

Index

A

- A-300 passenger aircraft design and development 168
- Aabacas Engineering Co., Amazon crane crab 836
Duodrive crane crab 836
- AB Lineara, linear electric motor 149
- AB Skanska Cementgjuteriet, Huvudsta Bridge 359
- A.B. Söderlund & Lindström, shaft couplings 187
- AB Svenska Järnvägsverkstäderna, electric locomotives 177
- Abbey Electronics and Automation Ltd., temperature control units 475
- Abell, T. W. D., international sales representative, ship repairing division 529
- Aberdare Holdings Ltd., appointments 991
merger with Yorkshire Electric Transformer Co 816
- Aberfan colliery tip disaster 195, 208
- Abrasion, of elastomers under load 182
of rubber, by D. I. James (book) 1017
- Abrasion testing unit, Elcometer 303
- Abrasive(s), cleaning machine for 673
flexible, Martindale Electric 973
synthetic diamond, SDA 258
see also Free-abrasive machine
- Abrasive materials, flexible 258
- Abrasive paper, Komatsubara 74
- Abrasive particles in vacuum pump 421
- Abrasive rolls, Atarolls 184
- Abrasive wheels, diamond (trade publication) 478
- Abridgements of British Patent Specifications 35
- ABS, cold-formable, Cycopac-155 638
- ABS polymer, Lustran 240, 440 and 740 111
- Accelerator, low viscosity (trade publication) 478
- Accelerometers, servo, Kistler 1042
- Accidents
airliner crashes and flight recorder equipment 737
British Railways 737, 781. *Letter* 817
Comet 4B airliner disaster 610
drilling rig *Sea Gem*, inquiry 688
drop forging hammers 532
industrial, report on 277
trends in, J. P. Bull 696
mining industry, statistics 566
- Accurate Diamond Tool Co., diamond tools for turning graphite and lava 792
- Accurist 159 chronograph wrist watch 995
- Accuspeed adjustable-frequency drive 513
- Ace extruded asbestos wall panel 892
- Acetal resin rods, Delrin, Anson-Bassan 797
- ACL 1600 monitoring system for coal cutting 145
- Acme-Efco Ltd., grinding machines 796
- Acoustical Investigation and Research Ltd., concrete block 798
- Acratork Engineering Co. Ltd., torque screwdrive 130
- Acrulite cold-curing resin 473
- Acrylic emulsions for leather finishing 301
- Acrylic materials as locking sealants 76
- Acrylics, milling machines for 337
- Acrylonitrile-butadiene-styrene. *See* ABS
- Activated Sludge Ltd. 829
- Actuated Controls Ltd., low pressure switches 1040
- Actuators
electric (trade publication) 982
fatigue, vibration and 221
pneumatic (trade publication) 306, 434
precision, Rollnut 552
Rotork Syncropak 708
- Adams Butter Ltd., ink drying by hot oil 793
- Adamson-Alliance Co. Ltd., forging manipulator 709
- Adcock-Shipley Sales Ltd.
activities 443
Bridgeport Line-a-mill milling machine 444, 471
Bridgeport Synchro-trace automatic duplicating machine 444
licensing agreement with Bridgeport Machines Inc., 443
milling machine for acrylics 337
milling machine manufacture 443
Moog numerically-controlled milling machine 444
- Addison, H., noise from aircraft 1025
- ADE drawing reader 515
- Adelaide Cement Co. Ltd., hammer failures 423
- Adhesive(s)
applications 940
basic principles 937
bond strength 937
characteristics 940
definition 937
electron exchange 937
Engineering Outline 937
insulation, Ductfas 639
joint design 938
joint elasticity 938
Loctite, in slip fitting of bearings 707
methods of application 939
physico-chemical factors 937
surface energies of 937
surface preparation for 938
- Adhesive-strip metals 150
- Adler, Felix, and Partners, Foulness airport 734
- Advanced Products Co., static metal seals (trade publication) 604
- Advertising exhibition (Utrecht) 190
- Advisory Council on Technology 651
- A & E Controls Ltd., Dataset counters 1042
- AEC, Mandator motor tractor 784
Marshal rescue and recovery vehicle 175
- AEI Automation Ltd., control and machine group 352
- AEI-Birlec Ltd., billet heating installations 546
electro-slag refining plant 660
gas-fired muffle furnace 795
- AEI Cables, reorganization 989
- AEI Central Research Laboratory, microwave heating 824-825
- AEI Construction Division, repair operations to oil-filled cables to Isle of Wight 654
- AEI Control Equipment Division
automated controls for blending limestone 670
dry reed control units 880
electro-pneumatic transducer 712
pneumatic valve positioner unit 881
vane-operated proximity switches 880
- AEI Control & Machines Group, Kapak slipping electric motors 801
six-pole induction electric motors 802
traction control equipment 612
- AEI Electronics, monitoring system for coal cutting 145
- AEI-General Signal Ltd., remote control of signalling system 592
- AEI-Herr Ltd., annealing line 794
grinding line 796
- AEI Industrial Group, electricity distribution system for building sites 387
- AEI Lamp and Lighting, quartz-halogen light unit 824
- AEI Power Group, water-cooled busbars 653
- AEI Switchgear Division, reclosure equipment 979
- AEI-Thorn Semiconductors Ltd., epoxy-encapsulated transistor 401
microcircuit mask service 885
monolithic operational amplifier 715
- AEI Transformer Division, cascade voltage transformer 671
- AEI Turbine-Generator Division, turbine blade erosion 804
- Aer Lingus, Viscount 808 airliner for freight 592
- Aerial for earth surface radio waves 253
- Aerocalor space heaters (trade publication) 936
- Aerocoldform Ltd., Triple Twelve band saw 628
- Aerodynamic drag on wheels 618
- Aerodynamics, ideal-fluid, by K. Karamcheti (book) 519
- Aerosol sprays for engineers, Unibond 340
- Aerospace industry mission 611
- Aérotrain, hovertrain project 994, 1024
- Africa, water collection and storage 662
water storage tanks in 665
- Aggregate, J-M Perlite, refractory insulation 799
- Agricultural aircraft, Cmelák Z-37 626
- Agricultural Fair, ELMIA '68 (Sweden) 642
- Agricultural machinery, Royal Show (Kenilworth) 52
Royal Smithfield Show (Earls Court) 954
testing scheme, NIAE 333
- Agricultural research in developing countries, NIAE 333
- Agriculture, electricity in, conference 268
in desert regions, engineering aids to 330
see also Farm; Tractor
- Agripol Ursus C-335 and C-350 tractor 52
- Agriovac Mk III vacuum cleaner 955
- Agron Manufacturing Co. Ltd., wire and strip parts (trade publication) 808
- Ailsa Trucks Ltd., articulated container carrier vehicle 783
- Aim Electronics Ltd., modular pulse generator 1046
waveform sampling adaptor 883
- Air, compressed. *See* Compressed air
- Air blower for bulk transport vehicles 517
- Air cleaners, methods and equipment 607
- Air conditioning, computer-room 602
Law Courts, Brighton 827
trade publication 190
see also Heating, ventilating and air conditioning international exhibition
- Air conditioning equipment 759, 930
for computer environment, Carlyle 752
for storage, Denco Miller 759
Stone-Carrier 263
- Air-cushion transport of large objects 165
- Air filter. *See* Filter
- Air France, A-300 passenger aircraft 168
- Air freight rates, structure of 439
- Air handler for horizontal flows 602
- Air heater. *See* Heater
- Air-Metacone rubber and air suspension 137
- Air outlets and lighting units 891
- Air pollution. *See* Pollution; Clean air
- Air Reduction Co. Inc., cryogenic plant 677
- Air Registration Board, appointments 945
- Air/sea rescue beacon 165
- Air suspension, combined with rubber 137
- Air suspension system, Pneuride 1002
- Air tools, Bohler 283

- trade publication 268
- Air Traffic Control Centre, West Drayton 616
- Air transport, exports movement by 439
- Airbus. *See* under Aircraft
- Aircraft
- A-300 passenger 168
- agricultural, Cmelák Z-37 626
- airbus design trends 168
- airliner crashes and flight recorder equipment 737
- aluminium alloy cladding material 668
- Anglo-French Variable Geometry 1
- BAC 2-11 project 313
- BAC 167 trainer/ground attack 825
- Blanik L-13 sailplane 626
- Boeing 737 jet transport, flap system for high lift 707
- Boeing 747, design and development 168
- Comet 4B airliner disaster 610
- Concorde supersonic airliner, frictional heating of fuel in 292
- progress of 942, 946
- rolling-out at Toulouse 946
- seating and cruising speed changes 738
- sonic bang simulator for 326
- Delfin trainer L-29 625
- Dornier Do32K Kiebitz tethered platform 994
- Douglas DC-10 168
- flight recorder equipment and airliner crashes 737
- helicopter, Enstrom F-28A components 738
- Sea Knight, fluidic control 129
- Twyford-Enstrom Solent 738
- helicopter hangar, Jersey Brow 283
- instrument landing system, Dynamco 718
- Islander, export order 1025
- Jaguar strike/fighter trainer 994
- Jane's all the world's, 1967-68, by J. W. R Taylor (book) 981
- Jet Provost T. Mk-5 825
- Jetstream HP137, first flight 281
- Jetstream prototype turboprop-powered business 5
- Lockheed CL-1011 169
- Mirage G variable-geometry 1029
- Morava L-200 626
- noise from. *See* Noise
- One-Eleven 500 airliner 5
- Trident 1E/140 airliner 567
- Trident IIIb airliner 987
- Two-Eleven airliner not required for BEA 987
- variable geometry, BAC 581
- Viscount 808 airliner conversion for freight 592
- V/STOL transport aircraft 695
- Zlin -526 Trener 626
- see also* Aviation; Airport
- Aircraft altitude reporting, encoder for 110
- Aircraft electronics, logic and multiplexing techniques 910
- Aircraft engine
- Cell 4, test facility, NGTE 46
- Garrett turboprop, for Skyvan aircraft 1028
- noise, Ansty research facility 18
- Rolls-Royce RB-207 168, 313
- Rolls-Royce RB-211 313
- turbofan, for AFVG aircraft 1
- JT9D, for Boeing 747 aircraft 169
- JT15D Pratt and Whitney 825
- turbo-jet, noise from 983
- Aircraft industry
- attack on Government 992
- Czechoslovakia 625
- Ministry of Technology's responsibility for 164
- position and prospects 397, 992
- Aircraft retrieval, pneumatic lifting bags, RFD 667
- Airfield visibility, equipment for measuring, Kent 207
- Airmaster Engineering Ltd., dust extractor 931
- Airpax Electronics Inc., metering relays (trade publication) 80
- Airport, cargo distribution system, Atlanta terminal 1029
- closed circuit television for 862
- London. *See* London airport
- Airtube document conveyor (trade publication) 36
- Alarm, burglar, radar method 740
- ultrasonic, Modern-phone Space Alarm 635
- frequency (trade publication) 268
- Alarm panel, illuminated, Panagraph 714
- Alcan Industries Ltd., aluminium in building (trade publication) 560
- coloured sheet 755
- Alcancolour coloured aluminium sheet 755
- Alexander, Geo H. Machinery Ltd.
- appointments 775
- copying machine 1007
- milling machines (trade publication) 190
- Triple Twelve saw 473, 628
- Alexander, Walter, Atlantean double-deck bus 784
- Alfa-Laval Co. Ltd., process plant equipment (trade publication) 982
- washing and degreasing machine 298
- Alfa Romeo F20 motor van 742
- Alfloc Head Wrightson Process Engineering Ltd., distilling waste treatment plant 870
- Algebra, boolean, fundamental, by J. Kuntzmann (book) 1017
- Algeria, natural gas supplies resumed 442
- Algol 60 computer language 394
- Alignment, fluidic units for non-contact system of 421
- Alimak, KS4-8 self-climbing scaffold 891
- Solett portable site hoist 721
- Alkbrant, Folke, Huvudsta Bridge 359
- Alkyd solution, pump and meter for 180
- Allan, R. A., transmission line maintenance 913
- Allday, William, & Co. Ltd., turbo-blower 301
- Allen, C. J., Switzerland—railways and cableways (book) 267
- Allen & Hanburys (Surgical Engineering), hospital for *Queen Elizabeth II* 902
- Allen, P. C., railways in Isle of Wight (book) 79
- Allen West & Co. Ltd., container handling cranes 669
- S-Law static control system 340
- Allen, W. G., & Sons (Tipton) Ltd., appointments 775
- Allman-Comet diaphragm pump 762
- Allman, E., Ltd., diaphragm pump 762
- Uniro crop sprayer 616
- Alloys, design of, modern theory in, by B. A. Bilby, S. G. Glover and D. W. Wakeman (book) 559
- heavy non-ferrous metals and, technology of, by J. H. Cairns and P. T. Gilbert (book) 79
- see also* under specific alloy types
- Allways dial indicator 557
- Alstonip saturator and stabilizer for mercurized materials 380
- Alternator(s), gas-turbine, Rover 11
- see also* Generator; Turbo
- Alternator control, exciters for 111
- Alumin Building Components Ltd., aluminium-wood pivot window 757
- Aluminium, in building (trade publication) 560
- vertical welding of 24
- Aluminium alloy, high-strength (trade publication) 434
- Aluminium alloy cladding material, MD-86 668
- Aluminium (Canada), Tysse 2 hydroelectric power station 743
- Aluminium casting alloy, X149, Alcoa 639
- Aluminium cladding, external, Weatherlap 892
- Aluminium Co. of America, aluminium casting alloy, X149 639
- Smithfield Street bridge, Pittsburgh 445
- student design merit awards 14
- Aluminium container as mobile exhibition unit 1016
- Aluminium curtain walling, Kawneer 73
- Aluminium decorative sheet (trade publication) 982
- Aluminium drive screws, Stone 756
- Aluminium film, thin, production 383
- Aluminium fluorescent lighting system, Alcoa award 14
- Aluminium foil windings in distribution transformer 147
- Aluminium Laboratories Ltd., vertical welding of aluminium 24
- Aluminium ladders (trade publication) 560
- Aluminium man-powered pump, Sorcerer's Apprentice, ALCOA award 14
- Aluminium melting plant, Hi-Melt Tower furnace 594
- Aluminium motor-car engine, Rover 489
- Aluminium sheet, coloured, Alcancolour 755
- Aluminium sheeting, Rigidal 862
- Aluminium smelting plants, cheaper power proposals 565
- Aluminium tanks for road tankers 249
- Aluminium tenodesis splint, ALCOA award 14
- Aluminium wall cladding RTZ 757
- Aluminium Wire & Cable Co. Ltd., appointments 903
- Aluminium-wood pivot window 757
- Alumino-thermic welding for reinforcing bars 548
- Alvsborg bridge, synthetic rubber sealing 833
- Always Castor Co. Ltd., castor ball unit 599
- Alweg, rapid transit system 777
- Amalgamated Engineering Union, election for president 125
- Amazon crane crab 836
- Ambulance suspension system 446
- AMcK Ltd., growth and structure of 321
- industrialized building system 321
- Ameliorair Ltd., formation 943
- American Air Filter (Great Britain) Ltd., Roto-Clone dust collector 432
- American Machine & Foundry Co., cargo distribution system, Atlanta terminal 1029
- Versatran automatic transfer and handling machine 507
- American Motors, Rambler Javelin motor car 537
- American Overseas Petroleum, Carmody Drilling and Well Control Trainer 6
- American Society of Mechanical Engineers, symposium on storage, flow and handling of solids 118
- American Society for Testing Materials, publications 345
- American Welding Society, Welding Handbook, Part 5 (book) 519
- AMF International Ltd., wire and cable symposium 336
- AMF Thermatool Inc., seam welding 1033
- wire and cable symposium 336
- Ammeters, wide-angle panel-mounting 1041
- Ammonia fertilizer plant, Rumania 611
- Ammonium nitrate solution, storage tank 1005
- Amp automatic crimp wiring machine 100
- Amphenol Corp., fluidic control for crimping machine 507
- Amplifier
- Dynamco 718
- encapsulated operational, Ancom 883
- monolithic operational, AEI-Thorn 715
- set-point, KPE 558
- solid-state, Ether 476
- Analogue controller, EEC 188
- Analyser, metal, scaler-type 432
- waste, Monitor I COD 223
- Analysis
- and design of pneumatic systems, by B. W. Anderson (book) 433
- of indeterminate structures, by A. Williams (book) 765
- prediction, by J. R. Wolberg (book) 765
- spectrochemical, excitation unit 70
- structural, by computer (trade publication) 724
- computer programs for, by W. Weaver (book) 807
- Anchor, concrete and masonry fixing kit 928
- Anchoring, rock 770
- Anchoring technique in chalk 826
- Ancom Ltd., encapsulated operational amplifier 883
- AND gate, fluidic, Plessey 1040
- Andek roofing system 755
- Anderson, B. W., pneumatic systems (book) 433
- Anderson, D., man-powered land transport 206
- Anderson, D., & Son Ltd., Andek roofing system 755
- Antrim extruded roof edge trim 755
- Pipeflash pipe flashing collars 755
- Supa-Dalite rooflight 755
- Anderson, R. A., fundamentals of vibrations (book) 765
- Anemometer, constant temperature, DISA 516
- ANGL gear bevel gear units (trade publication) 268
- Anglo-Austrian Trading Co. Ltd., alumino-thermic welding for reinforcing bars 548
- Anglo Swedish Equipment Ltd., loader shovel 719
- Angus, George, & Co. Ltd., seals (trade publication) 268
- Anker Motoren, Ankermatic moped 492
- Ankermatic moped 492
- Annealing, coil (trade publication) 682
- Annealing covers in stainless steel 69
- Annealing furnace, for steel wire and rod 1034
- gas-fired radiant tube 254
- Annealing line for stainless steel strip 794
- Annunciator, set point, Mimic 185
- Anode, M-type, mercury-arc valve 67
- N-type, mercury-arc valve 67
- seawater battery, Magnesium Elektron 634
- Anode structures for mercury-arc valves 67
- Anson-Bassan Plastic Rods Ltd., Delrin acetal resin rods 797
- Ansty noise-research facility 18
- Anthony, M. L., space flight mechanics (book) 305
- Anti-ballistic missile defence system 483
- Anti-corrosion exhibition (Earls Court) 118
- Anti-Corrosive Pipe & Lining Co., fume-handling fans 257
- Antilok system. *See* AP Antilok
- Anti-rust compound for central heating systems

- (trade publication) 392
- Anti-tank weapons 535, 536
- Anti-vibration Veedamper spring units 183
- Antrim extruded roof edge trim 755
- Antrim Princess* ferry 995
- AP Antilok braking system 50
- Apollo 4 unmanned flight tests 695
- Applied Chemicals Ltd., penetrating fluid 111
- Applied Power Industries Inc. (UK) Ltd., hydraulic pumps and cylinders (trade publication) 118
- Applied Research & Engineering Ltd., combined nuclear generating and desalination plants 136
- Applied Research Laboratories Ltd., excitation unit for spectrochemical analysis 70
- fibre optics experimental kit 301
- Quantometer X-ray fluorescence spectrograph 881
- APT Electronic Industries Ltd., solid-state power supply 74
- APT symbolic language and computer program 515
- Aqua range small pumps 257
- Aquitane-Fisons, nylon for rotational moulding 799
- Arax fast acting solder 638
- Arbeitsgemeinschaft Airbus, A-300 passenger aircraft 168
- Arboga Maskiner, Arbomatic 3212 numerically-controlled coordinate drilling machine 515
- Arbomatic 3212 numerically-controlled coordinate drilling machine 515
- Arbresch-Lemm carrier gas equipment for oxygen determination 1043
- Archaeology, industrial, of the Tamar Valley, by F. Booker (book) 267
- Archdale, James, & Co. Ltd., numerical-control drilling of structural steel sections 968
- Archer-International, Archer Machine Tool Register (book) 345
- Ardleigh Laminated Plastics Co. Ltd., glass fibre repairs 792
- Argonne National Laboratory, fuel cell 382
- stainless steel bellows 875
- Argus computer for Q4 Cunard Liner 452
- Argus 500 computer, CONSUL software package 46
- Ariel Pressings Ltd., Yorkometric condensing 707-708
- 'Arklone' cleaning solvent (trade publication) 434
- Arkon Instruments Ltd., instrument cabinet 1045
- Armaments, research and development, RARDE 534
- Armature winding machine, Willy Aumann KG 803
- Armitage, A. L., conference of Women Engineers 45
- Armour piercing discarding sabot (APDS) shot 535
- Arms embargo to South Africa 1024
- Armstrong Pumps Ltd., circulating pumps (trade publication) 434
- Armytage, W. H. G., scientists for industry 531
- Arnfield, R. V., on company mergers (book) 641
- Arnison, J. H., on roadwork technology (book) 1047
- Arnold & Richter KG, television filming system 867
- Arri electronic cam, television filming system utilizing 867
- Arrol, Sir William, & Co. Ltd., Han-co-sine oxygen cutting machine 627
- Artic Fuse Ltd., bar cutting-off machine 1033
- Articulated bed for spinal damage 48
- Articulated SL3000 shovel loader, Chaseside 553
- Articulated vehicles. *See* Motor vehicles
- Arup, Ove, structural engineer today 520
- A/S Frichs, diesel-electric locomotives 26
- A/S Rosenberg Mekaniske Verksted, tanker with super-large bore diesel engine 964
- A/S Tyssefaldene, Tysse 2 hydroelectric power station construction in Norway 743
- Asbestos wall panel, extruded, Ace 892
- ASEA
- load cells for roll force measurement 1039
- M-type anode 67
- meter for laser measurement of cloud-base 46
- No. 6 kiln at Slite cement works 962
- thyristor control for locomotives 177
- traction motors for locomotive 179
- valve developments for transmission lines 66
- Ash handling and extraction system 464
- Ash Metal Products, kettle production 104
- Ashford Study, comment on 854
- Ashmore, Benson, Pease & Co. Ltd., incinerator 223, 830
- Ashpalt drying and mixing plant (trade publication) 478
- Ashpalt plant, transportable (trade publication) 894
- Assembly machines, development of 133
- modular, development of 133
- teachable, GKN Unimate 133
- Assembly mechanisms, modular, Staveley Industries 133
- Assmann Intel System for telephone dictation 1029
- Associated Container Transportation, ship order for Germany 87
- Associated Electrical Industries Ltd.
- appointments 733
- board changes 903
- CirCarC gear tooth form 65
- control and machine group 352, 401
- copper comb microcircuit device 403
- feed heaters (trade publication) 1018
- gear product department 65
- gear production units merged 65
- generator sets for West Thurrock power station 620
- light beams for speech communications 695
- low voltage vacuum contactor 635
- merger with General Electric Co. 525, 567, 778
- microcircuit development 403
- Monobox crane, large-span 463
- motor speed control module 403. *Correction* 447
- position and prospects 441
- profilometer for gear tooth profile 65
- reversing static contactor 403
- semiconductor interests 401
- single-cylinder turbine, Doncaster B power station 731
- thyristor production and development 401-403
- turbine-generators for *Queen Elizabeth II* 498
- vacuum contactor(s), trade publication 642
- vacuum contactor sales 611
- vidicon television camera for airport 862
- X-ray diffraction (trade publication) 154
- zero volt switching 403
- see also* AEI
- Associated Industrial Consultants Ltd., courses 36
- Associated Machines & Tools Ltd., Parker-Majestic surface grinding machine 1010
- Associated Nuclear Services, formation 566
- Associated Semiconductor Manufacturers, micro-circuits 886
- Association of Engineering Distributors, conference 730
- Association of Scientific, Technical and Managerial Staffs, formation from ASSET and AScW 44
- Association of Scientific Workers, amalgamation with ASSET 44
- Association of Supervising Electrical Engineers, Presidential Address, N. F. Marsh 906
- Association of Supervisory Staffs, Executives and Technicians, amalgamation with AScW 44
- Assumption and myth in physical theory, by H. Bondi (book) 935
- Astor Boisselier & Lawrence Ltd., Astrolan 39 with Motorstor corrosion inhibitor 259
- Astropower Laboratory, Feher Cycle turbine 240
- sterilizable battery cell 240
- ATA (Grinding Processes) Ltd., abrasive rolls 184
- Atarolls abrasive rolls 184
- Atkinson, Guy F., Co., Mangla Dam 865
- Atkinson's of Clitheroe Ltd., bagging equipment 28
- transporter for solid fuel 28
- Atlantean double-deck bus 784
- Atlas Copco (Great Britain) Ltd., compressor for cleaning out heat exchanger elements 291
- compressor installation (trade publication) 848
- portable compressors (trade publication) 306
- spring balancers, RIL range 431
- Atlas Preservative Co. Ltd., insulation adhesive 639
- Atmospheric pollution. *See* Pollution; Clean air
- Atomic Energy of Canada Ltd., annual report 130
- power transmission scheme, Nelson River 241
- Atomic Energy Research Establishment, air pollution research 281
- glow-discharge equipment 291
- ultrasonic examination of steel castings 104
- Atomic power. *See* Nuclear power
- Atomic Power Constructions Ltd., combined nuclear generating and desalination plants 136
- Dungeness B nuclear power station 1025
- prestressing wires in concrete pressure vessels 338
- Atomic power station. *See* Nuclear power station
- Atomic reactor. *See* Nuclear reactor
- Atos-Oleodinamica, agreement with English Electric 943
- ATVA range thermostatic water valves 1041
- Auckland bridge, New Zealand, widening of 950
- Auction sales of models, Christie's 234
- Audco Ltd., pneumatic actuators (trade publication) 306
- Auriema Ltd., Rotron 1 in flow meter 927
- Aus-formed steel, machining of 590
- Ausforming process effect on fatigue 627
- Austin Motor Co. Ltd., Austin 250 gas-turbine engine 704
- interest in Stacatruc Ltd. 574
- Austin & Pickersgill Ltd., Condor cutting machine 628
- Austin 3-litre motor car 618
- Austin 250 gas-turbine 705, 706
- Australian power stations, gas-turbines for 206
- Auto Diesels Ltd., Austin 250 gas-turbine 706
- Autoflex Beta Timer traffic signal control device 240
- Automated controls for blending limestone 670
- Automatic chucking machine, hydro-copying 471
- Automatic Coil Winder and Electrical Equipment 456
- Automatic control, paper production with 750
- theory of, by H. Takai (book) 391
- Automatic Equipment Ltd., airless spray unit 298
- Automatic transmission, stepless, DAF 1029
- Automatics, Index E26 and E42 camless 1010
- Automation
- and instrumentation, by L. Dadda and U. Pellegrini (book) 345
- and research associations 372
- baking industry 372
- building materials industry 372
- ceramics industry 372
- furniture manufacturing industry 372
- sand recovery system 966
- smaller industries, W. H. Simmonds 371
- technological problems 371
- social and political implications 1018
- Automation Industries Inc., modular reflectoscope 299
- Automobile Disposal: A National Problem* 35
- Automotive Products Group, ceramic clutch facings 52
- dual clutch 52
- Autonetics & Co., contact sensor 344
- Autopact cleaning system in Stella-Meta water purification trailer 780
- Autoweigh bagging equipment 28
- Avdel Ltd., work-changing unit 382
- Aveley Electric Ltd., resolver/synchro-to-digital converter 556
- Avery dormant platform scale for coiled wire 282
- Avery, W. & T. Ltd., compression testing of containers 708
- mayonnaise and salad-dressing plant 359
- rotor balancing machine 64
- weighing machine for long tubes 547-548
- Aviation Property Consultants Ltd., Foulness airport 734
- Avica Equipment Ltd., appointments 857
- Ávila-Belos, C., waiting-line models (book) 433
- Avions Marcel Dassault, Mirage G aircraft 1029
- Avo International, marketing division 1045
- Avo Ltd
- Model 15 series multimeters 265
- multimeter, development review 456
- universal measuring bridge 458
- valve characteristic meter 458
- Zeva TSM drag-soldering machines 884
- 'Avoid' (Airfield Vehicle Obstacle Indication Device) radar 71
- Avon Rubber Co. Ltd., solid tyres (trade publication) 982
- Avon Wide Turbospeed motor car tyres 654
- Axles, railway, fatigue cracking in, IME 862
- Ayres, E. A., geometrical and mechanical drawing (book) 559
- Aztec Engineering Ltd., automatic valves 599

B

- Babcock International Investments Ltd., formation 945
- Babcock UK Investments Ltd., formation 945
- Babcock & Wilcox Ltd.
- boiler for Nuevo Puerto power station 47
- boilers for West Thurrock power station 620
- Browns Ferry nuclear power station 92
- incorporation of holdings groups 945
- Rocol Type MG grease 463
- welding of membrane-wall panels 967
- Baby, unborn, ultrasonic instrument for monitoring condition of, Sonicaid 490
- Backhoe digger, hydraulic (trade publication) 560
- Backlight drafting table 512
- Badalex Ltd., diversification 1027
- history 1027
- lamp machinery production 1027
- position and prospects 1027

- Badger Co. Inc., appointments 945
 Bagging equipment, Autoweigh 28
 Bailey turnstiles (trade publication) 604
 Bailey, Sir W. H., & Co. Ltd., flow indicators (trade publication) 1048
 Bain, G., white collar unions 993
 Bakelite moulding of cab fronts 292
 Bakelite Xylonite Ltd., appointments 818
 Bexlites plastic rooflights 892
 plastic materials and products (trade publication) 268
 Baker, Sir John, teaching of design 652
 Baking industry, automation in 372
 Balancers, spring, RIL range 431
 Balancing machine, rotor, automatic 64
 Balancing and measuring equipment (trade publication) 190
 Baler, electro-hydraulic, for scrap metal 669, 670
 Balfour Beatty & Co. Ltd., Blackwall Tunnel 248
 Cottam power station 455
 road/rail vehicle 266
 Balfour and Darwins Ltd., crosspoint screwdrivers 152
 Balfour-Schock-Gusmer lauter tun 957
 Baling press, scrap, hydraulic, Eldair 672
 Ball(s), tungsten-carbide, Spheric 30
 Ball bearings. *See* Bearings
 Ball, K. J., space vehicle dynamics (book) 723
 Ballard, D. B., replication technique 284
 Bamford, J. C., Excavators, challenge to Leyland on possession of Aveling Barford 855
 Bamford-Kvernelands semi-mounted plough 52
 Bamfords Ltd., BM Volvo combine harvester 532
 BM Volvo 800 tractor 954
 Band saw. *See* Saw
 Banks, J., procurement and inventory systems (book) 641
 Bar, metric sizes for, B.S. 966
 Bar cutting-off machine, automatic 1033
 Bar machines, automatic, Brown & Ward 471
 Bar straightening machine, Bronx 473
 trade publication 1018
 Baranson, J., technology for undeveloped areas (book) 807
 Barber, J., finance director, AEI 525
 Barclay Curle & Co., marketing agreement with Strk Engineering Works 649
 Bareau, A., IISI conference 905
 Barfords of Belton Ltd., Wacker BS60V rammer 720
 Barge lift, Ronquières Incline 58
 Barlow, G. W., managing director, English Electric Computers 529
 Barlow, H. M., aerial for earth surface radio waves 253
 Barrage, Chasma, Indus River Basin scheme 1001
 Qadirabad, Indus River Basin scheme 999
 Sidhnai, Indus River Basin scheme 1001
 Barrage construction for Indus River Basin scheme 998
 Barron & Shepherd Ltd., turntable 679
 Barrus, E. P. (Concessionaires) Ltd., outboard motors 862
 Barry-Wehmiller Co. Ltd., bottle washing machine 334
 Causti-Clean units 334
 Vortex Pasteuriser 335
 Barrymount isolating machine mountings 183
 Barrywald incinerators 757
 Bartlett-Snow-Pacific Inc., sludge incineration 830
 Baseboard gas convactor heater 358
 Basing Machinery Co., cutting tools (trade publication) 682
 Batchelor, G. K., fluid dynamics (book) 807
 Bateman, E. H., Sir John Cockcroft 569
 Rover 2000: prestige car? 447 *Letter* 491
 Bates, P. E. G., general manager, Plessey Radar 528
 Baths, Leeds Central, aluminium sheeting for 862
 Battelle Memorial Institute, heat-dissipating container for transporting radioisotopes 218
 resinous fillers for coating systems 591
 Battelle-Northurst, high-energy-rate forming 103
 Battery(ies)
 duct-heater, Mercian 760
 for diesel engines, Voltabloc GPX range 837
 for electronics (trade publication) 392
 lead/acid, research 699
 zinc/air 648, 655
 Battery anodes, seawater, Magnesium Elektron 634
 Battery cell, sterilizable, Douglas Aircraft 240
 Battery chargers, traction (trade publication) 808
 Battery electric tractor unit, Wessex 837
 Battery performance, radio sonde to monitor 536
 Battery-powered order pickers 592
 Baugh and Weedon Ltd., non-destructive testing 730
 Bausch and Lomb, fibre optics kit 301
 Bayard Alpert gauge 39
 Bayliss, Jones & Bayliss Ltd., Matisa railway track maintenance equipment 773
 BBRV prestressed concrete system 585, 722
 BCF, fire-extinguishing agent 513
 Beacon, air/sea rescue, SARBE Compact-355 165
 flashing light for 360
 Beakbane, Henry, (Fortox) Ltd., Pera R & D service 876
 Beakley, G. C., engineering (book) 847
 Beam(s), concrete, capstone aggregate 289
 Beamlock system for high speed press 383
 Beardmore R. L., aluminium tenodesis splint, ALCOA award 14
 Bearing(s)
 anti-friction, Tychoway 515
 ball, sealed (trade publication) 36
 joint (trade publication) 604
 journal, pressure-fed hydrodynamic, design chart 832
 loose, on axles, repair of 22
 needle roller, Skefco 599
 plastic locking sealants for 76
 roller (trade publication) 936
 Westwood Hi-Load 585
 slip fitting of, adhesive in 707
 spherical, Glacier 390
 trade publication 392
 white-metal, bond strength of 260
 electro-chemical corrosion 262
 Bearing material, titanium 1038
 Bearley, radio receiving station at 868
 Beck, D., creative element in engineering 46
 Beck Koller Filabond-8000 reinforced resin 407
 Becker Equipment & Lifts Ltd., automation in whisky industry 786
 Bexuda filling machines 211
 Bexuda nozzle for filling whisky casks 786
 scissor lift 680
 Bed, articulated, for spinal damage 48
 Bedford, John, & Sons Ltd., Husky ratchet socket handles 222
 New Britain ratchet socket handles 222
 Bedford motor vehicle factory, increased production 753
 Bedford TK and KM ranges of trucks 784
 Beeching, Lord, 'technologist at the top' 648
 Beer bottling plant, Courage 958
 Beetle, 1500, semi-automatic motor car 658
 Behr, J. B., information division, CIRIA 687
 Belix Co. Ltd., high voltage power supply units 636
 Bell & Howell Ltd., environmental testing of transducers 708
 Bell Telephone Laboratories
 ceramic production by freezing 180
 cobalt alloy for computer memories 639
 highest known superconducting temperature 591
 portable telephone extension 167
 Bellis & Morcom, Futurmill conversion unit for milling machine 752
 insecticides plant for Russia 861
 Bellows expansion joints for pipelines 73
 Bellows unit for bubble chamber 875
 Bell's Asbestos & Engineering Ltd., worm drive clip 517
 Belt conveyor *See* Conveyor
 Belt dressing, aerosol-packed 972
 Bending machine, pipe, Pines 678
 tube, hand-operated, Fairey Engineering 675
 Bending rolls, plate, Bronx 676
 Bendix Brakes, automatic feeder line for centreless grinding machine 180
 Benes, J., statistical dynamics (book) 189
 Benjaminsen, J. M., apparatus for dangerous areas 630
 Benn, A. Wedgwood, Minister of Technology 163
 Westinghouse recruitment from UKAEA staff 823
 Bennet-Clark, T. A., research planning 357
 Bennett, H., Bow Flyover 585
 Harrow Road Flyover 624
 Bennett, P. Allen, Ltd., motor speed controller 634
 power controllers 978
 Bennett Valves, four and five way valves 225
 Berlinetta competition prototype motor car 449
 Berry, Henry, & Co. Ltd., 400-ton press 672
 Berthon Boat Co. Ltd. *James & Catherine Mac-*
farlane life-boat 92
 Bertrams Ltd., Maxalog fluidic units 421
 Beryllium copper, gold inlaid 555
 trade publication 346
 Bevan, J. L., transformer noise 547
 Beves Manufacturing Ltd., timber cycle racing track 366
 Bexlites plastic rooflights 892
 Bexuda filling machines, Becker 211
 Bexuda nozzle for filling whisky casks 786
 Bianca, D., friction & abrasion of elastomers under load 182
 Bibbipol, shredded, for oil removal from water 206
 Bibby, J. & Sons Ltd., polyurethane foam of shredded Bibbipol for oil removal 206
 Bickell, M. B., pressure vessel design (book) 847
 Biclad extensible earth rod 889
 Bicycle, disadvantages of 97 *Letter* 206
 electric, Winn City Bikes 493
 see also International Cycle and Motor Cycle Show; Man-powered land transport machine
 Bicycle racing track 366
 Bicycle ways in cities proposals, E.C. Claxton 780
 Bifurcated & Tubular Rivet Co. Ltd., tubular rivet setting machines 474
 Bigwood, Joshua, & Son Ltd., appointments 945
 interrupted roll forming machine 1007
 Scaflit tube straightening machine 890
 Bigwood Unicalor Ltd., space heaters (trade publication) 936
 Bilby, B. A., design of alloys (book) 559
 Billet heating installations, AEI-Birlec 546
 Bills of quantity and contract programmes, research 274
 Binks-Bullows Ltd., appointments 691
 paint circulation system 591, 629
 spray coating of tablets 22
 Binnie & Partners, Dee Estuary development 199
 Mangla Dam 865
 Bio-engineering research unit, Strathclyde 855
 Bionic Instruments, obstacle detector for blind persons 57
 Biral Regula variable-head circulating pump 599
 Birefringence, phenomenon of 191
 Birfield Ltd., appointments 651
 Birkett, Francis W. & Sons Ltd., Cutmaster-Stone traverse cutting machine 152
 Birlec electric arc melting furnace 567
 Birmingham Battery & Metal Co. Ltd., weighing machine for long tubes 547, 548
 Birmingham Museum of Science and Industry 129
 Bir-Vac Ltd., vacuum evaporation units 1044
 Bison prestressed, precast concrete frame structure (trade publication) 268
 Bistat R logic switching system 557
 Bi-Trinary Electrical Ltd., capacitor boxes 518
 Black Arrow space project 244
 Blackening compounds for steels, Ebonol 148
 Blackett, P.M.S., anniversary of Royal Society 901, 902
 Blackfriars Bridgehead improvement scheme, underpass 172
 Blackman, Keith, Ltd., centrifugal fans (trade publication) 936
 Blackwall tunnel, ground treatment and construction 248
 Blades, compressor, diffusion bonding process 23
 machining of 186
 Blanik L-13 sailplane 626
 Blanking press, Grimar 508 *Correction* 708
 Blast-cleaning, monorail 422
 Blast furnace raw materials, screening 77, 78
 Blast furnace slag, combustion chamber for 923
 Blasting, quarry and mine, explosive for 972
 Bleaching range, Vaporloc 380
 Blind deaf mutes, telephones for 950
 Blind persons
 electronic aids for 55
 tactile simulator obstacle detector 57
 ultrasonic aid for 55
 binaural 57
 Bliss, E.W., Co., repeat cycle timer 517
 Block Compressors Ltd., diesel compressor 763
 Bloctube Controls Ltd., fluorescent inspection lamp 802
 positional controls (trade publication) 766
 Blood separation, Lehigh University 824
 Blooms, marking machines 224
 Blower, air, for bulk transport vehicles, 517
 Blue Funnel Line Ltd., automated cargo liners 909
 Blue M Electric Co., environmental test chambers 717
 Blyth, F.G.H., geology (book) 641

- BM Control Valves Ltd., fire valve 341
 BMAG, pipe-making plant 976
 BMW-2000 TI motor car, description of. *Letters* 242, 283, 361, 407
 Board, Surlyn A coatings on 799
 Board of Trade, Abridgements of British Patent Specifications 35
 British displays overseas fairs and exhibitions 43
 Boats, patrol, Royal Malaysian Navy 10
 Boeing Co., awards system from NASA 863
 Mini-orbiter for Mars and Venus explorations 1028
 Boeing 737 jet transport aircraft, flap system for high lift 707
 Boeing 747 aircraft, design and development 168
 Bogie(s), fatigue life of 800
 railway, rubber and air suspension 137
 see also Truck
 Bogie trailer, Dyson 836
 Bohler air tools 283
 Boiler(s)
 for Nuevo Puerto power station 47
 for West Thurrock power station 620
 for wood waste 1034
 gas, servicing of 239
 oil-fired, Europa 760
 Minimiser 601
 Potterton Eden-601 831
 packaged, automatic (trade publication) 936
 steam and hot-water, Powermax 116
 steam-heating, Vapor 26
 Stone-Vapor, for roof installation 592
 Stone-Vapor 6145 horizontal coil 923
 water-tube, Foster Wheeler type ESD II 405
 welding of Membrane-wall panels 967
 Boldrini spinning machine 678
 Boldt, J. R., winning of nickel (book) 267
 Boliden AB, Tysse 2 power station 743
 Bond Ranger motor van 493
 Bond strength of white-metal bearings 260
 Bond testing instrument, Fokker 797
 Bonder, compression, Hughes 884
 Bondi, H., assumption and myth 935
 director, ESRO 159
 Bonding process, diffusion, for compressor blades 23
 Book(s), technical, in print 1967 (book) 935
 Book vocabularies, computer analysis of 240
 Booker, F., archaeology of Tamar Valley (book) 267
 Boolean algebra, fundamental, by J. Kuntzmann (book) 1017
 Boonton Molding Co., diamond cutting and finishing tool for styrene spools 337
 Boosters, compressors and (trade publication) 80
 Booth, James, Aluminium Ltd., high-strength aluminium alloy (trade publication) 434
 sale of forging facilities 989
 Booth, K., women engineers and scientists 45
 Booth, L. G., structural use of timber (book) 641
 Boots Pure Drug Co., Ltd., computer control of warehouse 61
 Borehole(s), submersible pumps for 927
 Borehole tests in rock 767
 Borg and Beck, ceramic clutch facings 52
 dual clutch 52
 Borg-Warner adjustable-frequency drive 513
 Cycpac 155 cold-formable ABS 638
 gearbox for Mercedes-Benz marine engine 166
 Boring machine, horizontal, Optimetric S 471
 wood, deep-hole 1009
 Boring and milling machine, Herbert/De Vlieg Jigmill 470
 horizontal 471
 Boring and recessing machine, overhead, Wadkin 515
 Boring, drilling and milling machine, Hybormill 470
 NumeriCenter 470
 Boscombe Precision Engineering Ltd., warm-air heater 601
 Bostrom Manufacturing Co., Ltd., ambulance suspension 446
 Viking 4000 suspension seat 1016
 Bosworth, G. S., scientists for industry 531
 Bosworth, K. F., paint and dirty trains 95
 Bothwell, M. R., on corrosion of light metals (book) 519
 Bottle washing machine, high-speed 334
 Bottling plant, beer, Courage 958
 Bow Bridge Flyover, construction 584, 627, 722
 Bowater Organisation, insulated ducting 931
 Bowden, F. P., on friction and lubrication (book) 267
 Bowl feeder stands, vibratory 764
 Bowler and Sidney Ltd., variable reactor 343
 Boxes, capacitor, Bi-Trinary 518
 BP Chemical Group, TraNstor container 205
 BP Chemicals (UK) Ltd, encapsulation of photo-cell 793
 plasticisers for pvc (trade publication) 642
 Brain drain 198, 614. *Letter* 7
 Brain-gain survey 947
 Braithwaite & Co. Structural Ltd., pressed steel tanks (trade publication) 190
 Braithwaite, J. B., vehicle body building (book) 305
 Brake
 air, for railway coaches 539
 and couplings, electromagnetic clutches 102
 disc, for electric locomotive 179
 powder, eddy-current and magnetic 427
 Braking of road vehicles, by T. P. Newcomb and R. T. Spurr (book) 847
 Braking system for articulated vehicles 50
 Brasserie Artois, bottle washing machine 334
 Bray, J., British Scientific Achievements Exhibition (Warsaw) 566
 Brazing, vacuum, and heat treatment 252
 Brazing furnace with quick cooling system 146
 BRC Engineering Co., Ltd., indented structural fabric 518
 Breakdown. *See* Accident
 Breaking, hydraulic, and tamping machine 102
 Breakwater at Port Talbot 900
 Breeza Toi-Vent louvred ventilating unit (trade publication) 936
 Breguet Aviation, Jaguar supersonic aircraft 994
 Brennan, J. F., on elegant solution (book) 935
 Brewin, G. M., fluid logic circuitry 272
 Bribond Signs Ltd., (trade publication) 560
 Bridge(s)
 Alvsborg, neoprene sealing 833
 Auckland, New Zealand, widening 950
 Calder 320
 footbridge, steel, designs. *Letter* 242
 Huvudsta, balanced cantilever 359
 London 131, 730
 prestressed concrete, for M4 motorway 696
 road, expansion joints (trade publication) 36
 Smithfield Street, Pittsburgh, rejuvenation of 445
 suspension, Delaware Memorial 901
 Yarra, model tests on 790
 see also Culvert
 Bridgeport Machine Inc., licensing agreement with Adcock-Shiplely 443
 Line-a-mill milling machine 444, 471
 Synchro-trace automatic duplicating machine 444
 Bridges, David, Ltd., extrusion press 989
 Brighton Law Courts 827
 Brightside Engineering (Stamco) Ltd., steel strip processing equipment for Iran 1025
 Briquettes, strapping machine for, Union Carbide 462
 Brisch, E. G., and Partners Ltd., group technology seminar 629
 Bristol Siddeley, Ansty noise-research facility 18
 Black Arrow space project 245
 production control by closed circuit television 63
 turbofans for AFVG aircraft 1
 V/STOL transport aircraft 695
 Britain's railways in World War I, by J. A. B. Hamilton (book) 765
 British Aircraft Corp
 Anglo-French Variable Geometry aircraft 1
 appointments 569
 BAC 167 trainer/ground attack aircraft 825
 brazing furnace with quick cooling 146
 frictional heating of fuel in Concorde supersonic airliner 292
 Jaguar supersonic aircraft 994
 Jet Provost T. Mk-5 825
 Loctite adhesive in fitting of bearings 707
 merger with Hawker Siddeley 988
 One-Eleven 500 airliner 5
 2-11 aircraft project 313
 2-11 airliner not required for BEA 987
 variable geometry aircraft design 581
 see also Concorde supersonic airliner
 British Aluminium Co. Ltd.
 aluminium decorative sheet (trade publication) 982
 appointments 818
 new factory for ERW steel tube 487
 Rigidal aluminium sheeting 862
 Tysse 2 hydroelectric power station 743
 British Association
 annual meeting at Leeds 311
 automation in smaller industries, by W. H. Simmonds 371
 cooperation in industrial research, by R. Weck 317
 cost of wear in industry, by W. Hirst 375
 fact and supersition in design, by A. A. Wells 367
 flashing light for beacons and buoys, D. and T. Stevenson 360
 next thirty years in engineering, by M. W. Thring 327
 planning and financing of research 356
 Presidential Address by Lord Jackson 315
 Presidential Address to Engineering Section, by R. Weck, 317
 science and technology in education and research 315
 British Association for Commercial and Industrial Education
 course on training for the office 80
 techniques of instruction 306
 television in training, seminar 228
 visual aids, seminar 228
 British Berkefeld Filters Ltd., hollow Sterasyl candles 617
 British Broadcasting Corp.
 appointments 903
 colour television service 8, 863
 engineering division appointments 529
 television programme on engineering 125, 154
 British Brown-Boveri Ltd., punched tape program controller 674
 Thysert module system for thyristor converter 840
 British Calibration Service 160. *Correction* 276
 British Cast Iron Research Association, CO₂ sodium silicate foundry process 1006
 British Computer Society, Business decision '67 228
 computer courses (1967) 190
 British Council, scientific research in British Universities and Colleges, Vol. 1 (book) 153
 British craftsmanship, exhibition on 936
 British Crane and Excavator Corp., Coles Colossus lorry-mounted crane 878
 Coles Hydra 6 ton mobile jib crane 552
 Coles Hydra 12 ton crawler crane 552
 Neal Pelican loader 264
 British Domestic Appliances, servicing of domestic equipment 239
 British Electrical and Allied Manufacturers' Association, domestic appliance sales 2
 industrial electronics sections 854
 steam condensing plant (trade publication) 268
 British engineering exhibition (Copenhagen) 560
 British engineering week (Prague) 154
 British Ermeto Corp. Ltd., proportioning valve 111
 British European Airways, A-300 passenger aircraft 168
 Trident IIIB airliner for 987
 British Fractional Horsepower Electric Motor Manufacturers' Association 125
 British Hard Metal Association, classifying of hard metals 292
 British Hovercraft Corp. contract for SR-N6 and BH7 hovercraft 532
 SR.N4 hovercraft, design and construction 697
 British Hydromechanics Research Association, mechanical cockle dredge 243
 British Independent Steel Producers Association, 125, 689
 British Institute of Management
 appointments 1026
 conference on management in 70s 936
 decimal currency 346
 Duke of Edinburgh as Hon. President 1026
 executive success in manager's new world 154
 management ratios and interfirm comparison 190
 market research on small budget, seminar 228
 quicker reading courses 154
 British Insulated Callender's Cables Ltd
 appointments 691, 991
 Biclad extensible earth rod 889
 combined refuse and sewage disposal 924
 400 kV cable for CEGB 990
 Pod range of television relay cables 716
 road heating cable for Bow Bridge 627
 tension insulator 802
 British Insulated Callender Construction Co. Ltd., cables for Bournemouth-Waterloo railway electrification 17
 Didcot power station 650
 electrification of Lea Valley line 944
 wind recording instruments on television mast 489

- British Iron and Steel Federation, take over by British Steel Corp. 689
- British Iron and Steel Research Association conference on low-alloy steels 306
- Corrosion Prevention Booklets 117
- degradation of raw materials 77
- electro-slag refining technology (ESRT) 547
- screening of blast furnace materials 77, 78
- British Jeffrey-Diamond Ltd., motor grader 552
- British Lighting Council, lighting for industry campaign 131
- British Lighting Industries Ltd., corrosion resistant fluorescent lamp 802
- British Marine Equipment Council, Norwegian market 275
- British Mechanical Engineering Federation, Mechanical Engineering Directory and Buyers Guide 1967-1968 (book) 433
- officers for 1967/68 651
- British Motor Corp. Ltd.
- 3/45 tractor 52
- 4/65 tractor 52
- 250 JU light commercial carrier 784
- Austin 3-litre motor car 618, 656
- exhibits at Motor Show 656
- industrial relations 85
- job analysis 85
- MGC sports motor car 618
- MGC/GT sports motor car 618
- modifications to range of motor cars 618
- Stage 1 tuned engines for Mini 1100, 1300 and 1800 motor cars 919
- British Motor Holdings, exports 989
- British Oxygen Co. Ltd.
- Condor computer-controlled cutting machine 628
- cryogenic plant 527, 677
- natural gas services (trade publication) 154
- oxygen plant for Portugal 568
- thermic boring process to remove shipping hazard 668
- Tysse 2 hydroelectric power station 743
- British Petroleum Co. Ltd., film on hydraulic fluids 591
- natural gas from North sea 738
- British Rail Hovercraft Ltd., HM2 hovercraft 92
- British Railways
- accidents on 737, 781 *Letter* 817
- Antrim Princess ferry 995
- automatic track lining and consolidating machines 205
- Cazar K grease for switch blades 146
- container handling cranes 669
- contract for bulk transport of oil 1025
- Dart gas turbine for locomotive propulsion 129
- Derby carriage and wagon works 538
- diesel-electric locomotives, D400 class Type 4 874
- dismissal of G.F.G. T-W-Fiennes 526
- Duomatic 06-32 levelling and tamping machines 205
- electric locomotive overhaul at Crewe Locomotive Works 364
- electric trains, painting and cleaning *Letter* 95
- electrification of Bournemouth-Waterloo service 15
- electrification of Euston main line (book) 345
- electrification of Lea Valley line 944
- electro-diesel locomotives Type JB 418
- joint working party recommendations 729
- merry-go-round trains 1030
- new main-line coaches 445
- 0-6-2T locomotive for National Museum of Wales 167
- Paddington Station improvement scheme 586
- passenger coaches Mk IIA 538
- Proler plant for transmutation 47
- rail contract for Fisons 567
- Railways in Isle of Wight, by P. C. Allen and A. B. MacLeod (book) 79
- remote control of signalling system 592
- simulators for training of drivers 746
- St. Pancras railway station closure proposal 484
- British Road Services Ltd., inflatable warehouse 527
- British Ropes Ltd., Avery dormant platform scale for weighing coiled wire 282
- mooring ropes (trade publication) 118
- safety nets 263
- British Ropeway Engineering Co. Ltd., tower crane 552
- British Scientific Instrument Research Association, Datan Classifier for production line quality control 342
- optical performance standards 832
- British Ship Research Association, bond-strength of white-metal bearings 260
- electro-chemical corrosion of white-metal bearings 262
- British Standards Institution
- electroplating of threaded components 145
- flash welding of pipes and tubes 792
- lining of vessels for chemical processes 592
- metric sizes for bar 966
- photometric data surveillance 548
- rubbers identification 546
- spiral braid wire reinforced hose 967
- British Steel Casting Research Association, moulding materials (book) 893
- non-destructive testing of steel castings (booklets) 669
- ultrasonic testing of steel castings 104
- British Steel Corp., 161, 689
- appointment of A. Silberston 234
- group board appointments 528
- Midland Group board 991
- nationalized steel body 124
- organization and activities 202
- British Steel Piling Co. Ltd., tunnelling machines 876
- British Thornton Ltd.
- drawing office equipment 692
- Lansin tin-nickel electroplating process 692
- pencil spring compass with nylon bushes 692
- slide rules and instruments 692
- student's drafting kit 407
- Versatility drawing instruments case 693
- British Trailer Co. Ltd., trailer-mounted mobile stress-relieving furnace 967
- British Week (Stockholm) 982
- British Welding Research Association, CO₂ laser 292
- exhibition of welding technology 181
- fatigue life of bogies 800
- Weldability of Steel* (publication) 792
- Britten-Norman, Islander aircraft exports 1025
- Brittite rolled-strip spacers 597
- Brittle fracture, in drilling rig *Sea Gem* 688.
- Letter* 817
- in steel 368
- Brno International Trade Fair 488
- Broaching machine, BSA-Detroit 474
- Weatherley Cincinnati 186
- Broadcasting Convention, International, (London) 554
- Brocker, H., women engineers and scientists 45
- Brockhouse Organization, appointments 612
- Bromage, K., copper in cast iron 112
- Bromco fire alarm (trade publication) 306
- Bronx Engineering Co. Ltd., bar straightening machine 473
- trade publication 1018
- plate bending rolls 676
- tube-straightening machines 843
- Bronze irregular sections, continuous casting of 799
- Brookdeal Electronics, phase shifter 555
- Brooke Marine Ltd., *Seal* recovery and support vessel 210
- Brooke Tool Automation Ltd., unit heads 474
- Brooker, B., Lispro shin guard 618
- Brookes (Oldbury) Ltd., new factory for steel tube 487
- tube-cutting machine 474
- Brookhirst Igranic, logic switching system 557
- Brooks Instrument Ltd., electromagnetic flowhead (trade publication) 1048
- Brooks Instrument NV, level measurement (trade publication) 190
- Broom & Wade, drilling and tapping machine for starter-motor casing 923
- Brosan, G. S., CEI examinations 89
- Brown Boveri Ltd., Browns Ferry nuclear power station 92
- 1,300 MW generator 5
- Thysert module system 840
- Brown Brothers & Co. Ltd., appointments 691
- container ship stabilization (trade publication) 346
- Brown, C., on guide to materials (book) 893
- Brown, David, 780 Selectamatic tractor 954
- Brown, E. A., electric cars 48
- Brown, J. F. C., corrosion of white-metal bearings 262
- Brown, John, & Co. (Clydebank) Ltd., annual report 162
- automated cargo liners 909
- Queen Elizabeth II* liner 494
- Brown, John, Engineering (Clydebank) Ltd., appointments 818
- Newsletter* 1047
- Queen Elizabeth II* liner 497, 855
- Brown, R., rotating magnet-machine for shot-blasting 902
- Brown, S. G., Ltd., Checkweight weighing unit for commercial vehicles 6
- Brown & Ward (Tools) Ltd., bar machines 471
- Browns Ferry nuclear power station 92
- Broyt X2 excavator 720
- Bruce, James, & Son (England) Ltd., vibrating unit for reclaiming copper wire 63
- Bruce Peebles Ltd., transformer for Dounreay fast reactor 949
- Brüel and Kjer, noise tests on gas fires 960
- Brundrett, Sir Frederick, natural resources from sea 243
- Brush Electrical Engineering Co. Ltd., agreement with Pierce Fuses Ltd. 944
- Brush Type 4 diesel-electric locomotive 824
- Bryans Ltd., chart recorder 516
- curve following instrument 299
- BSA-Churchill Machine Tools Ltd. *See* Churchill Machine Tool Co. Ltd.
- BSA Co. Ltd., exhibits at International Cycle Show 492
- film on moulding, casting and sintering 793
- BSA Foundries Ltd., zircon sand recovery 966
- BSA Metal Components Division, advisory service 731
- BSA Precision Castings Ltd., investment casting of swirl-vane component 382
- BSA Tools Ltd., BSA-Detroit broaching machine 474
- CL2 copy lathe 471
- BSP-Calweld Ltd., roadway hole cutting 892
- tunnelling machines 876
- Bubble chamber, bellows unit for 875
- Buchanan, N., Derwent Dam 144
- Buck & Hickman Ltd., digital follower 152
- Bucket elevator system for core making plant 923
- Bucket loading system for motor vehicles 837
- Building
- aluminium in (trade publication) 560
- environmental experiments in 699
- industrialized, and structural engineer (book) 189
- Camus system of 49, 383
- flexibility 321
- precast concrete panels for 319
- Siporex system 533
- trade publication 154
- precast (trade publication) 306
- tall, by A. Coull and B. Stafford Smith (book) 153
- thermal environment in, symposium 982
- See also* Concrete
- Building blocks, high-strength concrete 506
- Building components, exhibition of 757
- Building constructions, industrialized, Camus, lift installation 383
- Building design and construction, plastics in, courses on 36
- Building Design Partnership, full-size five-level steel structure 757
- Building & Engineering Appliances Ltd., shot blasting 591
- Building exhibition, international (Olympia) 755
- South African (Johannesburg) 982
- Building Industry, Economic Development Committee for 486
- Building maintenance, profitable, conference on 346
- Building materials industry, automation in 372
- Building materials testing services (trade publication) 894
- Building panels (trade publication) 118
- Building Research Station
- change of 'ownership' 196
- concrete corner units 94
- electricity distribution system for building sites 387
- research programme 196
- Building sites, electricity distribution system for, AEI 387
- Bulk storage (trade publication) 682
- Bull, J. P., industrial accident trends 696
- Bullfinch Gas Equipment Ltd., heaters for point-work 587
- Bulpitt & Sons Ltd., guard for high-speed press 383
- Bump cap protective helmet 446. *Letter* 613
- Bumpcutter concrete levellers 223
- Bumpers, energy absorbent, for motor cars 217
- Bunce, William, & Son, snow cutters 94
- Buoys, flashing light for 360

- Bureau of Standards. *See* United States National
- Burglar alarm, radar method, RRE 740
ultrasonic, Modern-phone 635
- Burgmaster Ltd., indexing drilling machine 842
- Burkett, J., electrical engineering (book) 227
- Burls, J., industrial diamonds (book) 267
- Burmeister & Wain, 'super-large' bore diesel engine 964
- Burn protection in high temperature insulation 812
- Burnard & Son Ltd., tractor-mounted floodlight 889
- Burndept Electronics, air/sea rescue beacon 165
probes for proximity switches 111
- Burner(s), pressure-jet, Selectos 831
Todd AO sonic 150
- Burner controls, oil, Danfoss 932
- Burnet, Sir John, Tait & Partners, Petavel building, NPL 910
- Burnley Engineering Products Ltd., annealing furnace 1034
- Bus, Bussing 451
double-deck, Atlantean 784
Mercedes-Benz 451
- Busbars, water-cooled, Eggborough power station 653
- Bush(es), unlubricated, small sizes, Glacier 972
- Bush Beach & Segner Bayley Ltd., Decatox flue gas cleaning system 932
- Bush mountings, plastic locking sealants 76
- Bushings, Nylatron, for electric locomotive 179
- Business decision '67 228
- Business equipment exports 773
- Business Week* index 124, 197, 276, 354, 528, 688, 854
- Bussing, prototype city bus 451
- BUT Electrical Co. Ltd., drilling and tapping machine for starter-motor casing 923
- Butec electrical equipment, Leyland 689
- Butler, A. A. W., Calder Bridge 320
- Butler, C. C., research planning 357
- Butler Machine Co. Ltd., Microptic scale reader 506
openside planing machine 473
planing and milling machine 151
precision toolroom slotting machine 473
- Butterfield, W. P. (Engineers) Ltd., liquefied gases (trade publication) 982
- Buttering of pre-forged slab for welding 296
- Button tool, Speedicut-FN 845
- Butyl Products Ltd., bottle tank for water storage 666
- Buxton flameproof immersion heater 978
- BXL Plastics Materials Group, moulding of cab fronts 292
-
- C**
- Cab fronts, Bakelite moulding of 292
- Cabin(s), site and transit, range of 890
- Cabinet, instrument, weatherproof, Arkon 1045
projection, PCD 152
transparent storage (trade publication) 190
- Cable(s)
and flexible cords for lighting (trade publication) 80
electrical, computer programs for sizing 1005
mineral insulated, stub-type end seal for 802
oil-filled, repair operations, AEI 654
polyimide insulation for 978
ptfe insulated wire and (trade publication) 346
road heating, for Bow Bridge flyover 627
telephone, for Mediterranean and Baltic Sea 320
television relay, Pod range of 716
see also Power transmission; Wire and cable symposium; Wire rope
- Cable racking, wire mesh platform to replace, in telecommunications repeater stations 181
- Cable sheath, welding of 336
- Cable tap and spacer, Thomas and Betts 802
- Cableways, Switzerland, by C. J. Allen (book) 267
- Cadbury Brothers, microwave heating of cakes 824-825
- Cadmium Nickel Batteries Ltd., batteries for diesel engines 837
- Caird, Francis, Ltd., inline entrainment separators 763
- Caird and Rayner Ltd., evaporating plant 221
- Cairns, E. J., mathematics (book) 641
- Cairns, J. H., non-ferrous metals (book) 79
- Cake(s), preservation, microwave heating for 824-825
- Cake discharge, Chemical Equipment Engineering 1034
- Calcium silicate insulation slabs 973
- Calder Bridge, collapse of 320
design and construction 320
- Calder, J. M., managing director, Chemical Construction (GB) Ltd. 529
- Calibration methods for low pressure gauges 40
- Calibration service 160. *Correction* 276
for furnace temperature equipment 1034
- Caliper gauge, Scemama 298
- Calor Gas Co., fume elimination in road repairs 507
- Calorific equipment, R. von Linde 990
- Cam timers, adjustable, Crater Controls 426
- Cambell and McGill, helicopter hangar 283
- Cambridge Industrial Instruments Ltd., dial indicator 557
- Cambridge University, teaching of design 652
- Cambridge University Engineers' Association 652
- Cameron, A., visual evaluation of lubricant 752
- Campbell, Gifford and Morton Ltd., electrodes factory 861
- Campbell-Gray Ltd., plant hire (trade publication) 682
- Campbell, J., value engineering in shipbuilding 754
- Campbell, Malcolm, (Plastics) Ltd., safety notices (trade publication) 118
- Campbell Tile Co. Ltd., spray-drying plant repairs 975
- Camrex Ltd., fluorescent paint (trade publication) 808
- Camus system of industrialised building 49
lift installation 383
- Can(s), press for flattening, Maxam 1005-1006
- Canadian Industries Ltd., effluent treatment 870
- Canadian Institute of Mining Metallurgy, sliding friction and abrasion of elastomers, D. Bianca 182
- Canadian Pacific, appointments 1026
- Canal, Charleroi-Brussels, Ronquières Incline 58
Indus River Basin scheme 1001
- Canning, W. and Co. Ltd., barrel plating unit 674
Harperizer deburring machine 336
- Cannon, L., worker participation in management 815
- Capacitance as measure of moisture content 230
- Capacitor(s), Dubilier paper flaw detector for 185
tantalum 715
- Capacitor boxes, Bi-Trinary 518
- Capacitor ignition system, Lucas 493
- Capco-Hamco DS1A cutting machine 512
- Cape Insulation Ltd., appointments 733
Rocksil rockwool insulation products 498
- Caplin Engineering Co. Ltd., cutting machine 512
- Capper-Neill Ltd., nuclear generating and desalination plants 136
- Capper-Neill Plastics Ltd., fume-handling fans 257
- Capstone aggregate concrete beams 289
- Car, motor. *See* Motor car
- Carbon-dioxide circulators, Howden 902
- Carbon dioxide sodium silicate foundry process 1006
- Carburisation, definition of 849
Engineering Outline 849
- Carburettor(s)
basic principle 849
compound 851
Engineering Outline 849
fixed choke 849
spill-over height 849
variable choke 851
- Cardiff Royal Infirmary, kidney machine 654
- Careers encyclopaedia by P. J. Edmonds (book) 893
- Careers information survey 565
- Cargo distribution system, Atlanta terminal 1029
- Cargo liners, automated 909
Glenfinlas 909
Radnorshire 909
- Cargo ship. *See* Ship
- Carlton (Thermo Equipment) Ltd., differential pressure regulators (trade publication) 766
- Carlyle Air Conditioning Co. Ltd., appointments 1026
computer environment control 752
- Carmody Drilling and Well Control Trainer 6
- Carobronze Ltd., copper-zinc alloy 973
- Caro-Buhler copper-zinc alloy 973
- Carriage, railway, Mk IIA 538
new main-line 445
- Carrier frequency system, multi-channel 715
- Carrier tubes for underground conductors 617
- Carruthers and Co. Ltd., Monobox crane 463
- Carson Bros. (Productions) Ltd., office furniture (trade publication) 392
- Carter A., electric motor car 948
- Carter, C. F., research planning 356
- Carter Coaster electric motor car 948
- Carter Engineering Ltd. electric motor car 948
- Carter, G. W., on electromagnetic field (book) 847
- Carter Thermal Engineering Ltd., Gyra-Flo impeller 932
- Carton elevator for Boots' bulk section warehouse 61
- Cartwright, W. F., British Steel Corp. 202
- IISI conference 905
- Carves, Simon Ltd., generating sets at West Burton power station 700
- Cases, equipment, Implan 885
- Cast iron
copper in, advantages of 112
K. Bromage 112
conference on, CDA 112
research in, B. B. Moreton 112
trade publication 642
need for improved, J. G. Pearce 112
- Casting, continuous (book) 117
of bronze irregular sections 799
extended launder process 966
high alloy (trade publication) 80
investment. *See* Investment casting
iron, Terrapoint 220 core dressing for 972
malleable, annealing furnace for 254
trade publication 154
porosity of, testing machine, Maxam 590
steel, non-destructive testing (booklets) 669
ultrasonic testing of, BSCRA 104
titanium 1038
- Casting alloy, aluminium, X149, Alcoa 639
- Casting machine, continuous, type S 929
- Casting riser sleeves, Fabrex-10 799
Kalmin-44 799
- Casting techniques, film on, BSA 793
- Castings Ltd, malleable castings (trade publication) 154
- Castle County Secondary School 319
- Castle Donnington power station, blade erosion 805
- Castor ball unit, Alwayse 599
- Castrol Industrial Ltd., cleaning of lubrication system in papermaking machine 877
Deusol CR. 40 lubricating oil 877
Solvex ICE.116 solvent cleaner 877
- Catchpole Engineering Co., universal vegetable harvester 331
vegetable harvester 52
- Catherwood, F., small firms 486
- Cathode ray tube, digital displays 481
for test instruments, Mullard 150
rear port, Ferranti 885
- CAV Ltd., diesel engine noise research 872
- Cavitation, noise of. *Letter* 732
- Cazar K grease for sliding switch blades 146
- Ceiling system, suspended, Whitehouse 756
- Cell, fuel. *See* Fuel cell
miniature standard, Muirhead 885
- Cell 4 aircraft engine test facility, NGTE 46
- Cement, solvent, for underground ducts 779
see also Concrete
- Cement and Concrete Association, model tests on Yarra Bridge 790
prestressed concrete bridge designs for M4 motorway 696
residential training centre at Fulmer Grange 4
- Cement kiln control, Slite works 962
- Cement works, Slite, kiln control 962
- Cementation Co. Ltd., anchoring in chalk 826
Blackwall Tunnel 248
Tyne Tunnel 541
Vibroflotation technique for barrage project 1001
- Cementation Construction Ltd., Blackfriars Bridge-head underpass 172
Harrow Road Flyover 623
- Cementation (Muffelite) Ltd., Barrymount isolating machine mountings 183
- Cemented carbide, R1 Premium 672
- Centipede for carrying heavy loads 330
- Centi-Spray, contract at Moscovitch motor car plant 990
- Central Electricity Generating Board
annual report 527
appointments 775
cascade voltage transformer 671
creep measurement in transmission lines 105
education and training activities 906
engineering and scientific staff organization 906
generating sets at West Burton power stations 700
low frequency relay 634

- nuclear power station on Teesside 577
power station programme 576
see also Power station; Nuclear power station
- Central Electricity Research Laboratories. creep measurement in transmission lines 105
electric motor cars 699
lead/acid battery research 699
wind recording on television mast 489
- Central Fire Liaison Panel 162
- Central Lanarkshire Industrialized Consortium 49
- Centres, revolving (trade publication) 682
- Centrifugal pump. *See* Pump
- Centromat aligning clamp for welding 845
- Ceramic clutch facings, Borg and Beck 52
- Ceramic production by freezing, Bell Telephone 180
- Ceramics, pulverizing mills for reclamation 103
- Ceramics industry, automation in 372
- Ceretti, J., critical path planning (book) 35
- Cerrobend low-melting point alloy 462
- Chadderton power station, blade erosion 805
- Chaddock, D., inaugural lecture at Loughborough University 909
- Chain, rollerless hollow pin, King 598
- Chainveyor overhead conveyor 1015
- Chalk, anchoring technique in 826
- Chalmers, G. F., photoelasticity 194
- Chalmers tensile test 260
- Chamberlain and Hookham Ltd., defrost timer 760
- Chamberlain Industries Ltd., hydraulic rams 31
tunnelling machines 876
- Chambers, M. L., design of experiments 84
- Chambers, Sir Paul, ICI production strategy 582
- Champion, A. W., Ltd., cycle racing track 366
- Channel Airways, Trident 1E/140 airliner 567
- Channel electron multiplier, Mullard 71
- Channel Tool Distributors Ltd., handsaw (trade publication) 848
- Channel Tunnel, by A. S. Travis (book) 117
progress of 816
- Chapleur, A., welding galvanized sheet 108
- Charlerio-Brussels Canal, Ronquières Incline 58
- Charlesford Engineering Co. Ltd., variable length conveyor 1015
- Charrold, Ltd., coal containers 27
- Chart recorder, Bryans 516
- Chartered engineer. *Letters* 242, 856, 944, 990
- Chaseside Engineering Co. Ltd., shovel loaders 28, 553
- Chasma Barrage, Indus River Basin scheme 1001
- Chaurand, R., walking-beam furnaces 633
- Checkland, S. G., on Mines of Tharsis (book) 681
- Cheltenham Induction Heating Ltd., galvanizing of tube 1006
- Chemical(s), industrial (trade publication) 642
- Chemical and Allied Products Industry Training Board 527
- Chemical analysis. *See* Analysis
- Chemical Construction Corp., contact sulphuric acid processes (trade publication) 520
- Chemical dipping, pneumatic system for 1033
- Chemical engineering conference (Montreal) 118, 724
- Chemical Equipment Engineering Ltd., cake discharge 1034
- Chemical plant, computer design of 907
- Chemical and process engineering: bibliographical guide 765
- Chemical processing corrosion chart 1034
- Chemical reaction method for moisture content 232
- Chemical Society, natural products, symposium 560
- Chemistry of natural products, symposium 560
- Chemokomplex vulcanizing press 70
- Chevrolet Corvette motor car 580
- Chicago Bureau of Sanitation, refuse collection survey 242, *Letter* 407
- Chieftain tanks production techniques 246
- Chipperfield, P. N. J., effluent treatment 870
- Chloride Group, contract with Polish industry 527
- Chloride-Tudor Batteries, formation 1024
- Chorlton, F., fluid dynamics (book) 1047
- Chorofas, D. N., product planning (book) 35
- Chou, P. C., elasticity (book) 345
- Christensen diamond-impregnated saw blade 1006
- Christiani and Nielsen, Schelde tunnel 503, 504
- Christie's, auction sales of models 234
- Christopherson, D. G., engineer in university (book) 227
- Christy, R. K., industrial injuries 277
- Chromatography, exhaust-gas tar analysis by 875
- Chromatography controller, Pye 882
- Chromatron colour television tube 48
- Chronicles of steam, by E. S. Cox (book) 935
- Chrysler Dodge Charger motor car 579
- Chubb, B. A., instrument servo-mechanisms (book) 35
- Chucking machine, automatic, hydro-copying 471
- Churchill, Charles, Group, gear cutting machine 472
- Churchill, Charles H. Ltd., broaching machines 186
- Churchill Machine Tool Co. Ltd., grinding machines for roller and ball races 473
original name resumed 117
- Ciba (ARL) Ltd., bond testing instrument 797
Fokker honeycomb milling machine 844
Silcopac 120 potting compound 225
- CIGRE, conference on high-tension electric systems (Paris) 982
- Cilchem 193 silicone oils 639
- Cincinnati-Chomienne, Toolmaster milling machine 472
- Cincinnati N-C Cintimatic machining centre 567
tool and cutter grinder 843
Weatherley, Cincinnati broaching machine 186
- Cincinnati Milling Machines Ltd., appointments 733
- Cincinnati Nederland NV, horizontal machining centre 472
- Cinema, Odeon, St Martins Lane, London 617
- Cinema film. *See* Film, cinema
- Cinema screen, D-150, at Odeon, Marble Arch 96
- Cinematic Mark I automated control system for 617
- Cintimatic, N-C, machining centre 567
- CirCarC gear tooth form, AEI 65
- Circuit(s)
equivalent, of electric machinery, by G. Kron (book) 603
hydraulic, and control systems, by J. R. Fawcett (book) 723
integrated. *See* Integrated circuits
solid-state, conference on (Philadelphia) 604
thick-film 23
- Circuit-breaker, automatic air, Novomax 635
for 3.3 kV motor circuits, GEC 148
- Circuit engineering, integrated (book) 35
- Circular saw. *See* Saw
- Cire-perdue. *See* Investment casting
- Ciriacy-Wantrup, S. V., natural resources: (book) 603
- Citosan AG, epoxy resin service 835
- Citroen Dyane motor car 580
- City and Guilds College 571
- City University 731, 855
- Civil and Civic Proprietary Ltd., circular tower at Australia Square 417
- Civil engineering industry, Economic Development Committee 486
- Civil engineering research (trade publication) 36
- Civil Engineering Technicians Society 900
- CJB Technical Services Ltd., 818
- Claas combine harvesters 532
- Cladding, aluminium, external, Weatherlap 892
wall, aluminium, RTZ 757
- Cladding material for aircraft 668
- Cladding system, lightweight, Trisomet 755
- Clamp, aligning, for welding, Centromat 845
toggle, with 'fall-away' action 188
- Clark Equipment Co. Ltd., interest in Stacatruc Ltd. 574
Van Carrier container-handling system 952
- Clark, J., winner of British Grand Prix 95
- Clark, James, and Eaton Ltd., rotating grab 1013
- Clark, R. H., Midland and Great Northern Joint Railway (book) 227
- Clark Series 512 Van Carrier 575
- Clarke, Chapman & Co. Ltd., appointments 651
- Clarke, Sir Richard, on Ministry of Technology 854
- Clarke, S. L. H., data presentation 482
- Clark's Crank & Forge Co. Ltd., forging manipulator 709
forging press 709
- Clarkson Machine Tools Ltd., low-melting point alloy 462
- Clason, W. E., Dictionary of Metallurgy (book) 153
- Claudgen Ltd., radiant electric heaters 760
- Clausen, H., CEI and creative engineers 774.
Letter 902, 944
Is CEng a bad thing? 990
- Cla-Val Co., automatic valves 599
- Claxton, E. C., bicycle ways in cities 780
- Clay for Derwent Dam waterproof membrane 140
- Clayton Hytrol automatic valve 599
- Clean Air Act 605
- Clean air conference (Harrogate) 936
- Cleaners, air, methods and equipment 607
compressor suction, Teximat 764
- heavy-duty industrial, Norris 759
vacuum, Agrivac Mk-III 955
- Cleaning
blast, monorail 422
flue gas, Decatox system 932
of lubrication system in papermaking machine 877
tanks, at sea, Load on Top system 448
ultrasonic 1049
colour television tube 628
- Cleaning compound, instrument, Rodico 302
- Cleaning machine for abrasives 673
- Cleaning solvent (trade publication) 434
- Cleaning unit for furnace tubes 291
- Cleco Electric Industries Ltd., order pickers 592
- Clery, A. B., fatigue cracking in railway axles 862
- Cleveland Bridge & Engineering Co., Monmouth Tunnels 12
- Clifford Partitioning Ltd., cycle racing track 366
- Clifton, B. V. polyesters (book) 267
- Climate Equipment Ltd., computer environment control 752
- Clip, worm drive, Bell's Asbestos 517
- Clipper, mini motor bus, Volkswagen 658
- Clorocel sterilizing unit in water purification trailer 780
- Cloth(s), flame-resistant, Multitect 973
- Clothing, site (trade publication) 560
- Cloud-base, laser measurement of, ASEA 46
- Clutch, dual, Borg & Beck 52
electromagnetic, brakes and couplings 102
See also Coupling
- Clutch facings, ceramic, Borg & Beck 52
- Clyde Crane & Booth Ltd., scrap handling plant 667-670
- Cmelák Z-37 agricultural aircraft 626
- CNEN. *See* Italian Atomic Energy Authority
- CO₂. *See* Carbon dioxide; Welding
- Coach, railway. *See* Carriage
- Coal, conversion to liquid fuel or substitute gas 647
petrol from. *Letter* 529
pulverized, combustion of, by M. A. Field, D. W. Gill, B. B. Morgan and P. G. W. Hawksley (book) 935
- Coal Board. *See* National Coal Board
- Coal containers, Charrold 27
- Coal cutting, monitoring system for 145
- Coal cutting machine, radio-controlled 890
- Coal fields, location and output 820
- Coal gas. *See* Gas
- Coal Handling Exhibition (Nine Elms Depot) 5, 27
- Coal hoppers, digital equipment for 285
- Coal industry, position and prospects 273, 352, 647, 771, 819
- Coal Merchants Federation of Great Britain, Coal Handling Exhibition 5, 27
- Coal mine. *See* Colliery; Mine
- Coal mining industry. *See* Coal industry
- Coal supply by merry-go-round trains 285
- Coal transport, containerized 566
- Coal unloading facilities, Ratcliffe power station 1030
- Coalfields, Ekibastuz, open-cast development 875
- Coastal engineering, conference on, ICE 936
- Coastal erosion, plastic seaweed prevention 94
- Coating(s)
dual-component, Hydra-Cat 973
laser diodes improved by 64
of plastics, Elvacite-6015 797
on papers and boards, Surlyn A 799
photoelastic 191, 193, 194
powder, symposium (London) 894
spray, of tablets 22
weather resistant resin, SR-173 638
- Coating equipment, vacuum, Mullard 1045
- Coating plant and laboratories, Vicars 217
- Coating systems, resinous fillers for 591
- Cobar Precision Co. Ltd., annealing covers 69
- Cobol computer language 394
- Cobalt alloy for computer memories, 639
- Cockenzie power station, merry-go-round trains 285
- Cockcroft, Sir John, obituary 440. *Letter* 569
- CODOG combined machinery arrangement 10
- Cohen, George, Machinery Ltd.
Alimak KS4-8 self-climbing scaffold 891
Eldair hydraulic scrap baling press 672
Eldair scrap shearing machine 672
Pington P4R tower crane 514
Solett portable site hoist 721
- Cohen, George, 600 Group, Proler plant for transmutation 47

- Coil annealing (trade publication) 682
 Coil ties, Concrete Formwork 926
 Cold cathode gauge 39
 Cold forming, conference on (London) 832
 Cole Electronics Ltd., armature winding 803
 Cole Group, balancing and measuring equipment (trade publication) 190
 Cole, Harvey R., Foulness airport study 734
 Coles Colossus lorry-mounted crane 878
 Coles Hydra crawler crane 552
 Coles Hydra mobile jib crane 552
 Collars, pipe flashing, Pipeflash 755
 Colleges, scientific research in (book) 153
 Collet, indexing and grinding fixture 1008
 Colliery, Monktonhall, digital equipment 285
See also Mine
 Collingwood, J. G., research planning 356
 Collision. *See Accident*
 Colman & Co., vacuum cleaner 955
 Colour sorting machines, electronic, Sortex 712
 Colt Staplers Ltd., load retaining strap 836
 Comark Electronics Ltd., electronic thermometers 476
 Combination flowmeters 308
 Combine harvesters, Bamford BM Volvo 532
 Claas 532
 MF410, MF415 and MF515 52
 Combustion of pulverized coal, by M. A. Field, D. W. Gill, B. B. Morgan and P. G. W. Hawksley (book) 935
 Combustion chamber, bowl-in-piston, Ford 460
 toroidal, for blast-furnace slag 923
 Combustion Engineering Association, conference (Brighton) 118
 Comet 4B airliner disaster 610
 Commando, Norton, motor cycle 493
 Commodore hot-drink vending machine 675
 Common Market, brain drain and 614
 Britain's entry position, 854
 by W. G. Jensen (book) 477
 implications of UK interest in 90
 Communication
 and control (trade publication) 228
 engineering contribution to 327
 factory, Highams 989
 pocket paging equipment, Multitone 701
 Technical, Joint Council for Scientific 441
 with drivers of motor vehicles 21
 with spacecraft, RAM-C test 578
 Communications equipment, exports 990
 Flexicall 432
 hf radio, GEC 951
 Communications receiver with digital display 758
 Communication system, railway train-to-track 718
 speech, light beams for 695
 submarine, hf, ssb, Racal 758
 Communication system engineering handbook, by D. H. Hamsher (book) 391
 Compact 355, SARBE, air/sea rescue beacon 165
 Compacting machine, embankment, C450A, Hyster 115
 Compagnie Générale d'Automatisme, agreement with Elliott Process Automation 773
 Compagnie Royale Austrienne des Mines, Tysse 2 power station 743
 Company mergers by R. V. Arnfield (book) 641
 Compass, pencil spring, with nylon bushes 692
 Compensator, static, for Exeter substation 839
 Componex 67 (Olympia), exhibits at 755, 757
 honeycomb steel stairway 780
 Composite range of site and transit cabins 890
 Compounding Ingredients Ltd., silicone oils 639
 Compressed air, trade publication 36
See also Pneumatic
 Compressed air equipment (trade publication) 520
 Compressed air products (trade publication) 306
 Compressed air system oil filters 599
 Compression moulding gun, pneumatic 385
 Compression testing of containers 708
 Compressor(s)
 and boosters (trade publication) 80
 centrifugal, Parsons 600
 diesel, Monair-1 763
 for cleaning out heat exchanger elements 291
 Hydrovane 160PU rotary oil-sealed 598
 JW, Knight Taylor 283
 noise research 19
 portable rotary screw (trade publication) 306
 trade publication 478
 Compressor blades, diffusion bonding 23
 machining of 186
 Compressor discs, forged for gas turbines 466
 Compressor installation (trade publication) 848
 Compressor unit, stationary, Hydrovane 860
 Computational linguistics, by D. G. Hays (book) 189
 Computer
 analogue, course on 982
 Argus, for Q4 Cunard liner 452
 Argus 500, software package 46
 chemical plant design 907
 digital, basic principles 393
 Elliott 903, for electro-encephalograph analysis 739
 English Electric M21-40 980
 fire precautions for 165
 for analysis of steel 1043
 for industry, PERA 36
 groundwater flow studies 982
 IBM 360, for Boots' bulk section 62
 IC engine design, symposium (Manchester) 80
 ICT 1900 Series 970
 ICT 1901, for matrice stocks 489
 ICT 1906A 980
 management and 525
 NCR-Elliott-4100 907, 1005
 output printer for, 3M 181
 project planning service (trade publication) 36
 small, compiling techniques 506
 structural analysis by (trade publication) 724
 System 4, English Electric 99
 platter concept for 99
 use in radar systems, RRE 740
 Computer age, F. J. M. Laver 982
 Computer-aided design, for motor vehicles 593
 of electronic equipment, Racal 758
 Computer centre, English Electric, Whetstone 145
 offices and (trade publication) 190
 Computer control, for Hinkley Point B nuclear power station 670
 of Boots' bulk section warehouse 61
 of paper-making 611
 of System-24 machining plant 509
 Computer-controlled cutting machine, Condor 628
 Computer Course (1967) 190
 Computer environment control 752
 Computer exhibition, USA 982
 Computer interface, Scan-line process instruments with 712
 Computer languages
 cost/efficiency assessments 395
 Engineering Outline 393
 features of 393
 table of 394
 translation techniques 395
 trends and developments 396
 Computer memories, cobalt alloy for 639
 Computer process control system 1039
 Computer program, APT symbolic language and 515
 definition 393
 for structural analysis, by W. Weaver (book) 807
 Computer-room air conditioning 602
 Computer science for management, by A. Fletcher (book) 1017
 Computer service linked to telephone system 319
 Computer switching system, Stewarts & Lloyds 989
 Computerized typesetting, world survey 994
 Computing Centre, National 901
 Computing course, analogue and hybrid 848
 Concast AG, continuous casting machine 929
 Conch International Methane Ltd., cryogenic storage of liquefied natural gas 499
 Concorde supersonic airliner
 frictional heating of fuel in 292
 progress of 942, 946
 seating and cruising speed changes in 738
 sonic bang simulator for 326
 Concrete
 BBRV prestressing system 585
 lightweight, congress on 982
 for circular tower 416
 prestressed, BBRV system 722
 Bow Flyover construction 584
 bridge designs for M4 motorway 696
 sawing project 1006
 sprayed, pipe lining (trade publication) 306
 structural lightweight-aggregate, by J. K. Nesbit (book) 807
see also Formwork
 Concrete anchor fixing kit 928
 Concrete beams, capstone aggregate 289
 Concrete block, hollow, party-wall 798
 Concrete building blocks, high strength 506
 Concrete corner units, BRS 94
 Concrete floors, hollow mould pans for 187
 Concrete Formwork Ltd., coil ties 926
 Concrete frame structure (trade publication) 268
 Concrete levellers, Bumpcutter 223
 Concrete Ltd., residential training centre 4
 concrete frame structure (trade publication) 268
 Concrete mixer, Stowaway 489
 Concrete panels, precast, for industrialized building 319
 Concrete pressure vessels, prestressing wires in, failure of 338. *Letter* 407
 Concrete Proofing Co. Ltd., servicing cooling tower 218
 Concrete protection, rubber sealing for 833
 Concrete pump, SEM 221
 Concrete release agent, Zedcote S3 756
 Concrete reservoirs, prestressed, conical 241
 Concrete Sawing Equipment Ltd., concrete levellers 223
 concrete sawing project 1006
 Concrete-tube immersed tunnel construction 502, 779
 Concrete Vibration Ltd., vibrating table 551
 Concrete wall(s), building machine 386
 sculptural texture and colour variations 319
 Concreting plant, Winget 549
 Condenser packing assemblies, Crane Full Box 546
 Condensing plant, steam, surface type (trade publication) 268
 Condensing unit, air-cooled, for cooling water 707-708
 Conder (Agricultural) Ltd., drying and storage plants 955
 Condor computer-controlled cutting machine 628
 Conductor oscillation phenomena, transmission lines 913
 Confederation of British Industry, overseas scholarship scheme 88
 productivity improvement scheme 160
 testing service for electrical equipment in 252
 Conference
 Association of Engineering Distributors 730
 chemical engineering (Montreal) 118, 724
 Clean air (Harrogate) 936
 coastal engineering, ICE 936
 cold forming (London) 832
 competing spectrochemical technique 936
 containers, Birmingham 268
 copper in cast iron, CDA 112
 cost control in engineering management 1033
 electrical energy distribution, ERA 630
 electricity in agriculture and horticulture 268
 Engineering Materials and Design (Olympia) 936
 Engineering Societies of Western Europe and the United States. *See EUSEC*
 filament welding 228
 fluidics, Cranfield (Torino, Italy) 118, 434
 fractures in engineering materials (Brighton) 80
 heavy particle collisions (Belfast) 80
 high-tension electric systems (Paris) 982
 highway safety (London) 949
 hot dip galvanizing, ZDA 108
 hovercraft (Southampton), IPE 80,894
 Industrial Development, Electricity Council 659
 international forging (Sheffield) 465
 International Iron and Steel Institute 905
 lead (Venice), European Lead Development Committee 118
 long-range planning 190
 low-alloy steels 306
 lubrication (Chicago) 752
 management in the 70s, BIM 936
 managing energy (Brighton) 118
 numerical control of machine tools (Paris) 1048
 older industrial areas (Glasgow) 434
 physics of liquids 268
 plastics and production engineer (London) 76
 polymers, developments and applications 982
 powder metallurgy (New York) 118
 production engineering and management, PERA 1018
 profitable building maintenance 346
 reliability of service equipment, IME 724
 semi-metals and semiconductors 118, 982
 solid-state circuits (Philadelphia) 604
 solid state devices (Manchester) 1048
 stainless steels for the fabrication user, ISI 936
 submerged-arc welding 306
 technician engineers, CEI 729
 telemetering (Houston, Texas) 642
 textiles from film 1018
 thermal conductivity, NBS 392
 thick film technology 936
 thin film (Southampton) 478
 transformer noise, IEE 547
 transportation engineering, ICE 520

- urban planning 445
welding in vehicles (Cardiff) 604
white collar unions (London) 988, 993
Women Engineers and Scientists, International (Cambridge) 45
work-factor 648
worker participation in management 815
World Power (Moscow) 724
- Congress, on lightweight concrete 982
vacuum, international (Manchester) 478
- Conma Autobuilding machine for building concrete walls 386
- Connectors, high density, SQC, Ether 1046
integrated circuit, Ferranti 884
steel, for timber joints 476
subminiature crimped contact, Ether 31
- Connell, Charles (Shipbuilders) Ltd., lumber carrier 690
- Consett Iron Co. Ltd., slag transporter 343
- Consistency measurement, papermaking industry 1018
- Consolidated Electrodynamics Division, testing of transducers 708
- Consotrol auxiliary control stations 880
- Constantin (Engineers) Ltd., material-conveying pumps 512
- Construction, building design and, plastics in, courses on 36
- Construction Equipment Exhibition (Crystal Palace), at 549, 553, 719
- Construction Industry Research and Information Association, appointments 691
information division 687
- Construction Industry Training Board, amendment of scope 3
training centre at Bircham Newton 127
- Construction Industry Training Centre, Bircham Newton 816
- Construction plant and components 549, 719, 889
- Constructors John Brown Ltd., appointments 613
EST sewage treatment process 828
- Consul control panel for grain drying 955
- CONSUL software package, for Argus 500 computer 46
trade publication 724
- Contact, and frictional electrification, by W. R. Harper (book) 559
electric, by R. Holm (book) 433
- Contact phenomena, electrical, symposium (Swansea) 80
- Contact sensor, Murrell 344
- Contact sulphuric acid processes (trade publication) 520
- Contactors, miniature, Robinson 427
reversing static, AEI 403
vacuum, low voltage, AEI 635
trade publication 642
- Container
aluminium, mobile exhibition unit 1016
coal, Charrold 27
compression testing 708
conference on, Birmingham 268
freight, Metropolitan-Cammell Ltd. 838
general cargo 1014
heat-dissipating, for radioisotopes 218
IATA programme 440
skeletal body for rigid truck chassis 1013
tipping, bulk, Pick-a-back 1013
TraNstor, for liquefied gases 205
- Container carrier vehicle, articulated 783
- Container handling cranes 669
- Container handling systems, trade publication 682
Van Carrier 952
- Container-handling terminal, Paceco-Vickers Portainer 282
- Container services, and equipment exhibition (Olympia) 520
to Rotterdam, EUR 949
- Container ship stabilization (trade publication) 346
- Containerization report, NJC 235
- Containerized coal transport 566
- Continuous casting. *See* Casting
- Contour integration, by M. L. Rasulov (book) 641
- Contract programmes, bills of quantity and 274
- Contracting and estimating, electrical, by F. Hindler (book) 847
- Control(s)
automated, for blending limestone 670
automatic, of cement kiln 962
communication and (trade publication) 228
hydraulic, pneumatic and light (trade publication) 434
on-line, software (trade publication) 724
see also Engineering Inspection and Control Exhibition
- Control cubicles, for continuous processes 431
purpose-built, Uni-Ken 302
- Control devices, fluidic, Corning 711
- Control equipment 556, 711, 880, 1039
- Control machine, digital sequence, NRDC 160
- Control meters (trade publication) 894
- Control modules, solid-state, English Electric 73
- Control panel for grain drying plants 955
- Control relay system, Telemechanique 882
- Control stations, auxiliary, Consotrol 880
- Control system(s)
advances in, by C. T. Leondes (book) 641
automatic, by J. Benes (book) 189
Cinematic Mark I automated 617
computer process, K70 1039
electroplating 882
galvanizing 882
hydraulic circuits and, by J. R. Fawcett (book) 723
modern, by R. C. Dorf (book) 345
SCOPE 515
solid-state, Norkard 515
thyristor, for stainless steel strip line, GEC 795
- Control system theory, linear vibration and, by J. B. Vernon (book) 641
- Control units, dry reed, Control Equipment, AEI 880
thermostatic, for defrosting cycles, Elmwood 2455B 302
- Controller, analogue, EEC 188
non-linear, Kent Controls 1040
- Conurbation transport authorities 899
- Converters
dc (trade publication) 1048
resolver/synchro-to-digital 556
rotary, electric locomotive 177
signal, Mimic 303
thyristor, module system 840
- Conveyancer Fork Trucks Ltd., pipe handling 838
- Conveyancer-Raymond fork-lift truck 838
- Conveyor(s)
accumulation 680
document, Airtube (trade publication) 36
for bags or bulk materials, Fyson 151
for tobacco handling, Tiptrak 146
Interdel system, for document distribution 22
Jenner system 679
MA Mk-3 29
magnetic extractor for (trade publication) 306
overhead 645-646
Chainveyor 1015
torsion-type 646
roller, Dragon 476
trade publication 118
shear, for increased production 924
variable length system, Charlesford 1015
vibrating, resonant frequency 1014
vibratory, for sand recovery 966
- Conveyor belt repair with Flexane urethane 974
- Conveyorized painting for Tri-borne primer 834
- Conveyors & Automation Ltd., furniture flow line 629
- Conway, H., presidential address, IME 737.
Letter 774
- Coode & Partners, Indus River barrages 1001
Mangla Dam design and construction 865
- Cookie cutter roadway cutting equipment 892
- Coolie hydraulic pallet truck 575
- Cooling box lined with Flexane urethane 975
- Cooling towers, for Yallourn W power station 901
Gunite for servicing 218
Sky Climber winch for servicing 218
- Cooper Electroheat Ltd., preheating (trade publication) 520
trailer-mounted stress-relieving furnace 967
- Co-ordatrol drilling machine, Herbert 470
- Copper
beryllium (trade publication) 346
in cast iron, advantages of 112
K. Bromage 112
conference on, CDA 112
research in, B. B. Moreton 112
trade publication 642
welding electrodes for, ECuGT 876
- Copper alloy, IN732X, International Nickel 973
welding electrodes for, ECuGT 876
- Copper comb microcircuit device, AEI 403
- Copper Development Association, conference on copper in cast iron 112
copper in cast irons (trade publication) 642
- Copper wire, reclaiming, vibrating unit for 63
- Copper-zinc alloy, Caro-Buhler 973
- Copperad Ltd., controlling and recording production time 107
'Slim-Pak' enclosure for central heating appliance 131
- Copying machine for small and medium sized work 1007
- Cordero, H. C., non-ferrous metal works (book) 1047
- Core barrels, diamond drill (trade publication) 724
- Core dressing for iron castings 972
- Core making plant, bucket elevator system 923
- Corner guards, magnetic sling, Hunter 762
- Corner units, concrete, BRS 94
- Corning Glass Works, control for crimping machine 507
fluidic control devices 711
glass sphere for underwater research 104
resistors (trade publication) 520
ultra low-expansion silica 639
- Corona stabilizers, metal-ceramic, M-O Valve 1046
- Corporation Tax, announcement on 813
- Corrosion, electro-chemical, of bearings 262
of light metals, by H. P. Godard, W. B. Jepson, M. R. Bothwell and R. L. Lane (book) 519
stress, in prestressing wires 338
- Corrosion chart, chemical processing 1034
- Corrosion inhibitor, Astrolan 39 with Motorstor 259
- Corrosion Ltd., Methodic fully weldable primer 973
- Corrosion Prevention Booklets, BISRA 117
- Corrosion resistant lighting fitting, Crompton Parkinson 636
- Corsair motor car, modifications, Ford 616
- Cortina motor car, drophead, with Zodiac V6 engine 656
1600E 577, 656
- Cortina motor-car engine, bowl-in-piston combustion chamber 460
crossflow cylinder head 460
- Cory Maritime Ltd., RPH diesel engine 300
- COSAG marine propulsion machinery gearing 65
- Cosor Electronics Ltd., portable oscilloscope 884
- Cost control, conference on 1033
- Costain Concrete Co. Ltd., Siporex building system 533
- Costain Group, free-fall winch 69
- Costain Mining Ltd., mining contract in New South Wales 944
- Costain, Richard (Civil Engineering), harbour at Dubai 690
- Costain, Richard, Construction, British Airports Authority contract 944
- Costain, Richard, Ltd., board appointments 529
Calder Bridge 320
Gateway House office block 131
- Cosyglaze (Holdings) Ltd., double glazing 892
- Cottam power station, design and construction 453
- Coull, A., tall buildings (book) 153
- Coulouris, G. F., computer languages 396
- Council of Engineering Institutions
centralized services proposal 647. *Letters* 732, 856, 944, 990
Chartered Engineer certificate 86
conference on examination for non-graduate engineers 89
conference on technician engineers 729
corporate membership 312
election of new Chairman 86
technician engineers' meeting 899
- Council of Industrial Design, footbridge design 165
- Council of Ironfoundry Associations, appointments 691
- Council for Scientific Policy, expenditure 688
- Counter(s), remote readout, Dataset 1042
revolution, Ebauches 518
- Counter/timer, 835 universal, Racal 758
- Counting, electronic, by E. J. Kench (book) 681
- Counting devices, electronic 252
- Counting units with bcd output, Perfection 558
- County Commercial Cars Ltd., 4-wheel drive tractor 52
(trade publication) 118
- Couplings
ball-type flexible shaft, Soderkvist 187
brakes, electromagnetic clutches, Simplatroll 102
flexible, N-Eupex 148
pipe, Pressure-Lock 30
see also Clutch
- Courage Brewers Group, beer bottling plant 958
- Courses
computer, (1967) 190
diesel motive power 274
lubrication 274
management training, AIC 36
plastics in building 36

- powder technology, King's College 268
 proper use of fuels, NIFES 118
 training for the office, BACIE 80
 work study 943
- Courtnburn Positioners Ltd., positioning table 1008
- Coutant Electronics Ltd., modular power supplies 883
- Coutant Transducers, strain-gauge load cells 713
- Covell, Matthews and Partners, Foulness airport 734
- Coventry-Climax V8 motor car engine 656
- Coventry Movement Co. Ltd., universal vice 673
- Coventry Victor Vixen diesel engine 72
- Covers, annealing, in corrugated stainless steel 69
- Cox, E. S., chronicles of steam (book) 935
- Cox, William J., Ltd., milling machines for acrylics 337
- Crack(s) in metal, stress analysis of 370
- Crack detection equipment, magnetic-particle 845
- Crack growth in glass, NBS 463
- Cracking, fatigue, in railway axles, IME 862
- Craftsmanship, British, exhibition on 936
- Craig and Derricott Ltd., limit switches 636
 Miniswitches, snap action push buttons 303
- Craig, T. R., British Steel Corp. 202
- Crane(s)
 and lifting machines, testing (book) 433
 container handling 669
 crawler, Coles Hydra 552
 dockside, container-handling 282
 Holmes, for rescue and recovery vehicle 175
 lorry-mounted, Coles Colossus 878
 telescopic-jibbed 878
 mobile, Jones 851 Series 1015
 Oxford Engineering 836
 mobile jib, Coles Hydra 552
 Monobox, large-span 463
 overhead for paper rolls 336-337
 tower, British Ropeway 552
 Pingon P4R 514
 trade publication 520
- Crane crab, Amazon 836
 Duodrive 836
- Crane Fruehauf Trailers Ltd., road/rail vehicle 266
- Crane gears, Rocol Type MG grease for 462
- Crane Ltd., butterfly valves for liquid or gas flow regulation 74
 Europa oil-fired boiler 760
- Crane Packing Ltd., condenser packing assemblies 546
 stern shaft seal 546
- Crane version of air-controlled excavator 551
- Cranfield College of Aeronautics, industrial consultancy unit 904
- Cranfield fluidics conference (Torino, Italy) 118, 434
- Crankshafts, continuous-grain-flow, design stress 466
 solid forged steel 465
- Crash barrier research, RRL 21
- Crater Controls Ltd., adjustable cam timers 426
- Crayford Conversions, Cortina drophead motor car 656
- Creed and Co. Ltd., teleprinters and punched paper tape equipment (trade publication) 80
- Creep measurement in power transmission lines 105
- Creep test, tensile, constant load 925
- Cressex Machinery Ltd., exhibits at International Engineering Exhibition. *Correction* 152
- Crewe Locomotive Works, overhauls 364
- Crimp wiring machine, automatic, Amp 100
- Crimping machine, fluidic control for 507
- Critical path analysis, by K. G. Lockyer (book) 559
- Critical path planning, by J. Ceretti (book) 35
- Crittall Manufacturing Co. Ltd., office landscaping 286
- Crompton Parkinson Ltd.
 appointments 775
 articulated bed for spinal damage 48
 corrosion resistant lighting fitting 636
 fluorescent lighting fittings (trade publication) 642
 Hi-Q movement for vibration-proof meter 1036
 interest in Stacatruc Ltd. 574
 shear connector welding trolley 297
 zinc/air battery 648, 655
- Crop sprayer, Unirol 616
- Cross-channel collaboration, by C.de Hoghton (book) 893
- Cross, Malcolm, Engineering (Nottingham) Ltd., Lebow slipring assembly 426
- Crossley-Premier Engines Ltd., Pielstick type 16PC2V-400 diesel engine 995
- Cruden's Ltd., heating system for flats 831
- Crusader Vendors Ltd., hot-drink vending machines 675, 943
- Crushers, impact (trade publication) 560
- Crushing mill, limestone, hammer failures 423
- Crushing plant, portable primary, Pegson 549
- Cryogenerators (trade publication) 36
- Cryogenic equipment for liquefied gases (trade publication) 982
- Cryogenic liquids, radiation shield for 1021
 storage of 1019
- Cryogenic plant, BOC-Airco 677
- Cryogenic storage of liquified natural gas 499
- Cryogenic thermal insulation. *See* Insulation
- Cryogenics, definition 1019
 miniature systems 916
- Cryosystems Ltd., miniature cryogenic systems 918
 test facility for ESRO I satellite 103
- Crypton Equipment, phototransistor tachometer 1042
- CSF of France, bright display radar 617
- Cubicles, control, for continuous processes 431
 purpose-built, Uni-Ken 302
- Cubitts Fitzpatrick, Blackwall Tunnel 248
- Culvert design research 708
- Cummins Engines Ltd., precision lathe 265
- Cunard liner, Q4, computer system in 452
Queen Elizabeth II, design and construction 494
 hospital equipment for 902
Queen Mary, purchase by United States 616
- Current meter, resistance welding, Hirst 977
- Current sinking logic circuit devices 554
- Current transmitter, Ether 1042
- Curtain walling, aluminium, Kawneer 73
- Curve following instrument, Bryans 299
- Cushylevel anti-vibration mountings 425
- Cuss, J. F., linear motors 817
- Cutmaster-Stone traverse cutting machine 152
- Cutting
 and welding, glow-discharge equipment 291
 diamond, and finishing tool for styrene 337
 fine, carbon dioxide laser for 292
 tube, machine, automatic 474
 underwater, symposium (Columbus, Ohio) 80
- Cutting control system, Linde Plasmarc 846
- Cutting equipment, roadway, Cookie cutter 892
- Cutting machine
 coal, radio-controlled, NCB 890
 computer-controlled, Condor 628
 gear, Wormwheel generator, Churchill 472
 high-precision, Capco-Hamco 512
 oxygen, Han-co-sine 627
 portable, pipe, Hancock 673
 plasma-arc, Messer Griesheim 846
 traverse, Cutmaster-Stone 152
- Cutting-off machine, bar, automatic 1033
- Cutting oils, Energol 340
 trade publication 434
- Cutting process, plasma-arc 336
- Cutting service, plasma-arc 846
- Cybernetics, language, and information theory, by J. Singh (book) 765
 on railways, symposium (Montreal) 190
- Cycle. *See* Bicycle
- Cycle, motor. *See* Motor cycle
- Cyclo-meter counter-driving flowmeter 1042
- Cyclone cone repair with Flexane urethane 975
- Cyclone dust collectors 605
- Cyclone variable-pitch axial flow fan 759
- Cycopac 155 cold-formable ABS 638
- Cylinder(s), pneumatic, miniature, Maxam 928
- Cylinder head, crossflow, Ford Cortina 460
 diesel engine, R. W. Hall 112
- Cylinder head transfer line for Poland 990
- Czechoslovakia, aircraft industry 625
 exhibition on design in 190
 industrial development position and prospects 488
 iron and steel industry 588

D

- D-150 cinema screen at Odeon, Marble Arch 96
- Dadda, L., automation and instrumentation (book) 345
- DAF model-33 motor car 449
- DAF type 44 estate car 1029
- DAF type 55 de luxe motor car 1029
- Daily Mail schoolboys exhibition 848
- Daimler, V8-250 motor car, description of 537

- Daimler-Benz, motor-vehicle range 451
- Dale Electric of Great Britain Ltd., Austin 250 gas-turbine 706
- Dam(s)
 arch, ICE 766
 Derwent, design and construction 140
 Langevann, construction in Norway 743
 Mangla, construction progress 998
 Indus Basin project 864
 Tarbela, Indus Basin project 864
 successful bid for 998
- Damper, fire, automatic, for ventilation ducting 187
 iris-type, for ducts RCM 74
- Damping, vibration, in diesel engines 873
- Danfoss (London) Ltd.
 ATVA range thermostatic water valves 1041
 electric systems (trade publication) 642
 heating components and controls (trade publication) 894
 oil-burner controls 932
 oil burner nozzles (trade publication) 604
 refrigeration components (trade publication) 766
 return-temperature limiter valve 831
 thermostatic radiator valve 756
- Daniel, V. V., *Dielectric Relaxation* 632
- Danish Ship Research Institute, operation of engine plants 966
- Danish State Railways, diesel-electric locomotives 26
- Dano refuse and sewage disposal plant 924
- Dansk Industri Syndikat A/S, constant temperature anemometer 516
 pressure measurement equipment 558
- Darvic plastic sheet, ICI 13
- Dassault, Variable Geometry aircraft 1
- Data Dynamics Ltd., telephone link to computer 319
- Data logging equipment, Dynamco 718
- Data logging system, Modulog 303
- Data Memoranda, Design, for chemical engineers 181
- Data presentation
 analogue 479
 basic forms 479
 binary displays 480
 definition 479
 digital cathode ray tube displays 481
 digital displays 480
 Engineering Outline 479
 graphical records 479
 light pen 482
 printers 482
- Data processing system, graphical 515
- Data reader, digital, 'X-Y' 1041
- Data Recording Instrument Co. Ltd., magnetic recording head performance 422
- Data Research Ltd., digital voltmeter 717
- Data sheets on moulding materials (book) 893
- Data storage and handling, micro-recording 319
- DataKey for selection of plastics 23
- Dataset remote readout counters 1042
- Datran Ltd., production line quality control 342
- Daubert Chemical Co., Astrolan 39 with Motorstor corrosion inhibitor 259
- Davall Gear Co., range of stock precision gears 32
- Davall, S., and Sons Ltd., elapsed time indicator 1040
- Davey, Paxman and Co. Ltd., diesel engines (trade publication) 392
 Paxman type RPH diesel engine 300
- Davidson and Co. Ltd., Sirocco dust-control equipment 1010
 textile dust and fluff collector 601
- Davies, C. W., electrochemistry (book) 765
- Davies, D., technological economics (book) 1047
- Davies, E., Fifth World Meeting of Road Federation (book) 227
- Davies, H. E., turbine rotors fabricated by welding 293. *Letter* 361
- Davies, J., devaluation 853
- Davy and United Engineering Co. Ltd., hollows for stainless steel tubes 33
 rolling-mill plant for Finland 1011
- Davy and United Instruments Ltd., crane-weighing system 527
 electronic weighing system for coils 875
 6,000-ton loadcell 567
- Dawe Instruments Ltd., sonic bang simulator 326
 sound level measuring instrument 283, 344
- dc converters (trade publication) 1048
- DCMC Industrial Aerosols Ltd., belt dressing 972
- Deaerator, Weir 25
- Deaf mutes, telephones for 950
- De Beers Industrial Diamond Division, SDA

- abrasive 258
 Deburring, abrasive rolls for 184
 Deburring machine, Harperizer 336
 Decatox flue gas claning system 932
 Decibel ratings, noise level 283
 Decimal currency, BIM 346
 Decimal currency conversion, New Zealand 982
 Dee estuary, development proposals 199
 Deep-diving craft, Deepstar DS-2000 408
 Deepstar DS-2000 deep-diving craft 408
 Defence, Ministry of, Chieftain tanks 246
 DEF-62 specification on panel meters 1035
 White Paper on 124
 Deflationary measures, consequences of 813
 Defrost valve, Teddington Autocontrols 31
 Defrosting cycles, thermostatic control unit 302
 Degradation of raw materials during handling 77
 Degreasing machine, Alfa-Laval 298
 de Havilland Canada, masts for space craft 547
 de Hoghton, C., cross-channel collaboration (book) 893
 De Hoop paperworks, overhead cranes 336-337
 De La Rue Bull, telephone link to computer 319
 De La Rue Co. Ltd., appointments 651
 Delavan-Watson Ltd., sprinkler nozzles and water-shed system for lifeboat 407
 Delaware Memorial suspension bridge 901
 Delay lines, glass (trade publication) 228
 De Leuw Cather and Partners, rapid transit system 776
 Delfin L-29 trainer aircraft 625
 Delrin acetal resin rods, Anson-Bassan 797
 Delta Diving Ltd., diving contractors 793
 Delta power station, Nigeria 214
 Deltic diesel-electric locomotives 6
 Deltic diesel engines 6
 Dempster, J. C., HQ for institutions? 732
 Denco Miller Ltd., air-conditioning for storage 759
 compressed air (trade publication) 36
 computer-room air conditioning 602
 Denman, Sir Charles, chairman, Overseas Marketing Corp. 730
 Denmark, British trade drive in 808
 Dennison, H. A. J., electrical discharge forming 122
 Denver Motor Bodies Ltd., recovery vehicle 175
 Department of Economic Affairs, H. Wilson as chief minister 314
 Department of Education and Science, Scientific Research in British Universities and Colleges, Vol. 1 (book) 153
 Dependatherm thermometer with flexible probe 557
 Derby Carriage and Wagon Works 538
 Derritron Electronic Vibrators Ltd., vibration testing equipment 713
 Derwent Dam, design and construction 140
 Desalination
 and generating plants, combined nuclear-powered 136
 definition 347
 electro dialysis 349
 Engineering Outline 347. *Letter* 447
 ion exchange 350
 membrane processes 349
 principles 347
 reverse osmosis 349
 solar-powered plant 348
 vacuum freezing 350
 Desalination plant, turbo-generator set for, English Electric 167
 Desalination research unit, Weir Westgarth 690
 Design
 analytical and creative approach to 652
 computer-aided, of electronic equipment 758
 engineering, by S. B. Tuttle (book) 681
 fact and superstition in, A. A. Wells 367
 for export, exhibition on 560
 in Czechoslovakia, exhibition on 190
 industrial, achievements, Mather and Platt 379
 exhibition on 848
 mechanical, of diesel engines (book) 603
 of alloys, by B. A. Bilby, S. G. Glover and D. W. Wakeman (book) 559
 of dry-dock gate 368
 of experiments. *See* Experiments
 of pneumatic system, by B. W. Anderson (book) 433
 of power station cooling dome 367
 teaching, at Cambridge University 652
 Design ability conferences, Konstruktion 779
 Design Data Memoranda for chemical engineers 181
 Designer and social and scientific environment, D. Chaddock 909
 Desmond Bros., machine vice (trade publication) 1018
 Desoutter Group, exhibits at Hanover Exhibition 473
 Dessarts, P., walking-beam furnaces 633
 Det Norske Nitridaktieselskap, Tysse 2 power station 743
 Det Norske Zinkkompani, Tysse 2 power station 743
 De Tomaso Automobili, electric motor car 788
 Deusel CR.40 lubricating oil 877
 Deutsche Shell AG, *Myrina* tanker 405
 Devaluation of the pound, comment on 813
 Devcon Ltd., Flexane urethane 974
 Developing machine, Versamat automatic 825
 Development area, training in 1024
 Deviation indication, Kom-pac/1 controller for 556
 Devon River Authority, digital data reader 1041
 Dewar, design of neck 1021
 principle of 1019
 Dewar flask, miniature gas liquefier 916
 Dewpoint meter, Shaw 881
 Dewrance Controls Ltd., flameproof enclosure for solenoid valve 558
 Dewrance Metals Ltd., castings (trade publication) 80
 Dexion Ltd., shelf panels 109
 DF8 Mark III digital follower 152
 Dial indicator, Allways 557
 Dial-A-Mix Ltd., SEM concrete pump 221
 Diamond(s), industrial, by J. Burls (book) 267
 Diamond abrasive, synthetic, SDA 258
 wheels (trade publication) 478
 Diamond cutting tool for styrene spools 337
 Diamond drill core barrels (trade publication) 724
 Diamond tools for turning graphite and lava 792
 Diazoprinter, 48A, Mark II printing unit 184
 Dickason, A., on sheet metal drawing (book) 981
 Dictation, telephone, Assmann Intel 1029
 Dictionary, new shorter French and English, by J. E. Mansion 681
 of metallurgy, by W. E. Clason (book) 153
 Die casting, gravity, by B. Harocopos (book) 603
 zinc pressure (trade publication) 808
 Die-casting assemblies into position 256
 Die-casting machine, Engineering Tool & Product 256
 Die production, GKN spark machine for 670
 Diebold, J., computer manufacturing 525
 Diedrich, D., aluminium airflow seat, ALCOA award 14
 Diegrinder, pneumatic, ST21, Morris 385
 Dielectric constant as measure of moisture content 230
 Dielectric relaxation. V. V. Daniel 632
 Diesel engine. *See* Engine, diesel
 Diesel locomotive. *See* Locomotive
 Diesel motive power, courses 274
 Differential pressure regulators (trade publication) 766
 Diffraction instruments, X-ray (trade publication) 154
 Diffusion bonding for compressor blades 23
 Digger, hydraulic, Mustang-90, 550
 hydraulic backhoe (trade publication) 560
 Digger-loader, deep-digging 721
 Digging mechanism of Surveyor 4 spacecraft 93
 Digital data reader, 'X-Y' 1041
 Digital equipment for coal hoppers 285
 Digital follower, DF8 Mark III 152
 Digital frequency meters, Racal 758
 Digital glass memory modules (trade publication) 894
 Digital raster display system, Digitrace 617
 Digital sequence control machine, NRDC 160
 Digital systems (trade publication) 848
 Digital time recorder LR-2 1042
 Digital voltmeter 717
 Dynamco 718
 Digitrace digital raster display system 617
 Digiturn lathe measurement system 515
 Dineley, J. L., on Kaldas programming (book) 391
 Dino Spider motor car, Fiat 580
 Dino 206GT motor car, Ferrari 741
 Diode(s), gallium arsenide, Mullard 188
 silicon, and stacks (trade publication) 228
 Diode oscillators, Gunn, Mullard 884
 Diode-transistor logic integrated circuits 303
 Direct Nitrogen Ltd., container for liquefied gases 205
 Directory of Information Resources in the United States 35
 Directory of opportunities, 1967-1968, by C. Labovitch (book) 391
 Directory of Research Associations 723
 Diron one-coat enamel steel sheet 113
 Disintegrators for tool removal (trade publication) 392
 Display, digital raster, Digitrace 617
 with 'sketch-pad' facility, Marconi 188
 Distillation column, Stanlow refinery 621
 Distillation plant for Malta 902
 Distiller(s) dried solubles plant 958
 Distillers Co. (Carbon Dioxide) Ltd., CO₂ sodium silicate foundry process 1006
 Distillers Co. Ltd., bulk storage (trade publication) 682
 Distilling plant, marine, Caird 221
 Distilling waste treatment plant 870
 Distington Engineering Ltd., continuous casting 929
 Distortion measuring set for colour television, STC 883
 Distrene Ltd., injection moulding (trade publication) 520
 Distribution, electrical energy, conference on, EPA 630
 of goods, report 439
 Distribution system, electricity, for building sites, AEI 387
 Diving contractors 793
 DM Multiple-Five computer-room air conditioning 602
 d-mac Ltd., light-spot following recorder 185
 Dobson & Barlow Ltd., bottle washing machine 334
 Dock, dry, gate design and structural-analysis 368
 Liverpool 162
 Dockworkers, strike of 483
 conclusion of 855
 Document conveyor, Airtube (trade publication) 36
 Document distribution, conveyor system 22
 Dodd, B., programmed instruction (book) 893
 Dodge, KP1000 motor tractor unit 784
See also Chrysler Dodge
 Domestic appliances, sales statistics 2
 servicing 238 *Letter* 361
 thyristors use in 217
 Doncaster B power station, turbine, AEI 731
 Donovan Electric Co. Ltd., fault detection relay 978
 Door, fire-resisting (trade publication) 306, 520
 of opportunity, by R. Messenger (book) 117
 sliding, automatic (trade publication) 604
 Doppler radar detection for burglar alarms 740
 Doran Engineering Co. Ltd., screw studs 341
 Doranco screw studs 341
 Dorf, R. C., control systems (book) 345
 Dorman Long (Steel) Ltd., Dorman 30 high yield stress steel 516
 Dorman 30 high yield stress steel 516
 Dornier Do32K Kiebitz tethered platform 994
 Double glazing systems, Cosyglaze 892
 Doughty, G., white collar unions 993
 Douglas Aircraft Co., Feher Cycle turbine 240
 sterilizable battery cell 240
 Douglas DC-10 aircraft 168
 Douglas Moor power transmission test line 913
 Dounreay fast breeder reactor transformer 949
 Dove, E. D., engineering drawing (books) 35, 935
 Dow Chemicals, spray coating of tablets 22
 Dow Corning International Ltd. 691
 Silastic silicone rubbers 973
 silicone rubbers (trade publication) 346
 Dowty, Sir George, Hon. Fellowship, Royal Aeronautical Society 900
 Dowty Group Ltd., appointments 651
 Doxiadis Associates, water storage in Africa 662
 Doxiadis Ionides Associates Ltd., water storage in Africa 662
 Drafting kit, student's, British Thornton 407
 Drafting table, Backlight 512
 Dragon conveyor roller 476
 Drainage of the Fens (book) 477
 Drallim Industries Ltd., rotary switch valves (trade publication) 766
 Draper, A., electrical machines (book) 227
 Draught proofer for windows, Warsil 427
 Draughting machine, automatic, Gerber 100
 Draughting paper, VeriGraph Modular 973
 Drawing, engineering, by P. M. Dunne (book) 681
 reading exercises in, by R. Thomson (book) 807
 geometrical and mechanical, by A. C. Parkinson and E. A. Ayres (book) 559
 modern engineering, by E. D. Dove and A. T. W. Gaskin (books), 35, 935
 sheet metal, by A. Dickason (book) 981
 Drawing instruments case, Versatility 693

- Drawing office equipment, British Thornton 692
 Drawing reader, ADE 515
 Dredge, mechanical cockle 243
 Driers, filter, for refrigeration plant 340
 Drill, diamond, core barrels (trade publication) 724
 ejector, Sandvik 469
 rock, and roadbreaker, Mongoose 511
 Drill chuck attachment, chain saw with 764
 Drilling, of rock, by K. McGregor (book) 807
 Drilling machine
 Co-ordatrol, Herbert 470
 indexing 842
 numerically-controlled 515, 968
 tape-controlled, Pratt and Whitney 100
 trade publication 848
 ultrasonic 1050
 Drilling and milling machine
 Hydra-Point 471
 Line-A-Mill 471
 Drilling and tapping machine for starter-motor casing 923
 Drilling, boring and milling machine, Hybormill 470
 NumeriCenter 470
 Drilling rigs, Carmody Drilling and Well Control Trainer 6
 rotary, Traveller 69
Sea Gem accident inquiry 688. *Letter* 817
 semi-submersible, Staflo 988, 1028
 underwater 719
 Drive, adjustable-frequency, Accuspeed 513
 hydraulic, types of 155
 hydrodynamic 155
 hydrostatic. *See* Hydrostatic drives
 Drive units (trade publication) 478
 Driver(s), motor car speed judgement by 359
 Driver communication problem, RRL 21
 Drop forging hammer. *See* Hammer
 Drucquer, L., CEI centralized services 647
 Chairman, CEI 86
 Drum(s), polythene (trade publication) 80
 Drummond Dust and Fume Extractors Ltd., dust extractor (trade publication) 1018
 Dry dock. *See* Dock
 Dryer. *See* Drier
 Drying, and storage plants, Conder 955
 of blast furnace slag, combustion chamber for 923
 of ink, by hot oil 793
 of natural gas, molecular sieve for 464
 Dualseafe air heater 602
 Dubai, harbour at 690
 Dubilier Condenser Co. (1925) Ltd., paper flaw detector 185
 Duckhams Oils, concrete release agent 756
 Duct(s), underground, Polyorc B. pvc piping for 779
 Paraseal solvent cement for jointing 779
 Duct-heater battery, Mercian 760
 Ductfas insulation adhesive 639
 Ductility and strength in design 368
 Ducting, insulated, for heating systems 931
 ventilation, automatic fire damper 187
 Dudley, B. R., fatigue cracking in axles 862
 Dudley Drop Forging Ltd., controlling and recording production time 106
 Dukes and Briggs Engineering Co. Ltd., level limit switch 712
 Dumore Co., precision tools (trade publication) 520
 Dump hauler, rear, Steelfab 721
 Duncan Johnston Ltd., centralized heating 831
 Dunford and Elliott (Sheffield) Ltd., appointments 1026
 merger with Hadfields Ltd. 689
 Dungeness nuclear power station, radio-isotope warning light 104
 Ripple generator for 104
 Dungeness B nuclear power station, compressor for heat exchanger elements 291
 plumbing and drainage 1025
 progress 405
 protection of prestressing system 338
 Dunlop Engineering Group, appointments 691
 Dunlop Rubber Co. Ltd., Fleximet pipe assemblies 763
 Pneuride air suspension system 1002
 SP Sport motor car tyres 654
 wire motor car wheel 658
 Dunne, P. M., engineering drawing (book) 681
 Duodrive crane crab 836
 Duoflex flexible abrasive materials 258
 Duomatic levelling and tamping machines 205
 Duorail, rapid transit system 777
 Duplicating machine, Synchrotrace 444
 Du Pont, coating of plastics 797
 neoprene synthetic rubber sealing 833
 Nomex nylon fabric for dust filtration 590
 Viton fluorelastomer in aerosol pack 973
 Zytel 7000 glass-filled nylon resins 638
 Duport Foundries Ltd., monorail blast-cleaning 422
 Dura-Churn parts washer 927
 Duramin Engineering Co. Ltd., cargo containers 1014
 Dust collection
 cyclone 605
 definition 605
 electrostatic precipitators 607
 Engineering Outline 605
 filter bed 606
 gravity settling chamber 605
 inertial devices 605
 louvre type 605
 methods 605
 purpose 605
 scroll separator 606
 scrubbers 606
 Dust collector, bag-filter, Torit 931
 Roto-Clone 432
 textile 601
 Dust-control equipment, Sirocco 1010
 Dust Control Equipment Ltd., insecticides plant for Russia 861
 wet deduster for paper baling room 707
 Dust extractor, E type process, Airmaster 931
 trade publication 1018
 Dust filters, Powell Duffryn 469
 Dust filtration, nylon fabric for 590
 Dust removal for waste-paper baling room 707
 Dusting fabric, Minnesota Mining and Manufacturing 150
 Dutra 2500 tractor 52
 Dutra D8000 tractor 954
 Dwyer, F. W., differential pressure switches 1042
 Dwyer Manufacturing, pressure switch/gauge 714
 Dyane motor car, Citroen 580
 Dynaflo dust and fume filters 469
 Dynamco Ltd.
 amplifiers 718
 data logging equipment 718
 digital voltmeter 718
 electronic equipment (trade publication) 1048
 frequency synthesis 718
 growth of 718
 instrument landing system 718
 oscilloscope 71 series 718
 precision transformers 718
 research and development 718
 train-to-track communication system 718
 Dynamic Precision Controls Corp., transducers 138
 Dynamics, fluid, by F. Chorlton (book) 1047
 Dynamometer, hydrostatic 595
 Dyson, R. A., & Co. Ltd., bogie trailer 836
- ## E
- Eaglesfield, G. C., on laser light (book) 477
 Ear muffs for noise protection 446, 863
 Earth rod, extensible, Biclad 889
 Earthmoving equipment 552
 East Africa, trading prospects 400
 East Lancashire Paper Mill Co. Ltd., paper production control 750
 paper production equipment 751
 Eastburn, general hospital 533
 Eastern Airlines, cargo distribution system 1029
 Eaton Yale and Towne Inc., electric trucks 680
 Ebauches SA, revolution counter 518
 Ebonol blackening compounds for steels 148
 Eccles Engineering Ltd., traction stacker 1014
 Econheat Ltd., Dualseafe air heater 602
 suspended oil-fired air heaters 70
 Econ-O-Lift elevator for core making 923
 Economic Development Committees
 building industry 486
 civil engineering industry 486
 machine tool industry, new chairman 485
 mechanical engineering industry 526, 987
 Economics, of nuclear fuels, IAEA 766
 technological, by D. Davies and C. McCarthy (book) 1047
 Economists Advisory Group, Dee Estuary report 199
 ECuGT welding electrode for copper 876
 Edbro Ltd., bucket loading system 837
 tipping gears and bodies (trade publication) 1018
 Edinburgh Regional Electrophysiological Service, Elliott 903 computer for electro-encephalograph analysis 738
 Edlon Machinery Ltd., compression moulding gun, 385
 Edmonds, P. J., careers encyclopaedia 1967-68 (book) 893
 Education
 engineering contribution to 327
 higher, Lancaster studies in (book) 305
 mathematical, of engineers (book) 153
 of professional engineers (book) 935
 of technologists, by M. Jahoda (book) 981
 Educational and Training Technology, Industrial Council for 197
 Edwards, F. J., Ltd., circular cold saw 1009
 sawing and milling machine 511
 Edwards High Vacuum International Ltd., apparatus for European Space Technology Centre (ESTeC), Noordwijk 611
 Edwards High Vacuum Ltd., vacuum brazing and heat treatment processes 252
 Efcu-Royce Furnaces Ltd., brazing furnace 146
 Efcu-Udylite Nickel Seal nickel plating 627
 Effluent treatment, for food industries 36
 symposium 982
 plastic packing for 870
 trade publication 118
 Effluent treatment plant, Flocor 958
 Egerton, A. C., Engineers (Bromley) Ltd., articulated bed for spinal damage 48
 Eggborough power station, water-cooled busbars for, AEI 653
 E-H Research Laboratories UK Ltd., integrated circuits testing system 715
 Eimco (Great Britain) Ltd., mine and quarry loaders 890
 rocker shovel 720
 Ekco Electronics Ltd., metal analyser 432
 stainless steel runners 422
 Ekibastuz coalfields, open-cast development 875
 Elapsed time indicator, Davall 1040
 Elapsed time meters (trade publication) 228
 Elasticity, by P. C. Chou and N. J. Pagano (book) 345
 Elastomers under load 182
 Elcometer Instruments Ltd., abrasion testing 303
 Elcometer thickness gauge 389
 Eldair hydraulic scrap baling press 672
 Eldair scrap shearing machine 672
 Electric bicycle, Winn City Bikes 493
 Electric Cable Makers Association, cables and flexible cords (trade publication) 80
 Electric car. *See* Motor car, electric
 Electric contacts, by R. Holm (book) 433
 Electric furnace. *See* Furnace
 Electric Light Fittings Association, photometric data surveillance 548
 Electric locomotive. *See* Locomotive
 Electric machinery, equivalent circuits of, by G. Kron (book) 603
 Electric motor. *See* Motor, electric
 Electric motor car. *See* Motor car(s)
 Electric power. *See* Power; Electricity
 Electric Power Storage Ltd., appointments 1026
 batteries for electronics (trade publication) 392
 Electric power systems, by B. M. Weedy (book) 559
 Electric resistance-welded steel tube, Tru-Wel, manufacture of 487
 Electric systems, high-tension, conference on (Paris), CIGRE 982
 trade publication 642
 Electrical appliances, domestic sales statistics 2
 Electrical conductance as measure of moisture content 229
 Electrical contact phenomena symposium (Swansea) 80
 Electrical contracting and estimating, by F. Hindler (book) 847
Electrical Contractors' Standard Form of Accounts and Accounting Procedure 519
 Electrical discharge forming
 basic principles 119
 basic processes 119
 definition 119
 Engineering Outline 119
see also Electrohydraulic forming; Magnetic forming
 Electrical discharge machining 435
 Electrical energy distribution, conference 630
 safety in 630

- Electrical engineer(s) international exhibition (Earls Court) 642
- Electrical engineering, by J. Burkett and P. Plumb (book) 227
- static control in (book) 807
- Electrical equipment, Butec 689
- in flammable atmospheres, testing service 252
- trade publication 306, 346
- Electrical indicating instruments, specifications 1035
- Electrical installation science, by J. O. Paddock and R. A. W. Galvin (books) 117, 477
- Electrical installation work, by R. A. Mee (book) 847
- Electrical machines, by A. Draper (book) 227
- generalized, by A. J. Ellison 477
- Electrical machining. *See* Machining
- Electrical manufacturing industries, companies and products 778
- Electrical plant and components 634, 801, 977
- Electrical plugs and sockets (trade publication) 642
- Electrical power. *See* Power; Electricity
- Electrical Power and Storage Ltd., training scheme 773
- Electrical Research Association
- conference on electrical energy distribution 630
- Dielectric Relaxation* 632
- thick-film circuits 23
- value from research projects 87
- Electricity, in agriculture and horticulture, conference on 268
- research into new uses for 698. *Letter* 817
- water treatment by 698 *Letters* 817
- Electricity Council
- Better light better performance* 398
- electro-agricultural centre 52
- electrolytic cell for motor cars 699
- engineering and scientific staff organization 906
- environmental experiments in buildings 699
- Industrial Development conference 659
- lead/acid battery research 699
- lighting for industry campaign 131
- research laboratory, Capenhurst 698
- Electricity distribution system for building sites, AEI 387
- Electricity meter type FNE12PF, Ferranti 360
- Electricity supply industry
- nationalization of, Italy 7
- position and prospects of 273, 398
- research and development activities 906
- staff organization 906
- translator for 490
- Electricity Supply Industry Training Board 274
- Electricity tariffs, increase in 351
- Electrification, frictional, by W. R. Harper (book) 559
- Electro-agricultural centre, Electricity Council 52
- Electro Automat Ltd., control cubicles 431
- Electrochemical corrosion of bearings 262
- Electro-Chemical Engineering Co. Ltd., agreement with V/O Avtopromimport 944
- Efco-Udylite Nickel Seal nickel plating 627
- Electrochemical machining 436
- Electrochemistry, by C. W. Davies (book) 765
- Electrode-making machine, graphite, pantographite 1008
- Electrode setting gauge (trade publication) 766
- Electrodialysis, desalination 349
- Electro-encephalograph analysis, computer for 738
- Electrohydraulic forming 121
- advantages 122
- applications 121
- limitations 122
- Electrolytic cell research for motor cars 699
- Electrolytic etching of Diron steel sheet 114
- Electrolytic sewage treatment process 828
- Electromagnet(s) CDM 100, Hirst 636
- Electromagnetic clutches, brakes and couplings 102
- Electromagnetic field, by G. W. Carter (book) 847
- Electromagnetic flowhead (trade publication) 1048
- Electromagnetic flowmeters 309
- Electromechanical elapsed time indicators (trade publication) 724
- Electron beam machining 436
- Electron etching, developments in, Mullard 71
- Electron exchange force 937
- Electron lithography, developments in, Mullard 71
- Electron multiplier, channel, Mullard 71
- Electron synchrotron, NINA. *Letter* 690
- Electronic and magnetic behaviour of materials, by A. Nussbaum (book) 477
- Electronic aids for blind persons 55
- Electronic Associates Ltd., plotting modules 717
- Electronic cam, Arri, in television filming 867
- Electronic capital goods, exports of 731
- Electronic counting, by E. J. Kench (book) 681
- Electronic engineer's reference book, by L. E. C. Hughes and F. W. Holland (book) 723
- Electronic equipment, and components 554, 715, 758
- computer-aided design 758
- domestic, servicing 239
- trade publication 1048
- Electronic Flo-Meters Ltd., turbine flowmeter 258, 302, 1039
- Electronic gauge, Hoffmann 463
- Electronic instruments (trade publication) 228
- Electronic inverters, by F. G. Spreadbury (book) 345
- Electronic Production Aids Ltd., paper production 751
- Electronic revolution, by S. Handel (book) 765
- Electronic tachometers, Smiths 557
- Electronic thermometers, Comark 476
- Electronic trips, Mimic 475
- Electronic tubes and dry reed switches (trade publication) 1048
- Electronics
- aircraft, logic and multiplexing techniques 910
- basic industrial, by A. Haas (book) 433
- do-it-yourself kits 490
- industrial, international exhibition of (Basel) 392
- modern, physics of, by W. A. Günther (book) 519
- Electronics equipment and components 554, 715, 758, 883, 1039, 1044
- Electronics industry, position and prospects 398
- statistics of 41
- Electroniques, do-it-yourself kits 490
- Electroplating, control system 882
- of threaded components, BSI 145
- Electroplating process, Lansin tin-nickel 692
- Electro Products Laboratories, magnetic pickup 1039
- Electrosil Ltd
- digital glass memory modules (trade publication) 894
- fluidic devices 711
- trade publication 80
- fluidic passive OR gates (trade publication) 724
- glass delay lines (trade publication) 228
- glass memories (trade publication) 1048
- logic components 716
- oxide resistors, price reductions 1045
- tin oxide resistor networks (trade publication) 894
- Electro-slag refining plant 660
- Electro-slag refining technology (ESRT) 547
- Electrostatic paint spraying equipment 386
- Electrostatic precipitators 607
- Electrostatic tea de-stalking machine 943
- Elegant solution, by J. F. Brennan (book) 935
- Elevator, carton, for bulk section warehouse 61
- Elevator system, bucket, Econ-O-Lift 923
- Elevator truck, hydraulic, with pouring device 838
- Elgamill fixed-bed machine with numerical control 470-471
- Elgar Machine Tool Co. Ltd., Elgamill fixed-bed machine with numerical control 470-471
- Elliott-Automation, aircraft electronics, logic and multiplexing techniques 910
- Elliott-Automation Microelectronics Ltd., micro-circuits, beam-lead connectors 888
- Elliott, B. Group, appointments 733
- Elliott Process Automation Ltd., agreement with Compagnie Générale d'Automatisme 773
- gas/liquid sampling systems (trade publication) 1048
- Elliott 903 computer for electro-encephalograph analysis 738
- Ellis, M. D., women engineers and scientists 45
- Ellis, V., white collar unions 993
- Ellison, A. J., on Generalized Electrical Machines 477
- ELMIA '68 Agricultural Fair (Sweden) 642
- Elmwood 2455B thermostatic control for defrosting 302
- Eltron (London) Ltd., immersion heater 978
- Elvacite 6015 coating of plastics 797
- Embankment compacting machine 115
- Embassy Machine and Tool Co. Ltd., counter-roller device 668
- Embee Engineering, electrode setting gauge (trade publication) 766
- Embrittlement, hydrogen, in prestressing wires 339
- EMI Electronics Ltd., driverless tractors 590
- Robotug automatic trains 689
- wind recording instruments on television mast 489
- Emihus Microcomponents Ltd., appointments 818
- Hughes compression bonder 884
- tantalum capacitors 715
- Employee benefits, personnel manager's guide to, by M. Wade (book) 723
- Employer's guide to law, by E. Mitchell (book) 893
- Employment, racial discrimination in 234
- see also* Labour; Unemployment
- Emulsions, acrylic, for leather finishing 301
- Enamel steel sheet, Diron one-coat 113
- Encapsulation of photo-cell unit in viscometer 793
- Encoder, for aircraft altitude reporting 110
- relay-switched 702
- synchro shaft, K-260-A, Muirhead 1041
- End mill, clamped-tip, Secodex S 70
- Endoprobe endoscope inspection equipment 842
- Endoscope inspection equipment, Endoprobe 842
- Energol cutting oils 340
- trade publication 434
- Energy, hydraulic 157
- managing: conference (Brighton) 118
- Energy conversion, by C. R. Russell (book) 79
- in hydrostatic drives 157
- Engine, aircraft. *See* Aircraft engine
- diesel, batteries for 837
- Burmeister and Wain 'super-large' bore K98FF 964
- combined with gas turbine, CODOG 10
- Coventry Victor Vixen 72
- cylinder head, B. W. Hall 112
- Deltic 6
- EMD-645, General Motors 26
- for patrol boats, General Motors 10
- Honda type GD-90 533
- industrial, turbocharged 551
- Lister HW2 407
- MAN type KZ 105/180 134
- MAN type K3Z 102/180 134
- mechanical design of (book) 603
- NOHAB 405-406
- noise level research 872
- OM 636 conversion for marine duty 166
- Paxman type RPH 300
- Paxman Ventura, for recovery vessel 210
- Pielstick type 16PC2V-400 995
- trade publication 392
- vibration damping 873
- Vulcan (trade publication) 346
- diesel marine, development of large 129
- motor car. *See* Motor-car engine
- oil. *See* Engine, diesel
- petrol, four-stroke, Honda 240
- International RD450B 290
- rotary, Wankel, in motor car 410
- small internal combustion, testing equipment for 753
- traction, I worked with, by J. Hampshire (book) 519
- Engine design, IC, computers in, symposium (Manchester) 80
- Engineer(s)
- chartered. *Letters* 242, 856, 944, 990
- in electricity supply industry 906
- in university, by D. G. Christopherson (book) 227
- mathematical education of (book) 153
- professional, survey of 530
- world-wide authority for 648
- salaries of 233, 1023
- see also* Electrical, Mechanical, etc.
- ENGINEERING, automatic flat-banding and labelling 126
- Engineering: craft and science, BBC television programme 125, 154
- introduction to, by G. C. Beakley and H. W. Leach (book) 847
- of gas/solid reactions 1048
- see also* Civil, Electrical, Mechanical, etc.
- Engineering adhesives. *See* Adhesive(s)
- Engineering and Building Centre, Birmingham 528
- Engineering education. *See* Education
- Engineering Employers Federation, race relations 943
- Engineering Equipment Users Association, metric system 689, 785
- Engineering exhibition, British (Copenhagen) 560
- North British (Glasgow) 434
- Engineering industry, output in Europe in 1967 1024
- position and prospects of 313
- race relations in 943

- training and, symposium on, PERA 1018
 wage scales in 1023
- Engineering Industry Training Board (book) 1047
 First Year Training for Constructional Engineering
 Craftsmen and Technicians 773
 grants scheme for 1967/68 312
 recommendations 566
 reconstitution 159
 trainee places 274
 training school at Leeds 854
- Engineering Inspection and Control Exhibition
 (London) 875
- 'Engineering' Ltd., changes in Board 3
- Engineering manual, by R. H. Perry (book) 893
- Engineering materials, by M. H. A. Kempster (book)
 981
- Engineering materials and design international
 exhibition and conference (Olympia) 936
- Engineering mechanics, by T. C. Huang (book) 935
- Engineering outline
 carburation 849
 computer languages 393
 cryogenic thermal insulation 1019
 data presentation 479
 desalination 347. *Letter* 447
 design of experiments 81
 dust collection 605
 electrical discharge forming 119
 electrical machining methods 435
 engineering adhesives 937
 fluid logic circuitry 269
 formwork 725
 fuel injection 896
 high temperature insulation 809
 hydrostatic drives 155
 interferometry 521
 investment casting 683
 level measurement 561. *Letter* 774
 liquid flow measurement 307
 low pressure measurement 37
 moisture measurement 229
 noise from aircraft 983. *Letter* 1025
 overhead runways and conveyors 643
 photoelasticity 191
 rock mechanics 767
 ultrasonics 1049
- Engineering Outlines I, by A. A. H. Scott (book) 391
- Engineering science at university (handbook) 689
- Engineering sciences, handbook of, by J. H. Potter
 (book) 153
- Engineering standards. *See* British Standards
 Institution
- Engineering thermodynamics, by G. F. C. Rogers and
 Y. R. Mayhew (book) 559
- Engineering Tool and Product Design Co. Ltd.,
 diecasting machine 256
- Engineers Guild, annual general meeting 941
 appointment of new secretary 126
 local occupational groups of chartered engineers
 941
 salary levels of engineers 233
- English Electric Co. Ltd.
 agreement with Atos-Oleodinamica 943
 analogue controller 188
 computer control for Hinkley Point B nuclear
 power station 670
 D400 class Type 4 diesel-electric locomotives
 874
 d.c. power transmission scheme for Nelson River
 241
 Deltic locomotives 6
 electro-diesel locomotives, Type JB 418
 equipment for Bournemouth-Waterloo railway
 electrification 17
 gas-turbine generating sets for Australian power
 stations 206
 generating sets at West Burton power station 700
 generators for Cottam power station 454
 high pressure gas holders 944
 hydrostatic dynamometer 595
 Interbloc system of power transmission line
 protection 63
 low frequency relay 634
 scale meters, size 3E 98° 74
 servicing of domestic appliances 238
 solid-state control modules 73
 Switchgear and Fusegear Sub-Group 651
 switchgear interests 567
 turbogenerator set for desalination 167
 Vulcan diesel engines (trade publication) 346
- English Electric Computers Ltd.
 computer analysis of book vocabularies 240
 computer centre, Whetstone 145
- computer control for Hinkley Point B nuclear
 power station 670
- M21-40 computer for engineering and research
 980
- marketing organization 41
- record cards for magnetic tape files 31
- structural analysis by computer (trade publica-
 tion) 724
- System 4 computers design and production 99
- English Electric Valve Co. Ltd., image orthicon
 television camera (trade publication) 560
- television pickup tubes 555
- vidicons and ignitrons (trade publication) 228
- English Steel Corp. Ltd., Ex 9 experimental steel
 295, 296
 spectrographic laboratory 1043
- Enots Ltd., amplifying valve 341
- deep-hole wood-boring machine 1009
- flow regulator 518
- spray gun for lubricants 74
- Ensenada, iron and steelworks at 944
- Enstrom F-28A helicopter components for Twyford-
 Enstrom Solent helicopter 738
- Enthoven Solders Ltd., cored solder 257, 973
 silver bearing solder 638
- Environment test equipment exhibition 190
- Environmental experiments in buildings 699
- Environmental test chambers 717
- Environmental testing, of transducers 708
 trade publication 560
- Environmental testing equipment (US Trade
 Center) 220
- 'Epikure' NMA accelerator (trade publication) 478
- Epoxy resin service for wet surfaces 835
- Equipment cases, Implan 885
- Equivalent circuits by G. Kron (book) 603
- Eraflex pipe suspension system 302
- Erecto, storage structures (trade publication) 434
- ERF Engineering Ltd., cab fronts 292
- Ergonomics, and productivity symposium, PERA
 894
 and safety in motor car design (book) 153
- Erosion, coastal, prevention of 94
 turbine blade, reducing 804. *Correction* 863
- Error, experimental. *See* Experimental error
- ERW steel tube, manufacture 487
- ESAB, CO₂ welding (trade publication) 346
- Escher Wyss, Tysse 2 power station 743
- ESNA Products Ltd., self-locking fasteners (trade
 publication) 766
- ESR. *See* Electro-slag refining
- ESRO I satellite, test facility 103
- ESRT. *See* Electro-Slag Refining Technology
- Esso Petroleum Co. Ltd.
 air-cushion transport 165
 Cazar K grease for sliding switch blades 146
 Estor HD industrial diesel oils 838
 ink drying by hot oil 793
 polyurethane foam of shredded Bibbipol 206
- ESSO REM Marine Research and Training Centre,
 Port Revel, Grenoble 54
- Estimates Committee, report on road research 279
- Estimating, electrical, by F. Hindler (book) 847
- Estor HD industrial diesel oils 838
- Estuary, Dee, development proposals 199
- Etch booths of polypropylene 25
- Etchells, David (Machinery) Ltd., toggle press 474
- Etching, electrolytic, of Diron steel sheet 114
 electron, developments in, Mullard 71
- Ether Engineering, Ltd., environmental testing (trade
 publication) 560
 solid-state amplifiers 476
- Ether Ltd., current transmitter 1042
 high density connectors, SQC 1046
 safety valve for air and water 111
 subminiature crimped contact connectors 31
- Ethyl Corp., effluent treatment 870
- Ethylene oxide and glycol plant, reactors for 949
- E.T.S. (Lonertia) Ltd., diamond drill core barrels
 (trade publication) 724
 Soderkvist flexible shaft couplings 187
- Euro Dynamics Ltd., Micro Mist lubricant 797
- Eurolec GB pocket guide 1967 (book) 79
- Europa Engineering Co. Ltd., environmental test
 chambers 717
- Europa oil-fired boiler 760
- Europe, engineering industry output in 1967 1024
- European Economic Community. *See* Common
 Market
- European Institute of Technology 771
- European Launcher Development Organization 245
- European Lead Development Committee, conference
 (Venice) 118
- European Machine Tool Exhibition (Hanover) 470,
 515
- European Space Research Organization, appoint-
 ment of new director 159
 technical progress 245
 thermal test facility for ESRO I satellite 103
- European symposium on powder metallurgy
 (Stuttgart) 520
- European Unit Routes Ltd., container service to
 Rotterdam 949
- Eurotherm Ltd., temperature control unit 226
- Eurotramp Gesellschaft für Transport und Handel,
 lightweight pumice aggregate (trade publica-
 tion) 894
- EUSEC, activities of 90
- Euston main line electrification (book) 345
- Eutectic Institute for maintenance and repair welding
 techniques 146
- Evaporating and distilling plant, marine, Caird 221
- Evaporation units, vacuum, Bir-Vac 1044
- Evaporator, in Stabrite stainless-steel plate 1005
 vacuum insulated, BOC-Airco 677
- Eve, J. L., Construction Co Ltd., power transmission
 line reconstruction 320
- Evershed & Vignoles Ltd., quick-response recorder
 717
- Evro series galvanometers 1040
- Ewbank & Partners Ltd., appointments 1026
- Ex 9 experimental steel 295, 296
- Exactor Sterling Ltd., appointments 775
- Excavator
 air-controlled, crane version 551
 Broyt X2 720
 bucket wheel 719
 heavy-duty, UB162, Takraf 889
 hydraulic, mobile, Smith-Tractem-804 550
- Excavator/loaders, trade publication 560
 Wain-Roy 889
- Excitation unit for spectrochemical analysis 70
- Exciters, static, for alternator control 111
- Executive motor car, Ford 871
- Executive success in the manager's world 154
- Exeter substation, static compensator for 839
- Exhaust-gas tar analysis by chromatography 875
- Exhaust valve. *See* Valve
- Exhibition
 advertising (Utrecht) 190
 agricultural machinery, Royal Show (Kenilworth)
 52
 and conference, clean air (Harrogate) 936
 British craftsmanship 936
 British engineering (Copenhagen) 560
 British Week (Stockholm) 982
 Brno International Trade Fair 488
 Building, International (Olympia), exhibits at 755
 South African (Johannesburg) 982
 Coal Handling (Nine Elms Depot) 5
 exhibits at 27
 Componex 67 (Olympia) 755, 757
 computer, USA 982
 container services and equipment (Olympia) 520
 creative element in engineering, D. Beck 46
 Daily Mail schoolboys and girls 848
 design for export 560
 design in Czechoslovakia 190
 ELMIA '68 Agricultural Fair (Sweden) 642
 Engineering Inspection and Control (London)
 875
 Engineering Materials and Design (Olympia) 936
 environmental testing equipment (US Trade
 Center) 190, 220
 European Machine Tool (Hanover) 470, 515
 food processing, packaging and machinery
 (London) 604
 Frankfurt international motor show 449
 industrial finishing and anti-corrosion (Earls
 Court) 118
 International Broadcasting Convention (London)
 554
 International Construction Equipment (Crystal
 Palace) 549, 553
 International Cycle and Motor Cycle Show (Earls
 Court) 492
 International construction equipment (Crystal
 Palace) 719
 international electrical engineers (Earls Court)
 642
 international heating, ventilating and air condition-
 ing (HEVAC) (Olympia) 478
 international industrial electronics (Basel) 392
 International Motor Show (Turin) 741
 International Shipping (Oslo) 989
 Leipzig international fairs 982

- Lyon international fair 1968 894
 Machine Tool and Mechanical Engineering (Johannesburg) 773
 Mekanik '68 (Malmö, Sweden) 936
 Motor Show (Earls Court) 656
 North British Engineering (Glasgow) 434
 Paris Motor Show 579
 physics 560
 pneumatics in industry (Sheffield) 228
 public works and municipal services (Olympia) 682
 Royal Smithfield Show (Earls Court) 954
 Scottish Motor Show (Glasgow) 783
 site equipment demonstration (Hatfield) 808
 strain measurement, recording equipment 228
 teamwork-industrial design 848
 Textile Machinery, International (Basle) 80
 transportation engineering, ICE 520
 Turin Motor Show 788
 Vienna international trade fair 1018
Wasa sinking 682
 welding technology 181
 woodworking machines (Paris) 936
 Exhibition unit, mobile, aluminium container as 1016
 Expanded polyethylene in colour, Plastazote 972
 Expanded polystyrene foam cushions 832
 Expanded Rubber and Plastics Ltd., shin guard 618
 Plastazote expanded polyethylene in colour 972
 Expandite Ltd., plug for masonry, brickwork 475
 Expansion joints, axial (trade publication) 154
 bellows, Powerflex, for pipelines 73
 road bridge (trade publication) 36
 Experiment(s)
 design of, definition of 81
 principles of 82
 purpose of 81
 multiple-factor 83
 single-factor 82
 Experimental error, effects of 81
 random inaccuracy 81
 systematic bias 81
 Explosion. *See* Accident
 Explosive for quarry and mine blasting 972
 Export(s)
 business equipment 773
 communications equipment 990
 design for, exhibition on 560
 marine equipment 990
 mechanical engineering industry 404
 movement by air transport 439
 navigational aids 990
 of electronic capital goods 731
 statistics 441
 television programme filming for 867
 to Russia 486
 translation of technical material for. *Letter* 132
 Export Group for Construction Industries, appointments 945
 Express Lift Co. Ltd., Camus building constructions 383
 Extended launder air casting process 966
 External-Aire direct-fired air heaters 930
 Extractor, magnetic, for conveyors (trade publication) 306
 Extrudex Ltd., pipe tapping tool 757
 Extrusion press. *See* Press
 Eye faults, uncorrected (trade publication) 392
 Eye protection spectacles 863
 Eyles, G. F., menace of broken rails 902-903
- F**
- Fabrex-10 casting riser sleeves 799
 Fabric, indented structural 518
 Fabrycky, W. J., inventory systems (book) 641
 Face mask for use at high altitudes 618
 Factories Direction Ltd., racing track 366
 Factory(ies), total electric, W. Robinson 659
 totally integrated environment 659
 Factory accident. *See* Accident
 Fafnir Bearing Co. Ltd., sealed ball bearings (trade publication) 36
 FAG Bearing Co. Ltd., bearings (trade publication) 392
 Fagandini, D. A., managing director, Overseas Marketing Corp. 730
 Fagersta Steels Ltd., Futurmill conversion unit for milling machine 752
 Secodex S clamped-tip end mill 70
 Fair, trade. *See* Exhibition
 Fairey Engineering Ltd., appointments 775
 tube-bending machine 675
 Fairey Surveys Ltd., vibration and fatigue actuator 221
 vibration test service 146
 Fairfields Ltd., value engineering 754
 Fan(s), centrifugal (trade publication) 936
 corrosion-resistant, Placon 932
 fume-handling, Capper-Neill 257
 variable-pitch axial-flow, Cyclone 759
 Fan intake mutes for noise reduction 130
 Farm engineering research, NIAE 331
 Farm Implements Ltd., potato handling 955
 Farming, power, machines for, by A. A. Stone and H. E. Gulvin (book) 267
see also Agriculture; Tractor
 Farrow, Howard, residential training centre 4
 Fasteners, for screws in thin metal 31
 self-locking (trade publication) 766
 threaded, plastic locking sealants 76
 trade publication 434
 Fatigue, ausforming effect on 627
 high-strain, thermal and (book) 1017
 Fatigue actuator, vibration and, Fairey 221
 Fatigue cracking in railway axles, IME 862
 Fatigue fracture in large constructions 368
 Fatigue life of bogies 800
 Fault detection relay, Donovan 978
 Fausto Arona and Sons, outboard motors 862
 Fawcett, J. R., hydraulic circuits (book) 723
 FEANI, activities of 90
 composition of 90
 Federation of Civil Engineering Contractors, Handbook for 1967 559
 Fédération Européenne d'Associations Nationales d'Ingénieurs. *See* FEANI
 Feedback Ltd., servo-control teaching systems 713
 Feeder, hopper, elevating, INA 432
 Feeder stands, vibratory bowl 764
 Feeding aid, press, Dudal 845
 Feher, E. G., Feher Cycle turbine 240
 Felt pads for machine mountings 752
 Fencing, machinery (trade publication) 1018
 Fens, drainage of (book) 477
 Fenton, J. E., help for the sales engineer 361
 Ferguson Bros., fisheries research vessel 731
 Ferguson 4-wheel drive motor car 995
 Fernox CH1 additive for central heating systems (trade publication) 392
 Ferranti Ltd.,
 ADE drawing reader 515
 appointments 1026
 Argus computer for Q4 Cunard liner 452
 CONSUL software package 46
 Digiturn lathe measurement system 515
 electricity meter 360
 electronics department appointments 903
 fine-scratch measuring microscope 299
 integrated circuit connectors 884
 Multi-ax numerical control system 304
 on-line control software (trade publication) 724
 Photoplot radar map of Tees 324
 rear port cathode ray tube 885
 SCOPE control system 515
 static inverters (trade publication) 894
 U-link loader for wire-wrapping 843
 Ferrari Dino 206GT motor car 741
 Ferrari 365 2+2 motor car 657
 Ferry, *Antrim Princess* 995
 Fertilizer plant, ammonia, Rumania 611
 Humphreys & Glasgow 944
 Fiat, commercial vehicle exhibits at Turin 742
 Dino Spider motor car 580
 Fiat Tractors Ltd., tractor shovel 720
 Fibre(s), high strength 618
 Fibre optics experimental kit 301
 Fibre-reinforced metals, high-energy-rate forming of 103
 Fibreglass Ltd., infra-red television system to determine temperature distribution on furnace walls 669. *Correction* 753
 Field, M. A., pulverized coal (book) 935
 Fielden Electronics Ltd., appointments 991
 Fiennes, G. F. G. T-W-, relinquishment of BR post 526
 Filament welding, conference on 228
 Filipczynski, L., ultrasonic testing (book) 117
 Fillers, resinous, for coating systems 591
 Filling machines, and proportioning systems (trade publication) 766
 Bexuda, Becker 211
 Modufil volumetric, Becker 212
 semi-automatic, Neumo 358
 Film (cinema), moulding, casting and sintering 793
 on hydraulic fluids 591
 textiles from 154
 conference on 1018
 thin, conference (Southampton) 478
 Film technology, thick, conference on 936
 Filter(s)
 air, panel 597
 air cleaner 607
 industrial dust and fume, Dynaflow 469
 oil, compressed air system, Norgren 599
 Filter bed, dust collection 606
 Filter driers for refrigeration plant 340
 Filter elements, water, hollow Sterasyl candles as 617
 Filter-regulator, Norgren 425
 Filter testing agency proposal 464
 Filtraider filter unit in water trailer 780
 Filtration and Valves Ltd., strainers 476
 Finch, A. G., cars GT and TI 407
 Finch Engineering Co., steel footbridge designs 165
 Finch, J. R. G., CEI and creative engineers 902
 CEng is a good thing 944. *Letter* 990
 Finchsby portable centrifugal pump 598
 Finishing, abrasive rolls for 184
 exhibition (Earls Court) 118
 flow line, furniture 629
 Finishing plant, stainless steel tube 34
 Finishing tool for styrene spools 337
 Finland, Rautaruukki Oy steelworks 1011
 Finnish Plywood Development Association, plywood (trade publication) 154
 Fire, gas. *See* Gas fire
 in oil-soaked lagging 268
 Fire alarm bells (trade publication) 306
 Fire bill, industry's rising 36
 Fire damage statistics 162
 Fire damper for ventilation ducting 187
 Fire-extinguishing agent BCF 513
 Fire-fighting appliances, General Fire 513
 Fire fighting tug *Keverne* 653
 Fire precautions for computers 165
 Fire protection in process industry 1018
 Fire Protection Association, fire bill 36
 Fire Research Station, fires in lagging 268
 Fire-resisting doors (trade publication) 306, 520
 Fire Service, Gloucestershire, recovery vehicle 175
 Fire valve, BM Control 341
 Firestone Super Sports Wide Oval tyres 654
 Firestone Town and Country tyres 654
 Firth Brown Ltd., forgings (trade publication) 808
 Speedicut-FN button tool 845
 Firth Cleveland Fastenings Ltd., fasteners (trade publication) 434
 Firth-Derihon Stampings Ltd., drop hammer 469
 Firth-Vickers Stainless Steels Ltd., Staybrite plate 1005
 Fischer and Porter Ltd., Scan-line process instruments with computer interface 712
 Fishing ships and gear, research 243
 Fishplates, effect on rail failure 910
 Fisons Fertilisers Ltd., rail contract 567
 storage tank for ammonium nitrate solution 1005
 Fisons Industrial Chemicals, Ucecryl acrylic emulsions for leather finishing 301
 Fitzgeorge, D., metrication 95. *Letters* 283, 613, 774, 816. *Correction* 944
 S1 units for weights 650, 856-857
 Fitzpatrick and Son Ltd., Blackfriars Bridgehead underpass 172
 Fixed-bed machine with numerical control 470-471
 Flame detection unit, Photocain 714
 Flame proof enclosure for solenoid valve 558
 Flame-resistant cloths, Multitect 973
 Flammable atmospheres, testing service 252
 Flanagan, T. P., moisture measurement 232
 Flashing light for buoys and beacons 360
 Flaw detection in steel castings (booklets) 669
 Fløbu Luftteknikk A/S, dust and fume filters 469
 Flender (UK) Ltd., drive units (trade publication) 478
 N-Eupex flexible couplings 148
 Fletcher, A., computer science (book) 1017
 Fletcher and Stewart Ltd., hydraulic ball motor (trade publication) 604
 sugar manufacturing machinery 731
 Fletcher, Thomas, Ltd., Blackfriars Bridgehead underpass 172
 Flexadux Plastics Ltd., flexible plastic tubing 932
 Flexane urethane, production 974
 Flexicall communications equipment 432
 Fleximet pipe assemblies, Dunlop 763
 Flexstone flexible abrasive materials 258

- Flies, electrocution by Bentoflash equipment 242
 Flight recorder equipment 737
 Flight Refuelling Ltd., relays 475
 reed switches 717, 1045
 Flight simulators, Miles Electronics 612
 Fliteform Ltd., Viscount 808 airliner for freight 592
 Float glass. *See* Glass
 Flo-coat hot galvanizing of tube 1006
 Floccor effluent treatment plant 958
 Floccor plastic packing for effluent 870
 Flo-Master pneumatic valves 763
 Floodlight, tractor-mounted 889
 Floor(s), concrete, hollow mould pans for 187
 Floor scrubbing machines (trade publication) 560
 Floor surfacer, Quentop 798
 Flooring, Quenthan seamless 240
 Flow, and heat transfer, by A. Skelland (book) 641
 liquid, measurement of. *See* Liquid flow measurement
 Flow diagrams, mimic and, Synoptica 389
 Flow divider and regulator, Tektro 927
 Flow indicators (trade publication) 1048
 Flow line finishing, furniture 629
 Flow-rate control unit, electronic 1015
 Flow regulator, Enots 518
 Martonair 476
 Flowhead, electromagnetic (trade publication) 1048
 Flowmeter(s)
 combination 308
 counter-driving, Cyclo-meter 1042
 differential pressure 308
 electromagnetic 309
 inferential 307
 oil, Mini-Major 341
 Rotron 1 in 927
 shunt 308
 true mass 310
 turbine, Flo-Meters 258, 302
 types of 307
 ultrasonic 309
 variable aperture 308
 Flowmeter pickup, turbine 1039
 Flue gas, cleaning system, Decatox 932
 Fluff and dust collector, textile 601
 Flügge, W., viscoelasticity (book) 433
 Fluid(s), hydraulic, cinema film on 591
 penetrating, Free-Way 111
 Fluid dynamics, by G. K. Batchelor (book) 807
 of multiphase systems, by S. L. Soo (book) 641
 special topics in, by K. O. Friedrichs (book) 807
 textbook of, by F. Chorlton (book) 1047
 Fluid logic (trade publication) 228
 Fluid logic circuitry, Engineering Outline 269
 operation 270
 requirements 272
 Fluid-logic system, Plessey 933
 Fluid mechanics, by S. J. Peerless (book) 117
 Fluid power in hydrostatic drives 155
 Fluidic AND gate type AN, Plessey 1040
 Fluidic control, for crimping machine 507
 for Sea Knight helicopter 129
 Fluidic devices, Corning 711
 trade publication 80
 Fluidic elements, Norgren 880
 Fluidic logic for missile control 536
 Fluidic passive OR gates (trade publication) 724
 Fluidic units, Maxalog 421
 Fluidic visual indicator, Miniwink 880
 Visiwink 880
 Fluidics, course on 1018
 Fluidics conference, Cranfield (Torino, Italy) 118, 434
 Fluidised bed, scrap reclamation 967
 Fluorelastomer in aerosol pack 973
 Fluorplast Ltd., agreement with Pampus KG 527
 Fluorprint X-ray fluorescence spectrometer 1043
 Flygt submersible sludge pump 764
 Flyover
 Bow Bridge 584, 627, 722
 Harrow Road, design 623
 Foam bout marker, Soil Fertility 955
 Fodens Ltd., conveyerized painting 834
 Fog lamp quartz-halogen Silver Sabre 824
 Foil windings, aluminium 147
 Fokker, bond testing instrument 797
 honeycomb milling machine 844
 Follsain-Wycliffe Foundries Ltd., pulverizing mills 103
 Food freezer, thermostatic control unit 302
 Food industries, effluent treatment for 36
 symposium 982
 Food processing exhibition (London) 604
 Food transportation, NAAFI 241
 Foord, C. A., visual evaluation of lubricant 752
 Foot and mouth disease 950
 Footbridge designs, steel 165
 Foraky Ltd., cryogenic storage of gas 499
 Forbes, D. A., Joint Services Unit 495, 647
 Ford Motor Co. Ltd.
 ausforming effect on fatigue 627
 Comuta electric motor car 656
 Comuta 430E electric motor car. *Letter* 48
 Corsair motor car, modifications 616
 Cortina motor car, 1600E 577, 656
 dreadhead, with Zodiac V6 engine 656
 Cortina motor-car engine, bowl-in-piston combustion chamber 460
 crossflow cylinder head 460
 Econ-O-Lift bucket elevator 923
 Executive motor car 871
 Research and Engineering Centre, Dunton 661
 Safety and Service Week 694
 training courses 694
 Transit van for Swiss railways 358
 Zephyr motor car, modifications 616
 Ford of Germany, motor car range 450
 Ford-Werke Aktiengesellschaft, Versatran automatic transfer and handling machine 507
 Fordath Engineering Ltd., Econ-O-Lift bucket elevator 923
 Foreman, F. C., and Partners, Law Courts, Brighton 827
 Forge equipment, by A. Geleji (book) 893
 Forging(s)
 advantages of 465
 design of, R. Liston and G. P. Smedley 465
 for pressure vessels 466
 for rotating machinery 466
 for rotors 465, 466
 trade publication 808
 Forging conference, international (Sheffield) 465
 Forging manipulator, program-controlled 709
 Forgings and Presswork Ltd., billet heating 546
 Fork-lift truck
 battery electric, Kelvin 1016
 Clark-Stacatruc 574
 for fragile loads, Swinglift 838
 for pipe handling 838
 production and marketing 574
 Form rolling machine (trade publication) 1018
 Forming
 cold, conference on (London) 832
 electrical discharge. *See* Electrical discharge forming
 electrohydraulic 121
 applications 121
 high-energy-rate processes 103, 119
 magnetic 120
 Forming machine, roll, interrupted 1007
 Forming processes, ultrasonic 1052
 Formwork, Engineering Outline 725
 Fortran computer language 394
 Fosco (FS) Ltd., casting riser sleeves 799
 Terrapoint 220 core dressing 972
 Fosslube L-25 dry soap film lubricant 638
 Foster, M. G., menace of broken rails 817
 Foster Wheeler John Brown Boilers Ltd., factory at Seaton Carew 689
 type ESD II water-tube boilers 405
 Fosters Power Piping Ltd., pipework (trade publication) 982
 Foulness airport feasibility study 734
 Foundations, substation, foam cushions for 832
 Foundry. *See* Casting; Moulding, etc.
 Foundry equipment (trade publication) 604
 Foundry Industry Training Committee 274
 conference on management training 773
 Foundry process, CO₂ sodium silicate 1006
 Fourways (Engineers) Ltd., sack filling equipment 29
 Fox, Samuel, & Co. Ltd., appointments 733
 Foxboro-Yoxall Ltd., appointments 818
 Consotrol auxiliary control stations 880
 Fracture(s), brittle, in drilling rig *Sea Gem* 688. *Letter* 817
 in steel 368
 fatigue, in large constructions 368
 in engineering materials, conference on (Brighton) 80
 Fracture resistance in welding 370
 Fram, Higgs and Hill (Camus) Ltd., industrialised building 49
 Frames, portal, Sanders 892
 Francis, J. R. D., CEI examinations 89
 Frank, I., IISI conference 905
 Frankfurt international motor show 449
 Fraser and Chalmers Engineering Ltd., hammer failures 423
 Fraser and Fraser Ltd., boiler for wood waste 1034
 Fraser, W., telecommunications (book) 391
 Frassanito J. R., Sorcerer's Apprentice aluminium man-powered pump, ALCOA award 14
 Frederick, S. H., bond strength of white-metal bearings 260
 Free-abrasive machine, 32 BTAW 843
 Free-Way penetrating fluid 111
 Freeman, A. T., electric cars 529, 996. *Letter* 650
 Freeman, Fox and Partners, Auckland bridge 950
 model tests on Yarra Bridge 790
 Freight rates, air, structure of 430
 French, E. L., Astrolan 39 with Motorstor corrosion inhibitor 259
 French, W. and C. Ltd., Blackfriars Bridgehead underpass 172
 Bow Flyover 585
 Frequency alarms (trade publication) 268
 Frequency doubler/phase shifter 555
 Frequency meters, digital, Racal 758
 Frequency synthesis, Dynamco 718
 Friction
 and lubrication, by F. P. Bowden and D. Tabor (book) 267
 of elastomers under load 182
 Friction measuring machine, Mu-Meter 912
 Friction saws, Trennjaeger 551
 Frictional electrification, by W. R. Harper (book) 559
 Friedrichs, K. O., fluid dynamics (book) 807
 Frodingham Cement Co. Ltd., drying blast furnace slag 923
 Frost, H., & Co. Ltd., electric heaters 930
 Frye, J., chairman-designate, Iron and Steel Consumers' Council 529
 Fuchs, J. J. K., pocket phone 242
 Fuel(s), course on proper use of, NIFES 118
 frictional heating in Concorde 292
 see also under specific types of fuel
 Fuel cell, lithium-tellurium 382
 theory and application, by A. B. Hart and G. J. Womack (book) 681
 Fuel industry, position and prospects of 273, 819, 853
 Fuel injection, Engineering Outline 896
 Fuel policy, Lord Robens on 43
 White Paper on 771, 773, 819, 853
 Fuel supplies, statistics 820
 Fuel system for Austin 250 gas-turbine 705
 Fuller Aeropump material-conveying pumps 512
 Fume(s) in road repairs, Holden luminous wall 507
 Fume extract plant, thermoplastics for 924
 Fume filters, Powell Duffryn 469
 Funditor Ltd., marking machines 224
 Furnace
 annealing, for steel wire and rod 1034
 gas-fired radiant tube 254
 automatic gas-fired, for aluminium plant 594
 blast. *See* Blast furnace
 brazing, Efcro-Royce Furnaces 146
 electric arc melting, Birlec 567
 gas-fired muffle, for stainless strip 795
 incandescent (trade publication) 118
 trailer-mounted stress-relieving 967
 walking-beam 633. *Letter* 732
 R. Chaurand 633
 Furnace temperature calibration service 1034
 Furnace tubes, cleaning unit for 291
 Furnace walls, temperature distribution 669. *Correction* 753
 Furniture flow line finishing 629
 Furniture manufacturing industry, automation in 372
 Futurmill conversion for milling machine 752
 Fyador fire-resisting door (trade publication) 306, 520
 Fyneline wide-angle panel meters 1041
 Fyson, C. J. R., & Son Ltd., conveyor for bags 151
 Fyson, R. O., SI units for weight 650-651. *Letters* 774, 816

G

- Galbraith, W. A., Stacatruc Ltd. 574
 Gallium arsenide diodes, Mullard 188
 Gallwey, Sir John (Instruments) Ltd., Protimeter Grainmaster 955

- Galvanized steel, hot dip, F. C. Porter 108
welding, A. Chapleur 108
- Galvanizing
control system 882
Flo-coat process 1006
hot dip (book) 117
conference on, ZDA 108
recent developments 108
- Galvanometers, Evro series 1040
- Galvin, R. A. W., on electrical installation (book) 117, 477
- Gamble, F. D. M., Engineers Guild 126, 941
- Gamma radiation for level measurement 563, 564
- Gamm-O-Switch nuclear level control 518
- Gamm-O-Tron nuclear level gauge 713
- Garage trade and repair charges 238
- Gardner, H. Cameron, Ltd., loading equipment 29
- Gardners Transformers Ltd., low voltage transformers (trade publication) 154
- Garnett, J., white collar unions 993
- Garrard Engineering Ltd., balancing machine 64
- Garrett Corp., turboprop engines for Skyvan 1028
- Gas
high-pressure, as heat transport (book) 765
liquefied, TraNstor container for 205
trade publication 982
liquid petroleum, for infra-red heater 601
natural. *See* Natural gas
rarefied, molecular properties of 37
see also under specific types of gas
- Gas boilers, servicing of 239
- Gas bottle trailer, Tollbridge 680
- Gas convector heater, Baseboard 358
- Gas Council, cryogenic storage of gas 499
Hi-Melt Tower furnace for aluminium 594
Midlands Research Station, annealing furnace 254
North Sea, natural gas, reserves estimates 611
- Gas detector, portable, G.200, G.F.C. 1040
- Gas fire, natural gas, noise investigations on 960
town or natural gas, Hoover 93
- Gas-fired radiant tube annealing furnace 254
- Gas heaters for pointwork 587
- Gas-heating systems, servicing of 239
- Gas holders, high pressure 944
- Gas industry, position and prospects 273, 819
- Gas industry training board 400
- Gas liquefier, miniature, Hymatic Minicooler 916
- Gas pipeline, natural, across fenland 281
- Gas/solid reactions, engineering of 1048
- Gas streams, heating high velocity 752
- Gas turbine. *See* Turbine
- Gas works. *See* Gasworks
- Gascoigne (Constructors) Ltd., machine for concrete walls 386
- Gaskin, A. T. W., engineering drawing (book) 35, 935
- Gasworks, fan intake mutes 130
- Gates, D. W., carburation 852
fuel injection 898
- Gateway House office block, Manchester 131
- Gauge, caliper, Scemama 298
electronic, Hoffmann 463
vacuum, LKB Autovac Pirani 517
see also Switch/gauge
- Gauge blocks, steel alloy 473
- Gear(s), crane, Rocol Type MG grease for 462
open, barrier-film lubricant for 972
precision, Davall Gear Co. 32
- Gear cutting machine, Wormwheel generator 472
- Gear-operator, valve, Rotork 149
- Gear planing machine, Sunderland 472
- Gear production at AEI 65
- Gear tooth form, CirCarC 65
- Gear tooth profile, profilometer for 65
- Gear units, bevel (trade publication) 268
- Gear wheels, forged steel blanks for 466
- Gearbox for Mercedes-Benz marine engine 166
marine, for low speeds 384
midget electric motor-, Kangol 762
- Gearing for COSAG machinery 65
- Gebhardt sack filling equipment 29
- GEC (Electronics) Ltd., hf radio communications equipment 951
high voltage rectifiers 475
- GEC (Process Engineering) Ltd., lifts for *Queen Elizabeth II* liner 498
- GEC Road Signals Ltd., traffic signal control 240
- Gecostat static exciters 111
- Geiger-Müller counters, stainless steel tube for 629
- Geleji, A., forge equipment (book) 893
- General Descaling Co. Ltd., manhole-cover lifter 264
mobile pipe-bending machines 506
- General Electric Co. Ltd.
circuit-breaker 148
electric lifting magnet 110
Gecostat range of static exciters 111
merger with AEI 525, 567, 778
seawater battery anodes 634
static compensator for Exeter substation 839
superconducting magnet 336
telephone link to central computer 319
thyristor control for strip line 795
- General Electric Co. (US)
Browns Ferry nuclear power station 92
diffusion bonding for compressor blades 23
fused quartz blank for telescope mirror 833
liquid silicone rubber 799
power control modules 187
silicone rubber for gun barrel surface replicas 833
silicone surfactant 799
student response system 362
- General Engineering Co. (Radcliffe) Ltd., refuse and sewage disposal 924
- General Fire Appliance Co. Ltd., fire-fighting appliances 513
- General Motors Corp.
Chevrolet Corvette motor car 580
diesel-electric locomotive 205
diesel engines 10, 26
energy absorbent bumpers 217
Opel range motor cars 656
Saginaw energy absorbing steering column 174
- General Motors Research, exhaust-gas tar analysis 875
- General Post Office
high-frequency radio receiving station at Bearley 868
parcels sorting office, Nottingham 862
telephone kiosk, theft-proof cash compartment 1029
vehicle-mounted electrical power-generating unit 282
wire mesh platform in repeater stations 181
- General Precision Systems Ltd., simulators for locomotive drivers 746
- Generating and desalination plants, nuclear 136
- Generating plant, boiling water nuclear reactor and coal-fired generators for, TVA 92
- Generating sets
diesel 803
gas-turbine, for Australia 206
portable, Onan 10CCKB 116
West Burton power station 700
West Thurrock power station 620
- Generator
coal-fired for generating plant, TVA 92
for Cottam power station 454
1,300 MW, TVA 5
Ripple, for Dungeness nuclear power station 104
steam, for fluctuating steam demands 145
refuse-fired, H. Carlton Moore 253
tachometer, Smiths Industries 258
turbine, for *Queen Elizabeth II* liner 498
turbo, for Hunterston B nuclear power station 902
for Nanticoke power station 205
for Ontario Hydro Museum of Electrical Progress 205
for Pickering nuclear power station 205
vacuum tube, Thermatool 967
wind, for navigation lights 291
see also Alternator; Turbo
- Gentilly nuclear power station 943
- Geology for engineers, by F. G. H. Blyth (book) 641
- Gerber automatic draughting machine 100
- Gerrard Industries, strapping unit 298
Nylostrap non-metallic strapping 298
strapping machine for briquettes 462
- G.F.C. Becorit Electronics, gas detector 1040
- Ghana, British trade mission report 42
- Ghia, electric motor car 788
- Ghibli motor car, Maserati 657
- Giannini electric motor car 788
- Gibb, Sir Alexander, and Partners, Mangla Dam 865
prestressed concrete bridge designs for M4 motorway 696
- Giddings and Lewis-Fraser Ltd., Hybormill boring machine 470
NumeriCenter drilling machine 470
- Gifford, E. W. H., and Partners, Calder Bridge 320
- Gilbert-Ash Ltd., concrete building blocks 506-507
- Gilbert, P. T., non-ferrous metals (book) 79
- Gilbreth, L. M., conference of Women Engineers 45
- Gill, D. W., pulverized coal (book) 935
- Gill wet magnetic separator 431
- Girder. *See* Beam; Bridge; Floor
- Girling Ltd., shunting locomotive 637
- GKN Engineering Equipment Ltd.
electrode-making machine 1008
spark machines 670, 674
Unimate teachable assembly machine 133
- GKN Reinforcements Ltd., indented structural fabric 518
- GKN Rolled & Bright Steel Ltd., appointments 818
- Glacier Metal Co. Ltd., spherical bearings 390
unlubricated bushes 972
- Gland seal, mechanical, Sealol 31
- Glass crack growth in, NBS 463
float process for small batches 909
laminated, for windscreens 920
toughened, for windscreens 920
- Glass delay lines (trade publication) 228
- Glass fibre reinforced materials 539, 799
- Glass fibre repairs to pipework 792
- Glass handling, rotating grab for 1013
- Glass, H. M., metrication. *Letter* 7
- Glass memory(ies) (trade publication) 894, 1048
- Glass-reinforced plastic tanks 249
- Glass sphere for underwater research 104
- Glassbrook, H., Leyland Motor Corp. 237
- Glazing, double, Cosyglaze 892
- Glen Line Ltd., automated cargo liners 909
- Glenfinlas*, cargo liner 909
- Gloster Design Services Ltd., linear motors 817
- Gloster Saro Ltd., plastic tanks 249
- Gloucester Controls Ltd., pneumatic actuators (trade publication) 434
valves for tankers 358
- Gloucestershire Fire Service, rescue vehicle 175
- Glover, G., steam locomotive design (book) 893
- Glover, S. G., design of alloys (book) 559
- Glow-discharge equipment, AERE 291
- Glydette barrel plating unit 674
- G. & M. Power Plant Co. Ltd., portable generating set 116
- Godard, H. P., corrosion (book) 519
- Gold Fields Group, magnetic separator 431
- Gold inlaid beryllium copper 555
- Good(s), distribution of, report 439
- Goodall, Clayton & Co. Ltd., degradation of materials 77
- Goodyear Pumps Ltd., D9 pump and Neptune meter for transference of alkyl solution 180
- Goodyear 70 series motor car tyres 654
- Gordini V8 motor car engine, Renault 167
- Gordon, Alex, and Partners, residential training centre 4
- Görlich, P., photoconductivity (book) 189
- Gough Econ Ltd., bucket elevator 923
- Goundry, E. E., corrosion of white-metal bearings 262
- Government, science, technology and, by K. Hudson (book) 765
- Grab, rotating, for glass handling 1013
- Graco, Hydra-Cat coatings 973
- Grader, motor, British Jeffrey-Diamond 552
- Graham Engineering Ltd., half-track vehicle 290
- Grain drying plants, control panel 955
- Grain moisture content, Protimeter Grainmaster 955
- Grain terminal 'island' jetty, PLA 360
- Granada Guildhall Lectures 228
- Grant Production Co. Ltd., appointments 945
- Grantham, R., white collar unions 993
- Graphite, diamond tools for turning 792
- Graphite electrode-making machine 1008
- Gray-Campling Ltd., abrasive paper 74
Tilt'r positioning tool 297
- Grease, Cazar K, lubrication of switch blades 146
fluid, Guardian IFFG 109
peelable, Tak Chemicals 798
Rocol Type MG, for crane gears 462
- Grease Gun, multiloader, Newman 926
- Great Western Railway, history of (book) 765
- Greater London Council, control of London Transport 989
- Greenwood & Batley Ltd., wire-drawing machines 1008
- Greve, J. W., value engineering (book) 189
- Griffiths, Alan, and Partners, Selectabox on plastics 707
- Griffiths' guide to the iron trade (book) 681
- Griffiths, J., sales director, Centrax 529
- Grimar Constructions Mechaniques, blanking press 508
notching presses 508
- Grinding
and indexing fixture, collet 1008

Cerrobend low-melting point alloy 462
 electrical discharge 435
 electrochemically assisted 436
 roll, machine, Toshiba 844
 Grinding line for stainless steel strip 796
 Grinding machine
 abrasive-band, Linisher 298
 abrasive-belt 796
 centreless, feeder line for 180
 for roller and ball races, Churchill 473
 Sparcatron Contelyt Abwood 473
 surface, Parker-Majestic 1010
 trade publication 682
 tool and cutter, Cincinnati 843
 universal, Keighley 222
 Grosvenor, Richard, & Co. Ltd., Pygme pump 302
 Ground station for meteorological signals 576
 Groundwater flow studies by computer 982
 Group projects for students 280
 Group technology seminar 629
 Grouting processes, rock 769
 Growth of knowledge, by M. Kochen (book) 723
 Grubb Parsons, Isaac Newton telescope 911
 Grundfoss (UK) Ltd., multi-stage pumps 427
 submersible pumps 927
 Guard for high speed press 383
 magnetic sling, Hunter 762
 Guardian Products Ltd., fluid grease 109
 Guardian Technical Oil Products, lubricant for open gears 972
 Guest, Dutra 2500 tractors 52, 954
 Guidance capabilities for weapons 536
 Guided bodies, by G. V. Korenev (book) 433
 Guided land transport (book) 477
 Guided missiles for Iran and Argentina 612
 Gullick Ltd., travelling scholarships 689
 Gulvin, H. E., power farming (book) 267
 Gun, spray. See Spray gun
 Gun barrel surface replicas, silicone rubber 833
 Gunite for servicing cooling tower 218
 Gunn, A. and Co. Ltd., compressor for heat exchanger elements 291
 Gunn, A. W. R., colour television 48
 Gunn-diode oscillators, Mullard 884
 Gunn-diode radar systems, RRE
 Gunson's Sortex Ltd., colour sorting machines 712
 Günther, W. A., physics of electronics (book) 519
 GWB Holding (Dudley) Ltd., automatic packaged boilers (trade publication) 936
 GWR Stars, Castles and Kings, by O. S. Nock (book) 603
 Gwynne, P., materials science (book) 981
 Gwyther, J. L., CEI examination 89
 Gyra-Flo N impeller 932

H

- Haas, A., industrial electronics (book) 433
 Habit Diamond Tooling Ltd., indexing and grinding fixture 1008
 Hackbridge and Hewittic Electric Co. Ltd., switch-gear for railway electrification 17
 Hadfields Ltd., appointments 1026
 merger with Dunfold and Elliott 689
 Hafstrom Technical Products Inc., environmental testing 220
 Hahn, G. J., statistical models (book) 723
 Halegate Plant Hire Ltd., earthmoving equipment 552
 Haley, K. B., mathematical programming (book) 681
 Hall, John S., Ltd., air-cooled condensing unit 707-708
 Hall Lifts and Escalators Ltd., formation 943
 Hall, Matthews. See Matthew Hall
 Hall Russell, record export year 988
 Hall, R. W., diesel engine cylinder head 112
 Halmatic Ltd., sidewall hovercraft 92
 Hamilton, J. A. B., on Britain's Railways (book) 765
 Hammann, W. C., evaluation of lubricant 752
 Hammer, drop forging, Massey 469
 safety precautions 532
 Hammer failures in crushing mill 432
 Hampshire, J., traction engines (book) 519
 Hamsher, D. H., communication handbook (book) 391
 Hancock and Co. (Engineers) Ltd., pipe cutting machine 673
 Han-co-sine oxygen cutting machine 627
 Hand-written character reading devices 71
 Handbook of engineering sciences by J. H. Potter (book) 153
 Handbook of management technology, by G. Wills and R. Yearsley (book) 1047
 Handel, S., electronic revolution (book) 765
 Handley Page Ltd., Jetstream aircraft 5, 281
 Handling of raw materials, degradation 77
 see also Transport/handling vehicles and equipment
 Handling machine, transfer and 507
 Hands Trailers Ltd., container vehicle 783
 weighing unit for vehicles 6
 Hanger, helicopter, at Jersey Brow 283
 Hannoband building sealant 389
 Hanover Exhibition. See European Machine Tool Exhibition (Hanover)
 Hanson, C. F., symposium on titanium 1037
 Harbour at Dubai 690
 Harbour improvement scheme, Nassau 378
 Harbour surveillance system, Teesport 324
 Hard metals, classification 292
 Hardness measurement by H. O'Neill (book) 345
 Harefield Power Handling Ltd., sliding door (trade publication) 604
 Harkness, Smith, Andrew, cinema screen at Odeon 96
 Harland and Wolff Ltd., Myrina tanker 405
 Harocopos, B., gravity die casting (book) 603
 Harper, W. R., contact and frictional electrification (book) 559
 Harperizer deburring machine 336
 Harrison, T. S., Ltd., swing lathe 471
 Harrow, Rotatine 737
 spring time 737
 Harrow Road Flyover 623
 Hart, A. B., fuel cells (book) 681
 Harvesters
 combine, MF410, MF415 and MF515 52
 New Idea's Uni-System 406
 potato 331
 vegetable 52, 331
 Harvey Fabrication Ltd., Process Engineering Division 651
 Torit dust collectors 931
 Harvey-Flint, G., locking sealants 76
 Harvey, J. J., and Pressurecast Ltd., cyclone cone repair 975
 Haslett, Dame Caroline, biography (book) 117
 Hasse, Carl, und Wrede GmbH, DAS automatic machine 471
 Hassia potato harvesting machine 955
 Hastie, John, and Co., steering gear 736
 Hatfield College of Technology, courses 125
 Hausen, H., thermometric and hygrometric data and thermodynamic properties (book) 391
 Haverford College, detector for blind 57
 Hawker Electronics Ltd., level controller 882
 Hawker Siddeley Dynamics Ltd., computer environment control 752
 kidney machine 654
 speed indication and switching equipment 556
 temperature-sensing units 556
 transfer and handling machine 507
 Hawker Siddeley Group
 A-300 passenger aircraft 168
 Checkweight weighing unit 6
 glass-reinforced plastic tanks 249
 merger with British Aircraft Corp. 988
 reorganization 610
 Stem masts for space craft 547
 Trident 1E/140 airliner 567
 Trident IIIB airliner for BEA 987
 Hawkins Contractors (Gosport) Ltd., Law Courts, Brighton 827
 Hawksley, P. G. W., pulverized coal (book) 935
 Hawley, John, and Co. Ltd., spray guns 180
 Hawthorn Leslie (Shipbuilders) Ltd., Antrim Princess ferry 995
 Haynes, F. G., sales manager, English Steel Corp. 529
 Haynes, Norman, Bell and Partners Ltd., design and marketing service 689
 Hays, D. G., computational linguistics (book) 189
 Hay's Wharf Ltd., appointments 857
 Haywood, R. W., SI unit of mass 816-817
 Head, D. A., scientists for industry 531
 Head, Wrightson Teesdale Ltd., evaporator in Stabrite 1005
 road/rail vehicle 266
 tinning line 650
 Heat and mass transfer by A. W. D. Hills (book) 723
 Heat-dissipating container for radioisotopes 218
 Heat exchange equipment (trade publication) 392
 Heat meter, for heating system 831
 Heat-Pak air heaters 760
 Heat pump for thermal compensation 1021
 Heat transfer, introduction to, by J. R. Simonson (book) 1047
 Non-Newtonian, by A. Skelland (book) 641
 SI units, by G. F. C. Rogers and Y. R. Mayhew (book) 559
 Heat transfer fluids (trade publication) 346
 Heat transfer systems and materials (trade publication) 36
 Heat transport, gas as (book) 765
 Heat treatment, symposium on, PERA 80
 Heat treatment processes 252
 Heaters
 air, direct-fired, External-Aire 930
 Dualsafe 602
 gas-fired, Victoryaire 932
 Heat-Pak 760
 oil-fired, suspended, Econheat 70
 paraffin-fired, Hecta 760
 portable, Silent-Glow 387
 trade publication 766
 duct, battery, Mercian 760
 electric, radiant, Claudgen 760
 Sunhouse range of 930
 feed (trade publication) 1018
 flooded-water, Ruston type HT 464
 for warm-air curtain 761
 gas, for pointwork 587
 gas convector, Baseboard 358
 immersion, Buxton flameproof 978
 infra-red, Ipg, Ryton 601
 process, Kestner-Stone-Vapor 298
 space (trade publication) 766, 936
 vented warm-air, Tropical 601
 Heating
 billet installations, AEI-Birlec 546
 central, anti-rust compound for (trade publication) 392
 circulating pumps for (trade publication) 434
 for railway coaches 539
 Thermobloc HTV 761
 warm air gas-fired appliance 131
 warm air insulated ducting for 931
 microwave, to preserve cakes 824, 825
 road surface, underpass 173
 ventilating and air conditioning exhibition (Olympia) 478
 Ventilating and Air Conditioning Manufacturers Association, filter testing agency proposal 464
 Heating cable for Bow Bridge flyover 627
 Heating components (trade publication) 894
 Heating equipment 759, 930
 Heating high velocity gas streams 752
 Heating installation for replacement-parts centre, Toddington 760
 Heating jackets, metal-clad, Hotfoil 930
 Heating tape, Hotfoil 341
 Hecta paraffin-fired air heaters 760
 Heenan & Froude Ltd., training centre 943
 Heidenreich und Harbeck, turning machines 515
 Heisler moulding for plastics 170
 Helicopter, Enstrom F-28A components for 738
 Sea Knight, fluidic control for 129
 Twyford-Enstrom Solent, 738
 Helicopter hanger at Jersey Brow 283
 Helium technology, liquid (book) 519
 Helix storage tanks (trade publication) 478
 Helmet, protective, bump cap 446. Letter 613
 Hennessey, Chadwick, O hEocha & Partners, rapid transit 776
 Hepper, A. E., chairman, Upper Clyde Shipbuilding Group 353
 Hepple, P., oil and water industries (book) 519
 Herald, Triumph, 13/60 motor car 576
 Herbert, Alfred, Ltd., Co-ordatrol drilling machine 470
 Herbert/De Vlieg Jigmill machine 470
 machine tools for Ministry of Technology 774
 surface roughness measuring instrument 25
 Herbert-Ingersoll, activities 1025
 Herman, H., materials research (book) 117
 Hermite sewage treatment process 828
 Herrmann, H., Ltd., boiler for wood waste 1034
 Hesh (high-explosive squash head) shell 535
 Heurtey Ltd., walking-beam furnaces 633
 Hewitt's of Cranleigh, precast building (trade publication) 306
 Hick, Hargreaves Group, appointments 651,
 High definition displays, Marconi 188

- High Duty Valves Ltd., pipe couplings 30
 High-energy-rate forming processes 103, 119
 High Lift C-G2 loading equipment 29
 High Speed Motors Ltd., electric bicycle 493
 High-temperature properties of steels (book) 477
 Highams Electronic Communications Ltd., communications 989
 Highland Electronics Ltd., sequential programmer 558
 Highway. *See Road*
 Highway safety, conference on (London) 949
 Highways Research Board, culvert design 708
 HRIS Abstracts 893
 Highwood Engineering Co. Ltd., machinery fencing (trade publication) 1018
 Hilger & Watts Ltd.
 appointments 818
 fluorescence spectrometer 1043
 measuring microscope 299
 Microptic scale reader 506
 Polyvac E600 spectrometer 1043
 Hill, J. M., chairman, UKAEA 610
 Hillman Hunter Mark 2 motor car 537
 Hills, A. W. D., heat and mass transfer (book) 723
 Hills-McCanna Ltd., diaphragm valve 598
 Hills, R. L., machines, mills (book) 477
 Hi-Load roller bearings, Westwood 585
 Hi-Melt Tower gas-fired furnace 594
 Hindler, F., electrical contracting (book) 847
 Hines, J. G., symposium on titanium 1037
 Hines, W. A., and Partners, Law Courts, Brighton 827
 Hines, W. W., waiting-line models (book) 433
 Hinkley Point B nuclear power station, computer control for 670
 progress 405
 Hi-Q movement for vibration-proof meter 1036
 Hi-Q Plumbicon-tubed television camera 447
 Hird-Brown Ltd., press guard 383
 linear electric motor 149
 photoelectric equipment (trade publication) 36
 Hire, instruments for 1044
 plant (trade publication) 682
 Hire purchase terms, relaxations in 351
 Hirst, A. W. C., welded turbine rotors 361
 Hirst Electric Industries Ltd., electromagnets 636
 resistance welding current meter 977
 Hirst, W., cost of wear in industry 375
 History of the GWR, by O. S. Nock (book) 765
 Hobal Engineering Ltd., storage tank for ammonium nitrate 1005
 Hobart Bros. (Gt. Britain) Ltd., arc welding machine 843
 Multi-Range arc welding sets 675
 Hochtief AG, Tarbela Dam 998
 Hoesch AG, helical weld process 976
 Hoesch Export GmbH, pipe-making plant 976
 Hoesch-MFD, pipe-making plant 976
 Hoffmann Manufacturing Co. Ltd., electronic gauge 463
 Hofmann, W., vulcanization (book) 1017
 Hogben, L., mathematics for million (book) 935
 Hoist, portable site, Solett 721
 wire rope (trade publication) 682
see also Crane; Transporter
 Hoist & Co. Ltd., whole project service (trade publication) 894
 Hole cutting equipment, Cookie cutter 892
 Holford, William, & Partners, new premises for Royal Society 858
 Holfos bronze irregular sections, continuous casting 799
 Holister, G. S., stress analysis (book) 641
 Holland, A. D., designers of footbridges 242
 Holland, F. W., Electronic Engineer's Reference Book (book) 723
 Hollows for stainless steel tubes 33
 Holm, R., electric contacts (book) 433
 Holman Bros. Ltd., Mongoose rockdrill 511
 underwater drilling rig 719
 Holmes-Hazemag impact crushers (trade publication) 560
 Holmes type-750 crane for rescue vehicle 175
 Holmes, W. C., & Co. Ltd., air blower for bulk transport vehicles 517
 impact crushing (trade publication) 560
 Holroyd, John, & Co. Ltd., continuous casting of Holfos bronze irregular sections 799
 Honda (UK) Ltd., diesel engine type GD-90 533
 four-stroke stationary petrol engine 240
 Honda N Series motor cars 656
 Honda N600 motor car 580
 Honeycomb milling machine, Fokker 844
 Honeywell Aerospace Division, Sea Knight helicopter 129
 Honeywell Control Ltd., appointments 528
 Rotomator machine for printed circuit 834
 Honing, electrochemical assisted 436
 Hook(s), safety, Narvad 597
 Hooker, S. G., Gold Medal award 900
 Hoover Ltd., gas fire 93
 servicing of domestic equipment 239
 Hopper(s), coal, digital equipment for 285
 Weston 29
 Hopper feeder, elevating, INA 432
 Hordern, Mason & Edwards, minting machines 902
 Horsnel, T., magnet-machine for shot-blasting 902
 Horticulture, electricity in, conference 268
 Hose, for electric wires, Lectricoils 226
 pvc suction/delivery, Kanaflex 799
 rubber, wire reinforced, B.S. 967
 Hospital
 Cardiff Royal Infirmary, kidney machine 654
 Eastburn, Leeds Regional Hospital Board 533
 Siporex building system for 533
 St. Thomas's, pocket paging 701
 Stoke Mandeville, articulated bed 48
 Western General, Elliott 903 computer for electroencephalograph analysis 738
 Hospital equipment for *Queen Elizabeth II* 902
 Hot cathode ionization gauge 39
 Hotfoil Ltd., heating tape 341
 metal-clad heating jackets 930
 Hotpoint, servicing of domestic equipment 239
 Houchin Ltd., vehicle-mounted generating unit 282
 Houldcroft, P. T., welding (book) 681
 House of Commons Estimates Committee, space research and development report 244
 Hoval Boilers (UK) Ltd., Biral Regula pump 599
 Hovercraft
 BH7, contract for 532
 for solid cargoes, proposals 329
 HM2 immersed sidewall 92
 SR-N4, cross-channel service 697
 design and construction 697
 preview of 696. *Letter* 902
 SR-N6 532, 696
 tracked, development prospects 406, 407
 Hovercraft conference (Southampton), IPE 80, 894
 Hovercraft Development Ltd., transport of large objects 165
 Hoverlloyd, hovercraft, cross-channel service 697
 Hovermarine Ltd., HM2 immersed sidewall hovercraft 92
 Hovertrain, project 406, 407, 734, 994, 1024
 Howard, C.A.E.C., Ltd., wagon tippler 27
 Howard Farrow, Cement and Concrete Association residential Training Centre 4
 Howard Humphreys & Partners, Monmouth Tunnels 12
 Howard, John, & Co., Seaforth, Liverpool Docks 162
 grain terminal jetty 360
 Howard, R. J. F., general manager, AEI control 529
 Howard, Stanley, Ltd., milling machines (trade publication) 848
 HOWCO-G-FIN finned tubing 670
 Howden, James, & Co., CO₂ circulators 902
 Howden, James, & Parsons of Canada Ltd., Nanticoke power station 205
 Pickering nuclear power station 205
 Howe Richardson Scale Co., insecticides for Russia 861
 Howell & Co. Ltd., finned tubing 670
 Hoy Carbides Ltd., brazed tools (trade publication) 682
 HPB Electronic Enterprises Ltd., paint spraying 386
 Huang, T. C., mechanics (book) 1047
 engineering mechanics (book) 935
 Hudson, K., science and government (book) 765
 Hudson's Bay Oil & Gas Co. Ltd., molecular sieve for drying of natural gas 464
 Hudswell Clarke & Co. Ltd., storage system 337, 548
 Hughes Aircraft Co., digging mechanism of Surveyor 4 93
 Mariner 4 line up with Mariner 5 129
 Mariner 4 time and information 129
 Hughes compression bonder 884
 Hughes, J. R., petroleum liquids 305
 Hughes, L. E. C., Electronic Engineer's Reference Book (book) 723
 Hulton, J. H., industrial design 379
 Humber Sceptre motor car 363
 Humphreys Corp., heating gas streams 752
 Humphreys & Glasgow Ltd.
 ammonia plant, Rumania 611
 computer-aided design 907
 computer programs for cable sizing 1005
 fertilizer plant 944
 history and development 907
 75th anniversary 907
 Humphreys, Howard, & Partners, Monmouth Tunnels 12
 Hunslet Engine Co. Ltd., Tiny Tim locomotives 527
 Hunt Committee on intermediate areas 566
 Hunt & Moscrop Ltd., paper production 751
 Hunt, R. F., aircraft industry prospects 992
 Hunter, G. (London) Ltd., sling guards 762
 Hunter motor car, Hillman 537
 Hunter, M. W., space age (book) 305
 Hunterston B nuclear power station 6, 611, 902
 Hunting Painting Contractors Ltd., formation 988
 Hurst, D. Dixon, Law Courts, Brighton 827
 Husky ratchet socket handles 222
 Hutchinson, A. C., metrication 7. *Letter* 95
 noise of cavitation 732
 Huvudsta Bridge, balanced cantilever 359
 Hybormill boring machine 470
 Hyde, Silas, Ltd., Powermax boilers 116
 Hydra-Cat dual-component coatings 973
 Hydra-Point milling and drilling machine 471
 Hydraulic backhoe digger (trade publication) 560
 Hydraulic ball motor (trade publication) 604
 Hydraulic breaking and tamping machine 102
 Hydraulic circuits by J. R. Fawcett (book) 723
 Hydraulic controls (trade publication) 434
 Hydraulic digger, Mustang-90 550
 Hydraulic drives, types of 155
 Hydraulic elevator truck, Powell 838
 Hydraulic energy 157
 Hydraulic excavator, Smith-Tractem-804 550
 Hydraulic fluids, cinema film on 591
 Hydraulic motors 157
 fixed displacement 156
 for tunnelling machine, Staffa 876
 variable displacement 156
 Hydraulic paint circulation system 591
 Hydraulic platform, insulated, Simon 977
 Hydraulic plungers 598
 Hydraulic portable power pack, Olin Mathieson 762
 Hydraulic press. *See Press*
 Hydraulic pump. *See Pump*
 Hydraulic rams, Chamberlain Industries 31
 Hydraulic road breaking machine 551
 Hydraulic variator, Hydrodelta 764
 Hydraulic wagon tippler, Trucks-a-daisy 27
 Hydraulics Research Station, open days 268
 plastic sea-weed for coastal erosion 94
 Hydro-copying chucking machine, DAS 471
 Hydrodelta hydraulic variator 764
 Hydrodynamic drives 155
 Hydroelectric power scheme, Kianji 214
 by M. Mary and A. Janod (book) 267
 Hydroelectric power station, Tysse 2, Norway 743
 Hydrofoil craft, working party on 731
 Hydrogen embrittlement in prestressing wires 339
 Hydrostatic drives
 advantages 158
 basic principles 155
 definition 155
 disadvantages 158
 energy conversion in 157
 Hydrostatic dynamometer 595
 Hydrostatic transmission 155
 Hydrovane oil-sealed compressor 598
 Hydrovane stationary compressor unit 860
 Hygrotherm Engineering Ltd., calorific equipment 990
 Hymatic Engineering Ltd., Hydrovane compressor 598, 860
 Minicooler miniature liquefier 916
 Hyperdermic syringe needles, Vacu-Blast 628
 Hyster Overseas, embankment compacting machine 115
 Hytrol automatic valves, Clayton 599
 Hytronic control (trade publication) 1018
-
- IATA container programme 440
 IbeX Engineering Co. Ltd., vane pump 597
 IBM 360 computer for bulk section warehouse 62

- IBM United Kingdom Ltd., APT symbolic language and computer program 515
graphical data processing system 515
IBM 72 multilingual typewriter 385
- ICI (Europa) Ltd., activities 582
silicone products plant at Rozenberg 730
- ICT 1900 series computer 970
ICT 1901 computer for matrice stocks 489
- Ideal-fluid aerodynamics, by K. Karamcheti (book) 519
- Identification of metal objects, replication technique 284
- IDM Electronics Ltd., appointments 818
scanner switch 883
- I.F.T. Ltd., floor scrubbing machines (trade publication) 560
- IG Engineering Co. Ltd., footbridge designs 165
- Ignition system, capacitor, Lucas 493
- Ignition testing unit, portable, Ledger 837
- Ignitrons, vidicons and (trade publication) 228
- Ilford Ltd., Photoplot radar map of Tees 324
- Illumination. *See* Lamp; Light; Lighting
- Imhof, Alfred, Ltd., Implan equipment cases 885
- IMI Developments Ltd., plastic water taps 654
warm air radiator (trade publication) 936
- Impa Ltd., suction/delivery hose 799
- Impact crushers (trade publication) 560
- Impeller, high-capacity, Gyra-Flo N Type 932
- Imperial Aluminium Co. Ltd., aluminium cladding 892
- Imperial Chemical Industries Ltd., bouncing putty 257
cleaning solvent (trade publication) 434
conveyorized painting for Tri-borne primer 834
Darvic plastic sheet 13
evaporator in stainless-steel plate 1005
fire-extinguishing agent BCF 513
Floccor effluent treatment plant 958
instrument development group 649
loss angle measuring system 1040
Melinex polyester film 583
nylon (trade publication) 982
plastic packing for effluent treatment 870
plastic seaweed for coastal erosion 94
reactors for ethylene oxide plant 949
Silcopac 120 potting compound 225
TPX methylpentene polymer 583
world-wide production strategy 582
- Imperial College of Science and Technology, group projects 280
honeycomb steel stairway 780
welding courses 485
- Imperial Metal Industries (Kynoch) Ltd., Opella all plastic water taps 654
symposium on uses of titanium 1037
- Imperial Smelting Corp., phosphoric acid plant 1005
zinc purification process and plant 640
- Implan equipment cases 885
- Import(s), mechanical engineering industry 404
statistics 441
- Import statistics 990
- Impregnated Diamond Products Ltd., grinding machine 473
- INA Needle Bearings Ltd., hopper feeder 432
joint bearings (trade publication) 604
linear slideways 301
vibratory bowl feeder stands 764
- Inayama, Y., IISI conference 905
- Incineration, of solid refuse 253
sludge, multi-hearth system 830
- Incinerators, Barrywald 757
multiple-hearth, Ashmore 223
- Indented structural fabric 518
- Index of industrial production 486
- Index E26 and E42 camless automatics 1010
- Indexing drilling machines 842
- Indexing and grinding fixture, Multidex 1008
- Indicating and control meters (trade publication) 894
- Indicating equipment 556, 711, 880, 1039
- Indicator, dial, Allways 557
fluidic visual, Visiwink 880
Miniwink fluidic visual 880
- Indugas annealing furnace 254
- Indus River Basin project 864, 998
- Industrial (Anti-Corrosion) Services Ltd., anti-rust compound (trade publication) 392
- Industrial archaeology, Tamar Valley, by F. Booker (book) 267
- Industrial area, older, conference on (Glasgow) 434
- Industrial consultancy units 904, 942
- Industrial Council for Educational and Training Technology 197
- Industrial Diamond Information Bureau, diamond abrasive wheels (trade publication) 478
- Industrial Education International Ltd., seminars 154
- Industrial Encapsulations Ltd., encapsulation of photo-cell 793
- Industrial finishing exhibition (Earls Court) 118
- Industrial injuries, report on 277
- Industrial Inspection Ltd., non-destructive testing 462
- Industrial Magnets Ltd., magnetic separator 297
- Industrial Pumps Ltd., submersible sludge pump 764
- Industrial relations, BMC 85
- Industrial Reorganization Corp., resignations 688
- Industrial representation maps. *Letter* 361
- Industrial Society, conference of white collar unions (London) 988, 993
conference on worker participation 815
- Industrial training, announcements 274
- Industrial Training Act and After, G. T. Page 85
- Industrial training boards, complementary courses 689
engineering industry 159
guide (book) 1047
papermaking and paper products industry 233
printing, newspapers and publishing industry 233
road transport industry 991
rubber and plastics processing industry 159
- Industrial Training Yearbook 1967/68 267, 1047
- Industrial trends survey 649
- Industrial Trucks Ltd., fire alarm bells (trade publication) 306
- Industrial Vibrators Ltd., vibrating conveyors 1014
- Industrialized building. *See* Building
- Industry, scientists and technologists for, symposium 531
- Inertia Switch Ltd., miniature pressure switch type-381 1041
- Inferential flow meter 307
- Information and data storage, micro-recording 319
- Information Scientist*, new publication 189
- Information sources in US, directory 35
- Information theory, by J. Singh (book) 765
- Infra-red absorption as measure of moisture content 232
- Infra-red detection applications, RRE 740
- Infra-red television system for temperature distribution on furnace walls 699. *Correction* 753
- Ingots, production of forging quality 465
- Injection moulding (trade publication) 520
- Injuries, industrial, report on 277
- Ink drying by hot oil 793
- Insecticides plant for Russia 861
- Insley Industrial Ltd., toggle clamp 188
- Inspection, on-line measurement 154
see also Engineering Inspection and Control Exhibition
- Inspection equipment, endoscope, Endoprobe 842
- Inspection Instruments (NDT) Ltd., Endoprobe endoscope 842
- Inspection lamp, fluorescent tube 802
- Inspection projector (trade publication) 848
- Institute of Advanced Machine Tool and Control Technology, Government membership of steering committee 159
- Institute of Directors, annual conference 772
exhibition on British craftsmanship 936
- Institute of Economic Affairs, essays in pricing (book) 893
- Institute of Electrical and Electronic Engineers, conference on solid-state circuits (Philadelphia) 604
conference on telemetering (Houston, Texas) 642
- Institute of Information Scientists, *The Information Scientist* 189
- Institute of Measurement and Control 689
- Institute of Physics and the Physical Society
conference on competing spectrochemical techniques 936
conference on heavy particle collisions (Belfast) 80
conference on physics of liquids 268
conference on semi-metals and narrow gap semiconductors 118
electrical contact phenomena symposium (Swansea) 80
physics exhibition 560
Reports on Progress in Physics (book) 723
- Institute of Water Pollution Control, effluent treatment for food industries 36
- Institute of Welding, annual dinner 731
conference on submerged-arc welding 306
conference on welding in vehicles (Cardiff) 604
exhibition of welding technology 181
- Institution of Chemical Engineers, design data memoranda 181
gas/solid reactions 1048
- Institution of Civil Engineers
arch dams 766
conference on coastal engineering 936
conference on transportation engineering 520
Joint Services Unit 647
150th anniversary 724
presidential address 730
Telford Medal awards 649
- Institution of Electrical Engineers, conference on transformer noise 547
electrical contact phenomena symposium (Swansea) 80
Fellowship elections 991
photo-emission colloquium 190
- Institution of Electronic and Radio Engineers
conference on thick film technology 936
- Institution of Electronics, annual exhibition (Manchester) 554
- Institution of Heating and Ventilating Engineers, merger proposal with Institution of Mechanical Engineers 198
summer meeting on cruise ship 648
- Institution of Highway Engineers, conference on highway safety (London) 949
- Institution of Locomotive Engineers, presidential address, T. Matthewson-Dick 486
- Institution of Mechanical Engineers
annual dinner 648
arrangements to serve daughter institutions 198
Commercial Vehicles (book) 981
computers in IC engine design, symposium (Manchester) 80
conference on reliability of service equipment 724
ergonomics in motor car design (book) 153
Euston main line electrification (book) 345
experimental methods in tribology 268
fatigue cracking in railway axles 862
fire protection in process industry 1018
guided land transport (book) 477
high-pressure gas as heat transport (book) 765
joint services unit 647
machine tools in relation to components 766
mechanical design of diesel engines (book) 603
The Mechanicals, by L. T. C. Rolt (book) 305
merger proposal with Institution of Heating and Ventilating Engineers 198
presidential address, H. Conway 737. *Letters* 774, 902, 944
summer meeting (London) 346
symposium on refrigeration techniques 118
trends in education and training (book) 935
tribology in railways 766
vibrations in hydraulic pumps (book) 765
- Institution of Mining Engineers, travelling scholarships 689
- Institution of Production Engineers, data memoranda on assembly machines 133
hovercraft conference (Southampton) 80, 894
- Institution of Scales Engineers, industrial representation maps. *Letter* 361
- Institution of Structural Engineers, industrialized building (book) 189
- Instruction, techniques of, BACIE 306
- Instructors, National Association of, inaugural conference 901
- Instrument(s)
and slide rules, British Thornton 692
diffraction, X-ray (trade publication) 154
electrical indicating, specifications 1035
electronic (trade publication) 228
for hire 1044
- Instrument cabinet, weatherproof, Arkon 1045
- Instrument cleaning compound, Rodico 302
- Instrument landing system, Dynamco 718
- Instrument servo-mechanisms, by B. A. Chubb (book) 35
- Instrument Society of America, annual conference 936
- Instrumentation and automation, by L. Dadda and U. Pellegrini (book) 345
- Instruments Inc., nuclear level control 518, 713
- Insulated hydraulic platform, Simon 977
- Insulation
cryogenic thermal 1019
Engineering Outline 1019
high temperature, Engineering Outline 809
Marinite 498

- polyimide, for wires and cables 978
refractory, J-M Perlite aggregate 799
- Insulation adhesive, Ductfas 639
- Insulation materials, glass-based, Scandura 639
- Insulation products, rockwool, Rocksil 498
- Insulation slabs, Newtherm Extra Calcium Silicate 973
- Insulator, tension, BICC 802
- Integrated circuit
connectors, Ferranti 884
diode-transistor logic, STC 303
engineering (book) 35
laser machining for 219
testing system, E-H 715
- Integrated power supplies (trade publication) 560
- Integration, contour, by M. L. Rasulov (book) 641
- Interbloc system of transmission line protection 63
- Intercole Systems Ltd., data logging 303
- Intercom telephone, push-button, Reliance 446
- Interdel conveyor for documents 22
- Interferometry, Engineering Outline 521
- Interfirm comparison, BIM 190
- Interim Communications Satellite Committee 245
- Intermediate areas, Hunt Committee on 566
- Internal combustion engines, small, testing 753
- International Atomic Energy Agency, combined nuclear generating and desalination plants 136
economics of nuclear fuels 766
- International Broadcasting Convention (London) 554
- International Building Exhibition (Olympia) 755
honeycomb steel stairway 780
- International Combustion Ltd., Atlas Copco compressor for heat exchanger elements 291
generating sets at West Burton power station 700
- International Computers and Tabulators Ltd., ICT 1900 Series computer 970
ICT 1906A computer 980
techniques for small computers 506
- International conference of Women Engineers and Scientists (Cambridge) 45
- International Construction Equipment Exhibition (Crystal Palace) 549, 553, 719
- International Cycle and Motor Cycle Show (Earls Court) 492
- International Engineering Concessionaires Ltd., roller bearings (trade publication) 936
- International Exhibition of Industrial Electronics (Basel) 392
- International Exhibition of Textile Machinery (Basle) 80
- International Federation of Automatic Control, *IFAC Information Bulletin* 35
- International Forging Conference (Sheffield) 465
- International General Electric Co. of New York Ltd., current transformers 634
weather resistant resin coatings 638
- International Harvester Co. of Great Britain Ltd., McCormick International 523 tractor 52
tractor loader 891
- International Institute of Refrigeration, liquid helium (book) 519
- International Iron and Steel Institute, annual conference 905
- International Labour Office, *Introduction to Work Study* 35
- International Management and Engineering Group Ltd., natural gas pipeline 281
- International Motor Show (Turin) 741
- International Nickel Co. Inc., IN732X copper alloy 973
- International Nickel Ltd., appointments 818
stainless steels (trade publication) 118, 346
- International RD450B petrol engine 290
- International Rectifier Ltd., logic triac 507
thyristor/diode kit 1045
- International Research and Development Co. Ltd., MPD power generation 459
sponsored research (trade publication) 228
technical services 944
test facility for ESRO I 103
- International Road Federation, pacific regional meeting (Sydney, Australia) 434
World meeting, by E. Davies (book) 227
- International Shipping Exhibition (Oslo) 989
- International Standards Organization Technical Committee 45 on rubber 546
- International Trade Fair (Brno) 488
- International Vacuum Congress (Manchester) 478
- Interplan, launching ceremony and functions 611
- Intertherm Ltd., ultrasonic welding machine 972
- Inventory systems, by W. J. Fabrycky and J. Banks (book) 641
- Inverters, electronic, by F. G. Spreadbury (book) 345
static (trade publication) 894
- Investment, position and prospects 814
- Investment by the Process Industries* 526
- Investment casting
definition 683
Engineering Outline 683
history 683
of swirl-vane component 382
procedure 683
- Ion exchange, desalination 350
- Ionides, water storage experiments 662
- Ionization gauges 39
- Ireland, J. R., brittle fracture in oil rigs 817-818
- Iron, cast. *See* Cast iron
castings, core dressing for 972
- Iron and steel industry, Czechoslovakia 588
raw materials handling, BISRA 77
- Iron and Steel Industry Training Board, training levy 485
- Iron and Steel Institute, conference on low-alloy steels 306
conference on stainless steels 936
continuous casting defects (book) 117
high-temperature properties (book) 477
- Iron and steelworks at Ensenada 944
- Iron trade of Great Britain, Griffiths' guide to (book) 681
- Irradiation, sulphonates production by 923
- Isaac Newton telescope 911
- Ishikawajima Harima, Auckland bridge 950
- Islander aircraft export order 1025
- Isle of Wight, railways in the, by P. C. Allen and A. B. MacLeod (book) 79
- Isochromatics in photoelasticity 192
- Isoclinics in photoelasticity 192
- Italian Atomic Energy Authority (CNEN), MPD process 459
- Italy, nationalization of electricity 7
- Ilex Neospec protective spectacles 863
- ITW (Fastex Division) Ltd., captive nut 149

J

- Jack(s), machine screw, Limijack 512
- Jackets, heating, metal-clad, Hotfoil 930
- Jackson, A., steelmaking (book) 153
- Jackson, Lord, of Burnley, Oxfam Plough Shares 361
presidential address to British Association 315
- Jackson, M. D., welding and metallurgy (book) 1017
- Jacobs, M. B., toxicology of industrial poisons (book) 1017
- Jacobson Van Den Berg & Co. (UK) Ltd., liquid silicone rubber 799
silicone rubber for gun barrel replicas 833
silicone surfactant 799
weather resistant resin coatings 638
- Jaguar Cars Ltd., 1968 models 490
- Jaguar supersonic aircraft 994
- Jahn Plant Sales Ltd., space heaters (trade publication) 766
- Jahoda, M., education of technologists (book) 981
- James and Catherine Macfarlane*, life-boat 92
- James Contracting and Shipping Co., thermic boring process to remove shipping hazard 668
- James, D. I., abrasion of rubber (book) 1017
- James, J. F., Hydrovane compressor unit 860
- James, M. H., cars GT and TI 283
- James, R. T., and Partners, new premises for Royal Society 858
- Jan-Aire space heater (trade publication) 766
- Jane's all the world's aircraft 1967-68, by J. W. R. Taylor (book) 981
- Jane's surface skimmer systems, by R. McLeavy (book) 847
- Janod, A., hydroelectric power schemes (book) 267
- Jarvis, J., & Sons Ltd., Petavel building, NPL 910
- Javelin motor car, Rambler 537
- Jeltekt Ltd., site clothing (trade publication) 560
- Jenkin, K. J., liquid levels by fluidics 774-775
- Jenner, A. & C., Ltd., conveyor systems 679
- Jenner, N., highway safety 949
- Jensen, W. G., Common Market (book) 477
- Jepson, W. B., corrosion (book) 519
- Jerram, William J., Blackwall Tunnel 248
- Jersey Brow, helicopter hangar at 283
- Jet flaps for missile control 536

- Jet Propulsion Laboratory, Mariner 4 line up with Mariner 5 129
Mariner 4 time and information 129
- Jet Provost T. Mk-5 825
- Jetstream HP137 aircraft, first flight 281
- Jetstream prototype business aircraft 5
- Jetty, 'island', grain terminal, PLA 360
- Jig grinding machine, electric, JIL 265
- Jigmill boring and milling machine 470
- JIL electric jig grinding machine 265
- J-M Perlite aggregate refractory insulation 799
- Job analysis, BMC 85
- Jobson and Beckwith Ltd., centrifugal pump 598
- John, F., numerical analysis (book) 681
- Johns, A., electrical machining 438
- Johns-Manville (GB) Ltd., refractory insulation 799
- Johnson, A. & Co. (London) Ltd., mayonnaise plant 359
- Johnson Machinery Ltd., conveyor MA Mk-3 29
- Johnson, Matthey & Co. Ltd., spectrographically standardized substances (trade publication) 982
- Johnson Matthey Metals Ltd., gold inlaid beryllium copper 555
Stabiloh 133 resistance wire 797
- Johnson, M. W., mechanics (book) 1047
- Johnson Sea Horse outboard motors 862
- Johnsteads Ltd., Gill wet magnetic separator 431
- Johnston, Duncan, Ltd., centralized heating 831
- Joint(s)
expansion, axial (trade publication) 154
bellows, for pipelines 73
rail, insulated, 3M's 225
road bridge expansion (trade publication) 36
timber, steel connectors for 476
- Joint Council for Scientific and Technical Communication 441
- Joint design for adhesives 938
- Jones, A., wage scales 1023
- Jones 851 Series mobile cranes 1015
- Jones, Sir Eric, Submarine Cables Ltd. 529
- Jones, Walter, & Co. (Engineers) Ltd., position control servo 110
servomotors 31
- Jonsereds chain saw with drill chuck 764
- Jordanhill College of Education, closed-circuit television 447
- Jost committee of tribology 375
- JW compressors, Knight Taylor 283

K

- Kaiser Floors Ltd., hollow mould pans 187
- Kaldas programming, by J. L. Dineley and C. Preece (book) 391
- Kalmin-44 casting riser sleeves 799
- Kalpajian, S., mechanical processing (book) 79
- Kaltenbach Ltd., circular cold saw 1009
sawing and milling machine 511
- Kanaflex pvc suction/delivery hose 799
- Kane, Douglas, Group, Loctite adhesive in 707
- Kane, Douglas (Sealants) Ltd., Loctite for repair of bearings 22
- Kane-May Ltd., Dependatherm thermometer 557
- Kangol Controls Ltd., midget motor/gearboxes 762
- Kangol Reflex automatic safety belt 658
- Karamcheti, K., ideal-fluid aerodynamics (book) 519
- Kavanagh, M., career survey 565
- Kavanagh O'Moore & Co. Ltd., numerically-controlled drilling machine 515
drilling machines (trade publication) 848
- Kawasaki, exhibits at International Cycle Show 492
- Kawneer aluminium curtain walling 73
- Kay, L., binaural aid for blind persons 57
ultrasonic aid for blind persons 55
- Kay, V. B., symposium on titanium 1037
- Kayser Ellison & Co. Ltd., annealing furnace 1034
- KD Perkasa class patrol boats 10
- Kearney and Trecker-CVA, Milwaukee-Matics installation 42
- Kearns, H. W. & Co. Ltd., boring and milling machines 471
Optimetric S type horizontal boring machine 471
- KEF Group, sweeping machine 679
- Keighley Grinders (Machine Tools) Ltd., grinding machine 222
- Keir Ltd., kiln construction contract 1025
- Keithley Instruments, milliohm meter 110
- Kelly and Lewis (Pty) Ltd., water pumps 386

- Kelly, Robert, & Sons Ltd., shrinking machines (trade publication) 190
- Kelsey, P., woodwork for schools (book) 433
- Kelvin Engineering (Basingstoke) Ltd., fork-lift truck 1016
- Kelvin Hughes, radar maps of Tees 324
- Kematal acetal copolymer 654
- Kempster, M. H. A., engineering materials (book) 981
- Kenbar Electrical Equipment Ltd., mimic diagrams 389
- Uni-Ken control cubicles 302
- Kench, E. J., electronic counting (book) 681
- Kent Controls Ltd., non-linear controller 1040
- Kent, George, Group, runway visual range equipment 207
- Kent, George, (Petrochemical) Ltd., computer process control system K70 1039
- Kent Industrial Instruments Ltd., runway visual range equipment 207
- Kent Industrial Meters, whisky industry 786
- Kent Meters Ltd., Mini-Major flow meter 341
- Kent University, concrete building blocks 506
- Kentintental Engineering, Stowaway concrete mixer 489
- Kenya, trading prospects 400
- Kessler, H. K., laser diode coating 64
- Kestner Evaporator and Engineering Co., process heaters 298
- Kestner-Stone-Vapor process heaters 298
- Kestrel four-ton sideloader 1014
- Kettle production with pneumatic equipment 104
- Keverne fire fighting tug 653
- Key Terrain Ltd., pvc waste piping 756
- Keynes Ltd., lubricating oil manufacturing 253
- Kianji hydro-electric power scheme 214
- Kick to correct faulty equipment 695
- Kidney machine, Cardiff Royal Infirmary 654
- Kiebitz tethered platform, Dornier Do32K 994
- Kier Ltd., Blackwall Tunnel 248
- breakwater at Port Talbot 900-901
- Kiln, cement, Slite works 962
- gas-fired intermittent top hat 1006
- King, Geo. W. Ltd., appointments 775
- King, John, & Co. Ltd., hollow pin chain 598
- Kingsbury, Geo., & Co. (Machine Tools) Ltd., camless automatics 1010
- Kinnear Moodie, Oxford Circus bridge 949
- Kinnins and Brown Group, metering systems 422
- Kistler Instruments Ltd., servo accelerometers 1042
- Kitt Peak National Observatory, telescope mirror 833
- K and L Steelfounders and Engineers Ltd., Jones cranes 1015
- Kleenway sack holder 426
- Kleinman, G. S., women engineers and scientists 45
- Klimator air-conditioning (trade publication) 190
- Knight, J. P. Ltd., tug *Keverne* 653
- Knight-kits electronic kits 490
- Knight Taylor Ltd., JW compressors 283
- screw-threading machine 845
- Know How television programme 36
- Knowledge, growth of, by M. Kochen (book) 723
- Knox, T. V. Ltd., harvesting machines 406
- Knudsen calibration method 40
- Kochen, M., on growth of knowledge (book) 723
- Kodak Ltd., press for flattening cans 1005-1006
- Versamat automatic developing machine 825
- x-ray film processing equipment 344
- Koenigsberger, F., machine tool design (book) 227
- Komatsubara abrasive paper 74
- Kom-pac/1 controller for deviation indication 556
- Konecci, E. B., space age (book) 305
- Konstruktion, design ability conferences 779
- Korea, steelworks for, KISA 773
- Korean International Steel Associates, steelworks for Korea 773
- Korenev, G. V., guided bodies (book) 433
- KPE Controls Ltd., deviation indication 556
- set-point amplifier 558
- Kreyszig, E., mathematics (book) 641
- Kron, G., equivalent circuits (book) 603
- Kummer K20A twin-headed precision lathe 265
- Kuntzmann, J., boolean algebra (book) 1017
- L**
- Labhire Ltd., data logging hire service 882
- instruments hire service 1044
- Laboratory, mobile 670
- see also* National Engineering; National Physical Labour, Ministry of, occupational guidance service 88
- Labour disputes 528, 609
- Labour relations, H. Shirley-Smith 730
- Labovitch, C., directory of opportunities (book) 391
- La Brecque Engineering Co. Ltd., plastic fabrications (trade publication) 392
- Ladders, aluminium (trade publication) 560
- Lagging, oil-soaked, fires in 268
- Laing, John, Construction Ltd., natural gas pipeline 281
- Lamb, F., polyesters (book) 267
- Lamborghini Marzal 400 GT 2+2 motor car 657
- Lamination production reorganization, Laurence, Scott 508
- Lamp, fluorescent, corrosion resistant 802
- fog, quartz-halogen Silver Sabre 824
- inspection, fluorescent tube 802
- ultra-violet, sealing, NBS 382
- Lamp-making machinery, Badelex 1027
- Lamson Engineering Co. Ltd., Airtube document conveyor (trade publication) 36
- automatic pallet loading machine 184
- mechanical handling (trade publication) 520
- Lancashire Dynamo Electronic Products Ltd.
- digital equipment for coal hoppers 285
- digital systems (trade publication) 848
- frictional heating of fuel in Concorde 292
- program-controlled forging manipulator 709
- program-controlled forging press 709
- Starpac ac power regulators 714
- Lancaster, University of, higher education (book) 305
- Lancy Laboratories Ltd., effluent treatment (trade publication) 118
- Land and Marine, pipeline off Dutch coast 863
- Landeau, M. J., walking-beam furnaces 633
- Landing system, instrument, Dynamco 718
- Landis and Gyr, synchronous motors 426
- Landis Machine Co., screw thread and form rolling machine (trade publication) 1018
- Landmaster Ltd., paraffin-fired heaters 760
- Landolt-Börnstein Zahlenwerte und Funktionen aus Physik, Chemie, Astronomie, Geophysik und Technik, Vol. 4, by H. Hausen (book) 391
- Lane, R. L., corrosion (book) 519
- Langevann dam construction in Norway 743
- Langton, J. W., sheet metal (book) 981
- Language, cybernetics, and information theory, by J Singh (book) 765
- Lansin tin-nickel electroplating process 692
- Lansing Bagnall Ltd., hytronic control (trade publication) 1018
- rider electric reach truck 222
- Lapping machine, Wentzky 474
- Laser
- and optics instrument, Stabilite 891
- carbon dioxide, for fine cutting 292
- helium-neon, for integrated circuits 219
- interferometry and 523
- standard self-contained 70
- tooling, Pilkington 1045
- Laser diodes improved by coating 64
- Laser light, by G. C. Eaglesfield (book) 477
- Laser machining 437
- Laser measurement of cloud-base, ASEA 46
- Laser transit instrument, Transit-lite 891
- Lathe
- CL2 copy 471
- sliding shoe pump for polishing 421
- spinning, device to counteract wrinkling 668
- swing, with hydraulic copying 471
- turret (trade publication) 478
- twin-headed precision, Kummer 265
- Lathe measurement system, Digiturn 515
- Launch. *See* Boat
- Laurence Scott and Electromotors Ltd.
- container handling cranes 669
- electric actuators (trade publication) 982
- Grimar presses 508 *Correction* 708
- lamination production reorganization 508
- metric system for electric motors 508
- Muller automatic notching presses 508
- thermal protection of electric motors (trade publication) 808
- Wilkins and Mitchell press 508
- Lauter tun, Balfour-Schock-Gusmer 957
- Lava, diamond tools for turning 792
- Laver, F. J. M., computer age 982
- Law, guide to, by E. Mitchell (book) 893
- Law Courts, Brighton 827
- Lazard Brothers, Tyse 2 hydroelectric power station 743
- L.B. (Plastics) Ltd., plastic products (trade publication) 642
- Leach, H. W., engineering profession (book) 847
- Lead, conference on (Venice) 118
- Lead/acid battery research 699
- Leak detection, water, field unit 834
- Leak sealer, Petroplast 835
- Leather finishing, acrylic emulsion for 301
- Lebow slipring assembly 426
- Leckie, F. A., tensile testing equipment 925
- Lectricoils hose for electric wires 226
- Lectromec Controls Ltd., plating and galvanizing control 882
- six-track tape reader 1042
- Leddicon range of television tubes 555
- Ledger, Rupert, & Co. Ltd., ignition tester 837
- Lee, C. E., Sixty Years of the Northern (book) 603
- Lee, Howl & Co. Ltd., small pump (trade publication) 936
- Lee-Smith Photomechanics Ltd., drafting table 512
- Lee, T., house front door 445
- Leeds Central Baths, aluminium sheeting for 862
- Leeds Regional Hospital Board, general hospital at Eastburn 533
- Leeds University, fume extract plant 924
- tribology consultancy unit 904
- Leesona Corp., zinc/air battery 648
- Lehigh University, blood separation 824
- Leifelds, counter-roller device 668
- Leighton, G. K., safety of personnel 631
- Leipzig international fairs 982
- Le Marchant, H., locomotive simulators 749
- Lend Lease Corp., tower at Australia Square 417
- Lens, zoom, Rank-Taylor-Hobson Varotal-9 9
- Lenze, electromagnetic clutches 102
- Leondes, C. T., control systems (book) 641
- Lesser, J. E., (Homes) Ltd., party-wall hollow concrete block 798
- Lesser, J. E., (Prefabricated Buildings) Ltd., offices and computer centres (trade publication) 190
- Level control, nuclear, Gamm-O-Switch 518
- trade publication 190
- Level controller, liquid, Hawker Electronics 882
- LTH 712
- Level gauge, nuclear, Gamm-O-Tron 713
- Level limit switch, Dukes and Briggs 712
- Level measurement
- definition 561
- Engineering Outline 561. *Letter* 774
- liquids, methods and devices 561
- solids, devices and methods 564
- trade publication 190
- Levellers, concrete, Bumpcutter 223
- Levelling and tamping machines, Duomatic 06-32 205
- Levermore, A., & Co. Ltd., Temp-plate temperature-detection device 556
- Levy, B., computer costs 732-733. *Letter* 774
- Lewin, J., HQ for institutions 732
- Leyland Motors Corp. Ltd.
- Atlantean double-deck bus 784
- buses for Istanbul 731
- Butec electrical equipment 689
- drilling and tapping machine for starter-motor casing 923
- gas-turbine lorry 319
- Rover-2000 motor car 323
- semi-automatic transmission 451
- training schemes 236
- see also* Rover
- Licensing revision proposals for goods vehicles 124
- Lifeboat, for tankers, Watercraft Ltd. 407
- James and Catherine Macfarlane* 92
- Lift(s) for *Queen Elizabeth II* liner 498
- pallet, Power Lifts 115
- scissor 680
- Lift installation for industrialized building 383
- Lifting bags for aircraft retrieval 667
- Lifting equipment and resources, mobile 878
- Lifting machines, testing (book) 433
- Lifting magnet, electric, GEC 110
- Light
- flashing, for buoys and beacons 360
- laser, by G. C. Eaglesfield (book) 477
- remote navigation, recharging 291
- roof, Supa-Dalite 755
- warning, radio-isotope powered 104
- see also* Lamp; Lighting; Illumination
- Light beams for speech communication system 695
- Light metals, corrosion of, by H. P. Godard et al.

- (book) 519
 Light meter, horticultural 578
 Light units, quartz-halogen, AEI 824
 Silver Lance 824
 Silver Sabre 824
 Lighting
 cables and flexible cords for (trade publication) 80
 fluorescent, inspection lamp 802
 system, aluminium, ALCOA award 14
 Tubalux (trade publication) 520
 for industry campaign 131
 in industrial premises 398
 road, RRL 21
 room, brightness control for 617
 see also Illumination Lamp; Light;
 Lighting fitting, corrosion resistant, Crompton 636
 fluorescent (trade publication) 642
 Lighting units and air outlets combined, RCM 891
 Lignacite Group, hollow concrete block 798
 Lignacite (South Eastern) Ltd., building blocks 506
 Limestone, blending, controls for 670
 Limestone crushing mill, hammer failures 423
 Limijack machine screw jacks 512
 Limit switches, Craig 636
 LimiTorque Valve Controls Ltd., machine screw jacks 512
 Linde Plasmarc cutting control system 846
 Lindenthal, Gustav, Smithfield Street bridge 445
 Linderode Processes Ltd., spark erosion machining 64
 Line-a-mill milling machine, Bridgeport 444
 Linear and nonlinear programming by N. Williams (book) 723
 Linear microcircuits, SGS 389
 Linear slideways, INA 301
 Linear vibration and control system theory, by J. B. Vernon (book) 641
 Linear vibration theory, by J. B. Vernon (book) 1047
 Liner
 Q4 Cunard, computer system in 452
 Queen Elizabeth II, design and construction 494
 equipment for 855
 hospital equipment for 902
 Queen Mary, purchase by United States 616
 Linguistics, computational, by D. G. Hays (book) 189
 Lining of vessels, B.S. 592
 Linisher abrasive-band grinding machine 298
 Linotype and Machinery Ltd., ICT 1901 computer to control matrice stocks 489
 Lintott Engineering Ltd., SURV research vehicle 869
 Liquid(s), physics of, conference on 268
 Liquid flow measurement, Engineering Outline 307
 see also Flowmeter(s)
 Liquid level measurement. See Level measurement
 Liquid petroleum gas fired heater 601
 Lispro shin guard 618
 Lister HW2 diesel engine 407
 Liston, R., design of forgings 465
 Lithium-tellurium fuel cell 382
 Lithography, electron, Mullard 71
 Little, Arthur D. Ltd., conference on long-range planning 190
 Liverpool Docks 162
 Livingstone Laboratories Ltd., milliohm meter 110
 road-test simulator 138
 LKB Autovac Pirani vacuum gauge 517
 Load on Top system for oil tankers 448
 Load cells, for roll force measurement, ASEA 1039
 6,000-ton, Davy and United 567
 strain-gauge, Coutant 713
 Loader(s)
 excavator (trade publication) 560
 mine and quarry, Eimco 890
 Neal Pelican 264
 shovel, Articulated SL 3000, Chaseside 553
 BM Volvo 719
 Super-Loadmaster SL202 28
 see also Shovel
 tractor, International Harvester Co. 891
 Loading equipment, High Lift C-G2 29
 Loading machine, pallet, automatic 184
 Loading system, bucket, for motor vehicles 837
 Local authority. See Municipal
 Lockheed CL-1011 aircraft 169
 Lockheed Hydraulic Brake Co. Ltd., braking system for articulated vehicles 50
 Locking sealants, plastics as, G. Harvey-Flint 76
 Locknuts and screws (trade publication) 936
 Lockyer, K. G., critical path analysis (book) 559
 Locomotive(s)
 diesel-electric, Brush Type 4 824
 D400 class Type-4 874
 Deltic, achievements 6
 for Danish State Railways 26
 T44 class B-B 205
 diesel-hydraulic, MiniRover 72
 diesel shunting, Steelman 637
 electric, AL1 to AL6, overhaul 364
 simulators for training of drivers of 746
 with thyristor control 176
 electro-diesel, Type JB 418
 small-gauge, production and exports, Simplex 101
 steam, British at work, by O. S. Nock (book) 189
 British design, by G. Glover (book) 893
 discontinued in South of England 6
 GWR Stars, Castles and Kings, by O. S. Nock (book) 603
 0-6-2T, for National Museum of Wales 167
 Locomotive propulsion, Dart gas turbine for 129
 Loctite, Grade AV, for repair of bearings 22
 Loctite adhesive in slip fitting of bearings 707
 Loftus, A. A., materials science (book) 981
 Logic, aircraft electronics 910
 fluid (trade publication) 228
 Logic circuit, current sinking (CCSL) devices 554
 Logic components, 'designers' choice' 716
 Logic modules (trade publication) 724
 Logic switching system, Bistat R 557
 Logic triac, power logic switching gear 507
 Lomax, W., weak point of a car 491
 Londex Ltd., relays for dc operation 803
 Simset adjustable cam timer 75
 London, underground railways. See London Transport
 see also Greater London Council
 London Airport, Stansted controversy 1, 772
 see also Foulness
 London Bridge, reconstruction of 131
 sale of granite stone from 131
 London County Council, Blackwall Tunnel 248
 London Fan and Motor Co. Ltd., ventilation equipment (trade publication) 936
 London Stock Exchange, rebuilding 988
 London Transport, GLC control 989
 Oxford Circus bridge for sale 949
 simulator for motormen training 749
 Sixty years of the Northern, by C. E. Lee (book) 603
 Victoria Line extension 204
 Long-Lok Ltd., self-locking screws 74
 Longrigg, S. H., oil in Middle East (book) 1017
 Lopes, V. M. de Almeida, translation 132
 Lord, C. F., area classification 631
 Lorry. See Motor vehicle
 Loss angle measuring system, Tinsley 1040
 Lost wax process. See Investment casting
 Lotus 49 motor car at Silverstone 95
 Loughborough University of Technology, appointments 691, 991
 honeycomb steel stairway 780
 inaugural lecture, D. Chaddock 909
 manufacturing technology centre 485
 structural engineer today 520
 Low-frequency measurement system, Philips 555
 Low-melting point alloy, Cerrobend 462
 Low pressure. See Pressure
 Lower Yarra Crossing Authority, Yarra Bridge 790
 LSM Controls Ltd., Veritrak control instruments 711
 LTH Electronics Ltd., liquid level controllers 712
 LTV Ling Altec Ltd., formation 566
 Lubricant
 barrier-film, for open gears 972
 dry soap film, Foslube L-25 638
 Micro Mist 797
 open-gear, Moly-Paul Grade-1110 390
 spray gun for, Enots 74
 visual evaluation of 752
 Lubricating oil, Deulol CR.40 877
 see also Oil; Lubricant
 Lubricating oil plant, model of 253
 Lubrication
 and friction, by F. P. Bowden and D. Tabor (book) 267
 courses 274
 of sliding switch blades 146
 wear and, research 376
 Lubrication Conference (Chicago), visual evaluation of lubricants 752
 Lubrication system, automatic, in motor cycle 492
 cleaning of, in papermaking machine 877
 Lubricator, air-line 427
 mist-type, Wilkerson 258
 Lucas, capacitor ignition system 493
 quartz-halogen lights 824
 Lucas Gas Turbine Equipment Ltd., fuel system for Austin 250 gas-turbine 705
 Ludwig, Matthias, annealing furnace 254
 Lufthansen, A-300 passenger aircraft 168
 Lumber carrier 690
 Lunar Orbiter V spacecraft 204
 Lunar surface samples, digging mechanism of 93
 Lund, P. G., service to customers 361
 Lurgi Gesellschaft für Wärme-und Chemotechnik MBH, effluent treatment 870
 Lurgi (UK) Ltd., phosphoric acid production 1005
 Lustran 240, 440 and 740 ABS polymer 111
 Luxborough Lodge College of Architecture, concrete beams 289
 Lyon international fair 1968 894
 Lyons, Claude, Ltd., laser and optics instruments 891
 thyristor firing modules 882
 voltage stabilizer, ac 978
 Lysaght's, John, Bristol Works Ltd., conveyerized painting 834

M

- M4 motorway, bridge designs for 696
 M61 Manchester-Preston Motorway 566
 Macdiarmid, N. C., British Steel Corp. 202
 see also Mc
 Machine(s), mills and uncountable costly necessities, by R. L. Hills (book) 477
 Machine Control Ltd., panel air filters 597
 Machine monitoring recorder, Swiss Instruments 881
 Machine mountings, felt pads for 752
 isolating, Barrymount 183
 Machine tool(s)
 exports 355
 imports 355
 in relation to components, IME 766
 leasing of, Staveley Asquith 567
 long term demand for (report) 355
 Milwaukee-Matic 42
 new, production plant and equipment 672, 842, 1007
 numerical control of. See Numerical control
 order statistics 989
 precision (trade publication) 520
 stockbuilding support scheme 989
 Machine tool design and research, by S. A. Tobias and F. Koenigsberger (book) 227
 Machine Tool Exhibition, European (Hanover) 470
 Machine tool industry, Economic Development Committee for 355, 485
 order position 816
 position and prospects of 87, 123, 234, 355
 statistics 442
 Machine Tool and Mechanical Engineering Exhibition (Johannesburg) 773
 Machine tool register, Archer (book) 345
 Machine tool settings, Microptic scale reader for 506
 Machinefabriek Thole NV, overhead cranes for paper rolls 336-337
 Machinery, who makes, 1967 (book) 153
 Machinery fencing (trade publication) 1018
 Machining
 batch, work-changing unit for, Avdel 382
 electrical, Engineering Outline 435
 electrical discharge 435
 electrochemical 436
 electron beam 436
 laser 437
 of aus-formed steel 590
 of compressor blades 186
 of titanium 1038
 plasma-arc 436
 spark, for die production, GKN 670
 GKN Model C 674
 spark erosion, Linderode 64
 ultrasonic 1049
 Machining centre, N-C Cintimatic 567
 numerically-controlled, horizontal 472
 turret 472
 Mackamax Aluminium Ltd., extrusion press 989
 Kawneer aluminium curtain walling 73
 Mackle, W. See Muckle, W.
 MacKnight-Thomson, I.D., rotational moulding 170
 Maclaren and Sons Ltd., selection of plastics 23
 MacLeod, A. B., railways in Isle of Wight (book) 79
 Macready's Metal Co. Ltd., nitriding steels 639
 Maddox, J., research planning 356
 MAG Automation Ltd., sump cleaner (trade

- publication) 682
 Magnaflux Ltd., crack detection 845
 Magnesium Elktron Ltd., seawater battery anodes 634
 Magnet, lifting, electric, GEC 110
 permanent (trade publication) 154
 superconducting, 109,000-gauss 336
 Magnet-machine, rotating, for shot-blasting. *Letter* 902. *Correction* 990
 Magnetic behaviour of materials, by A. Nussbaum (book) 477
 Magnetic Devices Ltd., heavy-duty relays 75
 Magnetic extractor for conveyors (trade publication) 306
 Magnetic forming 120
 advantages 121
 applications 121
 limitations 121
 Magnetic-particle crack detection equipment 845
 Magnetic pickup, miniature, Electro Products 1039
 Magnetic recording head performance 422
 Magnetic separator, wet, Gill 431
 Magnetic sling corner guards, Hunter 762
 Magnetic tape files, record cards for 31
 Magneto plasmadynamic power generation. *See* MPD
 Magnus, Nils, Huvudsta Bridge 359
 Maili siphon, Indus River Basin scheme 999
 Majestic Diamond Tool Co., diamond tool for styrene spools 337
 Making electric things happen, by P. L. Taylor (book) 559
 Malleable castings, gas-fired radiant tube annealing furnace for 254
 trade publication 154
 Mallinson, William, Aircraft Products, Viscount 808
 airliner conversion for freight 592
 Mallinson, Wm., and Sons Ltd., racing track 366
 Mallory Metallurgical Products Ltd., beryllium copper (trade publication) 346
 MAN
 diesel engines, large marine 129
 type K3Z 102/180 134
 type KZ105/180 134
 motor-vehicle range 451
 RB 207 turboprop aircraft engine 168
 Man-powered land transport machine, design competition 85, 97
 Management
 and computers 525
 computer science for, by A. Fletcher (book) 1017
 engineering, conference on cost control in 1033
 in the 70's, conference, BIM 936
 production engineering and, conference on, PERA 1018
 reliability, product planning and, by D. N. Chorofas (book) 35
 worker participation in, conference on 815
 youth in, William Rees-Mogg 772
 Management ratios and interfirm comparison, BIM 190
 Management Selection Ltd., brain drain two-way flow 198
 brain-gain operation survey 947
 Management services, Urwick, Orr and Partners 154
 Management technology, handbook of, by G. Wills and R. Yearsley (book) 1047
 Management theory, by T. T. Paterson (book) 847
 Management training courses, AIC 36
 Managing energy: conference (Brighton) 118
 Manchester, rapid transit system, joint report 776
 Manchester Slate Co. (Contracts) Ltd., Rigidal aluminium sheeting for Leeds Central Baths 862
 Manchester University Institute of Science and Technology, appointments 857
 conference on cost control 1033
 machining of aus-formed steel 590
 professorial appointments 651
 Mandator motor tractor 783
 Mangla Dam, Indus Basin project 864, 998
 Manhole-cover lifter, General Descaling 264
 Manipulator, forging, program-controlled 709
 Siersatom power 1013
 Manitoba Hydro, Nelson River scheme 241
 Mann, J., and Sons Ltd., Claas combine harvesters 532
 Mannesmann-Meer, vibration straightening machine 428
 Manometers for low pressure measurement 37, 38
 liquid level 38
 mechanical 38
 Mansion, J. E., French and English Dictionary (book) 681
 Manual of mechanical handling equipment 723
 Manufacturing, value engineering in, by J. W. Greve and F. W. Wilson (book) 189
 Manufacturing methods, advisory service, BSA 731
 Maps, industrial representation. *Letter* 361
 Maranyl nylon (trade publication) 982
 Marbaix, Garston E., Ltd., precision lathe 265
 separation equipment (trade publication) 848
 surface grinding machines (trade publication) 682
 Marbaix Industries Ltd., disintegrators for tool removal (trade publication) 392
 Marconi Co. Ltd.
 appointments 1026
 colour television camera, Mk VII
 high definition displays 188
 navigation equipment for Ilyushin 18 aircraft 731
 teleciné system 1032
 television transmission test gear 554
 Marconi Instruments Ltd., appointments 691, 903
 electronic instruments (trade publication) 228
 instruments for hire 1044
 white noise test set 884
 Marconi Mechanical Products Division, hydrostatic dynamometer 595
 Marine engines, operational economy 966
 unattended, rules for equipment 966
see also Engine, diesel; Engine, petrol; Turbine
 Marine equipment, exports 990
 selling to Norway 275
 Marine Navigation Co., bulk carriers 990
 Marine propulsion machinery, COSAG, gearing for 65
 Mariner 4 spacecraft 129
 Mariner 5 spacecraft 129
 Marinite Ltd., Marinite insulation 498
 Marker, foam bout, Soil Fertility 955
 Market research on small budget, seminar BIM 228
 Marking machines for slabs and blooms 224
 Marples Ridgway, breakwater at Port Talbot 900-901
 Mars exploration with Mini-orbiter 1028
 Marshal rescue and recovery vehicle 175
 Marshall Conveyors Ltd., Interdel document conveyor 22
 overhead conveyor 1015
 parcels sorting office, Nottingham 862
 Marshall, Eric, Associates Ltd., design and marketing service 689
 Marshalsea Bros., small pumps 257
 Martin, C. N., satellites into orbit (book) 723
 Martin Co., resinous fillers for coating systems 591
 Martindale Electric Co. Ltd., appointments 651
 flexible abrasives 973
 proving device for voltage indicators 116
 Martonair Ltd., flow regulators 476
 Mary, M., hydroelectric power schemes (book) 267
 Marzal 400 GT 2+2 motor car, Lamborghini 657
 Maschinenfabrik Augsburg-Nürnberg. *See* MAN
 Maserati, Ghibli motor car 657
 Mexico motor car 657
 Quattroporte motor car 657
 Mask, face, for high altitudes 618
 Mask service, microcircuit, AEI 885
 Masking tapes, Sellotape 258, 798
 Masonry anchor fixing kit 928
 Masonry nails, Ucan 721
 Mass spectrometer 37
 partial pressure gauges 40
 Mass transfer, by A. W. D. Hills (book) 723
 Massey, B. S., Ltd., bouncing putty 257
 free-fall drop hammer 469
 Massey-Ferguson
 combine harvesters MF410, MF415 and MF515 52
 deep-digging digger-loader 721
 manufacturing projects function 775
 potato harvester 331
 tractors MF130, MF165 and MF178 954
 1,100 954
 Masson Scott Supercutter paper finishing equipment 751
 Masts for space craft, Stemrange of 547
 MAT Transport, freight containers 838
 Matbro Ltd., Swinglift fork-lift trucks 838
 Material(s)
 engineering, by M. H. A. Kempster (book) 981
 guide to, by C. Brown (book) 893
 mechanical processing of, by S. Kalpakjian (book) 79
 new 972
 Materials consulting service, Southborough Group 462
 Material-conveying pumps, Fuller Aeropump 512
 Materials Data Ltd., trade publication 642
 Materials Handling Equipment (GB) Ltd., sideloader 1014
 Materials research, by H. Herman (book) 117
 Materials science, by A. A. Loftus and P. Gwynne (book) 981
 Mathematical education of engineers (book) 153
Mathematical Papers of Isaac Newton 79
 Mathematical programming by K. B. Haley (book) 681
 Mathematical theory of systems engineering, by A. Wayne Wymore (book) 1017
 Mathematics, advanced engineering, by E. Kreyszig (book) 641
 for applied engineering, by E. J. Cairns (book) 641
 for the million, by L. Hogben (book) 935
 Mather and Platt Ltd.
 Alstonip saturator and stabilizer 380
 flameproof motors 381
 trade publication 642
 industrial design achievements 379
 open width fabric washing machine 380
 pea gathering machine 166, 381
 pin and clip stenter (stretcher) 380
 Vaporloc bleaching range 380
 ventilated motors 380
 water pumps 386, 706
 Mathieson, Olin, Ltd., power pack 762
 Matisa railway track maintenance equipment 773
 Matrice stocks, computer control 489
 Matrix analysis, structural, by J. Robinson (book) 189
 Matthew Hall Engineering Ltd., computer planning (trade publication) 36
 storage tank for ammonium nitrate 1005
 Matthews and Yates Ltd., variable-pitch fan 759
 Matthewson-Dick, T., presidential address 486
 Maudslay Society, lunch meeting 527
 Maulden Engineering, Agripol Ursus tractors 52
 Maunsell, G., and Partners, Dee Estuary 199
 model tests on Yarra Bridge 790
 Mavor and Coulson Ltd., bucket wheel excavator 719
 Maw, W. A., brain drain in reverse 7
 Max Arc Ltd., arc welding equipment 550
 CO₂ welding set 512
 Maxalog fluidic units 421
 Maxam Power Ltd.
 bar cutting-off machine 1033
 Flo-Master pneumatic valves 763
 liquid levels by fluidics 774-775
 Maxalog fluidic units 421
 miniature pneumatic cylinders 928
 porosity testing machine 590
 press for flattening cans 1005-1006
 Maxwell, W. M., cracking in axles 862
 Mayhew, Y. R., engineering thermodynamics (book) 559
 metrication 283
 Mayonnaise processing plant 359
 Maywick Appliances Ltd., Holden luminous wall to eliminate fumes 507
 stoving ovens (trade publication) 1018
 McAlpine, Sir Robert, and Sons Ltd., storage of liquified gas 499
 McCall and Co. (Sheffield) Ltd., structural fabric 518
 McCarthy, C., technological economics (book) 1047
 McCormick International 523 tractor 52
 McCusker, R., white collar unions 993
 McGregor, K., drilling of rock (book) 807
 McLeavy, R., on Jane's Surface Skimmer (book) 847
 McLellan, A. G., Derwent Dam 144
 McLeod gauges 38
 Mc *see also* Mac
 ME Boilers Ltd., subsidiary of Mitchell Engineering Ltd. 567
 Measurement, on-line, and inspection 154
 precision (trade publication) 228
 Measurement system, lathe, Digiturn 515
 low-frequency, Philips 555
 Measuring equipment (trade publication) 190
 Mechanical engineer(s), professional, education and training of (book) 935
 Mechanical engineering directory and buyers guide 1967-1968 (book) 433
 Mechanical Engineering Economic Development Committee 404, 526, 987
 Mechanical engineering industry, central organization proposal 2
 export statistics 404

- import statistics 404
position and prospects 351, 404
- Mechanical handling, mobile 574
trade publication 520, 1018
- Mechanical Handling Equipment, Manual of 723
- Mechanical plant and components 597, 762, 926
- Mechanical processing, by S. Kalpakjian (book) 79
- Mechanicals, The, by L. T. C. Rolt (book) 305
- Mechanics, developments in, by T. C. Huang and M. W. Johnson (book) 1047
engineering, by T. C. Huang (book) 935
of guided bodies, by G. V. Korenev (book) 433
- Mechanisms for engineering design, by S. B. Tuttle (book) 681
- Mechquip Ltd., mobile lifting resources and crane hire service 878
- Meddings, W. J., Sales Ltd., tool storage equipment (trade publication) 848
- Medicine, engineering contribution to 327
- Mee, R. A., electrical installation (book) 847
- Megator Pumps & Compressors Ltd., mining pumps (trade publication) 724
sliding shoe pump for polishing lathe 421
welding of panels for boiler 967
- Mekanik '68 (Malmö, Sweden) 936
- MEL Equipment Co. Ltd.
computer control of warehouse 61
cryogenerators (trade publication) 36
non-destructive testing 730
Philips dual-standard crosshatch generator 716
Philips low-frequency measurement system 555
- Melchett, Lord, British Steel Corp. 161, 202
worker participation in management 815
- Melinex polyester film 583
- Meller, George, Ltd., electrical equipment (trade publication) 306
- Melotte Farm & Dairy Equipment, Hassia potato harvesting machine 955
- Melville, Sir Harry, Science Research Council 484
- Membrane-wall panels for boiler, welding of 967
- Memory(ies), glass (trade publication) 1048
- Memory modules, glass, digital (trade publication) 894
- Mercedes-Benz (GB) Ltd., diesel engine conversion for marine duty 166
motor-vehicle range 451
prototype city bus 451
- Mercian Electric Co. Ltd., duct-heater battery 760
- Mercur tug, gearbox 384
- Meridian building of Old Royal Observatory restoration of 204
- Merry-go-round trains 285, 1030
- Mesh, nylon (trade publication) 808
- Messenger, R., Doors of Opportunity (book) 117
- Messer Griesheim cutting machine 846
- Metadalic Ltd., water displacement solvent 798
- Metal(s)
adhesive-strip, Vitolead, Vitocopper, Vitominium 150
cracks in, stress analysis of 370
fibre-reinforced, high-energy-rate forming of 103
hard, classification 292
light, corrosion of, by H. P. Godard *et al* (book) 519
non-ferrous, technology of, by J. H. Cairns and P. T. Gilbert (book) 79
notches in, stress analysis of 370
- Metal analyser, scaler-type 432
- Metal fatigue. *See* Fatigue
- Metal Industries, battle for control of 2, 86
- Metal objects, replication technique for identification of 284
- Metal reclaim systems (trade publication) 682
- Metalastik Ltd., Cushylevel anti-vibration mountings 425
suspension for railway bogies 137
- Metallurgy
dictionary of, by W. E. Clason (book) 153
powder, conference (New York) 118
1967, progress in (book) 603
process, heat and mass transfer in, by A. W. D. Hills (book) 723
welding methods and, by M. D. Jackson (book) 1017
- Metalock (Great Britain) Ltd., stitching repair 463
- Metco Ltd., ThermoSpray flame spray gun 511
- Meteorological Office, runway visual range equipment 207
- Meteorological satellite signals, ground station for 576
- Meter
for laser measurement of cloud-base 46
- heat, for centralized heating 831
indicating and control (trade publication) 894
- Neptune, for alkyd solution 180
- panel, DEF-62 specification on 1035
- vibration-proof, Hi-Q movement for 1036
- wide-angle panel, Fyneline 1041
- Meter-Flow Ltd., nuclear level control 518, 713
- Metering relays (trade publication) 80
- Metering systems for water treatment 422
- Methane, liquid, frozen-ground storage 1022
- Methodic fully weldable primer 973
- Methylpentene polymer, TPX 583
- Metric system
adoption of, programme for 785
bar sizes, BS 966
change to 689. *Letters* 7, 95, 283, 613, 650, 774, 816, 856
conversion, steel rule for, Rabone 109
frame sizes for electric motors 508
- Metrode Products Ltd., coated welding electrodes factory for Russia 861
- Metrodynamics Corp., electric motor car 788
- Metrology and precision engineering, by A. J. Scarr (book) 1017
- Metropolitan-Cammell Ltd., freight containers 838
railway coaches for Otraco Railway 990
- Metropolitan Engineers Council on Air Resources, symposium on refuse incineration 253
- M'Ewen, E., CEI examinations 89
- Mexico motor car, Maserati 657
- Meyerson, M. R., replication technique, metal objects 284
- M & H Mining Contractors Ltd., Monmouth Tunnels 12
- MHD power generation, position and prospects 950
- Microcircuit(s)
beam-lead connectors 888
development, AEI 403
for telephone exchanges 406
linear, SGS 389
mask service, AEI 885
nail-head bonding 887
production technique 886
scissor bonding 887
stitch bonding 887
- Micro Electronics Ltd., complementary transistors 303
- Microform systems and applications, Reprographic Centre 319
- Micro-Lube Corporation, Micro Mist lubricant 797
- Micro-Measurements, foil strain gauges 1039
- Micro Mist lubricant 797
- Microptic scale reader for machine tool settings 506
- Micro-recording techniques, OSTI/Hert 319
- Microscope, fine-scratch measuring, Hilger 299
- Microswitch, push-button, Plessey 1046
- Microwave(s), by L. Young (book) 433
- Microwave absorption as measure of moisture content 230
- Microwave-generating semiconductors 739
- Microwave heating to preserve cakes 824-825
- Microwave oscillator (trade publication) 724
- Middle East, oil in, by S. H. Longrigg (book) 1017
- Middlesex Group, appointments 903
- Middleton, G. J., naphthalene washing plant 467
- Midland & Great Northern Joint Railway, short history of, by R. H. Clark 227
- Midland Machine Tool Co. (Birmingham) Ltd., lathes 527
- Miles Electronics Ltd., flight simulators 612
- Mill, end, clamped-tip, Secodex S 70
pulverizing, for reclamation of ceramics 103
rolling. *See* Rolling mill
- Milling machine(s)
Bridgeport Line-a-mill 444
for acrylics, Adcock & Shipley 337
Futurmill conversion unit for 752
honeycomb, Fokker 844
manufacture, Adcock-Shipley 443
numerically-controlled, Moog 444
planing and, Butler 151
sawing and, Kaltenbach Model RK-Fras 511
System-24 tape-controlled plant, Molins 509
Toolmaster 472
trade publication 190, 848
- Milling and boring machine, Herbert/De Vlieg Jigmill 470
horizontal 471
- Milling, boring and drilling machine, Hybormill 470
NumeriCenter 470
- Milling and drilling machine, Bridgeport Line-A-Mill 471
- Hydra-Point 471
- Milliohmmeter, Keithley 110
- Millivoltmeter, audio-frequency, Sugden 716
- Mills Scaffold Co. Ltd., push-pull shores 23
- Millsbaugh Ltd., paper production equipment 751
- Milwaukee-Matics installation, Kearney & Trecker-CVA 42
- Milwaukee University School, refuse collection survey 242
- Mimic and flow diagrams, Synoptica 389
- Mimic Diagrams & Electronics Ltd.
electronic trips 475
frequency alarms (trade publication) 268
set point annunciator 185
signal converter 303
temperature monitor 558
trade publication 724
Translarm frequency trip units 226
- Mine transport, MiniRover locomotive for 72
- Mineral oil. *See* oil
- Mines of Tharsis, by S. G. Checkland (book) 681
- Minicooler miniature gas liquefier 916
- Mini-Major oil flow meter 341
- Minimiser oil-fired boiler 601
- Mini-Monarch central heating, enclosure for 131
- Mini-Moniteye series photoelectric cell 518
- Mining, coal, gas-turbine self-propelling unit for 329
engineering contribution to 328
- Mining & Chemical Products Ltd., low-melting point alloy 462
- Mining industry accidents, statistics 566
- Mining pumps (trade publication) 724
- Mini-orbiter for Mars and Venus explorations 1028
- MiniRover diesel-hydraulic locomotive for mine transport 72
- Ministry of. *See* Education; Technology, etc.
- Miniswitches, snap action push buttons 303
- Miniwink fluidic visual indicator 880
- Minnesota Mining & Manufacturing Co. Ltd.
dusting fabric 150
insulated rail joints 225
output printer for computers 181
'Scotch' protective tape for polished surfaces 149
- Mintech. *See* Technology, Ministry of
- Mirage G variable-geometry interceptor aircraft 1029
- Mirrlees (Engineers) Ltd., appointments 733
- Mirror, telescope, fused quartz blank for 833
- Missile control systems 536
- Mitchell Camus Ltd., industrialized building 49
- Mitchell Construction Co. (Scotland) Ltd., industrialized building 49
- Mitchell, E., Guide to the Law (book) 893
- Mitchell, Sir Steuart, resignation from machine tool EDC 485
- Mitron revolving centres (trade publication) 682
- Mixer, automatic, Soelene 149
- MK Electric Ltd., socket for electric razor 995
- ML Aviation Co. Ltd., friction measuring machine 912
- ML Industrial Products Ltd., proximity switches 188
thermostatic control unit 302
- M-O Valve Co. Ltd., electronic tubes and switches (trade publication) 1048
metal-ceramic corona stabilizers 1046
- Mobil Oil Co. Ltd., heat transfer (trade publication) 36
- Mobile Lifting Services Ltd., mobile lifting resources and crane hire service 878
- Model(s)
auction sales of, Christie's 234
of lubricating oil manufacturing plant 253
tanker, at Port Revel training centre 54
waiting-line, by E. Ruiz-Palá, C. Avila-Belos and W. W. Hines (book) 433
- Model 15 series multimeters 265
- Model tests on Yarra Bridge 790
- Modern Telephones (Great Britain) Ltd., ultrasonic burglar alarm 635
- Modernphone burglar alarm system 635
- Modufil volumetric filling machines 212
- Modular assembly machines 133
- Modular power supplies, Coutant 883
- Modular reflectoscope 299
- Modules, logic (trade publication) 724
plotting, log or ac 717
- Modulog data logging system 303
- Moisture content, definition 229
grain, Protimeter Grainmaster Mk 9 for 955
measurement methods, Engineering Outline 229
- Molacs (Molins On-Line Automatic Conveyors) 509
- Mole crusher for mining coal 328
- Molecular properties of rarefied gases 37
- Molecular sieve for drying of natural gas 464

- Molins Machine Co. Ltd., Molacs (Molins On-Line Automatic Conveyors) 509
 System-24 tape-controlled milling machine 509.
Letters 732, 774
- Moly-Paul Grade 1110 open-gear lubricant 390
- Molyslip Combat penetrating oil 972
- Monair 1 diesel compressor 763
- Mongoose rockdrill and roadbreaker 511
- Monitor 1 COD waste analyser 223
- Monitoring recorder, machine, Swiss Instruments 881
- Monitoring system for coal cutting 145
- Monk, A. & Co., Castle County Secondary School 319
- Monk Bridge Iron & Steel Co., loadcell 567
- Monktonhall colliery, digital equipment for coal hoppers 285
- Monmore Tubes Ltd., hot galvanizing of tube 1006
- Monmouth Tunnels, construction of 12
- Monobox crane, large-span 463
- Monorail blast-cleaning 422
- Monorail system of transport 329
 comparison of systems 777
see also Hovertrain
- Monsanto Chemicals Ltd., heat transfer fluids (trade publication) 346
 Lustran 240, 440, and 740 ABS polymer 111
 MON-X float zone silicon 715
- Montague, D., Lispro shin guard 618
- MON-X float zone silicon 715
- Moog Hydra-Point Ltd., Hydra-Point milling and drilling machine 471
- Moog numerically-controlled milling machine 444
- Moon, space vehicle landings on 779
- Moore, H. Carlton, refuse-fired steam generator 253
- Moore Reed & Co. Ltd., encoder for aircraft altitude 110
- Moore's Plant Ltd., Broyt X2 excavator 720
- Mooring ropes (trade publication) 118
- Moped, Ankermatic 492
- Morava L-200 business and taxi aircraft 626
- Moreton, B. B., copper in cast iron 112
- Moretti electric motor car 788
- Morgan, B. B., pulverized coal (book) 935
- Morgan & Grundy Ltd., temperature controlled water bath 673
- Morgan, J. R., CEI examinations 89
- Morgan, Thomas, & Partners, concrete reservoirs 241
- Morris, B. O., Ltd., air tools (trade publication) 268
 pneumatic diegrinder ST21 385
- Morris, Herbert, Ltd., container handling cranes 669
- Morris Singer & Haskins Ltd., fire-resisting door (trade publications) 306, 520
- Mortar, 81 mm, RARDE 534
- Motor
 electric, adjustable-speed ac, Reyrolle 977
 flameproof, Mather & Platt 381
 flameproof (trade publication) 642
 for solid state control, Westinghouse 634
 gearboxes, Kangol 762
 induction, six-pole, AEI 802
 linear, AB Lineara 149
 metric system frame sizes for 508
 multi-motor starter panel for, Square D 476
 slipping, Kapak 801
 speed control 340
 speed control module, AEI 403
 speed controller, MOD-ARC 'DR' 634
 speed controller, Solid State Controls 882
 starter, MTE 149
 synchronous, SAIA range 426
 thermal protection of (trade publication) 808
 ventilated, Mather & Platt 380
- hydraulic 157
 fixed displacement 156
 Staffa, for tunnelling machine 876
 variable displacement 156
 hydraulic ball (trade publication) 604
 outboard, Barrus 862
- Motor Agents' Association, repair charges 238
- Motor car(s)
 Austin 3-litre 618, 656
 Berlinetta competition prototype 449
 BMC MGC sports 618
 BMC MGC/GT sports 618
 BMC modifications 618
 BMW-2000 T1. *Letters* 242, 283, 361, 407
 Chevrolet Corvette 580
 Chrysler Dodge Charger 579
 Citroen Dyane 580
 Cortina drop head with Zodiac V6 engine 656
 DAF, with stepless automatic transmission 1029
- DAF model-33 449
- Daimler V8-250, description of 537
- electric, Carter Coaster 948
- electrolytic cell research for 699
- Ford 430E Comuta 656. *Letter* 48
- A. T. Freeman's 996
- Giannini 789
- Italian designs 788
- Leesona zinc/air battery for 655
- Moretti 788
- Rowan-Ghia-DeTomasco 788
- Urbanina 789
Letters 491, 529, 569, 613, 650
- energy absorbent bumpers for 217
- Ferguson 4-wheel drive 995
- Ferrari 365 2+2 657
- Ferrari Dino 206 GT 741
- Fiat Dino Spider 580
- Ford, research and development 661
- Ford Corsair, modifications 616
- Ford Cortina-1600E 577, 656
- Ford Executive Mark 4 871
- Ford of Germany range 450
- Ford Zephyr, modifications 616
- Frankfurt international motor show 449
- Ginetta G15 656
- Hillman Hunter Mark 2 537
- Honda N Series 656
- Honda N600 580
- Humber Sceptre 363
- Jaguar, changes for 1968 490
- Lamborghini Marzal 400 GT 2+2 657
- Lotus 49, at Silverstone 95
- Maserati Ghibli 657
- Maserati Mexico 657
- Maserati Quattroporte 657
- NSU 1000C 93
- NSU 1200TT 93
- NSU Ro-80 410
- Opel Olympia 449
- Opel range 449, 656
- OSI Silver Fox 741
- Peugeot diesel engined 579
- Pirana 656
- Porsche Sportomatic 450
- prestige image models 323. *Letters* 447, 491
- Rambler Javelin 537
- Reliant Regal three-wheeler 493
- Reliant Scimitar 288, 450
- Renault, modifications 359
- road-test simulator, Vauxhall Motors 138
- Rolls-Royce Silver Shadow drophead coupé 449
- Rover-2000 323, 419. *Letters* 447, 491
- Rover TC Zagato-bodied 656
- scrap, processed by Proler plant 47
- Siata Auto Spring-850 580
- Simca-1100 579
- Siva Sirio 2-seater 741
- Skoda 1000 MB 657
- Sunbeam Rapier 577
- Sunbeam Stiletto, description of 537
- Toyo Kogyo (Mazda) Cosmo 657
- Toyota Corolla-1100 656
- Toyota Corona 656
- Triumph Herald 13/60 576
- Triumph TR5PI 579
- TVR Tina coupé 580
- Vauxhall saloon, energy absorbing steering column 174
- Vauxhall Victor 621, 656
- Vauxhall Victor-2000 621
- Volkswagon, 1500 Beetle 450, 658
 1600 automatic 658
 with automatic transmission 450
see also Motor vehicle
- Motor car design, ergonomics and safety in (book) 153
- Motor car engine
 BMC Stage 1 tuned 919
 Coventry-Climax V8 656
 Ford Cortina, bowl-in-piston combustion chamber 460
 crossflow cylinder head 460
 Peugeot diesel 579
 Renault Gordini V8 167
 road-test simulator, Vauxhall Motors 138
 Rover V8 aluminium 489
see also Engine, petrol
- Motor car industry. *See* Motor industry
- Motor car silencers, poor quality of 491
- Motor car speed judgement 359
- Motor car tyres, design trends 654
- Motor cycle lubrication system 492
- oiling system, Posi-Force 492
- Norton Commando 493
see also International Cycle and Motor Cycle Show
- Motor industry, economic performance subcommittee 816
- Motor Industry Research Association, research projects and equipment 322
- Motor Rail Ltd.
 electromagnetic clutches, brakes and couplings 102
 hydraulic breaking and tamping machine 102, 551
 locomotive production and exports 101
- Motor Show, Earls Court 656
 Frankfurt international 449
 International (Turin) 741
 Paris 579
 Scottish (Glasgow) 783
 Turin 788
- Motor vehicle
 Alfa Romeo F20 van 742
 ambulance suspension system 446
 articulated, braking system 50
 articulated container carrier, Volvo 783
 Bedford trucks, production of 753
 Bedford trucks, TK and KM ranges 784
 BMC 250 JU light commercial 784
 Bond 875 Ranger van 493
 braking of, by T. P. Newcomb and R. T. Spurr (book) 847
 bucket loading system 837
 bus, Mercedes-Benz 451
 Bussing 451
 cab front, Bakelite moulding 292
 commercial, licensing revision 124
 Pneuride air suspension system 1002
 suspension seat 1016
 computer-aided design for 593
 Daimler-Benz range 451
 design and operation (book) 981
 Dodge KP 1000 motor tractor 784
 Fiat exhibits at Turin 742
 Ford Transit van for road/rail use 358
 four-ton sideloader, Kestrel 1014
 gas-turbine lorry, Leyland 319
 heavy commercial, tax increase 815
 MAN range 451
 Mandator motor tractor 784
 Mercedes-Benz range 451
 mini motor bus, Volkswagen Clipper 658
 Oanes Carrier half-track vehicle 290
 OM 150 side tipping truck 742
 OM Titano 1967 range 742
 radar for, 'Avoid' 71
 registration statistics 816
 rescue and recovery 175
 road haulage, maintenance inspection system 241
 road/rail, 150-ton 266
 Scottish Motor Show (Glasgow) 783
 Seddon 32:4:220 motor tractor 784
 semi-automatic transmission, Leyland 451
 skeletal body for rigid truck chassis 1013
 tankers, aluminium, Gloster Saro 249
 glass-reinforced plastic, Gloster Saro 249
 Volvo FB88 motor tractor unit 783
see also Motor car
- Motor vehicle air pollution research 322
- Motor vehicle body building and drawing, by J. B. Braithwaite (book) 305
- Motor vehicle industry. *See* Motor industry
- Motor vehicle noise research, MIRA 322
- Motor vehicle safety research, MIRA 322
- Motorola Instrumentation and Control, process control 711
- Motorway, M4, bridge designs 696
- M61, Manchester-Preston 566
- Mott, Hay and Anderson, Blackfriars Bridgehead underpass 172
 Blackwall Tunnel 248
 Tyne Tunnel 541
- Mould pans, hollow, for concrete floors 187
- Moulding, Bakelite, of cab fronts 292
 injection (trade publication) 520
 rotational, Heisler process 170
 Rilsan Nylon II GSMRO 799
- Moulding gun, pneumatic compression, RN30. Edlon 385
- Moulding materials, data sheets on (book) 893
- Moulding techniques, film on, BSA 793
- Moulton Cycles Ltd., International Cycle Show 492
- Mountings, anti-vibration, Crushylevel 425
 bush, plastic locking sealants for 76
 isolating machine, Barrymount 183

- machine, felt pads for 752
 Movement-of-Exports, air transport 439
 Mowlem, John, & Co. Ltd., Derwent Dam 140
 London Bridge 730
 MPD power generation, CNEN 459
 MSA Co. Ltd., ear muff to suppress noise 863
 MSE Manufacturing Co. Ltd., milling machines for acrylics 337
 MTE Control Gear Ltd., electric motor starters 149
 Norkard solid-state control system 515
 terminal blocks 150
 Muckle, W., ships' structures (book) 153.
Correction 305
 Muirhead & Co. Ltd., miniature standard cell 885
 synchro shaft encoder 1041
 Mullard Ltd.
 cathode ray tubes for test instruments 150
 ceramic tetrode transmitting valve 555
 gallium arsenide diodes 188
 Gunn diode oscillators 884
 infra-red television system for temperature distribution on furnace walls 669
 microcircuits, production technique 886
 solid state microwave oscillator (trade publication) 724
 stainless steel tube for Geiger-Müller counters 629
 transistors with 'lock-fit' pins 1044
 vacuum coating equipment 1045
 Mullard Research Laboratories
 'Avoid' vehicle radar system 71
 channel electron multiplier 71
 electron lithography and etching 71
 hand-written character reading devices 71
 open-day exhibits 71
 type reading devices 71
 Muller automatic notching presses 508
 Multi-ax six-axis numerical control system 304
 Multi-channel carrier frequency system 715
 Multicore Solders Ltd., fast acting solder 638
 Multidex universal collet indexing fixture 1008
 Multifabs Ltd., flame-resistant cloths 973
 Multimeter, Avo, development review 456
 low range, Walden 885
 Model 15 series 265
 Multi-Mini universal vice 673
 Multiphase systems, by S. L. Soo (book) 641
 Multiple-factor experiments 83
 Multiplexing and logic techniques in aircraft 910
 Multi-Range arc welding sets 675
 Multiswirl wet deduster for waste paper 707
 Multitect flame-resistant cloths 973
 Multitone Electric Co. Ltd., growth and exports 701
 pocket paging equipment 701
 Mu-Meter friction measuring machine 912
 Municipal Appliances Co. Ltd., Holden luminous wall 507
 Municipal services exhibition (Olympia) 682
 Murex Positioning Equipment Ltd., hydraulic press 843
 Murrell Horological Developments, contact sensor 344
 Museum, National, of Wales, 0-6-2T locomotive 167
 Science, transport exhibits 618, 696
Wasa sinking 682
 welding technology 181
 Science and Industry, Birmingham 129
 Mustang 90 hydraulic digger 550
 Myer, Horatio, & Co. Ltd., paint circulation system and spray booths 629
Myrina tanker, description of 405
- professional engineers 195, 208
 Tribunal's findings 208
 merry-go-round trains 285, 1030
 naphthalene washing plant 467
 new management structure 352
 radio-controlled cutting machine 890
 National Computing Centre, activities 901
 National Economic Development Office 439
Investment by the Process Industries (report) 526
 report on longterm demand for machine tools 355
 National Engineering Laboratory, bearings design chart 832
 National Fault Reporting Scheme 906
 National Forgemasters' Association of Great Britain, conference (Sheffield) 465
 National Freight Organization 816
 National Gas Turbine Establishment, Ansty noise-research 19
 Cell 4, test facility 46
 National Industrial Fuel Efficiency Service, course on proper use of fuels 118
 National Institute of Agricultural Engineering, research 331
 vegetable harvester 52
 National Joint Council on Materials Handling, containerization report 235
 National Museum of Wales, 0-6-2T locomotive 167
 National Physical Laboratory, Petavel building 910
 steel rule for metric conversion 109
 National Provincial Bank, conveyor for document distribution 22
 National Reprographic Centre for Documentation, microform systems and applications 319
 National Research Development Corp.
 activities 649
 air-cushion transport 165
 digital sequence control machine 160
 incremental recorder 185
 numerically controlled machine tools 160
 scrap reclamation by fluidised bed 967
 Tracked Hovercraft Ltd. 407
 National Society for Clean Air, conference (Harrogate) 936
 National Spinal Injuries Centre, articulated bed 48
 National Union of Mineworkers, conference 43
 Nationalization
 of electricity, Italy 7
 of port industry 43
 of steel industry 124, 161, 202
 Nationalized industries, objectives 730
 Natural gas
 from North Sea 123, 611, 738
 gas fires burning 93, 960
 liquefied, storage pits for 499
 molecular sieve for drying 464
 restoration of supplies from Algeria 442
 supplies and usage 822
 Natural gas conversion valve 928
 Natural gas pipeline, Fenland 281
 Natural gas services (trade publication) 154
 Natural Gas Tubes Ltd., welded pipe 972
 Natural resources, from sea, 243
 quality and quantity, by S. V. Ciriacy-Wantrup and J. J. Parsons (book) 603
 Naval equipment purchases by US, Congress refusal to honour 439
 Navigation lights, wind generator for recharging 291
 Navigational aids, exports 990
 Navy, Army and Air Force Institutes, food transportation 241
 Naylor, F. S., SI units for weight 613, 774.
Letters 650, 774, 856
 NCR-Elliott 4100 computer 907, 1005
 Neal Pelican loader 264
 Neatby, B. E., grease for crane gears 462
 Needles, hyperdermic syringe, Vacu-Blast 628
 Nelson River, power scheme 241
 Neoprene synthetic rubber sealing for bridge 833
 Neptune meter for alkyd solution 180
 Nervi, Prof., circular tower, Sydney 416, 417
 Nesbit, J. K., lightweight concrete (book) 807
 Net(s), safety, British Ropes 263
 Nettle Accessories Ltd., plugs and sockets (trade publication) 642
 Network, planning by, by H. S. Woodgate (book) 981
 Network techniques, PERA 154
 Neuman, Ch. J., Ltd., multiloader grease gun 926
 Neumo Ltd., filling machine and proportioning systems (trade publication) 766
 semi-automatic filling machine 358
 Neutron scattering as measure of moisture content 231
- New Britain ratchet socket handles 222
 New Conveyor Co. Ltd., factory for steel tube 487
 roller conveyors (trade publication) 118
 Square-One pallet system 679
 New Idea's Uni-System harvesting machines 406
New University, new publication 935
 New Zealand, decimal currency conversion 982
 power transmission line 66
 Newalls Insulation & Chemical Co. Ltd., appointments 818
 Newtherm Extra Calcium Silicate insulation slabs 973
 Newcastle on Tyne University, prestressing wires 338
 Newcomb, T. P., braking of road vehicles (book) 847
 Newman Industries Ltd., storage system 218
 Newmarket Transistors Ltd., semiconductor devices (trade publication) 1048
 Newtherm Extra Calcium Silicate insulation slabs 973
 Newton Chambers Engineering Ltd., appointments 1026
 naphthalene washing plant 467
 plate bending rolls 676
Newton, Isaac, Mathematical Papers of 79
 Nicholls, A. S., Ltd., computer environment control 752
 Nickel, winning of, by J. R. Boldt (book) 267
 Nickel alloys (trade publication) 478
 Nickel plating, Efcu-Udylite Nickel Seal 627
 Nickols Automatic Ltd., boring and recessing machine 515
 Nielson, H. & Son Engineering Works Ltd., Asphalt plant (trade publication) 478
 Nig Haldan Ltd., Q semi-dry print papers 972
 Niger Dams Authority, road/rail vehicle 266
 Nigeria, Delta power station 214
 NINA electron synchrotron. *Letter* 690
 Nitro Nobel AB, soot prevention compound 427
 Nitroy 40B and 41B nitriding steels 630
 Nock, O. S., GWR Stars, Castles and Kings (book) 603
 history of GWR (book) 765
 Steam locomotives (book) 189
 NOHAB, activities 405-406
 locomotives, for Danish Railways 26
 T44 class B-B diesel-electric 205
 Noise
 aircraft 18
 Engineering Outline 983. *Letter* 1025
 compressors, Ansty research facility 19
 diesel engine, research 872
 of cavitation. *Letter* 732
 of gas fires 960
 suppression, ear muff for 863
 Noise Abatement Society, airport report 734
 Noise level, decibel ratings 283
 Noise protection, ear muffs for 446
 Noise reduction at gas works, fan mutes 130
 Noise research, motor vehicle, MIRA 322
 Noise test set, white, Marconi 884
 Nomax nylon fabric for dust filtration equipment 590
 Non-destructive testing, Industrial Inspection Ltd. 462
 of steel castings (booklets) 669
 Non-ferrous metals, by J. H. Cairns and P. T. Gilbert (book) 79
 plasma-arc cutting 336
 works, by H. C. Cordero and T. J. Tarring (book) 1047
 Non-linear programming, by N. Williams (book) 723
 Non-Newtonian flow, by A. Skelland (book) 641
 Norco (Engineering) Ltd., clamp for welding 845
 Norgren, C. A., Ltd.
 compressed air equipment (trade publication) 306, 520
 compressed air system oil filters 599
 fluidic elements 880
 Miniwink fluidic visual indicator 880
 regulators and filter-regulators 425
 Norkard solid-state control system 515
 Normalair-Garrett Ltd., formation 943
 Norris, Cyril, & Son Ltd., industrial cleaner 759
 North American Aviation Inc., diamond tools 792
 North British Engineering Exhibition (Glasgow) 434
 North Eastern Gas Board, annealing furnace 254
 furnace for aluminium 594
 North of Scotland Hydro-electric Board, annual report. *Correction* 48

N

- N-Eupex flexible couplings 148
 Nails, masonry, Ucan 721
 Nant D'Avril sewage treatment plant 829
 Nanticoke power station, turbo-generator 205
 Naphthalene washing plant, NCB 467
 Napier, D., & Son, Deltic diesel engines 6
 Narvad Equipment Ltd., safety hooks 597
 Nassau harbour improvement scheme 378
 Nassau harbour model, wave machine 378
 National Agricultural Centre 52
 National Association of Instructors, inaugural conference 901
 National Centre for Tribology 904
 National Coal Board
 Aberfan colliery tip disaster, implications for pro-

- North Sea, natural gas from. *See* Natural gas
 North Western Gas Board, appointments 529
 Pulsco LM48 fan intake mutes 130
 Northampton, town expansion. *Correction* 48
 Norton Commando motor cycle 493
 Norway, marine equipment selling to 275
 Notches in metal, stress analysis of 370
 Notching presses 508
 Nottingham University, parts packaging 133
 School of Agriculture boiler house 464
 teachable assembly machines 133
 Novomax automatic air circuit-breaker 635
 Novo-Pak packaging machines 28
 Novotechnics Ltd., appointments 903
 Novo-Pak packaging machines 28
 Nozzle, Bexuda, for whisky casks 786
 oil burner (trade publication) 604
 spray, Vibrajel 616
 NSU, 1000C motor car 93
 1200TT motor car 93
 Ro80 motor car 410
 N.T.P. Sales and Distribution Ltd., corrosion chart 1034
 Nuclear Enterprises Ltd., acquisition of nucleonics interests of EMI and Elliott-Automation 943
 Nuclear fission, research position and prospects 160
 Nuclear fuels, economics of, IAEA 766
 Nuclear fusion, research position and prospects 160
 Nuclear level control 518, 713
 Nuclear magnetic resonance as measure of moisture content 232
 Nuclear Power Group, Hinkley Point B nuclear power station 405 670
 Nuclear power industry, position and prospects of 610
 reorganization recommendations 859
 Nuclear power station
 Browns Ferry 92
 Dungeness, radio-isotope powered warning light 104
 Ripple generator for 104
 Dungeness B, cleaning out heat exchanger elements 291
 plumbing and drainage 1025
 progress 405
 protection of prestressing system 338
 Gentilly 943
 Hinkley Point B 405, 670
 Hunterston B 6, 611
 turbo-generator sets for 902
 Pickering, turbo-generator sets for 205
 statistics 527
 Teesside proposals 577
 Wylfa, corrosion inhibitors 259
 Nuclear-powered submarine, Vickers 730
 Nuclear reactor
 boiling water, TVA 92
 fast breeder, Dounreay 949
 for combined generation and desalination 136
 PWR, Westinghouse 242
 SGHWR, Winfrith, design and operation 411
 Nuclear reactor programme, Committee report 859
 Nuevo Puerto power station, boiler 47
 Numerical analysis, by F. John (book) 681
 Numerical control
 drilling of structural steel sections 968
 fixed-bed machine with, Elgamill 470-471
 of drilling machine, Arbomatic 515
 of machine tools 160
 conference on (Paris) 1048
 of machining centre 472
 Sinumerik system of 515
 Numerical control development, Plessey 933
 Numerical-control systems 515
 Multi-ax six-axis 304
 NumeriCenter drilling, boring and milling machine 470
 Numotor positioning actuators (trade publication) 434
 Nussbaum, A., behaviour of materials (book) 477
 Nut, captive, ITW 149
 Nuttall, Edmund, Sons & Co., Tyne Tunnel 541
 Nyby-Grangesberg corrugated stainless steel annealing covers in 69
 Nylatron bushings for electric locomotive 179
 Nylon, for rotational moulding 799
 trade publication 346, 982
 tubing, Polypenco 111
 Nylon fabric for dust filtration equipment 590
 Nylon mesh (trade publication) 808
 Nylon resins, glass-filled, Zytel-7000 638
- O**
- Oakley, B. W., industrial applications unit 739
 Oakley life-boat, *James and Catherine Macfarlane* 92
 Oanes Carrier half-track vehicle 290
 Observatory, Old Royal, restoration of Meridian building 204
 Occupational guidance service, Ministry of Labour 88
 Ocean Engineering department, Stevens Institute of Technology 421
 Ocean Steam Ship Co., automated cargo liners 909
 Odda Smelteverk, Tysse 2 power station 743
 Odense Steel Shipyard Ltd., 255,000 dwt tanker 856
 Odeon cinema, St Martin's Lane, London 617
 Oertli, W., A.G., agreement with Prior Stokers Ltd. 989
 Office(s)
 and computer centres (trade publication) 190
 training for, course on, BACIE 80
 Office block, Gateway House, Manchester 131
 Office furniture (trade publication) 392
 Office landscaping technique 286
 Ogden Smiths & Hussey Ltd., resinated glass-fabric tubes (trade publication) 346
 Oil
 and water industries, by P. Hepple (book) 519
 cutting, Energol 340
 trade publication 434
 in Middle East, by S. H. Longrigg (book) 1017
 industrial diesel, Estor HD 838
 penetrating, Molyslip Combat 972
 silicone, Cilchem-193 639
 see also Lubricant; Lubrication; Paraffin; Petroleum; Refinery
 Oil engine. *See* Engine, diesel
 Oil flow meter, Mini-Major 341
 Oil industry, position and prospects of 819
 Oil pollution, prevention by Load on Top system 448
 Oil removal from water, polyurethane foam 206
 Oiling system in motor cycles, Posi-Force 492
 Old Royal Observatory, restoration of Meridian building of 204
 Oldham, G., Crewe Locomotive Works 364
 Olin Mathieson Ltd., power pack 762
 Olympia motor car, Opel 449
 Olympic Plastics Ltd., plastic forms and fabrications (trade publication) 808
 OM Titano 1967 range motor vehicles 742
 OM 150 side tipping motor vehicle 742
 On-line control software (trade publication) 724
 On-line measurement and inspection (St. Andrews) 154
 Onan 10CCKB portable generating set 116
 One-Eleven 500 airliner, maiden flight 5
 O'Neill, H., hardness measurement (book) 345
 Ontario Hydro Museum of Electrical Progress, turbo-generator set for 205
 Ontario Hydro turbo-generator sets, Nanticoke power station 205
 Pickering nuclear power station 205
 Opel, motor-car range 449, 656
 Opella all plastic water taps 654
 Optical Information Council, better productive vision (trade publication) 392
 Optical performance standards, Sira 832
 Optimetric boring machine 471
 Optimum operating conditions, determination of 83
 OR gates, fluidic passive (trade publication) 724
 Orchard self-loading vehicle 331
 Order pickers, battery-powered 592
 Ore carrier, *San Juan Exporter* 533
 Orenstein & Koppel excavator/loader (trade publication) 560
 Orientex (Agencies) Ltd., vulcanizing press 70
 Ormiston, T. S., transmission line maintenance 913
 Osborne, G. F., space vehicle dynamics (book) 723
 Osborne, Samuel, & Co., electro-slag refining plant 660
 Oscillators, diode, Gunn, Mullard 884
 microwave (trade publication) 724
 Oscilloscope, double-beam, SE Laboratories 884
 portable, Cossor 884
 71 series, Dynamco 718
 OSI Silver Fox motor car 741
 Osmosis, reverse, desalination 349
 Osram-GEC, Assmann Intel System for telephone dictation 1029
- OSTI/Hert micro-recording techniques 319**
 Oswalds & Ridgway Ltd., small pumps 257
 Otraco Railway, railway coaches for 990
 Outboard motors, Barrus 862
 Ovens, stoving (trade publication) 1018
 Overhead runways and conveyors, Engineering Outline 643
 Overseas Containers Ltd., containers contract 944
 Overseas Marketing Corp., activities of 730
 Overseas Scholarship Scheme, Confederation of British Industry 88
 Oxfam Plough Shares, Lord Jackson of Burnley 361
 Oxford Circus bridge for sale 949
 Oxford Engineering Co. Ltd., mobile crane 836
 Oxide resistors, price reductions, Electrosil 1045
 Oxygen cutting machine, Han-co-sine 627
 Oxygen determination, carrier gas equipment 1043
 Ozalid Co. Ltd., printing unit 184
- P**
- Paceco-Vickers Ltd., container handling 282
 trade publication 682
 Pacific Intertie power transmission schemes 66
 Packaging, parts, Nottingham University 133
 Packaging machine, Novo-Pak 28
 Packers Supply Co. Ltd., strapping tool 469
 Packing, synthetic string for, Tycord 973
 Paddington Station, rail improvement 586
 Paddock, J. O., electrical installation (books) 117, 477
 Pagano, N. J., elasticity (book) 345
 Page, G. T., Industrial Training Act 85
 Paging equipment, pocket, Multitone 701
 Paint, fluorescent (trade publication) 808
 hydraulic, circulation system 591
 see also Primer
 Paint circulation system 629
 Paint spraying equipment, electrostatic 386
 Paint stripper, hot, Takstripper 225
 Painter Bros. Ltd., power transmission towers for Iran 901
 Painting, conveyerized, for Tri-borne primer 834
 Paisley and Johnstone Engineering Training Group Ltd., training centre 649
 Pakistan, Indus Basin project 864, 998
 Pakord Ltd., synthetic string 973
 Pallet handling system, Square-One 679
 Pallet lift, Power Lifts 115
 Pallet loading machine, automatic 184
 Pametrada, disbanding of 528
 Standard Frame steam turbines 405
 Pampus KG, licensing agreement with Fluorplast Ltd. 527
 Panagraph illuminated alarm panel 714
 Panax Equipment Ltd., phosphors 639
 Panel(s) building (trade publication) 118
 Pan-Electronics Ltd., photoelectric cell 518
 Pantographite electrode-making machine 1008
 Paper, abrasive, Komatsubara 74
 Surlyn A coatings on 799
 Paper cutting machine, Sleeter 751
 Paper flaw detector for capacitors 185
 Paper production, equipment and methods 750
 with automatic control 750
 Paper rolls, handling and storage cranes 336-337
 Paper sacks, multi-wall 27
 Paper tape punch, springs for 506
 Papermaking, and paper products industry training board 233
 computer control of 611
 Papermaking industry, consistency measurement 1018
 Papermaking machine, cleaning of lubrication system 877
 Paraffin-fired air heaters, Hecta 760
 Paramatic Engineering Co. Ltd., digital follower 153
 Paraseal solvent cement for underground ducts 779
 Parcels sorting office, Nottingham 862
 Paris Motor Show 579
 Parker-Majestic surface grinding machine 1010
 Parker, S. M., braking system 51
 Parker-Smith, N., technical manager, Marconi Broadcasting Division 529
 Parkinson, A. C., drawing (book) 559
 Parkinson Cowan Appliances Ltd., noise of gas fires 960
 Parkinson Cowan-Computers, formation and appointments 568, 733
 Parkinson, J., & Son (Shipley) Ltd., gear planing machine 472

- Parkyn, B., polyesters (book) 267
 Parliamentary Committee of Public Accounts 195
 Parmiter, P. J., & Sons Ltd., harrows 737
 Parsons, C. A., & Co. Ltd.
 alternators for Dungeness B nuclear power station 405
 centrifugal compressors 600
 miniature cryogenic systems 918
 shaft seal for centrifugal compressor 600
 transformers for Cottam power station 454
 turbo-generator sets, for Hunterston B nuclear power station 902
 for Nanticoke power station 205
 for Ontario Hydro Museum 205
 for Pickering nuclear power station 205
 Parsons, J. J., natural resources (book) 603
 Part(s) packaging, Nottingham University 133
 Partial pressure gauges: mass spectrometers 40
 Particle collisions, conference on (Belfast) 80
 Particle size analysis (book) 519
 Party-wall hollow concrete block, Lignacite 798
Pass of Glenogle tanker, diesel engine 300
 Passenger transport authorities, plans for 941
 Pasteurization of bottle contents 334
 Patent Specifications, British, Abridgements of 35
 Patent system and patent law, committee 159
 Paterson, T. T., management theory (book) 847
 Patrol boats for Malaysian Navy, Vosper 10
 Pattern development, by A. Dickason (book) 981
 Paul, K. S., Products Ltd., open-gear lubricant 390
 Pawlowski, Z., ultrasonic testing (book) 117
 Paxman type RPH diesel engine 300
 Ventura diesel engines for *Seal* recovery vessel 210
 Payne Products International Ltd., lapping machine 474
 PCD Ltd., projection cabinet 152
 'X-Y' digital data reader 1041
 PCR system for controlling production time 106
 Pea gathering machine, Viner 166, 381
 Pearce, J. G., improved cast irons 112
 Pecket, G. W. E., computer analysis of book vocabularies 240
 Peebles, Bruce, Ltd., transformer for Dounreay reactor 949
 Peech, A. J., British Steel Corp. 202
 Peerless, S. J., fluid mechanics (book) 117
 Pegson Ltd., crushing plant 549
 Pegson-Telsmith crushing plant 549
 Pelapone Ltd., centrifugal switch for speed regulation 425
 Pell, C. J., and Partners, Gateway House office block 131
 Pellegrini, U., automation and instrumentation (book) 345
 Penetrating fluid, Free-Way 111
 Penfold Metallising Co. Ltd., cleaning machine for abrasives 673
 Penning gauge 39
 Pennington, J. D., high temperature insulation 812
 Pennsalt Ltd., Elcometer thickness gauge 389
 Foslube dry soap film lubricant 638
 Penny, R. K., tensile testing equipment 925
 Penstocks, sewage treatment works 708
 Perfection Parts Ltd., counting units 558
 differential pressure switches 1042
 Photohelic pressure switch/gauge 714
 Perkin-Elmer Ltd., spectrophotometers (trade publication) 1048
 spectrometer (trade publication) 154
 Perkins Engines Ltd., turbocharged diesel engines 551
 Perkins, R. F., prestressing weakened by irradiation? 407
 prestressing wires in concrete pressure vessels 338
 Permanent magnet(s) (trade publication) 154
 Pernix Ethone Ltd., blackening compounds 148
 Perry Drum-Tip potato bulk handling system 955
 Perry-Jeffes coupling for tractors 955
 Perry, R. H., engineering manual (book) 893
 Personnel manager's guide to employee benefits, by M. Wade (book) 723
 Personnel manager's lawyer and employer's guide to law, by E. Mitchell (book) 893
 Petavel building, National Physical Laboratory 910
 Petbow Ltd., diesel generating sets 803
 Peto Scott Ltd., television camera 447
 Petrocarbon Development Ltd., cryogenic systems 918
 thermal test facility for ESRO I 103
 Petrol from coal. *Letter* 529
 Petrol engine. *See* Engine, petrol
 Petroleum. *See* Oil; Refinery
 Petroleum liquids, storage and handling, by J. R. Hughes (book) 305
 Petroplast leak sealer 835
 Peugeot diesel engined motor cars 579
 Pfizer Ltd., spray coating of tablets 22
 Phase shifter/frequency doubler, Brookdeal 555
 Philips Electrical Ltd., automatic washing machine 360
 Philips Electronic and Associated Industries Group, non-destructive testing 730
 Philips generator for colour television 716
 Philips low-frequency measurement system 555
 Phillips, A. L., welding handbook (book) 519
 Phillips Drill Co. (UK) Ltd., concrete and masonry anchor kit 928
 Phosphor(s) for scintillation counting 639
 Phosphoric acid plant, Avonmouth 1005
 Photain Controls Ltd., flame detection unit 714
 Sanyo distributors 567
 Photo-cell unit, encapsulation of 793
 Photoconductivity in solids, by P. Görlich (book) 189
 Photodyne light-spot following recorder 185
 Photoelastic analysis, polariscope for 191
 Photoelastic coatings 191, 193, 194
 Photoelasticity, Engineering Outline 191
 Photoelectric cell, Mini-Moniteye series 518
 Photoelectric equipment (trade publication) 36
 Photoelectric relay (trade publication) 80
 Photo-emission colloquium, IEE 190
 Photohelic pressure switch/gauge 714
 Photometric data surveillance 548
 Photoplot radar map of Tees 324
 Photo-scanning profile-copying equipment 846
 Phototransistor tachometer, Crypton 1042
 Physical theory, by H. Bondi (book) 935
 Physics of liquids, conference on 268
 of modern electronics, by W. A. Günther (book) 519
 reports on progress in, by A. C. Stickland (book) 723
 Physics exhibition 560
 Physitech Inc., environmental testing 220
 Picard, Henri, and Frère Ltd., abrasives 258
 caliper gauge 298
 Pick-a-back bulk tipping container 1013
 Pickering nuclear power station, turbo-generator sets 205
 Pickles, John, & Son (Engineers) Ltd., woodworking machines 891
 Pidam modules (trade publication) 724
 Pielstick type 16PC2V-400 diesel engine 995
 Pierce Fuses Ltd. agreement with Brush Electrical 944
 Piling and Construction Co. Ltd., free-fall winch 69
 soil tester (trade publication) 434
 Traveller rotary drilling rig 69
 Pilkington flat glass process, tinted glass 909
 Pilkington Perkin-Elmer Ltd., tooling laser 1045
 Pillinger, G. C., & Co. Ltd., high pressure water supply (trade publication) 478
 Pin and clip stenter (stretcher) 380
 Pines pipe bending machine 678
 Pingon P4R tower crane 514
 Pininfarina, Berlinetta prototype motor car 449
 International Motor Show (Turin) 741
 Pinions, double helical, forgings for 466
 Pipe, helical-welded, large-diameter 976
 screw-threading machine, trolley-mounted 845
 steel, helically-welded, NGT 972
 see also Tube
 Pipe assemblies, Dunlop Fleximet 763
 Pipe-bending machines 506, 678
 Pipe couplings, Pressure-Lock 30
 Pipe cutting machine, Hancock 673
 Pipe fittings, pvc (trade publication) 936
 Pipe flash welding, BS 792
 Pipe flashing collars, Pipeflash 755
 Pipe lining, sprayed concrete (trade publication) 306
 Pipe runs, computer design of 907
 Pipe suspension system, Eraflex 302
 Pipe tapping tool, plastics 757
 Pipeflash pipe flashing collars 755
 Pipeline, natural gas, across fenland 281
 submarine, off Dutch coast 863
 Pipework, glass fibre repairs to 792
 polypropylene, for acid handling 832
 trade publication 982
 Piping, Polyorc B pvc, for underground ducts 779
 pvc waste, Key Terrain 756
 Powerflex expansion joints 73
 Pirana motor car 656
 Pirani gauges 39
 Pirelli General Cable Works, Ltd., cables for railway electrification 17
 Piston gauge for pressure measurement 668
 PL/1 computer language 394
 Placon corrosion-resistant fans 932
 Planing machine, gear, Sunderland 472
 openside, Butler 473
 Planing and milling machine, Butler 151
 Planning, by network, by H. S. Woodgate (book) 981
 long-range, conference on 190
 product, and reliability management, by D. N. Chorafas (book) 35
 urban, conference on 445
Planning Warehouse Locations 439
 Plant hire (trade publication) 682
 Plant Protection, Vibrajel spray nozzle 616
 Plascut Ltd., plasma-arc cutting 336
 plasma-arc cutting service 846
 Plasma-arc cutting; *See* Cutting; Cutting machine
 Plasma-arc cutting process 336
 Plasma-arc machining 436
 Plasser and Theurer, levelling and tamping machines 205
 track lining and consolidating machines 205
 Plastazote expanded polyethylene in colour 972
 Plastic Constructions Ltd., fire damper for ventilation ducting 187
 cleaning unit for furnace tubes 291
 Placon corrosion-resistant fans 932
 Plastic diaphragm valve, Hills-McCanna 598
 Plastic fabrications (trade publication) 392
 Plastic forms and fabrications (trade publication) 808
 Plastic Institute, textiles from film 154
 Plastic lever taps 578
 Plastic materials and products (trade publication) 268
 Plastic packing for effluent treatment 870
 Plastic pipe tapping tool, Taldex 757
 Plastic products (trade publication) 642
 Plastic rooflights, Bexlites 892
 Plastic Rotational Mouldings Ltd., rotational moulding 170
 Plastic seaweed for coastal erosion 94
 Plastic sheet, Darvic, ICI 13
 Plastic tanks, glass-reinforced 249
 Plasticisers for pvc (trade publication) 642
 Plastics
 and production engineer, conference (London) 76
 as locking sealants, Harvey-Flint 76
 coating of, Elvacite-6015 797
 DataKey for selection of 23
 glass-fibre reinforced, railway coaches 539
 Heisler process of rotational moulding for 170
 in building, courses on 36
 Selectabox on identification and characteristics of 707
 use in armaments 534
 welding of 1051
 Plastics Constructions Ltd., etch booths 25
 Plastics industry. *See* Rubber and plastics processing industry
 Plastics injection moulding (trade publication) 520
 Plastics Institute, conference on filament welding 228
 Plastics Ltd., styrene polymer and copolymer 943
 Plastizitätstheorie und ihre Anwendung auf Festigkeitsprobleme, by K. A. Reckling (book) 391
 Plate, stainless-steel, Staybrite 1005
 Plate bending rolls, Bronx 676
 Plate-mill plant for Finland, Davy 1011
 Platform, insulated hydraulic, Simon Engineering 977
 Kiebitz tethered, Dornier 994
 Platformer and hydrotreater, Shell Haven refinery 628
 Plating, electric. *See* Electroplating
 Plating unit, Glydette barrel 674
 Platter concept for System 4 computers 99
 Plenpak packaged pumps (trade publication) 118
 Plenty and Son Ltd., packaged pumps (trade publication) 118
 training centre 610
 variable-displacement pump 116
 Plessey Automation Group
 fluid-logic system 933
 horicultural light meter 578

- incremental recorder 185
numerical control activities 933
telegraph signal generators 716
Plessey Co. Ltd., appointments 775, 857
digital sequence control machine 160
numerical-control systems 515
Plessey Components Group, appointments 903
fluidic AND gate 1040
push-button microswitch 1046
Plessey Dynamics Group, hot air valves contract 527
marketing organization in US 731
Plessey Electronic Group, receiving station at Bearley 868
Plessey Group, interest in Turolla SpA 567
Plessey Radar Ltd., bright display radar 617
Digitrace digital raster display 617
ground station for meteorological satellite signals 576
secondary surveillance radar equipment 616
Plint & Partners Ltd., testing equipment for IC engines 753
Plotting modules, log or ac 717
Plough, semi-mounted, Bamford-Kvernelands 52
Ploughmaster 80 f-wd tractor 52
Plug, for masonry, brickwork 475
Plumb, P., electrical engineering (book) 227
Plungers, hydraulic 598
Plutonium-238 heat source for thermoelectric generator 218
Plymouth B power station, blade erosion 806
Plywood (trade publication) 154
Pneumatic actuators (trade publication) 306, 434
Pneumatic Components Ltd., PCL pneumatic machine vice 842
Pneumatic compression moulding gun, RN30, Edlon 385
Pneumatic controls (trade publication) 434
Pneumatic cylinders, miniature, Maxam 928
Pneumatic diegrinder, Morris 385
Pneumatic equipment, kettle production 104
Pneumatic handbook (book) 35
Pneumatic lifting bags for aircraft retrieval 667
Pneumatic systems, by B. W. Anderson (book) 433
for chemical dipping 1033
Pneumatic time delay relays 517
Pneumatics in industry exhibition (Sheffield) 228
Pneuride air suspension system 1002
Pocket paging equipment, Multitone 701
Pod range of television relay cables 716
Poisons, toxicology of, by M. B. Jacobs (book) 1017
Poland, cylinder head transfer line 990
Polar Chemicals Ltd., soot prevention compound 427
Polaris-missile submarine, *Resolution* 532
Polariscope for photoelastic analysis 191
Poliakoff, A., pocket paging equipment 701
Polishing, abrasive rolls for 184
Pollution, air 605
costs and control 578
research 281
research, MIRA 322
West Thurrock power station 620
oil, prevention by Load on Top system 448
PolSERVICE, ECuGT welding electrode for copper 876
Polyester(s), by B. Parkyn, F. Lamb, and B. V. Clifton (book) 267
Polyester film, Melinex 583
Polyimide insulation for wires and cables 978
Polymathic Engineering Co. Ltd., pallet truck 575
Polymers, developments and applications, conference on 982
Polyorc B pvc piping for underground ducts 779
Polypenco Ltd., Nylon 11 tubing 111
Polypropylene, etch booths 25
Polysulphide sealants (trade publication) 982
Polythene Drums Ltd., polythene drums (trade publication) 80
Polythene tubing, Telcon 30
Polyurethane foam for oil removal from water 206
Polyvac E600 vacuum emission spectrometer 1043
Polyvinyl chloride, pipe fittings (trade publication) 936
plasticisers for (trade publication) 642
suction/delivery hose, Kanaflex 799
waste piping, Key Terrain 756
Poole, S. P., interferometry 524
Porosity of castings, testing machine 590
Porsche Sportomatic motor car 450
Port industry, nationalization of 43
Port of London Authority, grain terminal 'island' jetty 360
Port Revel training centre, ESSO 54
Port Talbot, breakwater at 900
Porta bench- or stand-mounted press 844
Portable Factory Equipment Ltd., compressor suction cleaner 764
Portable Welders Ltd., spot welding gun 385
Portainer container-handling terminal, 282
Portair safety sliding door (trade publication) 604
Portal frames, Sanders 892
Portaloo portable toilet 551
Portapack Ltd., low-pressure spray units 756
Portasilo Ltd., Portaloo portable toilet 551
Portcrete Ltd., concrete beams 289
Porteous sewage treatment process 829
Porter, F. C., hot galvanized steel 108
Posford, Pavry & Partners, container-handling terminal 282
Posi-Force oiling system in motor cycles 492
Position control servo, Jones 110
Positional controls (trade publication) 766
Positioning table, Primary 1008
Positioning tool, Tilt'r 297
Potato bulk handling system, Perry Drum-Tip 955
Potato harvesting machines 331, 955
Potentiometers, medium torque, STC 1046
Potter, H. C. (Exeter) Ltd., revolving centres (trade publication) 682
Potter, J. H., handbook of engineering sciences, (book) 153
Potterton, centralized heating for flats 831
Eden 601 oil-fired boilers 831
Potting compound, Silcopac-120 225
Poulson, J. G. L., Siporex system for hospital 533
Pouring device, hydraulic elevator truck 838
Powder coatings, symposium (London) 894
Powder metallurgy, European symposium (Stuttgart) 520
Powder metallurgy conference (New York) 118
Powder metallurgy 1967, progress in (book) 603
Powder technology course, King's College 268
Powell and Co., electric platform truck 680
hydraulic elevator truck with pouring device 838
Powell Duffryn Engineering Co., Ltd., appointments 991
dust and fume filters 469
wagon contract 527
Powell Duffryn Processes, mobile laboratory 670
Power, fluid, in hydrostatic drives 155
transmission scheme, dc, Nelson River 241
World, Conference (Moscow) 724
Power Centre Ltd., shear conveyor 924
Power control modules S200, GEC 187
Power controllers, solid state 978
Power Driven Headings Ltd., piping for underground ducts 779
solvent cement 779
Power-factor correction, synchronous condenser for 214
Power Flexible Tubing Co. Ltd., expansion joints 73
Power-Gas Corp., copper smelter for India 731
gas-fired furnace for aluminium 594
Power-generating unit, vehicle-mounted 282
Power generation industry, position and prospects of 853
Power generation systems (book) 559
Power Lifts Ltd., pallet lift 115
'Power Pac' gas-turbine plants 215
Power pack, hydraulic portable 762
Power plants, gas-turbine, Stal-Laval 214
see also Power station; Substation
Power regulators, ac, thyristor-controlled, Starpac 714
Power station(s)
Australian, gas-turbine generating sets 206
Castle Donnington, blade erosion 805
Chadderton, blade erosion 805
Cockenzie, merry-go-round trains 285
Cottam, design and construction 453
Delta, Nigeria 214
development projects 906
Doncaster B, turbine, AEI 731
Eggborough, busbars, AEI 653
hydroelectric. See Hydroelectric
location and output 820
Nanticoke, turbo-generator 205
nuclear. See Nuclear power station
Nuevo Puerto, Babcock and Wilcox boiler 47
Plymouth B, blade erosion 806
Ratcliffe, coal unloading facilities 1030
West Burton 453, 700
West Thurrock 619, 620
wind powered, Russia 578
Yallourn W, cooling towers 901
see also Hydroelectric; Nuclear
Power station cooling dome, design of 367
Power station programme, CEGB 576
Power supplies, integrated (trade publication) 560
modular, Coutant 883
solid-state, A.P.T. Electronic 74
Power supply units, high voltage, Belix 636
Power transmission line(s)
conductor oscillation phenomena in 913
creep measurement in 105
Douglas Moor test line 913
high-voltage dc 66
Interbloc protection system 63
reconstruction, North of Scotland 320
Strathaven-Harker 914
wind hazards on 913
Power transmission towers for Iran 901
Power units (trade publication) 190
Powerflex bellows expansion joints 73
Powermaster oil/gas-fired boilers (trade publication) 936
Powermax steam and hot-water boilers 116
Powerstor Drawstack storage system 548
for nickel alloy bars and tubes 337
Powertrol automatic valve, Clayton 599
PowRmatic Ltd., External-Aire heaters 930
Pratt and Whitney, JT9D turbofan engine 169
JT15D turbofan engine 825
tape-controlled drilling machine 100
Precast building (trade publication) 306
Precise (Great Britain) Ltd., jig grinding machine 265
Precision casting. See Investment casting
Precision engineering, metrology and, by A. J. Scarr (book) 1017
Precision measurement (trade publication) 228
Precision Screw and Manufacturing Co. Ltd., fasteners 31
Prediction analysis, by J. R. Wolberg (book) 765
Preece, C., Kaldas programming (book) 391
Preece, Cardew and Rider, Mangla Dam 865
Preheating (trade publication) 520
Premier Injection Mouldings Ltd., Lispro shin guard 618
Presco (Manufacturing) Ltd., site and transit cabins 890
Press
extrusion 989
for stainless-steel cans 1005-1006
forging, program-controlled 709
400-ton overhung, Berry 672
high speed, Beamlock guard 383
hydraulic, hand-operated, Murex 843
notching, Muller automatic 508
Porta bench- or stand-mounted 844
toggle 474
upstroke, for water removal 430
vulcanizing, Chemokomplex 70
Wilkins & Mitchell 508
Press feeding aid, Udal Dudal 845
Press, William, & Son Ltd., pipe cutting machine 673
sprayed concrete pipe lining (trade publication) 306
Pressed Felt Manufacturers Association, felt pads 752
Pressed Steel Fisher Ltd., computed-aided design for motor vehicles 593
job analysis 85
Pressure, definition of 37
low, measurement of, Engineering Outline 37
measurement of, piston gauge for 668
units for 37
Pressure-Lock pipe couplings 30
Pressure measurement equipment 558
Pressure regulators, differential (trade publication) 766
Pressure sensor, Semiducer 712
Pressure switch(es), differential, Dwyer 1042
miniature, Inertia Switch 1041
Pressure switch/gauge, Photohelic 714
Pressure transducer with temperature stability 557
Pressure vessel(s), forgings for 466
Pressure vessel design by M. B. Bickell & C. Ruiz (book) 847
Prestressed concrete. See Concrete
Prestressing, steel for, symposium (Madrid) 982
Prestressing system, BBRV 585
Prestressing tendons for prestressed concrete 722
Prestressing wires in concrete pressure vessels 338, *Letter* 407
Price Machine Guards Ltd., press guard 383

Prices and Incomes Board 398
 wage scales 1023
 Pricing, theory and practice (book) 893
 Priestman Bros. Ltd., digger (trade publication) 560
 Mustang digger 550
 Primary positioning table 1008
 Primer, Methodic fully weldable 973
 Tri-borne, conveyerized painting for 834
 Print papers, Q semi-dry 972
 Printed circuit board assembly, machine for 834
 Printed circuits kit, Schjeldahl 885
 Printer, output, for computers, 3M 181
 Printing, newspapers and publishing industry training board 233
 Printing plates, stereo rubber 649
 Printing unit, 48A Diazoprinter Mark II 184
 Prior Stokers Ltd., agreement with W. Oertli A. G. 989
 Probe(s) for use with proximity switches, Burndep 111
 Probert, D., changing role of universities 132
 cryogenic insulation 1022
 Process control instruments, Veritrac 711
 Process control system K70, computer, Kent 1039
 Process heaters, Kestner-Stone-Vapor 298
Process Industries, Investment by (report) 426
 Process industry, fire protection in, IME 1018
 Process plant equipment (trade publication) 982
 Processing, mechanical, by S. Kalpakjian (book) 79
 Processing plant, mayonnaise and salad-dressing 359
 Procurement and inventory systems, by W. J. Fabrycky and J. Banks (book) 641
 PRODAC (Production Advisory Consortium) 314
 Product planning, by D. N. Chorafas (book) 35
 Production control by closed circuit television 63
 Production engineer, plastics and, conference (London) 76
 Production engineering and management, conference on, PERA 1018
 Production Engineering Research Association
 calibration service for furnace temperature measuring equipment 1034
 computers for industry 36
 conference on production engineering and management 1018
 ergonomics and productivity symposium 894
 hydrostatic dynamometer 595
 network techniques 154
 programme of training courses 943
 research and development service for smaller firms 876
 symposium on heat treatment 80
 symposium on programmed learning 228
 symposium on training and engineering industry 1018
 writing and speaking effectively, symposium 392
 Production plant and equipment 672, 842, 1007
 Production time, controlling and recording 106
 Productivity, ergonomics and, symposium, PERA 894
 position and prospects 814
 Productivity improvement, management—trade union scheme 160
 Professional engineers, survey of 530
 Profile-copying equipment, photo-scanning 846
 Profilometer for gear tooth profile, AEI 65
 Program controller, punched tape 674
 Programmed instruction by B. Dodd (book) 893
 Programmed learning, symposium on, PERA 228
 Programmer, sequential, Highland 558
 Programming, in industry, by N. Williams (book) 723
 mathematical, by K. B. Haley (book) 681
 Progres Janes & Lamson, power saw 473
 Progressive Appointments Register, salaries of engineering staffs 1023
 Project Champion hollows for tubes 33
 Project planning service (trade publication) 36
 Projection cabinet, PCD 152
 Projector, dual slide, teleciné 1032
 inspection (trade publication) 848
 Proler Cohen Ltd., Proler plant for transmutation 47
 Propathene, mixer moulded in, 149
 Proportioning systems (trade publication) 766
 Propulsora Siderurgica iron and steelworks at Ensenada 944
 Protector Safety Products (UK) Ltd., bump cap 446

ear muffs 446
 Proteus gas-turbine for patrol boats 10
 Protimeter Grainmaster Mk 9 for moisture content 955
 Provan, J., scrap reclamation using fluidised bed 967
 Proving device for voltage indicators 116
 Proximity switches, ML Industrial Products 188
 PSC Equipment Ltd., road bridge expansion joints (trade publication) 36
 ptfе insulated wire and cables (trade publication) 346
 Public Accounts, Parliamentary Committee of, report 195
 Public Buildings and Works
 Ministry of, helicopter hanger at Jersey Brow 283
 restoration of Meridian building of Old Royal Observatory 204
 Public works and municipal services exhibition (Olympia) 682
 Pulmac pulverizing mills for ceramics 103
 Pulsation Controls (GB) Ltd., fan intake mutes 130
 Pulsco fan intake mutes 130
 Pulse code modulation telephone exchanges, microcircuits for 406
 Pulse generator, modular, Aim Electronics 1046
 Pulverizing mills for ceramics 103
 Pumice aggregate, lightweight (trade publication) 894
 Pump(s)
 aluminium man-powered, Sorcerer's Apprentice, ALCOA award 14
 centrifugal, Finchsburly portable 598
 circulating, for heating systems (trade publication) 434
 variable-head, Biral Regula 599
 concrete, SEM 221
 diaphragm, Allman-Comet 762
 fixed displacement 156
 for fire-resistant fluids, Sutcliffe 390
 for transference of alkyl solution 180
 hydraulic 156, 157
 and cylinders (trade publication) 118
 flow divider and regulator, Tektro 927
 trade publication 118
 vane 550
 vibrations in (book) 765
 low-output, Pygme 302
 material-conveying, Fuller Aeropump 512
 mining (trade publication) 724
 multi-stage, Grundfoss 427
 oil, single-acting, Suba Hydraulics 426
 packaged (trade publication) 118
 rotary vane, Ibex 597
 Series III 263
 sewage, Sigmund Pulsometer 75
 sliding shoe, for polishing lathe 421
 small, Aqua range 257
 trade publication 936
 submersible, for bore-holes 927
 submersible sludge, Flygt 764
 sump, Warman 264
 vacuum, abrasive particles counteraction 421
 variable-displacement 116, 156
 water 386, 706
 Punch, paper tape, springs for punching and movement on 506
 tape, Westrex 512
 Punched paper tape equipment (trade publication) 80
 Purcell, P., honeycomb steel stairway 780
 Pure Air Corp. of America, environmental testing 220
 Pure-Flo diaphragm valves (trade publication) 604
 Push buttons, snap action, Miniswitches 303
 Putty, bouncing, ICI 257
 Pye-Ling Ltd., change of name 566
 vibration test equipment (trade publication) 604
 Pye TVT Ltd., production control by television 63
 television equipment exhibition 405
 Pye, W. G. and Co. Ltd., chromatography controller 882
 Datran Classifier for quality control 342
 Evro series galvanometers 1040
 Pygme low-output pump 302
 Pynford Ltd., air-cushion transport 165
 Pyrene Co. Ltd., conference on cold forming (London) 832
 Pyrotex Ltd., end seal for cables 802

Q

Q4 Cunard Liner, computer system in 452
See also Queen Elizabeth II
 Qadirabad Barrage, Indus River Basin scheme 999
 Quality and reliability campaign, STC 41
 Quality and Reliability Year 41, 160, 816
 Quality control, production line Datran Classifier for 342
 Quantometer X-ray fluorescence spectograph 881
 Quartz-halogen light units, AEI 824
 Quattroporte motor car, Maserati 657
Queen Elizabeth II liner, design and construction 494
 equipment for 855
see also Q4 Cunard liner
Queen Mary liner, purchase by US 616
 Quentane seamless flooring 240
 Quentop floor surfacer 798
 Quentsplass Ltd., Quentane seamless flooring 240
 Quentop floor surfacer 798
 Quick, J. H., work-factor 648
 Quicker reading courses, BIM 154

R

R1 Premium cemented carbide 672
 Rabone Chesterman Ltd., steel rule for metric conversion 109
 Racal Research Ltd
 communications receiver with digital frequency display 758
 computer-aided design of electronic equipment 758
 digital frequency meters 758
 submarine communications system 758
 universal counter/timer 758
 Race relations in engineering industry 943
 Racial discrimination in employment 234
 Radar, 'Avoid', for airfield vehicles 71
 bright display 617
 MIRA test track 322
 secondary surveillance, advanced equipment 616
 use in burglar alarms 740
 Radar map, Photoplot, of Tees and its approaches 324
 Radar systems, computer use in, RRE 740
 Gunn-diode, RRE 739
 Radiation, gamma, for level measurement 563, 564
 Radiation shielding cryogenic liquids 1021
 SGHWR reactor, Winfrith 414
 Radiator, warm air (trade publication) 936
 Radiator valve, thermostatic, Danfoss 756
 Radiatron, miniature rotary switch 1046
 Radio, hf communications equipment, GEC 951
 Radio-controlled coal cutting machine 890
 Radio receiving station, hf, Bearley 868
 Radio Rentals Group, mobile closed-circuit television unit 181
 Radio sonde to monitor battery performance 536
 Radio-telephone for salesman *Letter* 242
 Radio waves, earth surface, aerial for, H. M. Barlow 253
 Radioisotope powered warning light 104
 Radioisotopes, transporting, heat-dissipating container for, Battelle Memorial Institute 218
 Radiovisor Parent Ltd., photoelectric relay (trade publication) 80
Radnorshire, cargo liner 909
 Radyne Ltd., ultrasonic transducers for cleaning and plating solutions 390
 Rail ends, fishplates for joining 910
 Rail joints insulated, 3M's 225
 Railroad motive power, simulators, seminar 749
 Railway(s)
 Britain's, in World War I, by J. A. B. Hamilton (book) 765
 Danish State, diesel-electric locomotives 26
 Great Western, history of (book) 765
 Isle of Wight, by P. C. Allen and A. B. MacLeod (book) 79
 Midland and Great Northern Joint, short history of, by R. H. Clark (book) 227
 Otraco, railway coaches for 990
 Swedish State, class Rc electric locomotives with thyristor control 176
 Swiss National, Ford Transit road/rail van 358

- Switzerland, by C. J. Allen (book) 267
 tribology in, IME 766
 underground *See* London Transport
- Railway accident *See* Accident
- Railway axles, fatigue cracking in, IME 862
- Railway bogies, Air-Metacone rubber and air suspension 137
- Railway bridge. *See* Bridge
- Railway coaches for Otraco Railway 990
- Railway guards, strike of 483
- Railway locomotive. *See* Locomotive
- Railway points and signals, by M. Robbins (book) 35
- Railway rolling stock, Bournemouth-Waterloo electrification 17
see also Locomotive; Carriage; Wagon
- Railway symposium, cybernetics on (Montreal) 190
- Railway track, broken, causes 781 *Letter* 817 902
 maintenance equipment, Matisa 773
- Railway train(s), electric, painting and cleaning problems *Letter* 95
 merry-go-round, 285, 1030
- Railway train-to-track communication system, Dynamco 718
- Railway underground. *See* London Transport
- Rainfall distribution map 994
- Ram(s), hydraulic, Chamberlain 31
- RAM-C test to investigate loss of communication with spacecraft 578
- Rambler Javelin motor car 537
- Rammer, portable vibration, Wacker 720
- Rampveyor cargo distribution system 1029
- Randall, James H., & Sons Ltd., transparent storage cabinets (trade publication) 190
- Randell, F. T., desalination 447
- Range Boilers Ltd., plastic water taps 654
- Ranger, Bond 875, motor van 493
- Rank Audio Visual Ltd., D-150 cinema screen Odeon, Marble Arch 96
- Rank Organisation, Odeon cinema, St Martins Lane, London 617
- Rank Studio Equipment, television filming system utilizing Arri electronic cam 867
- Rank-Taylor-Hobson, Varotal-9 zoom lens 9
- Ransomes & Rapier Ltd., appointments 945
- Ransomes Sims & Jefferies, Barrymount isolating machine mountings 183
 Powerstor Drawstack steel storage system 548
 Veedamper spring units 183
- Rapid Conveyors Ltd., wire rope hoists (trade publication) 682
- Rapid Magnetic Ltd., magnetic extractor for conveyors (trade publication) 306
 magnetic separator 431
- Rapid transit system, Manchester 776
- Rapier, Sunbeam, motor car 577
- Rasulov, M. L., contour integration (book) 641
- Ratchet socket handles, Husky 222
 New Britain 222
- Ratcliffe power station, coal unloading 1030
- Rautaruuki Oy steelworks 1011
- Raw materials, blast furnace, screening 77, 78
 degradation during handling 77
- Raymond, Sir Stanley, resignation, British Railways 688
- Raynes, S. C. P., propellers for hovercraft 902
- Razor, electric, socket for 995
- RCA (GB) Ltd., transistor in terminal block mounting 555
- RCM (Air Distribution) Ltd., iris-type damper 74
 lighting units and air outlets combined 891
- Rea Ltd., grease for crane gears 462
- Reactions, gas/solid, engineering of 1048
- Reactors, for ethylene oxide and glycol 949
 variable, Bowler 343
- Reading courses, quicker, BIM 154
- Reading and District Engineering Training Group, training workshop for 901
- Reading exercises in engineering drawing, by R. Thomson (book) 807
- Readout counters, remote, Dataset 1042
- Reavell & Co. Ltd., compressors and boosters (trade publication) 80
- Reavis, W. R., aluminium fluorescent lighting system, ALCOA award 14
- Receiver, and transmitter units for telephone extension, Bell 167
 communications, with digital frequency display 758
- Recessing machine, Wadkin Type LQ 515
- Reckling, K. A., plasticity theory (book) 391
- Reclaim systems, metals (trade publication) 682
- Record cards for magnetic tape files 31
- Record Electrical Co. Ltd., dc converters (trade publication) 1048
- Recorder, chart, Dryans 516
 incremental, Plessey 185
 light-spot following, Photodyne 185
 twin-channel quick-response 717
see also under specific types
- Recorder Charts Ltd., VeriGraph Modular draughting paper 973
- Recording equipment. *See* Strain measurement, recording and associated equipment exhibition
- Recording head, magnetic, performance 422
- Rectifiers, high voltage, Unitrode 475
 silicon, Bournemouth-Waterloo railway electrification 16
- Red Head concrete and masonry anchor kit 928
- Rediffusion Television Ltd., television filming 867
- Redifon Air Trainers Ltd., simulators for locomotive drivers 746
- Redifon Ltd., appointments 903
- Reece, P. O., structural use of timber (book) 641
- Reed Medway Sacks Ltd., paper sacks 27
 sack holder 426
- Reed switches, Flight-Refuelling 1045
- Rees, William F., Ltd., epoxy resin for wet surfaces 835
- Rees-Mogg, W. youth in management 772
- Reffold, E. A., Leyland Motor Corp. 236
- Refinery(ies)
 location and output 820
 Shell Haven, platformer and hydrotreater 628
 Stanlow, vacuum distillation column 629
- Refining, electro-slag 547, 660
- Reflectoscope, modular 299
- Reflex, Kangol, automatic safety belt 658
- Refractory insulation, J-M Perlite aggregate 799
- Refrigeration components (trade publication) 766
- Refrigeration equipment 759, 930
 filter driers for, Tricor type KDT range 340
- Refrigeration techniques, symposium on, IME 118
- Refrigerator, thermostatic control unit 302
- Refrigerator-defrost timer, automatic 760
- Refrigerator industry, report on efficiency 196
- Refuse, solid, incineration of 253
- Refuse collection survey, US 242. *Letter* 407
- Refuse disposal plant, combined sewage and Sweden 902, 944
- Refuse-fired steam generator, H. Carlton Moore 253
- Regal, Reliant, three-wheel motor car 493
- Regional employment premiums 351-352
- Regional planning and Stansted airport controversy 1
- Regulator, diaphragm-type, Norgren 425
 filter, Norgren 425
- Reid, D. A. G., CEI examinations 89
- Reinforcing bars, thermic welding 548
- Relay
 control system, Telemecanique 882
 fault detection, Donovan 978
 for dc operation, Londex Ltd. 803
 heavy-duty 75
 If, English Electric 634
 metering (trade publication) 80
 multi-pole, Flight Refuelling 475
 photoelectric (trade publication) 80
 pneumatic time delay, Telemecanique 517
 track current, Bournemouth-Waterloo 16
- Relay-switched encoder 702
- Release agent, concrete, Zedcote S3 756
- Reliability, of service equipment, conference on, IME 724
see also Quality and Reliability Year
- Reliability engineering symposium (Liverpool) 392
- Reliability management, by D. N. Chorafas (book) 35
- Reliance Telephone Co. Ltd., push-button intercom telephone 446
- Reliant Motor Co., Scimitar motor car 288, 450
- Reliant Regal three-wheel motor car 493
- Remote control machines for underwater operation 329
- Remploy Ltd., annual report 816
- Renault Gordini V8 motor car engine 167
- Renault motor cars, modifications for 359
- Rendel, Palmer & Tritton, breakwater at Port Talbot 900-901
- Rentoflash equipment to electrocute flies 242
- Rentokil, Rentoflash equipment to electrocute flies 242
- Repeater stations, wire mesh platform 181
- Replication technique for identification of metal objects 284
- Reprographic Centre, National, for Documentation 319
- Rescue and recovery vehicle, AEC Marshal 175
- Rescue beacon, air/sea, SARBE 165
- Research
 and development, BA meeting discussion on 311
 planning and financing of 356
 sponsored (trade publication) 228
- Research associations, automation and 372
 directory of 723
- Research and Development Society, scientists and technologists 190, 531
- Reservoirs, prestressed concrete, Conical 241
- Resin, cold-curing, Acrulite 473
 nylon, glass-filled, Zytel-7000 638
- Resin coatings, weather resistant, SR-173 638
- Resinous fillers for improved coating systems 591
- Resistance-to-frequency transducers 138
- Resistors, oxide, price reductions, Electrosil 1045
 trade publication 520
- Resistor networks, tin oxide (trade publication) 894
- Resolution Polaris-missile submarine 532
- Resolver/synchro-to-digital converter 556
- Retford Vulcanizing Service, conveyor belt repair 974
- Reverse osmosis, desalination 349
- Reversing static contactor, AEI 403
- Revolution counter, Ebauches 518
- Revolving centres (trade publication) 682
- Rexroth, G. L., Ltd., flow control valve 927
- Reynolds, J. T., total design policy 692
- Reynolds Metal Co., aluminium alloy cladding for aircraft 668
- Reynolds Tube Co. Ltd., flash-welded rings (trade publication) 808
- Reyrolle, A., & Co. Ltd., adjustable-speed ac motor 977
- RFD Co. Ltd., lifting bags for aircraft retrieval 667
- Rheinstahl Hüttenwerke AG, continuous casting machine 929
- RIC Capacitors, chemical dipping 1033
- Richard Thomas & Baldwins Ltd.
 appointments 651
 helical weld mill 976
 pipe and tube-making processes 976
 scrap handling and preparation 667-670
 stainless steel strip line 794
- Richards, Charles, & Sons Ltd., locknuts and screws (trade publication) 936
- Richards, E. J., research planning 357
- Richards Group, foundry equipment (trade publication) 604
- Richards, J., fatigue cracking in axles 862
- Richards, P. B., space flight mechanics (book) 305
- Richardsons Westgarth (Hartlepool) Ltd., turbine rotor 293
- Richmond, T. D., hydrostatic drives 158
- Rickard, J. K., salary levels 233
- Rickman Metisse, exhibits at Cycle Show 493
- Riddell, T. G., steering gear 736
- Rider electric reach truck, Lansing 222
- Rigger Steeplejacks Ltd., Sky Climber winch 218
- Rigidal aluminium sheeting 862
- Rilsan nylon for rotational moulding 799
- Rings, flash-welded (trade publication) 808
- Rio Tinto-Zinc Corp., zinc purification 640
- Ripple generator for Dungeness nuclear power station 104
- Ritchies Blasting Agents Ltd., explosive for blasting 972
- River
 Indus development project 864, 998
 Nelson, dc power transmission scheme 241
 Schelde, road-rail tunnel construction 502, 779
 Tees, radar surveillance 324
 Tyne, tunnel. *See* Tyne Tunnel
- Rivet setting machines, tubular 474
- Road. *See* Flyover; Motorway; Underpass
- Road breaking machine, truck-mounted 551
- Road construction materials research, RRL 20
- Road Federation, International, World meeting, by E. Davies (book) 227
- Road haulage vehicles, inspection service 241
- Road heating cable for Bow Bridge flyover 627
- Road lighting RRL 21
- Road pricing system, RRL 21
- Road repairs, fume elimination 507
- Road/rail vehicle, 150 ton 266,
- Road research, Estimates Committee report 279
- Road Research Laboratory
 crash barriers 21
 driver communication problem 21

- functions and achievements 279
 motor car speed judgement 359
 new laboratories at Crowthorne 20
 road construction materials research 20
 road lighting 21
 road pricing 21
 seat belts 21
 traffic control research 20
 Road surface heating for Blackfriars underpass 173
 Road-test simulator, Vauxhall Motors 138
 Road transport of heavy indivisible loads, levy on 989
 Road Transport Industry Training Board, appointments 991
 Roadbreaker, Mongoose 511
 Roadless Traction, Ploughmaster 80 f-wd tractor 52
 Roadwork technology, by J. H. Arnison (book) 1047
 Robbins, M., points and signals (book) 35
 Robens, Lord, coal industry rundown 771
 on fuel policy 43
 Roberts-Arundel Ltd., labour-management dispute 816
 Roberts, J. W. Ltd., building panels (trade publication) 118
 Robertson, H. H. (UK) Ltd., Stypolight translucent sheeting (trade publication) 36
 Trisomet lightweight cladding system 755
 Robinson, D., & Co. Ltd., miniature contactor 427
 Robinson, F. C., & Partners Ltd., paper flaw detector 185
 Robinson, J., matrix analysis (book) 189
 Robinson, J. S., HQ for institutions? 732
 Robinson, Thomas, & Son Ltd., woodworking machinery exhibits 756
 Robinson, W., total electric factory 659
 Robot(s), development for industrial and domestic use 330
 Roboting driverless tractors for handling spare parts 590
 Robotug automatic trains, EMI 689
 Robson, George, Conveyors Ltd., computer control of warehouse 61
 Rock, anchoring 770
 borehole tests in 767
 drilling, by K. McGregor (book) 807
 grouting processes 769
 site exploration 767
 Rock-handling devices, Yale 889
 Rock mechanics, Engineering Outline 767
 Rock properties, improvement of 769
 measurement of 768
 Rock structures, detecting and locating methods 768
 Rockdrill and roadbreaker, Mongoose 511
 Rocker shovel, Eimco 720
 Rocksil rockwool insulation products 498
 Rockwool insulation products, Rocksil 498
 Rocol Ltd., grease for crane gears 462
 Rod(s), acetal resin rods, Delrin 797
 steel, bright annealing furnace 1034
 Rodico instrument cleaning compound 302
 Roe, P. W., Derwent Dam 144
 Rogers, G. F. C., thermodynamics (book) 559
 Roll(s), abrasive, Atarolls 184
 Roll force measurement, load cells for 1039
 Roll forming machine, Bigwood 1007
 Roll-grinding machine, Toshiba 844
 Roller, conveyor, Dragon 476
 Roller bearing. *See* Bearings
 Rolling improved by ultrasonic vibrations 217
 Rolling machine, form (trade publication) 1018
 Rolling mill(s), by A. Geleji (book) 893
 Rolling-mill plant for Finland 1011
 Rolling stock. *See* Railway rolling stock; Locomotive; Carriage; Wagon
 Rollnut precision actuator 552
 Rolls-Royce Ltd.
 aero and small-engines division reorganisation 1024
 Ansty noise-research facility 18
 automatic track lining machines 205
 Dart gas turbine for locomotives 129
 Duomatic levelling machines 205
 Proteus gas-turbine for patrol boats 10
 RB-207 aircraft engine 168, 313
 RB-211 aircraft engine 313
 Silver Shadow coupé motor car 449
 Steelman diesel locomotive 637
 Versatran automatic transfer machine 507
 Weatherley Cincinnati broaching machine 186
 Rolt, L. T. C., The Mechanicals 305
 Ronquières Incline barge lift 58
 Roof(s), sheet steel (trade publication) 268
 Roof edge trim, extruded, Antrim 755
 Roof-light, Supa-Dalite 755
 Roofing system, Andek 755
 Rooflights, plastic, Bexlites 892
 Root Harvesters, potato harvesting machine 955
 Rootes Group
 Ginetta G15 sports motor car 656
 Hillman Hunter Mk 2 motor car 537
 Humber Sceptre motor car 363
 Sunbeam Rapier motor car 577
 Sunbeam Stiletto motor car 537
 Rootes (Scotland) Ltd., Hi-Melt Tower automatic gas-fired furnace 594
 Ropes, mooring (trade publication) 118
 wire. *See* Wire rope
 Ross, R. J. R., television film engineering (book) 79
 Rosser and Russell, Royal Society 858
 Rotary converter, electric locomotive 177
 Rotary engine, Wankel, in motor car 410
 Rotary switch, miniature, Radiatron 1046
 Rotatine harrow 737
 Rotating machinery, forgings for 466
 Rotational moulding. *See* Moulding
 Rotax Ltd., appointments 903
 Rollnut precision actuator 552
 Rotax Precision Products, Tychoway bearings 515
 Roto-Clone dust collector 432
 Rotomator machine for printed circuit assembly 834
 Rotor(s), forgings for 465, 466
 turbine, fabricated by welding. *Letter* 361
 steels for 295, 296
 Rotor balancing machine, automatic 64
 Rotork Engineering Ltd., valve actuators 708
 valve gear-operator 149
 valve operators for power systems 928
 Rotron 1 in flow meter 927
 Router Trace routing machine 474
 Routing machine, Router Trace 474
 Rover gas-turbine alternators 11
 Rover Mk 3 motor-car engine 489
 Rover TC motor car, Zagato-bodied 656
 Rover-2000 motor car 323, 419. *Letters* 447, 491
 Royal Aeronautical Society, 'Design Data Memoranda' for chemical engineers 181
 Hon. Fellowships 900
 Royal Agricultural Society of England, administration of National Agricultural Centre 52
 Royal Air Force, *Seal* recovery vessel 210
 Royal Aircraft Establishment, sonic bang simulator 326
 Royal Armament Research and Development Establishment, open days 534
 Royal College of Art, steel stairway 780
 Royal Dutch/Shell Group, computer centre 901
 Royal Greenwich Observatory, Newton telescope 911
 Royal Institution, intelligent eye (lecture) 894
 Royal Institution of Chartered Surveyors, *Work of the Chartered Land Surveyor* 433
 Royal Malaysian Navy, patrol boats 10
 Royal Mint, minting machines 902
 Royal National Life-boat Institution, *James and Catherine Macfarlane* life-boat 92
 Royal Netherlands Aircraft Factories Fokker, milling machine 844
 Royal Ordnance Factory, Chieftain tanks 246
 Royal Radar Establishment
 computer in radar 740
 Gunn-diode radar 739
 industrial applications unit 739
 infra-red detection applications 740
 miniature Joule-Thomson cooler 916
 radar burglar alarms 740
 speed measuring device 740
 Royal Show, agricultural machinery exhibition (Kenilworth) 52
 Royal Smithfield Show (Earls Court) 954
 Royal Society, anniversary meeting 901-902
 new premises 858
 Royal Swedish Board of Aviation, meter for laser measurement of cloud-base 46
 Royal Worcester Industrial Ceramics Ltd., pulverizing mills for ceramics 103
 Royston Industries Ltd., financial difficulties 943
 RR Wired Services, mobile closed-circuit television unit 181
 RTZ Metals Ltd., aluminium wall cladding 757
 Rubber(s)
 abrasion of, by D. I. James (book) 1017
 and plastics processing industry training board 159
 identification of, standards on 546
 silicone, liquid, GEC 799
 Silastic 973
 surface replicas of gun barrel 833
 trade publication 346
 Rubber hose, reinforced, BS 967
 Rubber and Plastics Research Association of Great Britain, testing services (trade publication) 894
 Rubber sealing for concrete protection 833
 Rubber suspension, Air-Metacone 137
 Rubert & Co. Ltd., cold-curing resin 473
 steel alloy gauge blocks 473
 Rubery, Owen & Co. Ltd., axle beams 451
 containers 1014
 Rudd, W. C., welding of cable sheath 336
 Ruffle, N. J., Derwent Dam 144
 Ruiz, C., pressure vessel design (book) 847
 Ruiz-Palá, E., waiting-line models (book) 433
 Rule, steel, metric conversion 109
 Runway(s), overhead, advantages 643
 definition 643
 systems 643
 uses 644
 Runway surface friction measurement 912
 Runway visual range equipment 207
 Rural Industries Bureau, services 689
 Russell, C. R., energy conversion (book) 79
 Russia
 coated welding electrodes factory 861
 exhibits at International Motor Show (Turin) 742
 exports to 486
 insecticides plant for 861
 satellite link-up 696
 wind powered power station 578
 Ruston-Bucyrus Ltd., crane version of air-controlled excavator 551
 Ruston & Hornsby Ltd., training centre 990
 type HT flooded-water heater 464
 RVR. *See* Runway visual range equipment
 RW Transmissions Ltd., marine gearbox 384
 Ryton Ltd., 1pg infra-red heater 601

S

- S-Law static speed control 340
 SACE SpA, air circuit-breaker 635
 Sack(s), paper, multi-wall 27
 Sack filling equipment, Gebhardt 29
 Sack holder, Kleenway 426
 Sadi (GB) Ltd., hydraulic variator 764
 Sadler, A. J., power device development 401
 Safege, rapid transit system 777
 Safety, highway, conference on (London) 949
 in electrical energy distribution 630
 in motor car design (book) 153
 Safety belt, automatic, Kangol Reflex 658
 Safety measures, electrical machining 438
 Safety in Mines Research Establishment, testing service 252
 Safety nets, British Ropes 263
 Safety notices (trade publication) 118
 Safety precautions, drop hammers 532
 Safety research, MIRA 322
 Safety Service Co. Ltd., Itex Neospec protective spectacles 863
 Saginaw energy absorbing steering column 174
 Sailplane, Blanik L-13 626
 Saint. *See* St
 Salad-dressing, processing plant 359
 Salary levels of engineers 233, 530, 1023
 Salem-Brosius Ltd., annealing furnace 254
 Salesmen, radio-telephone for. *Letter* 242
 Sampling adaptor, waveform, Aim Electronics 883
 Sampling systems, gas/liquid (trade publication) 1048
San Juan Exporter, ore carrier 533
 Sand, zircon, recovery automation 966
 Sanders & Forster Ltd., portal frames 892
 Sanding equipment, hand 387
 Sandvik Steel Works Ltd., appointments 818
 Sandvik UK Ltd., ejector drill 469
 R1 Premium cemented carbide 672
 T-MaX toolholder 513
 Saniguard Appliances Ltd., Barrywald incinerators 757
 Sanyo Electric Co. Ltd., semiconductor component manufacturers 567
 SARBE air/sea rescue beacon 165
 Satellite(s) into orbit, by C. N. Martin (book) 723
 Satellite link-up, Russia 696
 Saturator for mercurized materials 380
 Saturn V space vehicle 695
 Saudi Arabia, air force buildings contract 731
 Saunders, George, Machinery Co. Ltd., excavator/

- loader (trade publication) 560
- Saw, band (trade publication) 848
Triple Twelve 628
chain, with drill chuck attachment 764
circular cold, Kaltenbach 1009
Trenjaeger 1009
friction, Trenjaeger 551
power, Triple Twelve, Alexander 473
see also Bandsaw
- Saw blade, diamond-impregnated 1006
- Saw kit, site, Trend 720
- Sawbench, Slydang 264
- Sawing, concrete, for doorway 1006
- Sawing machine, Kaltenbach Model RK-Fras 511
- Scaffold, self-climbing, Alimak 891
- Scaffit tube straightening machine 890
- Scale, for weighing coiled wire 282
- Scale meters, size 3E 98°, English Electric 74
- Scale reader for machine tool settings 506
- Scama Ltd., alarm panel 714
- Scandura Ltd., glass-based insulation materials 639
- Scan-line instruments with computer interface 712
- Scanner switch IDM 883
- Scarr, A. J., metrology (book) 1017
- Scemama caliper gauge 298
- Sceptre motor car, Humber 363
- Schelde, River, road-rail tunnel 502, 779
- Schenck, automatic rotor balancing machine 64
- Scherpenhuyzen, A. J., on Britain's NINA 690
- Schibli, T., cars GT and TI 242
- Schjeldahl, G. T., printed circuits kit 885
- School, Castle County Secondary, precast concrete panels 319
secondary, woodwork for, by P. Kelsey (book) 433
- Schrader's, A. Son, kettle production 104
pneumatic system for chemical dipping 1033
spool valves 226
- Science, technology and government, by K. Hudson (book) 765
- Science Museum, exhibition on *Wasa* sinking 682
transport exhibits 618, 696
welding technology exhibition 181
- Science Research Council, annual report 484
- Scientific counsellors, conference 528
- Scientific research in British universities and colleges (book) 153
- Scientific Systems Ltd., automatic control of penstocks 708
- Scientifica & Cook Electronics Ltd., self-contained lasers 70
- Scientists, and technologists for industry, symposium 531
in electricity supply industry 906
- Scimitar motor car, Reliant 288, 450
- Scissor lift 680
- SCOPE control system 515
- "Scotch" protective tape for polished surfaces 149
- Scott, A. A. H., *Engineering Outlines I* (book) 391
- Scott Balfour, dried solubles plant 958
- Scott, P. F., Harrow Road Flyover 624
- Scottish Aviation Ltd., Viscount 808 airliner conversion for freight 592
- Scottish Gas Board, Hi-Melt Tower furnace 594
- Scottish Machine Tool Co., high speed press guard 383
- Scottish Motor Show (Glasgow) 783
- Scrap baling press, Eldair 672
- Scrap handling plant 667-670
- Scrap Processors Ltd., scrap handling plant 667-670
- Scrap reclamation, fluidized bed 967
- Scrap shearing machine, Eldair 672
- Screen, cinema, D-150, Odeon, Marble Arch 96
- Screening of blast furnace raw materials 77, 78
- Screw(s), aluminium drive, Stone 756
and locknuts (trade publication) 936
in thin metal, fasteners for 31
self-locking, Strip-Lok 74
socket (trade publication) 520
- Screw thread and form rolling machine (trade publication) 1018
- Screw-threading machine, Sone trolley-mounted pipe 845
- Screwdrivers, crosspoint, Balfour 152
torque, for surgery 130
- Scroll separator, dust collection 606
- Scrubbing machines, floor (trade publication) 560
- SDA synthetic diamond abrasive 258
- SE Laboratories (Engineering) Ltd., oscilloscope 884
pressure transducer 557
- Sea, exploitation of natural resources 243
- Sea Gem, drilling rig, accident inquiry 688.
Letter 817
- Sea Horse, Johnson, outboard motors 862
- Sea Knight helicopter, fluidic control 129
- Sea-water, fresh water from. *See* Desalination
- Seal
gland, mechanical, Sealol 31
metal, static (trade publication) 604
positive action (trade publication) 268
shaft, for centrifugal compressor 600
stern shaft, Crane Packing 546
stub-type end, for cables 802
- Seal recovery and support vessel for RAF 210
- Sealant, building, Hannoband 389
locking, plastics as 76
polysulphide (trade publication) 982
- Sealant Manufacturers Conference, polysulphide sealants (trade publication) 982
- Sealing, neoprene, for concrete protection 833
ultra-violet lamp, NBS 382
- Sealol Ltd., mechanical gland seal 31
- Seaspeed, HM2 hovercraft 92
SRN4-001 hovercraft 697
- Seat, aluminium airflow, ALCOA award 14
suspension, for commercial vehicles 1016
- Seat belts, RRL 21
- Seaton, L. W., drawings wanted 856
- Seawater battery anodes, Magnesium Elektron 634
- Seaweed, plastic, for coastal erosion 94
- Secodex S clamped-tip end mill 70
- Secondary schools, woodwork for, by P. Kelsey (book) 433
- Seddon, C. G., paper production 750
- Seddon 32-4-220 motor tractor unit 784
- Seerproof-Cital, resin for wet surfaces 835
- Sefram of Paris, Photodyne light-spot recorder 185
- Seidler, Harry, & Associates, circular tower 417
- Seifert, R., & Partners, Gateway House office block 131
- Selectabox on identification of plastics 707
- Selectomatic 780 tractor, David Brown 954
- Selective Employment Tax, new ruling on 855
- Selectos pressure-jet burners 831
- Sellotape, masking tapes 258, 798
transfer thermosetting tape 2603 638
- SEM concrete pump 221
- Semiconductor(s), microwave-generating 739
narrow gap, conference 118, 982
- Semiconductor devices (trade publication) 1048
- Semiconductor manufacture, AEI 401
- Semiducer pressure sensor 712
- Semimetals, conference on 118, 982
- Semler, E. G., refuse collections 407
- Sencom Ltd., elapsed time indicators (trade publication) 724
- Sensor, contract, Murrell 344
- Sentner, R. F., IISI conference 905
- Separation equipment (trade publication) 848
- Separators, in-line entrainment 763
magnetic, wet, Gill 431
overband magnetic, Unimag 297
- Sequence, digital, control machine, NRDC 160
- Sequential programmer, Highland 558
- Serck Audco, natural gas conversion valve 928
- Series III pumps 263
- Service equipment, reliability of, conference on, IME 724
- Services Electronics Laboratory Research, CO₂ laser for cutting 292
laser machining for integrated circuits 219
- Servicing, of domestic appliances 238. *Letter* 361
of gas-heating systems 239
of television sets 239
- Servo, position control, Jones 110
- Servo-control teaching systems 713
- Servo-mechanisms, by B. A. Chubb (book) 35
- Servomotors, Jones 31
- Servowarm gas-heating system, servicing 239
- Sevenside Oyster Co. (Bangor) Ltd., dredge 243
- Sewage. *See* Sludge
- Sewage disposal, Royal Commission 870
- Sewage disposal plant, combined refuse and 924
- Sewage pumps, Sigmund Pulsometer 75
- Sewage treatment
electrolytic (EST) process 828
Hermite process 828
multi-hearth incineration 830
Porteous process 829
trade publication 154
- Sewage treatment plant, Nant D'Avril 829
- Sewage treatment works, automatic control of penstocks 708
- SF Air Treatment Ltd., air conditioning (trade publication) 190
- SGB Building Equipment Ltd., aluminium ladders (trade publication) 560
- SGS-Fairchild Ltd.
current sinking logic circuit devices 554
electronic counting devices 252
high-speed pnp switch 1044
linear microcircuits 389
microcircuits for pulse code modulation 406
national sales conference 609
- Shaft encoder, synchro, Muirhead 1041
- Shaft seal for centrifugal compressor 600
- Shaft speed regulation, centrifugal switch for 425
- Shapiro, S. S., statistical models (book) 723
- Shavrin Levataps Ltd., plastic lever taps 578
- Shaw, J., fatigue cracking in axles 862
- Shaw, John, & Sons (Salford) Ltd., press for water removal 430
- Shaw Moisture Meters, dewpoint meter 881
- Shear(s), hand-held, Squeeze-Pliers 116
rotary trimming 1007
- Shear connector welding trolley, Crompton 297
- Shear conveyor 924
- Shearing machine, scrap, Eldair 672
- Sheepbridge Equipment Ltd., numerical-control drilling of structural steel sections 968
- Sheet, aluminium, coloured, Alcancolour 755
aluminium decorative (trade publication) 982
plastic, Darvic, ICI 13
steel, Diron, one-coat enamel 113
- Sheet metal drawing, by A. Dickason (book) 981
- Sheet metal production, by J. W. Langton (book) 981
- Sheet Steel Information and Development Association, sheet steel roofs (trade publication) 268
- Sheet steel roofs (trade publication) 268
- Sheet thickness measuring machine, runners for 422
- Sheeting, aluminium, Rigidal, for Leeds Central Baths 862
translucent, Stypolight (trade publication) 36
- Sheffield University, computing course 848
- Shelf panels, Dexion 109
- Shell, HESH (high-explosive squash head) 535
- Shell & BP Scotland Ltd., centralized heating for flats 831
- Shell Centre (London), model of lubricating oil plant 253
- Shell Chemicals UK Ltd., industrial chemicals (trade publication) 642
low viscosity accelerator (trade publication) 478
- Shell Haven refinery, platformer and hydrotreater 628
- Shell Mex & BP Ltd., contract for bulk transport of oil 1025
cutting oils (trade publication) 434
Energol cutting oils 340
- Shell Research, foam cushions for foundations 832
frictional heating of fuel in Concorde 292
- Shell Tankers, general purpose crews 855
- Shell UK Ltd., platformer and hydrotreater, Shell Haven refinery 628
vacuum distillation column, Stanlow refinery 629
- Shelton Iron & Steel Co. Ltd., spray steelmaking 833
steel production 833
- Sheppard Harris scrap baler 669-670
- Sherbourne Engineering Co. Ltd., footbridge designs 165
- Shibaden, television and recording equipment 489
- Shields, J., managing director, AEI-Thorn 401
- Shin guard, Lispro 618
- Ship(s)
container, stabilization (trade publication) 346
fishing, and gear 243
motor, equipment and operation 966
see also under specific type of ship
- Ship purchases by US, Congress refusal to honour 439
- Ship structures, by W. Mackle (book) 153.
Correction 305
- Shipbuilding, value engineering in 754
- Shipbuilding Group, Upper Clyde 353
- Shipbuilding industry, position and prospects of 275, 1025
- Shipbuilding Industry Board, director 651
- Shipbuilding Industry Training Board, annual report 274
levy 527
- Shipbuilding and Ship Repairing Council, activities 566
- Shiple, A. H., Adcock-Shiple activities 443
- Shipping exhibition, International (Oslo) 989
- Shirley-Smith, H., labour relations 730
- Shoemith, Howe & Partners, grain terminal jetty 360
- Shores, push-pull, for sedimentation tank 23
- Short Bros. & Harland, guided missiles for Iran and Argentina 612

- Skyvan aircraft with Garrett engines 1028
 Shot-blasting, rotating magnet-machine for. *Letter* 902. *Correction* 990
 Shot-blasting plant, Vacu-blast Ltd. 591
 Shovel
 loader, Articulated SL3000, Chaseside 553
 BM Volvo 719
 Super-Loadmaster SL202 28
 rocker, Eimco 720
 Shovelall 115
 tractor, Fiat 720
 Shovelall shovel 115
 Show, trade. *See* Exhibition
 Shrinking machines (trade publication) 190
 Shunt flowmeters 308
 SI system units. *Letters* 7, 95, 283, 613, 650, 774, 816, 856
 Siata Auto Spring 850 motor car 580
 Sideloader, four-ton, Kestrel 1014
 Sidhrai Barrage, Indus River Basin scheme 1001
 Siemens Aktiengesellschaft, numerical control 515
 Siemens Research Centre, Sulfotherm equipment for SO₃ 1042
 Siersatom power manipulators 1013
 Sieve, molecular, for natural gas 464
 Sig. Bergesen dy & Co., tanker with super-large bore diesel engine 964
 Sigma Systems Corp., environmental testing 220
 Sigmund Pulsometer Pumps Ltd., sewage pumps 75
 Sign(s), trade publication 560
 Signal(s), railway, by M. Robbins (book) 35
 Signal converter, Mimic 303
 Signal generator, telegraph 716
 Signalling system, remote control of 592
 Signetics Corp., logic components 716
 Silas Hyde Ltd., Powermax boilers 116
 Silastic silicone rubbers 973
 Silberston, A., British Steel Corp. 234
 Silcopac 120 potting compound 225
 Silencers, motor car, poor quality of 491
 Silent Glow Co., portable air heater 387
 Silentbloc Ltd., Stone-Vapor boilers for roof installation 592
 Silica, fused, ultra low-expansion 639
 Silicon, MON-X float zone 715
 Silicon diodes and stacks (trade publication) 228
 Silicon rectifiers for railway electrification 16
 Silicone oils, Cilchem 639
 Silicone rubber, liquid, GEC 799
 RTV-11, for gun barrel replicas 833
 Silastic 973
 trade publication 346
 Silicone surfactant, GEC 799
 Silver, as water sterilizing agent 617
 Silver Fox motor car, OSI 741
 Silver Lance light unit 824
 Silver Sabre light unit 824
 Silver Shadow coupé motor car 449
 Simca 1100 motor car 579
 Simm, G. E., Engineering Ltd., pipe suspension 302
 Simmonds, W. H., automation in smaller industries 371
 Simmons, N. C., electric cars 491, 650. *Letters* 529, 569, 613
 Simon-Carves Ltd., BBRV prestressing system 585, 722
 Simon Engineering Dudley Ltd., insulated platform 977
 Simon Engineering Ltd., nylon mesh (trade publication) 808
 Simonacco Ltd., sump pump 264
 Simonson, J. R., heat transfer (book) 1047
 Simplatroll electromagnetic clutches, brakes and couplings 102
 Simplex-GE Ltd., factory for steel tube 487
 Simplex small-gauge locomotive 101
 Simplifix Couplings Ltd., control valves 926
 Sims, William, & Sons (Paints) Ltd., transference of alkyd solution 180
 Simset adjustable cam timer 75
 Simulators, flight, Miles Electronics 612
 for railroad motive power, seminar 749
 for training of locomotive drivers 746
 Sinex of Paris, feeder line for grinding machines 180
 Singh, J., information theory (book) 765
 Single-factor experiments 82
 Sintering techniques, film on, BSA 793
 Sinumerik system of numerical control 515
 Siphon, Mailsi, Indus River Basin scheme 999
 Siproex building system for hospitals 533
 Sirocco dust-control equipment 1010
 Site clothing (trade publication) 560
 Site equipment demonstration (Hatfield) 808
 Siva Sirio 2-seater motor car 741
 Sixty years of the Northern, by C. E. Lee (book) 603
 Skånska Cement AB, cement kiln 962
 Skefco Ball Bearing Co. Ltd., needle roller bearings 599
 Skelland, A., non-Newtonian flow (book) 641
 Skinner, S., cars GT and TI 361
 Skoda 1000 MB motor car 657
 Skoda (Great Britain) Ltd., Zetor tractor 954
 Sky Climber winch for cooling tower 218
 Skybus, rapid transit system 777
 Slab(s), marking machines 224
 wood wool (trade publication) 268
 Slag transporter, Wellman 343
 Sleeter paper cutting machine 751
 Slide rules, British Thornton 692
 Slideways, linear, INA 301
 Sliding door, automatic (trade publication) 604
 Sliding shoe pump for polishing lathe 421
 'Slim-Pak' enclosure for gas-fired heating appliance 131
 Slimseal butterfly valve for natural gas conversion 928
 Sling corner guards, magnetic, Hunter 762
 Slingsby, Walter, & Co. Ltd., annealing furnace 254
 Slip fitting of bearings, Loctite adhesive 707
 Slip Group, Moly Slip Combat penetrating oil 972
 Slipform formwork 727
 Slipring assembly, Lebow 426
 Slite cement works, kiln control 962
 Slotting machine, precision toolroom 473
 Sludge incineration, multi-hearth 830
 Sludge pump, submersible, Flygt 764
 Slydang Ltd., sawbench 264
 Smare, Frederick, Corp., Nassau harbour scheme 378
 Smart, James, Heating Ltd., air heater 932
 Smedley, G. P., design of forgings 465
 Smelting plants, aluminium, cheaper power 565
 Smith, B. Stafford, tall buildings (book) 153
 Smith, F. H., C.Eng. label 242, 856. *Letter* 944
see also On the Shelf articles
 Smith, G. B., high-power ultrasonics 1052
 Smith & Grace (Sales) Ltd., Wilkerson lubricator 258
 Smith, H., valve mechanisms (book) 79
 Smith Harkness, Andrew, D-150 cinema screen 96
 Smith, John, Ltd., cranes (trade publication) 520
 Smith, Thomas, & Sons (Rodley) Ltd., excavator 550
 Smith-Tractem 804 excavator 550
 Smithfield Street bridge, Pittsburgh 445
 Smiths Industries Ltd., electronic tachometers 557
 Photoplot radar map of Tees 324
 tachometer generators 258
 SNAP-27 thermoelectric generator 218
 SNECMA, turbofan for A-300 aircraft 168
 turbofans for AFVG aircraft 1
 Snow cutters, Unimog/Schmidt 94
 SNS Communications Ltd., communications equipment 432
 Social and political implications of automation (lecture) 1018
 Sociedad Mixta Siderurgia Argentina, weighing system for coils 875
 Societa per l'Industria e l'Elettricit , buttering of pre-forged slab for welding 296
 Soci t  des Grands Travaux de Marseilles, natural gas pipeline 281
 Soci t  Entrepose, natural gas pipeline 281
 Soci t  Grenobloise d'Etudes et d'Applications Hydrauliques, ESSO training centre, Port Revel 54
 Society for Analytical Chemistry, particle size analysis (book) 519
 Society of Automotive Engineers, annual congress (Detroit) 682
 Society of British Aerospace Companies, attack on Government 992
 Society of Chemical Industry, Messel Medal award 991
 Socket for electric razor 995
 Socket screws (trade publication) 520
 Socketex Ltd., socket screws (trade publication) 520
 Soclene Ltd., mixer moulded in propathene 149
 Soderkvist shaft couplings 187
 Sohl, Hans-G nther, IISI conference 905
 Soil Fertility Dunns Ltd., foam bout market 955
 Soil tester (trade publication) 434
 Solar power for desalination plant 348
 Solartron Electronic Group Ltd., data logging equipment, hire service 882
 Solartron wave form monitor 9
 Solbett, J. M., walking beam furnaces 732
 Solder, cored, with reduced flux 257
 fast acting, Arax 638
 non-activated rosin-cored 973
 silver bearing, Enthoven 638
 Soldering, drag, machines, Zeva TSM 884
 Solenoid valve, flameproof enclosure 558
 Solett portable site hoist 721
 Solid(s), level measurement. *See* Level measurement
 photoconductivity in, by P. G rlich (book) 189
 storage, flow and handling of, symposium on 118
 Solid-state circuits, conference on (Philadelphia) 604
 Solid-state control system, Norkard 515
 Solid State Controls Ltd., speed controller 882
 Solid state devices, conference on (Manchester) 1048
 Solid state microwave oscillator (trade publication) 724
 Solitron Devices Inc., integrated power supplies (trade publication) 560
 Solvent cleaner, Solvex ICE.116 877
 Solvex ICE.116 solvent cleaner 877
 Somers, Walter (Mechanical Handling) Ltd., grab for glass handling 1013
 Somerset Wire Co. Ltd., prestressing wires 338
 Sonatest, ultrasonic thickness meter 714
 Sonde, radio, to monitor battery performance 536
 Sonic bang simulator 326
 Sonicaid Ltd., monitoring of unborn baby 490
 Sony Corp., colour television receiver 48
 Soo, S. L., fluid dynamics (book) 641
 Soot, SP, prevention compound 427
 Sorcerer's Apprentice pump, ALCOA award 14
 Sortex electronic colour sorting machines 712
 Sorting machines, colour, Sortex electronic 712
 Sorting office, parcels, Nottingham, GPO 862
 Sound Diffusion Ltd., communication and control (trade publication) 228
 Sound level measuring instrument, Dawe 283, 344
 South Africa, arms embargo to 1024
 South African building exhibition (Johannesburg) 982
 South Birmingham Technical College, strain measurement equipment exhibition 228
 South East Planning Council, report of 687
 South of Scotland Electricity Board, appointments 991
 South Wales Switchgear Ltd., distribution transformer with aluminium foil windings 147
 0-6-2T locomotive for National Museum of Wales 167
 25th anniversary 771
 Southborough Group, materials service 462
 Southern Watch and Clock Supplies Ltd., instrument cleaning compound 302
 Sovex Ltd., mechanical handling (trade publication) 1018
 Space age, by E. B. Konecci, M. W. Hunter and R. F. Trapp (book) 305
 Space craft, masts for, Stem range of 547
 Space flight mechanics, by P. B. Richards (book) 305
 symposium, by M. L. Anthony (book) 305
 Space programmes, development and trends 779
 Space research and development report 244
 Space research projects 244
 Space vehicle dynamics, by K. J. Ball and G. F. Osborne (book) 723
 Space vehicle landings on Moon 779
 Spacers, rolled-strip, Brittite 597
 Spangle-free strip, H. Tuzet 108
 Spanish Railways (RENFE), air-conditioner 263
 Sparcatron Contelyt Abwood grinding machine 473
 Spark erosion machining, Linderode 64
 Spark machining. *See* Machining
 Sparling, L. G. M., rail joints 817
 Speaking effectively, symposium, PERA 392
 Spectacles, protective, Itex Neospec 863
 Spectograph, X-ray fluorescence, Quantometer 881
 Spectra-Physics Inc., laser and optics instruments 891
 Spectrochemical analysis, excitation unit 70
 Spectrochemical techniques, conference on 936
 Spectrographic laboratory, English Steel Corp. 1043
 Spectrographically standardized substances (trade publication) 982
 Spectrometer
 Fluorprint X-ray fluorescence 1043
 mass 37
 partial pressure gauges 40
 trade publication 154
 vacuum emission, Polyvac E600 1043

- Spectrophotometers (trade publication) 1048
 Speech communications system, light beams for 695
 Speed control, electric motor. *See* Motor, electric
 Speed indication and switching equipment 556
 Speed judgement by drivers 359
 Speed measuring device 740
 Speed regulation, shaft, centrifugal switch for 425
 Speedicut-FN button tool 845
 Spemby Technical Products Ltd., manipulators 1013
 Spencer Franklin Ltd., hydraulic plungers 598
 Spencer and Halstead Ltd., blast-cleaning 422
 Sperry Rand Ltd., vane hydraulic pumps 550
 Spheric Engineering Ltd., tungsten-carbide balls 30
 Spinal damage, articulated bed for 48
 Spinning lathe, wrinkling 668
 Spinning machine, Bolchini 678
 Spinning rig, high-speed, RARDE 536
 Spirax-Sarco Ltd., diversion valve 390
 Spirol Pins Ltd., rolled-strip spacers 597
 Splines, plastic locking sealants for 76
 Splint, tenodesis, aluminium, ALCOA award 14
 Spool(s), styrene, cutting and finishing tool for 337
 Spool valves, Schrader 226
 Sportomatic motor car, Porsche 450
 Sprackling, G. H., bump cars 613
 Spray coating of tablets 22
 Spray-drying plant repairs 975
 Spray gun, for lubricants, Enots 74
 for polishing compound, Thru-spray 180
 ThermoSpray flame 511
 Spray nozzle, Vibrajel 616
 Spray steelmaking process 833
 Spray unit, airless, Automatic Equipment 298
 low-pressure, Portapack 756
 Sprayed concrete pipe lining (trade publication) 306
 Sprayer, crop, Uniro 616
 Spraying equipment, paint, electrostatic, HPB 386
 Spreadbury, F. G., inverters (book) 345
 Spring(s) for paper tape punch 506
 Spring balancers, RIL range 431
 Spring steel, cold-rolled (trade publication) 808
 Spring units, Veedamper anti-vibration 183
 Spurr, R. T., braking of road vehicles (book) 847
 Square D Ltd., multi-motor starter panel 476
 Square-One pallet handling system 679
 Squeeze-Pliers hand-held shears 116
 SR.N4 hovercraft, preview of 696. *Letter* 902
 SR.N6 hovercraft, operational capabilities of 696
 St. Anne's Board Mill Co., Ltd., stitching repair 463
 St. Martin's nylon mesh (trade publication) 808
 St. Pancras railway station, closure proposal 484
 St. Thomas's Hospital, pocket paging 701
 Stabilite laser and optics instrument 891
 Stabilization, container ship (trade publication) 346
 Stabilizers, corona, metal-ceramic 1046
 Stabilohm 133 resistance wire 797
 Stacatruc Ltd., fork-lift truck production 574
 history of 574
 Stacker, manual traction, Eccles 1014
 Staffa hydraulic motor for tunnelling machine 876
 Staflo semi-submersible drilling rig 988, 1028
 Stainless steel
 blackening compounds, Ebonol 148
 corrugated annealing covers 69
 for fabrication user, conference on, ISI 936
 trade publication 118, 346
 Stainless steel bellows unit for bubble chamber 875
 Stainless-steel cans, press flattening 1005-1006
 Stainless steel cutting by plasma-arc 336
 Stainless-steel plate, high-proof Staybrite 1005
 Stainless Steel Pumps Ltd., mechanical gland seal 31
 Stainless steel runners for sheet measuring machine 422
 Stainless steel strip, annealing line for 794
 grinding line for surface defects 796
 production of wide bright, RTB 794
 Stainless steel tube, finishing plant, Stewarts and Lloyds 34
 for Geiger-Müller counters 629
 production of hollows for 33
 Stairway, steel, honeycomb 780
 Stal-Laval Turbin AB, gas-turbine plants 214.
Correction 360
 Standard Telephones and Cables Ltd.
 computer switching system 989
 distortion measuring set for colour television 883
 medium torque potentiometers 1046
 quality and reliability campaign 41
 uhf/am transmitter 650
 undersea telephone cables 320
 wire mesh platform to replace cable racking 181
 Standard Telephone Laboratories, laser machining for integrated circuits 219
 Standards. *See* British Standards Institution; United States National Bureau of Standards
 Stanhay (Ashford) Ltd., Shovelall shovel 115
 Stanley Consultants Inc., Nassau harbour 378
 Stanley Howard Ltd., milling machines (trade publication) 848
 Stanlow refinery, vacuum distillation column 629
 Stanstead. *See* London Airport
 Staples, B., white collar unions 993
 Starmer, R., nuclear generating and desalination plants 136
 Starpac ac power regulators 714
 Starter(s), electric motor, MTE 149
 Starter-motor casing, drilling and tapping machine for 923
 Starterpanel, multi-motor, Square D 476
 Static compensator for Exeter substation 839
 Static control in electrical engineering (book) 807
 Static exciters for alternator control 111
 Static inverters (trade publication) 894
 Statistical dynamics of automatic control systems, by J. Benes (book) 189
 Statistical models, by G. J. Hahn and S. S. Shapiro (book) 723
 Statistics of electronic industry 41
 Staveley Asquith, leasing of machine tools 567
 Staveley Industries Ltd., modular assembly 133
 Staveley-Smith Controls Ltd., numerical-control drilling of structural steel sections 968
 Staybrite stainless-steel plate 1005
 STC Semiconductors Ltd., logic integrated circuits 303
 Steam, chronicles of, by E. S. Cox (book) 935
 Steam condensing plant (trade publication) 268
 Steam generator, refuse-fired, H. Carlton Moore 253
 Stone-Vapor-6145 145
 Steam trap operation, Yarway Ltd. 388
 Steam turbine. *See* Turbine
 Steckelmacher, W., low pressure measurement 40
 Steel(s)
 aus-formed, machining of 590
 cold-rolled spring (trade publication) 808
 Ex 9 experimental 295, 296
 for prestressing, symposium (Madrid) 982
 for turbine rotors 295, 296
 high-alloy, analysis and control 1043
 blackening compounds, Ebonol 148
 high-temperature properties of (book) 477
 high yield stress, Dorman-30 516
 low-alloy, conference on 306
 nitriding, Nitroy 40B and 41B 639
 Steel castings, non-destructive testing (booklets) 669
 ultrasonic testing, BSCRA 104
 Steel Co. of Wales Ltd., control system at Abbey works 649
 Dragon conveyor roller 476
 honeycomb steel stairway 780
 transformer noise 547
 Steel connectors for timber joints 476
 Steel footbridge designs 165. *Letter* 242
 Steel industry, nationalisation of 124, 161, 202
 Steel melting, continuous, Russia 966
 Steel pipe, helically-welded, NGT 972
 Steel production statistics 773, 989
 Steel production trends 833
 Steel refining, electro-slag 660
 Steel rod, bright annealing furnace 1034
 Steel rope. *See* Wire rope
 Steel rule for metric conversion 109
 Steel sections, structural, numerical-control drilling 968
 Steel sheet, Diron one-coat enamel 113
 Steel stairway, honeycomb 780
 Steel storage system, Powerstor Drawstack 548
 Steel strapping tool, Packers 469
 Steel structure, full-size five-level 757
 Steel tube, double-wall, Tru-Well 30
 ERW, manufacture of 487
 Flo-coat galvanizing 1006
 Tru-Wel resistance-welded, manufacture 487
 Steel wire. *See* Wire
 Steelfab/Shawnee Poole Ltd., rear dump hauler 721
 Steelmakers, modern steelmaking for, by A. Jackson (book) 153
 Steelmaking, modern, by A. Jackson (book) 153
 spray process 833
 Steelman diesel shunting locomotive 637
 Steelworks, for Korea, KISA 773
 Rautaruukki Oy 1011
 Steering column, Saginaw energy absorbing 174
 Steering gear, electric hydraulic 736
 Steiger, B., strangers from the skies (book) 519
 Stella-Cockenzie power transmission line 913
 Stella-Meta water purification trailer 780
 Stem range of masts for space craft 547
 Stenter (stretcher), pin and clip 380
 Stephens and Carter Ltd., Sky Climber winch 218
 Sterasyl candles, hollow, water filter 617
 Sterilizing agents for water 617
 Sterilizing unit, Clorocel, water purification 780
 Sterling Instruments Ltd., timers and (trade publication) 228
 Stern shaft seal, Crane Packing 546
 Stevens Institute of Technology, Ocean Engineering 421
 Stevenson, C., flashing light buoy 360
 Stevenson, T., flashing light buoy 360
 Stewart Automatic Boilers Ltd., Minimiser boiler 601
 Stewarts and Lloyds Ltd., computer switching system 989
 stainless steel tubes 33, 34
 Thysert module system for thyristor converter 840
 Stickland, A. C., progress in physics (book) 723
 Stiletto motor car, Sunbeam 537
 Stitching repair, Metalock 463
 Stock Exchange, London, rebuilding 988
 Stoke Mandeville Hospital, articulated bed 48
 Stokes, Sir Donald, gas-turbine lorry 319
 Leyland Motor Corp. 236
 Rover motor cars 323
 Stomach examination by colour television 1028
 Stone, A. A., power farming (book) 267
 Stone-Carrier air conditioning equipment 263
 Stone, J. & Co. (Deptford) Ltd.
 aluminium drive screws 756
 Kestner-Stone-Vapor process heaters 298
 packaged air-conditioner 263
 Stone-Vapor boilers 145, 592, 923
 Stone-Vapor steam generator 145
 Stone Manganese Marine Ltd., propeller contract 568
 Stone-Platt Industries Ltd., appointments 857
 bottle washing machine 334
 order from Turkey 1025
 Stone-Vapor boilers 145, 592, 923
 Storage, air-conditioning system, Denco Miller 759
 bulk (trade publication) 682
 of petroleum liquids, by J. R. Hughes (book) 305
 Storage cabinets, transparent (trade publication) 190
 Storage equipment, tool (trade publication) 848
 Storage structures (trade publication) 434
 Storage system, live, for finished components 218
 steel, Powerstor Drawstack 548
 Storage tanks, Helix (trade publication) 478
 Storage units for nickel alloy bars and tubes 337
 Storeys of Lancaster, appointments 691
 Stork Engineering Works, agreement with Barclay Curle & Co. 649
 Stothert & Pitt Ltd., transportable asphalt plant (trade publication) 894
 Stoving ovens (trade publication) 1018
 Stowaway concrete mixer 489
 Strachan and Henshaw, paper cutting machine 751
 Straightening machine, bar, Bronx 473
 trade publication 1018
 tube, Bronx 843
 tube, Scaflit 890
 vibration, Mannesmann-Meer 428
 Strain gauge(s), foil, Micro-Measurement 1039
 trade publication 724
 Strain-gauge load cells, Coutant 713
 Strain measurement, equipment exhibition 228
 Strainers, Filtration 476
 Strangers from the skies, by B. Steiger (book) 519
 Strap, load retaining, Colt 836
 Strapping, non-metallic, Nylostrap 298
 Strapping machine, Union Carbide 462
 Strapping tool, heavy-duty steel, Packers 469
 Strapping unit, automatic 298
 Stratford Auto-Flow Systems Ltd., accumulation conveyors 680
 Strathaven-Harker power transmission line 914
 Strathclyde University, appointments 903
 bio-engineering research 855
 industrial consultancy 904
 Street lighting. *See* Road lighting
 Strength of ships' structures, by W. Mackle (book)

153. *Correction* 305
- Stress analysis, by G. S. Holister (book) 641
of cracks in metal 370
of notches in metal 370
photoelastic 191
- Stress corrosion in prestressing wires 338
- Stress distribution in welded rotors 294
- Stress-relieving furnace, trailer-mounted 967
- Strike, dockers 483, 855
railway guards 483
- String, synthetic, Tycord 973
- Strip
mass produced parts (trade publication) 808
spangle-free, H. Tuzet 108
stainless steel, annealing line 794
grinding line for surface defects 796
wide bright, RTB 794
- Strip-Lok self-locking screws 74
- Stripper, paint, hot, Takstripper 225
- Strontium titanate, superconducting transition temperature of, NBS 1006
- Structural analysis, by computer (trade publication) 724
computer programs for, by W. Weaver (book) 807
- Structural engineer, industrialized building and (book) 189
- Structural engineer today, Ove Arup 520
- Structural matrix analysis, by J. Robinson (book) 189
- Structural steelwork. *See* Steelwork
- Structural use of timber, by L. G. Booth and P. O. Reece (book) 641
- Structures, indeterminate, by A. Williams (book) 765
ship, by W. Mackle (book) 153. *Correction* 305
steel, full-size five-level 757
storage (trade publication) 434
- Stud(s), screw, Doranco 341
- Student response system, Syracuse University 362
- Sturtevant Engineering Co. Ltd., ash handling and extraction system 464
coated welding electrodes factory for Russia 861
insecticides plant for Russia 861
Russian contracts 861
- Stypolight translucent sheeting (trade publication) 36
- Styrene spools, diamond cutting and finishing tool for 337
- Suba Hydraulics Ltd., single-acting oil pump 426
- Submarine, inspection, SURV 869
nuclear-powered, Vickers 730
Polaris-missile, *Resolution* 532
- Submarine Cables Ltd., generator for Dungeness nuclear power station 104
- Submarine communications system, hf, ssb, Racal 758
- Substations, Bournemouth-Waterloo railway electrification 16
delayed automatic reclosure equipment 979
Exeter, static compensator for 839
foundations, expanded polystyrene 832
400 kV, cascade voltage transformer 671
- Sud-Aviation, A-300 passenger aircraft design and development 168
see also Concorde supersonic airliner
- Sugden, J. E. & Co. Ltd., audio-frequency millivoltmeter 716
- Sulfotherm equipment for SO₂ 1042
- Sulphonates, production by irradiation 923
- Sulphur trioxide, Sulfotherm equipment for 1042
- Sulphuric acid processes, contact (trade publication) 520
- Summers, John, & Sons Ltd., Diron steel sheet 113
- Sump cleaner (trade publication) 682
- Sump pump, Warman 264
- Sun. *See* Solar
- Sunbeam Rapier motor car 577
- Sunbeam Stiletto motor car 537
- Sunderland gear planing machine 472
- Sunderland and South Shields Water Co., Derwent Dam 140
- Sunhouse range of electric heaters 930
- Supa-Dalite roof-light 755
- Super-Loadmaster loading shovel 28
- Super Mobile Viner pea gathering machine 166, 381
- Super Series Worksaver electric trucks 680
- Superconducting magnet, 109,000-gauss 336
- Superconducting temperature, highest known 591
- Superconducting transition temperature of strontium titanate, NBS 1006
- Supercutter paper finishing equipment 751
- Superswitch Electric Appliances Ltd., brightness-control switch 617
- Surface energies, of adhesives 937
of materials 937
- Surface finish, electrical machining 437
- Surface friction measurement device 912
- Surface preparation for adhesives 938
- Surface roughness measuring instrument 25
- Surface skimmer systems, Jane's, by R. McLeavy (book) 847
- Surfactant, silicone, GEC 799
- Surgery, torque screwdriver for 130
- Surlyn A coatings on papers and boards 799
- SURV (standard underwater research vehicle) 869
- Surveyor, chartered land, work of 433
- Surveyor 4 spacecraft, digging mechanism 93
- Suspension
for ambulance 446
for railway bogies 137
Pneuride system, Dunlop 1002
- Sutcliffe, Richard, Engineering Systems Ltd., coal unloading plant 1030
Dragon conveyor roller 476
flow-rate control unit for bulk handling 1015
pump for fire-resistant fluids 390
- Swan Hunter Group, appointments 857
tanker for Texaco 731
- Swan Hunter and Tyne Shipbuilders, formation 566
- Swann, M., scientists for industry 531
- Sweden, rule of road changeover 353
- Swedish State Railways, diesel-electric locomotives 205
locomotives with thyristor control 176
- Sweeping machine, KEF 679
- Swiftplan Ltd., industrialized building (trade publication) 154
- Swimming pool, aluminium sheeting for 862
- Swingfire anti-tank weapon 536
- Swinglift fork trucks 838
- Swirl-vane component, investment casting 382
- Swiss Instruments and Components Ltd., machine monitoring recorder 881
- Swiss National Railways, Ford Transit van for road/rail use 358
- Switch
brightness-control 617
centrifugal, for shaft speed 425
dry reed (trade publication) 1048
high-pressure, Thermal Control 517
high-speed pnp, BSW25, SGS-Fairchild 1044
level limit, Dukes and Briggs 712
limit, Craig 636
low pressure, Actuated Controls 1040
miniature pressure, Inertia Switch 1041
pressure, differential, Dwyer 1042
proximity, ML 188
reed 717
Flight-Refuelling 1045
rotary, miniature, Radiatron 1046
scanner, IDM 883
vane-operated magnetic proximity 880
- Switch/gauge, pressure, Photohelic 714
- Switchgear, cubicle pattern fuse, Wallacetown 801
delayed automatic reclosure 979
- Switching, zero volt, AEI 403
- Switching gear, power logic, logic triac 507
- Switching system, computer, Stewarts and Lloyds 989
logic, Bistat R 557
- Switzerland, railways and cableways, by C. J. Allen (book) 267
- Sykes Machine Tool Co., turning machines 515
- Sykes, W. J. A., electric train propulsion 17
- Synchronous condenser for power-factor correction 214
- Synchro-shaft encoder K-260-A, Muirhead 1041
- Synchro-to-digital converter, Aveley 556
- Synchro-trace duplicating machine 444
- Syncropak, Rotork, electric valve actuators 708
- Synoptica mimic and flow diagrams 389
- Synthetic rubber sealing for concrete protection 833
- Syracuse University, student response system 362
- System-24 tape-controlled milling machine 509. *Letters* 732, 774
- Systems engineering, by A. Wayne Wymore (book) 1017
- T-MaX toolholder 513
- Table, drafting, Backlight 512
- Tablets, spray coating of 22
- Tabor, D., friction and lubrication (book) 267
- Tachometer(s), electronic, Smiths 557
phototransistor, Crypton 1042
- Tachometer generators, Smiths Industries 258
- Taf Fechan Water Board, reservoirs 241
- Taff Vale Railway, 0-6-2T locomotive for National Museum of Wales 167
- Tak Chemicals Ltd., peelable grease 798
- Takai, H., automatic control (book) 391
- Takdust Products Ltd., paint stripper 225
- Talbot, F. W., and Co., pipe tapping tool 757
- Taldex plastics pipe tapping tool 757
- Tall buildings, by A. Coull and B. Stafford Smith (book) 153
- Tamar Valley, archaeology of, by F. Booker (book) 267
- Tamping machines 102, 551
- Tamplin, N., and Co. Ltd., tipping container 1013
- Tank(s)
aluminium, for road tankers, Gloster Saro 249
Chieftain, production 246
cleaning, at sea 448
frozen-ground, for liquid methane 1022
glass-reinforced plastic, for road tankers, Gloster-Saro 249
pressed steel (trade publication) 190
sedimentation, Mills Scaffold 23
storage, for ammonium nitrate 1005
Helix (trade publication) 478
water storage, in Africa 665
- Tanker(s), construction plans 358
fire fighting, tug *Keverne* 653
lifeboat for, *Watercraft* 407
Myrina, description of 405
orders for new 533
Pass of Glenogle 300
road. *See* Motor vehicle, tanker
super-large bore diesel engine 964
tank cleaning at sea 448
255,000 dwt 856
- Tanker training centre, Port Revel, ESSO 54
- Tantalum capacitors 715
- Tap(s), plastic 578, 654
- Tape
heating, Hotfoil 341
masking, Sellotape 798
protective, for polished surfaces, 'Scotch' 149
transfer thermosetting Sellotape 638
video, Shibaden 489
- Tape punch, paper, springs for 506
Westrex 512
- Tape reader, six-track, Lectromec 1042
- Tapping machine for starter-motor casing 923
- Tapping tool, plastics pipe, Taldex 757
- Tar, exhaust-gas, analysis 875
- Tarbela Dam, Indus Basin project 864, 998
- Tarex (England) Ltd., chucking automatic machine 471
- Tarring, T. J., non-ferrous works (book) 1047
- Taylor Electrical Instruments, panel meters 1041
- Taylor, H. G., electrical energy distribution 630
- Taylor, Sir James, scientists for industry 531
- Taylor, J. W. R., Jane's All The World's Aircraft (book) 981
- Taylor, P. L., Making Electric Things Happen (book) 559
- Taylor Woodrow Construction Ltd., capstone aggregate concrete beams 289
prestressing cables at Wylfa nuclear power station 259
vacuum distillation column 629
- Taylor Woodrow International Ltd., appointments 733
- Tea de-stalking machine, electrostatic 943
- Teaching systems, servo-control, Feedback 713
see also Education
- Techne (Cambridge) Ltd., fluid logic (trade publication) 228
water baths 926
- Technical books in print 1967 (book) 935
- Technical illustrations, appeal for. *Letter* 856
- Technical Representation Ltd., terminal strips 110
- Technical writers, joint body for 440
- Technician engineers, conference on, CEI 729
qualification and status comment 899
- Technicon Corp., waste analyser 223
- Technicon Instruments Co. Ltd., waste analyser 223

- Technological economics, by D. Davies and C. McCarthy (book) 1047
- Technologists, and scientists for industry, symposium on 531
- education of, by M. Jahoda (book) 981
- Technology
- for undeveloped areas, by J. Paranson (book) 807
- Minister of, Advisory Council on Technology 651
- Ministry of, activities of 163
- air pollution research 281
- Ansty noise-research facility 18
- aviation group 164
- brain drain two-way flow scheme 198
- 'Design Data Memoranda' for chemical engineers 181
- engineering group 164
- industrial consultancy units 904, 942
- machine tools for 774
- research group 164
- staff salary statistics 854
- Survey of Professional Engineers 530
- testing service for electrical equipment 252
- thick-film circuits 23
- see also under specific establishments and projects
- science, and government, by K. Hudson (book) 765
- Teddington Aircraft Controls Ltd., Semiducer pressure sensor 712
- Teddington Autocontrols Ltd., defrost valve 31
- filter driers for refrigeration 340
- indicating meters (trade publication) 894
- reversing valves, KCY range 226
- Teddington Bellows Ltd., expansion joints (trade publication) 154
- Teddington Engineering Co. Ltd., compressors (trade publication) 478
- diving contractors 793
- Tees, River, radar surveillance 324
- Tees and Hartlepool Port Authority, radar maps of Tees 324
- Teesport, harbour surveillance 324
- Tektro, flow divider and regulator 927
- Telcon Plastics Ltd., polythene tubing 30
- Surlyn A coatings 799
- Teleciné system, Marconi 1032
- Telecommunications, by W. Fraser (book) 391
- Telecommunications repeater stations, wire mesh platform 181
- Telegraph signal generator 716
- Telemecanique Electrique (Great Britain) Ltd., relays 517, 882
- Telemetering, conference on (Houston, Texas) 642
- Telephone, for deaf mutes 950
- intercom, push-button, Reliance 446
- radio for salesmen. *Letter* 242
- Telephone cables, undersea, for Mediterranean and Baltic 320
- Telephone dictation, Assmann Intel System 1029
- Telephone exchanges, pulse code modulation, microcircuits for 406
- Telephone extension, portable, Bell 167
- Telephone kiosk, theft-proof cash compartment 1029
- Telephone link to central computer, De La Rue Bull 319
- Telephone Rentals Ltd., controlling and recording production time 106
- Teleprinters and punched paper tape equipment (trade publication) 80
- Telescope, Isaac Newton 911
- Telescope mirror, fused quartz blank for 833
- Teletype Corp., tape punch 512
- Television
- closed-circuit, and video tape recording equipment, Shibaden 489
- for airports 862
- mobile unit 181
- production control by 63
- colour, BBC service 8, 863
- distortion measuring set 883
- stomach examination 1028
- equipment exhibition, 405
- in training, seminar, BACIE 228
- infra-red system, for temperature distribution on furnace walls 669. *Correction* 753
- mobile closed-circuit, Jordanhill College 447
- Television cameras, colour, BBC 9
- Marconi Mk VII 1032
- Hi-Q Plumbicon-tubed 447
- image orthicon (trade publication) 560
- vidicon, for airport use 862
- Television film engineering, by R. J. R. Ross (book) 79
- Television filming system, Arri cam 867
- Television pickup tubes, English Electric 555
- Television programme, Engineering: craft and science 154
- filming for export 867
- Know How 36
- Television receiver, colour, chromatron tube 48
- construction. *Letter* 48
- Philips crosshatch generator for 716
- Television relay cables, Pod range 716
- Television sets, servicing 239
- Television transmission test gear, Marconi 554
- Television transmitting valve, ceramic tetrode 555
- Television tube, colour, ultrasonic cleaning 628
- Temco Heating Ltd., gas convector heater 358
- Temperature, superconducting, highest known 591
- Temperature control units, Abbey 475
- Eurotherm 226
- Temperature controlled water bath 673
- Temperature-detection device, Temp-plate 556
- Temperature distribution on furnace walls 669. *Correction* 753
- Temperature measurement, low, nuclear quadrupole resonance 548
- see also Thermocouple; Thermometer
- Temperature measuring equipment, furnace, calibration service 1034
- Temperature monitor, Mimic 558
- trade publication 724
- Temperature-sensing units 556
- Temperature sensors, evaluation of, NBS 421
- Temp-plate temperature-detection device 556
- Tennessee Valley Authority, boiling water nuclear reactor and coal-fired generator 92
- Browns Ferry nuclear power station 92
- 1,300 MW generator 5
- Tensile test, Chalmers 260
- superstition and scientific application 369
- Tensile testing, R. K. Penny and F. A. Leckie 925
- Tension insulator, BICC 802
- Terminal blocks, close stacking, MTE 150
- Terminal strips, Technical Representation 110
- Terrapoint 220 core dressing 972
- Testing. See under specific types of test and item tested
- Testing equipment for small internal combustion engines 753
- Testing instrument, bond, Fokker 797
- Testing machines. See under specific type of testing machine
- Testing service for electrical equipment in flammable atmospheres 252
- Texaco, 255,000 dwt tanker 856
- Texaco Europe Ltd., appointments 613
- Teximat compressor suction cleaner 764
- Textile(s) from film 154
- conference on 1018
- Textile dust and fluff collector 601
- Textile Machinery Exhibition (Basle) 80
- Thames Marine Products, gearbox for Mercedes-Benz marine engine 166
- Tharsis, mines of, by S. G. Checkland (book) 681
- Thermacoust Ltd., wood wool slabs (trade publication) 268
- Thermal conductivity, conference on, NBS 392
- Thermal conductivity gauges 39
- Thermal Control Co. Ltd., high-pressure switches 517
- Thermal environment in buildings, symposium 982
- Thermal test facility for ESRO I 103
- Thermatool vacuum tube generators 967
- Thermic boring process to remove shipping hazard 668
- Thermionic Products (Electronics) Ltd., television and video tape recording 489
- Thermobloc HTV heating system 761
- Thermobloc Multipass heater for warm-air curtain 761
- Thermocouples, calibration service, PERA 1034
- Thermodynamics, engineering, by G. F. C. Rogers and Y. R. Mayhew (book) 559
- Thermoelectric generator, SNAP-27 218
- Thermometer, Dependatherm, with flexible probe 557
- electronic, Comark 476
- Thermometry, low-temperature, nuclear resonance 548
- Thermoplastics for fume extract plant 924
- Thermo Plastics Ltd., tanks (trade publication) 478
- ThermoSpray flame spray gun 511
- Thermostatic control for defrosting cycles 302
- Thermostatic water valves, ATVA 1041
- Thermotron Corp., environmental testing 220
- Thermowells (trade publication) 766
- Thick-film circuits 23
- Thick film technology, conference 936
- Thickness gauge, Elcometer 389
- Thickness measuring machine, runners for 422
- Thickness meter, ultrasonic, Sonatest 714
- Thin film conference (Southampton) 478
- Thomas and Betts Co. Inc., cable tap and spacer 802
- Thomas, J. E. C., glass for windscreens 920
- Thompson, C., conference of Women Engineers 45
- Thomson, R., engineering drawing (book) 807
- Thorn Automation, formation 1024
- Thorn Electrical Industries, appointments 691
- interest in Metal Industries Group 2, 86
- Thornycroft, John I., & Co. Ltd., tug *Keverne* 653
- Thread, screw. See Screw thread
- threading. See Screw
- Threaded components, electroplating 145
- Threaded fasteners, plastic locking sealants 76
- 3M. See Minnesota Mining and Manufacturing Co.
- Thrige-Titan A/S, diesel-electric locomotives 26
- Thring, M. W., next thirty years 327
- Thru-spray guns for polishing compound 180
- Thumper hydraulic breaking machine 102
- Thurrock Flint Co. Ltd., conveyor belt repair 974
- Thyristor(s), trade publication 80
- use in domestic appliances 217
- Thyristor control, for ac power regulators 714
- for electric locomotives 176
- for stainless steel strip line 795
- Thyristor converter, module system 840
- Thyristor/diode kit, International Rectifier 1045
- Thyristor firing modules, Lyons 882
- Thyristor production and development, AEI 401-403
- Thysert module system for thyristor converter 840
- TI Stainless Tubes Ltd., runners for thickness measuring machine 422
- tube for Geiger-Müller counters 629
- Tichauer et Cie, tower crane 514
- Ticket Equipment Ltd., turnstiles (trade publication) 604
- TIE. See Totally integrated environment
- Tiefenback, Dr. H. & Co., proximity switches 188
- Tilt'r positioning tool 297
- Timber, cycle racing track 366
- structural use, by L. G. Booth and P. O. Reece (book) 641
- Timber joints, steel connectors 476
- Timber Research and Development Association, bicycle track 366
- Time delay relays, pneumatic 517
- Time indicator, elapsed, Davall 1040
- electromechanical elapsed (trade publication) 724
- Time meters, elapsed (trade publication) 228
- Time recorder, digital, LR-2 1042
- Timers
- adjustable cam, Crater Controls 426
- Simset 75
- automatic refrigerator-defrost 760
- delay (trade publication) 228
- repeat cycle, Bliss 517
- see also Counter/timer
- Times Machinery Co. Ltd., appointments 1028
- Tin oxide resistor networks (trade publication) 894
- Tin Research Institute, Chalmers tensile test 260
- direct chloride process 260
- Lansin tin-nickel process 692
- Tina coupé motor car 580
- Tinning, direct chloride process 260
- Tinning line, Head Wrightson 650
- Tinsley, H., & Co. Ltd., loss angle measuring system 1040
- Tipping container, bulk, Pick-a-back 1013
- Tipping gears and bodies (trade publication) 1018
- Tippler, hydraulic wagon, Trucks-a-daisy 27
- Tipton and Kalmbach, link canals, Indus River Basin scheme 1001
- Tiptrak conveyors for tobacco handling 146
- Titanium, as bearing material 1038
- castings 1038
- machining of 1038
- properties and uses, symposium 1037
- welding of 1037
- Tobacco handling, Tiptrak conveyors for 146
- Tobias, S. A., machine tool design (book) 227
- Todd AO sonic burner 150

- Todd Combustion Ltd., Todd AO sonic burner 150
 Toggle clamp, Insley 188
 Toggle press 474
 Toilet, portable, Portaloo 551
 Tollbridge Trailers Ltd., gas bottle trailer 680
 Tollemache Composting Systems Ltd., refuse-disposal plant for Sweden 902, 944
 Tomatin Distillers Co. Ltd., distilling waste treatment plant 870
 whisky production 956
 Tool(s) air, Bohler 283
 trade publication 268
 brazed (trade publication) 682
 button, Speedicut-FN 845
 cutting (trade publication) 682
 diamond, for turning graphite and lava 792
 finishing, for styrene spools 337
 hand, underwater, symposium (Columbus, Ohio) 80
 positioning, Tilt'r 297
 wire-wrapping, U-link loader for 843
 Tool removal, disintegrators for (trade publication) 392
 Tool storage equipment (trade publication) 848
 Tool wear, electrical machining 438
 Toolholder, T-MaX 513
 Toolmaster milling machine 472
 Torit bag-filter dust collectors 931
 Tororo Industrial Chemicals and Fertilizers Ltd., phosphate fertilizer plant 855
 Torrington Co. Ltd., appointments 691
 Toshiba Machine Co. Ltd., roll-grinding machine 844
 Totally integrated environment (TIE) 659
 Tower, circular, Sydney, Australia 416
 Tower crane. *See* Crane
 Towler Brothers (Patents) Ltd., overhung press 672
 Towler Hydraulics, export orders 856
 hydraulic pump (trade publication) 118
 program-controlled forging press 709
 upstroke press for water removal 430
 Townsend H. R. A., computer for electro-encephalograph analysis 738
 Toxicology, analytical, of industrial inorganic poisons, by M. B. Jacobs (book) 1017
 Toyo Kogyo (Mazda) Cosmo motor car 657
 Toyoto Corolla 1100 motor car 656
 Toyota Corona motor car 656
 TPX methylpentene polymer 583
 Track lining, machines, automatic, AL-203 205
 Tracked Hovercraft Ltd., formation and activities 397, 406-407
 Traction engines, by J. Hampshire (book) 519
 Tractor
 Agripol Ursus C-350 and C-335 52
 BM Volvo 800, Bamfords 954
 Dutra-2500 52
 Dutra D8000 954
 four wheel drive (trade publication) 118
 Massey-Ferguson MF130, MF165, and MF178 954
 Massey-Ferguson 1,100 954
 McCormick International-523 52
 Perry-Jeffes quick coupling hitch 955
 Ploughmaster 80 f-wd 52
 remote control, NIAE 332
 roboting driverless, for spare parts 590
 safety frame tests, NIAE 333
 three-point linkages 955
 Zetor-5511 954
 3/45 and 4/65, British Motor Corp. 52
 780 Selectamatic, David Brown 954
 1124 four-wheel drive, County Commercial 52
 Tractor driver comfort, ergonomic study 332
 Tractor loader, International Harvester Co. 891
 Tractor-mounted floodlight 899
 Tractor shovel, Fiat 720
 Tractor unit, battery electric, Wessex 837
 Trade exhibition. *See* Exhibition
 Trade union(s), conference of 'white collar' (London) 988, 993
 see also under names of specific unions
 Trade Union Congress, educational activities 400
 productivity improvement scheme 160
 Traders Road Transport Association, maintenance inspection service 241
 Traffic control research, RRL 20
 Traffic signal control device, Autoflex Beta Timer 240
 Trailer, bogie, Dyson 836
 gas bottle, Tollbridge 680
 semi-trailer, Hands, for containers 783
 Train. *See* Railway train
- Training
 and engineering industry, symposium on, PERA 1018
 for office, course on, BACIE 80
 in development areas 1024
 industrial, announcements 274
 programmed instruction for, by B. Dodd (book) 893
 yearbook 1967-68 (book) 1047
 Leyland Motor Corp. 236
 of drivers of electric locomotives 746
 of training officers, report 901
 television in, seminar, BACIE 228
see also Course; Education, etc.
- Training board. *See* Industrial training board
 Training centre
 Cement and Concrete Association 4
 Construction industry, Bircham Newton 127, 816
 Paisley and Johnstone 649
 Plenty & Son 610
 Worthington-Simpson 611
 Training courses, Ford 694
 Training officers, training of, report 901
 Training school at Leeds, EITB 854
 Training workshop for Reading and District Engineering Training Group 901
 Transalarm frequency alarm (trade publication) 268
 Transducer
 electro-pneumatic, AEI 712
 environmental testing of 708
 pressure, with temperature stability 557
 resistance-to-frequency 138
 ultrasonic, for cleaning and plating solutions 390
 Transfer and handling machine, Versatran automatic 507
 Transformer
 cascade voltage, for 400 kV substation 671
 current, International General Electric Co. 634
 distribution, with aluminium foil windings, South Wales Switchgear 147
 for Cottam power station 454
 for Dounreay fast reactor 949
 low voltage (trade publication) 154
 precision, Dynamco 718
 Transformer noise 547
 conference on, IEE 547
 Transformer production expansion, Westinghouse 242
 Transistors, complementary, Micro 303
 epoxy-encapsulated, AEI-Thorn 401
 in terminal block mounting, RCA 555
 power, 250 A, Westinghouse 801
 with 'lock-fit' pins, Mullard 1044
 Transit-lite LT-2 laser transit instrument 891
 Translarm frequency trip units 226
 Translation of technical material for export. *Letter* 132
 Translator for electricity supply 490
 Translode Units Ltd., mobile exhibition unit 1016
 Translucent sheeting, Stypolight (trade publication) 36
 Transmission, automatic, stepless, DAF 1029
 hydrostatic 155
see also Power transmission; Gearing
 Transmitter, current, Ether 1042
 uhf/am, type DU 8-D, STC 650
 Transmitter units for telephone extension, Bell 167
 Transmutation, Proler plant for 47
 Transparent storage cabinets (trade publication) 190
 Transport
 air. *See* Air; Aircraft; Aviation
 air-cushion, of large objects 165
 engineering contribution to 329
 exhibits at Science Museum 618, 696
 guided land (book) 477
 Ministry of, appointments 818
 steel footbridge designs 165
 Unimog/Schmidt snow cutters 94
 public, joint memorandum on 899
 railway. *See* Railway
 road. *See* Motor car; Motor vehicle; Road
 sea. *See* Ship; Shipping
 White Paper on 815, 816
 Transport authorities, conurbation 899
 passenger, plans for 941
 Transport/handling vehicles and equipment 679, 836, 1013
 Transport machine, man-powered, land, design competition 85, 97, 618
 Transport vehicles, bulk, air blower 517
 Transportation engineering conference, ICE 520
- Transporter, demountable, for solid fuel, Atkinsons 28
 slag, Wellman 343
 TraNstor container for liquefied gases 205
 Trapp, R. F., Space Age (book) 305
 Traveller rotary drilling rig 69
 Travis, A. S., Channel Tunnel (book) 117
 Trend Industrial Equipment Ltd., hand sanding equipment 387
 site saw kit 720
 Trennjaeger (Great Britain) Ltd., cold saw 1009
 friction saws 551
 Triac, logic, power logic switching gear 507
 Tribley, A. C., electric cars 569. *Letter* 650
 Tribology, and national economy 375
 consultancy unit, Leeds 904
 experimental methods, IME 268
 in railways, IME 766
 National Centre for 904
 Tri-borne primer, conveyerized painting for 834
 Tricor filter driers for refrigeration 340
 Trident IE/140 airliner 567
 Trip(s), electronic, Mimic 475
 Trip units, frequency, Translarm 226
 Tripartite chemical engineering conference (Montreal) 724
 Triple Twelve band saw 628
 Triple Twelve power saw, Alexander 473
 Triplex Safety Glass Co. Ltd., history 920
 windscreens 94, 920
 Zebrazone uniform wide zone 922
 Trisomet lightweight cladding system 755
 Trist, Hubert H. P. & Co. Ltd., hose for electric wires 226
 Triumph Herald 13/60 motor car 576
 Triumph TR5PI motor car 579
 Trolley, welding, shear connector 297
 Trollope & Colls, Royal Society 858
 Tropical vented warm-air heater 601
 Trotman, D. W., white-metal bearings 260
 Troughton & Young Ltd., lighting (trade publication) 520
 Truck(s)
 electric, Super Series Worksaver 680
 electric platform 680
 hydraulic elevator, Powell 838
 hydraulic pallet, Coolie 575
 rider electric reach, Lansing 222
see also Bogie; Motor vehicle; Forklift truck
 Trucks-a-daisy wagon tippler 27
 Tru-Wel steel tube 30, 487
 T & T Vicars Ltd., coating plant and laboratories 217
 Tubalux fluorescent lighting (trade publication) 520
 Tube(s)
 carrier, for underground conductors 617
 furnace, cleaning unit for 291
 honed-bore 592
 resinated glass-fabric (trade publication) 346
 stainless steel, finishing plant, Stewart & Lloyds 34
 for Geiger-Müller counters 629
 Project Champion production of hollows for 33
 steel, ERW, manufacture of 487
 Flo-coat hot galvanizing 1006
 Tru-Wel 30, 487
 weighing machine for long 547-548
see also Pipe
 Tube-bending machine, hand-operated, Fairey 675
 Tube-cutting machine, automatic 474
 Tube flash welding, BS 792
 Tube Investments Ltd., finned tubing 670
 Tube Products Ltd., Tru-Wel steel tube 30, 487
 Tube railway. *See* London Transport
 Tube-straightening machines, Bronx 843
 Scaflit 890
 Tubes Ltd., honed-bore tubes 592
 Tubing
 finned, HOWCO-G-FIN 670
 manufacture of, Howell 670
 helical, reinforced, Flexadux 932
 Nylon 11, Polypenco 111
 polythene, Telcon 30
 Tubular rivet setting machines 474
 Tug *Keverne*, fire fighting 653
Mercur, gearbox for low speeds 384
 Tungsten-carbide balls, Spheric 30
 Tunnel
 Blackwall, ground treatment and construction 248

Channel, progress of 816
 1802-1967, by A. S. Travis (book) 117
 Monmouth, construction of 12
 Schelde river road-rail 502, 779
 Tyne. *See* Tyne Tunnel
 Tunnelling machine, hydraulic motor 876
 Turbine
 gas, alternators, Rover 11
 Austin-250 704, 706
 auxiliary 454
 combined with diesel engine, CODOG 10
 Dart, for locomotive 129
 for lorry, Leyland 319
 for patrol boats 10
 forged compressor discs for 466
 generating sets for Australia 206
 power plants, Stal-Laval 214, 215
 self-propelling unit for mining 329
 Stal-Laval GT120 214 *Correction* 360
see also Aircraft engine
 hydraulic, vibrations in (book) 765
 steam, casings, insulation 811
 contra-rotating radial/axial flow 214
 for Cottam power station 454
 for *Queen Elizabeth II* liner 497
 Pametrada Standard Frame 405
see also Turbo-generator
 using chemical fuel and solar energy 240
 Turbine blade erosion, power station experiments 804
 reduction of 804 *Correction* 863
 Turbine flowmeter(s), Flo-Meters 258, 302
 pickup, Electronic Flow-Meters 1039
 Turbine rotor, fabricated by welding 293 *Letter* 361
 steels for 295, 296
 Turbo-blower, Allday 301
 Turbocharged industrial diesel engines 551
 Turbo-generator sets
 for Hunterston B nuclear power station 902
 for Nanticoke power station 205
 for Ontario Hydro Museum 205
 for Pickering nuclear power station 205
 for US desalination plant 167
 Turin Motor Show 788
 Turner Bros. Asbestos Co., glass fibre reinforcement 799
 Turner & Brown Ltd., pipework for acid 832
 thermoplastics for fume extract plant 924
 Turner, J. H. W., Engineers Guild 941
 Turner Machine Tool Ltd., Linisher grinding machine 298
 Turner & Newall Group, expenditure on R & D 527
 Turners Asbestos Cement Co. Ltd., appointments 945
 Turniff Construction Ltd., foam cushions for foundations 832
 Turning machines, VDF 515
 Turnstiles (trade publication) 604
 Turntable, Barron and Shepherd 679
 Turolla/Plessey SpA, formation 567
 Tuttle, S. B., mechanisms (book) 681
 Tuzet, H., spangle-free strip 108
 TVR Engineering Ltd., Tina coupé motor car 580
 Two-Eleven airliner project 313, 987
 Twyford-Enstrom Solent helicopter 738
 Twyford Moors (Helicopters) Ltd., Solent helicopter 738
 Tychoway anti-friction bearings 515
 Tycord synthetic string 973
 Tygadore Ltd., electrical equipment (trade publication) 346
 polyimide insulation 978
 Tyne Tunnel
 cast-iron segments 541
 contractors 545
 decorative finishes 545
 design and construction 541
 ground treatment 541
 shields 543
 technical particulars 545
 Type reading devices, Mullard 71
 Typesetting, computerized, world survey 994
 Typewriter, multi-lingual, IBM 385
 Tyres, motor car, design trends 654
 solid (trade publication) 982
 Tysons Woodworking Machine Makers, wood-boring machine 1009
 Tysse 2 hydroelectric power station 743

U

U-link loader for wire-wrapping tools 843
 Ucan Products Ltd., masonry nails 721
 Ucecryl acrylic emulsions for leather 301
 Udal Dudal press feeding aid 845
 Udal, J. P., press feeding aid 845
 Uddeholm Ltd., spring steel (trade publication) 808
 UFO. *See* Unidentified Flying Objects
 Ukotaco, Dura-Churn parts washer 927
 Ulster Transport Authority, fatigue life of bogies 800
 Ultra Electronics Ltd., ultrasonic aid for blind persons 55
 Ultra low-expansion fused silica 639
 Ultrasonic aid for blind persons 55, 57
 Ultrasonic burglar alarm 635
 Ultrasonic cleaning 1049
 colour television tube 628
 Ultrasonic flowmeters 309
 Ultrasonic forming processes 1052
 Ultrasonic instrument for unborn baby 490
 Ultrasonic machining 1049
 Ultrasonic oil filters 599
 Ultrasonic technology, definition 1049
 Ultrasonic testing, by L. Filipczynski, Z. Pawlowski and J. Wehr (book) 117
 steel castings, BSCRA 104
 Ultrasonic testing probes, Ultrasonoscope 798
 Ultrasonic thickness meter, Sonatest 714
 Ultrasonic transducers for cleaning and plating solutions 390
 Ultrasonic vibrations, rolling improved by 217
 Ultrasonic welding 1050
 Ultrasonic welding machine, Intertherm 972
 Ultrasonics, Engineering Outline 1049
 Ultrasonoscope Co. (London) Ltd., testing probes 798
 Ultra-violet lamp sealing, NBS 382
 Underground Mining Machinery Ltd., locomotive for mine transport 72
 Underground railway. *See* London Transport
 Underpass, Blackfriars Bridgehead 172
 Undersea research craft, Deepstar 408
 Underwater house study 1024
 Underwater operations, remote control 329
 Underwater research, glass sphere for 104
 Underwater welding, symposium (Columbus, Ohio) 80
 Undeveloped areas, technology, by J. Baranson (book) 807
 Unemployment 125, 483, 813, 855
see also Employment; Labour
 Unibond Ltd., aerosol sprays 340
 Unidentified flying objects 576
 by B. Steiger (book) 519
 Uni-Ken control cubicles 302
 Unilat Engineering Ltd., Porta press 844
 Unimag overband magnetic separator 297
 Unimate teachable assembly machine 133
 Unimog/Schmidt snow cutters 94
 Union, trade. *See* Trade union
 Union Carbide UK Ltd., Linde Plasmarc cutting control system 846
 molecular sieve for drying of natural gas 464
 strapping machine for briquettes 462
 thermowells (trade publication) 766
 Uniro crop sprayer 616
 Uniroyal Ltd., conveyors for tobacco 146
 Uni-System harvesting machines 406
 Unit Construction Co., industrialized building 49, 383
 Unit heads, Brooke Tool 474
 United Aircraft of Canada Ltd., Pratt & Whitney turbofan engine 825
 United Kingdom Atomic Energy Authority
 annual report 610
 appointment of new chairman 610
 fork-lift truck for pipe handling 838
 National Centre for Tribology 904
 reorganization recommendations 859
 Ripple generator for Dungeness nuclear power station 104
 SGHW reactor, Winfrith 411
 Westinghouse staff recruitment campaign 823
 United Nations Food and Agriculture Organisation, water storage in Africa 662
 United Packages Pty. Ltd., compression testing of containers 708
 United States, *Business Week* index 124, 197, 276, 354, 528, 688, 854
 information sources in, Directory 35
 United States Air Force Materials Laboratory, high-

energy-rate forming 103
 United States Arms Control and Disarmament Agency, replication technique for identification of metal objects 284
 United States Army Engineer Waterways experimental station, wave generating machine for Nassau harbour model 378
 United States National Aeronautics and Space Administration
 Boeing Co. awards system 863
 Lunar Orbiter V spacecraft 204
 Mariner 4 spacecraft 129
 RAM-C test to investigate loss of communication with spacecraft 578
 Saturn V space vehicle 695
 United States National Bureau of Standards
 conference on thermal conductivity 392
 crack growth in glass 463
 evaluation of temperature sensors 421
 laser diodes improved by coating 64
 nuclear quadrupole resonance for thermometry 548
 piston gauge for pressure measurement 668
 publications 267
 replication technique for identification of metal objects 284
 superconducting transition temperature of strontium titanate 1006
 thin aluminium film production 383
 ultra-violet lamp sealing 382
 United States Naval Air Development Centre, fluidic control for helicopter 129
 United States Public Health Service, refuse collection survey 242
 United Steel Companies Ltd., appointments 945
 Unirode Corp., high voltage rectifiers 475
 Universal Asbestos Manufacturing Co., asbestos wall panel 892
 Universal measuring bridge, Avo 458
 Universal vegetable harvester 331
 University(ies)
 British, scientific research in (book) 153
 changing role of. *Letter* 132
 engineer in, by D. G. Christopherson (book) 227
 Engineering Science at (Handbook) 689
see also under names of specific universities
 University College, Bangor, industrial consultancy unit 904
 Swansea, lubrication in corrosive environments 904
 Unloading facilities, Ratcliffe power station 1030
 Upper Clyde Shipbuilders Ltd., formation 900
 Upper Clyde Shipbuilding Group 353
 Urban planning, conference on 445
 Urbanina electric motor car 788
 Urethane, Flexane 974
 Urquharts (1962) Ltd., toroidal combustion chamber for drying blast furnace slag 923
 Urwick, Orr & Partners Ltd., management services 154
 USI Engineering Ltd., Burtonwood factory 566
 metals reclaim systems (trade publication) 682
 scrap reclamation, fluidized bed 967

V

Vacu-Blast Ltd., hypodermic syringe needles 628
 shot blasting plant 591
 Vacuum, definition of 37
 Vacuum Atmospheres Corp., environmental testing equipment 220
 Vacuum brazing processes 252
 Vacuum coating equipment, Mullard 1045
 Vacuum congress, international (Manchester) 478
 Vacuum contactor, AEI 611, 635
 trade publication 642
 Vacuum distillation column, Stanlow refinery 629
 Vacuum evaporation units, Bir-Vac 1044
 Vacuum freezing, desalination 350
 Vacuum gauges, for low pressure 37, 38
 LKB Autovac Pirani 517
 Vacuum Generators Ltd., vacuum gauge 517
 Vacuum insulated evaporator, BOC-Airco 677
 Vacuum pump. *See* Pump
 Valeport (Tools) Ltd., rotary shears 1007
 Value engineering, by J. W. Greve and F. W. Wilson (book) 189
 in shipbuilding, J. Campbell 754
 techniques 190
 Value Engineering Association, techniques 190
 Value Engineering Ltd., European Conference 754

- Valve(s)
 amplifying 341
 automatic, Clayton Hytrol and Powertrol 599
 butterfly, for liquid or gas flow 74
 Slimseal, for natural gas conversion 928
 control, Simplifix Couplings 926
 Danfoss return-temperature limiter 831
 defrost, Teddington Autocontrols 31
 diaphragm (trade publication) 604
 diversion, Spirax 390
 Fire, BM Control 341
 four and five way, Bennett 225
 hydraulic flow control, Rexroth 927
 mercury-arc, anode structures 67
 for high-voltage dc transmission lines 66
 M-type anode 67
 N-type anode 67
 plastic diaphragm, Hills-McCanna 598
 pneumatic, Flo-Master 763
 proportioning, Ermeto 111
 radiator, thermostatic, Danfoss 756
 reversing, KCY range, Teddington 226
 rotary switch (trade publication) 766
 safety, for air and water, Ether 111
 solenoid, flameproof enclosure, Dewrance 558
 spool, Schrader 226
 television transmitting, ceramic tetrode 555
 thermostatic water, ATVA range 1041
- Valve characteristic meter, Avo 458
 Valve gear-operator, Rotork 149
 Valve industry, growth of 731
 Valve mechanism, by H. Smith (book) 79
 Valve operators for power systems, Rotork 928
 Valve positioner unit, pneumatic, AEI 881
 Van Carrier container-handling system 575, 952
 van der Maas, H. J., Hon. Fellowship, Royal Aeronautical Society 900
 Van der Waal's forces 937
 van Wiechen, P. H., electrical apparatus for dangerous areas 630
- Vapor steam-heating boiler 26
 Vaporloc bleaching range 380
 Varatio-Strateline Gears Ltd., right angle bevel gear units (trade publication) 268
 Variable reactor, Bowler 343
 Variator, hydraulic, Hydrodelta 764
 Varipak variable-displacement pump 116
 Vauxhall Motors Ltd.
 hydraulic paint circulation system 591
 replacement parts centre 689,760
 road-test simulator 138
 Roboting driverless tractors for spare parts 590
 Thru-spray spray guns for polishing compound 180
 Victor motor car 621, 656
- VDF turning machines 515
 Veale, A. J. R., AEI control and machine group 352
 Veedamper spring units, anti-vibration 183
 Vegetable harvester, universal 331
 Vending machine, Commodore 675
 Crusader Vendors 943
 Ventilating equipment 759, 930
 trade publication 936
 Ventilation ducting, fire damper for 187
 Ventura diesel engines, Paxman 210
 Venus exploration with Mini-orbiter 1028
 Venus 4 spacecraft 653
 Verdict Gauge (Sales) Ltd., precision measurement (trade publication) 228
 Verein Deutscher Ingenieur Group, design ability conferences 779
 Verenigd Plastic-Verkoopkantoor NV, nylon (trade publication) 346
 VeriGraph Modular draughting paper 973
 Veritrak process control instruments 711
 Vernon, J. B., linear vibration and control (book) 641
 linear vibration theory (book) 1047
 Vero Machine Tool Co. Ltd., turret machining centre 472
 work-changing unit batch machining 382
 Versamat automatic developing machine 825
 Versatility drawing instruments case 693
 Versatran automatic transfer and handling machine 507
- Veryard & Partners, residential training centre 4
 Viaduct. *See* Bridge
 Vibrajel spray nozzle 616
 Vibratechniques Ltd., underwater drilling rig 719
 Vibrating table, Concrete Vibration 551
 Vibrating unit for reclaiming copper wire 63
 Vibration
 and control system theory, linear, by J. B. Vernon (book) 641
 and fatigue actuator, Fairey Surveys 221
 and shock reduction in forge 183
 damping, in diesel engines 873
 fundamentals of, by R. A. Anderson (book) 765
 in hydraulic pumps and turbines (book) 765
 linear, theory of, by J. B. Vernon (book) 1047
 Vibration straightening machine, Mannesmann-Meer 428
 Vibration testing, Fairey Surveys 146
 trade publication 604
 VC01M, Derritron 713
 Vibratory bowl feeder stands 764
 Vibroflotation technique for barrage project 1001
 Vibro-Meter SA, eddy-current and magnetic-powder brakes 427
 multi-channel carrier frequency system 715
 strain gauges (trade publication) 724
 Vice, machine (trade publication) 1018
 pneumatic machine, PCL 842
 universal, Multi-Mini 673
 Vickers Armstrongs (Shipbuilders) Ltd., automated cargo liners 909
 Vickers Ltd., centenary film 816
 Paceco-Vickers Portainer cranes 282
 Vickers Shipbuilding Group, nuclear-powered submarine 730
Resolution Polaris-missile submarine 532
 Victor motor car, Vauxhall 621, 656
 Victoria Line underground railway 204
 Video tape recording equipment, Shidbaden 489
 Vidicons and ignitrons (trade publication) 228
 Vienna international trade fair 1018
 Vigilant anti-tank missile 536
 Viking 4000 suspension seat 1016
 Viners Ltd., sliding shoe pump for lathe 421
 Viscoelasticity, by W. Flügge (book) 433
 Viscometer, photo-cell unit in 793
 Viscount 808 airliner conversion for freight 592
 Visiwink fluidic visual indicator 880
 Visual aids, seminar, BACIE 228
 Vito Self Adhesives Ltd., adhesive-strip metals 150
 Hannoband building sealant 389
 Vitocopper adhesive-strip metals 150
 Vitolead adhesive-strip metals 150
 Vitominium adhesive-strip metals 150
 Viton fluorelastomer in aerosol pack 973
 V/O Avtopromimport, agreement with Electro-Chemical Engineering Co. Ltd. 944
 Voce, J. D., aircraft noise 986
 Vokes Ltd., Cyclo-meter flowmeter 1042
 Volkswagen
 automatic transmission 450
 Clipper mini motor bus 658
 1500 Beetle semi-automatic motor car 450, 658
 1600 automatic motor car 658
 Voltabloc batteries for diesel engines 837
 Voltage indicators, proving device for 116
 Voltage stabilizer, ac, Claude Lyons 978
 Voltmeter, digital 717
 Dynamco 718
 wide-angle panel-mounting 1041
 Volvo, articulated container carrier vehicle 783
 FB88 motor tractor unit 783
 Von Linde, R., calorific equipment 990
 Vortex Pasteurizer for pasteurization of bottle contents 335
 Vosper Ltd., patrol boats for Malaysian Navy 10
 Vulcan diesel engines (trade publication) 346
 Vulcanization and vulcanizing agents, by W. Hofmann (book) 1017
 Vulcanizing press, Chemokomplex 70
 VVB Takraf Leipzig, UB162 heavy-duty excavator 889
- W**
- Wacker vibration rammer 720
 Wade, M., employee benefits (book) 723
 Wade Pneumatic Ltd., hydraulic controls (trade publication) 434
 Wadkin Ltd.
 overhead boring and recessing machine 515
 routing machine 474
 woodworking machinery (trade publication) 848
 Wages in engineering industry 814, 1023
 Wagon tippler, hydraulic, Trucks-a-daisy 27
 Wain-Roy Ltd., excavator-loader 889
 Waiting-line models, by E. Ruiz-Palá, C. Ávila-Belos and W. W. Hines (book) 433
 Wakeling, T. R. M., rock mechanics 770
 Wakeman, D. W., design of alloys (book) 559
 Walden Precision Apparatus Ltd., multimeter 885
- Wales, National Museum of, 0-6-2T locomotive for 167
 Walker Crossweller & Co. Ltd., Harperizer deburring machine 336
 Stone-Vapor steam generator 145
 Wall(s), concrete, Conma Autobuilding machine for 386
 Wall cladding, aluminium, RTZ 757
 Wall panel, asbestos, extruded, Ace 893
 precast concrete, texture and colour variations 319
 Wallace & Tiernan Ltd., leak detection unit 834
 Wallacetown Engineering Co. Ltd., fuse switch-gear 801
 Waller, George, & Son Ltd., appointments 945
 Wallis, B., Hon. Fellowship, Royal Aeronautical Society 900
 Walmore Electronics Ltd., magnetic pickup 1039
 Walter, L., coal not for burning 529
 Wankel rotary engine in motor car 410
 Wanson Co. Ltd., air heaters (trade publication) 766
 ink drying by hot oil 793
 Thermobloc HTV heating system 761
 Thermobloc Multipass heater 761
 Warburton, E. D., Ltd., paper production equipment 751
 Ward, H. W., & Co. Ltd., turret lathe (trade publication) 478
Warehouse Locations, Planning 439
 Warm-air curtain, heater for, Thermobloc Multipass 761
 Warman International Pty. Ltd., sump pump 264
 Warmoil Ltd., draught proofer 427
 Warner, F. E., CEI examinations 89
 Warning light, radio-isotope powered, for Dungeness nuclear power station 104
 Warwick Pump & Engineering Co. Ltd., Series III pumps 263
 Wasa sinking, exhibition on 682
 Washer, parts, Dura-Churn 927
 Washing machine, Alfa-Laval 298
 automatic, Philips 360
 Mather & Platt 380
 sales statistics 3
 Washing plant, naphthalene, NCB 467
 Waste, wood, boiler for 1034
 Waste analyser, Monitor 1 COD (chemical oxygen demand) Auto-Analyzer 223
 Waste treatment plant, distilling 870
 Water
 and oil industries, problems of, by P. Hepple (book) 519
 cooling, Yorkometric condensing unit 707-708
 desalination. *See* Desalination
 saline, purification of 618
 sea. *See* Sea water
 sterilizing agents for 617
 Water bath, temperature controlled 673
 TWB range 926
 Water collection and storage in Africa 662
 Water development project in India and Pakistan 864, 998
 Water displacement solvent, Metadalic 798
 Water leak detection field unit 834
 Water pumps, Mather & Platt 386
 Water purification in storage tanks in Africa 663
 Water purification trailer, Stella-Meta 780
 Water Research Association, leak detection field unit 834
 Water storage tanks in Africa 665
 Water supply, high pressure (trade publication) 478
 Water treatment, by electricity 698. *Letter* 817
 metering systems 422
 Watercraft Ltd., lifeboat for tankers 407
 Waterway, inland. *See* Canal; River, etc
 Watson-Grundy, C., distribution study 439
 Watson, Manasty & Co. Ltd., inspection projector (trade publication) 848
 Watson & Sons (Electro-Medical) Ltd., modular reflectoscope 299
 Watts Regulator (UK) Ltd., air-line lubricator 427
 Wave generating machine, Nassau harbour 378
 Waveform monitor, Solartron 9
 Waveform sampling adaptor, Aim Electronics 883
 Way, Sir Richard, chairman, machine tool EDC 485
 Weapons, anti-tank 535, 536
 guidance capabilities for 536
 research and development, RARDE 534
 Wear, and lubrication, research 376
 in industry, cost of, W. Hirst 375
 tool, electrical machining 438
 Weatherlap external aluminium cladding 892
 Weatherley Cincinnati broaching machine 186
 Weaver, W., computer programs (book) 807

- Weck, R., Presidential Address to Engineering Section of BA 317
visiting professor, Imperial College 485
- Weedy, B. M., electric power (book) 559
- Wehr, J., ultrasonic testing (book) 117
- Weighing coils 282, 875
commercial vehicles, Checkweight 6
- Weighing machine for long tubes 547-548
- Weinstock, A., managing director, GEC 525
- Weir, G. & J. Ltd., deaerator 25
- Weir Westgarth, desalination research 690
distillation plant for Malta 902
- Weldability of Steel*, publication 792
- Weldall & Assembly Ltd., shear conveyor 924
- Welding
alumino-thermic, for reinforcing bars 548
buttering of pre-forged slab for 296
Centromat aligning clamp for 845
CO₂ (trade publication) 346
cutting and, glow-discharge equipment for AERE 291
filament, conference on 228
flash, of pipes and tubes, BS 792
of rings (trade publication) 808
fracture resistance in 370
helical, pipe mill, RTB 976
of cable sheath 336
of hot dip galvanized steel sheet, A. Chapleur 108
of membrane-wall panels for boiler 967
of plastics 1051
of titanium 1037
of turbine rotors 293. *Letter* 361
resistance, current meter 977
seam, hf current penetration 1033
structural failures and design 367
submerged-arc, conference on 306
of turbine rotors 295
ultrasonic 1050
underwater, symposium (Columbus, Ohio) 80
vertical, of aluminium 24
- Welding applied in vehicles, conference (Cardiff) 604
- Welding courses, Imperial College 485
- Welding electrodes, coated, factory for Russia 861
for copper and copper alloys 876
- Welding equipment, arc, Max Arc Ltd. 550
- Welding gun, spot, Type S120 Mark 2, Portable Welders 385
- Welding handbook, by A. L. Phillips (book) 519
- Welding machine, arc, silicon diode rectifier 843
automatic, BOC 678
ultrasonic, Intertherm 972
- Welding methods and metallurgy, by M. D. Jackson (book) 1017
- Welding processes, by P. T. Houldcroft (book) 681
- Welding sets, arc, Multi-Range 675
CO₂, Max Arc 512
- Welding techniques, maintenance and repair 146
- Welding technology, exhibition of 181
- Welding trolley, shear connector, Crompton 297
- Wellings, Thos. B., & Co., expansion 943
- Wellman Engineering Corp., Ltd., appointments 818, 991
- Wellman Group, incandescent furnaces (trade publication) 118
- Wellman Incandescent Furnace Co. Ltd., coil annealing (trade publication) 682
- Wellman Industrial Systems Ltd., appointments to board 528
- Wellman Machines Ltd., slag transporter 343
teeming carriages and ingot stripper 1025
- Wells, A. A., fact and superstition in design 367
- Welsh College of Advanced Technology, magnetic recording head performance 422
- Welsh Metal Industries Ltd., spark machine 670, 674
- Welsko, T. A., replication technique for identification of metal objects 284
- Welwyn Electric Ltd., foil strain gauges 1039
- Wenham, R. A., expansion at Motor Rail Ltd., 101
- Wentzky, Alfred, Kg., lapping machine 474
- Wessex Industries (Poole) Ltd., battery electric tractor 837
- West, Allan, & Co. Ltd., container handling cranes 669
S-Law static motor speed control 340
- West Burton power station 453, 700
- West Hyde Development Ltd., logic modules (trade publication) 724
- West Kent Main Sewerage Board, multiple-hearth incinerator 223
- West Thurrock power station 619, 620
- Western General Hospital, computer for electro-encephalograph analysis 738
- Western Machinery and Equipment Ltd., chain saw 764
- Westinghouse Brake and Signal Co. Ltd., silicon diodes and stacks (trade publication) 228
thyristors (trade publication) 80
traction battery chargers (trade publication) 808
- Westinghouse Electric Corp., pressurized water reactors 242
staff recruitment campaign 823
transformer production 242
- Westinghouse Electric International Co.
colour television tube cleaning 628
electric motors for solid state control 634
power transistor, 250A 801
rolling improved by ultrasonic vibrations 217
translator for electricity supply 490
- Westinghouse Skybus rapid transit system 777
- Westinghouse Undersea Division, deep-diving craft 408
- Westland Aircraft, Black Arrow space project 245
SR N4 hovercraft 697
- Weston Truck and Engineering Co. Ltd., hoppers 29
- Weston Works (Birmingham) Ltd., appointments 903
- Westool Ltd., power units (trade publication) 190
- Westrex Co. Ltd., springs for paper tape punch 506
tape punch 512
- Westwind Turbines Ltd., Cincinnati grinding machine 843
- Westwood Hi-Load roller bearings 585
- Wheel(s), aerodynamic drag on 618
motor car, wire, Dunlop 658
- Wheelburn in railway track 781
- Whessoe Ltd., evaporator in stainless-steel plate 1005
storage tank contracts 527
- Whisky casks, Bexuda nozzle for filling 786
- Whisky industry, automation in 786
- Whisky production process 956
- Whitaker, R. O., metrication 7. *Letters* 95, 283
- White, Sir Bruce, Wolfe Barry and Partners, Harrow Road Flyover 623
- White Fish Authority, research 243
- White-metal bearings, bond strength 260
electro-chemical corrosion 262
- White Paper. See under specific subjects
- Whitehead & Poole Ltd., sewage treatment (trade publication) 154
- Whitehouse, George, & Co. (Birmingham) Ltd., suspended ceiling system 756
- Whitised Duplex Twin potato harvesting machine 955
- Whitt, F. R., electric cars. 613. *Letter* 650
- Whiz-Tite fasteners (trade publication) 936
- Who makes machinery 1967 (book) 153
- Who owns whom 1967 (book) 391
- Whyatt (Builders) Ltd., concrete sawing 1006
- Wickman Machine Tool Sales Ltd., abrasive machine 843
- Wiggans, P. A. T., HQ for institutions 732
- Wiggin, Henry, & Co. Ltd., nickel alloys (trade publication) 478
Powerstor Drawstock storage units 337
- Wight, H. H., hammer failures 423
- Wild, A., marketing activities, Badalex 1027
- Wild, Thos. C., & Sons, gas-fired kilns 1006
- Wilkens, J. F., dangerous areas 630
- Wilkerson mist-type lubricator 258
- Wilkins, G., NSU Ro80 motor car 410
- Wilkins and Mitchell press 508
- Willan, G. L., Ltd., extended launder air casting process 966
- Williams, A., indeterminate structures (book) 765
- Williams, D. C., interferometry 524
- Williams, N., linear and nonlinear programming (book) 723
- Williams, R., CEI examination 89
- Williamson, D. T. N., computer costs 774
System-24 milling machine 509. *Letter* 732
- Willis-Jones, E., chairman, AEI-THORN 401
- Wills, G., management technology (book) 1047
- Wills, W. D. & H. O., conveyors for tobacco 146
- Willy Aumann KG, armature winding machine 803
- Wilmot, P. D., adhesives 940
- Wilson, D. G., man-powered land transport design competition 85, 97, 206, 618. *Letter* 206
- Wilson, F. W., on value engineering (book) 189
- Wilson, H., chief minister of Department of Economic Affairs 314
European Institute of Technology proposal 771
- Wilson, T. D., highway safety 949
- Wilton, G. S., transmission line maintenance 913
- Wimpey Central Laboratory, civil engineering research (trade publication) 36
- Wimpey, George, & Co. Ltd., appointments 857
Vauxhall Motors' parts centre 761
- Winch, free-fall 69
Sky Climber, for servicing tower 218
- Wind effects on tall structures 489
- Wind generator for navigation lights 291
- Wind hazards on transmission lines 913
- Wind powered power station, Russia 578
- Wind recording instruments on television mast 489
- Winding machine, armature, Willy Aumann KG 803
- Window, aluminium-wood pivot 757
draught proofer, Warmsil 427
- Windscreens, laminated glass 94, 920
toughened glass 920
Zebrazone uniform wide zone in 922
with heating element 920
- Winfrith, SGHWR reactor 411
- Winget Construction Equipment, concreting and contracting plant 549
- Winn, Charles, & Co. Ltd., diaphragm valves (trade publication) 604
- Winn City Bikes, electric bicycle 493
- Wire
and cable symposium 336
and strip parts (trade publication) 808
coiled, weighing 282
copper, reclaiming, James Bruce 63
polyimide insulation for 978
prestressing, failure of 338. *Letter* 407
pfe insulated (trade publication) 346
resistance, Stabilohm-133 797
steel, bright annealing furnace 1034
- Wire-drawing machines, capstan-type 1008
- Wire rope hoists (trade publication) 682
- Wire-wrapping tools, U-link loader for 843
- Wiring machine, crimp, automatic, Amp 100
- Wiseman, Alfred Ltd., shunting locomotive 637
- Wofac Corp., work-factor 648
- Wolberg, J. R., on prediction analysis (book) 765
- Womack, G. J., on fuel cells (book) 681
- Women Engineers and Scientists, conference (Cambridge) 45
- Wood-boring machine, deep-hole 1009
- Wood waste, boiler for 1034
- Wood wool slabs (trade publication) 268
- Woodgate, H. S., on network planning (book) 981
- Woodgrange Metal Stamping Co. Ltd., kettle production 104
- Woods, Geoffrey, Ltd., air heaters 760
- Woodwork for secondary schools, by P. Kelsey (book) 433
- Woodworking machinery, international building exhibition (Olympia) 756
international show (Paris) 936
Pickles 891
trade publication 848
- Woolley, M. V., Calder Bridge 320
- Work-changing unit for batch machining 382
- Work-factor conference 648
- Work study, courses in 943
introduction to 35
- Worker participation in management, conference 815
- World power conference (Moscow) 724
- World War I, Britain's railways in, by J. A. B. Hamilton (book) 765
- Wormwheel generator gear cutting machine, Churchill 472
- Worthington Air Conditioning Co., air handler 602
- Worthington-Simpson Ltd., heat exchange equipment (trade publication) 392
training centre 611
- Wright, P. W., electrical machining 438
- Wright, W. B., Ltd., filling machine 358
- Wrinkling during spinning, device to counteract 668
- Wrist watch, Accurist 159 chronograph 995
- Writers, technical, joint body for 440
- Writing and speaking effectively, symposium, PERA 392
- Wyle Laboratories, environmental testing 220
- Wylfa nuclear power station, corrosion inhibitor for prestressing cables 259
- Wymore, A. Wayne, systems engineering (book) 1017

X

X-Omat X-ray film processing equipment 344
 X-ray diffraction instruments (trade publication) 154
 X-ray film processing equipment, X-Omat 344
 X-ray fluorescence measurement of nickel coating 114
 X-ray fluorescence spectograph, Quantometer 881

Y

Yale Tractor Shovels, rock-handling devices 889
 Yallourn W power station, cooling towers 901
 Yamaha Autolube automatic lubrication system in motor cycle 492
 Yarra Bridge, model tests on 790
 Yarsley Research Laboratories Ltd., carrier tubes for

underground conductors 617
 face mask for high altitudes 618
 high strength fibres 618
 purification of saline water 618
 Yarway Ltd., steam trap operation 388
 Yawata Iron & Steel Co., roll-grinding machine 844
 Yearsley, R., management technology (book) 1047
 York Shipley Ltd., condensing unit 707-708
 York Trailer Co. Ltd., truck chassis for containers 1013
 Yorkometric air-cooled condensing unit 707-708
 Yorkshire Electric Transformer Co., merger with Aberdare Holdings 816
 Yorkshire Imperial Plastics Ltd, piping for underground ducts 779-780
 pvc pipe fittings (trade publication) 936
 Yorkshire Television Ltd., Marconi teleciné system 1032
 Young, L., microwaves (book) 433
 Young, R. H., metrication. *Letter* 7
 Youth in management, W. Rees-Mogg 772

Z

Zebrazone in toughened glass windscreen 922
 Zed-2 precast building (trade publication) 306
 Zedcote S3 concrete release agent 756
 Zephyr motor car, modifications, Ford 616
 Zero volt switching, AEI 403
 Zeter 5511 tractor 954
 Zeva TSM drag-soldering machines 884
 Zinc Alloy Die Casters Association, die castings (trade publication) 808
 Zinc Development Association, conference on hot drip galvanizing 108
 Zinc pressure die castings (trade publication) 808
 Zinc purification process and plant 640
 Zip Code Directory 117
 Zircons and recovery automation 966
 Zlin 526 Trener trainer aircraft 626
 Zone Controls Ltd., air circuit-breaker 635
 Zytel 7000 glass-filled nylon resins 638