box 1055 Croning 1054 Core blowing techniques, high pressure 1056 Core breakdown agent, Dexil 34 (BNF) 1055 Core making machines for diecasting 499 Corella, fisheries research vessel, legal action over stabiliser in 715 Cornell University, temperature control for low temperature testing 92 Cornelly Equipment Co. Ltd., Multi-Hydrobot water control for concrete mixers 955 Corning fluidic control relay 823 Corning Glass Works, fluid logic system 954 Cornish engine in motion. Letter 117 Cornish Engines Preservation Society 857, 859 Corona 1500 and 1600 cc motor car Toyota 1077 Corporation Tax, comment on 269 Corrosion and its prevention in waters, by G. Butler and H. C. K. Ison (book) 696 and surface-protection exhibition, international (Gothenburg) 924 anti (trade publication) 1142 stress, failures, prevention of 460 Corrosion Abolition Ltd., anti-corrosion treatment (trade publication) 1142 Corrosion advice bureau and booklets (BISRA) 92 Corrosion protection, Metalife system of 540 of steelwork at Tema 249 Corrosion resistance of stainless steel 92 Coseley Engineering Services Ltd., textile mill for Guinea 849 Cosi-Clad insulated chimney 206 Cossor, A. C., Ltd., digital information display system 953 Cossor instrument landing system/v.h.f. omnirange test set 492 Costain Concrete Co. Ltd., Siporex aerated concrete building material 1093 Costain, Richard (Construction) Ltd., Siporex aerated concrete building material 1093 Costain, Richard, Group, Siporex aerated concrete building material 1093 Costain, Richard, (Gulf) Ltd., textile mill for Guinea 849 Costin-Nathan motor car 175 Council of Engineering Institutions steam, diesel engine for 459 appointment and functions of assistant secretary 59 chartered membership position 172 education requirements 273 examination syllabuses and specimen papers 846 first annual report 474 non-exemption for HNC 217 prospects for 1966 7 qualifying examination proposals 661 survey on professional engineers 979 Council of Industrial Design, capital goods' award scheme 283 Council of Industrial Design Awards 283 Design Centre Awards 866 Council for National Academic Awards, awards of 845 polytechnics scheme 1024 Council for Scientific Policy, first report 1023 Counter binary, transient torque/speed characteristics

Bo decade 206 decade, Elma range of 206 microcircuit decade 643 modular, Veeder-Root Ltd. 1170 pneumatic, Consultair 153 revolution, Carter 40 Counter/timer, Advance Electronics 1137 Counting, scintillation, liquid, symposium on 1100 Coupe Bros. (Sheffield) Ltd., concrete box subway units 404 Coupling(s) bellows (trade publication) 1100 constant velocity, fatigue failure of, vindication of 378 flexible, and clutch, Pneumaflex 782 fluid, production of 602 with steel shot flow charge 875 free-flow, Lockheed Avery-Cejn 739 swivel pipe, aircraft hydraulic system (trade publication) 832 see also Clutch Courses critical path methods, AERE 786 engineering design, Cambridge University 751 postgraduate, Arthur Report on 934 training officers 5 Courtaulds Engineering Ltd., Vaco-Pilot digital computer for dyeing machine control 1096 Courts, kangaroo, comment on 519 Cousins, F., general secretary TGWU 226 message to ENGINEERING 65 numerically controlled machine tools 841 responsibility for aircraft and shipbuilding 1147 Coutinho, J. de S., Annals of Reliability and Maintainability Vol. 4 (book) 104 Coventry, experimental planning role 1106 Coventry Climax Engines Ltd., fork lift, reach, and platform trucks 958 FPE V8 motor car engine 174 Coventry Gauge and Tool Co. Ltd., Matrix adjustable mini-caliper gauges 921 Cowan, N., skills analysis training at Perkins Engines 67 Cowie, G. R., A Manual of Applied Chemistry for Engineers (book) 556 Cowls, industrial and domestic, Harvey 408 Cox, D. R., on Theory of Stochastic Processes (book) 207 Cox, E. S., on Locomotive Panorama Vol. 2 (book) 610 Cox of Watford Ltd., Watford GT3 safety seat for motor cars 1071 Coyne and Bellier, Abu Simbel project 128 Crack detector, magnetic, EMAG-1,000 1090 Cradle, building, 'Space Climber' 102 Craftsmen, training of, EITB 980 CRAM magnetic cards for production control. 144 Crane(s) container Colossus Powerbeam–360 713 single-boom, Super Colossus 712 twin-boom 713 crawler, Jones 15-7 959 diesel-electric, Coles Illustrious 957 electric overhead travelling, Centre-Lift 410 range 1134 jib (trade publication) 208 light, Hydrocon Hornet 599 mobile, Valla, with fork-lift attachment 958 mobile gantry, Nohab 554 overhead bridge, with linear motor 873

torsional box girders for, Smith-Savigliano Tor-Box 47 tractor, 'Tracma' (trade publication) 414 truck-mounted, Alpine 959 Crane Fruehauf Trailers Ltd., biggest trailer in Europe 807 trailer for 197 ton loads for Russia 807 Twin-Tainer container system 961 Crane Packing Ltd., jointing and anti-seize compounds (trade publication) 1142 Cranfield Society, Aerospace Development Council 222 Crankcase, diesel engine, design research 374 Crankshaft(s) BRM H16 3-litre racing car 898 diesel engines, V arrangement, Sulzer 542 Holset vibration damper for 542 Crawley Bros. Ltd., water cooler 355 Creasy, L. R., industrialized techniques of construction 1047

141

Engineering Volume 201 1966

Creativity at school, film on 324

- Creda plan Quick-Disc electric hotplate 867 Creep
- and stress relaxation in metals, by I. A. Oding (book) 1141
- behaviour prediction by elastic models, Ashford and Sherwood 780
- of plastic model materials, Muller 780
- Creep-rupture tests on steels, ERA 456, 458
- Creteangle pan concrete mixer 955
- Critical path methods, course on, AERE 786
- Crofts (Engineers) Ltd., worm gear electric motors (trade publication) 1184 Croftshaw (Engineers) Ltd., solvent recovery
- stills 830 Cromp-Arc production head stud welding unit
- 1011
- Crompton Parkinson (Cables) Ltd., cable plant activities and extension 410
- Crompton Parkinson Ltd., Cromp-Arc production head stud welding unit 1011
- Series 6 three-phase electric motors 306 Cromwell, E. M., & Co. Ltd., Ceemarcyne cold
- setting resins for hard surfacing 462

Croning core blowing machine 1054

- Crosland, A., science policy 1023
- Cross, Malcolm, Ltd., cable reeling drum 358
- Cross-Ram digging grab 1010 Crossbar electromechanical system, Plessey-5005
- 330 Crouzet England Ltd., timers (trade publication)
- 1058 Crown Staffordshire China Co., Polytite skin
- packaging for china goods 353 Cruachan pumped storage hydro-electric scheme, closed-circuit television 540
- Crushers, impact, Hazemag 199
- CRV5 motor car with plastics body 949
- Cryogenic cast iron 101
- Cryogenic castings (trade publication) 698
- Cryogenics and heat transfer 976
- Crystal Palace exhibition centre proposal 1025
- CUB oil-fired burner, Tecalemit 963
- Cubic and quartic equations, solution of, by S. Neumark (book) 414
- Cubitt Index 112
- Cullwick, E. G., on Fundamentals of Electro-Magnetism (book) 1057
- Cumberland Basin split level interchange, Bristol, street lighting for 637
- Cunard liner Queen Elizabeth, refitting for cruising 670
- Curvator flame cutting machine 509
- 'Curv-Line Q-Panel' wall cladding 101
- Cushioncraft CC-5 hovercraft 427
- Cushioning materials in packaging for transport 810 Cut-off machine. *See* Cutting-off machine
- Cutter(s), hobs and (trade publication) 364 trepanning, DXD, for large diameter holes 741
- Cutter head, Duplex all angle 258 Cutting, flame, Curvator machine 509
- metal, mechanics of, by N. N. Zorev (book) 969 Cutting machine, circle 922
- profile, with hinged arm 692
- Cutting-off machine, abrasive wheel 650 automatic 829
- Cutting tool. See Tool(s)
- Cwmbran new town 166
- Cyclopac packaged air conditioning units 686 Cycolac ABS plastic for CRV5 motor-car body 949
- Cylinders
- gas
- fire hazards of 1078
- handling and use of 1078
- hydraulic, Broughton 1176
- T. Millington & Co. Ltd. 301
- Cynheidre colliery 118
- Czechoslovak State Railways, Giesl ejectors on steam locomotives 379

## D

12

- Dainton Report on arts and science students 320 Dam, Aswan High, removal of temples 127-129 Kainji project. See Kainji dam project
  - Miraflores, Colombia 1166
- Pierre-Benite construction scheme 861 Dam construction *Biarritz* grab dredger for 595
- for Plover Cove, reservoir 595 Damp proofing (trade publication) 970
- Danarm Ltd., LS Cut-All grinding wheel 1095 Danfoss (London) Ltd., air thermostats for auto-

- matic control of space heaters 352 oil pump for heavy-oil burners 508 RAV thermostatic radiator valve 687 self-actuating temperature regulator 739 solenoid valve 103
- Dartford, J., Clamp structural plastics system 1049 Dashboard, metallized phenolic moulding for 820 Dassault, Galion airbus 666
- Data Acquisition Ltd., signal conditioning unit 407
- Data collection and recording systems, Allen West 953
- Data communication to computers by telephone 376

Denmark, district heating in 183-184

Labour Government 841

and trade associations 219

(trade publication) 832

Derailments and welded rails. Letter 326

Deri Sine hydraulic pumps and motors 828

de Roo, H., grain handling at Amsterdam 597

Derrick, erection by self-climbing method 824,

Desalination, water, and combined generating

education for, B. Turner 753. Letter 940

of high speed diesel engines, by M. H. Howarth

optical, instrumental optics and, conference on

plastic, of structures, Engineering Outline 745

Design education, industry's responsibility, J.

Design Engineering and Management, conference

Designing, molecular, of materials and devices, by

Desk calculator, controller for, ROBOX-103 401

Desoutter Group, pneumatic Auto Feed drill 454

Desoutter Lang Pneumatic Ltd., diaphragm pilot

Detector, phase sensitive, Brookdeal Electronics

Detel Products Ltd., Clearlane road marking paint

Deutscher Ingenieurtag 1966, Automation-An

Developments in mechanics Vol. 2, Part 1, by

S. Ostrach and R. H. Scanlan (book) 103 Developments in mechanics Vol. 2, Part 2, by

S. Ostrach and R. H. Scanlan (book) 263

De Waard, P., strain gauge measurements on

Dewhirst, E. V., gravity die-casting of aluminium

Dewhurst, D. J., on Physical Instrumentation in

Dewrance Controls Ltd., ASCO air control valve

Dial-a-pump, Durrum, positive displacement unit

Dialarm remote telephone alarm system (trade pub-

international conference (Oxford) 970, 1099

multi-lingual glossary and buyer's guide 555

to metal surface, electrochemical bonding of 652

Dick, R. & J., Ltd., Variflo variable-speed drive

Diamond compound for machine lapping 652

Diamond sawing, Whitefriars Glass 152

Dickinson, H. W., Memorial Lecture 857

Medicine and Biology (book) 1015

Dexil 34 (BNF) core breakdown agent 1055

Dialarm automatic warning device 954

Dialin numerical control equipment 869

Devereux, W. A., Industrial Training Act 1108

Dew-Hughes, D., superconductivity 794

Destaco toggle clamps (trade publication) 314

structural, in aluminium, by L. P. Bowen (book)

teaching of, conference on 264, 656, 753.

courses at Cambridge University 751

activities 221

circuits 254

825. Letter 940

plant 285

Letter 940

(book) 1141

Wooding 754

on, PERA 610

valve 303

Ltd. 356

92

1130

910

Diamond

industrial

lication) 743

units 1130

970

969

teaching of, Fuchs 754

Design Centre Awards, review of 866

Design Index, Design Centre Awards 866

A. R. von Hippel (book) 1015

Desk lamp, fluorescent, Best & Lloyd 866

Series M80 pneumatic screwdriver 146

Destroyer, Type 82 guided missile 427 Desulphurization of diesel oil 1158

Engineering Task 610

rotating machinery 780

silicon alloy pistons 1173

Diagnostic instrument, ultrasonic

Design projects course, Seireg 754

engineering

Design

Derusting compound, S23 261

Dennison, H. A. J., explosive forming 1104

Density meter, Krohne, for liquid mass flow 1129 Department of Economic Affairs, activities under

Preston/Leyland/Chorley area growth study 1066

Department of Education and Science, computer

operative, craft and technician examinations 981

Dependatherm temperature measuring systems

Deposition techniques for thin film integrated

engineering as career (booklet) 795, 894

- Data logging equipment in ships 396
- Data logging modules, NBS 360
- Data processing unit for tape programming, Pencil Follower 1014
- Data Retrieval System for building industry 1087 Data sheet(s), reproduction of 877
- Data sheet unit, Royal Aeronautical Society 9
- DATAR. See Digital Auto-Transducer
- Datatrol numerical control equipment 869
- Davenport, A. G., wind problems in tall buildings 904 Davey, Paxman & Co. Ltd., UIC tests in Ventura diesel engine 534
- Davies Integrated Sales, Slimline conductive-plastic potentiometer 206
- Davies, J., BIM conference 524
- trade associations 322
- Davies, J. Llevelys, planning conference on Wales 755
- Davies, John, & Son (Derby) Ltd., safe lights (trade publication) 743
- Davies & Metcalfe, vacuum controlled air brake 721 Davies, P. O. A. L., on An Introduction to Dynamic
- Analysis and Automatic Control (book) 264
- Davies, S. J., trade exhibition in West Germany 1066 Davis, John, & Son (Derby) Ltd., sound-powered
- telephones (trade publication) 1142 Davis & Lloyd (1955) Ltd., aluminium alloy rail
- tank wagon 513 Davyhulme sewage works, opening of new exten-
- sion 942 Dawe Instruments Ltd., digital modules and instru-
- ments 1090 Sonoray ultrasonic thickness gauge and flaw detector 202
- transistorized phase meter 359
- Dawson Bros. Ltd., Mini Major degreasing machine 1138
- Day, R., Pye-1108 mono reproduction model radio 867
- Dc inductive loads, relay for switching of 1013 DCMC Industrial Aerosols Ltd., polyvinyl chloride
- spray coating 462 Deakin Phillips Electronics Ltd., vibrating wire
- strain gauge 742
- Decco Teen flameproof solenoid 1003
- Decompression chamber for deep-sea diving 334
- Deep-drawing test machine 42 Deere, M., applied science at Reading University 1068
  - Reading Schools Engineering Club 64
- Defect detection in sheet metal surfaces 250

Degreasing machine, Mini Major 1138

Delay timer with automatic reset 1043

Delecta medium voltage switchgear 549

DeLong Corp., Sea Gem oil drilling rig 9

Deltaline push-button telephone STC

Demineralizer, Deminrolit, Permutit 691

Deminrolit demineralizer, Permutit 691

Demtank road/rail tank container 1070

Denholm, I., management studies 281

motors 828

Demtip road/rail tipping container 1070

Deltaphone dial telephone, STC 866

Defence, White Paper on 420

bores 146

cooling system 950

552

- Deflection ordinates for single-span and continuous beams, by G. Anger and K. Tramm (book) 48
- Degassing, vacuum, of steel (book) 156 Degenhardt & Co. Ltd., stereomicroscopes (trade publication) 1184

De Haas, H. M, interpretation of moire pictures 780

de Havilland Canada, Twin Otter feeder airliner 941

De-icing agents, coatings for protection from 540

Delapena & Son Ltd., homing machine for long

stroking fixture for Speedhone honing machine

De La Rue Frigistor Ltd. Frigi-Pak thermoelectric

Dell Quay Sales Ltd., Johnson outboard motors 718

Denco Miller Ltd., Computaire air conditioner 739

Denison Deri Ltd., Deri Sine oil hydraulic pumps and

- Dictating system, centralized, Agavox 784 Distribution(s), by H. J. Bremermann (book) 314 Dictionary of mathematical sciences, by L. Herland (book) 923 six-language, of plastics and rubber technology, by A. F. Dorian (book) 831 Die(s), explosive forming 1101 lapping with diamond compound 652 Die casting of aluminium bronze 1174 of aluminium-silicon alloy pistons 1173 pressure, Brockhouse/Lester machines 499 Kaye Alloy Castings 499 Die casting foundry, Kaye Alloy Castings 499 Die casting furnace with automatic burners 1042 Die casting machine for improved finished zinc 830 Die Casting Machine Tools Ltd., die casting machine for improved finished zinc 830 Die holders, re-usable, nickel steel for 261 Die-spotting press 256 Diescon waste-heat recovery system 400 Diesel engine. See Engine Diesel locomotive. See Locomotive Diesel oil, desulphurization of 1158 Diving Differential equations, applied, by G. Feineman, S. Garrett and A. Kraus (book) 743 Differential geometry, tensor calculus through, by J. Abram (book) 363 Diffraction equipment, electron 690 Diffusion, gold-silver, slow rate of 652 37 in body-centred cubic metals (book) 48 Diffusion furnace, Electroglas 1042 for microcircuit production, Thermco Pacesetter 606 819 for microcircuits, Thermco 605 Diffusivity measuring equipment, thermal, GEC 689 Digging grab, Cross-Ram 1010 Digital Auto-Transducer and Recorder (DATAR) 1177 Digital dial display assembly, Midgi-Dial 823 Digital display of mechanical motion (trade publication) 924 Dock Digital modules and instruments, Dawe 1090 Digital position indicator, Rotax 920 669 Digital tachometer for transient torque/speed characteristics in induction motors 821 Digi-Tape units for machine position measurement 777 Digiturn measuring system 960 Dimensions in building, coordination of, BS 534 Dinosaur demountable lorry bodies 302 386 Diode avalanche, Read 91 1025 silicon 91 Diode source, step recovery, M-O Valve 951 Diode tester, Avo 951 Disc, flexible abrasive, with bayonet locking 909 rupture, reverse-buckling 909 turbine, proving for gas turbines 529 Discourse on Fourier series by C. Lanczos (book) 877 Discovery, invention and innovation, H. M. Finniston 624 Dishmaid DA10 dishwasher 32, 35 Dishwasher Colston Mk. 4, 33, 36 Dishmaid DA10 32, 35 Kenwood A1212 33, 36 Kim Mk. 1 34, 35 Miele G45 32, 35 survey of 31-36 Swanmaid 34, 36 Westinghouse SUF4NXW 31, 35 301 Display, digital, of mechanical motion (trade publication) 924 Display assembly, digital dial, Midgi-Dial 823 Display lighting units, Quartet Major 866 Display system, digital information, Cossor 953 Distillation plant for lighthouses 95
- Steels Process Plants 1160
- water, yachting version 71
- Distillers Chemicals and Plastics Ltd., carbon dioxide storage vessel with polyurethane insulation 1046
- flux-cored wires for CO2 welding 1132
- polychloroprene synthetic rubber 101
- Distillery, gin, Beefeater, development scheme 1071
- whisky, at Invergordon 848, 892
- Distington Engineering Co. Ltd., Stream Fisher vessel for nuclear fuel elements 494

- Distribution system for Central Costanera power station 776 District heating Aldershot 187 AWRE scheme 187 Billingham scheme 185 British projects 185-9 development review of 181-9 gas turbine for 584 in Denmark 183-4 in Sweden 183-4 Ministry of Works schemes 187-9 Paisley scheme 187 Perma-Pipe mains for 388
  - Pimlico scheme 187
- position and prospects 189
- Scandinavian approach 183-4 thermoelectric schemes for 181, 183, 184. Letter 276
- Vasteras project 182

Distugil S.A., polychloroprene synthetic rubber 101 Dividing tables, rotary 922 deep sea, oxy-helium mixture for 334

- submersible decompression chamber 334 SCUBA, air buoy for 718 Diving chamber, CJB-Divcon Ltd. 93
- Diving system, twin-chamber deepwater, Cachalot
- Divisor slide-rule wrist watch 1156
- DKW Audi motor car 1077 d-Mac Ltd., Pencil Follower for oil well log data
- Pencil Follower data processing unit for tape programming 1014 Do it yourself, handicrafts and, international
- exhibition (Olympia) 1100 Dock(s), Tilbury, modernisation and extension 1164
- Dock gate seals in neoprene 540
- ck ramp for vehicle loading and unloading, Serco 1094 Dockyards, management in, Sansbury and Sutherby
- Dodge, motor vehicle tractors for container carriage 438 Dodsworth, J.E., obituary 523 Dollin, F., 500 MW turbine generator sets 453
- Dombrow, B. A., on Polyurethanes (book) 785
- Domestic appliance(s), electric control systems for
- Domestic appliance industry, merger of interests in
- Dominion Bridge Co. Ltd., Arvida road bridge in aluminium 427
- Don Safety Trophy, first presentation of 1115 Donovan Electrical Co. Ltd., contactor, 30A 544
- Edytect proximity switch 544
- Door, Metco Polyport industrial 555
- Door grille, return air 500 Dore, John, and Co. Ltd., rectifying stills 1071
- Dorf, R. C., on Time-Domain Analysis and Design of Control Systems (book) 831
- Dorian, A. F., on Six-Language Dictionary of Plastics and Rubber Technology (book) 831 Dorman Machinery Sales Ltd., gear hobbing
- machine (trade publication) 414
- superfine finish (trade publication) 514
- Dorman type 12 QTCW diesel engine 1005
- Dornier Skyservant feeder airliner 941
- Dosing valve, variable-reagent, Isoflow 1046
- Double glazed horizontal sliding window, Quebec
- Douglas, A., Co. Ltd., machine tools stock (trade publication) 104
- Douglas Concrete and Aggregates Ltd., hot water plant for concrete making 402
- Douglas electric platform truck 358
- Dounreay Atomic Energy Establishment
- activities of 893
- and Highlands development 848
- 250 MW prototype fast reactor 321, 331 Dowding and Doll Ltd., Accuratool automatic capstan lathe 763
- Marvel horizontal hydraulic bandsaw 148 Wiedemann turret punch presses with numerical
- control 650
- Dowty Mining Equipment Ltd., 5-leg mine roof support 503
- Dowty two-stage hydraulic jet unit 227
- Doyle, G. N., split compressor differential engine 585

- Drafting machines, electronic, Ferranti 762
- Drafting unit, Intercline 258

Drafting. See also Draughting

- Dragon nuclear reactor, first test run 284 Dragoon version of Anglia motor car 176
- Drainage engineering, by J. N. Luthin (book) 969
- Drake, J., Reading Schools Engineering Club 64
- Drakelow C power station
- CEGB opinion 350
- dumping systems at 347
- starting the supercritical steam system 347
- supercritical steam conditions 1115
- supercritical steam generating sets 343
- turbine construction 349
- Draught measurement recorder 687
- Draughting. See also Drafting
- Draughting machine, tape-controlled, for tyre tread pattern, Goodyear 653 Draughtsmen, strike at English Electric Co. Ltd.
- 472. Letter 526
- Draughtsmen's and Allied Technicians' Association, strike action proposals 472. Letter 526
- Drawing, engineering, and construction, by L. C. Mott 877
- model construction direct from 779 Dredger, grab, Biarritz for dam construction 595
- Drier, electronic, for lumber, RPS 1133 see also Dryer
- Drill
  - and reamer sleeves (trade publication) 514 hydraulically operated hand-held 1178
  - pneumatic, Auto Feed 454 road, noise converter for, Heinke CNC 1115 rock, conversion set for 102
  - Torkhammer percussive attachment for 551
  - Rotacone grinding fixture for 921
  - rotary percussion, Quersa 1179 trade publication 156

- ultrasonic, MEL Equipment 96
- Drill grinding machines, ZB25 and ZB32 40 Drill head, multi-spindle, Kavanagh O'Moore & Co. Ltd. 875
- Drill Service (Horley) Ltd., Gammons Duplex piloted hand reamer 206
- Drilling attachment, close-to-wall 405
- Drilling machine
  - Autodrill six-spindle turret 767
  - co-ordatrol automatic turret 766 for printed circuits 408

  - hand-held hydraulic for coal, rock, etc. 1 hand-held hydraulic for coal, rock, etc. 1 1129

  - horizontal, with numerical control 94, 1009
  - Hydrovane compressor for 830 numerical control of, Wadkin 766
  - numerically controlled, Wadkin (trade publication) 414

Drilling platform, offshore, nuclear power for 895

Drilling rig, compressed air, for cats-eyes in roads

Drinkwater Services Ltd., demountable lorry

916

Driver, motor-car performance device, Drivometer

Driver Southall Ltd., auger filler for powders and

Drivometer motor-car driver performance assess-

Drop forge, heating in the, symposium 1184

Drop forging steel, Euroforge requirements

Drop forging tolerances, slide rule for 1052

Drott Travelifts for container handling 438

steam/water, for SGHWR reactor 141

with numerical control 1009

numerical control equipment 871

Drycol thermoelectric breather-drier 544

Dryers, pneumatic (trade publication) 414

Dry Honer shot-blast machine 505

Drying, rubber, in extrusion 250

wood, electronic method 1133

See also Drier

Drop forging(s), tolerances for, Euroforge 1052

Drummond-Asquith Ltd., horizontal drilling machine

1052

13

Drive, hydraulic, for marine engines 70

Drive units, variable-speed, Variflo 1130

granular materials 1138

Drum(s) hoisting yoke for 200

hydrostatic, dump truck with, NEL 916

- radial with compressor unit 830 Speedrill 920

See also Oil drilling

see also Oil drilling

bodies 302

for conveyor 916

for machine tools

See also Transmission

ment device 337

455

- Drying tunnels, air, with automatic trolley indexing 42
- Drysdale & Co. Ltd., glandless pump/water-filled motor unit 510
- Drysweep silo-emptying system 262
- DuBois, J. H., on Plastics Mold Engineering (book) 413
- Duckworth, R., BMEF report 933 director BMEF 162
- Duct connector, flexible, Durodyne 301
- Ducting
- busbar (trade publication) 786
- flexible pvc, Plastiflex 262
- Kopex pliable 687
- pipework and, thermoplastics, in unplasticized polyvinyl chloride and polythene (book) 831
- warm air (trade publication) 1184 Dulles international airport, Washington, 240–1,
- 243 Dummer, G. A., on Connectors, Relays and
- Switches (book) 414 Dummer, G. W. A., on Modern Electronic Com-
- ponents (book) 609 Dump truck. See Motor vehicle
- Dumping systems at Drakelow C power station 347
- Dumpmaster demountable lorry bodies 302
- Dune Duster motor car 759
- Dungeness A nuclear power station, official opening of 1021
- Dungeness B nuclear power station, site progress 942
- Dunican, P., suspension buildings 907
- Dunlop Engineering Group, clean room for assembly of parts 740
- Dunlop Maxaret anti-lock braking 1115
- Dunlop Rubber Co., AA silver medal award 941
- Dunlopillo, new process for latex foam products 604 Dunn, P., applied science at Reading University
- 1068
- Reading Schools Engineering Club 64 Dunworth, Dr. J. V., message to ENGINEERING 65
- Dunz pneumatic hoist 1056 Duo-flo equipment for two-part compounds 148
- Duo-mix equipment for two-part compounds 148
- Duplex all angle cutter head 258
- Duplicator/copier, Rank Xerox-2400 1014
- Du Pont Co.
- dock gate seals in neoprene 540
- Durolon weather-resistant fabric 301 Stepon stair carpet protection in Surlym A
- ionomer resin 1115 Teflon polytetrafluorethylene resins 1129
- Du Pont de Nemours (Deutschland) GmbH
- Kapton polyimide film 784 Tedler pvf film 784
- Duralcote Fascia Rib Lip vinyl coating of ribbed aluminium building sheet 1090
- Duramin Engineering (Lydney) Ltd., freight container 806
  - semi-trailer road tanker 807
- side-loading box van 1096 Taper-Leaf suspension 285
- Durodyne flexible duct connector 301
- Durolon weather-resistant fabric 301
- Durrum Dial-a-pump positive displacement unit 910
- Dust collector, pressurized, Mikro-Pulsaire 258 trade publication 1184
  - wet, Midac 1055
- Dust extraction unit (trade publication) 1058
- DXD trepanning cutter for large diameter holes 741
- Dyeing machine, automated 1096
- Dymar Electronics Ltd., loudspeaker/microphone assemblies 1004
- two-tone signal generator 737
- Dynamatic eddy-current dynamometer 872 Dynamic analysis and automatic control, an introduction to, by P. O. A. L. Davies (book) 264
- Dynamo, flux, superconductor 794
- Dynamometer, eddy-current, Dynamatic 872 hydraulic, Heenan & Froude 872
- Dynasty single-axle semi-trailer 412, 806
- Dynex Co., export activities 757
- Dyson, R. A., & Co. Ltd., semi-trailer tractor unit 807
- E

14

Earth-moving equipment finishing plant, continuous, Bamford 1140 Earth-moving equipment tyres, chains for 783 Earth resistivity meter (trade publication) 1100 Earthquake(s), modified Mercalli scale for 178 rebuilding of city damaged by 177-80 systems 382

380

685

322

Electric motor. See Motor

Electric locomotive. See Locomotive

Electric power. See Power; Electricity

Electric and Musical Industries Ltd., merger of

Electric wiring for industrialised building systems

Electricaire ducted warm air off-peak central heating

Electrical Contractors Association, annual dinner

Electrical Engineers' Exhibition (Earls Court),

Electrical engineering, basic tables in, by G. A. Korn

matrix theory to, application of, by W. E. Lewis

1016

Electrical Engineering Industry, Economic Develop-

Electrical accessories (trade publication) 1100

Electrical engineer, in mining engineering 986

and systems (trade publication) 1142

training syllabus for NCB 988

and D. G. Pryce (book) 923

Electrical equipment, imports survey 219

Electrical instruments (trade publication) 786

Electrical machine(s), construction and design of

Electrical machine theory, by M. Jevons (book)

Electrical Research Association, carpets and under-

creep-rupture testing and bursting tests for

digital tachometer for transient torque/speed

exhibits at Electrical Engineers' Exhibition 543

Electrical resistance of metals, by G. T. Meaden

Electrical Trades Union, survey of activities and

Electricity Corp. of Nigeria, Kainji dam project 73

Electricity Council, domestic appliances show

Electricaire ducted warm air off-peak central

Electricity Development Advisory section of 385

Materials Handling in Industry (book) 1015

Electricity Development Advisory section of

Electricity supply failures, factors controlling 1163

Electro Automat Ltd., constant voltage charger

Electrochemical bonding of diamond to metal

optical mask alignment and exposure system 952

Electroheating (London) Ltd., hardening machine

Electrolube Ltd., centrifuge slip ring lubricant 353

Electrolux Ltd., Dishmaid DA 10 dishwasher

Electrolytic sewage purification using sea water

Electromagnetic vibrator for wet concrete, Simbi

Electro-magnetism, fundamentals of, by E. G.

Electromatic Pacemaster 65 collating machine

Electromechanical energy conversion, by A. J.

Electron Beam Processes Ltd., capacity for electron

Electromagnetic brakes for EOT crane 1134

Electromagnetic waves, group velocity 928

polyvinyl chloride coating for refrigerator trays

Electricity supply industry, Switzerland 1037

characteristics in induction motors 821

Electrical stress, anti-discharge varnish for 965

Electrical measuring instruments, pivotless 964

Electrical Power. See Power; Electricity

ment Committee for 219

Electrical fittings (trade publication)

Electrical industry, activities of 543

unusual (book) 1057

floor heating 285

(book) 656

(Brighton) 385

heating 685

chassis 549

surface 652

for shafts 918

32, 35

1012

1168

V5E 956

738

in free space 925

transverse 925

phase velocity 927

transverse modes 928

Ellison (book) 48

Cullwick (book) 1057

Electron beam(s), nature of 1017

Electron beam machining 255

boiler tubes 456, 458

policy developments 1152

Electricity Council 385

Electrobale baling machine 357

Electricity supply, new bulk tariff 891

Electroglas Inc., diffusion furnace 1042

easier-to-use aerosol 2A-X 37

exhibits at 543, 695

(book) 923

in 1866 15

969

domestic appliance interests 1025

- see also Seismic surveying Earthquake resistant building structures 177-80
- East Midlands Gas Board, gas distribution grid 286 East Sussex Engineering Co., mechanised gang-
- ways for Hong Kong ocean terminal 1127 Eastern Diamond Products Inc., machine lapping
- with diamond compound 652
- Eastwood Plastics Ltd., plastic tents for jointers 601 Eaton Yale and Towne Inc., tractor for shunting wagons 738
- Ebbeni, J., moire fringe techniques 780
- Ecabert, R. J., combined steam-gas turbine plants 584
- Econ-O-Fab Durodyne duct connector 301
- Economic Consultants Ltd., Preston/Leyland/ Chorley area growth study 1066
- Economic Development Committee for Electrical Engineering Industry 219
- Economic Development Committee for the Movement of Exports 1109
- Economic site organisation and building supervision, by H. F. Broughton (book) 1057
- Economics of cold extrusion 38
- Edco concrete plane 309
- Eddison Plant Ltd., plant hire (trade publication) 924
- Eddytester tube inspection system 1008
- Edeleanu, C., on Materials Technology in Steam
- Reforming Processes (book) 923 Eden, Sir John, on small shareholder 111
- Edge trimmer, plastic, Trend 145
- Edinburgh, HRH Duke of, BHRA laboratories 1156
- Design Centre Awards 866 International Federation of Automatic Control 1156
- message to ENGINEERING 3
- Edmonds, R., science and industry awards 709 Education
- design, industry's responsibility, J. Wooding 754 engineering, and industrial training 801 defects in, by Lord Snow 623
  - mathematics in 800-1
- engineering curriculum, Lancaster University 800
- further, chemical engineer 1184
- higher, studies in, Lancaster University 800, 1028
- management. See Management education
- Metroplitan Architectural Consortium for, formation and activities 1108
- naval architects (report) 476
- position and prospects for 1966 6
- rhythm of, A. N. Whitehead 800
- science and, working party on 1023
- see also Courses; Training, etc.
- Educational Role of the Ministry of Aviation Establishments 473
- Edwards, F. J., Ltd., Besco-Hydrobend hydraulic press brake 309
- Besco-Ringroller Model V2 rolling machine 876 Edwards High Vacuum Ltd., mass spectrometer leak detector 199

Efco brazing furnace for Ful-braiz steel tube 1098

Elafloor extruded polyvinyl chloride floor for

Elastic analysis of flat guillages, by J. Clarkson (book)

Elasticity, of ice, detern 'nation at low temperature,

potential methods in the theory of, by V. D.

ELDO. See European Launcher Development

Electric analogue for groundwater flows 1164

Electric circuits, advanced by A. M. P. Brookes

Electric Construction Ltd., block-type contactors

Electric control systems for domestic appliances

Electric installation tests for industrialised building

Electric heating, terminology agreement 996

Edytect proximity switch 544

Kupradze (book) 698

Elderly persons, communications for 173

Eleco Ltd., Kite-mark approval licences 639

Eldair scrap baling press 600

Electric car. See Motor car

Electric furnace. See Furnace

computers 100

877

Elastic recoil 882

NBS 1128

Organisation

(book) 1183

401

386

Egeman, stainless steel cladding 141

Engineering Industries Association, trade mission to

Engineering Industries Group Apprenticeship

assessment of grant against  $2\frac{1}{2}$ % levy 423

handbook on training of craftsmen and technicians

924

North America 568

Engineering Industry Training Board

Birmingham headquarters 114

regional officer for Wales 935

regional offices at Bristol 272

training officers and advisers 114

Wales Region Training Office 935

2<sup>1</sup>/<sub>2</sub>-per-cent of-payroll-levy 707

supervisory training 570

partnership 1108

prospects for 1966 7

activities of 565

888, 980

beam welding 1155

- Electron beam welding. See Welding Electron beam welding machine. See Welding
- machine Electron diffraction equipment 690
- Electron gun, Bir-Vac Ltd. 917
- for electron beam welding 1018
- Electron microscopy grids, maXtaform 1045
- Electron-phonon interaction in superconductors 790
- Electronic circuit(s), handbook of, by R. Feinberg (book) 831 Electronic circuit interconnections, computer control
- of 329 Electronic components (trade publication) 1100
- modern, by G. W. A. Dummer (book) 609 reliability of 1180
- Electronic components standards, simplification of 1014
- Electronic engineering in oceanography, conference on 464
- Electronic Kilns Ltd., RPS electronic drier for lumber 1133
- Electronic Machines Ltd., Grundig-Adler tape program writer 1179
- Electronic thermometers (trade publication) 832 Electronics
- bibliographical guide-2, by C. K. Moore and K. J. Spencer (book) 877
- list of recently-coined terms in 513
- transistor, introduction to, by R. L. Walker (book) 1183 see'also Instruments, Electronics and Automation
- Exhibition Electro-Oil Automatic Oil Burners Ltd., automatic oil burners 876
- Electroplating plastics (trade publication) 970 Electrosil Ltd., Corning fluidic control relay 823
- fluid logic system 954

integrated-circuit amplifier 964

- integrated-circuit analogue voltage comparator
- Electrostatic precipitation in theory and practice, introduction to, by H. E. Rose and A. J. Wood (book) 1183
- Electrostatic separators, high-tension 406
- Electrostatic torque clutch, GEC 689
- Elements of mechanical metallurgy, by W. J. McGregor Tegart (book) 1141 Elements of steelmaking practice, by J. D. Sharp
- (book) 785
- Elevator(s) for grain handling 598 Elevator conveyor, mobile self-contained 406 Elizabethan LZ102 tape recorder 132, 135

Elliott ARCH 1000 computers 251

- Elliott-Automation Ltd., Aeroglide air cushion conveyor 1010
- Aeroglide air cushion conveyor system 1010

equipment at ISE exhibition 954

- X-ray analyser for ore 913
- Elliott, B. (Machinery) Ltd., Duplex all angle cutter head 258
- take-over bid for Asquith Machine Tool Corp. 323
- Elliott Marine Automation, control equipment for tanker *British Admiral* 397 Elliott Process Automation Ltd., miniature pneu-
- matic instrumentation (trade publication) Elliott, R. P., on Constitution of Binary Alloys:
- First Supplement (book) 877 Ellis, B., on Basic Concepts of Measurement (book)
- 413
- Ellis, J. R., vehicle simulation 808
- Ellison, A. J., on Electromechanical Energy Conversion (book) 48 Ellison, George, Ltd., air break circuit breaker 549 modular substation 549
- Elma range of decade counters 206 Elmenius, L., combined steam-gas turbine plants
- 584
- Elson and Robbins Ltd., dip coating of springs 250 Eltram-130 portable welding transformer 42
- Eltron (London) Ltd., heating elements (trade publication) 1184
- Elwell-Parker Electric Co., battery electric fork lift trucks 959
- EMAG 1,000 magnetic crack detector 1090 EMI Electronics Ltd.
- Emicon S1000 positional controller 869 short range telemetry equipment 688
- solid state switching (trade publication) 924 thin film stores 954 Emicon S1000 positional controller 869

- Empire State Building, wind loading on 904 Employers' Associations, Royal Commission on 165, 475 749 see also Manpower; Labour Encapsulation press, Stokes 1179 Encapsulation procedure, Plessey 1181 Energie de l'Ouest-Suisse SA Chavalon sur Vouvry power station 1037 Energy, concept of, by D. W. Theobald (book) 513 for new towns, conference on 1184 Energy beams and their uses, conference on 970 Energy conversion, electromechanical, by A. J. Ellison (book) 48 Engelhard Industries Ltd., oxygen meter for use in non neutral gases 455 removal to Sutton 322 Engine(s) aircraft. See Aircraft engine compound, for Royal Navy 15 diesel, automatic control in ships 396 Burmeister and Wain, for Blue Funnel Group cargo ships 802 crankcase design research 374 criticism of, Letter 478 Dorman type 12QTCW 1005 for steam crane 459 for winch, Lister 409 high speed, design of, by M. H. Howarth (book) 1141 Leyland type RU680/20 190 lubricants for, J. C. Levrague, F. Roux and A. Schilling 995 marine research and development trends 398 medium-speed, heavy-fuel burning 715 noise problem of 374 Perkins T6.354 782 Stork-Werkspoor SW900 marine 434 Sulzer LVA range for rail traction 541 Sulzer RD, for Glen Line cargo ships 802 valve gear lubricator 305 Ventura, UIC tests on 534 Werkspoor-Amsterdam TE450 two-stroke 434 industrial, Perkins 958 motor car. See Motor-car engine oil. See Engine, diesel petrol, industrial V-type, Ford 1010 rotary, Wankel, development of, Johnson Engine oil for anti-friction additive, Castrol 912 Engineer chartered. See Chartered engineer function of, H. N. Muller 522 graduate supply and demand statistics 569 professional, survey on 979 status in society, Lord Snow 623 see also Civil, Electrical, Mechanical, etc. Engineered Motor Products Inc., link-up with Speedwell Performance Equipment 481 ENGINEERING
- centenary messages 65 H.M. The Queen's message to 2
- H.R.H. Duke of Edinburgh's message to 3
- publication of first issue in A4 size 1 staff writers 165
- Engineering, art in 887
- as career, DES booklet 795, 894 centenaries in 14-15
- see also Civil, Electrical, Mechanical, etc.
- Engineering apprentice. See Apprentice
- Engineering components, art exhibition proposal 329
- Engineering computations, graphical techniques for, by W. H. Burrous (book) 364
- Engineering contract. See Contract
- Engineering drawing and construction by L. C. Mott 877
- Engineering education. See Education Engineering Employers' Federation, G. Baker appointed president 243
- evidence to Royal Commission 475
- Engineering eponyms, by C. P. Auger (book) 47 Engineering Equipment Users Association, ball and
- roller bearings (book) 1141
- cladding of industrial buildings (book)
- flooring for industrial buildings (book) 1015 thermal insulation of industrial buildings (book)
- 1099 thermoplastics pipework and ducting in un-
- plasticized polyvinyl chloride and polythene (book) 831
- Engineering Foundation, handbook on composite engineering materials and structures 363 Engineering Foundation Research, conference on
- team approaches to complex problem solving

Yorkshire and Humberside office 218 Engineering laboratory. *See* Laboratory Engineering materials: selection and value analysis, by H. J. Sharp (book) 923 **Engineering Outlines** electron beam welding 1017. Letter 1113 explosive forming 1101 fibre optics 1185 fluidization 415 fuel cells 105-108 function of 49 gas bearings 211 gas turbines 515 gyroscopes 699 heat transfer 973 lasers 51-55 linear induction motors 835 magneto-hydrodynamics 315 noise in machines 1059 157-160 orbital mechanics photodetectors 657 plastic theory of structures 745 prestressed concrete 613 ring binder for 47 seismic surveying 1143 solid state switching 559 superconductivity 789 telecommunications 265 thermoelectric generation 365 transducers 465 viscoelasticity 881 waveguides 925 Engineering projects. See Project Engineering and Scientific Equipment Ltd., semiautomatic Rockwell hardness testing machine

- 404 Engineering societies, international conference of, proposal for 798
- Engineering Societies of Western Europe and the United States of America, conference of. See EUSEC
- Engineering standards. See British Standards Institution; Standards; Standardization
- Engineering technicians, proposal for institution for 370. Letter 478, 526
- Engineer's Companion, by M. Souders (book) 923 Engineers' Guild, changes in secretaryship 567. Letter 626
- English Construction Co. Ltd., electric drive for slitting line 154
- English Electric Co. Ltd.
- automatic electronic position indicating equipment 919
- converter equipment for Kingsnorth-Willesden dc transmission line 484
- Drakelow C power station 343
- Drycol thermoelectric breather-drier 544
- DXD trepanning cutter for large diameter holes 741
- electric power equipment for British Railways 22 exhibits at Electrical Engineers' Exhibition 548
- extra-high-voltage switchgear 781
- Ferrybridge C power station 445
- group's annual accounts 421 industrial gas turbines 429
- Kaplan turbine sets for Kainji dam project 76
- multi-motor control centre 696
- optical torquemeter 310
- strike of draughtsmen 472

719, 724

- textile mill for Guinea 849
- transformer for Ferrybridge C power station 452 Type AL6 electric locomotive for British Railways

English Electric-Leo Marconi Computers Ltd.

computer analysis of motor-car underbody 479

- computer numerical control tape programme service using APT language 1014 Leo 360 and KDF7 computers for Czech steel-
- works 997, 999 pipe stress analysis by computer 1172
- System 4-75 computer 856
- English Electric Valve Co. Ltd., diagnostic X-ray image intensifier 694
- exhibits at ISE exhibition 952
- valve data (trade publication) 832
- English Steel Co. Ltd., honing machine for long bores 146
- interest in Alloy Steel Rods Ltd. 1139 Engraving, spark erosion, for thin film microcircuits 914
- Engraving machine, Gravograph 256
- Ente Nazionale Idrocarburi (ENI), water demineraliz-
- ing plant for Sicily 1079 Enthoven Solders Ltd., anti-vibration soldered eyelets for printed circuit boards 504
- ENV Engineering Co. Ltd., gearbox for off-highway vehicles 959
- Environment in 1966 6-8

Environmental engineering, role in society 808

- Environmental studies, centre for 521
- Environmental testing for guided weapons 810
- EPAK Associates, diffusion furnace 1042
- Epitaxial deposition for microcircuits 605

Epoxy resin adhesive for floor coverings 46

- Equipe GT4S motor car, road test and specification,
- Bond 298. Letter 377 Erfurt Machinery Ltd., universal milling machine 827
- Ergonomics Research Society, annual conference (Manchester) 514
- Eridi Giovanni Canavese, automatic copying lathe 259
- Erma Ltd., terminal blocks (trade publication) 1100 Errut Products Ltd., Edco concrete plane 309
- Erskine Heap and Co. Ltd., air circuit breaker 546
- Escher Wyss AG, turbo-alternator for Chavalon sur Vouvry power station 1039

turbo-alternator foundation 1040 Escher Wyss Ltd., closed cycle gas turbines 582

- Esel Automation Ltd., conveyor system (trade publication) 1016
  - gravity feed conveyors 97

jib cranes (trade publication) 208

Espionage, industrial, consultants on 749

- Esso Lancashire, tanker, automatic control in 396 Esso Petroleum Co. Ltd., aluminium alloy articulated
- road tanker 513
- Fawley power station 850
- 80-ton aluminium alloy rail tank wagon 512 Esso Research and Engineering Co., iron ore reduction by fluidization 92
- Etching machine, Rota-Etch 692

Ethylene making plant, Friedrich Uhde Gmbh 1158

Ethylene propylene rubber cable insulation 404 Eurofinish VOM-66 exhibition on surface treatment

(Utrecht) 1184 Euroforge, tolerances for steel drop forging 1052

Europa 1 rocket, launching of 1031 Europe, exports to, through transport concept 1109

- space programme projects in progress 684 European Coal and Steel Community, position and
  - prospects of 474 production figures 164
- European Components Service, formation and activities 1064
- European Launcher Development Organization

Europa I rocket launching 1031 position and prospects of 1151

- UK's decision to quit 1065
- European meeting of statisticians (London) 878
- European space programme, conference on (Hamburg), Eurospace 681
- Eurospace, conference on European space programme (Hamburg) 681
- EUSEC, world engineering body proposals 798 Evans, J. W., Lea Hall colliery 991
- Evans, M., on From Inverness to Crewe: the British 4-6-0 Locomotive (book) 698
- Evaporation plant, aluminium, for microcircuit production 606
- Everett, N. S., grain handling at Hull 598
- Eversharp razor blade, Schick 942
- Evershed and Vignoles Ltd., insulation and continuity tester 546
- Evolution of the nuclear atom, by G. K. T. Conn and H. D. Tuner (book) 156
- Excalibur SS motor car 760

16

Excavator finishing plant, continuous, Bamford 1140

1057

Experimental stress analysis. See Stress analysis

Explosive(s), contact operations using 1104

for engineers, by C. E. Gregory (book) 785

proof solenoid 1003

see also Accident

Explosive forming

Explosive cladding 1104

advantages of 1102

applications of 1103

basic principles 1101

Engineering Outline 1101

Movement of 1109

prospects of 933

NEDO report 1109

exporters 1064

Europe 1064

economics of 38

research on, NEL 916

research at NEL 916

of acrylic sheet 1111

rubber drying in 250

of upvc sheet 822

dual, for cable insulation 404

Eye bolt of improved design 820

1109

Extrusion

cold

F

1166

566

207

812

70

Fan

units 553

Airmax 547

Fair, trade. See Exhibition

Mancunian Way 816

engine 1005

CBI 1149

for 1966 7

equipment requirements 1102

industrial considerations 1102

inland clearance depots for 1109

nuclear power industry 1106

to Canada, campaign to boost 421

to Europe through transport concept 1109

to North America, campaign to increase 619

Export Council for Europe, specialist service for

Export movements study, Martech Consultants

Exporters, specialist service for, Export Council for

Exposure system, optical mask alignment and 952

Extruder for concrete floor slabs, Spiroll 956

hydrostatic, design contact, Vickers 481

Faber, S. E., and Son, Ocean terminal, Hong Kong

Fabian Society, workshop bargaining, by N. Ross

Fabricated Metals Inc., Flo-bin and Liqua-bin

Factory, your, and the law, by E. Mitchell (book)

Fadeometer test for motor car trim materials 655

Fairbanks Morse, Dorman type 12QTCW diesel

Fairclough, Leonard, Ltd., Chester inner ring road

Fairey Co. Ltd., hydraulic drive for marine engines,

Fairey Engineering Ltd., Digital Auto-Transducer

Fairey Hydraulics Ltd., Flexequip high-pressure hose

Fairfield Shipbuilding and Engineering Co. Ltd.,

and Recorder (DATAR) 1177

Fairey SA, tube bending machine 95

new management form 5

and limit control, Penn 1171

axial-flow recirculating, Reflow 509

propeller type, Keith Blackman Ltd. 687

ducted air, Budworth 25-in 227

tangential flow, Streamflow 687

tubular centrifugal, Axia 962

axial-flow, Axiform 1008 Centaxial 686

centrifugal, Gyra-Flo 651

semi-bulk handling system 1121

Facsimile communication for police 285

Factory accident. See Accident; Explosion

Factory services, conference on, PERA 530

position and prospects 109

Export services exhibition 1016

definition 1101

Export(s)

Expert Industrial Controls Ltd., Decco Teen flame-

Explosion, gas cylinders, precautions against 1078

Economic Development Committee for the

mechanical engineering industries, position and

Excavator-loaders (trade publication) 698 offset design 508

- Exciter, static, Gecostat 16/80 for alternator control 1003
- Exeter ship canal 14
- Exhibition
  - and conference, international fluid power, (London) 924 Non Destructive Testing Society of Great
  - Britain (Sheffield) 1100
- Biennale de l'Equipement Electrique' 786 British Fair and Fortnight in Oslo, comment on exhibits 890
- British Industrial (Mexico City) 1016
- British Week in Hong Kong 373
- building (Southport) 698
- Business Efficiency (Leeds) 599
- domestic appliances show (Brighton) 385 Electrical Engineers' (Earls Court), exhibits at
- 543, 695
- engineering components proposal 329 Eurofinish/VOM-66, on surface treatments (Ut-
- recht) 1184
- export services 1016
- Foundry (Birmingham), exhibits at 1046, 1054
- gauge and tool and power press 921, 935
- Geneva Salon motor car 531, 589
- German Air Show, Hanover, exhibits at 941
- Hanover Fair, exhibits at 781
- Hovershow 66, display of hovercraft 329, 1080 new models announced at 1157
- Indian International Trade and Industries Fair (Madras) 1016
- industrial automation, Italian (London), exhibits at 1130
- industrialized building systems and components (Crystal Palace), exhibits at 943
- instruments, electronics and automation (Olympia) exhibits at 950
- international, of high precision techniques and metrology 924
- international boat show, exhibits at 69-71
- international chemical and petroleum engineering
- (Olympia) 1079, 1158 international fair for oil hydraulics and pneumatics
- 1142 international federation of prestressing, congress (Paris), report of 1155
- international handicrafts and do it yourself (Olympia) 1100
- international heating, ventilating and air conditioning (Olympia), exhibits at 685
- international mechanical handling (Earls Court), exhibits at 957
- international packaging (Paris) 1184
- international plumbing and domestic heating
- (London) 878
- international safety (Manchester) 970
- Italian biennial machine tool (Milan) 1058

New York Motor Show, exhibits at 759

Oil and Colour Chemists' Association 378

numerical control of machine tools (Olympia)

plastics, Copenhagen, CRV 5 motor car with

Leipzig Fair, comment on 568 London International Engineering (1967) 208

761, 841, 868, 920, 1009, 1014

physics, equipment displayed at 688

Paris Technical Fortnight 832

Scottish industrial estates 470

scrap and waste (Olympia) 535

Ships Gear International '66 744

Universal and International 1058

Exhibition centre, Crystal Palace proposal

Exide Batteries Division, lead acid battery 651

Exmouth, frigate, gas-turbine trials 332, 398

Expanded Metal Co. Ltd., activities of 1110

suspended ceilings (trade publication) 656

Expanded Rubber and Plastics Ltd., expanded sili-

Experimental nucleonics, by B. Brown (book)

Expanded polystyrene (trade publication) 104

cone rubber (trade publication) 970

Expanded silicone rubber (trade publication)

Expansion compensators for steam pipe 822

Expamet Dryspan suspended ceiling system (trade

exhibits at 742

plastics body 949

(Düsseldorf) 48

precast concrete 955

publication) 656

1025

on 913

395

1057

544

stabiliser in 715

ultrasonic, Sonatest 1043

Flexair pneumatic instruments 950

Flexibox Ltd., lapping machine 737

H. Granholm (book) 104

'Flicr' valve, Brown and Sharpe 823

Flexequip high-pressure hose units 553

(book) 156

492

Elafloor 100

conveyor 916

for nuclear fuel elements 494

formation of the Ante-Bellum Economy (book)

Fleming, W. H., on Functions of Several Variables

Fletcher and Stewart Ltd., hydrostatic drive for

Flexiscope fibre optics inspection device 1187

Flexural theory, general, of reinforced concrete, by

Flight control and automatic landing system, Smiths

Flight control inspection equipment, SADIE 491,

Flight Refuelling Ltd., high-speed reed switch 823

Floor, extruded polyvinyl chloride, for computers,

Series 5, Belfast military freighter with 1120

Fan, L. T., on Continuous Maximum Principle (book) 1057 Farnborough. See Royal Aircraft Establishment Farrimond, H. L., manpower conference 477 Fasteners, metric screw thread, effect of changing to 43-45 nylon overlapping, Velcro 601 Fastscan motion picture projector 1002 Fatigue failure of constant velocity coupling, vindication of 378 Fault warning system, modular, Londex 778 Fawley Foundation Lecture by Sir Denning Pearson 313 Fawley power station Barco self-aligning swivel joints for 653 Esso Petroleum Co. Ltd. 850 pump motors for 510 Fay, J. A., on Molecular Thermodynamics (book) 208 FEB (Great Britain) Ltd., FEBspred, FEBstrike and FEBface concrete admixtures 955 Feedback Ltd., breadboard mechanical components (trade publication) 878 servo control system for feedback control teaching system 954 Feedback teaching system, servo control system for 954 Feeder. See Screen/feeder Feeding machinery, press 95 Feedwater Specialists Co., water softeners (trade publication) 970 Feinberg, R., on Handbook of Electronic Circuits (book) 831 Feineman, G., on Applied Differential Equations (book) 743 Felcoil Ltd., gas burner assembly conversion 685 Fellgett, P., applied science at Reading University 1068 Felvic Marketing and Sales Co. Ltd., air conditioning equipment 828 Femelt melting furnace, gas-fired 1055 Fencing, chain link, Plastabound 303 Fendering, Raykin, for Hong Kong ocean terminal 234 Fenlow Products Ltd., Ford 3000 remote-controlled tractor 1032 Fenn Manufacturing Co., tube end forming machine 919 Fenner, J. H., and Co. Ltd., glass fibre V-belts 1171 Ferguson Research Ltd., AA silver medal award 941 Ferranti Ltd. continuous path magnetic tape controlled system 764 Copath linear interpolator 307 dc excited gas laser 307 Digiturn measuring system 960 electronic drafting machines 762 Indoor Packaged Substation 607 integrated system transformer 550 numerical control equipment 869 production of microcircuits for computers 605 specifiable coordinate positioning equipment (SCOPE) 869 summation metering equipment 550 tap changers 550 Ferrari, exhibits at Geneva Salon 589 racing motor cars 84 Ferries. See Ferry Ferrograph-631 tape recorder 131, 134 Ferromagnetic resonance, by S. V. Vonsovskii (book) 1141 Ferropaste millscale removal paste 92 Ferry(ies), gas turbines for 715 roll-on/roll-off, for Hook of Holland route 1033 Ferrybridge C power station boiler rating 449 coal handling plant 449 commissioning of 445 construction of 447 description of 445 discussion on 500 MW sets 453 electrical services 450 generators 451 main contractors 445 services 450 site plan 446 switchboards 450 transformer for 452 turbine blocks 447 turbine house 447

Fertilizer industry, ammonia for 1160

Fertilizer processes and plants 1162

workshop, type FKB portable 1178

- 1138 462 Film(s) cinema creativity at school 324 polyimide, Kapton 784 pvf, Tedler 784 thin. See Thin film station 445 Filmac 400 reader-printer 507 recording 508 pilot, of stainless steel 407 B. F. Blundell (book) 610 vibratory 259 earth moving equipment 754 Finnoda Varv, Stella timber ship 139 Fire, of London 14 oil, increase in 1155 Fire hazards of gas cylinders 1078 Fire precautions in buildings 573. Letter 626, 754 Fire protection of structures (trade publication) 208 storage, handling and use of gas cylinders 1078 Fire research, model analysis in 435 building 1049-50 Kong ocean terminal 234 extrusion 250
  - Firth Brown Ltd., interest in Alloy Steel Rods Ltd., 1139
  - Firth of Clyde Dry Dock Co., refitting of Queen Elizabeth liner 670
  - Firth of Forth, radioisotopes for silt movement, survey

Festo-Pneumatic rotary indexing tables 308 Firth, R. W., aluminium bronze die-casting 1174 Fiat-Baldwin disc brakes on Fiat-124 motor car Fisher, James, and Sons Ltd., Stream Fisher vessel Fiat-124 motor car 533 description and road test on 817 Fisheries research vessel, Corella, legal action over description of 633 Fishing vessel research and development trends Fiat-850 Idromatic motor car 533 Fibre(s), carbon, for reinforced plastics, RAE 1133 Fishlow, A., on American Railroads and the Trans-Fibre drum for packaging 1091 Fibre laser development research 1188 Fibre optics, applications of 1186 Fittings, electrical (trade publication) 1016 basic physics of 1185 Fixing devices, Rawlplug 547 cathode ray tube face 1187 Fixture, grinding, Rotacone, for drills 921 construction requirements 1185 definition of 1185 Flame spraying of ceramic coatings 539 Flameproof-Weatherproof pendant lighting fitting encoding printed information 1188 Engineering Outlines 1185 Flamidor blow torch soldering iron 827 Flexiscope inspection device 1187 future developments 1188 Flanders, A., manpower conference 477 Flashing beacon, Rotoflash 402. Correction 715 history of 1185 in photography 1187 Flasks for nuclear fuel element transport 494 in surgery 1187 Flats with plastic cladding panels 1047, 1049 Fibre/steel drum for packaging 1091 Flavell, A. J. photodetectors 660 Flaw detector, tube, Eddytester 1008

- Fidler, R., strain analysis by moire method 780
- Field, A. J., derailments and welded rails 326
- Field plotter, Servomex Controls Ltd. 917
- Field station, satellites and, communication system

634

- US Army 667
- Fielden Electronics Ltd., dc potentiometric recorder 201
- Telstor 62 level measuring equipment 200 Fielding and Platt Ltd., hydrostatic extrusion press
- 481
- hydraulic press of three-mould type 955
- Fighting vehicles. See Motor vehicles
- Figure of merit in thermoelectric generation 366 Filler, auger, for powders and granular materials
- liquid, exact volume automatic, Bexuda Modufil
- Filler/filter unit, hydraulic, Porta-Filter 738
  - Government Training Centres 796
- shrink, for multiple packaging 305
- Film Cooling Towers Ltd., Ferrybridge C power
- Filmsort-2000 processor camera for microfilm
- Filter(s), industrial (trade publication) 970 over-pressure vacuum rotary drum 251
- water, drain type, Imacti Immedium 728 Filter/filler unit, hydraulic, Porta-Filter 738
- Finch, J. R. G., message to ENGINEERING 65
- Finish, superfine (trade publication) 514
- textured acrylic, Armour 1632, 46 Finishing equipment, industrial, introduction to, by
- Finishing plant, continuous, for excavators and 1140 Finniston, H. M., Stephenson Lecture 624. Letter

- Fire extinguisher and warning system, Graviner 191
- Fire loss statistics in recent major incidents 58
- Fire Protection Association, oil fire hazards 1155
- Fire regulations in timber buildings 1049-50
- Fire Research Station, Fire regulations in timber
- Firestone-Burleigh Ltd., Raykin fendering for Hong

- Firms' delegation and communication errors 520

- Firestone Tyre and Rubber Co., rubber drying in

- Flooring industrial buildings 530
  - industrial buildings (book) 1015

Float gauge, magnetic liquid-level 964 Flo-bin container for semi-bulk handling 1121

open steel (trade publication) 656 synthanite, Semtex, for clean room 740

Floor coverings, epoxy resin adhesive for 46

Floor slabs, concrete, extruder for, Spiroll 956

- Flow, fluid, theories of, Coanda 1114 liquid mass, Krohne density meter for 1129
- two phase, boiling heat transfer and ,by L. S. Tong (book) 785
- Flow control valve, H. M. L. 1091
- Flow rate in liquid hydrogen, nuclear magnetic resonance technique for 1013
- Flow rate indicator, Parkinson Cowan 1046 Flowers Report on computers in university research 221
- Flowmeter, air, Unico Flo-Master 1129 laser in 54
- turbine, Rhodes 601
- Fluid coupling. See Coupling Fluid flow, theories of, Coanda 1114
- Fluid logic system, Electrosil 954
- Maxalog 777
- Fluid power international exhibition and conference (London) 924
- Fluid switching and power amplification, conference on 414
- Fluid velocity, optical measurement of 1089 Fluidic control relay Corning 823
- Fluidization
  - aggregative 415
- basic principles 415
- definition of technique 415
- Engineering Outline 415
  - gas 416
  - heat-exchange systems 418
- industrial considerations 417
- iron ore reduction by 92 particle circulation systems 416
- particulate 415
- typical applications 417
- Fluidized bed, basic principles 415 heat transfer by 977
- heating processes 418
- industrial considerations 417
- quicksands as. Letter 478
- Flume Type Tank Stabilizer, legal action on 715

Engineering Volume 201 1966 Fluor Corp. Ltd., Wulff process for acetylene 1160 314 Fluorescence analyser (trade publication) 1142 Fluorescent desk lamp, Best and Lloyd 866 Flux dynamo superconductor 794 Flux pump superconductor 794 Foam insulation, urethane, for Hortonsphere spherical vessel 913 Foamglas glass insulation blocks 102 Foil, aluminium, for telephone cable jointing and repair 1087 Ford of America, Radio Road Alert device 336 719-27 Ford of Britain, estate version of Corsair motor car 532 Mk IV Zephyr Zodiac range of 768 road accident prevention activities 336. Letter 940 trim materials laboratory 654 Ford Cologne, 20M TS coupe motor car 532 Ford Motor Co. Ltd., AA silver medal award 941 1100 die-spotting press 256 farm tractors (trade publication) 786 high pressure coreblowing techniques 1056 industrial V-type petrol engine 1010 metallized phenolic moulding for dashboard 820 Ford Motor Co. (US) Dune Duster motor car 759 high frequency resistance welding 249 Ford-3000 remotely controlled tractor 1032 Ford, W. D., maintenance management in foundry 1174 Fordath Engineering Co. Ltd., Fordath-2000 hot coater 1055 Fords (Finsbury) Ltd., rotary heat sealing machine 554 140 Foremen in iron and steel industry, survey 1153 qualifications of, survey 1154 Training, ITS booklet 570 survey 1154 see also Training, supervisory Forestal Industries (UK) Ltd., S23 combined deruster and cleaner 261 Forged rings (trade publication) 414 Forging, drop. See Drop forging Fork-lift attachment, Valla mobile crane with 958 Fork-lift trucks, battery electric 959 Clarklift 957 Coventry Climax 958 cross-country, Mastiff Series-3 41 Hustler 1010 Fuel cells trade publication 1184 applications 108 Formica Ltd., exhibitions at Electrical Engineers basic principles 106 Exhibition 545 definition of 105 Forming, explosive. See Explosive forming Engineering Outline 105 strip steel for, Hardflex 646 Forming machine, tube end, Fenn 919 practical systems 107 vertical slide 599 Formwork for modern structures, by Sir Frederick Snow (book) 48 for prestressed concrete, Stelmo Ltd. 1155 Fort William, industrial growth 892 Foseco (FS) Ltd., Dexil 34 (BNF) core breakdown agent 1055 Foster, M. G., small shareholder 225 Foster Wheeler, activities at Hartlepool 1111 Casale process for ammonia making 1162 fertilizer processes and plants 1162 pulverized fuel systems (trade publication) 1058 1098 Foster Wheeler Hercules, nitric acid plant 1162 Fothergill and Harvey Ltd., nylon mesh for bank 695 erosion 403 Foucault, L., gyroscope development 699 Foundation for Management Education, activities of 170–1 Foundry, diecasting, Kaye Alloy Castings 499 67 maintenance management in 1174 see also Casting; Moulding, etc. Foundry apprentice competition, National, awards in 983

Foundry Exhibition (Birmingham), exhibits at 1046, 1054

- Foundry industry, joint committee for training in, activities of 983
- Foundry and Metallurgical Equipment Co. Ltd., Croning core blowing machine 1054
- Foundry Suppliers Ltd., portable Brinell hardness tester 198
- Foundry Trades Equipment and Supplies Association. See Foundry Exhibition
- Fourier series, discourse on, by C. Lanczos (book) 877
- Fourier transforms, by H. J. Bremermann (book)

18

- Fourtrak, trailer, Scammel 807, 1096
- Fox, Samuel, and Co. Ltd., on-line control for soaking pits, 251
  - razor blade steel 942
- F.P.T. Industries Ltd., self-sealing tank cover 501 Fracture, brittle, in gas plant 230
- in pressure vessel under hydraulic test 714 by C. J. Osborn (book) 743
- Frame for electric locomotives, Types AL1-AL6
- Framed structures, analysis of, by J. M. Gere and W. Weaver (book) 208
- Franks Report on Oxford University 170, 938
- Fraser, I., North Sea Diving Services Ltd. 335 Frass, A. P., on Heat Exchanger Design (book) 314
- Frazer, S., EITB senior training officer 935
- Free piston gasifier for marine propulsion 588
- 'Freeway' conveyor systems (trade publication)
- Freightliner trains, container design 438 lifting equipment for use with 438 locomotives for use with 442 motor vehicle tractors in use with 438
- operation and costs 436
- wagon design 441
- French, M. J., engineering design course 751
- Freyssi flat jack 354
- Freyssinet, M., Freyssi flat jack 354
- Freyssinet multi-strand prestressing cables for elevated road 814, 815
- Freyssinet system of prestressed concrete 613, 617 Friede and Goldman, Sea Quest drilling platform
- Frigate, Exmouth, gas-turbine trials 332, 398
  - gas-turbine propulsion for 398
- Frigi-Pak thermoelectric cooling system 950 Frischmann, W. W., shear wall concepts 906
- From Inverness to Crewe: the British 4-6-0 loco-
- motive, by M. Evans (book) 698 Fromme Förderanlagen GmbH, Variocar towed-
- truck transport system 783 Fruehauf Trailer Corp., Twin-Tainer container sys-
- tem 961 Fry, J., Aquaglider air-assisted planing vessel 70
- Fuchs, teaching engineering design 754
- Fuel(s), gas turbine 582, 587
- heavy, for medium-speed diesel engines 715 see also under specific types of fuel

- fuels and materials used 106
- Fuel consumption, gas turbines 588
- Fuel consumption statistics 424
- Fuel controls analysis, gas turbine, and design (book) 1057
- Fuel injection system for motor cars, Lucas 483 Tecalemit-Jackson 483
- Fuel oil treatment, Houseman-Varo system 643 Fuel policy, PEP critique of 424
- Fuel pump. See Pump
- Fuel systems, pulverized (trade publication) 1058 Fuel tank, lightweight covering, FPT 501
- Ful-braiz double-wall copper brazed steel tube
- Fuller Electric Ltd., ac commutator motors 549,
- high speed resistor on-load tap changer 549 transformer for on-site assembly, Fuller 912
- Fuller, J. A., metric conversion 527
- Fuller, K., skills analysis training at Perkins Engines
- Fulton (TI) Ltd., Ful-braiz double-wall copper brazed steel tube 1098
- Functions, computing elementary, handbook for, by L. A. Lyusternik, O. A. Chervonenkis and A. T. Yanpol'skii (book) 923
- of several variables, by W. H. Fleming (book) 156 Fundamentals of electro-magnetism, by E. G. Cullwick (book) 1057
- Fundamentals of statistical thermodynamics, by R. E. Sonntag and G. J. van Wylen (book) 1099
- Funditor Ltd., muffle furnaces 1177
- Funicular railways, aerial ropeways and, by Z. Schneigert (book) 785
- Furnace, aluminium melting and holding, gas fired 948
  - annealing, air jacket recirculating principle for

948

- billet heating, gas-fired 948
- brazing, Efco, for Ful-braiz steel tube 1098
- die-casting, with automatic burners 1042
- diffusion, Electroglas 1042
  - for microcircuit production, Thermco Pacesetter 606
- Thermco, for microcircuits 605 hardening, for steel balls 600
  - shaker-tube 947
- heat treatment (trade publication) 1016 heating, for rod mill, Salem-Brosius 1139
- induction melting (trade publication) 743

LD steelmaking, computer control of 998

- melting, Femelt gas-fired 1055
- for bronze and aluminium alloys 1054 muffle, Funditor 1177
- oil-fired, Bale-O-Matic holding, Morganite 499
- oil-fired basin tilting, Morganite BT1300 499
- open-hearth, computer control of 653
- swarf melting, gas-fired 948
- thermal gradient 504
- tower melter, gas-fired 948
  - vacuum, Brew 917
- quick-cooled, Torr Plan 742
- Furniture Development Council 851 Furniture Industry Research Association, activities of
- 851
- Fusewelder welding machine for hard surfacing (trade publication) 314
- FW5 motor car manufacture in Turkey (Reliant Motor Co.) 232
- Fyne Machinery and Engineering Ltd., exhibits at Precast Concrete Exhibition 955
- Humdinger portable vibrators 357
- hydraulically operated hand-held drill 1178

## G

1127

251

743

Gas Council

Gadd, H.F., regional training officer 272 Galion airbus 666

- Gallium arsenide, infra-red lamp 401
- transit time devices 91 Galvanizing practice, general (book) 831
- Galvanometers (trade publication) 970

Gants Hill road junction, model of 1164

synthesis, by steam reforming 1160

see also under specific types of gas

Gas appliances, seal of approval for 714

Gas components and calorific value 289

gas supply failure in Midlands 72

seal of approval for gas appliances 714

Gas distribution grids, medium pressure 286

Avon Mark 1533-L, Rolls-Royce 292

Gas grid, choice of system pressure 291

national, position and prospects 286

research and development activities 947

Gas plant, liquid petroleum (trade publication)

Gas prospecting in North Sea, successful strikes

Gas pipe, cast iron, working pressures 291

Gas production Lurgi process for 289

291

national gas grid position 286

Gas cylinders, fire hazards of 1078

storage, handling and use of 1078

natural. See Natural gas

town. See Town gas

Gas bearings. See Bearings

Gas booster, high-pressure 94

Gas cone height controller 947

automatic gas burner 829

exhibits at HEVAC 685

natural gas tanks 895

Gas fittings, Class-600

trade publication 208

Gas holder capacities 291 Gas ignition unit, automatic 830

choice of diameter 291

Gas industry, plant failures in 164

Gas generators

steel 291

970

district heating 187

Gammons Duplex piloted hand reamer 206

telescopic (Babcock and Wilcox Ltd.) 234

Gangway, mechanized, Hong Kong ocean terminal

Garage, pressed concrete, automated production

Garrett, S., on Applied Differential Equations (book)

Gas, liquefied petroleum, for convector heater 1009

range 772

994

Gas quality control, cone height 947

Wobbe 947

- Gas storage capacity 291 Gas storage underground 291
- Gas supply failure(s) 164
- in Midlands 72
- Gas test plant for industrial and domestic burners 948
- Gas transmission mains, map of 286
- Gas valve, Basotrol two-stage 462
- Gascoignes (Kee Klamps) Ltd., Kee Board racking system 403
- Gascoyne, P. F., quicksands: fluidization? 478 Gasification plant

oil

- breakdowns 230
- Coleshill, breakdown at 72
- Gasifier, free piston, for marine propulsion 588 Gast air motors 963
- Gauge(s)
- and tool and power press exhibition 921, 935 Matric adjustable mini-caliper 921
- Gauge block calibrator (trade publication) 156
- Gauge and Tool Makers' Association, competition in toolmaking for apprentices 935
- gauge and tool and power press exhibition 921, 935
- Gaule, G. K., on Boron (book) 743
- Gazzola, Piero, Abu Simbel project 128
- GBT Lifting Equipment Co. Ltd., 25-ton hydraulic press 1136
- Gear(s), helical, speed reducers (trade publication) 878

reduction, type DRWS 876

- Gear hob(s) and cutters (trade publication) 364
- Gear hobbing machine, Norton Gould and Eberhardt 876
- Rigidhobber 147
- Gear speed reducers, helical (trade publication) 878

Gear transmission units, Varatio-Strateline 958 Gear units, helical (trade publication) 878

motor car, Sciaky electron beam welding machine 741

Gearbox

- for off-highway vehicles, ENV 959
- Handtorgue, North Bar Tool Co. 1135
- semi-automatic, Allison Torqmatic 807 totally enclosed multi-stage spur, for shaded pole motors 352
- type R14 Self-Changing Gears Ltd. 190
- Gearhead, Vactric size 08 402
- Gearing, marine research and development trends 400
- GEC (Electronics) Ltd., Lancon IS pocket sized radio telephone 739
- GEC (Telecommunications) Ltd., electronic telephone exchange at Learnington Spa 631
- Geddes, J. D., on Problems in Engineering Soils (book) 877
- Geddes report on shipbuilding industry 476, 934, Letter 425
- comment on 627 summary of 628
- GEM, Sea Gem oil drilling rig 9
- Gemini series spacecraft projects 578 Gemini-9 satellite, performance of 1070
- Gemstones, rocks and minerals, by R. Borner (book)
  - 697
- General Dynamics Computer Recorder for typesetting 192
- General Election, comment on 469

turbofan engine development 945 turbojet engine development 944 turboprop engine development 945 General galvanising practice (book) 831 General Motors Corp. Allison Division liaison with Rolls-Royce 852 collapsible steering column 460 experimental coupe with doors on parallelogram linkage 759 motor car production statistics 569 motor vehicle warming device 194 slush guards for Chevelle and Chevrolet motor cars 759 General Motors Research Laboratories, air injection reactor system for smoke pollution 249 oil consumption measurement by radioisotope 249 General Pneumatic Automation Italiana, rotary indexing table 1131 **General Post Office** data communication to computers by telephone 376 electronic telephone exchanges 330 Leamington Spa 631 mail sorting office, Southampton 1000 plastic tents for jointers 601 position and prospects 521 savings bank move to Glasgow 163 square pillar box proposal 284 see also Post office prospects; Post office tower Generating set, airborne, Rover Rotax 433 Generator(s) gas (trade publication) 208 magnetohydrodynamic, Engineering Outline 315 noise (trade publication) 1142 nuclear, SNAP-7D, for weather station 122 signal, Advance Electronics 1137 thermo-electric, Petbow 1137 turbo, geared, sound analysis of 1060 supercritical steam cycle 1115 see also Alternator; Turbo Geneva Salon motor car exhibition 531, 589 Gentry Carbide Tool and Die Co., machine lapping with diamond compound 652 Geochemical exploration kit 46 Geology, introducing, by D. V. Ager (book) 656 Geometry, differential, tensor calculus through, by J. Abram (book) 363 George, A., project work in draughtsmen training 754 Geotechnical investigations (trade publication) 48 Gere, J. M., on Analysis of Framed Structures (book) 208 on Matrix Algebra for Engineers (book) 364 German Air Show, Hanover, exhibits at 941 German State Railways, Giesl ejectors on steam locomotives 379 Germanium alloy transistors, failure prediction 1182 Ghana, motorway with sun-powered emergency telephone 1154 Ghia, exhibits at Geneva Salon 592 Giaever, Ivar, dc transformer 411 Gibb, Sir Alexander, and Partners, Kainji dam project 73 Gibbons Bros. Ltd., heat treatment furnaces (trade publication) 1016

- Gibbs-Smith, C., on Invention of the Aeroplane (book) 785
- Gibson, Sir Donald, underwater road 536
- Giddings and Lewis, Numeripoint numerical control system 869
- Government investment agency 58

Girling/Rubery Owen brakes for semi-trailer 413 Giulia exhibits at Geneva Salon 591 GKN. See also Guest Keen and Nettlefolds GKN Bolts and Nuts Ltd., ISO Metric bolts and nuts 910 GKN Foundations Ltd., piling (trade publication) 1184 GKN Group, Sydney Opera House 736 GKN Screws and Fasteners Ltd., implications of change to metric screw thread system 45 Glas 1700 coupe motor car 1076 Glasgow, Abbotsinch Airport 852 Renfrew Airport, closure of 852 Glass, shot blasting 505 ultrasonic machining, UKAEA 554 Glass fibre insulation (trade publication) 878 Glass fibre protection box, BICC 547 Glass fibre tape, Res-i-Glas 2-F Hi-Tem thermosetting, for transformer insulation 1092 Glass fibre V-belts 1171 Glass insulation blocks, Foamglas 102 Glass-reinforced products (trade publication) 1058 Glen Line, cargo liner Glenalmond 426 diesel engines for cargo ships 802 Glenalmond cargo liner 426 Gloster Saro Ltd., aluminium alloy articulated road tanker 513 aluminium alloy rail tank wagon 513 pallet/demountable tanks 959 road tanker in glass reinforced plastic 513 Gloucester Railway Carriage and Wagon Co., 80ton aluminium alloy rail tank wagon 512 Glover, D. E., dropping the Guild's pilot? 626 Glover and Ferguson, Abbotsinch Airport 852 Glow discharge and an introduction to plasma physics, by F. Llewellyn-Jones (book) 514 Gluing machine for cartons 260 Goddard, K. J., Kite-mark for street lighting 639 Godden, C. G., electric wiring and industrialised building 380 Godden, K. A., electron beam welding 1113 Godfrey, Sir George, and Partners (Industrial) Ltd., Rootes type industrial blowers 260, 957 Goin, K. L., on High-Speed Wind Tunnel Testing (book) 156 Gold diffusion for microcircuits 606 Gold-silver diffusion, slow rate of 652 Golf course, Sunningdale, automatic watering system for 850 Golf-trolley, battery powered, Lectrol 850 Goodenough Pumps, peristaltic pumps 198 Goodier, D., road test on bond equipe 377 Goodman, I., on Polyesters Vol. 1 (book) 208 Goodyear tape-controlled draughting machine for tyre tread pattern 653 Goodyear wheels for wide section tyres 263

- Goonhilly Downs, satellite communication aerial 1123
- Gordon, J., Gordon-Keeble IT motor car 716
- Gordon-Keeble IT motor car, description and road test on 716
- Gorman, Siebe, & Co. Ltd., Heinke CNC noise converter for road drill 1115
- underwater television inspection 540
- Gott, H. H., Dungeness A nuclear power station 1021
- Government
  - and engineering in 1966 6
  - Ministerial changes in 707
  - science technology and, conference on (Bath) 1142

Giddings and Lewis-Fraser Ltd., Hybormill horizontal

General Electric Co. Ltd., Carlton electric cooker 386 digital tachometer for transient torque/speed characteristics in induction motors 821 electrostatic torque clutch 689 Gecostat 16/80 static excitor for alternator control 1003 thermal diffusivity measuring equipment 689 General Electric Co. of New York Ltd., numerical control systems 870 General Electric Co. (US) disc proving for gas turbines 529 electrochemical bonding of diamond to metal surface 652 fan-in-wing system 946 gas turbine seminar 428, 528 Hardiman powered exoskeleton 849 laboratory model of dc transformer 411 Mark Century continuous path control 763, 764 Simplex-GE Ltd., 193

boring machine 763 **Giesl** ejectors on rack and adhesion locomotives 123 on steam locomotives 379 Gifford, A. F., steel/water drums 141 Gifford-Udall system of prestressed concrete 617 Gilkes, Gilbert, and Gordon Ltd., trade exhibition in West Germany 1066 Gillett, P., apprenticeship scheme 1108 Gin distillery, Beefeater, development scheme 1071 Ginetta G 10 motor car 175 Ginzberg-Landau-Abrikosov-Gork'ov (GLAG) theory of superconductivity 792 Girder, torsional box, for cranes, Smith-Savigliano Tor-Box 47 see also Beam; Bridge; Floor Girdlestone Pumps Ltd., condensate recovery units 409 Girling disc brakes for Ford Mk IV Zephyr Zodiac

Government policy, technology and 707 Government Training Centres, expansion of 843 Poplar 843 retraining activities 796 Grab, cross axis, Moore 911 digging, Cross-Ram 1010 Graber, exhibits at Geneva Salon 592 Graco Adjusta-Stroke pump metering attachment 649 Graco airless spraying equipment 194 Graco Bulldog pump for pvc paste 1012 Gradieometer for locating submerged objects, Wreckfinder 602 Grading machine, Polygrada 691 Graduate recruitment, Automotive Products Group 327 Graffenstaden horizontal milling machine 763 Graham Clark Lecture. See Institution of Electrical Engineers Graham-Enock Manufacturing Co. Ltd., automatic Amsterdam 597

Rotterdam 598

(book) 207

grids 1045

publication) 156

(book) 47

wagon 513

publication) 610

785

Botlek 598

Bristol 598

Hull 598

dispensing conveyor lubricator 97 Grundig TK23L tape recorder 133, 135 Grain cleaner, Vibramat 259 Grain handling in ports, symposium on, ICE 597 Grain handling installation West Twin Silo, Belfast 597 See also GKN Grande Paroisse Co., ammonia making plant 1162 nitric acid plant 1162 Granholm, H., on General Flexural Theory of Reinforced Concrete (book) 104 of, J. A. Wilson 809 Graphical methods in research, by A. S. Levens Guinea, textile mill 849 Graphical techniques for engineering computations, by W. H. Burrows (book) 364 Grate, continuous, Heenan-Nichols 1053 691 Nichols Perfection 1053 Graticules Ltd., maXtaform electron microscopy Gurney racing motor cars 85 Graviner fire extinguisher and warning system 191 GW Heat-Pak air heaters 308 Gravity-vacuum tube transportation system 278 Gyra-Flo centrifugal fan 651 Gravograph engraving machine 256 Gray, D. H., manpower conference 477 Gray, F., seismic surveying 1146 Gray, J. L., supercritical turbo-generators 1115 Grease injector (trade publication) 156 Greasers, portable, Macnaught 306 definition of 669 Greasomatic continuous greasing injector (trade 703 Great Eastern, laying of Atlantic cable by 14 Great Ouse Basin, water resources of 338 ments 704 Greater London Council, flats with structural plastic panels fixed to steel frame 1047, 1049 Engineering Outline 699 site for national exhibition centre 1025 free rotor types 705 traffic noise report 374 gas-spin free-rotor gyro 705 Green, A. E. S., on Atomic and Space Physics history of 699 integrating 701, 702 Green, W., on Aircraft of the World (book) 414 laser in 54 Greenshields, Drivometer development 337 miscellaneous configurations 705 Greenwood & Batley Ltd., hydraulically powered performance range 703 baling press 1009 principle of 702 Gregory, C. E., on Explosives for Engineers (book) principles of operation 700 rate integrating 701, 702 Gresham & Craven Ltd., aluminium alloy rail tank rate type 701 simple form of 699 Grey cast iron. See Cast iron single degree of freedom 701 'Grid' method of industrialized building (trade sub-miniature 303 suspension system developments 704 testing 704

- Griesheim Ltd., Eltram-130 portable welding transformer 42
- Grieve, Highlands development 848 Griffin, A., on Thyristor and its Applications (book) 609
- Griffin, L. J., strength of karabiners 895
- Griffin, M., marketing conference 1026
- Griffith, M., carpets and underfloor heating 285 Griffith sports motor car 760
- Griffiths, A. E. (Smethwick) Ltd., continuous finishing plant for excavators and earth moving equipment 1140
- washing machine for traction motors of electric locomotives 1140
- Griffiths Bros. & Co. London Ltd., Armour 1632 textured acrylic finish 46
- Griffiths, S. H., pressure vessel failure under hydraulic test 539
- Grillages, flat, elastic analysis of, by J. Clarkson (book) 877
- Grille, window, Vizor retractable steel 354
- Grimston-AEI coordinate tables with numerical control 95 Grinding, abrasive-belt centreless 89-90
- centreless, abrasive-belt 89-90
- in air stream mill 460 Grinding fixture, Rotacone, for drills 921
- Grinding machines, drill, ZB25 and ZB32 40
- Luke & Spencer Ltd. 1054
- precision scroll 922
- surface, electronic relay for 1013
- tap, automatic centreless 552 trade publication 1184
- Grinding wheel, LS Cut-All 1095
- Gripson transparent labels 309
- Gross, J., aluminium bronze die-casting 1174 Gross, S., on Calculation and Design of Metal Springs (book) 656
- Ground power units for airliner servicing 488 Ground stations for satellite communications 1154 Groundwater flows, electric analogue for 1164 Grundig-Adler tape program writer 1179

Grundy & Partners, teaching-machine research 17 Grundy, S. W., Grundytutor teaching machine 16 Grundymaster teaching machine 17 Grundytutor teaching machine, development of 16 Guard, photoelectric, for press brake 1011 safety, for Quersa chasing machine 555 Guernsey, sewage purification plant 232, 1169 Guest Keen & Nettlefolds, vacation courses 894 Guide, air bar, for web strip 553 Guided weapons, environmental testing for 810 Guided weapons systems, reliability requirements Guillotine, electronically controlled 1003 Gulf Oil (Great Britain) Ltd., activities of 895 Gunson's Sortex Ltd., Polygrada grading machine Gunter, R., Government Training Centres 843 Gutehoffnungshütte, closed cycle gas turbine 584 Gyrofin, Sperry, ship stabilization system 399 Gyroplane, A2 one-man, McCandless 537 Gyroscope, applications of 702 construction problems 706 cryogenic free-rotor gyros 705 drift rates produced by mass unbalance torques effect of application on performance requireelectrostatic free-rotor gyro 705

Yanpol'skii (book) 923

- of air conditioning system design (book) 1183 of chemistry and physics, by R. C. Weast (book) 923
- of electronic circuits, by R. Feinberg (book) 831 Handicrafts and Do it yourself, International Exhibition (Olympia) 1100
- Handipump stainless steel pump 147
- Handles, handwheels and knobs (trade publication) 832
- Handley Page Jetstream twin turbo-prop aircraft 232, 329
- Handley Page Memorial Trust Fund, formation and activities 1065
- Handling plant, pneumatic, mobile, Jenkins-Kubbe 46
- Handtorque gearbox, North Bar Tool Co. 1135
- Handwheels, handles and knobs (trade publication) 832
- Hannen and Cubitts (North West) Ltd. pharmaceutical division of ICI 803
- Hanover Fair, exhibits at 781
- Hanover German Air Show exhibits 941
- Harcostar Ltd., polyethylene barrel 1005
- Hard surfacing, Ceemarcyne cold setting resins for 462
- Fusewelder welding machine for 314
- Hardening furnace
- for steel balls 600
- shaker-tube 947
- Hardening machine for shafts 918
- Hardflex strip steel for blanking and forming 646 Hardiman powered exoskeleton 849
- Hardinge mills (trade publication) 464
- Hardness-changing alloy inserts for temperature monitoring, Templug 504
- Hardness tester, Brinell, portable 198
- Cami di Paviglianiti 1131
- Rockwell, semi-Hardness testing machine, automatic 404
- Hardy Spicer, alleged fatigue failure of Birfield constant velocity couplings 378
- Harefield Power Handling Ltd., Douglas electric platform truck 358
- Harland and Wolff Ltd., refitting of Queen Elizabeth liner 670
  - Sea Quest drilling platform 140
- Harris, A., Reading Schools Engineering Club 64
- Harris, F. R., on Turbine Main Engines (book) 156
- Harris, H., cladding with stainless steel 326. Letter 478
- stainless steel cladding 526
- Harrison, B. C., numerical control 761
- Harrison, G., project work in schools 984
- Hart and Cooley Manufacturing Co., return air door grille 500
- Hartlepool, ancient town of 1110
- industrial development position and prospects 1110
- Hartlepool Crankshafts Ltd., activities of 1111
- Hartley, Sir Harold, Kelvin Gold Medal award 371
- Hartmann and Braun AG, recording equipment 784
- Harvard Business School, training scheme for
- managers at 619
- Harvester, vegetable, NIAE 897
- Harvey Fabrication Ltd., cowls and ventilators 408 Harwich Parkeston Quay, redevelopment plan,
- British Rail 1033 Hasler recorder for diesel railcars 191
- Hattersley (Ormskirk) Ltd., bronze globe valve 303
- Haulpak 120A dump truck 1005
- Hausner, H. H., on Beryllium, Metallurgy and Properties (book) 314
- Havers, H. C. P., on Underground Railways of the World (book) 1099
- Hawker Siddeley Dynamics, electron beam welding gun 1155
  - Fluid Power Transmission Group 602
- production of fluid couplings 602

tape controlled recording automatic check-out equipment (TRACE) 491

- Hawley, John, and Co. (Walsall) Ltd., HFM universal polishing head 97
- Hayes Engineers (Leeds) Ltd., Hayes-Ferranti Hall's Program H modular timber buildings 913
- Tapemaster milling machine 764 Hamilton, H. H., ASME gas turbine symposium 581 Hayes, F. C., supervisory training 570 Hams Hall power station turbo-generator set 429
  - training in foundry industry 983
  - Hayes-Ferranti Tapemaster milling machine 764 Hayes, J., Mancunian Way 816
  - Hayters Ltd., diesel-engined mower 359
    - motor mowers (trade publication) 1142
  - Hazard warning device, traffic, for motor cars 960 Hazemag impact crushers 199

Training (book) 877 Hadfield, R., supervisors in iron and steel industry 1153

Hackney, J. W., on Control and Management of

Hacon, R. J., on Conflict and Human Relations

- Hadland, John (Photographic Instrumentation), Ltd., Fastscan motion picture projector 1002
- Hagan Controls Corp., electric actuators 401 Hagan-Westinghouse power positioner 300

Hagglund hydraulic motor for stern tube borer 96

Hagglund hydraulic winch 139

ment education 59

modation 401

829

Handbook

two degree of freedom 700

Capital Projects (book) 655

Η

- Hague, The, submarine pipelines for sewage disposal 631
- Halcrow, Sir William, and Partners Ltd., Central Costanera power station 776
- motorway sun-powered emergency telephone 1154 Hall effect in magnetohydrodynamics 316
- Hall, J. and E. Ltd., air conditioning of liner Queen Elizabeth 671

Hall, Sir Noel, on academic freedom and manage-

Hallam, Vic, Ltd., caravan as mobile site accom-

Hamworthy Engineering Ltd., automatic gas burner

for computing elementary functions, by L. A.

Lyusternik, O. A. Chervonenkis and A. R.

gas burner assembly conversion 685

Hand, artificial, nerve-controlled, NRDC 688

Hall and Kay Ltd., textile mill for Guinea 849

President, IME 795

Hit blind rivets 301

685

1091

Hobbing machine

Rigidhobber 147

trade publication 414

tor Devices (book) 609

Hoist, goods, Spacesaver 409

pneumatic, Dunz 1056

Hoisting yoke for drums 200

Holford, Lord, road planning 111

system built house 943

publication) 208

Hazemag impact crushers 199

trade publication 924

Honda racing motor cars 85

amplifiers 964

1016

741

155

laser in 55

547

1136

296

376

Honing machine

for long bores 146

trade publication 1184

Hook. See Lifting tackle

Hook, C., hydrofoils 125

minting press 865

insulation for 913

House 736

414

1142

1100

Index 112

Hogg, Q., arbitration proposals 567

see also Crane; Transporter; Derrick Hoist blocks with disc brake 918

gear

Hire, plant (trade publication) 924

Hitachi, gas turbine development 528

Historic Buildings Councils, activities of 860

Hi-Volume vertical jet roof extract ventilation unit

H. M. L. (Engineering) Ltd., flow control valve

Hobart Bros. Co., combination engine-driven welding machine 1041

Hobart Bros. (Great Britain) Ltd., combination

Hodges, J. P., single-leaf springs 425 Hogarth, C. A., on Materials used in Semiconduc-

Holcroft pusher type furnaces (trade publication)

Holes, large diameter, DXD trepanning cutter for

Holland and Hannen and Cubitts, annual Cubitt

Holland, L., on Thin Film Microelectronics (book)

Holmes, W. C., and Co. Ltd., gas generators (trade

Holophane Ltd., lighting fittings for hazardous areas

Holroyd, John, and Co. Ltd., aluminium billet lathe

Holset Engineering Co. Ltd., constant velocity universal joints (trade publication) 832

Holt, A. and Co., launching of Priam cargo liner 72

Honeywell Controls Ltd., Accudata 104 dc

pneumatic control system for swimming pool

communication to computers by telephone

ground station for satellite communications 1154

vibration damper for crankshaft 542

Holt, G., launching of Priam cargo liner 72

domestic control equipment 386

Hong Kong, British Week in 373

mechanised gangways 1127

Plover Cove reservoir scheme 593

Speedhone, stroking fixture for 552

Hopper feed mechanism, Wadkin 1044

Hopper overflow return device, Aiax 909

Hoover Ltd., production at Merthyr Tydfil 167 Hope Anti-Jack Knife device 806

Hordern, Mason and Edwards Ltd., Coinmaster

Horlock, J. H., on Axial Flow Turbines (book) 785

Hornibrook, M. R. (NSW) Pty. Ltd., Sydney Opera

Hornung, W. J., on Reinhold Data Sheets (book)

Horstman Ltd., polariscope for stress analysis using photoelastic coating 1177 Hortonsphere spherical vessel, urethane foam

ocean terminal 234, 1166

H20 digital control computer 953

switch/display matrix 953 Honeywell Electronic Data Processing,

Hologram(s), interferometry technique 1166

123

data

21

Holland, A. D., standardizing bridges for roads

engine-driven welding machine 1041

Norton Gould and Eberhardt 876

Hob(s) and cutter(s) (trade publication) 364

Hirst, A. C., Rally Imp 940, 1029 70 mph Jaguar 377

HBN-100 airbus, study of 941

- Head Wrightson Machine Co. Ltd., bull block 146 Verson 200 ton single action press 921
- Head Wrightson Stockton Ltd., aluminium alloy footbridge 330
- Head Wrightson Teesdale Ltd., rail/road low loader vehicle 1091 Hearth, J. D. M., on Progress in Cargo Handling
- (book) 831
- Heat, waste, recovery, Diesecon marine system 400 Heat Economy Ltd., Heatcon electrically heated industrial oven 257
- Heat exchange, fluidised bed 418
- Heat exchanger, extended surface 977 principles of 977
- rotary 977
- trade publication 878
- Heat exchanger design, by A. P. Frass and M. N. Ozisik (book) 314
- Heat sealing, rotary machine 554
- Heat sealing device, impulse 42
- Heat sink, plug-in 502
- Heat transfer, basic mechanisms 973 boiling, and two phase flow, by L. S. Tong
- (book) 785
- by combustion 977
- by conduction 976 by convection 973, 976
- by fluidized beds 977
- by radiation 973
- cryogenics and 976 definition 973
- Engineering Outline 973
- history of 976
- insulation and 976
- mass transfer 976
- Heat treatment of stainless steel 38
- . Heat treatment furnaces (trade publication) 1016 Heatcon electrically heated industrial oven 257 Heater(s)
  - GW Heat-Pak 308
  - packaged, Toroidal, for process heating 145 convector, liquefied petroleum gas fired 1009
  - mobile (trade publication) 514 Smiths Webasto, for water distillation plant 71
  - space, oil-fired, Reddy portable, 40 thermostat control 352
  - trolley mounted, Porta Bella 39
  - warm air, Pak-a-Way range of 686
- Heater bands, Cole 96
- Heating

air

- automatic, for railway points 301 billet automatic plant for 38
- central, ducted warm air off-peak, Electricaire 685
- Minivector hot water/electric heater unit 644
- district. See District heating domestic, plumbing and, exhibition International
- (London) 878
- drop forge symposium 1184
- electric, terminology agreement 996
- electric off-peak storage 386
- underfloor, carpets and 285
- for swimming pool 297 with microwaves, by H. Püschner (book) 923 see also International Heating. Ventilating and Air Conditioning Exhibition
- Heating control equipment, Satchwell 686 200
- Heating elements, furnace, Morganite Type 'U
- trade publication 1184 Heating equipment, automatic electro-gas, Pyromatic Major 827
- trade publication 208
- Heating furnaces for rod mill, Salem-Brosius 1139 Heating and Ventilating Research Association, Thermal Abstracts 969
- thermostat test cabinet 820
- Hedin Ltd., air drying tunnels with automatic trolley indexing 42
- radiant tube burners for shaker hearth furnace 947
- Heenan & Froude Ltd., Dynamatic eddy-current dynamometer 872
- Heenan-Nichols continuous grate 1053 hydraulic dynamometers 872
- water coolers 454
- Heenan-Nichols continuous grate 1053
- Heinke CNC noise converter for road drill 1115
- Helicopter, AAFSS folding-blade 193
- Help for inventors (trade publication) 786
- Hendry, A. W., on Photo-elastic Analysis (book) 969

- Henry, Mrs. D., trade mission to China 664
- Henshaw, L. G. J., visit to India 272 Hepburn Conveyor Co. Ltd., Hepflo bunker discharge system 507
- Hepflo bunker discharge system 507
- Hepworth Iron Co., hydrostatic drive for machine tools 916
- Hepworth-Polva Plastics Ltd., pvc sewage pipe in River Weaver 250
- Herbert, Alfred, Ltd.
- contract plant replacement scheme 1064 co-ordatrol automatic turret drilling machine 766
- link-up with Ingersoll Milling Machine Co. 1107, 1149 numerical control 761
- numerical control equipment 869
- research scholarship at Warwick University 566 special purpose machine tools 1107
- training department for numerical control 1149 Herbert, C. W., on Turbine Main Engines (book) 156
- Herbert-Ingersoll Ltd., formation and activities of 1107, 1149
- Heritage, R., Quartet Major display lighting units 866
- Herland, L., on Dictionary of Mathematical Sciences (book) 923 Hermite, E., sewage purification 1168
- Hersent, S. A., Sea Gem oil drilling rig 9
- Hevac. See International Heating, Ventilating and Air Conditioning Exhibition Heyman, J., plastic theory of structures 748
- Heywood, J., engineering education study 800
- schools and technology 1028
- Hickson, V. M., stress analysis of aircraft structures 780
- Hi-Define industrial magnefier 910
- Hiduminium 48 Al-Zn-Mg alloy (trade publication) 743
- Hiflow milling cutters with tungsten carbide throwaway tips 201
- Higgs, T. J., on Progress in Control Engineering (Vol. 3) (book) 1099
- High Duty Alloys Ltd., forged rings (trade publica-tion) 414

high strength light alloy (trade publication) 743 High energy beam optics, by K. G. Steffen (book) 103

- High fidelity systems, by R. F. Allison (book) 1141 High precision techniques and metrology, international exhibition of 924
- High pressure metals under. Letter 1029
- High strength light alloy (trade publication) 743 High vacuum pumping equipment, by B. D. Power (book) 1141
- Higher National Certificate, non-exemption for CEI 217, 273
- Highland Computers Ltd., activities of 892 Highlands, industrial growth position and prospects
- 847, 892
- timber industry in 848 Highlands and Islands Development Board 847
- Highway, automated, possibility of 278
- see also Road

819

formers

754

757

1021

1021

Highway Trailers (Great Britain) Ltd., trailers for container carriage 438 Highwayman tractor, Scammell 807

Hilger-IRD Ltd., nitrous oxide as leak detector 300

Hilger & Watts Ltd., automatic inclusion counter

equipment for optical torquemeter 310

fluorescence analyser (trade publication)

jig borer microscope (trade publication)

optical tooling (trade publication) 1100

1112

Hill, A. W., semi-bulk handling containers 1121 Hill Equipment Ltd., arc welding machines 455

Hill, G. B., career selection methods by sixth

Hill, O., Hotpoint Automatic-1501 washing machine 866 Hilliard, J. E., gold-silver diffusion 652 Hillman Rally Imp motor car, description and

performance of 900. Letters 940, 1029

Hilton, K., planning conference on Wales 756

Hilton, J., project work in draughtsmen training

Hinkley Point nuclear power station, opening of

Hinton, Lady, Dungeness A nuclear power station

Hinton, Lord, Dungeness A nuclear power station

on use of natural gas fuel 1022

Hose units, high-pressure, Flexequip 553 Hoskyns, J., and Co. Ltd., course for computer consultants 935 Hospital, Royal Free, artificial kidney unit 603 St. Helier, foundation renewal. Letter 479 Hospital bedstead, standard design for 574 Hot Dip Galvanizers Association, General Galvanizing Practice (book) 831 Hotplate, electric, Creda plan Quick-Disc 867 Houchin Ltd., ground power unit 488 Houseman and Thompson Ltd., Houseman-Varo combustion control process 643 Houseman-Varo combustion control process 643 Housing and Local Government, Ministry of, water resources of Great Ouse Basin 338 Hove, J. E., on Ceramics for Advanced Technologies (book) 610 on Modern Ceramics: Some Principles and Concepts (book) 556 Hovercraft BH7, announcement of 1157 BH8, announcement of 1157 CC-1 1084 CC-2 1084 CC-4 1085 CC-5 427, 1085 CC-6 hoverferry 1157 Coanda effect in 1114 Cockerell/NRDC dispute 419 development position and prospects 419, 471, 1080 exhibition of (Browndown, Hampshire) 329, 1080, 1157 HD-1 1085 HD-2 1086 inflatable structure lifting system 1157 Manx hovercat 1157 origins of 1080 SR-N1 1080 SR-N2 1081 SR-N3 1082 SR-N4 534, 1082 SR-N5 1082 SR-N6 534, 1082 VA-1 1083 VA-2 10844 VA-3 108 Rhyl-Wallasey service 1083 Hovercraft Development Ltd. 1080 activities of 1085 CC-4 and CC-5 hovercraft 1085 formation and activities of 1081 HD-1 hovercraft 1085 HD-2 hovercraft 1086 hovertrain development 1086 Hovercraft industry, position and prospects of 1080 Hovercraft routes, sea conditions on 136-8 Hovershow '66 exhibition (Browndown, Hampshire) 329, 1080, 1157 Hovertrain development, HDL 1086 How to Organize QR Campaigns 163, 222 Howard and Bullough Ltd., course for grammar schoolboys 894 Howard, H., locomotive design trends 727 Howard, L. R., supersonic transport aircraft 223 Howard Rotavator Co. Ltd., pipe-laying trench digger 507 Howarth, M. H., on Design of High Speed Diese! Engines (book) 1141 Howden, James, English Electric, diesel-driven compressor 1031 Hryniszak, W., split compressor differential engine 585 Hudson Electronic Ltd., radio telephone for Bexley vehicle control 233 Hudson, K., on Industrial Archaeology (book) 363 Hudson, Robert (Raletrux) Ltd., Leedsall articulated dump truck 356 Hughes Aircraft Co., microcircuit bonding system 603

Surveyor moon probe 580

Surveyor spacecraft 1073

22

Hughes International (UK) Ltd., microcircuit bonding system 603

Hull(s), smoother, Vickers Ltd. system 283

Hull, J. N., Reading Schools Engineering Club 64

- Hull (Yorks.), grain handling installation at 598 Human Engineering, research techniques in, by A.
- Chapanis (book) 1015 Human relations training, conflict and, by R. J.
- Hacon (book) 877 Human response tests for tall buildings 905 Human robots in myth and science, by L Cober
- Human robots in myth and science, by J. Cohen

(book) 609

- Humdinger portable vibrators 357
- Humidification equipment, Hygro-Robot Ltd. 714 Humphreys, G., planning conference on Wales 756
- Humphreys & Glasgow Ltd., pipe stress analysis by computer 1172

pressure vessel failure under hydraulic test 539, 714

- Humphris & Sons Ltd., press feeding machinery 96 Hundred years of road rollers, by Aveling-Barford Ltd. (book) 313
- Hunslet Engine Co. Ltd., diesel hydraulic locomotives for NCB 553
  - replacement boilers 233
- Hunt Heat Exchangers Ltd., heat exchangers (trade publication) 878
- Hunt, Sir Joseph, manpower conference 477 Hunter, Sir John,
- chairman, Central Training Council 707 CEI and chartered engineer 172
- Hunting Engineering Ltd., Mhoglas concrete
- accelerated hardening technique 1092 Hurst, R., gas turbines in merchant ships 587
- ship research and developments 392
- Husband, H. C., steerable aerials 1070 Husqvarna Vapenfabriks AB, vending machine for
- hot dogs 505
- Hustler fork-lift truck 1010
- Hutchings, E. G., radiant type boilers 154 Hutchinson, G. L., large steerable aerials 1122
- Hutchison, Sir Kenneth, on use of natural gas fuel 1022
- Hybormill horizontal boring machine 763
- Hyde, N. E., on Connectors, Relays and Switches (book) 414
- Hydramite jack for press frame 257
- Hydrant valve, Parity 258
- Hydra-Point point-to-point numerical control system 870
- Hydraulic circuit symbols, Circuitape 1130
- Hydraulic cylinders, Broughton 1176
- T. Millington & Co. Ltd. 301
- Hydraulic drive for marine engines 70 Hydraulic equipment, Dynex Co. 757
- Vickers Sperry Rand 757
- Hydraulic filler/filter unit, Porta-Filter 738
- Hydraulic jet unit, two-stage, Dowty 227
- Hydraulic motor See Motor
- Hydraulic platform, self-propelled 489
- Hydraulic power unit for hydraulic press, Vickers Sperry Rand 405
- Hydraulic press. See Press
- Hydfaulic pump. See Pump
- Hydraulic servo motors, Cincinnati Acradrive 648 Hydraulic system
  - airliner, inspection and maintenance 492
- independent, Vary Touch 248 Hydraulic work platforms 490, 492
- Hydraulics, oil, and pneumatics, International Fair
- for 1142
- Hydrocar amphibious vehicle, Vinten 70, 227. Letter 225
- Hydrocarbon cracking for acetylene making 1160 Hydrocheck control for cutting feed 829
- Hydrocon Hornet light crane 599
- Hydroelectric power scheme, Kainji dam project
  - 73–82
  - Pierre-Benite 861
- pumped storage, Cruachan, closed-circuit television 540
- Hydroelectric power station, V. I. Lenin, and Moscow, long distance electrical transmission between, by A. M. Nekrasov and S. S. Rokotyan (book) 1183
- Hydrofin hydrofoil 125
- Hydrofoil, Hydrofin 125
- possibilities and limitations of 125
- Hydrogen, liquid, flow rate in, nuclear magnetic resonance technique for 1013
- recovery and purification 1160
- Hydrogen sulphide purification, Stretford process for 1160
- Hydro-Lift hydraulically lifting trailer 741
- Hydrolift Ltd., scissor lift trolley 41
- Hydrometallurgical processes, chemistry of, by
- A. R. Burkin (book) 1015 Hydrostatic drive, dump truck with, NEL 916
  - for conveyor 916 for machine tools 916
  - udvostatio ovtrusion room
- Hydrostatic extrusion, research at NEL 916 Hydrovane compressor 690, 1138
  - for drilling machine 830

Hygro-Robot Ltd., humidification equipment 714 Hylink compression socket 384

- Hyltern Controls Ltd., clutches and brakes (trade publication) 1058
- Hymatic Engineering Co. Ltd., Hydrovane compressor 690
- Hydrovane compressor for drilling machine 830 Hydrovane packaged compressor 1138
- relief and non-return valve 644
- solenoid valve 501

## 

- Ibbotson, L. W., weight of trains 173
- IBM, computer control of interconnections 329 removal to Gunnersbury 322
- Ice, elasticity of, determination at low temperature, NBS 1128
- Icelert icy road warning system 533
- ICI Metal Pretreatments, prepainted strip (trade publication) 104
- Icy road warning system, Icelert 533
- Idemitsu Tanker Co., 205,000 ton deadweight tanker 398
- Idromatic motor car, Fiat-850 533
- Ignition unit, gas, automatic 830
- Ikara guided weapon systems 427
- ILGA. See Inner London Group Apprenticeship scheme
- Illinois Tool Works Inc., four-lamp switch indicator 501
- Plessey-Licon double-break illuminated pushbutton switch 911
- Illuminating Engineering Society, Lighting of Libraries 463
  - street lighting, C. C. Smith 995

Impact crushers, Hazemag 199

Impact evaporation technique 254

Troskolanski (book) 364

Imperial Chemical Industries Ltd.

chairman's report 664

Plastabond fencing 303

714

press 865

Keedur coating for Keebush 822

- Illumination. See Lamp; Light; Lighting
- Imacti Immedium drain type water filter 728
- Immersion suits 355
- Imp, Hillman Rally, motorcar, description and performance of 900. *Letters* 940, 1029

Impeller pumps, by S. Lazarkiewicz and A. T.

defect detection in sheet metal surfaces 250

isobutyl vinyl ether (trade publication) 1142

pharmaceutical production and research 803

Imperial College of Science and Technology,

Imperial Metal Industries Ltd., Coinmaster minting

Imperial Oil Co., urethane foam insulation for

Imperial Oil Enterprises of Canada, iron ore

Imperial Typewriter Co., steel marking stamps

Impulse tester for hidden fault detection, ASEA 829

Incinerator, refuse, for continuous operation,

Indexing tables (rotary), Festo-Pneumatic 308

Index-o-matic rotary indexing table 1091

India, small tools production problem 272

Indian switchgear (trade publication) 832

locomotives with Giesl ejector 123

Induction brazing (trade publication) 786

Indicator. See under specific types

Induction furnace. See Furnace

Laithwaite (book) 1057

Induction motor. See Motor, electric

Indian International Trade and Industries Fair (Mad-

Indonesian State Railways, rack and adhesion

Induction machines for special purposes, by E.

Hortonsphere spherical vessel 913

Tri-borne paint-dipping process 966

compiler processor project 803

'Trilac' 24S resin solution 250

Ex-684 titanium alloy 1170

reduction by fluidization 92

Impregnation procedure, Plessey 1181

(trade publication) 464

Impregilo, Kainji dam project 81

Heenan-Nichols 1053

Incomes policy, prices and 220

Indexer, digital 'Slo-Syn' 869

General Pneumatic 1131

Index-o-matic 1091

Snow 1094

ras) 1016

Inclusion counter, automatic 819

pressure vessel failure under hydraulic test 539,

- Indulex Engineering Co. Ltd., flats with plastic cladding panels 1047, 1049
- Industrial archaeology
- by K. Hudson (book) 363
- museums of 859
- note on 1099
- Industrial and Commercial Finance Corp., report on advances by 982
- Industrial Design Unit Ltd., Hotpoint Automatic-1501 washing machine 866
- Industrial diamond. See Diamond
- Industrial Diamond Information Bureau 155
- Multi-Lingual Glossary and Buyers Guide 1966 555
- Industrial Estates Management Corporation for Scotland, activities of 470
- Industrial manager; background and career pattern, by D. G. Clark (book) 923
- Industrial Market Research Ltd., survey of electrical imports 219
- Industrial monuments, preservation plans for 857. *Letter* 1029
  - review of 857
- Industrial Monuments Survey 857
- Industrial Reconstruction Corp., comment on 269 Industrial relations, comments on weaknesses in
- 566 course for Latin Americans (Geneva) 323
- shipbuilding industry 630
- Industrial Reorganization Corp. 372
- White Paper on 221
- Industrial skills, by W. D. Seymour (book) 514
- Industrial spying, consultants on 749
- Industrial Supplies (Slough) Ltd., Constanite material lift 1011
- Industrial training, in engineering education 801 see also Training
- Industrial Training Act 4, 114, 120 implementation of 565, 981, 983, 1024, 1108 prospects for 1966, 7
- Industrial Training Boards, and Central Training Council 707
- sandwich course for training officers, Central Training Council 980
- Industrial Training International, new publication 969
- Industrial Training Service 571
- Industrial trends survey, CBI 372
- Industrial Vibrators Ltd., Low-Line vibrating screen/ feeder units 1176
- Industrialized building. See Building
- Industrialized Building Systems and Components Exhibition (Crystal Palace) exhibits at 943
- Industrieele Maatschappij Activit NV. See Imacti Industry and labour in the USSR, by G. V. Osipov (book) 969
- Inertia Switch Ltd., centrifuge slip ring lubricant 353
- Inertial navigation, principle of 702
- Inflatable structure lifting system, hovercraft 1157 Information
- and communication theory, by A. M. Rosie (book) 743
- atomic energy, sources of, by L. J. Anthony (book) 513
- medical, MEDLARS computer retrieval for 996 Information Handling Ltd., information retrieval
- system (trade publication) 1100 Information retrieval system (trade publication) 1100
- Information service, computer, for physicists 996 Infradex Ltd., convector heater using propane or
  - butane 1009

- flight control, SADIE 491, 492
- Inspection system, tube, Eddytester 1008
- Instant Heat soldering gun kit 600
- Institute of British Foundrymen, annual conference (Scarborough) 1173
- Institute of Export, Export Services Exhibition 1016 Institute of Industrial Supervisors, renamed In-
- stitute of Supervisory Management 570 Institute of Information Scientists, conference of
- (Oxford) 832
- Institute of Management Consultants, annual general meeting 844
- Institute of Marine Engineers, implications of chartered engineer 172
- radiant type boilers, by E. G. Hutchings 154 Institute of Personnel Management, conference on
- manpower use (Stratford-upon-Avon) 477 Institute of Petroleum, lubricants for diesel engines,
- J. C. Levrague, F. Roux and A. Schilling 995
- Institute of Physics and the Physical Society conference on
  - energy beams and their uses 970
  - instrumental optics and optical design 970
  - nuclear and particle physics 1142
  - rare earths 1016
  - solid state physics 1142
  - Physics Exhibition 688, 742
- symposium on liquid scintillation counting 1100 Institute of Supervisory Management, formation and activities 570
- Institution of British Engineers, trade mission to China 664
- Institution of Chemical Engineers, Further Education of the Graduate Chemical Engineer 1184
- Institution of Civil Engineers
- airport passenger terminals symposium 173
- airport terminals symposium 236
- annual dinner 797
- area control of road traffic 1016
- model display at annual conversazione 1164
- symposium on grain handling in ports 597
- weight of trains, L. W. Ibbotson 173
- Institution of Electrical and Electronics Engineers, conference on automatic operation of broadcasting equipment 364
- Institution of Electrical and Electronics Technician Engineers, future of television, by F. C. McLean 125
- Institution of Electrical Engineers
- area control of road traffic 1016
- computer-assisted information service for physicists 996
- conference on automatic operation of broadcasting equipment 364
- Graham Clark Lecture by Lord Snow 623
- International Conference on Microwave and Optical Generation and Amplification 1058 phasing out of qualifying examinations 661 symposium on large steerable aerials 1070 theatre lighting, F. P. Bentham 536
- Institution of Electronic and Radio Engineers, conference on automatic operation of broadcasting equipment 364
- conference on electronic engineering in oceanography 464
- International Conference on Microwave and Optical Generation and Amplification 1058
- Institution of Engineering Inspection, National Inspection Conference 970
- Institution of Highway Engineers, bridge construction, O. A. Kerensky 535
- Institution of Mechanical Engineers
- advances in automatic control (book) 877

- Institution of Production Engineers, numerical control, A. W. Vickers 761
- Institution of Structural Engineers, annual dinner 888
- bridge construction, O. A. Kerensky 535 conference on industrialized building and struc-
- tural engineer (London) 698, 1047 Instron Ltd., load/strain control system 688

Instrument(s)

- and modules, digital, Dawe 1090
- electrical (trade publication) 786, 1016
- Electronics and Automation Exhibition (Olympia) exhibit at 950
- for cleaned surfaces quality assessment 378 pivotless electrical measuring 964

Instrument calibration service, Ministry of Tech-

Instrument Development Laboratories, Color-Rad

Instrument Society of America, conference on

Instrumental optics and optical design, conference

for an Urban Society, conference on 878

Instrumentation for an Urban Society 878

physical, in medicine and biology, by D. J.

pneumatic, miniature (trade publication) 832

Instruments Electronics Automation Year Book

Insulating tape, PVC (trade publication) 1142

and Buyers' Guide 1966, by T. G. Williams

polyurethane, carbon dioxide storage vessel

sound control and, of buildings, by P. D. Close

transformer, Res-i-Glas 2-F Hi-Tem thermosetting

urethane foam, for Horton-sphere spherical

Insulation test set, very low frequency, ASEA 1004

Integrated circuit packs, Transitron Electronic 152

Interchange, Cumberland Basin split level, Bristol,

Interfaces, surfaces and, solid, by H. Mykura (book)

Interferometer calibrator, laser, for machine tools

International Apprentice Competition (Utrecht)

International Atomic Energy Agency, MHD power

International Automobile Technical Congress

International Chemical and Petroleum Engineering

Interferometry technique, Hologram 1166

International Boat Show, exhibits at, 69-71

generation symposium 610

(Munich) 786

thermal, of industrial buildings (book) 1099

colour measuring equipment 352

pneumatic, Flexair 950

in seismic surveying 1146

Dewhurst (book) 1015

and continuity tester 546

cable, dual extrusion for 404

glass fibre (trade publication) 878

and heat transfer 976

polythene cable 961

with 1046

(book) 785

vessel 913

1141

1092

1151

trade publication 786

glass fibre tape for 1092

Insulation blocks, glass, Foamglas 102

Insulink compression socket 383, 384

Intelsat II Pacific satellite system 1154

street lighting for 637

Intercom for four stations 502

Intercline drafting unit 258

nology 804

on 970

(book) 697

Insulation

Instrumentation

Porta Bella trolley mounted heater 39 Ingersoll Milling Machine Co., link up with Alfred Herbert 1107, 1149 special purpose machine tools 1107 Injection moulding machine. See Moulding machine Inland clearance depots for exports 1109 Inland waterways. See also Canal; Navigation; River Inner London Group Apprenticeship scheme 1108 Innovation, invention, and discovery, H. M. Finniston 624 Inpower Works (Pty) Ltd., fluid couplings 602 Insley Industrial Ltd., toggle clamps (trade publication) 314 Inspection, conference on quality, reliability and marketing, National 970 Inspection device, fibre optics, Flexiscope 1187 Inspection equipment, automatic, TRACE 490, 491, 492

better engineering with simple statistics, discussion 698 computer analysis of motor-car underbody 479 construction equipment for airborne military operations 284 engine cooling systems, Stratton, Stringer and Taylor 666 implications of metric conversion 527 iron and steel works lubrication (book) 831 James Clayton Fellowship for medical engineering 114 James Clayton Prize awarded to R. S. Silver 371 Lord Hinton as President 795 lubrication and wear, convention (book) 877 steam plant availability (book) 831 syphon operation, A. G. Kelly 895 Institution of Metallurgists, Metal Physics (book) 1015 Institution of Municipal Engineers, annual conference 1105

Exhibition (Olympia) 1079 exhibits at 1158 International Combustion Ltd. Central Costanera power station 773 Drakelow C power station 343 mills (trade publication) 464 oil firing equipment (trade publication) 514 radiant boilers for Central Costanera power station 775 steam/water drums for SGHWR reactor 141 supercritical boiler for Drakelow C power station 345 International Computers and Tabulators Ltd., automatically wired computer stores 1172 International conference engineering societies, proposal for 798 experimental stress analysis (Berlin) 780 microwave and optical generation and amplification 1058 non-destructive testing (Montreal) 104 International Congress

### Engineering Volume 201 1966

automatic control (London 1966) 48 International Society of Rock Mechanics 924

precast concrete industry 955, 1092 International corrosion and surface-protection

- exhibition (Gothenburg) 924 International exhibition of high precision techniques
- and metrology 924 International Fair for Oil Hydraulics and Pneu-
- matics 1142
- International Federation of Automatic Control, congress of 1156
- International Federation of Prestressing, congress (Paris), report of 1155
- International Fortnight on Nuclear Radiation Protection 1142
- International Handicrafts and Do It Yourself Exhibition (Olympia) 1100
- International Harvester Co. of Great Britain Ltd. Bristol Duplex tractor mounted compressor 358 model 434 tractor 248 24-1 front end loader 248

- Vary Touch independent hydraulic system 248 International Heating, Ventilating and Air Con-
- ditioning Exhibition (Olympia), exhibits at 685 International Industrial Diamond Conference (Oxford) 970, 1099
- International Labour Office, industrial relations course for Latin Americans 323
- International Machine Tool Design and Research Conference (Birmingham) 786
- International Measurement Congress (Warsaw) 1058
- International Mechanical Handling Exhibition (Earls Court), exhibits at 957
- International Nickel Ltd., Copper Cliff Ontario plant for the production of nickel oxide sinter 46 cryogenic cast iron 101
  - cryogenic castings (trade publication) 698 Nickel Oxide Sinter-90 46
- nickel steel for re-usable die holders 261
- International Organization for Standardization, approval of ISO Metric screw thread system 43
- International Packaging Exhibition (Paris) 1184 International Plumbing and Domestic Heating
- Exhibition (London) 878 International Research and Development Co. Ltd., activities and resources (trade publication) 364

sponsored research activities 203

- International Road Federation, world meeting of 698
- International Rubber Conference (Brighton) 970
- International Safety Exhibition (Manchester) 970
- International standard (SI) units 4
- International standards, comment on 522 International Symposium on Shipyard Automation
- (Genoa) 924 International Symposium on Suspension Bridges
- 1142 International Tutor Machines Ltd., development of
- Grundytutor teaching machine 16-18 group teaching machine 18
- Grundymaster teaching machine 17
- NRDC support for 18
- program writing 18
- International Union of Air Pollution Prevention Associations (London) 924
- Internationella Siporex, Siporex aerated concrete building material 1093
- Intersonde Ltd., miniature bonded strain gauge pressure transducers 778
- Intertherm Ltd., continuous gluing beam laminating press 41
- gluing machine for cartons 260
- Introducing geology, by D. V. Ager (book) 656 Introduction to chemical process control, by D. D. Perlmutter (book) 655
- Introduction to electrostatic precipitation in theory and practice, by H. E. Rose and A. J. Wood (book) 1183
- Introduction to industrial finishing equipment, by B. F. Blundell (book) 610
- Introduction to transistor electronics, by R. L. Walker (book) 1183
- Introduction to variational methods in control engineering, by A. R. M. Noton (book) 877
- Invention innovation and discovery, H. M. Finniston 624
- of the aeroplane, by C. Gibbs-Smith (book) 785 Inventors, help for (trade publication) 786
- Invergordon, distillery 848 industrial growth 892

24

Inverness, industrial growth 892

Investigations in the field of organic chemistry, by L. C. Willemsens and G. J. M. van der Kerk (book) 364

969

940

549

switch 207

John F. Kennedy airport 236

(trade publication) 786

Strand prestressing wire 1155

universal (trade publication) 832

Industry, activities of 983

Jointers, plastic tents for 601

control system 870

rotary dividing tables 922

Jones, F. B., Cornish engines 117

Jones, J., manpower conference

Jones, M. D., traffic noise 478

Jones 15-7 crawler crane 959

Joule cycle in gas turbine 516

LMR 29-30

478, 526

К

technician role of 474

compartment tray 309

Kainji dam project, 73-82, 109

constructional forms of 80 consulting engineers' views on 80

design details 74

site progress 78

statistical data 81

publication) 832

Kapton polyimide film 784

Karabiners, strength of 895

design techniques 80

fringe benefits of 80

electricity grid system 77

Jones, Sir Henry, national gas grid 290

Jones, S., British Rail Hovercraft 534

Jordaens, cargo liner, sea trials on 669

Jordan, D. P., on Air Tables (book) 47

Judge, J. T., steel nationalization 567

attachment for rock drill 551

JOVIAL computer program language 997

Ramsden Memorial Lecture 667

lication) 1142

1013

276

radio 867

Joint sealing (trade publication) 1142

asbestos (trade publication) 656

Joint(s), swivel, self-aligning, Barco 653

Johnson outboard motors 718

Jig borer microscope (trade publication) 1100

Jiskoot Autocontrol Ltd., weatherproof rotary

Johnson, K. J., review of trade associations 163

Johnson, L. A., psychologists' aid to safer driving?

Johnson, Matthey and Co. Ltd., induction brazing

Johnson and Phillips Ltd., metalclad switchgear

Johnson, Richard, and Nephew, Thermalized

Johnston, K. St., launching of *Priam* cargo liner 72

constant velocity (trade publication) 832

Joint Committee for Training in the Foundry

Joint Venture Abu Simbel firms comprising 128

Jointing, and anti-seize compounds (trade pub-

Jointing power cables (trade publication) 970

machine tools (trade publication) 1184

Jones, A. A. & Shipman, analogue numerical

electronic relay for surface grinding machine

relieving attachment (trade publication) 556

Jones, D., Pye-1108 mono reproduction model

Jones, E. Pennant, training officers for small firms

Jones, V. J. A., EITB senior training officer 935

Jowett, W. G., 25 kV electrification scheme for

Junction Bit & Tool Co., Torkhammer percussive

Junior Institution of Engineers, proposal to become

Kabi (Electrical and Plastics) Ltd., polystyrene

Kaempfe, A., gyroscope development 700

health and rehousing aspects of 80

navigation improvements due to 77 site and configuration of 80

Kangaroo courts, comment on 519

Kandux Precision Instruments Ltd., optical/

mechanical bar straightening machines 260

Kane-May Ltd., electronic thermometers (trade

Kantorowicz, O., should we save the relics? 1029

KAP crystal for micro-analyser light element 1170

Kapp, R. O., technical writers and illustrators 425

Karbowiak, A. E., on Trunk Waveguide Communica-

Kaplan turbine sets for Kainji dam project 76

engineering technicians' institution 370. Letter

Junghans process-timing stop watch 1171

477

Jiggens, A. H. F., Chester inner ring road 812

- Investment agency, Government 58
- Investment grants, proposed legislation on 796 Investment Incentives, White Paper on 110, 161 Investment reserve scheme proposal, MTTA 1063
- Invicta Bridge and Engineering Co. Ltd., design and erection services (trade publication) 656
- Ion gauge control unit for pressure measurement 911
- Ion pressure gauge, AEI 742
- Iron, cast. See Cast iron
- wrought, enquiry into present position. Letter 626
- Iron ore reduction by fluidization 92
- Iron and steel industry, foremen in, survey 1153 pilot plant in (book) 1141
- Iron and Steel Institute, conference on hightemperature properties of steel 314
- Pilot Plant in the Iron and Steel Industry (book) 1141
- Vacuum Degassing of Steel (book) 156
- Iron and steel works of the World, by H. G. Cordero (book) 208
- Iron and steel works lubrication (book) 831 Ironmaking research laboratory, Tees-side, BISRA
- 1133 Irrigation channels, earthen, lining of, by H. L. Sally
- (book) 413
- Irrigation pipe fittings, aluminium 152 Isle of Grain power station, proposed site for 994
- Iso-Car platform truck 959
- Iso Grifo motor car 1076
- ISO Inch screw threads 124
- ISO Inch (Unified) screw thread system 43-45
- ISO Metric screw thread system 43, 124 design changes for 632. Letter 849 GKN 910
- Iso-Speedic Co. Ltd., Iso-Car platform truck 959 ISO Unified screw threads, design changes for 632. Letter 849
- Isobutyl vinyl ether (trade publication) 1142
- Isoflow variable-reagent dosing valve 1046
- Ison, H. C. K., on Corrosion and its Prevention in
- Waters (book) 969 Isora Illumination Ceilings Ltd., illuminated ceiling panels 153
- Isuzu Bellet motor car, Nippon 1077
- Italian Biennial Machine Tool Exhibition (Milan) 1058
- Italian Exhibition of Industrial Automation (London), exhibits at 1131
- Italian Trade Centre (London), exhibition at 1131
- J
- Jack, flat, Freyssi 354 Hydramite, for press frame 257
- see also Lifting tackle
- Jack wire tensioning system, Stressomatic 1155
- Jackson Engineering (Beckenham) Ltd., Quersa rotary percussion drill 1179
- safety guard for Quersa chasing machine 555 Jackson Trimline electric cooker 386
- Jaguar Cars Ltd.
- E-type motor car, effect of 70 mph speed limit 115. Letters 377, 626
  - performance characteristics, 115-117
- E-type 2 + 2 motor car 493
- traffic hazard warning device for motor cars 960 Jaguar supersonic strike fighter/trainer aircraft, Breguet 941
- Jameson, J. L., Ltd., tape controlled coordinate positioning boring machine 767
- Janes's fighting ships 1965-66, by R. V. B. Blackman (book) 877
- Jari underwater weed mower 201

46

958

- Jaumotte, A. L., large gas turbines 582
- J. D. Tractors Ltd., John Deere crawler loaders 509
- Jebba hydroelectric power scheme 77 Jenkins-Kubbe mobile pneumatic handling plant 46
- Jenkins, W. J., and Co. Ltd., cooling conveyors for briquetting plant 205

Jet Stream Airveyors Ltd., air-cushion conveyor

Jevons, M., on Electrical Machine Theory (book)

Jensen Motors Ltd., Don Safety Trophy 1115

Jetstream twin turbo-prop aircraft 232, 329

Jenkins-Kubbe mobile pneumatic handling plant

tion (book) 208

- Kavanagh O'Moore & Co. Ltd., multi-spindle drill head 875
- Kawasaki Iron Works, computer control of openhearth furnace 653
- Kaye Alloy Castings Ltd., diecasting foundry at West Bromwich 499
- KDF7 computer for Czech steelworks 997, 999
- KDN 2 computer for LD furnace control 998
- Kealey, L., TGWU engineering group 226
- Kearney and Trecker-CVA Milwaukee-Matic machining centres 870
- Kearns, D., comment on Ministry of Technology 620

numerical control 761

- Kearns, H. W., & Co. Ltd., milling and boring machine 920
- Kearton, Sir Frank, industrial reorganization corp. 221

Kee Board racking system 403

- Keeble Cars Ltd., Gordon-Keeble IT motor car 717
- Keeble, J., Gordon-Keeble IT motor car 717
- Keebush pump impeller, Keedur coating for 822 Keedur resin bonded graded silicon carbide pumpimpeller coating 822
- Keith, K., BIM conference 525
- Kellet, E., vehicle turbocharging 668
- Kelly, A. G., syphon operation 895
- Kelseal Ltd., Neoprene air drying panel sealant 1091

Keltec Industries Cass-horn aerial 1125

- Kelvin Gold Medal award to Sir Harold Hartley 371
- Kemp Applications Sales Ltd., Electromatic Pacemaster 65 collating machine 738
- Kendall & Gent Ltd., plano-milling machine 257 Kennametal (GB) Ltd., toolholders (trade publication) 464
- Kennedy, G. R., large gas turbines 582
- Kept, George, Group, Flexair pneumatic instruments 950

portable sampler 952

- Kent, George, Ltd., Kent-Helix water meter 554 on-line control for soaking pits 251
- Kent, George (Petrochemical) Ltd., Minimec Mk. 2 pneumatic recorder/controller 950
- Kent-Helix water meter 554
- Kent Precision Electronics Ltd., control units (trade publication) 1016
- low-drift chopper amplifier 1092
- Kent pressed concrete garages 251
- Kenway tractor-mounted cement mixer 303 Kenwood Manufacturing (Woking) Ltd., Kenwood
- A1212 dishwasher 33, 36
- Kerensky, O. A., bridge construction 535
- Kerry Works three wheeled truck 306
- Kerry's (Ultrasonics) Ltd., ultrasonic machining of glass and ceramics 554
- Kestner Evaporating & Engineering Co. Ltd., Keedur resin bonded graded silicon carbide pump-impeller coating 822
- Keyswitch Relays Ltd., double plug-in relay unit 952

miniature lever keys for switching 352

- Kidney, artificial, equipment for treatment by 603 Kier, J. L., & Co. Ltd., reinforcement of cooling
- towers 447
- Kiesling, E. W., photoelastic and model materials 780
- Kiln, shuttle, for ceramic tiles 947
- Kilometre, pronunciation of. Letter 377
- Kilpatrick, T. S., BIM conference 524 Kim Engineering Ltd., Kim Mk. 1 dist.washer

- Klochnev, N. I., on Production Technology and Properties of Heat Resisting Cast Iron (book) 1183
- Knobs, handles and handwheels (trade publication) 832
- Kockums, stern tube boring machine 96
- Kodela, L., rebuilding of Skopje city 177-80
- Koenigsberger, F., on Advances in Machine Tool Design and Research 1965 (book) 1057
- Kolatarap shrink wrapping system 305
- Kopex pliable ducting 687
- Kopp Variator in coil winding machine 1095
- Korn, G. A., on Basic Tables in Electrical Engineering (book) 923
- KPR photoresist technique for micro-circuits 605 Kraus, A., on Applied Differential Equations (book) 743
- Krohne density meter for liquid mass flow 1129
- Krotos burglar alarm system 970
- Krupp, Fried, Maschinenfabriken, wagon for ultralarge loads 233
- K. & T. Corporation, Milwaukee-Matic machining centres 870
- Kuhlmann sulphuric acid process 1162
- Kuo, Shan S., on Numerical Methods and Computers (book) 463
- Kupradze, V. D., on Potential Methods in the Theory of Elasticity (book) 698
- Kuznetsov NK-12 turboprop engine 946
- Kynmore Engineering Co. Ltd., miniature battery charger modules 101
- Variogon electrostatic phase-shifting transducers 777
- Vibra-Fork resonant-reed devices 1003

Label(s), transparent, GripsOn and PressOn 309 Label overprinter machine 1043 LabKit printed circuit edge connectors 778 Laboratory, biological, CERL 896 research, ironmaking, Tees-side, BISRA 1133 structures, RAE Farnborough 1072 see also National Engineering; National Physical Laboratory equipment manufacturers' visit to West Germany 1066 Labour and industry in the USSR, by G. V. Osipov (book) 969 Ministry of chief adviser on industrial training 621 conference on manpower use (Stratford-upon-Avon) 477 film on Government Training Centres 796 see also Employment; Manpower; Strike Labour dispute(s), comments on 566 in motor industry, Scamp committee on 572 see also Strikes Labour dispute procedure, comments on 475 Labour Party manifesto 469 Ladle, manually operated mobile molten metal 1056 Lagging stud, Bighead 100 Lagos, as centre of power 60 Laing, John, Construction Ltd., Abbotsinch Airport 852 Britannic House, London 575

- Danish 12M Jespersen system 943 raising structural steel roof for aircraft hangar
- 354 Laing, W. Kirby, industrialized building systems

- Lamp circuits, capacitors for, BS 1070 Lamp standards, plywood, designs for 638
- Lamp units, pushbutton and signal 352
- Lamson Engineering Co. Ltd., Model H. pallet
- loader 1096
- Lancashire Dynamo Electronic Products Ltd., control equipment for punch presses 650
- Petite range of indicators and controllers 953 Lancashire-Yorkshire motorway, M62 111
- Lancaster University
- engineering curriculum 800
- professorial chair in marketing 844
- schools and technology 800, 1028
- Studies in Higher Education 800, 1028
- vocational guidance for would-be technologist 1028
- Lancer Boss Group, self-propelled hydraulic platform 489
- Lancer Machinery Ltd., sideloader motor truck 959 Lanczos, C., Discourse on Fourier Series (book) 877
- Land and Marine Contractors Ltd., Hague sewage disposal 631
- Land and Marine NV, Hague sewage disposal 631 Landar 1000 cc motor car 176
- Landmaster Ltd., Vacmaster dual-purpose vacuum cleaner 1178
- Landon Kingsway Ltd., Visutape tank contents gauge 1171
- Landrover motor vehicle, rubber suspension for 822
- Langdon, F. J., noise acceptability scales 375
- Langham Tools Ltd., Baier MF63i chasing machine for brick walls 551
- Langley HL-10 re-entry vehicle 684
- Langmuir technique for vaporization rate of rhenium 1097
- Lansdown, R. F., NCB career p.ospects 990
- Lapmaster-72 lapping machine 692
- Lapping with diamond compound by machine 652
- Lapping machine, Flexibox 737 Lapmaster-72 692

applications 53

definition of 51

crystal 52

gas 52

basic physics of 51

dc excited 307

in communications 53

in linear measurement 54

in photochemistry 54

in testing materials 55

in welding and machining 53

thermal diffusivity measurement with 1013

yttrium-aluminium-garnet crystal, sun-operated

Laser-beam welding for micro-circuit connections

Laser interferometer calibrator for machine tools

in photography 54

in printing 55

in surgery 54

injection 52

1172

505

1092

in display systems 55

in flow meter 54 in gyroscope 54

in holograms 55

Engineering Outline 51-55

fibre, development research 1188

for structural research 1164

Laser(s)

34, 35 Kincardine County Council, Imacti Immedium water filter trials 729 Kinetics of phase transformation in metals, by J. Burke (book) 514 King, A. J., British Acoustical Society 1030 noise in machines 1062 King, B. R., pay-television 12 King, L., Lea Hall colliery 991 King portable Brinell hardness tester 198 Kings Norton, Lord, CNAA awards 845 Handley Page Memorial Fund 1065 Kingsnorth power station, construction progress 994

dc transmission line to Willesden 484 Kingsway, London, circular building 908 Kinnis & Brown Group, chemical cleaning to investigate boiler tube failure 459 cleaning and passivating at West Thurrock 819 Kite-mark. See British Standards Institution Kleinwort Benson building, structural details 907

270

Laithwaite, E., on induction machines for special purposes (book) 1057 linear induction motors 840 MFD monorail system 498 Lake, R. A., Spencer Steel Works 750 Lambert Engineering Co. (Glasgow) Ltd., Hydrocon Hornet light crane 599 Lamble, J. H., Strength Tests on Brittle Materials 204 Lamborghini, exhibits at Geneva Salon 589 Laminating press, beam, continuous gluing 41 Lamming, C. K. G., management education 225 La Mont assisted circulation type boilers 775 Lamp, desk, fluorescent, Best & Lloyd 866 infra-red, gallium arsenide 401 sodium vapour, development of high pressure 637 ultra-violet hand 260 xenon tube, AEI 545 see also Light; Lighting; Illuminating

Laser oscillation 52 Laser wavelength range 53 Latex foam products, new process tor, Dunlopillo 604 Latham, Sir Joseph, chairman of British Domestic Appliances 1025 Lathe(s) aluminium billet, John Holroyd 1136 automatic copying 259 capstan, automatic, Accuratool 763 AutoWard fully automatic plug programmed 767 centre, with numerical control, Numericon 764 contouring, with numerical control, Churchill-Redman 764 copying (trade publication) 1058 trade publication 970 turret (trade publication) 556 Lather-Lube conveyor lubricator 97 Lathi, B. P., on Signals, Systems and Communication (book) 1183

- Latin Americans, industrial relations course for (Geneva) 323
- Latina nuclear power station, fuel element reprocessing 494

Launch. See Boat

- Laundry industry, automation in 573
- Laurence, Scott & Electromotors Ltd., exhibits at Electrical Engineers' Exhibition 550
- Law, your factory and, by E. Mitchell (book) 207 Lawman, I. T., visit to USA 277
- Laycock LH-type overdrive for Ford Mk IV Zephyr Zodiac range 771
- Lazarkiewicz, S., on Impeller Pumps (book) 364
- Lazell, H. G., BIM conference 525 LD steelmaking furnace, computer control of 998
- Lea Hall Colliery, management structure 991 mechanization at 990
- Lea Recorder Co. Ltd., portable sampler 952
- Lead acid battery. See Batteries
- Lead Development Association, lead acid batteries (trade publication) 698
- Leak detector, mass spectrometer 199, 500 nitrous oxide as 300
- with alarms 353
- Leakage current and transistor failure 1182
- Leamington Spa, electronic telephone exchange at 631
- Leather industry research 912
- Leather manufacture, process control of, research grant 912

Lebanon, aerial observation cars for 100

Leckie, A. H., steel industry for under-developed

- countries 708 Lectrol battery powered golf-trolley 850
- Lee, Arthur, and Sons Ltd., interest in Alloy Steel Rods Ltd. 1139
- Lee, C. E., Bakerloo Line 536

Lee, F., gas board interconnection 286

- Lee, L. S., engineering education study 800
- Lee-McCall system of prestressed concrete 617 Lee-Smith Photomechanics Ltd., coating whirler 1009
- Rota-Etch etching machine 692

Leeds, city highway programme 111

- Leeds Meter Co. Ltd., Kent-Helix water meter 554
- Leedsall 12 articulated dump truck 356 Leggett, R. A., centreless grinding by abrasive belt
- 89–90
- Leipzig Fair, comment on 568
- Lektrokit rack system with enclosure panels 205
- Le Mans motor car race, report on 1156
- Length comparator for cement and concrete samples 308
- Lenin, V. I., Hydro-Electric Station and Moscow, long distance electrical transmission between, by A. M. Nekrasov and S. S. Rokotyan (book) 1183
- Leo 360 computer for Czech steelworks 997, 999 Le Tourneau-Westinghouse, Haulpak 120A dump truck 1005

Letter(s). See Mail

- Letter folding and inserting (trade publication) 743
- Level, liquid transmitter, Taylor 1004
- Level controls magnetic, Mobrey 409
- Level gauge, liquid, magnetic float 964
- Level indicator, oil, for sumps 505
- see also Tank contents gauge
- Level measuring equipment, Telstor 62, 200
- Levens, A. S., on Graphical Methods in Research (book) 207
- Lever keys, miniature, for switching 352
- Leverpak fibre/steel drum for packaging 1091 Leverton, H., and Co. Ltd., Caterpillar 769 dump
- truck 406
- Levin, E., building in timber 1049-50
- Levrague, J. C., lubricants for diesel engines 995 Lewis, W. E., on Application of Matrix Theory to
- Electrical Engineering (book) 923 Leyland, Type RU680/20 diesel engines 190
- Library(ies), lighting of 463 Patent Office, services of 697
- Lidar, principle of 54
- Lift, material, Constanite 1011
- Lift-jet. See Aircraft engine
- Lift trolley, scissor 41
- Lifting device, Ambulift, for patients 995
- vacuum, Vac-U-Lifter 965 Lifting system, inflatable structure, hovercraft 1157
- Lifting tackle service 98-99

26

- Lifting turntable, power-operated, Polt 1178 Light(s), safe, for explosive atmospheres (trade
- publication) 743
  - see also Lamp; Lighting; Illuminating

Light alloy, high strength (trade publication) 743 Light element attachment for micro-analyser, AEI 1170 Load/strain control system, Instron 688

excavator (trade publication) 698 Loading(s) on bulldings, CERA. Letter 849

Lock Sloy pumped storage scheme 1030

Loading control, automatic push button, in meal

Lock, A. M., & Co., Eddytester tube inspection

Lockheed C5-A high-wing jet submission transport

Lockheed-California AAFSS folding-blade heli-

Lockheed Precision Products Ltd., Lockheed

Lockheed supersonic transport aircraft develop-

Lockyer, K. G., on Production Control in Practice

British 4-6-0, from Inverness to Crewe, by

diesel, Brush Type 4, Freightliner trains 442

diesel-electric, silencing of test house for 92

electric, axle-hung motors in Type AL6 727

for London Midland Region main line (Types

types AL1-6 for London Midland Region

washing machine for traction motors 1140

industrial, rubber suspension units for, Neidhart

rack and adhesion, with Giesel ejector 123

Locomotive construction and repair by British

Locomotive panorama Vol. 2, by E. S. Cox (book)

Loewy constant-gap rolling mill for tinplate 960

Lofthouse, J. A., road construction committee

Lohmann & Stolterfoht AG, Pneumaflex flexible

Londex Ltd., modular fault warning system 778

London, controlled parking zone increase 369

underground railways. See London Transport

traffic problem, underwater road for 536

London Airport, maintenance organization 485

London Electric Firm Ltd., lighting suspension

London Group for the Study of Research and

London International Engineering Exhibition (1967),

London Transport Executive, Bakerloo Line history

model of Victoria Line underground railway 1164

Long distance electrical transmission between the 1

Longclose Engineering Co. Ltd., automated dyeing

Longitudinal bending moments of ship models,

Loof, H. W., interpretation of moire pictures 780

Loudspeaker/microphone assemblies, Dymar 1004

Loughborough University of Technology, charter

Longmore, J., lighting of work places 536

V.I. Lenin Hydro-Electric Station and Moscow,

by A. M. Nekrasov and S. S. Rokotyan (book)

terminal buildings 236, 242, 243

gear (trade publication) 924

note-changing machine 1044

Sulzer LVA range engines for 541 diesel-hydraulic, Hunslet, for NCB 553

electrical losses in Type AL6 727

rating inverse in Type AL6 727

transductor control in type AL3 727

Avery-Cejn free-flow couplings 739

Lockheed Avery-Cejn free-flow couplings 739

Loaders, crawler, John Deere 509

Local authority. See Municipal

Location of Offices Bureau 322

production 461

system 1008

aircraft 758

copter 193

ments 223

(book) 923

M. Evans (book) 698

AL1-AL6) 719-27

sources of failure 726

steam, Giesel ejectors on 379

replacement boilers 233

Logic system, fluid, Electrosil 954

coupling and clutch 782

overhaul of 27

21-22, 28, 30

Railways 679

Maxalog 7777

Logicon trainer, T-law 545

firms moving out of 322

Development 162

summer visits 1100

machine 1096

D. I. Moor 669

Lorry. See Motor vehicle

Lotus 41 F2/3 motor car 175

Lotus motor cars 86

noise survey 374

Executive

208

536

1183

693

610

1147

testing station for, BR 872

Locomotive

- Light energy, guided, communication by 304 Lightguards Ltd., photoelectric guard for press brake 1011
- Lighthouses, distillation plant for 95
- South Stake, light alloy footbridge 330 Lighting
- fluorescent, heavy duty fitting 546
- in factories and industrial buildings 530
- of libraries 463
- of work places (booklet) 536 street, improved design need. *Letter* 1113 Kite-mark for lanterns 284, 635
  - review of current ideas on 635 C. C. Smith 995
- theatre, F. P. Bentham 536
- see also Lamp; Light; Illuminating
- Lighting fittings
  - for hazardous areas 547
  - trade publication 924
  - pendant, Flameproof-Weatherproof 544
- Lighting suspension gear (trade publication) 924
- Lighting units, display, Quartet Major 866
- Lignacite Group, lightweight high strength concrete blocks 553
- Limehouse Cut 14
- Limfjords immersed-tube tunnel 1164
- Lind-Air Electronics Ltd., plugs, sockets and
- connectors (trade publication) 556 Linde AG, coke-oven gas purification and sep-
- aration 1160 Lindley, Sir Arthur, competition in tool-making for
- apprentices 935 Lindley Haulage Ltd., York TY 20/Atkinson articulated tipper trailer 806
- Lindop, H. W., and Sons Ltd., castings (trade publication) 556
- Line proejctor, Morse Controls Ltd. 1170
- Linear induction motor. See Motor, electric
- Linear interpolator, Copath 307
- Linear measurement, laser in 54
- Linear time-variable systems, analysis and synthesis of, by A. R. Stubberud (book) 263

Lining of earthen irrigation channels, by H. L. Sally

Link-Belt Co., helical gear speed reducers (trade

Linkages, mechanisms, and mechanical controls,

Linseed oil based coatings for protection from

Lipton LP Carburettor Co. Ltd., magnetic liquid-

Liqua-bin container for semi-bulk handling 1121

Liquefied petroleum gas for convector heater 1009

Liquid fillers, exact volume automatic, Bexuda

Littlebrook D power station, construction progress

Liverpool Borax Co. Ltd., damp proofing (trade

Livingston Electronics Ltd., Color-Rad colour

Llewelyn-Davies, Lord, Centre for Environmental

Llewelyn-Davies, Weeks and Partners, Swindon

Llewellyn-Jones, F., on Glow Discharge and an

Lloyd, Richard, Ltd., metal marking (trade pub-

Lloyd, T. I., highland rail to highland road 480, 715

Lloyd's Register of Shipping, annual report 663

Introduction to Plasma Physics (book) 514

Teradyne automatic transistor tester 952

development recommendation 520

Lloyd, J. R., regional training officer 218

Lloyd-Lowles, G. G. N., visit to India 272

- Liner(s)
- Northern Star, story of (book) 1099 Queen Elizabeth, refitting for cruising 670
- research and development trends 395
- Southern Cross, story of (book) 1099

A-7A Corsair 2 aircraft 262

see also Cargo liner Ling-Temco-Vought

X142 aircraft 278

(book) 413

Liniaiust air diffuser 643

publication) 878

spherical roller bearings 262

de-icing agents 540

level float gauge 964

Lister diesel engine for winch 409

measuring equipment 352

Modufil 462

publication) 970

Studies 521

lication) 1016

Automation in Ships 396

Rules for Steel Ships 396

new rules for dry cargo ships 38

994

by N. P. Chironis (book) 655

for 472

Lovell, S. Maynard, road planning 111 Low. Archibald, & Sons Ltd., Elafloor extruded

- polyvinyl chloride floor for computers 100
- Low heat concrete for Kainji dam project 74 Low-Line vibrating screen/feeder units 1176
- Low loader vehicle, rail/road 1091 Low temperature behaviour of solids, by R. G.
- Scurlock (book) 743
- Low temperature testing, temperature control for, 92 LS Cut-All grinding wheel 1095
- Lubricant, centrifuge slip ring 353
- for diesel engines, J. C. Levrague, F. Roux and A. Schilling 995
- Lubricating oil. See also Oil; Lubricant Lubrication
- and viscoelasticity 885
- and wear, third convention (book) 877 industrial, proceedings of symposium (book) 313
- iron and steel works (book) 831 machine tool (trade publication) 1058
- trade publication 1016 Lubricator, conveyor, automatic dispensing 97
- Milomatic, for valve gear 305
- Lucas, 'Joseph, Ltd., fuel injection system for production cars 483
- traffic hazard warning device for motor cars 960 Lufkin Chrome-Clad steel tapes and rules 404
- Luke & Spencer Ltd., grinding machines 1054
- Luna 9 moon probe, soft landing by 274
- Lunar excursion module for Apollo spacecraft 580
- Lunch, J., director of finance, PLA 663
- Lunn, R., safety features in motor cars 759
- Lurgi process for gas production 289
- Luthin, J. N., on Drainage Engineering (book) 969
- Lycoming T53 turboprop engines for Jetstream aircraft 329
- Lyons, Claude Ltd., dc micro-volt-ammeter (trade publication) 1142
- Micro-Model 5201A transient amplitude voltmeter 358
- noise generators (trade publication) 1142 Lyons, D. J., visit to USA 277
- Lysaght's Scunthorpe Works, computer control of LD steelmaking furnace 998
- Lytag Ltd., lightweight concrete aggregate (trade publication) 104
- Lyusternik, L. A., on Handbook for Computing Elementary Functions (book) 923

## Μ

- M62 Lancashire-Yorkshire Motorway 111
- MACE. See Metropolitan Architectural Consortium for Education
- Machine(s), measurement of mechanical parameters in, by N. P. Rayevskii (book) 464 noise of. See Noise
- Machine position measurement, Digi-Tape units for 777
- Machine shop(s), noise in, PERA survey 379
- Machine shop equipment (trade publication) 156 Machine Shop Equipment Ltd., multi-diameter
- cutting tools 153 Machine tool(s)
- Bohle general-purpose 765
- hydrostatic drive for 916
- laser interferometer calibrator for 1092
- noise problems in, research on 566
- special purpose, manufacture in UK, Herbert-Ingersoll 1107
- trade publication 1184
- Universal, with numerical control 763 Machine tool design and research conference

#### 1058

- Machine tool stock (trade publication) 104
- Machine Tool Trades Association, awards to design scholars 217
- criticism of Ministry of Technology's policy 620 exhibition on numerical control 761
- investment reserve scheme proposal 1063 Machinery, laser in 53
- Machining, electron beam 255
- spark erosion, engraving of microcircuits 914 ultrasonic, of ceramics, UKAEA 554 of glass, UKAEA 554
- Machining centre, Cintimatic 767 Milwaukee-Matic 870
- Mackie, W. and Co. Ltd., pole amplitude modulated motors 544
- static power converter 545
- Macmillan, R. H. on Progress in Control Engineering (Vol. 3) (book) 1099
- Macnaught portable greasers 306
- Macpherson, Geoffrey E., Ltd., Valla mobile crane with fork-lift attachment 958
- Macpherson, G. P., strut type suspension 772 Magnefier, industrial, Hi-Define 910
  - Magnum 910
- Magnel Blaton system of prestressed concrete 617 Magnesium wheels for VW motor car 481
- Magnet, superconducting 794
- Magnet materials (trade publication) 314
- Magnetex Ltd., Tex Hi-Speed windscreen wiper blade 642
- Magnetic cards for production control, CRAM 144
- Magnetic crack detector, EMAG-1,000 1090
- Magnetic recording heads (trade publication) 786 Magnetic liquid-level float gauge 964
- Magnetic pick-up, long reach, Airpax 1004
- Magnetic tape memory, Potter 953
- Magnetic thin films by R. F. Soohoo (book) 103
- Magnetic tools (trade publication) 556
- Magnetohydrodynamic power. See MHD
- Magnetohydrodynamics, applications of 318 Engineering Outline 315
- Magnetometer, differential proton, Wreck-finder, 602 for locating submerged objects
- Magnum industrial magnifier 910
- Mahoney, J. E., project management 751
- Mail sorting office, Southampton 1000
- Main, J. B., on Turbine Main Engines (book) 156
- Maintainability, reliability and, annals of Vol. 4, by J. de S. Coutinho (book) 104
- Maintenance of airliners 485
- Maintenance management in foundry 1174
- Makowski, Z. S., structural plastics 1048
- Malawi, trade mission to 846 MAN, ore unloading bridges 1133
- Man-machine engineering by A. Chapanis (book) 1099
- Management
  - and Trade Union relations, psychology of, by R. Stagner and H. Rosen (book) 877
  - control and, of capital projects, by J. W. Hackney (book) 655
  - design engineering and, conference on, PERA 610
- in competitive Britain, conference of 524 in dockyards, Sansbury and Sutherby 669 of engineering projects, symposium on 750
- professional, construction and, by H. Rubey and W. W. Milner (book) 1183
- Management consultants, advertising and 799 and foundation for management education 171 growth in activities of 799
- Management Consultants Association and Foundation for Management Education 171 annual meeting 799, 844
- Management education, academic freedom and, by Sir Noel Hall 59

- Manchester College of Science and Technology, symposium on Management of Engineering Projects 750
- Manchester Ship Canal Co., nylon mesh for bank erosion 403
- Manchester University, Joe Hyman Chair in Marketing 844

Mancunian Way, Manchester elevated road design

Mangere international airport, New Zealand 241

Manpower in Scotland, conference on 744

McBeath (book) 1183

Manx Hovercat hovercraft 1157

(trade publication) 156

publication) 556

Marconi Instruments Ltd.

pressure 574

of 629

trends 398

Multipress hydraulic press 828

committee on 934

Avon) 477

16

1094

949

Manpower availability, working party on 1023

Manners, G., on planning conference on Wales 755

Manpower planning, organization and, by G.

Manpower resources for science and technology,

Manpower use, conference on (Stratford-upon-

Manstead, Dr. S. K., Grundytutor teaching machine

Manual of applied chemistry for engineers by F. G.

Marbaix, Gaston E., Ltd., gauge block calibrator

Snow rotary turret and rotary indexing tables

Marbon ABS plastic for CRV 5 motor-car body

Marcar, Alexander, and Co. Ltd., turret lathe (trade

Marconi Co. Ltd., amplifier microcircuit 263

underwater television inspection 540

diagnostic X-ray image intensifier 694

rf electronic millivoltmeter 359, 951

Marine engine(s), hydraulic drive for 70

version of motor car engine, BMW 71

transistorized oscilloscope 951

Equipment Council 934

research and developments 392

Market(s), industrial, P. Self 1026

conference on, PERA 1026

industrial, A. Wilson 1027

professorial chairs of 844

Conference on 970

trade publication 1058

No. 9650 462

Engines 67

93

shipbuilding industry 628

Marionette X-ray image intensifier 694

Marketing, concept of, C. Barwell 1026

industrial products, A. Wilson 1026

modulation meter for communications 691

Margam B power station, supercritical steam

see also Engine, diesel; Engine, petrol; Turbine

Marine engine industry, position and prospects

Marine engineering research and development

Marine Progress and Research Ltd., British Marine

Marine propulsion, gas turbine. See Turbine, gas

quality, reliability and, National Inspection

Markham, A., skills analysis training at Perkins

Markham & Co., CJB-Divcon deep diving chamber

Marking film with an adhesive coating, Controltac

Marking machines (trade publication) 1058

Marking stamps, steel (trade publication) 464

Marking-out tables, coordinate 952

Marking, metal (trade publication) 1016

Marine Proteus gas turbine for hovercraft 1157

Buttler and G. R. Cowie (book) 556

Mancleaner unit for clean room personnel 740

811.812

International (Birmingham) 786 Machine tool design and research 1965, advances in, by S. A. Tobias and F. Koenigsberger (book) 1057 Machine Tool Exhibition, Italian Biennial (Milan) 1058 Machine tool industry, criticism of Ministry of Technology's policy 620 need for fewer and larger firms 271. Letter 326 order pattern in 1063 working party report 1063 Machine Tool Industry Research Association, laser interferometer calibrator for machine tools 1092

Machine tool lubrication (trade publication) 1058 Machine tool production unit (trade publication)

development position 170-1. Letter 225 see also Foundation for Management Education Management Investigations Ltd., formation and activities 749 Management studies, Chesters residential centre for 280 Strathclyde University 279 Manager(s), at Harvard Business School, training scheme for 619 industrial, background and career pattern, by D. G. Clark (book) 923 Manchester Mancunian Way, elevated road design 811, 812 rapid transit system 220 Safege monorail system 220 sewage works, Davyhulme plant 942

Markite Corp., Slimline conductive-plastic potentiometer 206 Marley Tile Co. Ltd., Marlith slab industrial partitions 500 Marlith slab industrial partitions 500 Marples, Ridgeway & Partners, second Mersey tunnel 125 underslung overhead travelling crane 99 Marryat & Place Ltd., Barduct and Barclad busbar systems 546 busbar ducting (trade publication) 786 Marsh, J., remarks at IMC meeting 845 Marsh, R., on steel industry legislation 1148 Marshall Richards Machine Co. Ltd., Fenn tube end forming machine 919 Marson, H. W., sewage purification 1168 Martech Consultants, export movement study 1109

- Martin, B. W., heat transfer 978
- Martin Co., nuclear generator for drilling rig 896
- Martin, T. L., grain handling at Bristol 598 Martin, V. L., & Co. Ltd., constant tension cable
- reeling unit 200
- Martin 200 V8 motor car 174
- Martonair Ltd., pneumatic pressure switch 101 Marvel horizontal hydraulic bandsaw 148
- Marwin Machine Tools Ltd., machining centre (trade publication) 514
- Max-E-Mill milling and boring machine 920 Maryon, A. J., technical census 326
- Maschinenfabrik Esslingen, rack and adhesion locomotives with Giesl ejector 123
- Mash, V., schools and technology 1028
- Masking method for precision painting 195
- Mason, R., at International Boat Show 69
- Mass spectrometer leak detector 199, 500
- Massey, Sir Harrie, science policy 1023
- Mastic (trade publication) 1058
- Mastiff Series 3 cross-country fork lift truck 41 Matbro Ltd., Mastiff Series 3 cross-country fork lift truck 41
- Materials
- and devices, molecular designing of, by A. R. von Hippel (book) 1015
- engineering, selection and value analysis, by H. J. Sharp (book) 923
- use in semiconductor devices, by C. A. Hogarth (book) 609
- Materials handling in industry (book) 1015
- Materials handling research, BISRA 1133
- Materials technology in steam reforming processes, by C. Edeleanu (book) 923
- Materials testing, automated, economics of, conference on (London) 878
- Mathematical sciences, dictionary of, by L. Herland (book) 923
- Mathematics in engineering education 800 Mather & Platt Ltd., pump manufacture rationalisa-
- tion move 372
- textile mill for Guinea 849
- Mathews, M., typesetting using CRO screen 192 Matisa Lenning (UK) Ltd., track recording trolley for British Railways 968
- Matric adjustable mini-caliper gauges 921
- Matrix algebra for engineers, by J. M. Gere and W. Weaver (book) 364
- Matrix theory to electrical engineering, application of, by W. E. Lewis and D. G. Pryce (book) 923
- Matthew Hall & Co. Ltd., ammonia for fertilizer industry 1160
- fertilizer processes and plants 1162
- Kuhlmann sulphuric acid process 1162
- phosphoric acid by wet process 1162
- sulphuric acid plants (trade publication) 924 urea synthesis plant 1162 Matthews, J. B., Loughborough's industrial liaison
- officer 472 Matthews & Yates Ltd., Cyclopac packaged air
- conditioning units 686 Mattress, latex foam, new process for, Dunlopillo
- 604 Maunsell, G., & Partners, Mancunian Way 813
- overhead road model tests 816 Max Mueller turning machines with numerical
- control 764
- Maxalog fluid logic system 777
- Maxam pneumatic control equipment 829 Maxam Power Ltd., hopper feed mechanism 1044
- Maxalog fluid logic system 777 panel saw 1044
- pneumatic silencer 1130
- twist-lever fluid control valve 502
- Maxaret anti-lock braking, Dunlop 1115
- Max-E-Mill, milling and boring machine 920
- Maxemill, numerically controlled (trade publication) 514
- Maximum principle algorithms (book) 1057
- MaXtaform electron microscopy grids 1045 Maywick Appliances Ltd., hot water plant for
- concrete making 402 McAlpine, Sir Alfred, Ferrybridge C power station
- 445 McAlpine, Sir Robert, & Sons Ltd., natural gas
- tanks 895
- McBeath, G., Organization and Manpower Planning (book) 1183
- McCandless (Aviation) Ltd., A2 one-man gyroplane 537
- McCandless, R., gyroplane 537

28

McDonald, H., typesetting using CRO screen 192 McGrae, J. D., on Optical Tooling in Industry

- (book) 969
- McKenzie, S. C., on drug-addict designers? 754 McKim, Dr. F., Reading Schools Engineering Club 64

kinetics of phase transformation In, by J. Burke

Metal Box Co. Ltd., shrink films for multiple

Metal cutting mechanics, by N. N. Zorev (book)

Metal and Pipeline Endurance Ltd., nitrous oxide as

Metal Ventures Ltd., Bighead lagging stud 100

Metalife Ltd., corrosion protection system 540

Metallized phenolic moulding for dashboard 820

Metallurgy, history of, Sorby centennial symposium

mechanical, elements of, by W. J. McGregor

flame spraying of copper and copper alloys 1071

Meter-Flow Ltd., Krohne density meter for liquid

Metering attachment for pumps, Graco Adjusta-

Metering system, Parkinson Cowan Unipulse 1071

Methane supply pipeline from Canvey Island 286

Institution of Mechanical Engineers 527

implications of changing to, 43-45, 527.

Metrology, high precision techniques and, inter-

Metropolitan Architectural Consortium for Educa-

Metropolitan-Cammell Ltd., 90-ton rail tank cars

Metropolitan-Vickers Electrical Export Co. Ltd.,

MFD high-speed monorail transport system 498.

Mhoglas concrete accelerated hardening technique

Mickleover Transport Ltd., Clamp structural

Micro-analyser, light element attachment for, AEI

Microcircuit connections, laser-beam welding for

Microelectronics, thin film, by L. Holland (book)

Micro Flame Gas Generator water welders 199

Micro-Model 5201A transient amplitude voltmeter

Microphone/loudspeaker assemblies, Dymar 1004

Micrometer, Anglometric English/Metric 910

Microprecision SA, microswitch range 911

Microscope, jig borer (trade publication) 1100

heating with, by H. Puschner (book) 923

aerials, G. L. Hutchinson 1122

Microwave switching 564

Micro-volt-ammeter, dc (trade publication) 1142

Microwave, and Optical Generation and Ampli-

fication, International Conference on 1058

Microwave problems in design of large steerable

Micro-Weld Ltd., miniature 'water' welding machine

processor

spark erosion engraving for thin film 914

MHD power generation symposium, IAEA 610

tion, formation and activities 1108

100-ton bogie rail tank wagons 1031

mounted cement mixer 303

MHD. See Magnetohydrodynamics

plastics system 1049

Microcircuit, amplifier, Marconi 263

Microfilm recording, Filmsort-2000

for computers, Ferranti 605

Central Costanera power station 773 Meyer, H. I. (Services) Ltd., Kenway tractor-

Metering equipment, summation, Ferranti 550

Methane, protein in, Shell Research 1114

Methane supplies from Algeria 289, 290

Metric standards for engineering, BSI 632

under high pressure. Letter 1029

Metal-Fab Durodyne duct connector 301

Metal marking (trade publication) 1016

Metalastik bush for diesel engines 190

on, by C. S. Smith (book) 831

(book) 514

packaging 305

Metal fatigue. See Fatigue

Metal physics (book) 1015

leak detector 300

Metal spraying. See Spraying

Metalife Clad process 249

Tegart (book) 1141

Meter, water, Kent-Helix 554

mass flow 1129

Stroke 649

Metric system

233

Letter 1113

1092

1170

505

155

358

camera for 508

changing to 1, 4

BSI 610, 757

for screw threads 124

in building, BS 534

see also Screw threads

conversion slide for, BSI 740

national exhibition of 924

Letters 65, 225, 276, 326, 377

conference on:

Metco Ltd., ceramic coatings 539

Metco Polyport industrial door 555

969

- McLaren modified Indy-Ford motor car 1034
- McLaren racing motor cars 84
- McLean, F. C., future of television 125
- McLean, Sir Robert, Scottish industrial estates exhibition 470
- McMullen, John J. Associates Inc., action against the Ministry of Agriculture, Fisheries and Food 715
- Meade, J. P. de C., supervisory training 570 Meaden, G. T., on Electrical Resistance of Metals (book) 656
- Meal mill production, automatic control of 461 Measurement, basic concepts of, by B. Ellis (book)
- 413 of mechanical parameters in machines, by N. P.
- Rayevskii (book) 464 Measurement Congress, International (Warsaw)
- 1058 Measurement Research Ltd., signal conditioning
- unit 407
- Measuring instruments, electric, pivotless 964
- Measuring system, Digiturn 960
- Mechanaids Ltd., Ambulift lifting device for patients 995
- Mechanical components, breadboard (trade publication) 878
- Mechanical engineer, in mining engineering 986 training syllabus for NCB 988
- Mechanical engineering industries, exports, position and prospects of 933
- Mechanical Handling Exhibition, International (Earls Court), exhibits at 957
- Mechanical metallurgy, elements of, by W. J. McGregor Tegart (book) 1141
- Mechanical parameters in machines, measurement of, by N. P. Rayevskii (book) 464
- Mechanics, developments in, Vol. 2, by S. Ostrach and R. H. Scanlan (book) 103, 263
- Mechanisms, conference on, ASME 786
- linkages, and mechanical controls, by N. P. Chironis (book) 655
- Mec-Test Ltd., proximity limit switch 205
- Mectin mechanical surface roughness indicator for tubes 922
- Medical engineering, James Clayton Fellowship for 114
- Medical information, MEDLARS computer retrieval for 996
- Medicine and biology, physical instrumentation in, by D. J. Dewhurst (book) 1015
- MEDLARS computer retrieval for medical information 996
- Meissner effect in superconductors 792
- MEL Equipment Co. Ltd., analogue-to-digital converter 1045
- coolant clarifier 148
- Philips numerical indicating and control equipment 871
- ultrasonic drill 96

road test on 443

truck 306

station 776

Kainji dam project 77

hinged arm 692

AEC

258

Metal(s)

656

Merchant ship. See Ship

industrial door 555

413

Merlin ride-on rotary mower 667

Melting furnace, for bronze and aluminium alloys 1054

Mercedes-Benz 230 motor car, description of 443

Merchant Trading Co. Ltd., Metco Polyport

Mercurial Power Ltd., Kerry Works three wheeled

Mercury 505, tractor with Dynasty semi-trailer,

Merryweather and Sons Ltd., Parity hydrant valve

Mersey tunnel, inauguration of work on second 125

Merton Engineering Co. Ltd., Boughton ripper

attachment for Merton tractor shovel 302

Merz and McLellan, Central Costanera power

Messer Griesheim Ltd., profile cutting machine with

electrical resistance of, by G. T. Meaden (book)

body-centred cubic, diffusion in (book) 48

- gas-fired Femelt 1055
- Memory, magnetic tape, Potter 953 Mendia, Prof. sewage purification 1168
- Mensforth, Sir Eric, export mission to Canada 843

Montgomerie Reid Ltd., fork lift trucks (trade

Monuments, industrial. See Industrial monuments

point-to-point numerical control system 870

Moor, D. I., longitudinal bending moments 669

Moore, C. K. on Electronics: A Bibliographical

Morden, J. F. C., Strength Tests on Brittle Materials

Morgan, A. J., and Sons Ltd., electronically con-

Morgan-Crucible Co. Ltd., die-casting furnace

Morganite BT1300 oil-fired basin tilting furnace

Morganite Electroheat Ltd., Morganite Type 'U'

Morganite oil-fired Bale-O-Matic holding furnace

Morganite Thermal Designs Ltd., die-casting furnace

Morgardshammer AB, precision rod mill 1139 Morris, B. O., Ltd., carbide burrs (trade publication)

manually operated mobile molten metal ladle

drill and reamer sleeves (trade publication) 514

Morris, Herbert, Ltd., Centre-Lift 410 range of

Morrison and Partners, industrialized building (trade

Morrispac thrust units for linear-motor crane 873

Morton, F., engineering projects symposium 750 Moscow, long distance electrical transmission

between the V. I. Lenin Hydro-Electric Station

and, by A. M. Nekrasov and S. S. Rokotyan

Motherwell Bridge and Engineering Co. Ltd., water

electric overhead travelling crane 1134

Moog Hydra-Point Ltd., milling machine 408

Moon, J., engineering education study 800

Moon, soft landing by Luna-9 274

surface details from Luna-9 274

Moore, W. and E., cross axis grab 911

with automatic burners 1042

furnace heating elements 200

with automatic burners 1042

hoist blocks with disc brake 918

linear motor for overhead crane 873

Morse Controls Ltd., line projector 1170

storage (trade publication) 48

ac commutator, Fuller 549, 695

ASEA lightweight 782

control accessories 695

fractional hp, Citenco 963 linear induction, accelerators 840

applications 838-40

basic types 835

development 835

open-sided 837

tubular 837

self-oscillating 838 sheet-rotor motor 836

starter for 3-phase 546

Engineering Outline 835

rotor/stator inversion 837

pole amplitude modulated 544

synchronous, for slow speed 304

terminal assembly, Bruce Peebles 697

for MFD transport system 498

for overhead bridge crane 873

multi control centre, English Electric 696

definition 835

Bruce Peebles 550

eye bolt of improved design 820

publication) 1184

Moon probe, Surveyor 580

Guide-2 (book) 877

lifting tackle service 98-99

trolled guillotine 1003

204

499

499

1056

104

toolholders 922

publication) 610

(book) 1183

air, Gast 963

Motor(s)

electric

199

- Midac wet dust collectors 1055
- Middlesex Machine Tool Co. Ltd., Speedrill drilling machine 920

Midgi-Dial digital dial display assembly 823

- Midland Electrical Manufacturing Co. Ltd., electrical accessories (trade publication) 1100
- electrical control gear (trade publication) 970 Midland Heating and Ventilation Co. Ltd., Midac wet dust collectors 1055
- Midland Railway 1844-1874, rise of, by E. G. Barnes (book) 1099
- Midland Silicones Ltd., silicone products (trade publication) 878
- Midwesco-Enterprises Inc., Perma-Pipe district heating mains 388

Miele G45 dishwasher 32, 35

Mikropul Ltd., ACM pulverizer 40

- Mikro-Pulsaire pressurized dust collector 258 Mill, air stream 460
- Hardinge (trade publication) 464
- meal, automatic production control 461 rolling. See Rolling mill
- Millar, C. E., nuclear magnetic resonance 1013
- Miller, H. D., on Theory of Stochastic Processes (book) 207
- Milling cutters (trade publication) 314
- tungsten carbide throw-away tips, Hiflow 201 Milling machine, Automil-2, numerical control of 1131
- Bridgeport Line-a-Mill, with line tracing 1088 camshaft 737
- Hayes-Ferranti Tapemaster 764

horizontal, Graffenstadon 763

- Wotan Teletrol 765
- numerical control of 408
- numerically controlled Moog Hydra-Point 408
- plano universal 257
- universal, Erfurt 827
- vertical, Parkinson 650
- Richmond 766
- Werner 300 step programme 765
- Milling and boring machine, Kearns 920 Max-E-Mill 920
- Millington, T., & Co. Ltd., hydraulic cylinders 301
- Millivoltmeter, rf electronic, Marconi Instruments Ltd., 359, 951
- Millscale removal paste, Ferropaste 92
- Milner, W. W., on Construction and Professional Management (book) 1183
- Milomatic lubricator for valve gear 305
- Milton Roy Co., 'C' type mini-pump 950
- Milward, A., BEA's need for interim aircraft 852
- Milwaukee-Matic machining centres 870
- Minchin, L., Multi-Gas Burner 480
- Mine, coal. See Colliery
- see also Coal; Colliery; Ore
- Mine roof support, Dowty 5-leg 503
- Mine safety regulations 985
- Mineral(s), rocks and gemstones, by R. Borner (book) 697
- Mines and Quarries Act (1954) 985
- Mini Major degreasing machine 1138
- Mini motor car, electric traction conversion 640 Miniature pneumatic instrumentation (trade publication) 832
- Minicom, communications control unit, Plessey 244
- Minicomp compensating recorders 784
- Mini-lube portable greaser 306
- Mini-Marcos motor car 176
- Mini-Moke utility vehicle, Beach Buggy version of 71
- Mining engineer, functions of 986 legal qualification requirements 985
- training syllabus for NCB 988

- press 865
- Mint, Royal. See Royal Mint
- Minting press, Coinmaster 865
- Mintz, M. D., on Air Tables (book) 47
- Miraflores dam, Colombia 1166
- Mirrlees (Engineers) Ltd., dual pumping set 508
- Mirrlees National Ltd., Milomatic lubricator for valve gear 305
- Misal Machine Tools sas Leto, numerical control of
- Automill-2 milling machine 1131
- Missile, guided, in Type 82 destroyer 427
- Mitchell, A., on Splendid Sisters (book) 1099
- Mitchell, E., on Your Factory and the Law (book) 207
- Mitchell, L. A., Ltd., pneumatic dryers (trade publication) 414
- Mitchell, R. W. Stuart, marine gas turbines 586
- Mitchell, S., gas turbines in merchant ships 587
- Mitchell, Sir Steuart, BR Workshop Plan 672, 674
- Mitsubishi Heavy Industries' Yard, cargo line
- Glenalmond 426
- Mixer for two-part compounds 148
- Mixing control, automatic push button, in meal production 461
- ML Aviation Ltd., microswitch range 911
- M-O Valve Co. Ltd., dual trace instrument cathode ray tube 951
- step recovery diode source 951 Mobil Oil Co., machine tool lubrication (trade
- publication) 1058
- Mobrey magnetic level controls 409
- Model(s), ship, longitudinal bending moments of, D. I. Moor 669
- Model construction direct from drawings 779
- Model display at annual conversazione, ICE 1164
- Model materials, lin ar range of behaviour,
  - Pindera and Kiesling 780 plastic, creep of, Muller 780
- Model test(s)
- in fire research 435
- on Western Avenue elevated road extension 816 Model testing facilities, ship 393
- Modelling technique for nower station design 779
- Modern Cargohandling Ltd., Stella timber ship 139
- Modern electronic components, by G. W. A.
  - Dummer (book) 609

data-logging, NBS 360

Correction 715

Moire fringe techniques

tools 153

Modern optics, by E. B. Brown (book) 364 Modern Telephones (Great Britain) Ltd., loudspeaking telephone system 1135

- Modified Mercalli Scale for earthquakes 178 Modular counters, Veeder-Root Ltd. 1170
- Modular fault warning system, Londex 778
- Modular process chromatograph, Pye 951

Modulation meter for communications 691

strain analysis, Fidler and Nurse 780

Moisture meter for moulding sand 1046

by A. R. von Hippel (book) 1015

review of car performance 1034

Monarch, gua turrets in 15

stress analysis, conference on 780

Modules, and instruments, digital, Dawe 1090

Moflash Co. Ltd., Rotoflash flashing beacon 402.

Mohawk Europa Ltd., multi-diameter cutting

Moisture measurement (trade publication) 1100

Molecular designing of materials and devices,

Molecular thermodynamics, by J. A. Fay (book)

Monaco Grand Prix motor car race, results of 994

Monel K-500 alloy for segment bolting system 736

Monitoring equipment, engine room, Sperry/

- Modular techniques, precision coaxial connector.
- Letter 754 Modular timber buildings, Program H 913

Mining engineering research and development, NCB 986 Mining equipment industry cooperation with National Coal Board 987 Ministart manual starter for 3-phase motors 546 Ministerial changes in government 707 Ministry of. See Education; Health; Labour; Technology, etc. Minivector central heating unit 644 Minnesota Mining and Manufacturing Co. Ltd., Filmac 400 reader-printer 507 Filmsort-2000 processor for camera for microfilm recording 508 jointing power cables (trade publication) 970 Minolta single lens reflex camera 1114 Mint (Birmingham) Ltd., Coinmaster minting

#### TKS 397

208

Monk, J. D., engineering education study 800 Monk Marine Diesels Ltd., diesel engine for steam crane 459

Monometer Manufacturing Co. Ltd., melting furnace for bronze and aluminium alloys 1054 Monomover overhead conveyor system (trade publication) 1016 Monorail, MFD high-speed transport system 498. Letter 1113 Safege system, Manchester 220 Safege system study 1166 Monotronic control for air conditioning and central heating systems 686 Monstrand prestressing unit 1155 Montabone, Fiat 124 motor car 817

thermal protection for 302 three-phase, Series-6 306 thyristor control equipment, Mullard 696 trade publication 1016 transient torque/speed characteristics, digital tachometer for 821 washing machine for locomotive traction 1140 with disc brake, ASEA 1005 worm gear (trade publication) 1184 electric traction, in locomotives Types AL1 - AL6 719 - 27hydraulic 151, 957 Deri Sine 828 for aircraft, Vickers Sperry Rand 608 Hagglund, for stern tube borer 96 through-shaft 145

hydraulic servo, Cincinnati Acradrive 648 outboard, Johnson 718 Motor car(s) Abarth exhibits, Geneva Salon 590 Anglia, Dragoon version of 176 Audi 1077 Autodelta Sprint GTA 1076 Bertone exhibits, Geneva Salon 591 BMW production history and models 576 BMW-1600 533 Bond Equipe GT4S, road test and specification 298. Letter 377 Brabham racing 85 BRM, at Monaco 994 H16 3-litre 898 performance at Monaco 1034 racing 87 Checker Aerocar 1076 Chevelle, slush guard for 759 Chevrolet, slush guard for 759 Cooper-Maserati, F1 174 Cooper-Maserati monocoque racing 83 Corona 1500 and 1600 cc, Toyota 1077 Costin-Nathan 175 CRV 5, with plastics body 949 Crysler Dodge Charger 532 Dune Duster 759 electric, position and prospects of 640 Scamp 640 Trident 640 Excalibur SS 760 exhibits at Geneva Salon 531, 589 Ferrari exhibits, Geneva Salon 589 Ferrari racing 84 Fiat-124 533 description of 633 description and road test on 817 Fiat 850 Idromatic 533 Ford 20M TS coupe 532 Ford Zephyr Zodiac Mk IV range 768 FW5, manufacture in Turkey, Reliant Motor Co. 232 gas turbines for 585 Ghia exhibits, Geneva Salon 592 Ginetta G 10 175 Glas 1700 coupe 1076 Gordon-Keeble IT, description and road test on 716 Graber exhibits, Geneva Salon 592 Griffiths sports 760 Gurney racing 85 Hillman Rally Imp, description and performance of 900. Letters 940, 1029 Honda racing 85 Iso Grifo 1076 Isuzu Bellet, Nippon 1077 Jaguar E-type, effect of 70 mph speed limit 115. Letters 377, 626 performance characteristics, 115-117 Jaguar E-type 2 + 2 493 Johnny Walker JW4 Villiers-engined 175 Lamborghini exhibits, Geneva Salon 589 Landar 1000 cc 176 Lotus 41 F2/3 175 Lotus racing 86 McLaren modified Indy-Ford 1034 McLaren racing 84 Mercedes-Benz 230, description of 443 road test on 443 Mini, electric traction conversion 640 Mini-Marcos 176 Mustang 1077 Pininfarina exhibits, Geneva Salon 591 Plymouth Barracuda 1077 pollution laws for 271 Porsche exhibits, Geneva Salon 591 production statistics, General Motors 569 Racing Car Show exhibits 174-6 Repco Brabham, at Monaco 1036 Rover-2000 TC 533 safety belts for, international standard for tests on 426 safety engineering 336. Letter 940 safety requirements in United States 759 safety seat for, Watford GT3 1071 sales in Switzerland 531 Silverstone foreign car test day 1076 speed limit of 70 mph 115 Spider, Alfa Romeo 1077 Sprint GTA, Autodelta 1077 steel scrap from discarded, Proler plant 902 Steyr-Puch 650 TR11 1076

Tasman 2 litre BRM, performance at Monaco

traffic hazard warning device for 960 Trident racing 175 trim materials laboratory, Ford 654 V8, Martin 200 174 Vauxhall XVR 532 VW, magnesium wheels for 481 VW production statistics. Letter 65 see also Motor vehicle Motor car driver performance assessment device, Drivometer 337 Motor car engine, Chevrolet Corvair, for CRV 5 plastic-body vehicle 949 Coventry Climax FPE V8 174 Ford 3 litre Zodiac 768 Ford V4 2 litre Zephyr 768 Ford V6 21 litre Zephyr 768 Giulia exhibits, Geneva Salon 591 marine engine version, BMW 71 Nathan-Imp 176 racing, supercharging for 86 Unipower GT 176 Volkswagen horizontally-opposed flat-four, for gyroplane 538 see also Engine, petrol Motor car engine cooling systems, Stratton, Stringer and Taylor 666 Motor car exhibition, Geneva Salon 531, 589 Motor car gear units, Sciaky electron beam welding machine for 741 Motor car industry. See Motor industry Motor car race, Le Mans, report on 1156 Monaco Grand Prix, results of 994 review of car performance 1034 Motor car racing, 3-litre formula-1 prospects 83-87 Motor car underbody, computer analysis of 479 Motor industry, position and prospects of, United States 759 records in 72 Motor industry disputes, Scamp committee on 572 Motor Industry Joint Labour Council 226 Motor Industry Research Association, wind tunnel tests on Tex Hi-Speed windscreen wiper blade 642 Motor Show, New York, exhibits at 759 Motor truck. See Motor vehicle Motor vehicle(s) amphibian, Vinten Hydrocar 70, 227. Letter 225 Beach Buggy version of Mini-Moke utility 71 box van, side-loading 1096 commercial, construction and use regulations 806 dump truck, articulated, Leedsall 12 356 Caterpillar-769 406 Haulpak 120A 1005 with hydrostatic drive, NEL 916 fighting, developments in 124 Kerry Works three wheeled truck 306 Landrover, rubber suspension for 822 lorry demountable body systems 302 low loader vehicle, rail/road 1091 Mini-Moke utility, Beach Buggy version of 71 radio telephone for control of 233 safety engineering in 336. Letter 940 sideloader truck, Lancer 959 tanker, glass fibre reinforced polyester 807 GVW bulk mixed-powder 806 in aluminium alloy 513 in glass reinforced plastic 513 vibration in, testing of 808 see also Motor car Motor vehicle engines, turbocharging for, E. Kellet 668 Motor vehicle industry. See Motor industry Motor vehicle simulation, J. R. Ellis 808 Motor vehicle tractor for containers 438 Motor vehicle warming device 194 Motorola Semiconductor Products Inc., annular semiconductor construction method 1087 Motorway, Ghana, with sun-powered emergency telephone 1154 M62 Lancashire-Yorkshire 111 Severn Bridge and, economic impact of 1066 Mott, Hay and Anderson, second Mersey tunnel 125 Mott, L. C., on Engineering Drawing and Construction 877 Mott, Sir Nevill, educational role of Ministry's establishments 473

1034

Mouchel, L. G., & Partners, Chester inner ring road 812

Mould design and production for plastics (book)

413 Mould, N. L. J., manpower conference 477 Moulding, metallized phenolic, for dashboard 820 Moulding machines, green-sand 1056 injection, Austin Allen 1095 Moulding sand, moisture meter for 1046 Moulding sand mixer, Ribbon-Flo 1056 Mount, plug-in, for electronic equipment 502 Mount Hope Machinery Ltd., air bar guide for web strip 553 web guide with air cushion 965 web tension indicator (trade publication) 743 Mountaineering equipment research, NEL 916 Mountford, F. A., nitrogen in grey cast iron 1174 Mountford, Frederick, (Birmingham) Ltd., Sydney Opera House 736 Mower, diesel-engined, Hayters Ltd. 359 motor (trade publication) 1142 rotary, ride-on, Merlin 667 weed, Jari underwater 201 MTE Control Gear Ltd., numerical control equipment 1176 Series DLO starters 363 UCO Unit System of contactor-relay 361 Mudie, C., Vinten Hydrocar amphibian vehicle 70 Muffle furnaces, Funditor 1177 Muirhead and Co. Ltd., electrical accessories and systems (trade publication) 1142 facsimile communication for police 285 Muldivo Ltd., ROBOX 103 controller for desk calculator 401 Mullard Ltd., exhibits at ISE exhibition 952 radiation detector 307 thyristor dc motor/speed controls 696 Muller, H. N., ASME gas turbine symposium 581 on engineer and engineering 522 Muller, R. K., creep of plastic model materials 780 Mullins, L., Proceedings of Natural Rubber Producers' Research Association Jubilee Conference (book) 313 Multi-Gas Burner 480 Multi-Hydrobot water control for concrete mixers 955 Multiversal rolling mill 355 Municipal engineers, role of, G. Berry 1105 Murdoch, M. L., cams anthology 326 Murex Welding Processes Ltd., ground power unit control panel 488 Murfitt Bulk Transporters Ltd., Beltveyor bulk handling system 459 Schmitz-Anhanger three-axle steering bogie 459 Murray, J. M., strength standards for merchant ships 669 Murray-Shelley, synchronous motors for slow speed 304 Murthy, T. K. S., sea conditions for hovercraft 136 - 8Muscle power amplification device 849 Museums, of industrial archaeology 859 Victoria and Albert, Raphael cartoons 283 Mustang motor car 1077 Mustard space transporter project 682. Letter 804 Myers, Fred, Ltd., mechanical sweepers (trade publication) 514 Trash-Vac heavy duty industrial vacuum cleaner 829 Mykura, H., on Solid Surfaces and Interfaces (book) 1141 N Nader, R., safety features in motor cars 759 Nairn-Williamson Ltd., epoxy resin adhesive for floor coverings 46 Naphthas, catalytic reforming reactor for 1160 Naslin, P. on Progress in Control Engineering (Vol.

3) (book) 1099 Nathan-Imp motor car engine 176

National Aeronautics and Space Administration. See United States

National Association of Drop Forgers and Stampers, Heating in the Drop Forge, symposium 1184 National Building Agency 322

National Cash Register Co. Ltd., transparency reader 1041

National Coal Board

administrative reorganisation effects 987 Bretby broadsheets 555

Central Engineering Establishment 986, 989

coalmining policy for South Wales 118

cooling conveyors for briquetting plant 205

Nippon Kokan Kabushiki Kaisha, computer control

Nitric acid plant, Foster Wheeler/Hercules 1162

Nixon, F. , engineers or superficial scientists? 377

Nobelphone-portable sound-powered telephones

Nitrogen, in industry, by M. Sittig (book) 313

of open-hearth furnace 653 Niteline system for road painting 601

influence in grey cast iron 1174 Nitrous oxide as leak detector 300

metric conversion 527 NCB Reliability Conference 982

Grande Paroisse 1162

development activities 989 diesel hydraulic locomotives 553 district heating 181, 185 engineering training scheme and syllabus 988 exhibits at HEVAC 685 heating study group 187 mechanization progress 985 mining equipment industry cooperation with 987 pit closure and production statistics 985 position and prospects 424 recruitment policy for engineers 988 relationship with suppliers 989 reliability conference (Brighton) 982 salaries in colliery management 988 self-advancing powered mine roof supports 503 specification on hoses 553 university scholarships 988 warning on coal industry 752 National Council for Quality and Reliability, How to Organize QR Campaigns 163, 222 National Economic Development Council, activities under Labour Government 841 National Economic Development Office, Efficiency in Road Construction 1147 report on exports 1109 National economic plan 224 National Engineering Laboratory, California water supply pump evaluation 896 cold extrusion research 916 computer programs for surface generation 653 economics of cold extrusion 38 hydrostatic drive application 916 hydrostatic extrusion research 916 mountaineering equipment research 916 research activities 916 rope testing machine 895. Letter 1029 National Examinations Board in Foremanship and Supervision 570 National Federation of Building Trades Employers, annual dinner 270

National Foundry Apprentice competition, awards in 983

National gas grid. See Gas grid

- National Gas Turbine Establishment, circulationcontrol rotor studies 993
- engine control by computer 993 engine test facility with simulated flight conditions 992
- Olympus 593 engine tests for Concorde airliner 992
- National Inspection conference on quality, reliability and marketing 970
- National Institute of Agricultural Engineering, vegetable harvester 897
- National Marketing Council, training scheme for managers at Harvard Business School 619
- National Monuments Record, industrial monuments survey 857
- National Physical Laboratory
- numeral recognition machine 1044
- passive-type roll stabilizer 715
- ship hydrodynamics laboratory 393
- strake stabilization of chimneys 805
- wind tunnel tests on hyperbolic cooling towers 941
- National Plastics Ltd., metallized phenolic moulding for dash-board 820
- National Research Corp., mass spectrometer leak detector 500
- National Research Development Corp. dispute with C. Cockerell 419
- help for inventors (trade publication) 786 hovercraft interests 1080

- industrial use prospects 947
- North Sea discoveries
- effect on economy 1022
- for power stations 1022 impact on Hartlepools 1111
- successful strikes 994
- protein from, Shell Research 1114
- Natural gas firing for Central Costanera power station 775
- Natural gas/oxygen reforming for town gas 1160 Natural Rubber Producers' Research Association, conference on rubber in engineering applications 1100
- proceedings of Jubilee conference, by L. Mullins (book) 313
- Naval architects, Chapman Committee on 476 education and training of (report) 476 supply and demand position 476
- Naval architecture, research and developments review 393
- Navigation, inertial, principle of 702
- NCK-Rapier Ltd., Alpine truck-mounted crane 959
- NCR-315 computer, AEC 144
- Neal, S., Hardiman powered exoskeleton 849 Neath Steel Sheet and Galvanizing Co. Ltd., sponsors of SSIDA 479
- Nedeco, Kainji dam project, 73, 80
- Needham, J., Science and Civilization in China 112
- Needle valves (trade publication) 786
- Negretti and Zambra Ltd., Westinghouse Hagan power positioner 300
- Neidhart SA, rubber suspension unit for industrial locomotives 693
- Neill, James, and Co. (Sheffield) Ltd. magnetic tools (trade publication) 556
- Nekrasov, A. M. on Long Distance Electrical Transmission between the V. I. Lenin Hydro-Electric Station and Moscow (book) 1183
- Nelson, Lord, of Stafford, on English Electric 421
- Nelson, R. A., transportation systems 277
- Neoprene, air drying panel sealant 1091
- dock gate seals 540 laminate construction material 602
- Neumark, S., on Solution of Cubic and Quartic Equations (book) 414
- Neutrino detection project 505
- New Conveyor Co. Ltd., mail sorting office, Southampton 1000
- New York Motor Show, exhibits at 759
- New York World Trade Centre, structural details 907, 908
- Newalls Insulation and Chemical Co. Ltd., carbon dioxide storage vessel with polyurethane insulation 1046
- expanded polystyrene (trade publication) 104 Foamglas glass insulation blocks 102
- glass fibre insulation (trade publication) 878 thermal insulation (trade publication) 786
- Newcastle upon Tyne University, Stephenson Lecture, by H. M. Finniston 624. Letter 754
- Newcomen Memorial Engine Trust 857 Newcomen Society, activities of 859
- Dickinson Memorial Lecture, by R. Wailes 857 Newfoundland and Labrador Power Commission,
- packaged gas-turbine power station 292 Newman Industries Ltd., Newmistor thermal protection for electric motors 302
- Newtherm Extra calcium silicate insulation (trade publication) 786
- Newton Chambers and Co. Ltd., company resources (trade publication) 464
- Stretford process for hydrogen sulphide purificacation 1160

(trade publication) 1142 Noble and Dowden Ltd., Ford 3000 remote-controlled tractor 1032 Nock, O. S., on Britain's New Railway (book) 263 Single Line Railways (book) 555 on Steam Railways in Retrospect (book) 969 Nohab, mobile gantry crane 554 Noise definition of 1059 diesel vehicles machine(s), Engineering Outline 1059 narrow band analysis 1060 specification 1060 machine shops, PERA survey 379 machine tools, airborne 1059 research on 566 structure-borne 1059 types of 1059 measurement of 1059 octave band measurements 1059 traffic, research and policies on 374. Letter 478 Noise acceptability scales 375 Noise converter for road drill, Heinke CNC 1115 Noise generators, trade publication 1142 Noise problem, Wilson Committee on 374 Noise reduction, factories and offices 530 machines 1060 Noise survey, London 374 Nomad floating weather station 122 Non-destructive testing airliner maintenance 492 international conference on (Montreal) 104 Non-Destructive Testing Society of Great Britain, conference and exhibition (Sheffield) 1100 Nonlinear mechanics, operational methods in, by L. A. Pipes (book) 1099 NOR unit, spring-controlled, Techne 689 Norbar torque multiplier 1135

- Norgren, C. A., Ltd., air system equipment (trade
- publication) 1100 Normalair Ltd., CJB-Divcon deep diving chamber
- 93
- Norman, A. G., BIM conference 524
- Normanbrook Report 170
- Norris, edible protein in methane 1114
- Norstel and Templewood Hawksley Ltd., conversion set for rock drill 102
- North America, exports to, campaign to increase 619
- North American Aviation, spacecraft development 580
- North Bar Tool Co. Ltd., Norbar torque multiplier 1135
- North British Plastics Ltd., neoprene laminate construction material 602
- North-east Corridor Transportation Project 277
- North Eastern Gas Board, research and development centre at Bradford 947
- North of Scotland Hydroelectric Board, cable laying to Western Isles 802
  - pumped storage scheme at Loch Sloy 1030

multi-purpose gas burner 480 nerve-controlled artificial hand 688 NIAE vegetable harvester 897 numerical control scheme 841 support for ITM teaching machines 18 National Tower Testing Station, opening of 1071 National Union of Railwaymen, views on Freightliner trains 436, 437 National Union of Sheet Metal Workers and Braziers 665 National Union of Sheet Metal Workers and Coppersmiths, activities and policy as craft union 665 National Union of Vehicle Builders, activities of 572 Nationalization, steel industry, alternative proposals 1148 prospects of 567 Natural gas iced earth tanks for 895

Newton, Sir Isaac, activities of 14 gyroscopic phenomena 699 Neyrpic, bulb turbines 863 Nicholas, H., arbitration proposals 566 assistant general secretary, TGWU 226 Nichols Perfection grate 1053 Nickel oxide sinter 46 Nickel steel for re-usable die holders 261 Nickel temperature sensors 644 Nicoll, R. G., programme management 751 Nieuwenhuizen, J. K., optical measurement of fluid velocity 1089 Niger Dams Authority, rail/road low loader vehicle 1091 Nigeria, as centre of power 60 Kainji dam project, 73-82, 109 Nipper hydraulic clamping device 875 Nippon, Isuzu Bellet motor car 1077 Nippon Electric Co., computer control of openhearth furnace 653

North Sea, natural gas discoveries in. See natural gas North Sea Diving Services Ltd., deep-diving equipment 335 North Siberian trunk railway 535 North Thames Gas Board, natural gas/oxygen reforming for town gas 1160 North Western Gas Board, Stretford process for hydrogen sulphide purification 1160 Northern Ideal Homesteads, two-storey house 943 Northern Star liner, story of (book) 1099 Norton Abrasives Ltd., Bear-Tex impregnated nylon 153 wafering machines for semi-conductors 41 Norton-Asquith Ltd., Norton Gould and Eberhardt gear hobbing machine 876 Norton Co., centreless grinding by abrasive belt 89-90 Norton Gould and Eberhardt gear hobbing machine 876

- Norville, C. C., computer analysis of motor-car underbody 479
- Norwood Instruments Ltd., trade exhibition in West Germany 1066
- Note-changing machine, London Transport 1044 Noton, A. R. M. on Introduction to Variational
- Methods in Control Engineering (book) 877 Nova Hut Klementa Gottwalda steelworks, computers ordered for 997
- Nuclear and particle physics, conference on 1142 Nuclear atom, evolution of, by G. K. T. Conn and H. D. Turner (book) 156
- Nuclear energy, sources of information on by L. J. Anthony (book) 513
- Nuclear fuel element, flasks for transport in MV Stream Fisher 494
  - reprocessing, Windscale 494

transport in MV Stream Fisher 494

Nuclear generator, SNAP-7D, for weather station 122

Nuclear industry exhibition (Basle) 1058

- Nuclear magnetic resonance technique for flow rate in liquid hydrogen 1013
- Nuclear power for offshore drilling platform 895 Nuclear power industry, exports 1106
- Nuclear Power Group, computer for Oldbury power station 1118
  - Oldbury nuclear power station 1031
- Nuclear power plant, SNAP 10-A endurance test on 574

Nuclear power station(s)

CEGB 1022

construction programme 757

Dungeness A, official opening of 1021

Dungeness B, site progress 942

- Hinkley Point, opening of 757
- Latina, fuel element reprocessing 494
- Oldbury, computer-based alarm system 1118 prestressed concrete reactor vessel 1031 production figures 757
- Nuclear radiation protection, international fortnight on 1142
- Nuclear reactor
- Advanced Gas-Cooled, export efforts 1106
- Dragon, first test run 284
- fast breeder prototype, Dounreay 757
- fast 250 MW, Dounreay 321, 331
- MZFR, West Germany 330
- Oldbury prestressed concrete vessel 1031
- Steam Generating Heavy Water 141 757, 1106 Nuclear Research Centre, Karlsruhe, MZFR reactor 330
- Nucleonics, experimental, by B. Brown (book) 1057
- Numbers, products of, by C. Attwood (book) 1183 Numeral recognition machine, NPL 1044

Numerical control

- Acramatic 100 series 871
- Automill-2 milling machine 1131 Autoset positioner controller 871
- Axiamatic system, AEI 869
- Bohle general-purpose machine tool 765
- centre lathe with, Numericon 764
- Cincinnati Acramatic systems 648
- contouring lathe with, Churchill-Redman 764
- Co-ordatrol, Alfred Herbert 869
- coordinate tables with, Grimston-AEI 95
- Dialin, Alfred Herbert 869
- Diatrol, Alfred Herbert 869
- drilling machines, Wadkin 766
- trade publication 414
- Emicon S1000 positional controller 869
- General Electric systems 870 horizontal drilling machine 94, 1009
- Hydra-Point system 870
- incremental system 868
- Jones & Shipman analogue system 870
- machine tools, F. Cousins 841
- exhibition of (Olympia) 761, 841, 868, 920, 1009, 1014 forum on 610
- position and prospects of 761
- Max Mueller turning machines with 764
- Maxemill (trade publication) 514
- milling machine 408
- Milwaukee-Matic machining centre 870
- Ministry of Technology's attitude to 762
- Numeripoint, Giddings and Lewis 869
- Phillips equipment 871
- Plessey systems 870
- review of systems 868

32

- 'Slo-Syn' digital indexer 869
- specifiable coordinate positioning equipment

(SCOPE) 869
Staveley continuous path 871
Tape-O-Matic system 870
tape programme service using APT language, EELM 1014
tape programming by Pencil Follower, AEI 1014
training department, Alfred Herbert 1149
turret punch presses 650
Universal machine tool 763
Varysec systems 871
A. W. Vickers 761
Warner-Swasey equipment 871
Numerical control absolute system 868

Numerical control equipment, Cea-Perego 1176

Kuo (book) 463

Nuts, ISO Metric, GKN 910

Nylon tubing, Wadelon 207

ference on 464

machine 962

physicists 996

see also Oil drilling

OGO spacecraft series 1116

Ohrnell conveyor systems 506

Oil, diesel, additive-treated 995

desulphurization of 1158

High Performance Diesel 995

Petter AV1 test for 995

OGO-B spacecraft, launch of 1116

1042

378

1142

Metals (book) 1141

Nylon, impregnated, Bear-Tex 153

Nylon overlapping fastener, Velcro 601

Nylone tape for aircraft arrester gear 282

Observation cars, aerial, for Lebanon 100

Ocean terminal, Hong Kong, 234, 1166

Occupational hygienist, aims and objects of 808

Oceanography, electronic engineering in, con-

Oding, I. A., on Creep and Stress Relaxation in

Oerlikon Electrodes Ltd., Compact electrode holder

Oerlikon Engineering Co., turbo-alternator for

Chavalon sur Vouvry power station 1039

Office Machinery Ltd., Omal Electromat copying

Office of Scientific and Technical Information,

computer-assisted information service

Offshore drilling platform, nuclear power for 895

engine, with anti-friction additive, Castrol 912

Oil and Colour Chemists' Association, exhibition of

see also Lubricant; Lubrication; Petroleum

Oil consumption, and fire loss increase 1155

Oil firing equipment (trade publication) 514

Oil gasification plant breakdowns 72, 230

Oil industry, effects on coal industry 752

Oil well log data, Pencil Follower for 819

plant (trade publication) 970

Oil level indicator for sumps 505

Oil lifter automatic 643

panels 1049

Oil seal, test equipment 305

alarm system 1118

Oliver, D. R., viscoelasticity 886

Olsen, F. E., district heating 184

Olympus 593 turbo-jet engine 518

indicator 1087

Oil fuel treatment, Houseman-Varo system 643

Oil hydraulics and pneumatics, International Fair for

Old Park Engineering Ltd., liquid petroleum gas

Old, William, (Resiform) Ltd., plastics sandwich

Oldbury nuclear power station, computer-based

Oldham and Son Ltd., audible battery discharge

Olefins, ultra selective cracking process for 1160

Olsen, K., phase to phase switching surges 1163

Olympic Screw and Rivet Corp., Hit blind rivets 301

prestressed concrete reactor vessel 1031

measurement by radioisotopes 249

Oil drilling platform, Sea Quest 140

Oil drilling rig, Sea Gem, disaster of 9

see also Offshore drilling

Oil engine. See Engine, diesel

Oil fires, increase in 1155

656

0

Numerical methods and computers, by Shan S.

Numericon centre lathe with numerical control 764

'Nuraphalte' method of roofing (trade publication)

Numeripoint numerical control system 869

Nuova Pignone, gas turbine development 528

Nurse, P., Strain analysis by moire method 780

Nylon mesh to combat canal bank erosion 403

- Olympus 593 turbojet, testing for Concorde supersonic airliner 992
- Olympus 593B aircraft engine, development of 482 Olympus gas turbine, for hovercraft 1157
- <sup>a</sup> Olympus marine gas turbine 332, 586 Olympus turbojet power plant, Bristol Siddeley 450
- Omal Electromat copying machine 962 Omic Ltd., 'Tracma' tractor-crane (trade publica
  - tion) 414
- Omni Spectra Inc., panel cable connector 1129 Omniguard alarm system (trade publication) 610 One-Eleven airliners, maintenance of 486 Open-hearth furnace, computer control of 653
- OPEP orbital plane experiment packages 1117
- Opera House, Sydney, design and construction 731
  - list of contractors and consultants 736
- Operation Engtrade mission to North America 568 Operational methods in nonlinear mechanics, by L. A. Pipes (book) 1099
- Operations research, process and strategy, by D. S. Stoller (book) 314
- Operator training by P-E Consulting Group 120 Optical communications link transmitter/receiver
  - 742
- Optical design, instrumental optics and, conference on 970
- Optical Generation and Amplification, Microwave and, International Conference on 1058
- Optical mask alignment and exposure system 952 Optical measurement of fluid velocity 1089 Optical tooling
- in industry, by J. D. McGrae (book) 969
- trade publication 1100 Optical torquemeter, development of 310
- Optics, fibre. *See* Fibre optics
- high energy beam, by K. G. Steffen (book) 103 instrumental, and optical design, conference on 970
- modern, by E. B. Brown (book) 364
- Orbital mechanics, Engineering Outline 157–160 Orbiting geophysical observatory programme. See OGO
- Ore, X-ray analyser for 913
- Ore unloading bridge, MAN 1133
- Organic chemistry, investigations in the field of, by L. C. Willemsens and G. J. M. van der Kerk (book) 364
- Organization and manpower planning by G. Mc-Beath (book) 1183
- Organization of research establishments, by Sir John Cockcroft (book) 1057
- Orr, J. G., director-general, Business Equipment Trade Association 567. Letter 626

Oscillograph recorder, Southern Instruments 950

Osipov, G. V., on Industry and Labour in the USSR

Oslo, British Fair and Fortnight in, comment on

Osmond, A. and S. Ltd., abrasive wheel cut-off

Osram (GEC) Ltd., high pressure sodium vapour

Ostrach, S., on Developments in Mechanics Vol 2

Outboard Marine Corp., air buoy for SCUBA diving

Oven, air-circulated convection type for excavator

Overdrive, Laycock LH-type, for Ford Mk IV

Owen, Sir Alfred, BRM H16 3-litre racing car 898

Owen Organization, BRM H16 3-litre racing car

Oxford University, career selection methods by

Oxygen analyser, battery powered portable 1094

Oxygen meter for use in non-neutral gases 455

electrically heated industrial, Heatcon 257

Overflow return device, hopper, Ajax 909

Oscilloscope, double beam, Telequipment 951

Correction 983

(book) 969

exhibits 890

machine 650

lamps 638

Ove Arup. See Arup

equipment 1140

sixth formers 1112

Franks Report on 170, 938

Oxygen, explosion hazards of 1078

718

898

1042

for

Osborn, C. J., on Fracture (book) 743 Oscillator, Iow-frequency, Advance Electronics

transistorized, Marconi 951

Kite-mark approval licences 639

street lighting activities 637

(book) 103, 263

Otosan, FW5 motor car 232

Outboard motors, Johnson 718

Zephyr Zodiac range 771

Petbow Ltd., thermo-electric generator 1137 Peterborough Engineering Co. Ltd., York TY 20/

Atkinson articulated tipper trailer 806

Petite range of indicators and controllers 953

Petrol engine, industrial V-type, Ford 1010

International (Olympia) 1079

Petter AV1 test for diesel oil 995 Pfersdorff, O. H., large gas turbines 582

J. Burke (book) 514

(trade publication) 1142

impregnation of capacitors 1138

purification 1160

portable greasers 306

Petroleum. See Oil; Refinery

exhibits at 1158

359

820

871

780

1162

sion 475

publication) 314

precision painting 195

Photochemistry, laser in 54

Engineering Outlines 657

scope for 1177

Photography, laser in 54

cation) 1142

(book) 923

metal (book) 1015

Wyatt (book) 47

soldering iron 827

controlled 765

scheme 861

Pierce electron gun 1019

nuclear fuel elements 494

Pile frames, British Steel Piling 198

vibratory (trade publication) 1142

Piling, trade publication 1184

exhibits at 742

Physics,

Photovoltaic cells, silicon 261

Ltd. 356

Petrocarbon Developments, hydrogen recovery and

Petrol Pump Supplies (Overseas) Ltd., Macnaught

Petroleum and Chemical Engineering Exhibition,

Pharmaceutical production and research, ICI 803

Phase meter, transistorized, Dawe Instruments Ltd.

Phase sensitive detector, Brookdeal Electronics

Phase transformation in metals, kinetics of, by

Phenolic moulding, metallized, for dashboard

Phoenix CM-70F, CM-80F, and CM-90F steels

Phibbs, W. C. O., tape recorders 478. Letter 626

Philips (Hamilton) Ltd., vacuum plant for wax

Philips numerical indicating and control equipment

Phillips A. L., on Welding Handbook (book) 208

Phillips Electrical Ltd., evidence to Royal Commis-

Phillips, L. G., stress analysis of aircraft structures

Phoenix Bookcases, bookcases and cabinets (trade

Phoenix Telephones Ltd., masking method for

Phosphoric acid by wet process, Matthew Hall

Photocell, vacuum, Engineering Outline 657

Photodetectors, applications 659-60

Photodiode, Engineering Outline 657

Pindera and Kiesling 780

photoelastic coating 1177

characteristics determination 821

Photoelectric guard for press brake 1011

Photomultiplier, Engineering Outline 657

by D. J. Dewhust (book) 1015

Photoconductive cell, Engineering Outline 657

Photoelastic analysis, by A. W. Hendry (book) 969

Photoelastic coating, stress analysis using, polari-

Photoelastic materials, linear range of behaviour,

Photoelectric detector transient torque/speed

Photolastic Inc., polariscope for stress analysis using

Photopia Ltd., 8 mm sound projector (trade publi-

Photoresist technique, KPR, for micro-circuits 605

Physical instrumentation in medicine and biology

and chemistry, handbook of, by R. C. Weast

plasma, glow discharge and an introduction to,

space, atomic and, by A. E. S. Green and P. J.

Physics Exhibition, equipment displayed at 688

Pick-up magnetic, long reach, Airpax 1004

Picard, Henri and Frère Ltd. Flamidor blow torch

Pidofat 25 chucking automatic machine, programme

Pierre-Benite dam and power station construction

Piert, Joseph, & Co., Stream Fisher vessel for

Piganiol, M. P., politics and science research 162

33

particle, nuclear and, conference on 1142

by F. Llewellyn-Jones (book) 514

solid state, conference on 1142

Phenolic/epoxy compound, Prodor Glas 1071

Ozalid Co. Ltd., Intercline dratting unit 258 Ozisik, M. N., on Heat Exchanger Design (book) 314

#### Ρ

- Package Heater Co. Ltd., Pak-a-Way range of warm air heaters 686
- Packaging, blister, of components, STC 1012 fibre and fibre/steel drums for 1091 for transport, cushioning materials in 810
- Polytite skin, for china goods 353
- Packaging Exhibition, International (Paris) 1184 Packing room conveyor installation, STC 1013
- Paddon, T. W., training officers, 117. Letter 276
- Paint, road marking, Clearlane 92
- Paint-dripping process, Tri-borne, ICI 966
- Paint finish, vinyl, for roof decking 206 Paint protection of steelwork 378
- Paint Research Station, instruments for cleaned surfaces quality assessment 378 Paint spraying unit, petrol-driven 406
- Painting
- airless spraying, Vauxhall 194
- precision, masking method for 195
- radiators with trichloroethylene solvent 966 surface preparation quality assessment for 378
- Painting equipment, road 601
- Paisley group heating scheme 187 Pak-a-Way range of warm air heaters 686
- Pak-a-way range of war
- Pallas, ram vessel 15 Pallet loader, model H, Lamson 1096
- Palm, E. & Co. Ltd., automatic oil burners 876
- Palmer, G. A. Stanley, Ltd., sub-miniature microswitches 1004
- PAMETRADA, gas-turbine research and development 398, 400
- Pan American Airlines, order for Boeing 747 airliners 758
- terminal buildings 239, 241, 243 Panax Equipment Ltd., Redhill transistorized rate-
- meter 257

Panel cable connector 1129

- Panel saw, Wadkin 1044
- Panel sealant, air drying, Neoprene 1091 Pannell, C., building industry 270
- Pantograph, Stone-Faiveley, Type ALI electric locomotive 719
  - Type AL4 electric locomotive 721
  - Type AL5 electric locomotive 722
- Paper cables, production of 410
- Paper making machine, twin wire 202 Paraboloidal reflectors for steerable aerials 1123
- Paramatic Development Ltd., Digi-Tape units for machine position measurement 777
- Parcel sorting office, Southampton 1000

Paris Technical Fortnight 832

- Parity hydrant valve 258
- Park Gate Iron and Steel Works, computer production control system 997, 999
- Park, K. M., EITB senior training officer 935
- Parker, S. M., collaboration with schools 327
- Parkes, L. R., electron beam welding 1020
- Parkeston Quay, Harwich, redevelopment plan, British Rail 1033
- Parking zone increase in London 369
- Parkinson Cowan Industrial Products, mobile heater (trade publication) 514
- Parkinson Cowan Ltd., Dialarm automatic warning device 954
- rate-of-flow indicator 1046

remote alarm (trade publication) 743

- Unipulse metering system 1071
- Parkinson, E., planning conference on Wales 756 Parkinson Howard (Accra) Ltd., motorway sun-
- powered emergency telephone 1154 Parkinson, J. & Son (Shipley) Ltd., vertical milling
- machines 650 Parkinson, Sir Lindsay, and Co., Kainji dam project
- 74 Parmeko Ltd., exhibits at Electrical Engineers' Exhibition 544
- Parsons, C. A., & Co. Ltd.

Esso Fawley power station 851

- Ferrybridge C power station 445
- industrial gas turbines 429
- plano-milling machine 257
- supercritical turbo-generators 1115
- turbines and alternators for Ferrybridge C power station 451
- turbo-alternator sets for Dungeness B nuclear power station 942

- Parsons, D., Vinten hydrocar 225
- Particle physics, nuclear and, conference on 1142 Particulate matter systems, conference on (Milwaukee) 786
- Partition(s), Marlith slab industrial 500
- Partitioning, steel sheet (trade publication) 48
- Partlow Corp., temperature recorder 1041
- Passenger ship research and development trends 395
- Passivation of boiler internal surfaces, West Thurrock 819
- Paste, millscale removal, Ferropaste 92
- Patent Office Library, services of 697
- Paterson, T. T., administration studies 279
- Pathrinder critical atmosphere control plant (trade publication) 264 Pattern techniques for thin film integrated circuits
- 255 Paul Plus Ltd., Plus Ria 2024 semi-automatic slide projector 1171
- Paul Y Construction Co. Ltd., Hong Kong ocean terminal 234
- ocean terminal, Hong Kong 1166
- Pay television. See Television
- Pay-TV Ltd., pay-television service 10-13
- Payne, J. E., operator training 120
- Payne, P. P. & Sons, Res-i-Glas 2-F Hi-Tem thermosetting glass fibre tape for transformer insulation 1092
- Payne Products International Ltd., Lapmaster-72 lapping machine 692
- Payroll tax. See Selective Employment Tax
- PCD Ltd., X-Y trace reader 409
- P-E Consulting Group Ltd., cold extension 916 economics of cold extrusion 38 operator training 120
- skills development method 120
- Peak pulse voltage measurement, NBS 1132
- Pearce, G., sea conditions for hovercraft 136-8
- Pearce, J., vitreous enamel label 481
- Pearson Committee on seamen's strike 1105
- Pearson, Sir Denning, BIM conference 525
- state of engineering 313
- Pearson Panke Ltd., deep-drawing test machine 42 Pedgrift G. F., grain handling at Belfast 597
- Peebles, Bruce, & Co. Ltd.
- Belmos flame proof mining type control gear 550 glandless pump/water-filled motor unit 510 motor terminal assembly 697
- rotor assembly for large electric motors 550 Peel Engineering Ltd., Trident electric motor car 640
- Pelletizing production research, BISRA 1133
- Pels, Henry, & Co. Ltd., Max Mueller turning machines with numerical control 764 Peltier effect 365
- Pembrokeshire cargo liner 426
- Pencil Follower, data processing unit for tape pro-

fan and limit control 1171

PEP, fuel policy for Britain 424

Percy, A. J., on training grants 8

fan and limit control 1171

skills analysis training 66

T6.354 diesel engine 782

462

786

steel 513

Perkins Z-drive 229

388

Pentex electronic switching system 330

Percussion tools (trade publication) 364

Peregrine television camera crane 293

Perkins, D., director-general, PLA 663

Process Control (book) 655

(trade publication) 314

Pernix Ltd., syphon breaker 146

devices 1003

Perkins Engines Ltd., industrial engines 958

- gramming 1014 for oil well log data 819
- Penn Controls Inc., Basotrol two-stage gas valve 462

Perfection Parts Ltd., Basotrol two-stage gas valve

magnetic recording heads (trade publication)

Performance of ceramic tools when turning on alloy

Perkins, F., chief adviser on industrial training 621

Perlmutter, D. D., on Introduction to Chemical

Permanent Magnet Association, magnet materials

Perma-Pipe pipe system for district heating mains

Perry Laboratories Inc., Vibra-Fork resonant-reed

Permutit Co. Ltd., Deminrolit demineralizer 691

Persian Gulf, polythene insulated cable in 961

heating equipment (trade publication) 208

Pilkington, Sir Harry, chancellor of Loughborough University 472 Pillar box, square design proposal 284 Pilling, W. H. C., programme management 751 Pilot plant in the iron and steel industry (book) 1141 Pindera, J. T., photoelastic and model materials 780 Pininfarina exhibits at Geneva Salon 591 Pinkerton, J. M. M., computing in the 1970s 856 Pipe, concrete, wire reinforcement cage for 956 gas cast iron, working pressures 291 choice of diameter 291 steel 291 sewage, pvc, in River Weaver 250 steam and hot water, expansion compensators for 822 underground (trade publication) 698 see also Tube Pipe Conduits Ltd., district heating system at Aldershot 388 Pipe fittings, irrigation, aluminium 152 Pipe installation for district heating at Aldershot 388 Pipe-laying trench digger 507 Pipe stress analysis by computer 1172 Pipe thrusting technique 632 Pipeline for Algeria, opening of third 573 methane supply, from Canvey Island 286 sewage disposal, The Hague 631 Pipes, L. A., on Operational Methods in Nonlinear Mechanics (book) 1099 Pipework and ducting, thermoplastics, in unplasticized polyvinyl chloride and polythene (book) 831 Pirani and Penning vacuum gauges 199 Pirelli building, Milan 907 Pistons, die casting of aluminium-silicon alloy 1173 Pitch Fibre Pipe Association, underground pipes (trade publication) 698 Pitman, D. A., Ltd., Unico Flo-Master air flow meter 1129 Pitney-Bowes Ltd., letter folding and inserting (trade publication) 743 Pitt, Dr. H. R., Reading Schools Engineering Club 64 Pitt, P. A., small gas turbines 585 Pittler (Great Britain) Ltd. programme controlled Pidofat 25 chucking automatic machine 765 Pittsburgh Corning Corp., Foamglas glass insulation blocks 102 Plane, concrete, Edco 309 Planing vessel, Aquaglider air-assisted 70 Planning, manpower, organization and, by G. Mc-Beath (book) 1183 Plant hire, trade publication 924, 970 Plant replacement scheme, contract 1064 Plante, E. R., high temperature properties of rhenium 1097 Plasma physics, glow discharge and an introduction to, by F. Llewellyn-Jones (book) 514 Plastabond chain link fencing 303 Plastic design. See Design Plastic edge trimmer, Trend 145 Plastic film. See Film Plastic hinges in structural design 745 Plastic Lead Seal jointing paste (trade publication) 1142 Plastic materials, by J. A. Brydson (book) 785 Plastic melts and solutions, processing of 885 Plastic model materials, creep of, Muller 780 Plastic tents for jointers 601 Plastics, and rubber technology, six language dictionary of, by A. F. Dorian (book) 831 bonding of, Casing process for 741 electroplating (trade publication) 970 glass-fibre reinforced, road tanker 807 glass reinforced, for road tanker 513 moulded handles, handwheels and knobs, Rencol range of (trade publication) 832 printing on, Casing process for 741 reinforced, carbon fibres for, RAE 1133 structural applications 1048, 1049 service spines in 302 structural, Clamp system 1049 Z. S. Makowski 1048 Swinger camera in, Polaroid Land 1030 Plastics exhibition, Copenhagen, CRV 5 motor car with plastics body 949

Dusseldorf 48 Polyethylene, bulk handling plant for, Bakelite Plastics mold engineering, by J. H. DuBois and 1044 W. I. Pribble (book) 413 Polyethylene barrel, Harcostar 1005 Plastics sandwich panels 1049 Polygrada grading machine 691 Plastics Year Book 1966, British (book) 1141 Polygram shell blowing machine 499 Plastiflex flexible pvc ducting 262 Polystyrene, expanded (trade publication) 104 Plastisol, pvc, for steel sheet coating, Sternite-S 46 Polystyrene compartment tray 309 Polytechnics, new grade of technical college 1024 Platform, stable, principle of 702 Platform truck, electric, Douglas 358 Polytetrafluorethylene resins, Teflon 1129 Iso-Car 959 Plating, electro. See Electroplating Platt Bros. (Sales) Ltd., contract for textile mill in 831 Guinea 849 textile mill for Guinea 849 Platt, F., Drivometer development 337 Playboy Clubs, comment on 662 Plessey Environmental Laboratory, Titchfield 1181 Plessey Group activities at Ilford division 1180 activities in Swindon 710 AR-1 Movable radar 244 centrifugal axial switch 402 5005 crossbar electromechanical system 330 gallium arsenide infra-red lamp 401 LabKit printed circuit edge connectors 778 microminiature computer 954 'Minicom' communications control unit 244 numeral recognition machine 1044 numerical control systems 870 Pentex electronic switching system 330 push-button television tuner 302 semi-automatic techniques 1180 302 solar energy converters 261 Plessey-Licon double-break illuminated pushbutton switch 911 Plessey-Licon four-lamp switch indicator 501 Plint & Partners Ltd., trade exhibition in West Germany 1066 Plover Cove reservoir scheme 593 Plowden Report on aircraft industry 7, 222 Plug(s), sockets and connectors (trade publication) 227 556 Plug gauge, screw thread 922 Plug-in mount and heat sink 502 Plug-in pendant for industrialized building installations 381 Plumbing and domestic heating exhibition International (London) 878 Plus Ria 2024 semi-automatic slide projector 1171 357 Plymouth Barracuda motor car 1077 Plywood lamp standards, designs for 638 Pneumaflex coupling and clutch 782 Pneumatic dryers (trade publication) 414 Pneumatic handling plant, mobile, Jenkins-Kubbe 46 Pneumatic instrument(s), Flexair 950 919 Pneumatic instrumentation, miniature (trade publication) 832 Pneumatic silencer, Maxam 1130 for 777 Pneumatic wrench, pneutorque, North Bar Co 1135 Pneumatics, oil hydraulics and, International Fair for 1142 521 Pneutorque pneumatic wrench, North Bar Tool Co. 1135 Points, railway, automatic heating for 301 Polak, P., traffic lights 1113 Polariscope for stress analysis using photoelastic coating 1177 Polaroid cassette system for X-ray diffraction 201 patterns 1002 Polaroid Land Swinger camera in plastics 1030 953 Polaroid model-180 camera 1002 Police, facsimile communication for 285 Polishing equipment, automatic HFM universal 97 Politics and research, M. P. Piganiol 162 Pollard Bearings Ltd., self-lubricating bearings (trade publication) 878 Pollard, E. & Co. Ltd., Vizor retractable steel window grille 354 Pollinger, G., on The Aircraft of the World (book) 414 Pollitt, J., schools and technology 1028 Pollution, air, prevention associations, international union of (London) 924 motor cars, laws for 271 water. See Water pollution. Polt power-operated lifting turntable 1178 Polychloroprene synthetic rubber 101 trade publication 786

Polycomp K compensating recorder 784

(book) 208

Polyesters Vol. 1, by I. Goodman and J. A. Rhys

Polythene, polyvinyl chloride and, unplasticized, thermoplastics pipework and ducting in (book) Polythene insulated cable in Persian Gulf 961 Polytite skin packaging for china gouds 353 Polyurethane, insulation, carbon diaoxide storage vessel with 1046 Polyurethanes, by B. A. Dombrow (book) 785 Polyvinyl chloride and polythene, unplasticized, thermoplastics pipework and ducting in (book) 831 coating for refrigerator trays 1012 ducting, flexible, Plastiflex 262 floor, extruded, for computers, Elafloor 100 insulating tape (trade publication) 1142 plastisol for steel sheet coating, Sternite-S, 46 sewage pipe in River Weaver 250 sheet, extrusion of unplasticised 822 spray coating 462 Poolpumps Ltd., centrifugal pumps for abrasive materials 1096 Pope, A., on High-Speed Wind Tunnel Testing (book) 156 Pope, H. C., Ltd., Spacesaver goods hoist 409 Poplar, Government Training Centre 843 Population explosion and urbanization 277 Porcupine card trolley 351 Porsche, exhibits at Geneva Salon 591 single dry-plate clutch 229 366C/1600SC engine 229 616/16 engine for Hydrocar amphibious vehicle Port(s), grain handling in, symposium on, ICE 597 Port of London Authority, modernization and reorganization plans 663 Tilbury docks modernization and extension 1164 Porta Bella trolley mounted heater 39 Porta-Filter hydraulic filler/filter unit 738 Portable Balers Ltd., Electrobale baling machine Porter, D. I. R., project work in schools 984 Reading Schools Engineering Club 64 Porter, H. K., (Great Britain) Ltd., aircraft arrester gear 282 Portsmouth, sewage purification plant 1169 Position indicating equipment, automatic electronic Position indicator, digital, Rotax 920 Position measurement, machine, Digi-Tape units Positioner, power, Westinghouse Hagan 300 Post office. See General Post Office Post office prospects, 1966-67, White Paper on Post Office Tower, microwave channels 123 Postgraduate courses, Arthur Report on 934 Potential methods in the theory of elasticity, by V. D. Kupradze (book) 698 Potentiometer, conductive-plastic, Slimline 206 Potentiometric recorder, dc, Fielden Electronics Potter Instrument Co. Inc., magnetic tape memory Powder Couplings Ltd., fluid coupling with steel shot flow charge 875 Powder metallurgy, symposium on 656 Powder road/rail container, bulk, Prestank 1070 Powell & Co. Ltd., hoisting yoke for drums 200 'Sprog' electric scooter 359 Powell Duffryn Engineering Co. Ltd., Dumpmaster and Dinosaur demountable lorry bodies 302 Power and coal industries, in postwar Britain, by

- E. S. Simpson (book) 655 Power amplification, fluid switching and, conference on 414
- Power, B. D. on High Vacuum Pumping Equipment (book) 1141
- Power Centre Co. Ltd., busbar trunking (trade publication) 1016
- Power demand forecasting, weather maps for 819 Power factor correcting capacitor, BICC 547
- Power Gas Corp., ammonia synthesis plant 1162
- Power generation, thermoelectric. See Thermoelectric

Productivity bargaining discussion at manpower

Program writer, tape, Grundig-Adler 1179 Programmed instruction, CTC memorandum 422

Progress in cargo handling, by J. D. M. Hearth

Progress in control engineering. (Vol. 3), by R. H. Macmillan, T. J. Higgs and P. Naslin (book)

Project work, applied science/engineering, con-ference on 984

Proler Cohen Ltd., plant for steel scrap from dis-

Proler Steel Corp., plant for steel scrap from dis-

Propeller, marine research and development trends

Propeller decrease in size with increasing ship size

Propulsion systems, advanced (trade publication)

Protech AS Ltd., Isoflow variable-reagent dosing

Protolite Ltd., milling cutters (trade publication)

Pryce, D. G., on Application of Matrix Theory to

Pryor, Edward, and Son Ltd., marking (trade publication) 1058 P.S.C. Equipment Ltd., Freyssi flat jack 354

Psychology of trade union and management rela-tions, by R. Stagner and H. Rosen (book) 877

Public Building (PB) frame building system 1006

Public Building and Works, Ministry of, district heating, 181. 185, 187–9

exhibits at Electrical Engineers' Exhibition 543 Public Building (PB) frame building system 1006 radioisotopes for silt movement survey on Firth of

Pulp and paper mill at Fort William, Wiggins Teape

Puls-O-Rev weatherproof rotary switch 207 Pulse voltage measurement, peak, NBS 1132

centrifugal, for abrasive materials 1096

flux, superconductor 794 fuel injection, for diesel railcars 190

hydraulic, Deri Sine 828

starting from rest, 149

mini C-type, Milton Roy 950

mixed flow, Vickers 1166 oil, for heavy-oil burners 508

peristaltic, Goodenough 198

stainless steel, Handipump 147

sump, Worthington-Simpson Ltd. 687

through-shaft 145 types of 149

PVB-205 262

(book) 364 intravane 151

pump 910 sludge, Beresford 147

transfer 649

Group) 357

glandless circulating, Super Opiomatic 463 Graco Bulldog, for pvc paste 1012

for aircraft, Vickers Sperry Rand 608

impeller, by S. Lazarkiewicz and A. T. Troskolanski

positive dispacement 12-channel, Durrum Dial-a-

variable displacement, Towler Hydraulic (Mi

35

Projectina Co. Ltd., miniature anemometer 691

Projector, Fastscan motion picture 1002 line, Morse Controls Ltd. 1170 slide, semi-automatic, Plus Ria 2024 1171

sound, 8mm (trade publication) 1142

carded motor cars 902

carded motor cars 902

Propeller efficiency tests, Stone 399

Prosser L. E., BHRA laboratories 1156

Protection box, glass fibre, BICC 547 Protein from natural gas, Shell Research 1114

Proteus marine gas turbine 332, 586

Protexulate for district heating scheme 186

Electrical Engineering (book) 923

Monstrand prestressing unit 1155

Tetron bridge bearing 956

Forth 913

Pulverizer, ACM 40

Univac 963 diaphragm, oil-free 692

848, 892

Pump(s)

Prop, push-pull 551

400

399

1100

314

valve 1046

Project engineer activities at NCB 990

Project management, symposium on 750

Project training for apprentices. Letter 65

Profile cutting machine. See Cutting machine

publication) 1184

conference 477

register of, BACIE 371

(book) 831

1099

- Power Jacks Ltd., Nipper hydraulic clamping device 875
- Power station
  - Buenos Aires Central Costanera 773 Chavalon sur Vouvry 1037

Drakelow C,

- CEGB opinion 350
- dumping systems at 347
- starting the supercritical steam system 347 supercritical steam conditions 1115 supercritical steam generating sets 343
- turbine construction 349 efficiencies of, CEGB 573
- Fawley, Barco self-aligning swiveljoints for 653 Esso Petroleum Co. Ltd. 850
- pump/motors for 510 Ferrybridge C. See Ferrybridge C power station
- future projects. CEGB 851 gas-turbine packaged 292
- Hams Hall, turbo-generator set 429 hydroelectric. See Hydroelectric power Isle of Grain, proposed site for 994
- Kingsnorth, construction progress 994 dc transmission line to Willesden 484
- Littlebrook D, construction progress 994 Margam B, supercritical steam pressure 574 natural gas for 1022
- nuclear. See Nuclear power station
- Rugeley, fuel supply from Lea Hall colliery 990 Rugeley B, self-climbing derrick erection 824 supercritical steam conditions 1115
- Thorpe Marsh, double-flow hp turbine stages 453
  - 550 MW set 453
- steam conditions 451
- West Burton B, application for building 851 West Thurrock, boiler cleaning and passivating 819
- Woolwich, chemical cleaning to investigate boiler tube failure 459

see also Substation

- Power station design, modelling technique for 779 Power supply system for London Midland Region 24.28
- Power-thrust radial drilling machine 830
- Power transmission, overhead equipment for London Midland Region 23-25, 29
- see also Drive; Gearing; Transmission Power transmission line, dc, Kingsnorth-Willesden 484
- Power transmission systems, CIGRE conference on 1163
- failures in 1163

reliability factors in 1163

- stability assessment 1163
- Powerbeam 360 straddle carrier for containers 713 Powered exoskeleton, Hardiman 849
- Powermatic Ltd., gas burner assembly conversion 685
- Prabhu, S. S., shear wall concepts 906
- Pragmatic Ltd., Polt power-operated lifting turn-table 1178
- Pratt and Whitney, Tape-O-Matic numerical control system 870
- turbofan engine development 944

- turbojet engine development 944 Precast concrete See Concrete, precast Precast Concrete International Congress on See
- Concrete, precast Precipitation, electrostatic, in theory and practice, introduction to, by H. E. Rose and A. J. Wood
- (book) 1183 Preece, Cardew and Rider, Kainji dam project Premo Pattern Co. Ltd., foundry equipment 1056
- Prentice, R., school applied science
- technology among the teachers 169 Prescott Clock and Watch Co. Ltd., Junghans
- process-timing stop watch 1171 Press
- baling, hydraulically powered, Greenwood &
- Batley Ltd. 1009 chassis, 4,000 ton, John Thompson Motor Pressings Ltd. 874
- die-spotting 256
- drawing, Taylor & Challen 308
- encapsulation, Stokes 1179 hydraulic, Apex Series 175, 39 Multipress 828
- of three-mould type 955
- stretch-draw 405 25-ton, GBT 1136
- hydrostatic extrusion, Fielding and Platt 481 minting, Coinmaster 865

- power, gauge and tool and, exhibition 921, 935 punch, turret, Wiedemann, numerical control 650 punching, automatic, Bruderer 1011
- rubber-pad, John Shaw 918
- scrap baling, Eldair 600 single-action, Verson 200 ton 921
- straightening, oil hydraulic, Berry 919
- servo control of 193
- vice action, Taylor and Challen 921
- Press brake, hydraulic 202 Besco-Hydrobend 309
- photoelectric guard for 1011 Press feeding machinery 95
- Press frame, open-gap type, Tangyes Ltd. 257
- Press and Shear Machinery Co. Ltd., Bruderer auto-matic punching press 1011
- Pressed Steel Co. Ltd., factory at Swindon 710
- PressOn transparent labels 309
- Pressure controller, Via-Vac 97 Pressure gauge, ion, AEI 742
- Pressure measurement, ion gauge control unit for 911
- Pressure measurement recorder 687
- Pressure operated switch, B & M 778
- Pressure transducer, high accuracy 644 miniature bonded strain gauge 778 Pressure vessel failure under hydraulic test 539, 714
- Prestank bulk powder road/rail container 1070
- Preston, J. Roger, and Partners, mechanized gang-ways for Hong Kong ocean terminal 1127 Preston/Leyland/Chorley area growth study 1066
- Prestressed concrete. See Concrete
- Prestressed Concrete Development Group, standard prestressed concrete bridge beams 123 Prestressing, single strand system 403
- Stress Block system 1155
- Prestressing unit, Monstrand 1155
- Prestressing wire, Bridon Dyform 1155 Stabilized Strand 1155
  - Thermalized Strand 1155
- Priam cargo liner, launching of 72
- Pribble, W. I., on Plastics Mold Engineering (book) 413
- Prices and incomes policy, 220. Letter 804 Priestman Bros Ltd., Cross-Ram digging grab 1010
- Prime-Mover, motorized tip barrow 356 Principles of technical writing, by R. Hays (book) 363
- Printed circuit(s), drilling machine for 408 Printed circuit boards, soldered eyelets for 504
- universal, Veroboard 502 Printed circuit card assembly machine 1136
- Printed circuit edge connectors, LabKit 778 Printed-circuit teaching aid, Stillitron 88
- Printing, laser in 55 on plastics, Casing process for 741 Printing machine, label overprinter 1043 Prismo Safety Corp., road painting equipment 601 Probability theory, by A. M. Arthurs (book) 103 Process chromatograph, modular, Pye 951 Process control, chemical, introduction to, by D. D.
- Perlmutter (book) 655
- of leather manufacture, research grant 912 Process control applications, integrated, conference on (Manchester) 1016 Process-timing stop watch, Junghans 1171
- Processor camera, Filmsort-2000, for microfilm recording 508
- Prodor Glas phenolic epoxy compound 1071 Product(s), finding new, M. Griffin 1026 of numbers, by C. Attwood (book) 1183
- organizing new development, P. C. T. Clark 1027 processing of new, L. Rodger 1026 Production control, in practice, by K. G. Lockyer

Production Engineering Research Association,

design engineering and management 610

computer design of hydrostatic bearings 304

factory services and industrial buildings 530

performance of ceramic tools when turning an

Production technology and properties of heat resisting cast iron, by N. N. Aleksandrov and N. I. Klochnev (book) 1183

Production Tool Alloy Co. Ltd., carbide tools (trade

magnetic cards for, CRAM 144

marketing 656, 1026 conference programme 786

alloy steel (book) 513

programme for 1966 379

turning survey 91

noise in machine shops, survey 379

(book) 923

conference on :

- Pump evaluation, California water supply, NEL 897 Pump impeller, Keedur coating for Keebush 822 Pump manufacturers' rationalization move 372
- Pump-metering attachment, Graco Adjusta-Stroke 649
- Pump water-filled motor unit, glandless 510 Pumped storage scheme, Cruachan, closed-circuit

television 540

- Loch Sloy 1030
- Pumping equipment, high vacuum, by B. D. Power (book) 1141
- Pumping set, dual, Mirrlees 508

trade publication 1016

- Punch(es), chassis (trade publication) 314 lapping with diamond compound 652
- Punching press, automatic; Bruderer 1011 turret, Wiedemann, numerical control 650
- Puschner, H., on Heating with Microwaves (book) 923
- Pushbutton, illuminated 546
- pendant station switch 965

signal lamp units and 352

- P & V (Mining and Engineering) Ltd., Torkhammer percussive attachment for rock drill 551
- Pye of Cambridge, Pye-1108 mono reproduction model radio 867
- Pye, W. G., and Co. Ltd., modular process chromatograph 951
- Pyles Industries Inc., transfer pumps 649 two-part compound mixer 148

Pyrocord temperature sensitive tube 191

Pyromatic Major automatic electro-gas heating equipment 827

## 0

Q-Deck corrugated steel roof decking 206

Quality, reliability and marketing, National Inspection Conference on 970

- Quality and Reliability Year 163, 222
- Quarterman, R., prices and incomes 804
- Quartermaster self-steering device for yachts 69
- Quartet Major display lighting units 866
- Quartic and cubic equations, solution of, by S. Neumark (book) 414
- Quebec double glazed horizontal sliding window 301
- Queen's Award for Industry, awards made under 797
- Queen Elizabeth, H.M., message to ENGINEERING

Queen Elizabeth liner, refitting for cruising 670 Quentglaze moisture curing protective coating 500 Quentsplass Ltd., Quentglaze moisture curing protective coating 500

Quersa chasing machine, safety guard for 555 Quersa rotary percussion drill 1179 QuickDisc, Creda plan, electric hotplate 867 Quicksands as fluidized bed. Letter 478

# R

36

- Racal Electronics Ltd., transistorized digital clock for process control and data logging 407 Racal Ltd., history of 889 Racing car. See under Motor car Racing Car Show 174-6 Rack(ing) system, enclosure panels, Lektrokit 205 Kee Board 403 steel, Widney Group 954 trade publication 264 Radar, Plessey AR-1 Movable 244 Radar guidance for railways 91
- Radio Road Alert device 336 Radio telephone, for control of motor vehicles 233 pocket-sized, Lancon IS 739 Radio transmission 265, 267 Radioisotope(s), airliner maintenance examination 492 silt movement survey on Firth of Forth 913 oil consumption measurement 249 Radyne Ltd., RPS electronic drier for lumber 1133 Rae, A. W., talking to computers by telephone 376 Rae, J. B., on American Automobile (book) 785 Rail(s), stress analysis of, A. S. Babb 851 welded, and derailments. Letter 326 for Eastern Region 535 Rail breakage due to wheelburn 851 Rail/road containers for powders and liquids, BR 1070 Rail/road low loader vehicle 1091 Rail strike, comment on threat of 319 Rail tank wagon. See Wagon Rail transport, Freightliner train operation and costs 436 Railcars for Rhodesia Railways 190. Letter 276 Railroads, American, and the transformation of the ante-bellum economy, by A. Fishlow (book) 1057 Railway(s) Bay Area Rapid Transit commuter system, San Francisco 496 Britain's, under steam, by J. B. Snell (book) 1015 Britain's new, by O. S. Nock (book) 263 British. See British Railways Czechoslovak State, Giesl ejectors on steam locomotives 379 funicular, aerial ropeways and, by Z. Schneigert (book) 785 German State, Giesl ejectors on steam locomotives 379 monorail. See Monorail narrow-gauge, round the World on, by P. B. Whitehouse and P. Allen (book) 1015 Rhodesia, railcars for 190-1. Letter 276 single line, by O. S. Nock (book) 555 steam, in retrospect, by O. S. Nock (book) 969 trunk, North Siberian 535 underground, of the World, by H. C. P. Havers (book) 1099 see also London Transport Executive Railway accident. See Accident Railway Advisory Service, United Kingdom 27 Railway bridge. See Bridge Railway construction 1866 15 Railway conversion to road, Connel Ferry-Ballachulish service 480. Letter 715 Railway derailments and welded rails. Letter 326 Railway locomotive. See Locomotive Railway Navvies, by T. Coleman (book) 264 Railway points, automatic heating for 301 Railway rolling stock, testing station for dieselpowered 872 see also Locomotive; Railcar; Carriage; Wagon Railway signalling, colour-light, for London Midland Region electrification scheme 26 Railway track, welded, for Eastern Region 535 Railway track recording trolley, Matisa 968 Railway trains, merry-go-round coal handling 449 passenger, speed development 667 weight of, L. W. Ibbotson 173 Rally Imp. See Hillman Rally Imp Ramp, dock, for vehicle loading and unloading, Serco 1094 Ramsden Memorial Lecture, by S. Jones 667
- Ramshaw, R. S., on Thyristor and its Applications (book) 609

Ramshaw, synchronous motors for slow speed 304 Rank Organization, Surtronic surface texture meter

- Raykin fendering for Hong Kong ocean terminal 234 Raymond, S., on British Rail modernization 522 electrification extension to Glasgow 758 Razor blade, Eversharp, Schick 942 RCM (Air Distribution) Ltd., Liniajust air diffuser 643 Stylovent Mark 3 air diffuser 206 Read avalanche diode 91 Reader, trace, X-Y 409 Reader Feed-back form 8 Reader-printer, Filmac-400 507 Reading Schools Engineering Club 64, 1068 Reading University, applied science department development 1068 department of applied physical sciences 64 Schools Engineering Club 64, 1068 Reamer, piloted hand, Gammons Duplex 206 Reamer sleeves, drill and (trade publication) 514 Reba, I., fluid flow theories 1114 Record Electrical Co. Ltd., electric tachometers (trade publication) 970 electrical instruments (trade publication) 786 Recorders, compensating, Minicomp 784 Polycomp K 784 Hasler, for diesel railcars 191 oscillograph, Southern Instruments 950 potentiometric, dc, Fielden Electronics 201 pressure and draught measurement 687 Recording equipment, Hartmann and Braun 784 Rectifier, mercury-arc, Com-Pak 721 semiconductor, for electric locomotives 726 welding, Rockweld 148 Reddish Detergents Ltd., automatic dispensing conveyor lubricator 97 Reddy portable oil-fired space heater 40 Redhill transistorized ratemeter 257 Redland Engineering Ltd., wire reinforcement cage for concrete pipe 956 Reduction gear. See Gear speed reducers Reed, M., national sample census 273 Reed & Mallik Ltd., pvc sewage pipe in River Weaver 250 Reed switch, high-speed 823 Reeling unit, cable, constant tension 200 Re-entry vehicle, Langley HL-10 684 Rees, M. W. T., AL6 electric locomotive 726 Reflection techniques in seismic surveying 1144, 1145 Reflectors, paraboloidal, for steerable aerials 1123 Reflow axial-flow recirculating fan 509 Reformer header tube, cast austenitic steel for 230 Refraction techniques in seismic surveying 1143, 1145 Refrigeration, bibliographic guide to, 1961-1964 (book) 363 thermoelectric 368 Refrigeration plant, Borsig 782 for nuclear fuel element transport 494 Refrigerator trays, polyvinyl chloride coating for 1012 Refuse incinerator for continuous operation, Heenan-Nichols 1053 Regional planning council(s) 369 South-East England 369 Reid, D. A. G., engineering centre 888 Reinforced concrete. See Concrete Reinforcement cage, wire, for concrete pipe 956
- Reinhold data sheets, by W. J. Hornung (book) 414
- Relay(s), B & R Relays 696
- double plug-in, Keyswitch 952
- electronic, for surface grinding machine 1013
- fluidic control, Corning 823
- for switching of dc inductive loads 1013

Radiation, heat transfer by 973 Radiation detector, Mullard 307 Radiation meter, personal, Atometer Total-6122 911 Radiation protection, nuclear, international fortnight on 1142 Radiation worm geared motors (trade publication) 1184 Radiator painting with trichloroethylene solvent 966 Radiator valve, RAV thermostatic 687 thermostatic 502 Radiatron Ltd., Atometer Total 6122 personal radiation meter 911 Bo decade counter 206 Radio, Pye-1108 mono reproduction model 867 Radio receiver for Ford-3000 remotely controlled tractor 1032

194 Rank Xerox Ltd., 2400 copier/duplicator 1014 Raphael cartoons, Victoria and Albert Museum 283 Rapid Magnetic Ltd., high-tension electrostatic separators 406 Rapid transit system, for urban transport 220 Manchester 220 Runcorn 220 Rare earths, conference on 1016 Rate of flow. See Flow rate Ratemeter, transistorized, Redhill 257 Rawlplug Ltd., fixing devices and vibroto power tools 547 Ray Engineering Co. Ltd., handles, handwheels and knobs (trade publication) 832 Rayevskii, N. P., on Measurement of Mechanical Parameters in Machines (book) 464

light current, Simplex GE 547 resonant-reed, Vibra-Fork 1003 switches and connectors, by G. A. Dummer and N. E. Hyde (book) 414 voltage regulating, AEI 545 see also Contactor relay 361 Reliability, and maintainability, annals of Vol. 4, by J. de S. Coutinho (book) 104 of electronic components 1180 quality, and marketing, National Inspection Conference on 970 Reliability Conference, NCB (Brighton) 982 Reliability requirements of guided weapons systems, J. A. Wilson 809 Reliance Telephone Co. Ltd., amplified telephone handset 1130 Reliant Motor Co., FW5 motor car manufacture in Turkey 232

- Relieving attachment (trade publication) 556 Relton, F. E., on Applied Bessel Functions (book)
- 923 Rencol range of plastics moulded handles, handwheels and knobs (trade publication) 832
- Renfrew Airport, closure of 852
- Renold Chains Ltd., Vertichain overhead chain conveyor 154
- Repco Brabham motor car at Monaco 1036
- Report writing, better, by W. H. Waldo (book) 264
- Reptil automatic conveyor systems 506
- Research, and politics, M. P. Piganiol 162
- graphical methods in, by A. S. Levens (book) 207 Research associations, limitations on information
- supply 363. Letter 526 Research establishments, organization of, by Sir John Cockcroft (book) 1057
- Research techniques in human engineering, by A. Champanis (book) 1015

Reservoir, Clywedog regulating 340

- Plover Cove scheme, Hong Kong 593
- Res-i-Glas 2-F Hi-Tem thermosetting glass fibre tape for transformer insulation 1092
- Resin(s), cold setting, for hard surfacing, Ceemarcyne 462
- ionomer, Surlym A, Stepon stair carpet protection in 1115

polytetrafluorethylene, Teflon 1129

- Resin solution, ICI Trilac 24S 250
- Resistivity meter, earth (trade publication) 1100
- Resonant-reed devices, Vibra-Fork 1003
- Reutlinger and Sohne, armature balancing machines 552
- Reverser, BHI type 620 153
- Revo Chef electric cooker 386
- Revo Electric Co. Ltd., Kite-mark approval licences 639
- Revo Mini chef electric cooker 386
- Revolution counter, Carter 40
- Reynolds, R. J. H., Data Retrieval System for building industry 1087
- Reyrolle, A. & Co. Ltd., class LMA air break switchgear 783

Ferrybridge C power station 445

- RFD Co. Ltd., immersion suits 355
- Rhenium, aerospace applications 1097
- high temperature properties 1097
- vaporization rate, Langmuir techniques 1097 Rheogoniometer method for viscoelastic fluids 884
- Rhodes, B. & Son Ltd., turbine flowmeter 601
- Rhodes, Joseph, & Sons Ltd., circle cutting machine 922
- Rhodesia Railways, railcars for, 190-1. Letter 276
- Rhone, river, navigation improvement 861
- Rhys, J. A., on Polyesters Vol. 1 (book) 208
- Rhythm of education, A. N. Whitehead 800
- Ribbon(s), edible protein in methane 1114
- Ribbon-Flo continuous sand mixer 1056
- Richard Thomas and Baldwins, development position and prospects 166
- Richards, George, & Co. Ltd., Universal machine tool with numerical control 763
- Richardsons, Westgarth Group, activities at Hartlepool 1111
- Richardsons Westgarth (Hartlepool) Ltd., gas turbine plant 429
- Richardsons Westgarth (Instrumentation and Controls) Ltd., alarm system (trade publication) 610
- Richmond Machine Tool Co., Ltd., vertical milling machine 766

River Thames and River Severn, link proposal for 342 River Weaver, pvc sewage pipe in 250 Rivets, Hit blind 301 Road(s) cats-eyes in, compressed air drilling rig for 455 concrete, protection from de-icing agents 540 elevated, Chester Inner Ring 811, 812 designs for 811, 812 Western Avenue extension, model tests on 816 in England and Wales 1964–65 (report) 72 railway conversion to, Connel Ferry-Ballachulish service 480. Letter 715 underwater, for London traffic problem 536 see also Bypass; Highway; Interchange; Flyover; Motorway; Street Road accident. See Accident Road construction, efficiency of, working party report 1147 Road construction work, Leeds 111 Road drill, noise converter for, Heinke CNC 1115 Road Federation, International, world meeting of 698 Road improvement expenditure, report on 72 Road junction, delayed three-level 1164 Gants Hill, model of 1164 Road marking paint, Clearlane 92 Road obstructions, warning signs for 632 Road painting equipment 601 Road planning, traffic noise aspects 374 Road rail containers for powders and liquids, BR 1070 Road/rail low loader vehicle 1091 Road Research Laboratory, road accident prevention activities 336, 337 tests on elevated road structure 814 tests on lighting columns 638 Road rollers, hundred years of, by Aveling-Barford Ltd. (book) 313 Road speed limit of 70 mph 115 retention of 983 Road surfacing (trade publication) 1142 Road traffic. See Traffic Robbins, E. L. G., apprenticeship schemes 1108 Robens, Lord, NCB Reliability Conference 982 Roberts, A., NUVB's activities 572 Roberts, E. H., & Co. (Sales) Ltd., 'Space Climber' building cradle 102 Roberts, J., film on Creativity at School 325 Roberts, R. H., Thurso technical college 893 Roberts, T. J., manpower conference 477

- Rugby College of Engineering Technology 845
- Robertson, A. S., 25 kV ac locomotives 727
- Robertson, H. H., & Co. Ltd., Colour Galbestos sheeting, 249
- prepainted internal roof finish 206
- Robertson, L. E., wind problems in tall buildings 904
- Robertson Thain Ltd., 'Curv-Line Q-Panel' wall cladding 101
- Robertson, W. H. A. & Co. Ltd., Loewy constant-gap rolling mill for tinplate 960
- Robinson, D. & Co. Ltd., plug-in mount heat-sink 502
- timers (trade publication) 610
- Robinson, W., lighting in factories 530
- Robots, human, in myth and science, by J. Cohen (book) 609
- ROBOX 103 controller for desk calculator 401
- Robson, A. E., LMR electrification scheme 28 Rock(s), gemstones and minerals, by R. Borner (book) 697
- Rock drill, conversion set for 102

Rolex Paper Co. Ltd., pvc insulating tape (trade publication) 1142 Roll damping, van den Bosch and Vugts 669 Roll stabilizer, passive-type, NPL 715 Roller, road. See Road roller Roller bearing. See Bearings Rolling machine, Besco-Ringroller Model V2 876 Rolling mill, Multiversal 355 rod, Alloy Steel Rods Ltd. 1139 tinplate, Loewy constant-gap 960 Rolling stock. See Railway rolling stock; Locomotive; Carriage; Railcar; Wagon Rollo, J., Highlands development 848 Rolls-Royce Ltd., Avon Mark gas generator 292 Conway by-pass jet engine 518 gas turbine development 946 industrial Avon gas turbine plant 429 international aircraft engine projects 852 liaison with General Motors Allison Division 852 lift-jet engine for V/STOL aircraft 852 lift-jet engine development 946 merger examination with Bristol Aeroplane 1064 turbofan engine development 945 turboprop engine development 945 Rollway system of carrying cars on railway wagons 278 Rolph, R. L., traffic lights 1113 Rolt, L. T. C., The Aeronauts 313 Roof, structural steel, raising for aircraft hangar 354 Roof decking, vinyl paint finish for 206 Roof support, mine, Dowty 5-leg 503 Roof system (trade publication) 656 Rooney, D. H., overhead equipment for LMR electrification scheme 29 Rootes Group, Hillman Rally Imp motor car, description and performance of 900. Letters 940, 1029 Root's blowers, type L-800 and X-420 260, 957 Rope, wire. See Wire rope Rope strength testing machine, NEL 895. Letter 1029 Ropeways, aerial, and funicular railways, by Z. Schneigert (book) 785 Rose, D., marketing conference 1027 Rose, H. E., on Introduction to Electrostatic Precipitation in Theory and Practice (book) 1183 Rosen, H., on Psychology of Union Trade and Management Relations (book) 877 Ross, N., workshop bargaining 566 Ross Winans, 'cigar ship' 15 Rossie, A. M., on Information and Communication Theory (book) 743 Rota bearings for load transfer in elevated road 814 Rotacone grinding fixture for drills 921 Rota-Etch etching machine 692 Rotaflex Quartet Major display lighting units 866 Rotaflon bearings for load transfer in elevated road 814 Rotary dividing tables 922 Rotary engine, Wankel, development of, Johnson 718 Rotary indexing table. See Indexing table Rotary Pumps Ltd., Gast air motors 963 Rotary turret, Snow 1094 Rotax Ltd., ballscrews and way bearings 920 digital position indicator 920

- Rotherhithe Baths, description of new 296
- Roto-Finish Ltd., vibratory finishing equipment 259
- Rotoflash flashing beacon 402. Correction 715 Rotor, chrome-nickel steel forging 1040
- circulation-control studies for VTOL aircraft 993 Rotor dynamics, some problems of, by A. Tondl

Rider Hunt & Partners, Sydney Opera House 736 Ridler, K. D., shock effects in goods transport 810 Ridoline alkali cleaners (trade publication) 104 Riley Aeronautics Corp., order for Jetstream aircraft 232 Riley, W. C., on Ceramics for Advanced Technologies (book) 610 on Modern Ceramics: Some Principles and Concepts (book) 556 Ring(s), forged (trade publication) 414 Ring gauge, screw thread 922 Ripper attachment, Boughton, for Merton tractor shovel 302 Rise of the Midland Railway 1844-1874, by E. G. Barnes (book) 1099 River engineering and water conservation works, by R. Berkeley Thorn (book) 969 River Rhône, navigation improvement 861 River Saône, navigation improvement 861 River Severn and River Thames, link proposal for 342

Torkhammer percussive attachment for 551 Rock mechanics, international congress of the international society of 924 Rocket, Europa 1, launching of 1031 Rockweld Ltd., welding rectifiers 148 Rockwell hardness testing machine, semi-automatic 404 Rockwell Machine Tool Co. Ltd., grinders (trade publication) 264 Verson 200 ton single action press 921 Werner vertical milling machine 765 Rod mill, heating furnaces for, Salem-Brosius 1139 high precision, Alloy Steel Rods Ltd. 1139 Rodene range of timers (trade publication) 610 Rodger, L., marketing conference 1026 Rogers, T. G. P., BIM conference 525 Rokotyan, S. S., on Long Distance Electrical Transmission between the V. I. Lenin Hydro-Electric Station and Moscow (book) 1183 Rolba Ltd., vibratory piling (trade publication) 1142

(book) 697 Rotork Engineering Co., Aquaglider air-assisted planing vessel 70 Rotterdam, grain handling installation at 598 Round the world on narrow-gauge railways by P. B. Whitehouse and P. Allen (book) 1015 Roux, F., lubricants for diesel engines 995 Rover Co. Ltd., AA gold medal award 941 gas turbine development 433 rubber suspension kit for Landrovers 822 2000 TC motor car 533 Rover Gas Turbines Ltd. 433 Rover Rotax airborne generating set 433 Rowlands, M., polyethylene barrel 1005 Rowley, B., engineering education study 800 Royal Aeronautical Society, Barnwell Memorial Lecture, Viscount Caldecot 682 centenary of 47 Engineering Sciences Data Unit 9 Handley Page Memorial Fund 1065

37

#### Engineering Volume 201 1966

reproduction of data sheets 877

Royal Air Force, Air League on 173

- Royal Air Force Institute of Technology at Trenchard Hall 1031
- Royal Aircraft Establishment, aircraft structures laboratory 1072

carbon fibres for reinforced plastics 1133 Royal College of Science and Technology (Glas-

- gow) 280 Royal Commission on Trade Unions and Employers
- Associations 165, 475, 749 Royal Engineers, construction equipment for air-

borne military operations 284 Royal Free Hospital, artificial kidney unit 603

Royal Institute of British Architects, becoming an

- architect (trade publication) 48 building regulations, E. Williams 573. *Letters* 626, 754
- Royal Institution, Annual Report for 1965 969
- Royal Institution of Naval Architects, annual meeting 669
- education and training of naval architects (report) 476
- Royal Mint, high speed minting machines 865
- Royal Navy, gas-turbine propulsion 332
- Royal Ordnance Factory (Birtley), economics of cold extrusion 38
- Royal Society, wind tunnel tests on hyperbolic cooling towers 941
- Royal Society of Arts, Cantor Lectures by M. W. Thring 113

Royalaire RA-NS return air door grille 500

Royce Electric Furnaces Ltd., hardening furnace for steel balls 600

Rubber

- in engineering applications, conference on 1100 plastics and, technology, six-language dictionary of, by A. F. Dorian (book) 831
- polychloroprene, trade publication 786

polychloroprene synthetic 101

silicon, expanded (trade publication) 970 Rubber conference, international (Brighton) 970

Rubber drying in extrusion 250

- Rubber-pad press, John Shaw 918
- Rubber suspension for industrial locomotives, Neidhart 693

for Landrover motor vehicle 822

- Rubert & Co. Ltd., Mecrin mechanical surface roughness indicator for tubes 922
- Rubery Canada Ltd., Taper-Leaf leaf spring 285 Rubery Owen & Co. Ltd., Drott Travelifts for con-
- tainer handling 438 tandem running gear for road tanker semi-
- trailer 807 Rubery Owen Warrington Ltd., Taper-Leaf leaf
- spring 285. Letter 425 Rubey, H., on Construction and Professional
- Management (book) 1183 Rud-Kettenfabrik Rieger and Dietz, chains fo
- earth-moving equipment tyres 783 Rudd, T., BRM H16 3-litre racing car 899

Ruddock and Meighan Ltd., pipe thrusting 632

Ruddspeed Ltd., Glas 1700 coupé motor car 1076 impulse heat sealing device 42

Mustang motor car 1077

- Rugby College of Engineering Technology 845 conference on applied science/engineering pro-
- ject work 984 Rugeley power station, fuel supply from Lea Hall colliery 990
- Rugeley B power station, self-climbing derrick erection 824
- Rule, Chrome-Clad steel 404
- Runcorn, rapid transit system 220
- Rupture disc, reverse-buckling 909
- Russell, K. A., pay-television 13
- Russell, S. M. McGee, MaXtaform grids 1045
- Russia, industry and labour in, by G. V. Osipov (book) 969

Rust removal compound, S23 261,

- Ruston, G., Aquaglider air-assisted planing vessel 70
- Ruston Group, exhibits at Hanover Fair 781 Ruston and Hornsby Ltd., gas turbines 429, 433
  - trade publication 924
  - hydraulic motors 957
  - pumping set (trade publication) 1016
- TA-1500 gas turbine 351

38

- Ruston Paxman Super Ultrasonic packaged boiler 1071
- Rutkowski, J., on Stroboscopes for Industry and Research (book) 743
- R. W. Transmission Ltd., helical gear units (trade

publication) 878

ing 740

trailer 807

cation) 743

airliners 485

492

Safety

Safety belts

426

754

759

for tyres 759

rod mill 1139

(book) 413

work 540

Satellite(s)

Army 667

forming 646

S

Ryders Autoservice (GB) Ltd., Steyr-Puch 650 TR11 motor car 1076

SABO Universal machine for scaffold tube clean-

SADIE flight control inspection equipment 491,

SAE fifth wheel coupling for road tanker semi-

Safe lights for explosive atmospheres (trade publi-

for motor cars, international standard for tests on

Safety engineering, in motor vehicles 336.

Safety exhibition, international (Manchester) 970

Safety regulations in buildings 573. Letters 626,

Safety requirement, for motor cars in United States

Safety factor in plastic design of structures 745

Safety guard for Quersa chasing machine 555

Safety seat for motor cars, Watford GT3 1071

Safety Trophy, Don, first presentation of 1115

Salen-Brosius (England) Ltd., heating furnaces for

Sally, H. L., Lining of Earthen Irrigation Channels

Samengo-Turner, J. F., Ltd., numerical control of

Sample(s), suction, for vacuum spectrometer 1088

San Francisco BART commuter railway system 496

Sanders, Arthur, Ltd., Bedford County Hall 426

Sanders and Forster Ltd., exposed structural steel-

Sandvik Group, Hardflex strip steel for blanking and

metal cutting tools (trade publication) 208

Sansbury, L. A., management in HM dockyards 669

Sashless Window Co., Quebec double glazed

Satchwell Control Systems Ltd., transistorized

heating and air conditioning controls 686

and field station communications system, US

Satellite communications, aerial requirements 1122

Automill-2 milling machine 1131

Sampler, portable, Kent-Lea Recorder 952

Sanday, A. P., project work in schools 984

Sand, moulding. See Moulding sand

Sandvik Swedish Steels Ltd. 647

Sandwich course, training officers 980

Saone, river, navigation improvement 861

horizontal sliding window 301

588 integrating controller 386

Gemini-9, performance of 1070

Satre, P., Concorde airliner costs 482

Saturn series spacecraft projects 580

Saunders-Roe, hovercraft development 1080

Saw, band, Marvel horizontal hydraulic 148

Saunders Valve Co. Ltd., activities at Cwmbran 168

ground stations for 1154

Intelsat II Pacific 1154

panel, Wadkin 1044

Tyslide 152

stone, Anderson-Grice 307

Scaffold tube, cleaning 740

Highwayman tractor 807

operated brakes 1096

Scamp electric motor car 640

Saw bench, Textile Machinery 600

Sawing, diamond, Whitefriars Glass 152

Scammell Lorries Ltd., Fourtrak trailer 807

MH type coupling gear and mechanically-

Scamp committee on motor industry disputes 572

Scanlan, R. H., on Developments in Mechanics,

Sawyer, J. W., marine gas turbine 586

trailers for container carriage 438

Scandinavia, district heating 183-4

12 ton Fourtrack semi-trailer 1096

Salaries in colliery management 988

Safege Monorail system, Manchester 220

Safege Monorail system study 1166

in mines regulations 985

snatch test for 505

Letter 940

traffic, symposium on 656

Vol. 2 (book) 103, 263

- Scanner panel for Centriblast blast cleaning plant 1054
- Scarborough, C., survey on professional engineers 979
- Schenck DR-60 and DR-60-G vibro-rams (trade publication) 1142
- Schick Eversharp razor blade 942
- Schilling, A., lubricants for diesel engines 995
- Schlosser and Co., concrete production plant 956 Schmeck, H. M., on Semi-Artificial Man (book) 1183
- Schmooch, O., gas turbine for district heating 584 Schneigert, Z., on Aerial Ropeways and Funicular Railways (book) 785
- Schoeller-Blackmann Steel Works, rack and adhesion locomotives with Giesl ejector 123
- School(s)
  - and technology, Lancaster University 1028 applied science in 4. *Letters* 169, 425
  - creativity at, film on 324
  - industry's collaboration with 327
  - interest in technology, BA grant 894
  - School architecture, home counties consortium on 1108
  - School-leavers, enquiry on arts and science 320
  - School project work, conference on 984 Schools Engineering Club, Reading University 64,
  - 1068 Sciaky electron beam welding machine, for motor
  - car gear units 741 Sciammarella, C. A., processing of moire data 780
  - Sciammarelia, C. A., processing of moire data 780 Science
    - and civilization in China 112
    - and education, working party on 1023 and industry award of Science Research Council
    - 709
    - and technology students, enquiry on 320
    - applied, in schools 4. Letters 169, 425
  - mathematical, dictionary of, by L. Herland (book) 923
  - Science Museum, industrial monuments survey 857
  - Science policy, report on, CSP 1023
  - Science Research Council, science and industry
  - award 709 Science research policy planning of 1023
  - Science teachers, ASW memorandum on 421
  - Science Technology and Government, conference on (Bath) 1142
  - Scientific Civil Service, shortage of engineering graduates 936. Letter 1029
  - Scientific Systems Ltd., electronic relay for surface grinding machine 1013
  - Scintillation counting, liquid, symposium on 1100 Scissor lift trolley 41
  - Scooter, electric, 'Sprog' 359
  - Scotland, Highlands industrial growth position and
  - prospects 847, 892 Industrial Estates Management Corporation for,

Scott Bader, glass fibre reinforced polyester road

Scott, B. W. F., European Components Service

Scott and Wilson, Kirkpatrick and Partners, Plover

raising structural steel roof for aircraft hangar 354

Scottish Aviation Ltd., Scamp electric motor car

Scottish College of Commerce (Glasgow) 280

Scottish Economy, White Paper on 224

Screw driver, pneumatic, Desoutter 146

Scrap, and Waste Exhibition (Olympia) 535

Screen/feeder units, vibrating, Low-Line 1176

design changes for 632. Letter 849

conversion implications 43-45, 527.

ISO Unified, design changes for 632. Letter 849

Scottish Council, Highlands development activities

Scottish Machine Tool Corporation Ltd., hydraulic

steel, from discarded motor cars, Proler plant 902

activities of 470 manpower in, conference on 744

regional plan for 1970 224

Cove reservoir 593

press brake 202

Scrap baling press, Eldair 600

Screw(s) ISO Metric, GKN 910

ISO Inch (Unified) 43-45

ISO Metric 43-45, 124

tanker 807

1064

640

847

Screw thread(s)

ISO Inch 124

GKN 910

metric system 124

100-ton bogie rail tank wagons 1031 Shell Research, edible protein in methane 1114

Letters 65, 225, 276, 326, 377

See also Metric system Screw thread plug gauge 922

Screw thread ring gauge 922

- Scroll grinding machine, precision 922
- Scruton, C., strake stabilization of chimneys 805
- SCUBA diving, air bouy for 718
- Scurlock, R. G., on Low Temperature Behaviour
- of Solids (book) 743
- S.E. Laboratories Ltd., pressure transducer 644 Sea conditions on hovercraft routes 136–8
- Sea Conditions on noverclar routes 130-0
- Sea Gem oil drilling rig, disaster of 9 Sea Quest oil drilling platform 140
- Sea station communications system 667
- Sea water, electrolytic sewage purification using 1168
- Seadart guided weapon systems 427
- Seal, approval for gas appliances 714 dock gate, in neoprene 540
- oil, test equipment 305
- Viton 'A', for needle valve 501
- Sealant, panel, air drying, Neoprene 1091 Sealing, heat, rotary machine 554
- joint (trade publication) 1142
- Sealing compound for concrete, Tokstrip (trade publication) 1142
- Sealing device, heat, impulse 42
- Sealocrete Products Ltd., mastic (trade publication) 1058
- Seamen's strike, comment on 1105 Pearson Committee on 1105
- Searle Manufacturing Co. Ltd., coolers for cold rooms 687
- Seastation Telecommunications Ltd., sea station communications system 667
- Seat, safety, for motor cars, Watford GT3 1071 Seat belt. See Safety belt.
- Seaton Carew power station site in natural gas area 1022
- Secomak Pistonhorn electric whistle 552
- Seddon, motor vehicle tractors for container carriage 438
- Seddon and Anwar, optical measurement of fluid velocity 1089

Seebeck effect 365

- Seeding technique in magneto-hydrodynamics 315
- Seemeel Co. Ltd., automatic control of meal mill production 461
- Segmented Carbide Die Co., nickel steel for reusable die holders 261
- Seippel, C., 'jet'-driven power turbines 428 jet gas generator 581
- Seireg, design projects course 754
- Seismic surveying, definition 1143
- energy forms 1146
- Engineering Outline 1143
- instrumentation in 1146
- land surveys 1145
- marine surveys 1145
- reflection techniques 1144, 1145
- refraction techniques in 1143, 1145
- Selective Employment Tax, comment on 889
- Selectus Ltd., plastic tents for jointers 601
- Self-Changing Gears Ltd., type R14 gearbox 190
- 'Self-Lube' bearings (trade publication) 878
- Self, P., marketing conference 1026
- Self-steering device for yachts, Quartermaster 69 Selling of services, D. Rose 1027
- Selson Machine Tool Co., automatic copying lathe 259
- Semi-Artificial Man, by H. M. Schmeck (book) 1183

- 1094
- Serson, gyroscope development 699
- Service(s), factory, conference on, PERA 530
- selling of, D. Rose 1027
- Service Electric Co. Ltd., Secomak Pistonhorn electric whistle 552
- Service installation for industrialized building systems 380
- Service spines in plastics 302
- Servicios Electricos de Gran Buenos Aires, Central Costenera power station 773
- Servo control(s) for feedback teaching system 954 for Ford–3000 remotely controlled tractor 1032 of straightening press 193
- Servo motor, electro-hydraulic, Vickers Sperry Rand 953
- hydraulic, Cincinnati Acradrive 648
- two-phase, Servomex 965
- Servomex Controls Ltd., battery powered portable oxygen analyser 1094
- field plotter 917
- two-phase servo motor 965 Sevenoaks School, film on technical activities centre 324
- Severn Bridge and motorways to, economic impact of 1066
- Severn River and River Thames, link proposal for 342
- Sewage disposal by submarine pipeline, The Hague 631
- Sewage effluent, tertiary treatment of 729-30
- Sewage pipe, pvc, in River Weaver 250 Sewage purification, electrolytic, using sea water
- 1168 Sewage purification plant, Guernsey 232, 1169
- Portsmouth 1169
- Sewage treatment, Pierre Benite scheme 862 Sewage works, Davyhulme, opening of new extension 942
- Seymour, D., operator training 120
- Seymour, W. D., on Industrial Skills (book) 514
- SG Ni-Resist iron type D-2M 101
- SGB Shuttering Ltd., push-pull prop 551
- shuttering beam clamps 1132
- SGS-Fairchild Ltd., microcircuit decade counter 643
- semiconductor devices (trade publication) 610
- Shackles. See Lifting tackle
- Shafts, hardening machine for 918
- Shalco shell blowing machine 499
- Shardlow Micrometers Ltd., Anglometric English Metric micrometer 910
- Shareholders, small, prospects for 111. Letter 225
- Sharp, H. J., on Engineering Materials: Selection and Value Analysis (book) 923
- Sharp, J. D., on Elements of Steelmaking Practice (book) 785
- Shaw, John, & Sons (Salford) Ltd., rubber-pad press 918
- Shaw, Joshua, Ltd. sideloaders 357
- Shaw Moisture Meters, moisture measurement (trade publication) 1100
- Shaw Mont Newfoundland Ltd., packaged gasturbine power station 292
- Shaw, R., gas-turbines 518
- Shaw Savill liners Southern Cross and Northern Star (book) 1099
- Shear wall concept in tall buildings 906
- Sheet
  - acetate, Claritex, for building sites 540 acrylic, extrusion of 1111 ferromagnetic, thickness gauge for 738
- Shell Research Centre, heat engine teaching unit 894 Sheppard, W. V., NCB Reliability Conference 982 Sherwood, J. B., long term creep behaviour 780 Ship(s) automation in 72, 396 BEAMA committee 668 D. S. Townend 896 cargo, container, discussion on 392 new rules for dry 38 submarine, position and prospects of 392 container, for Hook of Holland route 1033 Janes's fighting, 1965-66, by R. V. B. Blackman (book), 877 merchant, gas turbines in 586, 587 strength standards for, J. M. Murray 669 passenger, research and development trends 395 see also Cargo liner; Liner; Tanker and under specific type of ship Ship design research and developments review 393 Ship gangway, mechanized, Hong Kong ocean terminal 1127 Ship hydrodynamics laboratory, NPL 393 Ship model(s), longitudinal bending moments of, D.I. Moor 669 testing facilities 393 Ship research and developments 630 discussion on 392 review of 391. Letter 425 Ship stabilization system, Sperry Gyrofin 399 Ship trials results, G. Aertssen 669 Ship vibration, automatic analysis of 961 Shipbuilding industry, design and development in 629 engine manufacture in 629 Geddes report on 476, 934 comment on 627 summary of 628 government action and policy 630 group structure 630 industrial relations in 630 Lloyd's Register report 663 management organization chart recommended 630 market for merchant ships 628 market for naval ships 628 marketing in 628 Ministry of Technology's responsibility for 1147 order statistics 798 position and prospects 627, 628 recent performance 628 research and development in 391, 392, 630. Letter 425 scope for improvement 628 steel consumption in 629 structure of 630 sub-contracting in 934 training scheme, need for 476 world capacity 628 yard resources and production 629 Shipbuilding Industry Board, proposal for 631 Shipping, container traffic on international routes 139 Shipping industry, Lloyd's Register report 663 Ships Gear International '66 744 Shipyard automation, international symposium on

Semiconductor(s) and thin films 255 annular construction method, Motorola 1087 conduction in 559 p-n junction 559 trade publication 1058 wafering machines for 41 Semiconductor devices, materials used in, by C. A. Hogarth (book) 609 trade publication 610 Semiconductor effects in photodetectors 658 Semiconductor rectifier for electric locomotives 726 Semiconductor spinning machine, Westinghouse 1135 Semi-trailer. See Trailer, semi Semtex synthanite flooring for clean room 740 Sencom, elapsed timer device 1043 Separators, electrostatic, high-tension 406 SEPECAT, formation of 941 Serco dock ramp for vehicle loading and unloading

polyvinyl chloride, extrusion of unplasticised 822 ribbed aluminium building, vinyl coating of 1090 steel. See Steel sheet Sheet metal surfaces, defect detection in 250 Sheet metal workers. See National Union of Sheet-rotor motor 836 Sheet steel, trade publication 1058 Sheeting, Colour Galbestos 249 Sheffield Twist Drill and Steel Co. Ltd., DXD trepanning cutter for large diameter holes 741 Sheffield University, postgraduate courses in applied mechanics department 934 Shell blowing machine, Polygram 499 Shalco 499 Shell Chemical Co. Ltd. polyethylene barrel 1005 VeoVa 911 monomer for coatings 261 Shell cores and moulds, coating machine for, Fordath-2000 1055 Shell-Mex and BP Ltd., 90 ton rail tank cars 233

Shock waves, generation in explosive forming 1101 strata determination by 1143 Shone, Sir Robert, fellowship at Nuffield College 841 Shook, D. C., transistor failure precidition 1182 Shop stewards, training of, conference on 414 Shorrock, C., on supercharging 86 Short Bros. & Harland Ltd., Belfast military freighter with Smiths Series 5 flight control and automatic landing system 1120 porcupine card trolley 351 Shot blast machine, Carousel 1054 Shot blasting of glass 505 Shovel tractor Merton, Boughton ripper attachment for 302 Yale 651 Show, trade. See Exhibition Shower Information Bureau 413 Shrink films for multiple packaging 305 Shroko Metal Box Co., shrink films for multiple

(Genoa) 924

Shirley, D. E., high alumina cement 479

Shock effects in goods transport 810

Shobert, E. I., on Carbon Brushes (book) 413

packaging 305

- Shunting wagons, tractor for 738
- Shuttering beam clamps, SGB 1132
- Shuttle kiln for ceramic tiles 947 SI units international standard 4
- Sicily, water demineralizing plant for 1079
- Sickness benefits, wage-related, White Paper on

218

- Sideloaders, box van 1096 Joshua Shaw Ltd. 357
- Lancer motor truck 959
- Siebe, Gorman & Co. Ltd., deep diving equipment 334
- Heinke CNC noise converter for road drill 1115 Siemens Halske, supercritical boiler for Drakelow C power station 345
- Siemens-Schuckert Werke AG, supercritical boiler for Drakelow C power station, 345
- Sifam Instrument Co., pivotless electrical measuring instruments 964
- Signal(s), systems and communication, by B. P. Lathi (book) 1183
- Signal conditioning unit 407
- Signal generator, Advance Electronics 1137
- two-tone, Dymar 737 Signalling, railway, colour-light, for London
- Midland Region electrification scheme 26 Sikorsky stowed rotor V/STOL aircraft 193
- Silencer, pneumatic, Maxam 1130
- Silencing of test house for diesel-electric locomotives 92
- Silicon avalanche diode 91
- Silicon carbide, resin bonded graded, pumpimpeller coating 822
- Silicon crystals for microcircuits 605
- Silicon dice testing machines for microcircuits 607
- Silicon photo-voltaic cells 261
- Silicon rubber, expanded (trade publication) 970
- Silicon slice production for microcircuits 605 Silicone products (trade publication) 878
- Silo-emptying system, Drysweep 262
- Silt movement survey, radioisotopes for, on Firth of Forth 913
- Silver, R. S., James Clayton Prize award 371
- Silver-gold diffusion, slow rate of 652
- Silverleaf, A., naval architecture review 391
- Silverstone foreign car test day 1076
- Simbi V5E electromagnetic vibrator for wet concrete 956
- Simmonds & Robinson Ltd., telephone uniselector
- 1045 Simms, C. J., Ltd., Rotherhithe Baths 297
- Simon Engineering (Dudley) Ltd., hydraulic work
- platforms 492 Simon, Viscount, report on naval architects 476
- Simplex Electric, Creda plan Quick-Disc electric hotplate 867
- Simplex-GE Ltd., exhibits at ASEE exhibition 547, 695
- light current relay 547

rotary limit switch 547

- tape-recorded instructions for assembly work 193
- Simplifix Couplings Ltd., stainless steel needle valve 501
- Simpson, E. S., on Coal and Power Industries in Postwar Britain (book) 655
- Sinclair, J. F., management education 170-1 Single line railways, by O. S. Nock (book) 555
- Sinter, nickel oxide 46
- Siporex aerated concrete building material 1093
- Site accommodation, mobile, caravan as 401 Site organization, economic, and building super-
- vision, by H. F. Broughton (book) 1057 Sittig, M., on Nitrogen in Industry (book) 314
- Sixth-formers, career selection methods by 1112
- Skills, industrial, by W. D. Seymour (book) 514 Skills analysis training 66-68, 120
- Skills development method 120
- Sklenar Furnaces Ltd., gas-fired Femelt melting furnaces 1055
- Skopje, rebuilding of earthquaked city 177-80
- Skyservant, Dornier, feeder airliner 941
- Slag, blast furnace, Slagceram from 1133
- Slagceram production research, BISRA 1133
- Slatter, B. H., marine gas turbines 586 Slide projector, semi-automatic, Plus Ria 2024 1171
- Slide rule for drop forging tolerances 1052
- Slide rule wrist watch, Divisor 1156

40

- Slimline conductive-plastic potentiometer 206 Slings. See *Lifting tackle*
- Slitting line, steel strip, Auxiliary Rolling Machinery

- 154
- Slitting machine, Auxiliary Rolling Machinery 1179 'Slo-Syn' digital indexer 869

Soil shear strength indicator, Torvane 201

Torvane soil shear strength indicator 201

Soldered eyelets for printed circuit boards 504

Solicitors' Law Stationery Society Ltd., Arcor

Solid state switching, at microwave frequencies

Solid surfaces and interfaces, by H. Mykura

Solids, elementary theory for advanced students, by

low temperature behaviour of, by R. G. Scurlock

Solitron Devices Inc., microelectronic dc amplifier

Solodovnikov, V. V., on Statistical Dynamics of

Solution of cubic and quartic equations, by S.

Some problems of rotor dynamics, by A. Tondl

Somerset Wire Co., Stabilized Strand prestressing

Sommerhoff, Gerd, 'Creativity at School', film on

Sonatest, EMAG 1,000 magnetic crack detector

Sonntag, R. E., on Fundamentals of Statistical

Sonoray ultrasonic thickness gauge and flaw

Sontheim, R., ASME gas turbine symposium 581

Soohoo, R. F., on Magnetic Thin Films (book) 103

Sorby centennial symposium on the history of

Souders, M., on Engineer's Companion (book) 923

control and thermal insulation of buildings, by

Sources of information on atomic energy, by L. J.

South Durham Steel & Iron Co. Ltd., welded pipe

South Stack lighthouse light alloy footbridge 330

South Staffs Wagon Co. Ltd., aluminium alloy rail

industrial and population growth prospects 755

South Wales Switchgear, developments at Black-

Southampton mail sorting office with conveyor

Southampton University, diesel engine crankcase

Southeastern Drilling Co., Sea Quest drilling

Southern Instruments Ltd., oscillograph recorder

Southern Switchgear Ltd., Indian switchgear (trade

South east region, planned expansion 520

South Wales, coalmining in 118-119

industrial development of 166-9

communications network 167

wood and Caerphilly 168

symposium on tall buildings 903

publication) 832 'Space Climber' building cradle 102

Southern Cross liner, story of (book) 1099

Sound, analysis of geared turbo-generator 1060

metallurgy, by C. S. Smith (book) 831

Sorting office, mail, Southampton 1000

P. D. Close (book) 785

definition of 1059

see also Noise

mill 1111

measurement of 1059

tank wagon 513

steel industry in 166

system 1000

design 374

platform 140

950

Anthony (book) 513

Sommer, A. H., railcars for Rhodesia 276

ultrasonic flaw detector 1043

Thermodynamics (book) 1099

Linear Automatic Control Systems (book) 463

geochemical exploration kit 46

Soldering gun kit. Instant Heat 600

Soldering iron, blow torch, Flamidor 827

Solenoid, flameproof, Decco Teen 1003

Electrostatic copying machine 509

Solid state physics, conference on 1142

Soiltest Inc., earth resistivity meter (trade publica-

length comparator for cement and concrete

Soil test set 455

tion) 1100

samples 308

Solar energy converters 261

Solenoid valve, Danfoss 103

Engineering Outline 559

G. Weinrich (book) 1099

Sollergren, B., switching surges 1163

Neumark (book) 414

Solvent recovery stills 830

(book) 697

wire 1155

detector 202

324

1090

trade publication 924

(book) 1141

(book) 743

1129

soil test set 455

Solar, see also Sun

Hymatic 501

definition 559

564

- Slotted angle irons (trade publication) 924
- Slush guards for Chevelle and Chevrolet motor cars 759
- Small & Parkes Ltd., Don Safety Trophy 1115
- Smallpeice, Sir Basil, refitting of Queen Elizabeth liner 670
- SMEGMA, development of Olympus 593B aircraft engine 482
- Smit, P., Immedium water filter 728 Smith, B. W., on Sixty Centuries of Copper (book) 104
- Smith, C. C., street lighting 995
- Smith, C. S., on Sorby Centennial Symposium on the History of Metallurgy (book) 831
- Smith, Daniel, Ltd., Multiversal rolling mill 355
- Smith, F. H., chartered engineers 715, 804 Letters 754, 940
- Smith, Harold, Motors Ltd., Gordon-Keeble IT motor car 717
- Smith, I. MacFarlane, spatial ability 800
- Smith, J. E. G., collaboration with schools 327
- Smith, J. Sandford, remarks at IMC meeting 844
- Smith, N., steel/water drums 141
- Smith, R., professor of marketing 844
- Smith-Savigliano Tor-Box torsional box girders for cranes, 47
- Smiths Aural Diagnostic Inspection Equipment. See SADIE
- Smiths Industries Ltd., Autoset controller 386 Kopex pliable ducting 687
  - SADIE flight control inspection equipment 491, 492
  - Streamflow tangential flow fans 687
- sub-miniature gyroscopes 303
- sump oil level indicator 505
- transfer function analyser 828
- Smiths Series 5 flight control and automatic landing system, Belfast military freighter with 1120
- Smiths Webasto heater for water distillation plant 71
- Smoke pollution, air injection reactor system for 249
- SNAP-7D nuclear generator for weather station 122
- SNAP 10-A nuclear power plant, endurance test on 574
- Snell, J. B., on Britain's Railways under Steam (book) 1015
- Snow, Sir Frederick, on Formwork for Modern Structures (book) 48
- Snow, Sir Frederick, and Partners, Rotherhithe Baths 297
- Woolsington airport, redevelopment 1166 Snow, Lord, electrical engineers' exhibition 543

Snow rotary turret and rotary indexing tables 1094

Soag Machine Tools Ltd. Grimston-AEI, coordinate

Wotan Teletrol horizontal boring and milling

Sociedad Espanola de Construcciones Electro-

Societe Generale d'Entreprises, Pierre-Benite power

Society of Automotive Engineers, Gas Turbine Fuel

Society of British Aerospace Companies, on metric

Society of British Aerospace Constructors, on

Society of Environmental Engineers, bi-annual

Society of Instrument Technology, automation in

Socket(s), plugs and connectors (trade publication)

Socket couplers, compression, for industrialized

SOEP solar-oriented experiment packages 1117

Soil(s), engineering, problems in, by P. L. Capper,

W. F. Cassie and J. D. Geddes (book) 877

Soil Mechanics Ltd., electric analogue for ground-

geotechnical investigations (trade publication)

Careers with Instruments (booklet) 413

Controls Analysis and Design (book) 1057

tables with numerical control 95

Soaking pits, on-line control 251

Mecanicas, bull block 146

engineer in society 623 visit to USA 164

machine 765

scheme 864

threads 124

556

48

Plowden Report 222

symposium, London 808

ships, D. S. Townend 896

building installations 382

Sodium vapour lamp, high pressure 637

Soda ash, bulk handling of 194

water flows 1164

long term development plan 620

Steel consumption in shipbuilding industry 629

for under-developed countries, A. H. Leckie 708

in United States, effects of price increases 60 nationalization of, prospects of 567

Steel, Peech and Tozer, thin suction sample for

Steel prices, effect of fixing of new maximum 661

Steel sheet, partitioning (trade publication) 48

slotted angle irons (trade publication) 924

steel sheet partitioning (trade publication)

Steel strip slitting line, Auxiliary Rolling Machinery

Steelmaking practice, elements of, by J. D. Sharp

Steelworks, Nova Hut Klementa Gottwalda, com-

Steering, Ackermann, for Hydrocar amphibious

Steffen, K. G., on High Energy Beam Optics (book)

Stella, timber carrier, cargo handling equipment in

Stellar Components Ltd., burglar alarm (trade

Stelmo Ltd., formwork for prestressed concrete

Stephens, R. W. B., British Acoustical Society 1030

Stephenson Engineering Society, Stephenson Lecture, by H. M. Finniston 624. Letter 754 Stephenson, I. M., waveguides 932

Stepon stair carpet protection in Surlym A ionomer

Sterilisation, chlorination, of swimming pool 296

Sterling Instrument Ltd., delay timer with push-

Sterling Moulding Materials Ltd., Sternite-S pvc plastisol for steel sheet coaitng 46

Sternite-S pvc plastisol for steel sheet coating 46

Stevens Institute of Technology, Stevens Report on

Stewart, J., performance at Monaco GP 1034 Stewart-Warner line tracing equipment 1088

Stewarts & Lloyds Ltd., joint consultative commit-

role in development of Corby new town 61-63

Stillit Books Ltd., Stillitron printed-circuit teaching

Stochastic processes, theory of, by D. R. Cox and

Stokes, Sir Donald, report on arms export selling

Stokvis, R. S., & Sons Ltd., Prime-Mover motorized

Stoller, D. S., on Operations Research, Process and

Stone-Faiveley pantograph, Type AL1 electric

41

Stereomicroscopes (trade publication) 1184

Stein, P. K., strain gauge developments 780

Steel sheet partitioning (trade publication)

Steelmaking, computer control in Japan 653

Steels Process Plants, distillation plants 1160

Steelwork, corrosion protection at Tema 249

48

48

Steel Sheet Information and Development Asso-

pvc plastisol coating for, Sternite-S 46

sheet steel (trade publication) 1058

nationalization alternative proposals 1148

Steel industry, automation, computers for 997

Margam 'B' power station 574

position and prospects 1148

Steel racks, Widney Group 954

ciation, activities of 479

Steelmaking furnace. See Furnace

paint protection of 378

puters ordered for 997

Steering column, collapsible 460

(book) 785

vehicle 229

publication) 970

103

139

1155

resin 1115

button reset 1043

director BEAMA 162

solvent recovery 830

tip barrow 356

locomotive 719

Strategy (book) 314

MFD monorail system 498

workers' welfare activities 63

Still(s), rectifying, John Dore 1071

H. D. Miller (book) 207

Stockmarker system, Unifix 309

Steyr-Puch 650 TR11 motor car 1076

Stillitron printed-circuit teaching aid 88

Stoeckly, E. E., marine gas turbines 586

Stokes, F. J., Co. encapsulation press 1179

tees 63

aid 88

889

Stern tube boring machine 96

engineer supply and demand 569 Steward, S., BEAMA report 523

Steel rope. See Wire rope

Steel scrap. See Scrap

154

vacuum spectrometer 1088

zoned system of, John Summers 661

Steel foundry. See Foundry

in South Wales 166

- Atlas-Centaur, first Space launching vehicle, operational flight of 1073, 1074 Space physics, atomic and, by A. E. S. Green and
- P. J. Wyatt (book) 47
- Space programme, Europe, projects in progress 684 Space programme, European, conference on, (Hamburg), Eurospace 681
- Space research, international cooperation in 574 position and prospects in UK 1066-67
- projects in United States 578 Space structures, conference on (Battersea College of Technology) 156
- Space transporter project, for Europe 681 Mustard 682. Letter 804 Spacecraft, Surveyor, A. See Surveyor A
- Spacecraft projects, Apollo series 580
- Gemini series 578 Saturn series 580
- Spacesaver goods hoist 409
- Spark erosion engraving for thin film microcircuits 914

Spatial ability, I. Macfarlane Smith 800

Spectrometer, mass, leak detector 500

- vacuum, analysis by, thin suction samples for 1088 Speed King Manufacturing Co. Inc., Beltveyor bulk
- handling system 459
- Speed limit, road, 70 mph, 115, 983 Speed reducers, helical gear (trade publication)
- 878 Speedhone honing machine, stroking fixture for
- 552 Speedrill drilling machine 920
- Speedwell-EMPI, formation of 481
- Speedwell Performance Equipment Ltd., dealers
- sales conference and exhibition 481 Speedwork Labels Ltd., label overprinter machine 1043
- Speedyfeeder Mark 2 mobile conveyor 1136
- Spence, Sir Basil, Abbotsinch Airport 852
- Thurso technical college 893 Spencer & Halstead Ltd., Centriblast scanner panel 1054
- Spencer, K. J., on Electronics: A Bibliographical Guide-2 (book) 877
- Spencer (Melksham) Ltd., Aeroglide air cushion conveyor 1010

Sperry, E., gyroscope development 700

- Sperry Gyrofin ship stabilization system 399 Sperry/TKS engine room monitoring equipment 397
- Spider motor car, Alfa Romeo 1077
- Spillman, W., closed cycle gas turbine 584
- Spinning machine, semiconductor, Westinghouse 1135
- Spiroll (Great Britain) Ltd., extruder for concrete floor slabs 956
- Splendid sisters, by A. Mitchell (book) 1099 Split compressor differential gas turbine 585
- Spraying, flame, of ceramic coatings 539
- of copper and copper alloys 1071

metal, portable equipment, Berk 1137

- polyvinyl chloride 462
- Spraying equipment, airless, Graco 194 Spraying machine, transverse, Automatic Equipment Ltd. 259
- Spraying unit, paint, petrol-driven 406
- Spring(s), dip coating of, Elson and Robbins 250 leaf, Taper-Leaf 285. Letter 425
- metal, calculation and design of, by S. Gross (book) 656
- Spring, P., tape recorders 626 Sprint GTA motor car, Autodelta 1077
- 'Sprog' electric scooter 359
- Spying, industrial, consultants on 749
- St. Helier Hospital, foundation renewal. Letter 479
- Stabilization system, ship, Sperry Gyrofin 399
- Stabilized Strand prestressing wire 1155 Stabilizer, Flume Type Tank, legal action on 715 roll, passive-type, NPL 715

- Stable platform, principle of 702 Stacatruc Ltd., Clarklift fork lift truck 957 Stack Engineering & Manufacturing Co. Westminster coil winding machines 1095 Ltd.,
- Westminster coil winding machines 1 Stag Place, Victoria, 27 storey block 908
- Staging, timber, prefabricated 309 Stagner, R., on Psychology of Union Trade and
- Management Relations (book) 877 Stainless steel, corrosion resistance of 92
- heating treatment of 38 welding of 38
- Stainless steel cladding of steam/water drum, 141-3. Letters 326, 478, 526

Stainless steel needle valve, Simplifix 501

- Stainless steel pilot filter 407
- Stainless steel pump, Handipump 147
- Stainless Steel Pumps Ltd., Handipump positive displacement rotary 147
- Stainless steel tube, helical welding of 102 Stair carpet protection, Stepon, in Surlym A
- ionomer resin 1115 Stal-Laval Turbin AB, advanced propulsion systems (trade publication) 1100
- Stal-Laval Turbine Co., combined steam-gas turbine plants 584
- Stamicarbon NV/DSM process for urea synthesis 1162
- Standard Telecommunication Laboratories Ltd., communication by guided light energy 304 optical communications link transmitter/receiver 742
- Standard Telephones & Cables Ltd., blister packaging of components 1012
  - conveyorized packing room 1013
- dark-trace cathode-ray tube 351
- Deltaline push-button and Deltaphone dial telephones 866
- spark erosion engraving of microcircuit 914
- Speedrill drilling machine 920
- Standardization components for road bridges 123 Standards, electronic components, simplification of 1014
- International, comment on 522
- see also British Standards Institution; United States National Bureau of Standards
- Stanelco Industrial Services Ltd., high-frequency welding machine 1012
- Pyromatic Major automatic electro-gas heating equipment 827
- Stanley Machine Tool Co. Ltd., lathes (trade publication) 970
- Starmer, G. H., engineering for schools 425
- project work in schools 984
- Rugby College of Engineering Technology 845 Startall Equipment Ltd., Lectrol battery powered golf trolley 850
- Starters, for 3-phase motors, Ministart 546 Series DLO, MTE Control Gear Ltd. 363
- Static electricity, prevention by humidification 714 Gecostat 16/80, for alternator Static exciter, control 1003
- Statistical dynamics of linear automatic control systems, by V. V. Solodovnikov (book) 463
- Statistical thermodynamics, fundamentals of, by R. E. Sonntag and G. J. van Wylen (book) 1099
- Statisticians, European meeting of (London) 878 Stator conductor, water boxes terminating 452
- Staveley Industries, take-over bid for Asquith Machine Tool Corp. 323
- Staveley Research Department, continuous path control system 871
- Steam, Britain's railways under, by J. B. Snell (book) 1015
- supercritical, power generation by, Drakelow C 343
- supercritical cycle 1115
- Steam cleaner, Steamatic 3000 39
- Steam cleaning of excavators and earth moving equipment 1140
- Steam pipe, expansion compensators for 822
- Steam plant availability (book) 831
- Steam railways in retrospect, by O. S. Nock (book) 969
- Steam reforming, synthesis gas by 1160 Steam reforming process, materials technology in,

cast austenitic, for reformer header tube 230

drop forging, Euroforge requirements 1052

conference on high-temperature properties of

fine-grained carburizing (trade publication)

heat treatment. See Heat treatment and under specific type of heat treatment

strip, for blanking and forming, Hardflex 646

Steel Co. of Wales, development position and pros-

Loewy constant-gap rolling mill for tinplate

Steam/water drums for SGHWR reactor 141

by C. Edeleanu (book) 923 Steam turbine. See Turbine

Steel

314

1142

pects 166

960

Steamatic 3000 steam cleaner 39

sheet (trade publication) 1058

vacuum degassing of (book) 156

- Type AL4 electric locomotive 721
- Type AL5 electric locomotive 722
- Stone, J. & Co. Ltd., flatwork laundry machinery 573
- Stone Manganese Marine Ltd., CP propeller for frigate Exmouth 333

propeller efficiency tests 399

Stone saw, Anderson-Grice 307

- Stone-Wallwork (Charlton) Ltd., automatic hot box core blowing machine 1055
- Stone Webster, ultra selective cracking process for olefins 1160
- Stop watch, process-timing, Junghans 1171
- Storage control, automatic push button, in meal production 461
- Storage vessel, carbon dioxide storage, with polyurethane insulation 1046

Stork-Werkspoor marine diesel engines 434

- Strachan, G. R., gas turbine development seminar 528
- Straddle carrier for containers, Powerbeam-360 713
- Straightening machines, bar, optical/mechanical 260
- Straightening press, oil hydraulic, Berry 919 servo control of 193
- Strain analysis by moire fringe technique, Fidler and Nurse 780
- Strain gauge, bonded miniature, pressure transducers 778
- bonding by suction pad, Hickson and Phillips 780
- developments, Stein 780
- measurements on fast rotating machinery, De Waard 780
- vibrating wire, for structures 742
- Strake stabilization of chimneys 805
- Stranding machines, for cable production 410
- Strata determination by shock waves 1143
- Strathclyde University, management studies 279 Stratton, D. G., engine cooling systems 666
- Streamflow tangential flow fans 687 Street lighting, BSI Kite-mark for lanterns 284

improved design need. Letter 1113 Kite-mark scheme for lanterns 635

- review of current ideas on 635
- C. C. Smith 995
- Strength standards for merchant ships, J. M. Murray 669

Strength tests on brittle materials 204

- Stress, electrical, anti-discharge varnish for 965
- Stress analysis, experimental, International conference on (Berlin) 780
- Moire fringe techniques for, conference on 780 pipe, by computer 1172
- rails, A. S. Babb 851
- using photoelastic coating, polariscope for 1177 Stress Block prestressing system 1155
- Stress corrosion failures, prevention of 460
- Stress determination. See Stress analysis
- Stress relaxation, creep and, in metals, by I. A. Oding (book) 1141
- Stressed Concrete Design Ltd., Stress Block prestressing system 1155
- Stressomatic jack wire tensioning system 1155
- Stretford process for hydrogen sulphide purification 1160
- Stretham Engine Preservation Trust 857 Strike
- draughtsmen, English Electric 472. Letter 526 rail, comment on threat of 319
- seamen's, comment on 1105
- Pearson Committee on 1105
- unofficial, means to avoid 566
- see also Labour disputes

42

Submerged objects, locating, Wreckfinder differential proton magnetometer for 602 Substation, Ferranti Indoor Packaged 607 modular, Ellison 549 Substation frameworks, test station for 1071 Subway construction with precast concrete box units 404 Suction samples for vacuum spectrometer 1088 Sud-Aviation, Galion airbus 666 see also Concorde supersonic airliner Suez Canal Co. 15 Suez Oil Processing Co., new refinery for 1158 Suffolk Iron Foundry (1920) Ltd., Curvator flame cutting machine 509 Suits, immersion 355 Sulphuric acid plants (trade publication) 924 Sulphuric acid process, Kuhlmann 1162 Sulzer Bros Ltd., combined steam-gas turbine plants 584 LVA range of diesel engines for rail traction 541 monotube boilers, Chavalon sur Vouvry power station 1038 RD diesel engine for Glen Line cargo ships 802 supercritical boiler for Drakelow C power station 345 Summation metering equipment, Ferranti 550 Summers, John, & Sons Ltd., chairman's report 271 zoned system of steel pricing 661 Summers, Sir Richard, John Summers & Sons Ltd. 271 Sump pump, Worthington-Simpson Ltd. 687 Sun, see also Solar Sun-operated yttrium-aluminium-garnet crystal laser 1172 Sun-powered emergency telephone, Suncall 1154 Suncall sun-powered emergency telephone 1154 Sunningdale golf course, automatic watering system for 850 Sunstrand Machine Tool Corp., computer programs for surface generation 653 Super Colossus single-boom container crane 712 Super Metal-Fab Durodyne duct connector 301 Super Opiomatic glandless circulating pump 463 Supercharging for racing motor car engines 86

Structural plastics system, Clamp 1049

Structural research, gas laser for 1164

Structural steelwork. See Steelwork

903

208

853

392

(book) 208

(book) 48

RAE Farnborough 1072

Stylovent Mark 3 air diffuser 206

Structural problems in tall buildings, symposium

Structures, fire protection of (trade publication)

framed, analysis of, by J. M. Gere and W. Weaver

modern, formwork for, by Sir Frederick Snow

Structures laboratory, Building Research Station

Stubberud, A. R., on Analysis and Synthesis of

Linear Time-Variable Systems (book) 263

Students, science and technology, enquiry on 320

Submarine cargo ship, position and prospects of

Sturgeon, D., processing of moire data 780

Sub-contracting in shipbuilding industry 934

plastic design of, Engineering Outline 745

- Superconductivity, Bardeen-Cooper-Schrieffer (BCS) theory of 791 basic phenomena 789 basic physics of 790 definition of 789 Engineering Outline 789 Ginzberg-Landau-Abrikosov-Gork'ov (GLAG)
- Supersonic air stream mills 460 Super-Stat electrostatic copying machine 649 Supervisory training. See Training see also Foremen Surface(s) and interfaces, solid, by H. Mykura (book) 1141 sheet metal, defect detection in 250 Surface generation, computer programs for 653 Surface preparation quality assessment for painting 378 Surface roughness indicator, mechanical, for tubes, Mecrin 922 Surface texture meter, Surtronic 194 Surface treatments, Eurofinish/VOM-66 exhibition (Utrecht) 1184 of plastics, Casing process 741 Surface Treatments Ltd., Ferropaste mill-scale removal paste 92 Surgery, laser in 54 spare parts, by H. M. Schmeck (book) 1183 Surlym A ionomer resin, Stepon stair carpet protection in 1115 Surtees, J., performance at Monaco GP 1034 Surtronic surface texture meter 194 Surveying, seismic. See Seismic surveying Surveyor A spacecraft, communications equipment aboard 1074 design and construction of 1073 first engineering test flight 1073 flight plan of 1073 objectives of 1073 processing of engineering data 1074 television camera in 1074 Surveyor moon probe 580 Suspension (rubber), for industrial locomotives Neidhart 693 for Landrover motor vehicle 822 Suspension buildings, structural details 907 Suspension gear, lighting (trade publication) 924 Sutcliffe, Richard, Engineering Systems Ltd., Flo-bin and Liqua-bin semi-bulk handling system 1121 Sutherby, F. S., management in HM dockyards 669 Swanmaid dishwasher 34, 36 Swann, stress-corrosion failures 460 Swarf melting furnace, gas-fired 948 Sweden, district heating in 183-4 Swedish American, SR-N4 hovercraft service Ramsgate-Calais 1082 Swedish Lloyd, SR-N4 hovercraft service Ramsgate-Calais 1082 Sweepers, mechanical (trade publication) 514 Swimming pool, chlorination sterilisation of 296 for liner Queen Elizabeth 671 Rotherhithe Baths 296 Swinden, T. A., training grants. Letter 8 Swindon, development position and prospects 710 development recommendation 520 industrial diversification 710 Swinger camera in plastics, Polaroid Land 1030 Swingler, S., Don Safety Trophy 1115 Swiss Watch Corporation (England) Ltd., Divisor slide-rule wrist watch 1156 Switch(es) centrifugal axial 402 illuminated push-button, Plessey-Licon 911 induction proximity, Airmec 954 micro, range of, Microprecision 911 sub-miniature 1004 pneumatic pressure 101 pressure operated, B & M 778 proximity, Edytect 544 proximity limit, Mec-Test 205
- pushbutton pendant station 965 see also Pushbutton

Stringer, R. E., engine cooling systems 666 Strip, prepainted (trade publication) 104 steel, slitting line, Auxiliary Rolling Machinery 154 web, air bar guide for 553 Strip processing plant 37 Strip steel for blanking and forming, Hardflex 646 Stroboscopes for industry and research, by J. Rutkowski (book) 743 Stroking fixture for Speedhone honing machine 552 Structural ceramics, R. E. Bradshaw 1047 Structural cores in tall buildings 907 Structural design in aluminium, by L. P. Bowen (book) 969 Structural engineer, and industrialized building, conference 698, 1047 Structural plastics, Z. S. Makowski 1048

theory of 792 Superconductors, applications of Type I 793 applications of Type II 794 characteristics of 789 electron-phonon interaction 790 flux dynamo 794 flux pump 794 heat switches 793 logic and memory devices 793 magnets 794 Meissner effect in 792 proximity effect 791 specific materials 792 tunnelling 791 Type I 792 Type II 792 Supercritical steam. See Steam Super-lube portable greaser 306

reed, high-speed 823 relays and connectors, by G. A. Dummer and N. E. Hyde (book) 414 rotary, weatherproof and flameproof 207 rotary limit, Simplex GE 547 Switch/display matrix, Honeywell KB system 953 Switch indicator, four-lamp 501 Switchboards, Ferrybridge C power station 450 Switchgear air break, Class LMA 783 circuit breaker air, Buxton flameproof 548 air, Ellison 549 air, Erskine Heap 546 extra high-voltage, EEC 781 Indian (trade publication) 832 medium voltage, Delectra 549 metalclad, Johnson & Phillips 549

Switching, miniature lever keys for 352

of dc inductive loads, relay for 1013 solid state, at microwave frequencies 564 definition 559

Engineering Outline 559

Tactorstat, for rod mill furnace 1139 trade publication 924

Switching surges, discussion on 1163

Switzerland, Chavalon sur Vouvry power station 1037

electricity supply industry 1037 motor car sales 531

Swivel joints, self-aligning, Barco 653

Sydney Opera House, design and construction 731

list of contractors and consultants 736 Sykes, Henry, Ltd., Univac centrifugal pump 963

winch with hydraulic control system 409

Synthesis gas by steam reforming 1160 Syphon breaker for water pollution prevention 146

Syphon operation, A. G. Kelly 895

Systems, signals and communication, by B. P. Lathi (book) 1183

Systems 4-75 computer, EELM 856

Szwarc, R., high temperature properties of rhenium 1097

# Т

T-law logicon trainer 545 Tachometer, digital, for transient torque/speed characteristics in induction motors 821 electric (trade publication) 970 Tactorstat solid state switching for rod mill furnace 1139 Tammeter device for Television Audience Measurement 981 Tangyes Ltd., open-gap type press frame 257 Tank, fuel, lightweight covering, FPT 501 military, developments in 124 natural gas storage, iced earth 895 pallet/demountable, Gloster Saro 959 Tank container, road/rail, Demtank 1070 Tank contents gauge, Visutape 1171 Tank level transmitter, Taylor 1004 Tank wagon. See Wagon Tanker Auris, gas-turbine propulsion 400 British Admiral, engine and boiler control room 397 Esso Lancashire, automatic control in 396 order for 205,000 ton, Idemitsu Co. 398 rail. See Wagon, rail tank road. See Motor vehicle, tanker Tanker research and development trends 394 Tantalum for thin film integrated circuits 253 Tap changers, Ferranti 550 high speed resistor on-load 549 Tap grinding machine, automatic centreless 552 Tape, Chrome-Clad steel 404 glass fibre, Res-i-Glas 2-F Hi-Tem thermosetting, for transformer insulation 1092 Tape editing set, APTEC Transcoder 953 Tape-recorded instructions for assembly work 193 Tape recorder, Brenell Mk. 5 Type M Series-3 132, 134 Elizabethan LZ102 132, 135 Ferrograph-631 131, 134 Grundig TK23L 133, 135 principles of 130 reversible, 130. Letters 478, 626 survey of, 130-5 Telefunken KL65X 133, 135 WVB Series 6 (Vortexion Ltd.) 131, 134 Tape recorder-reproducer, Bell and Howell 300 Tape storage cabinet 599 Tapemaster milling machine, Hayes-Ferranti 764 Taper-Leaf leaf spring 285. Letter 425 Tarmac Building Ltd., Sherwood house 943 Taskers of Andover (1932) Ltd., Dynasty singleaxle semi-trailer 806 single axle semi-trailer 412 trailers for container carriage 438 Tasman 2 litre BRM motor car, performance at Monaco 1034 Taylor & Challen Ltd., drawing press 308 100 ton vice action press 921 Taylor, George, & Son (Engineers) Ltd., screw thread ring and plug gauges 922 Taylor Instrument Companies (Europe) Ltd., liquid level transmitter 1004 Taylor, L. C., 'Creativity at School', film on 324 Taylor, L. G., projects for craft apprentices 65

Taylor, P. C., technical writers and illustrators 425 Taylor, S. R. G., engine cooling systems 666

Taylor Woodrow Construction Ltd., Safege Monorail system study 1166

- Taylor Woodrow International Ltd., ocean terminal, Hong Kong 1166
- Taylor Woodrow (Overseas) Ltd., Hong Kong ocean terminal 234
- Teachers, science, ASW memorandum on 421
- Teaching of Engineering Design, conference on (Scarborough) 264, 656, 751, 753. Letter 940
  - Fuchs 754
- Teaching aid, printed-circuit, Stillitron 88
- Teaching machine(s)

group (ITM) 18

Grundymaster 17

- Grundytutor, development of 16
- in apprentice training 18
- program writing for 18
- Teaching machine industry, confusion in 218 Team approaches to complex problem solving, con-

ference on 924

Tebrax Ltd., Triclamp tube clamp 820

Tecalemit (Engineering) Ltd., CUB oil-fired burner 963

- Tecalemit-Jackson fuel injection system for motor cars 483
- Tachmation Ltd., Durrum Dial-a-pump positive displacement unit 910
- Techne (Cambridge) Ltd., spring-controlled NOR unit 689
- Technical authors in census. Letters 326, 425
- Technical college, Thurso 893
- Technical Editing and Reproduction, reproduction of data sheets 877
- Technical illustrators in census. *Letters* 326, 425 Technical Representation Ltd., printed circuit card
- assembly machine 1136 Technical writing, principles of, by R. Hays (book) 363
- Technicians, training of, EITB 980
- Technologist in modern society 113
- Technology
- and government policy 707
- Ministry of, attitude to numerical control 762 comment on activities 6
- computer industry participation 708
- computer projects 803
- contracts with Yarrow-Admiralty Research Department 715
- grant to promote schools interest in technology 894
- instrument calibration service 804
- lighting of work places (booklet) 536
- responsibility for aircraft and shipbuilding 1147
- sponsorship of British Standards Institution 270
- survey on professional engineers 979
- progress of, essential nature of 624. Letter 754
- schools and, Lancaster University 1028
- Technology research policy planning of 1023
- Teddington Bellows Ltd., expansion compensators
- for steam pipe 822
- Tedler pvf film 784
- Teesdale, K. J. B., safety engineer 336
- Teflon polytetrafluorethylene resins 1129
- Tegart, W. J. McGregor, on Elements of Mechanical Metallurgy (book) 1141
- Teknigas Ltd., Multi-Gas Burner 480

- sound powered (trade publication) 1142 Telephone alarm system, remote, Dialarm (trade
- publication) 743 Telephone cable, aluminium foil for, jointing and
- repair 1087
- Telephone coin unit with one slot 535
- Telephone exchanges, electronic 330
- Leamington Spa 631
- Telephone system, loudspeaking, Modern Telephone 1135
- Telephone uniselector 1045
- Telephony, 265, 267
- Telequipment Ltd., double beam oscilloscope 951 Telescope for optical torquemeter 310–13
- Television, closed-circuit, application in church 961

colour

- PAL system transmission announcement 480 rival systems 480
- future of, F. C. McLean 125
- pay service 10-13
- comments on 12-13
- underwater inspection by closed-circuit 540 Television Audience Measurement Ltd., activities of 981

- statistical factory at Berkhamsted 981 Television camera in Surveyor A spacecraft 1074
- Television camera crane, Peregrine 293
- Television microwave links, Post Office Tower 123
- Television Society, conference on automatic opera-
- tion of broadcasting equipment 364
- Television transmission 265, 267
- Television tuner, push-button 302
- Telstor 62 level measuring equipment 200
- Tema, protection of steelwork 249

(trade publication) 832

inserts for, Templug 504

Temperature sensors, nickel 644

temperature monitoring 504

Teradyne automatic transistor tester 952

Terminal blocks (trade publication) 1100 Termorid srl, temperature controllers 1131

Test facilities in U.K. (supplement) 47

J. Abram (book) 363

Tents, plastic, for jointers 601

127-9

46

tested

1004

machine

Tetron bridge bearing 956

- Temfix Engineering Co. Ltd., thermostatic radiator valve 502
- Temperature alarm scanners, Oldbury nuclear power station 1118
- Temperature control for low temperature testing 92

Temperature monitoring, harness-changing alloy

Temperature recording-controller, heavy-duty 1041

Temperature regulator, self-actuating, Danfoss 739

Temples, Abu Simbel, removal to higher ground

Templug hardness-changing alloy inserts for

Tension indicator, web (trade publication) 743

Tensioning system, jack wire, Stressomatic 1155

Tensor calculus through differential geometry, by

Tercol Ltd., epoxy resin adhesive for floor coverings

Test(s). See under specific type of test and item

Test set, insulation, very low frequency, ASEA

Testing machine. See under specific type of testing

Terminal assembly, motor, Bruce Peebles 697

Temperature sensitive tube, Pyrocord 191

Temperature controllers, Termorid srl 1131 Temperature measuring systems, Dependatherm

Telearchics Ltd., electric motor cars 640 Telecommunications, definition of 265 Engineering Outline 265 reflection techniques 268 techniques 265 Telecommunications growth, GPO 521 Teledictor Ltd., thickness gauge for ferromagnetic sheet 738 Telefunken KL65X tape recorder 133, 135 Telegraphy 265, 267 Telehoist Ltd., lubrication (trade publication) 1016 'Telelube' automatic lubrication (trade publication) 1016 Telemetry equipment, short range, EMI 688 Telephone, amplified handset with volume control 1130 data communication to computers by 376 Deltaline push-button, STC 866 Deltaphone dial, STC 866 emergency, sun-powered, Suncall 1154 radio, pocket-sized, Lancon IS 739

Textile Machinery Developments Ltd., saw bench 600 Textile mill, Guinea 849 Thames Conservancy plan for water supply 338, 342 Thames River and River Severn, link proposal for 342 Theatre lighting, F. P. Bentham 536 Theobald, D. W., on Concept of Energy (book) 513 Theocaris, P. S., moire analysis of cylindrical surfaces 780 Theory of road traffic flow, by W. D. Ashton (book) 969 Thermal Abstracts, new publication 969 Thermal diffusivity measurement with lasers 1013 Thermal diffusivity measuring equipment, GEC 689 Thermal gradient furnace 504 Thermal insulation. See Insulation Thermalized Strand prestressing wire 1155 Thermco diffusion furnace for microcircuits 605 Thermco Pacesetter diffusion furnaces for microcircuit production 606

- Thermix Industries Ltd., dust collectors (trade publication) 1184
- Thermo-compression bonding machine for microcircuits 607
- Thermodynamics, molecular, by J. A. Fay (book) 208
- statistical, fundamentals of, by R. E. Sonntag and G. J. van Wylen (book) 1099
- Thermoelectric cooling system, Frigi-Pak 950
- Thermoelectric generation, applications 368
- Engineering Outline 365
- Thermoelectric generator, Petbow 1137
- Thermoelectric refrigeration 368
- Thermoelectric schemes for district heating 181, 183, 184. Letter 276
- Thermometers, electronic (trade publication) 832
- Thermoplastics pipework and ducting in unplasticized polyvinyl chloride and polythene (book) 831

Thermostat for space heater control 352

- Thermostat test cabinet, HVRA 820
- Thermotank Ltd., air conditioning of liner Queen Elizabeth 671
- Theta Instrument Corp., bellows couplings (trade publication) 1100
- digital display of mechanical motion (trade publication) 924
- Midgi-Dial digital dial display assembly 823 Thickness gauge
- and flaw detector, Sonoray ultrasonic 202 for ferromagnetic sheet 738
- Thielenhaus 'Microfinish' method (trade publication) 514
- Thin film(s)
- integrated circuits 252
- magnetic, R.F. Soohoo (book) 103
- microcircuits, spark erosion engraving 914 microelectronics, by L. Holland (book) 155
- semiconductors and 255
- stores, EMI 954
- Thoka Machinery Supplies Ltd., Index-o-matic rotary indexing table 1091
- Thomas, R. E., impact of Severn Bridge 1066
- Thompson, F., Highlands development 848 Thompson, John, and Co. Ltd., Aquapac Coalmaster boilers 187
  - Drakelow C power station 343
  - Esso Fawley power station 851
- Thompson, John, Group Research Centre, pressure vessel failure under hydraulic test 539, 714
- Thompson, John, Motor Pressings Ltd., 4,000 ton chassis press 874
- Thompson, John, Water Tube Boilers Ltd., electrically driven twin drum winches 99 self-climbing derrick erection 824
- Thompson, John, (Wolverhampton) Ltd., pressure vessel failure under hydraulic test 539, 714
- Thompson/Matrix grinding machines (trade publication) 264
- Thomson, F., whisky distillery at Invergordon 892 Thorn Parsons Ltd., Newmistor thermal protection for electric motors 302
- Thorn, R. Berkeley, on River Engineering and Water Conservation Works (book) 969
- Thornton, B., Ltd., over-pressure vacuum rotary drum filter 251
- Thornton, E., training officers' conference 473
- Thornton-Fest over-pressure rotary drum filter 251
- Thorpe Marsh power station, double-flow hp turbine stages 453
  - 550 MW set 453
- steam conditions 451
- Thread, screw. See Screw thread
- Thred-Gard anti-seize compound (trade publication) 1142

- Timber, building in, H. J. Burgess and E. Levin 1049-50 Timber buildings, fire regulations in 1049-50 modular, Program H 913 modular system, Hall's 913 Timber carrier Stella, cargo handling equipment in 139 Timber construction manual (book) 1183 Timber industry in Highlands 848 Timber Research and Development Association plywood lamp standards 638 fire regulations in timber buildings 1049-50 Timber staging, prefabricated 309 Time-domain analysis and design of control systems, by R. C. Dorf (book) 831 Time-variable systems, linear, analysis and synthesis of, by A. R. Stubberud (book) 263 Timer(s), delay, with automatic reset 1043 elapsed, Sencom 1043 high speed, Brown 690 Rodene range of (trade publication) 610 trade publication 1058 Timer/counter, Advance Electronics 1137 Tinplate, Loewy constant-gap rolling mill for 960 Tip barrow, motorized, Prime-Mover 356 Tipler, gas turbines in merchant ships 587 Tipper trailer, articulated, York TY 20/Atkinson 806 Tipping container, road/rail, Demtip 1070 Tipton oil gasification plant, breakdown at 230 Titanium alloy, Ex-684, IMI 1170 Tobias, S. A., on Advances in Machine Tool Design and Research 1965 (book) 1057 Toggle clamps (trade publication) 314 Tokstrip sealing compound for concrete (trade publication) 1142 Tolerances for drop forgings, Euroforge 1052 Tolworth Broadway building, structural details 907 Tondl, A., on Some Problems of Rotor Dynamics (book) 697 Tong, L. S., on Boiling Heat Transfer and Two Phase Flow (book) 785 Tool(s), carbide (trade publication) 1184 ceramic, when turning an alloy steel, performance of (book) 513 cutting, metal (trade publication) 208 multi-diameter 153 percussion (trade publication) 364 power press and gauge exhibition 921, 935 Toolholders, B. O. Morris Ltd 922 trade publication 464 Tooling, optical, in industry, by J. D. McGrae (book) 969 trade publication 1100 Toolmaking for apprentices, competition in 935 Tor-Box, Smith-Savigliano, torsional box girders for cranes 47 Torkhammer percussive attachment for rock drill 551 Tornado Fixings Ltd., Simbi V5E electromagnetic vibrator for wet concrete 956 Toroidal packaged air heater for process heating 145
- Toronto airport terminal buildings 239, 241
- Torqmatic, Allison, semi-automatic gearbox 807 Torque multiplier, Norbar 1135
- Torque/speed characteristics, transient, in induction motors, digital tachometer for 821
- Torquemeter, optical, development of 310
- Torquemeters Ltd., optical torquemeter 310
- Torr Plan quick-cooled vacuum furnace 742
- Torrington Co. Ltd., universal joints (trade publication) 832
- Torrington Manufacturing Co., vertical slide forming machines 599
- Torsional vibration, by W. A. Tuplin (book) 1099
- Town gas, natural gas/oxygen reforming for 1160 Town gas production plants 1160 Town Planning Institute, planning conference on Wales 755 Townend, D. S., marine automation 896 Toyota, Corona 1500 and 1600 cc motor car 1077 TRACE automatic inspection equipment 490, 491 492 Trace reader, X-Y 409 Tracing equipment, line, Stewart-Warner 1088 Track, railway. See Railway track Tracma tractor-crane (trade publication) 414 Traction motor. See Motor, electric traction Tractor, AEC Mercury 505, with Dynasty semitrailer 413 farm (trade publication) 786 for shunting wagons 738 International Harvester model-434 248 remotely controlled, Ford-3000 1032 Scammell Highwayman 807 Tractor-crane, "Tracma" (trade publication) 414 Tractor shovel, Merton, Boughton ripper attachment for 302 Yale 651 Trade associations, assessment of role of 322 Department of Economic Affairs and 219 function of 162 in mechanical engineering 163 Trade exhibition. See Exhibition Trade mission to: North America, EIA 568 Caribbean 936 China, IBE 664 Malawi 846 Zambia 846 Trade Union, and management relations, psychology of, by R. Stagner and H. Rosen (book) 877 amalgamation progress 621 Royal Commission on 165, 475, 749 see also under names of specific unions Traffic control, area, symposium 1016 Traffic flow, road, theory of, by W. D. Ashton (book) 969 Traffic hazard warning device 632, 960 Traffic lights, improved design plans 1030. Letter 1113 Traffic noise, research and policies on 374. Letter 478 Traffic problem, London, underwater road for 536 Traffic warning signs for road obstructions 632 Trailers, construction and use regulations 806 for container carriage 438 for 197 ton loads, Crane 807 for 300 ton loads, Crane 807 hydraulically lifting, Hydro-Lift 741 Scammel Fourtrak 807 semi, road tanker 807 single-axle, Dynasty 806 single-axle, Taskers 412 12 ton Fourtrak, Scammell 1096 tipper, articulated, York TY 20/Atkinson 806 Train. See Railway train Training apprentice, teaching machine in 18 British Railways facilities 679 craftsmen, EITB 980 first year engineering, EITB 888 foremen, ITS booklet 570 survey 1154 see also Training, supervisory
  - human relations, conflict and, by R. J. Hacon (book) 877 industrial chief advicer appointed MOL 621

foundry industry, Joint Committee for 983

3 M Co. Ltd., Controltac No. 9650 marking film with an adhesive coating 462 Thring, M. W., technologist in modern society 113 Thrust units for linear-motor crane, Morrispac 873 Thrusting technique for large diameter pipes 632 Thurso, development of 893 technical college 893 Thyristor and its Applications, by A. Griffin and R. S. Ramshaw (book) 609 Thyristor, applications 563 dc motor/speed control equipment, Mullard 696 solid state switching device 561 TI Stainless Tubes Ltd., helically welded stainless steel tube 102 Tilbury docks modernization and extension 1164 Tiles, ceramic, shuttle kiln for 947 Tilghman's Ltd., Carousel shot blast machine 1054

orsionmeter, ship's electrical 400 Torvane soil shear strength indicator 201 Total Oil Products, Silverstone foreign car test day 1076 Toulouse Aeronautical Establishment, airframe testing at RAE Farnborough 1072 Towed-truck transport system, Variocar 783 Tower cooling See Cooling tower Tower melter furnace, gas-fired 948 Tower Testing Station, National, opening of 1071 Towler, F. H., metric threads 377 Towler Hydraulics, hydraulic pumps and motors with through-shaft 145 oil hydraulic straightening press 919 variable displacement pump 357 Town(s), new, energy for, conference on 1184 Town and Country Planning Association, planning conference on Wales 755

industrial, chief adviser appointed, MOL 621 in engineering education 801 managers, Harvard Business School 619 National Coal Board scheme 988 naval architects (report) 476 operator, P-E Consulting Group 120 position and prospects for 1966 6 shipbuilding industry, need for scheme 476 shop stewards, conference on 414 skills analysis 66-68 supervisory, developments in 570 meeting on, BACIE 570 technicians, EITB 980 training officers 4-5. Letter 117 report on 980 see also Industrial training; Course; Education etc. Training Centre, Government. See Government

**Training Centre** Training grants. *Letter* 8 Training manual for operator training 121 Training officers, annual conference of 473 for small firms 117. Letter 276 sandwich course 980 training of 4-5. Letter 117 report on 980 Tramm, K., on Deflection Ordinates for Single-Span and Continuous Beams (book) 48 Transducers applications 468 basic principles of 465 definition of 465 electrical 467 electrostatic phase-shifting, Variogon 777 Engineering Outline 465 Hartmann & Braun 784 mechanical 466 pressure, high accuracy 644 miniature bonded strain gauge 778 systems of 468 Transfer function analyser, Smiths 828 Transfer pumps 649 Transformer(s) cascade voltage, AEI 548 dc, laboratory model 411 failures in 1163 for Ferrybridge C power station 452 for on-site assembly, Fuller 912 integrated system, Ferranti 550 peak load, AEI 548 testing of large 1163 welding, Eltram-130 portable 42 Transformer insulation, Res-i-Glas 2-F Hi-Tem thermosetting glass fibre tape for 1092 Transformer oil analysis, Plessey 1181 Transient torque/speed characteristics in induction motors, digital tachometer for 821 Transistor(s) dc chopper amplifier and wave forms 562 failure prediction, NBS 1182 germanium alloy, failure prediction 1182 high frequency beta gain measurement 1177 leakage current and failure prediction 1182 n-p-n type 561 p-n junctions 560 solid state switching device 560 switching applications 562 Transistor Automation Co., Teradyne automatic transistor tester 952 Transistor electronics, introduction to, by R. L. Walker (book) 1183 Transistor parameters, measurement of 1182 Transistor tester, automatic, Teradyne 952 Avo 951 Transistorized ratemeter, Redhill 257 Transitron Electronic Ltd., electronic components (trade publication) 1100 integrated circuit packs 152 Transmission, automatic, Borg Warner Model 8 493 long distance electrical, between the V.I. Lenin Hydro-Electric Station and Moscow, by A. M. Nekrasov and S. S. Rokotyan (book) 1183 see also Power transmission; Drive; Gearing Transmission towers, test station for 1071 Transmission units, gear, Varatio-Strateline 958 Transmitter for Ford-3000 remotely controlled tractor 1032 Transmitter/receiver, optical communications link 742 Transmitter tubes, radiation-cooled, Brown, Boveri 781 Transparency reader, NCR 1041 Transport air. See Air; Aircraft; Aviation cushioning materials in packaging for 810 goods, shock effects in 810 Ministry of, comment on activities of 57 road improvement expenditure 72 railway. See Railway road. See Motor car; Motor vehicle; Road sea. See Ship; Shipping urban, rapid transit for 220 Transport Coordinating Council for London 420 Transport and General Workers' Union, membership, structure and policy of 226 Transport Holding Co., annual report 1150

- Transport policy developments 420 Transport system, towed-truck, Variocar 783
- Transportation Project, Northeast Corridor 277
- Transportation systems, future technological possi-

bilities 277 Transporter, heavy load, BHC 1086 Trash-Vac heavy duty industrial vacuum cleaner 829 Travelifts, Drott, for container handling 438 Trawler research and development trends 395 Trench digger, pipe-laying 507 Trenchard Hall, RAF Institute of Technology 1031 Trend Industrial Equipment Ltd., close-to-wall drilling attachment 405 plastic edge trimmer 145 Trepanning cutter, DXD, for large diameter holes 741 Trepeznikov, V. A., control, economy and technological progress 1156 Triangle chassis punches (trade publication) 314 Tri-borne paint-dipping process, ICI 966 Trichloroethylene in paint-dipping process 966 Tricity Golden Marquis electric cooker 386 Triclamp tube clamp 820 Trident airliner, maintenance of 491 Trident electric motorcar 640 Trident racing motorcar 175 Trilac 24S resin solution, ICI 250 Trim materials laboratory, Ford 654 Trojan Ltd., aerial observation cars for Lebanon 100 Iso Grifo motor car 1076 Trolley, lift, scissor 41 porcupine card 351 Troskolanski, A. T., on Impeller Pumps (book) 364 Truck fork-lift. See Fork-lift truck Kerry Works three wheeled 306 platform, electric, Douglas 358 Iso-Car 959 towed, transport system, Variocar 783 see also Bogie; Motor vehicle; Fork-lift truck Trunk waveguide communications, by A. E. Karbowiak (book) 208 Trunking, busbar (trade publication) 1016 Truscon Group, MFD monorail system 498 TRW Systems Inc., OGO series 1116 Tube boiler bursting tests on 456, 458 failure of, chemical cleaning to investigate 459 trade publication 743 welding of 458 copper, for water services, BS 379 internal surface roughness indicator, Mecrin 922 reformer header, cast austenitic steel for 230 scaffold, cleaning 740 stainless steel, helical welding of 102 steel, double-wall copper brazed, Ful-braiz 1098 trade publication 1016 see also Pipe Tube bending machine 95 Tube clamp, Triclamp 820 Tube end forming machine, Fenn 919 Tube Headings Ltd., pipe thrusting 632 Tube inspection system, Eddytester 1008 Tube Investments Ltd., automatic inclusion counter 819 Simplex-GE Ltd., 193 tubes for boilers (trade publication) 743 Tube mill, mechanized, Continuous Tube Production 873 Tube railway. See Underground railway; London Transport Executive Tubes Ltd., Continuous Tube Production tube mill 873 Tubing, nylon, Wadelon 207 Tubornet Ltd., Quartermaster self-steering device for yachts 69 Tuner, H. D., on Evolution of the Nuclear Atom (book) 156 Tungsten carbide rotary burrs (trade publication) 104 Tungsten carbide throw-away tips, Hiflow milling cutters with 201 Tunnel(s), air drying, with automatic trolley indexing 42 construction for Plover Cove reservoir 596 immersed-tube, Limfjords 1164 Mersey, inauguration of work on second 125 Tunnelling, superconductors 791 Tuplin, W. A., on Torsional Vibration (book) 1099 postgraduate courses at Sheffield University 934 Turbine(s)

- axial flow, by J. H. Horlock (book) 785 bulb, Neyrpic 863 Pierre-Bénite scheme 861
- gas, aircraft, principles of 517, 518

aircraft, review of 25 years of 944 applications of 518 ASME conference (Zurich) 522 basic plant 515 closed-cycle 516 closed cycle, Escher Wyss 582 closed cycle, Escher Wyss closed cycle, GHH 584 combined with steam 584 compressor efficiency 516 conference on, ASME 428 conference on, GEC (US) 428 definition of 515 development position and prospects 428 development seminar, GEC (US) 528 disc proving procedure 529 emergency stand-by plant 445, 448, 450 Engineering Outline 515 for district heating 584 for ferries 715 for fighting vehicles 124 for marine propulsion, ASME symposium (Zurich) 586 for motor cars 585 fuel(s) for 582, 587 fuel consumption in 588 fuel controls analysis and design (book) 1057 history of 516 in merchant ships 586, 587 in Venezuela 582 industrial plant 517, 518 large, ASME symposium 582 marine plant 332, 517, 518, 586 Marine Proteus, for hovercraft 1157 marine research and development trends 398 Olympus, for hovercraft 1157 Olympus marine 332 open-cycle 516 open-cycle, marine developments 586 packaged power station 292 power plant, CEGB 428 propulsion for frigates 398 propulsion in tanker Auris 400 Proteus marine 332 Ruston and Hornsby TA-1500 351 small industrial 585 small packaged plant 432 split compressor differential 585 symposium on, ASME (Zurich) 581 thermal efficiency 588 thermodynamic cycle 516 trade publication 924 trials in frigate Exmouth 332, 398 turbine efficiency 516 see also Aircraft engine marine, advanced propulsion system (trade publication) 1100 steam, combined with gas 584 design developments, limitations and prospects 453 Ferrybridge C power station 451 marine research and development trends 398 supercritical, Drakelow C power station 349 see also Turbo-generator Turbine blade cooling 588 Turbine cladding, modelling technique as design 779 aid Turbine flowmeter, Rhodes 601 Turbine main engines, by J. B. Main, F. R. Harris and C. W. Herbert (book) 156 Turbine sets, Kaplan, for Kainji dam project 76 Turbo-alternator sets for Central Costanera power station 776 Turbo-charging for motor vehicle engines, E. Kellet 668 Turbo-circulators for Central Costanera power station 775 Turbofan engine. *See* Aircraft engine Turbo-generator, geared, sound analysis of 1060 Turbojet engine. *See* Aircraft engine Turbomeca Astazou XIV engines for Jetstream aircraft 329 Turboprop engine. See Aircraft engine Turboshaft engine. See Aircraft engine Turbrovent roof ventilator 687 Turbulence suppression by viscoelastic fluids 885 Turner, B., education for engineering design 753. Letter 940 engineering education study 800 Turner & Brown Ltd., service spines in plastics 302 Turbrovent roof ventilator 687 Turner, B. T., importance of technicians 478 Turner, D., occupational hygienist 808 Turner, G. I., photodetectors 660

- Turner, G. W., manpower conference 477
- Turner and Newall housing system 943
- Turners Asbestos Cement Co. Ltd., fire protection of structures (trade publication) 208
- Turning, alloy steel, performance of ceramic tools (book) 513
- survey on (PERA) 91
- Turning machines with numerical control, Max Mueller 764
- Turntable, lifting, power-operated, Polt 1178 Turret, rotary, Snow 1094
- 20th Century Electronics Ltd., high vacuum systems (trade publication) 264
- Twin Otter feeder airliner, de Havilland Canada 941 Twin-Tainer container system 961
- Tycet, Ltd. Tyslide saw bench 152
- Tyndall, J., fibre optics 1185
- Typesetting using CRO screen 192
- Tyre(s), earth-moving equipment, chains for 783 safety requirements for 759
- tread pattern, tape-controlled draughting machine for, Goodyear 653
- wide section, wheels for, Goodyear 263 Tyslide saw bench 152

### U

- UCC Filters Ltd., industrial filters (trade publication) 970
- UCO Unit System of contactor-relay 361
- Udal, J. P., Ltd., Festo-Pneumatic rotary indexing
- tables 308 Uhde, Friedrich, GmbH, ethylene making plant 1158
- synthesis gas by steam reforming 1160
- Ultra selective cracking process for olefins 1160 Ultrasonic cleaning tank 1008
- Ultrasonic diagnostic instrument 402
- Ultrasonic drill, MEL Equipment 96
- Ultrasonic flaw detector, Sonatest 1043
- Ultrasonic machining
- ceramics, UKAEA 554
- glass, UKAEA 554
- Ultrasonic thickness guage and flaw detector, Sonoray 202
- Ultrasonoscope Co. (London) Ltd., ultrasonic diagnostic instrument 402

Ultra-violet hand lamp 260

- Under-developed countries, steel industry for, A. H. Leckie 708
- Under Water Welders and Repairers Ltd., North Sea Diving Services Ltd. 335
- Underground pipes (trade publication) 698 Underground railways, of the World, by H. C. P. Havers (book) 1099
- see also London Transport Executive
- Underwater & Marine Equipment Ltd., Wreckfinder differential proton magnetometer for locating submerged objects 602
- Underwater road for London traffic problem 536 Underwater weed mower, Jari 201
- UNESCO, world engineering body proposals 798
- Unico Flo-Master air flow meter 1129
- Unified screw thread system. See ISO Inch
- Unifix stockmarker system 309
- Unimatic Engineers Ltd., 'Slo-Syn' digital indexer 869
- Unimech range of mechanical components (trade publication) 878
- Union, trade. See Trade union
- Union Cartage Ltd., Twin-Tainer container system 961
- Unipulse metering system, Parkinson Cowan 1071 Uniselector, telephone 1045
- United Kingdom Atomic Energy Authority, radioisotopes for silt movement survey on Firth of Forth 913
- ultrasonic machining of glass and ceramics 554 United Kingdom Railway Advisory Service 27
- United Roofing Co. Ltd., roof system (trade publica-
- tion) 656 United States, consulting practice in universities 1067
- motor car industry, position and prospects of 759
- space research projects in 578
- steel industry price increases 60

46

- supersonic transport aircraft development 223
- see also America; American United States Army, satellites and field station com-
- munications system 667
- United States Atomic Energy Commission, nuclear

- power for drilling rig 895
- United States National Aeronautics and Space Administration, cloud experiments 251 international space research cooperation 574

Vacuum systems, high (trade publication) 264

practical, by W. F. Brunner and T. H. Batzer (book)

Valla mobile crane with fork-lift attachment 958

Vacuum technique(s) (book) 47

Valentine, A. C., district heating 276

Value engineering, bibliography 697

dosing, variable-reagent, Isoflow 1046

air control, ASCO 1130

diaphragm pilot 303

hydrant, Parity 258

bronze globe triple-seal 303

'Flicr', Brown and Sharpe 823

flow control, H.M.L. 1091

trade publication 786

thermostatic 502

solenoid, Danfoss 103

wafer-type butterfly 823

Valve voltmeter, Advance 962

return air door grille 500

Valve data (trade publication) 832

Valve gear, Milomatic lubricator for 305

van den Bosch, J. J., roll damping 669

of Organic Chemistry (book) 364

van Millingen, R. D., optical torquemeter 310

Thermodynamics (book) 1099

Variflo variable-speed drive units 1130

Varysec numerical control systems

XVR motor car 532

machine 918

VBB, Abu Simbel project 128

Vegetable harvester, NIAE 897

clean rooms 603

Ventilation units, Brooks 685

Clear Opening, Colt 245

roof, MF, Colt 247

Turbrovent 687

Ventilator(s)

Vāsterås district heating project 182–3

Veeder-Root Ltd., modular counters 1170

Velcro nylon overlapping fastener 601

Ventilating light shutter, VO, Colt 246

industrial and domestic, Harvey 408

Ventura diesel engine, UIC tests on 534

VeoVa 911 monomer for coatings 261

analysis conference 780

turret drilling machine 767

Vending machine for hot dogs 505

Vekos Powermaster boilers at Billingham 186

Venesta Manufacturing Ltd., building board for

Ventilating. See International Heating, Ventilating and Air Conditioning Exhibition

Verein Deutscher Ingenieure experimental stress

Vero Machine Tool Co. Ltd., Autodrill six-spindle

Vero Precision Engineering Ltd., camshaft milling machine 737

precision scroll grinding machine 922

Verson 200 ton single-action press 921

Vertichain overhead chain conveyor 154

Vibra-Fork resonant-reed devices 1003

VFW-G14 short-haul aircraft 941

Via-Vac pressure controller 97

Vibramat grain cleaner 259

Vibration

Veroboard universal printed circuit board 502

Vibrating screen/feeder units, Low-Line 1176

in buildings, isolation of, R. A. Waller 808

Variocar towed-truck transport system 783

Hymatic 501

circuits 502

nector 301

for 1097

958

777

gas, Basotrol two-stage 462

hydraulic, directional plug-in 504

radiator, RAV thermostatic 687

needle, stainless steel, Simplifix 501

relief and non-return, Hymatic 644

twist-lever control, for pneumatic or hydraulic

Van den Bosch Ltd., Durodyne flexible duct con-

van der Kerk, G. J. M., on Investigations in the Field

van Wylen, G. J., on Fundamentals of Statistical

Vaporization rate of rhenium, Langmuir technique

Varatio-Strateline Gears Ltd., gear transmission units

Variational methods in control engineering, intro-

duction to, by A. R. M. Noton (book) 877

Variogon electrostatic phase-shifting transducers

871

Varnish, anti-discharge, for electrical stress 965

Vauxhall Motors, paint spraying equipment 194

VEB Drahtziemaschinenwerk Grunsa, wire spooling

Vary Touch independent hydraulic system 248

104

Valve(s)

- re-entry vehicle studies 684
- United States National Bureau of Standards, datalogging modules 360
  - elasticity of ice 1128
- high temperature properties of rhenium 1097
- model tests in fire research 435
- nuclear magnetic resonance techniques for flow rate of liquid hydrogen 1013
- peak pulse voltage measurement 1132
- precision coaxial connector and modular tech-niques. Letter 754 transistor failure prediction 1182
- United States National Science Foundation, con-
- sulting practice in universities 1067 United Steel Companies Ltd., fine-grained carburiz-
- ing steel (trade publication) 1142 United Water Softeners Ltd., water demineralizing
- plant for Sicily 1079 Univac centrifugal pump 963
- Universal Divers Ltd., North Sea Diving Services Ltd. 335
- Universal Highways Ltd., road painting equipment 601
- Universal and International Exhibition 1058
- Universal joints, constant velocity (trade publication) 832
- trade publication 832
- Universal machine tool with numerical control 763 Universal Power Drives Ltd., Hustler fork-lift truck 1010
- Unipower GT motor car engine 176
- Universal Towel Co., roller towel machinery 573 University(ies), in US, consulting practice in 1067
- see also under names of specific universities University College, London, cooling towers and wind loading 1166 University research, computers in, Flowers Report
- on 221
- Unplasticised polyvinyl chloride. See Polyvinyl chloride
- Urbanization, population explosion and 277
- Urea synthesis, Matthew Hall plant 1162
- Stamicarbon NV/DSM process 1162 Urethane foam insulation for Hortonsphere
- spherical vessel 913 Urquhart's (1926) Ltd., Toroidal packaged air heater for process heating 145
- Urwick, Orr and Partners, skills analysis training for Perkins Engines Group 66
- USI Inc., 4,000 ton chassis press 874
- Utzon, J., Sydney Opera House 731

# V

- V-belts, glass fibre 1171
- Vacmaster dual-purpose vacuum cleaner 1178
- Vaco-Pilot digital computer for dyeing machine control 1096
- Vactric Control Equipment Ltd., size 08 gearhead 402
- Vacu-Blast Ltd., shot blasting of glass 505
- Vac-U-Lift (Great Britain) Ltd., Vac-U-Lifter vacuum lifting device 965
- Vac-U-Lifter vacuum lifting device 965

Vacuum degassing of steel (book) 156

Vacuum gauges, Pirani and Penning 199

Vacuum lifting device, Vac-U-Lifter 965

Vacuum photocell, Engineering Outline 657

Vacuum, high, pumping equipment, by B. D. Power (book) 1141

Vacuum deposition for thin film integrated circuits

Vacuum Generators Ltd., electron diffraction equip-

Vacuum Industrial Applications Ltd., vacuum plant

for wax impregnation of capacitors 1138

Vacuum plant for wax impregnation of capacitors

Vacuum spectrometer, analysis by, thin suction

97

ion gauge control unit for pressure measurement

Vacuum brake. See Brake Vacuum cleaner. See Cleaner

254

911

1138

ment 690

Vacuum contactor, AEI 548

Vacuum furnace, Brew 917

quick-cooled, Torr Plan 742

Via-Vac pressure controller

samples for 1088

for traction motors of electric locomotives 1140

Water, corrosion and its prevention in, by G. Butler

Water boxes terminating stator conductors 452 Water conservation works, river engineering and, by

Water control for concrete mixers, Multi-Hydrobot

Water desalination and combined generating plan

Water pollution prevention, syphon breaker for 146

Water pollution research, conference on (Munich)

Water Pollution Research Laboratory, tertiary treat-

Water Research Association, nitrous oxide as leak

Water storage, groundwater scheme for Great Ouse

Water supply pump evaluation, California, NEL 896

Watering system, automatic, for Sunningdale golf course 850

Wates Ltd., industrialized building system (trade

Watson-Marlow Ltd., leak detector with alarms 353

communication, trunk, by A. E. Karbowiak (book)

970

Waste, and scrap exhibition (Olympia) 535

and H. C. K. Ison (book) 969

R. Berkeley Thorn (book) 969

Water cooler, Crawley Bros Ltd. 355

ment of sewage effluent 730

Water resources of Great Ouse Basin 338

Water shortage in South-East England 338

Water supply industry early steam plants 859

Waterway, inland. See Canal; River, etc.

Watford GT3 safety seat for motor cars 1071

927

Wax impregnation of capacitors vacuum plant for

Wayne Kerr Co. Ltd., electrical instruments (trade

Wear, lubrication and, third convention (book) 877

Weast, R. C., on Handbook of Chemistry and Physics (book) 923

Weather maps for power demand forecasting 819

Weaver, W., on Analysis of Framed Structures (book)

on Matrix Algebra for Engineers (book) 364

Web tension indicator (trade publication) 743

Webasto heater, Smiths, for water distillation plant

Wednesbury Tube Co., Ltd. automatic billet heating

Weeks & Co. (Engineers) Ltd. Hydro-Lift hydrau-

Weighing control, automatic push button, in meal

Weighing machine, Avery, for artificial kidney equip-

Weinrich, G., on Solids: Elementary Theory for

Weir, G. & J. Holdings Ltd., pump manufacture/

47

Weight of railway trains, L. W. Ibbotson 173

Advanced Students (book) 1099

Weinberg, S., NCB Reliability Conference 982

Weather station, floating, Nomad 122

Weaver, River, pvc sewage pipe in 250

Weaving, J. H., small gas turbines 432

Weck, R., no charge for research? 526

Weed mower, Jari underwater 201

lically lifting trailer 741

production 461

ment 603

Web guide with air cushion 965

Web strip, air bar guide for 553

Waterwitch, jet-propelled gunboat 15

Water services, copper tube for, BS 379

Water softeners (trade publication)

Water demineralizing plant for Sicily 1079

Water distillation plant, yachting version 71

Water filter, drain type, Imacti Immedium 728

Heenan & Froude Ltd. 454

Water heater. See Heater Water meter, Kent-Helix 554

hot, for concrete making 402

reclamation, value of 535

sea. See Sea water

866

955

285

1016

detector 300

Basin 339

trade publication 48

publication) 698

definition of 925

microstrip system

parallel plate 926 rectangular 930

stripline system 927

triplate system 926

Way bearings, Rotax 920

publication) 1016

208

1138

208

71

plant 38

Waveguides, application 932

Engineering Outline 925

frequency range of 929 hollow 929, 930, 931

in motor vehicles, testing of 808

- in ships, automatic analysis of 961
- torsional, by W. A. Tuplin (book) 1099 Vibration damper, Holset, for crankshaft 542 Vibrator, electromagnetic, for wet concrete, Simbi
- V5E 956 portable, Humdinger 357
- Vibratory piling (trade publication) 1142
- Vickers-Armstrongs Ltd. (Hovercraft Division), heavy load transporter 1086 hovercraft developments 1082
- VA-1 and VA-3 hovercraft 1083, 1084 Vickers-Armstrongs (Shipbuilders) Ltd., cargo liner for Glen Line 426
- Vickers, A. W., numerical control 761
- Vickers-Detroit, hydraulic vane motor 102 vane pumps 102
- and motors 149-51
- Vickers Engineering Group, South Marston works 710
- Vickers Ltd., closure of Weymouth works 750 concentration at South Marston works 750
- hydrostatic extrusion contract 481
- mixed flow pumps 1166 smoother ship's hull system 283
- Vickers Sperry Rand Ltd., activities of aero division at Farlington, Portsmouth 608 953
- electro-hydraulic servo motor export activities 757
- hydraulic power unit for hydraulic press 405 hydraulic pump(s) for aircraft 608
- hydraulic pump servicing 492
- Porta-Filter hydraulic filler/filter unit 738
- power pack for rock drill conversion set 102 PVB 205 hydraulic pump 262 vane pumps 151
- Vickers VC10 airliners, maintenance of 486
- Victor Products (Wallsend) Ltd., electrical fittings (trade publication) 1016
- Flameproof-Weatherproof pendant lighting fitting 544
- Victoria and Albert Museum, Raphael cartoons 283
- Victoria Line underground railway, model of 1164 Vigilance control for diesel railcars 191
- Vinten, C., Hydrocar amphibious vehicle 70, 227. Letter 225
- Vinten, W., Ltd., Peregrine television camera crane 293
- Vinyl coating of ribbed aluminium building sheet 1090
- Vinyl paint finish for roof decking 206 Viscoelastic fluids, behaviour of 882, 883
- behaviour under shear stress 882
- elastic stresses in 883
- turbulence suppression by 885
- Viscoelastic material, definition of 881 Viscoelastic phenomena 882
- Viscoelastic properties and structure of turbulence 883
- Viscoelasticity, basic principles 881 Engineering Outline 881
- industrial applications 885
- lubrication and 885
- modern trends 886
- Viscount airliners, maintenance of 489
- Visutape tank contents gauge 1171
- Viton 'A' seals for needle valve 501
- Vitos Ltd., Gravograph engraving machine 256
- Vitreous enamel, approved quality label 481 Vitreous Enamel Development Council, approved quality label 481
- Vizor retractable steel window grille 354
- VMF/Stork-Werkspoor Group activities of 434
- Vogler, J., engineering education study 800 Volkswagen, horizontally-opposed flat-four motor car engine for gyroplane 538
- production statistics. Letter 65
- Voltage comparator, analogue, integrated-circuit, Electrosil 964
- Voltage measurement, peak pulse, NBS 1132
- Voltage regulating relay, AEI 545
- Voltmeter, transient amplitude, Micro-Model 5201A 358
- valve, Advance 962 von Hippel, A. R., on Molecular Designing of Materials and Devices (book) 1015
- von Karman Institute for Fluid Dynamics, activities of 622
- von Karman, T., von Karman Institute 622 Vonsovskii, S. V., on Ferromagnetic Resonance (book) 1141
- Von Sydow, A. C., district heating 184

Vortexion Ltd., WVB Series 6 tape recorder 131, 134

Voucher Ltd., automatic cutting-off machines 829 Vugts, J. H., roll damping 669

## W

- Wade Couplings Ltd., Wadelon nylon tubing 207 Wadelon nylon tubing 207
- Wadkin Ltd., hopper feed mechanism 1044 numerically controlled drilling machines 766
- trade publication 414 panel saw 1044
- Wafering machines for semi-conductors 41
- Wage increases, early warning system 220 Wage prospects for 1966 7
- Wage-related sickness benefits, White Paper on
- 218 Wagon, automatic coal discharge, maintenance of 232
- construction by British Railways 679
- for ultra-large loads 233
- oil tank 90-ton 233
- rail tank, aluminium alloy, 80-ton 512 100-ton, Shell-Mex 1031 shunting, tractor for 738
- Wagon design for Freightliner trains 441
- Wailes, R., industrial monuments survey 857
- Waldman, P., skills analysis training at Perkins Engines 68
- Waldo, W. H., on Better Report Writing (book) 264 Wales, Civic Trust for 167
- Engineering Industry Training Board's office 935 Government Report on 470 industrial position and prospects 470
- planning conference on development of 755 South. See South Wales
- Walker, James, & Co. Ltd., asbestos jointing (trade publication) 656
- Walker, Johnny, JW4 Villiers-engined motor car 175
- Walker, R. L., on Introduction to Transistor Electronics (book) 1183
- Wall cladding, Curv-Line Q-Panel 101 Wall Colmonoy Ltd., welder (trade publication) 314
- Wallace, John, Mechanical Handling Ltd., Serco dock ramp 1094
- Wallace and Tiernan Ltd., nitrous oxide as leak detector 300
- Waller, George, & Son Ltd., high-pressure gas booster 94
- Waller, R. A., isolating a building 808
- Wallis, B., variable geometry aircraft 941
- Wallwork, Henry, & Co. Ltd., Dunz pneumatic hoist 1056
- Walshe, D. E. J., strake stabilization of chimneys 805
- Wankel rotary engine, development of, Johnson 718
- Ward Ashcroft and Parkman, pvc sewage pipe in River Weaver 250
- Ward, H. W., & Co. Ltd., AutoWard fully automatic plug programmed capstan lathe 767
- Warder, S. B., LMR electrification scheme 27

Warner electric brake 1003

equipment 871

1095

566

tion) 924

- Wardle & Davenport Ltd., Wreckfinder differential proton magnetometer for locating submerged objects 602
- Warlow, W. J., flooring in industrial buildings 530 Warm air ducting (trade publication) 1184

Warner electric clutch in coil winding machine

Warner Swasey Asquith Ltd., numerical control

Warr, P., supervisors in iron and steel industry 1153

Warwick Pump & Engineering Co. Ltd., Steamatic

Warwick Rim and Sectioning, Vizor retractable steel

Warwick University, Herbert Research Scholarship

Washers, colour code identification (trade publica-

Washing machine, Automatic-1501, AEI-Hotpoint

Warner electronically controlled clutch 1003

Warner, F. E., CEI examinations 846

Warning device, automatic, Dialarm 954

Warning signs for road obstructions 632

Warning system fault, modular, Londex 778

traffic hazard, for motor cars 960

3000 steam cleaner 39

Wash, barrage proposal for 340

window grille 354

rationalisation move 373

- Weir, G. & J. Ltd., distillation plant for lighthouses 95 glandless pump/water-filled motor unit 510
- Weircrest Ltd., Beach Buggy version of Mini-Moke utility vehicle 71
- Weissenberg hypothesis 882
- Welbourn, D. B., engineering design course 751 Welbourne, D., on Analogue Computing Methods (book) 156
- Welded rail. See Rail
- Welding
- arc, metal-inert-gas of rail tank wagon 512 carbon dioxide shielded, flux-cored wire, BWRA 1132
- electron beam, advantages of 1019
- basic principles 1017
- basic systems 1018
- capacity for 1155 definition 1017
- disadvantages of 1020
- electron gun 1018
- Engineering Outline 1017. Letter 1113
- optical system 1019 power source 1018
- process features 1019
- uses 1020 Westinghouse Electric Corp. Letter 1113
- work chamber 1019
- helical, of stainless steel tube 102
- high frequency resistance 249
- laser in 53
- laser-beam, for micro-circuit connections 505 of boiler tube 458
- of stainless steel 38
- stud, Cromp-Arc production head unit 1011
- Welding electrode holder, Compact, Oerlikon 1042
- Welding equipment, pulsed arc, BOC 783
- Welding gun, electron beam, Hawker Siddeley Dynamics 1155
- spot, for concrete reinforcement 147
- Welding handbook, by A. L. Phillips (book) 208 Welding machines, arc, Hill 455
- combination engine-driven, Hobart 1041 for hard surfacing, Fusewelder (trade publication) 314
- high-frequency, Stanelco 1012
- miniature 'water', Micro-Weld 199 Sciaky electron beam, for motor car gear units 741
- Welding rectifiers, Rockweld 148
- Welding transformer, Eltram-130 portable 42
- Wells, A. A., brittle fracture in gas plant 230
- Wels, T. A., metric threads 276
- Wenham, F. H., paper on aerial locomotion 15 Werkspoor-Amsterdam NV, diesel engine developments 434
- TE450 two-stroke diesel engine 434
- Werner vertical milling machine 765
- Wessex Industires (Poole) Ltd., battery electric fork
- lift trucks 959 West Burton B power station, application for
- building 851 West European Coal Producers, warning on coal
- industry 752 West Hartlepool, architecture of 1110
- see also Hartlepool
- West Midlands Gas Board, gas distribution grid 286
  - gas-fired Femelt melting furnace 1055 plant failure during cold weather 72
- West Thurrock power station, boiler cleaning and passivating 819
- West Twin Silo, Belfast, grain handling 597
- Western Avenue elevated road extension, model tests on 816
- Western Isles, cable laying to 802
- Westinghouse Brake and Signal Co. Ltd., semiconductors (trade publication) 1058
- Westinghouse Electric Corp., electron beam welder. Letter 1113
- Westinghouse Electric International Co., Cachalot twin-chamber deepwater diving system 37 semiconductor spinning machine 1135
- Westinghouse-Hagan power positioner 300
- Westinghouse SUF4NXW dishwasher 31, 35
- Westland Aircraft Ltd., hovercraft development 1081
- nickel temperature sensors 644
- see also Hovercraft, SR-N series

48

- Westminster coil winding machines 1095
- Westool Ltd., Warner clutch and brake system 1003 Weyburn Engineering Co. Ltd., camshaft milling

- machine 737 Whately, R. F. A., ships : builders and owners 425 Wheel(s)

Tex Hi-Speed windscreen wiper blade 642

Window, double glazed horizontal sliding, Quebec

Winding machines, coil, Westminster 1095

Window grille, Vizor retractable steel 354

Winfrith, Dragon reactor test run 284

prestressing, Bridon Dyform 1155

Stabilized Strand 1155

Wire spooling machine 918

Wobbe gas quality control 947

gears 876

1183

308

motor 963

907, 908

1135

626

47

X

γ

156

machine 765

Thermalized Strand 1155

Windscreen wiper blade, Tex-Hi Speed 642 Windsor-Smith, P., on supercharging 86

steam/water drums for SGHWR reactor 141

Windscale, nuclear fuel element reprocessing 494

Winn and Coales Ltd., joint sealing (trade publica-

Winterbourne, H. S., metric threads, 225. Letter 326

Wire, and cable symposium (Atlantic City) 970

Wire reinforcement cage for concrete pipe 956

Wiseman, Alfred, & Co. Ltd., type DRWS reduction

Wood, A. J., on Introduction to Electrostatic Precipitation in Theory and Practice (book)

Woodall-Duckham Construction Co., natural gas/

oxygen reforming for town gas 1160

Woods, D., on British idea taken up in USA 754

Woods, Geoffrey, Ltd., GW Heat-Pak air heaters

Woodward Governor Co. fractional hp electric

Woolwich power station, chemical cleaning to investigate boiler tube failure 459

Workshop(s), British Railways. See British Railways

World Trade Centre, New York, structural details

Worm gear electric motors (trade publication) 1184

Wotan Teletrol horizontal boring and milling

Wreckfinder differential proton magnetometer for

Wrench, pneutorque pneumatic, North Bar Tool Co.

Wrist watch, slide-rule, Divisor 1156 Writing, better report, by W. H. Waldo (book) 264

Wrought iron, enquiry into present position. Letter

Wyatt, P. J., on Atomic and Space Physics (book)

Wymark Co., grease injector (trade publication)

Wynne-Edwards, Sir Robert, engineering projects

X-ray diffraction patterns, cassette system for,

X-ray spectrochemical methods, conference on

Yacht(s), Quartermaster self-steering device for 69

Yachting version of water distillation plant 71

Yale & Towne, tractor for shunting wagons 738

tractor shovel with dual pivot articulation 651

Yale Tractor Shovels, tractor shovel with dual pivot

X-ray examination in airliner maintenance 492

X-ray image intensifier, diagnostic 694

technical, principles of, by R. Hays (book) 363

Worthington-Simpson Ltd., sump pump 687

locating submerged objects 602

Wright, P. J. F., loadings on buildings 849

Wright, D. L., gyroscopes 706

Wulff process for acetylene 1160

HNC non-exemption for CEI 217

Wynns, biggest trailer in Europe 807

survey on professional engineers 979

symposium 750

technician training 474

X-ray analyser for ore 913

Xenon tube lamps, AEI 545

Polaroid 1002

924

Woolsington airport, redevelopment 1166

Work, A. L., adviser on industrial training 621

Workshop bargaining, N. Ross 566

Wire rope terminals (trade publication) 878

Wishart, C. I. C., chartered engineers 940

Wood drying, electronic method 1133

town gas production plants 1160

Wooding, J., design education 754

jack, tensioning system, Stressomatic 1155

301

tion) 1142

- for wide section tyres, Goodyear 263
- magnesium, for VW motor car 481
- Wheelburn at Hest Bank, railway accident due to 851
- Whessoe Ltd., SB Crystic polyester resin for road tanker 807
- Whirler, coating, Lee-Smith 1009
- Whisky distillery at Invergordon 892
- Whistle, electric, Secomak Pistonhorn 552
- Whitaker, H. E., Volkswagen production 65
- White, James, (Hayes) Ltd., drilling machine for printed circuits 408
- White Paper on :
- defence 420
- industrial reorganization corporation 221
- Investment Incentives 110, 161
- polytechnics 1024 Post Office Prospects 1966–67 521
- Scottish Economy 224
- wage-related sickness benefits 218 White-Rodgers Ltd., automatic gas ignition unit 830
- Whitefrairs Glass Ltd., diamond sawing 152
- Whitehead, A. N., rhythm of education 800
- Whitehead, E., BIM conference 525
- Whitehouse, P. B., on Round the World on Narrow-
- Gauge Railways (book) 1015
- Whitlock Bros. Ltd., excavator-loaders (trade publication) 698
  - offset excavator-loaders 508
- Who Owns Whom 1965-66 (book) 264
- W. H. S. (Pathfinder) Ltd., clean rooms and laboratories (trade publication) 264
- Wickham, D., & Co. Ltd., railcars for Rhodesia Railways, 190–1. *Letter* 276 Wickham Engineering Co. Ltd., Speedyfeeder
- Mark 2 mobile conveyor 1136
- Wickman Lang Ltd., Numericon centre lathe with numerical control 764
- Wickman Scrivener Ltd., automatic centreless tap grinding machine 552
- Widney Group, steel racks 954

William 848, 892

engine 585

Letter 626

(Utrecht) 1151

(book) 697

Williams, E.,

479

504

156

Wiedemann turret punch presses with numerical control 650 Wiggins Teape, pulp and paper mill at Fort

Wilkinson, T. S., split compressor differential

Willemsens, L. C., on Investigations in the Field of

Williams, J. I., supersonic transport aircraft 223

Williams, John (Wishaw) Ltd., sponsors of SSIDA

Williams, S., International Apprentice Competition

Williams, T. G., on Instruments Electronics Auto-

mation Year Book and Buyers' Guide 1966

building regulations 573, 754.

Wilcock, A., Kite-mark for street lighting 639

Organic Chemistry (book) 364

Willmott, F. B., the diesel engine 478

marketing conference 1027

Wilson, H., BIM conference 524

weapons systems 809

Wilson, W. L., district heating 189

Winch, hydraulic, Hagglunde 139

with hydraulic control system 409

Wind loading, cooling towers and 1166

Wind movement in tall buildings 904

Wind tunnel tests, cooling towers 941

marking paint 92

drum winches 99

see also Lifting tackle

in tall buildings 903

tall buildings 905

Sea Gem oil drilling rig 9

Wilson, J., supervisory training 570

Wilson, A., management consultant 799

marketing of industrial products 1026

Wilson Committee on noise problem 374

Wilson, G. A., director of engineering, PLA 663

Wilson, J. A., reliability requirements of guided

Wilson, R. W., Templug hardness-change inserts

Wilson & Scott (Highways) Ltd., Clearlane road

Wimpey, George, & Co. Ltd., diesel driven single

high-speed, by A. Pope and K. L. Goin (book)

Williams, E. C., visit to USA 277

articulation 651

- Yanpol'skii, A. R., on Handbook for Computing Elementary Functions (book) 923
- Yarrow-Admiralty Research Department, contract on gas-turbine engines for sea-going ferries 715
- contract on heavy-fuel burning medium-speed diesel engines 715
- gas-turbine propulsion for Royal Navy 333 gas-turbine research contract 400
- Yates, Edward, & Sons Ltd., Barco self-aligning swivel joints 653

York memorandum on labour disputes 475

- York Trailers, expansion at Corby 63
- TY 20/Atkinson articulated tipper trailer 806 Yorkshire-Lancashire motorway, M62 111
- Young, C. G., sun-operated laser 1172
- Young, J., chairman, MACE 1108
- Young, R. D., chairman designate, Alfred Herbert 1107
- Youngman, W. C., Ltd., caravan as mobile site accommodation 401
- prefabricated timber staging 309 Reddy portable oil-fired space heater 40
- Yttrium-aluminium-garnet crystal laser, sun-operated 1172

## Z

Zambia, trade mission to 846
Zeeland Steamship Co., Parkeston Quay-Zeebrugge freight service 1033
Zephyr Mk IV motor car, Ford 768
Zimmerman, D., numerical control 762
Zinc, improved finished, die casting machine for

830 Zinconia, flame-sprayed coatings 539

Zodiac Mk IV motor car, Ford 768

Zorev, N. N., on Metal Cutting Mechanics (book) 969

