

INDEX

A

- AASTRUP, A., on dams built above non-resistant rock, 894
 Abattoir for Barbados, 736
 Abbott, Dr., Profilometer, 258; formation of Micrometrical Manufacturing Co., 258
 Abel, R. C., review of Hover Craft, 708; biographical note, 708
 Abetti, Dr. P. A., Project EHV manager, 85
 Ablative material (Martin Co.), 909
 Abrasive cutter (trade publication), 68
 — Grits, Macolaapp (Monks & Crane), 135
 — Medium, Aloxite, 586
 — Wear, laboratory testing for, 546
 — Resistance, studies of, 546-547
 — Wheel, Artifex (Finishing Aids and Tools Ltd.), 835
 Abroad, touring, take a tomato when, by R. S. Campbell, 799
 Absence from Work—Incidence, Cost and Control, 413
 Absenteeism, 413
 Abstracts, publication and use of, 719
 Abutments, rock, safety of, by L. Müller, 894
 AC circuit. See *Circuit*
 — Generators. See *Generators*
 — Motors. See *Electric motors*
 Accelerator, electrostatic, 488
 — Linear electron, to be built at Stanford University, 488
 — Heavy ion experiments with, 832
 — LINAC, for Moscow Trade Fair (Vickers Research), 673
 — for weld examination (Mullard Equipment Ltd.), 191
 — X-band (Vickers), 673
 — Van de Graff, for Padua University (High Voltage Corp.), 488
 — Van de Graff, for Texas Science Research Institute, 488
 Accelerometer (Technical Ceramics Ltd.), 826
 Access Equipment Ltd., Clinch tube joints, 101
 Accidents, atomic, explosion at National Reactor Testing Station, Idaho, 148
 — Reactor, 355
 — Reactor, HRE-2, 355
 — Reactor, Marcoule, 355
 — Reactor in 1960, 355
 — Reactor, table of, 355
 — Reactor, SL.1, 355
 — Reactor, Teakettle, 355
 — Reactor, WTR, 355
 — Brooklyn air crash, 1
 — Building industry, 209, 381
 — Falling objects, statistics on, 824
 — Foot injuries, 513
 Accidents—How They Happen, 721
 — Motor car, diagonal safety belts, 718
 — Motorway, distribution, 625
 — Munich air crash, 1
 — Prevention Group, safety regulations, 381
 — Road, casualties, 856
 — during Christmas holiday, 9
 — Royal Society for the Prevention of. See *Royal*
 — Statistics for industrial, 556, 721
 — at Vauxhall Motor Co., 513
 — to young workers, prevention of (Ministry of Labour leaflet), 721
 — See also *Explosion*
 Accumulator, hydro-pneumatic (trade publication), 364
 ACD Bridge Co. Ltd., Forth Road Bridge, 10, 449; Severn Road Bridge contract, 379; purchase of trailers with protected wheels (Taskers), 651
 Acetal plastic for gear pump, Delrin (Du Pont), 507
 Acid corrosion in boilers, preventing, 782-783
 — Fumes, ducts for, 474
 — Storage tank, 474
 Acme plastics welding machine (H.F. Industrial Services Ltd.), 628
 Acrow (Engineers) Ltd., Acrow V-Formwork, 466-468
 Acru Electric Tool Manufacturing Co. Ltd., spring winding tool, 826
 Actuators, rotary (English Electric Co. Ltd.), 527
 Adams, Sir Grantley, opening of deep water harbour in Barbados, 733
 Adams Trainer machine (Lodge Equipment Ltd.), 912
 Adams, W. F., on safety aspects of motorway design, 625
 Adamson, C., on High Voltage Direct Current Power Transmission (review), 22
 Adapta-Charts Ltd., charts (trade publication), 112
 Adcora A3 polyamide cured coaltar/epoxy (E. & F. Richardson), 506
 — Coatings, 506. See *LETTER*, 136
 — P6 neoprene coating (E. & F. Richardson), 506
 — SP solventless epoxy coating (E. & F. Richardson), 506
 Add-On alarm unit (Thomas Industrial Automation Ltd.), 766
 Addison Electric Co. Ltd., induction tracer, 660
 Addison, E. N., on plant and customers' requirements, 566
 Addison, H., on An Engineer Looks at the Arab Revolts, 624; review of African Revolution, 746; biographical note, 748; review of Irrigation and Hydraulic Design, 675-676; biographical note, 676
 Addison Tool Co. Ltd., Bahler tube bending machine, 251; Cefmo cutting-off machine, 251; belt grinding machine, 319; Jungbluth friction saw, 527; circular saw, 559; on plant and customers' requirements, 566
 Additive oils, 521
 Adequate wiring, by W. F. Jarvis, 784
 Adhesion tester (Hoyt Metal Co.), 529
 Adhesives (trade publication), 808
 — (Atlas Preservative Co. Ltd.), 698
 — Impact, Evo-Stik 633 (Evode Ltd.), 633
 — Dry film (British Tego Gluefilm Ltd.), 421
 — Neoprene, to prevent bonnet shake (Du Pont), 855
 — Redux, for aluminium (CIBA (ARL), Ltd.), 587
 — to replace spot welding, 687
 Adkins, J. E., on Large Elastic Deformations and Non-Linear Continuum Mechanics (book), 496
 Adlard, E. R., research on gas analysis, 645
 Administration, Plain Words on, 344
 Admiralty station, Dounreay, Capt. H. A. Kidd appointed to command, 420
 Adrema (London) Group, Bradma addressing machines for Czechoslovakia, 159
 Advance Components Ltd., transistor tester, 598; power supply instruments, 891
 Advance Motor Supplies, expansion of export business, 905
 Advertising Publications Co. Ltd., exhibitions arranged, 685
 Advice to a Lecturer, by Michael Faraday (book), 464
 Aeberli, A. E., on Deriaz reversible pump-turbine, 228
 AEC Ltd., vehicle order from South Africa, 777
 AEC Vehicles (SA), order position, 429
 AEI Appliances Ltd., formation of, 17; to direct activities of AEI Hotpoint and AEI Gala, 17; export organization, 17; Lord Chandos appointed chairman, 17; R. C. Wood appointed managing director, 17
 AEI-Birlec Ltd., continuous casting equipment for Ley's Malleable Castings Co. Ltd., 202; electric furnace, 555
 AEI-Davy United Steelworks Automation Unit, formation of, 533
 AEI Electronic Apparatus Division, miniature silicon diode, 41
 AEI Engineering, 262
 AEI-Gala Ltd., overseas sales of AEI-Hotpoint Supermatic washing machines, 328
 AEI-GRS, exhibit at Rand Show, 465
 AEI-Hotpoint Ltd., gas fired stoving plant installed (Parkinson Cowan), 203; supermatic washing machine, 326-328
 AEI Marine Dept., dryer, 352
 AEI Plastics (Aldridge) Ltd., polyethylene pattern letters, 551
 AEI Radio and Electronic Components Division, Loudspeakerphone office communicator, 384
 AEI. See also *Associated Electrical Industries*
 Aerial delivery packs, honeycomb as impact absorber, 90
 — Survey of Skelmersdale new town area (Fairley Air Surveys Ltd.), 673
 — System, corona rings for, 205
 Aero Controls Ltd., pipeline couplings to eliminate expansion joints, 461
 Aero-engine. See *Aircraft engine*
 Aero-Thermodynamics and Flow in Turbo-machines, by M. H. Vavra (review), 110
 Aerobee-Hi rockets, 899
 Aerodynamics for Engineering Students, by E. L. Houghton and A. E. Brook (book), 24
 — Research at NPL, 709
 Aerograph-DeVilbiss Co. Ltd., spraying urethane foams for insulation, 438
 Aerojet-General Nucleonics, ML-1 atomic reactor, 388; cores for USAEC gas cooled reactor experiment, 223
 Aeromarine Ltd., Electro-Clock elapsed time indicator, 826
 Aeronautical exhibition, international, Paris, 694
 Aeroplane. See *Aircraft*
 — engines. See *Aircraft engine*; *Turbine, gas*
 Aerostable suspension of Renault Dauphine car uses neoprene, 481
 Aerostyle Ltd., Megastraton electrostatic paint spraying plant, 571, 598; airless paint spraying plant, 767
 Aeroweb honeycomb, 90. See *LETTER*, 180
 — Production information sheet No. 1 (CIBA (ARL) Ltd.), 361
 Aesthetics, British journal on, 574
 AETR project. See *Atomic reactor, advanced epithermal thorium*
 African Revolution, by J. Cameron (review), 746
 Aggregate, concrete, specification and handling for large dams, 894
 — Lightweight, use of, by V. V. Stolnikov, 894
 — for roads from slag, 342
 — Specification based on Dokan Dam, by D. N. W. Earp, 894
 — for Warragamba Dam, by T. B. Nicol, 894
 Agincourt, HMS, historical note, 7
 Agricultural Credit Corp., 299
 Agricultural Engineers Association, export statistics for agricultural machinery, 159; meeting on exports, 201
 — Equipment, design and development in, 164
 — Future exhibitions on, 165
 Agricultural equipment industry, expansion and investment in, 167
 — External factors affecting, 165
 — Industry, forecast for 1961, 167
 — Industry, long term research in, 167
 — Industry, management and labour in, 166
 — Industry, plant and materials supply in, 167
 — Industry, production in, 167
 — Market trends in, 166
 — Outlook for 1961, 164-167
 — and Industrial Fair, European, Sweden, 181
 — Industry, intensive mechanization of, 299
 — Machinery exports, 159
 — Imported into Sweden, 181
 Agricultural Research Institute, on European Common Market, 761
 — Tractor. See *Tractor*
 Agriculture, ready mixed concrete for, 235
 — See also *Farm: Tractors*
 Agusta-Bell 204B helicopter aircraft, de Havilland Gnome engines for, 673
 Agusta Helicopter Manufacturing Co., on order to de Havilland Engine Co., for Gnome turbine engines, 17
 Aidas Electric Ltd., Sadia electric water heater, 699
 Air bearings. See *Bearings*
 — Bridge across Channel, 681
 — Clean, conference, proceedings of diamond jubilee international (National Society for Clean Air (book), 68
 — National Society for. See *National*
 — Year book, 870
 — Compressed. See *Compressed air; Pneumatic*
 — Compressor. See *Compressor*
 — Conditioner, Airtemp (Chrysler Airtemp Ltd.), 693
 — Velovent (Air Control Installations Ltd.), 528
 — Conditioning and fire precautions, 142
 — and refrigeration exhibition, International, 834
 — Swimming pool, 511
 — Unit, Airwell, 816
 — Unit, Guardaire (Winston Electronics Ltd.), 816
 — Units, packaged (Carlyle Air Conditioning & Refrigeration Ltd.), 403
 Air Control Installations Ltd., Velovent air conditioner, 528
 — Cylinders (Scovill Manufacturing Co., Schrader Division), 87
 — Ducts of Plasticell, 834
 Air Ministry, integrated air traffic control system, 478
 Air-O-Line pneumatic control unit, Batch (Honeywell), 826
 Air pollution. See also *Smog*
 — Control, symposium on (ASTM), 200
 Air Pumps Ltd., Travelair power pack compressor, 827
 Air Products (Great Britain) Ltd., liquid hydrogen production, 898
 — and rain, radioactive fall-out in, by D. H. Pierson *et al.*, 60
 Air Registration Board, longer overhaul life for Rolls-Royce Avon engines granted, 497
 — Route traffic control centre, IBM 650 RAMAC computer for data processing in, by H. R. Johnson, Jr., J. E. Erickson, J. E. Speers and J. O. Egloff, 479
 — Upper, 478
 — Safety, combined operations for, 478
 — Screws. See *Propellers*
 Air Trac drilling rig, Gardner-Denver (Wickman Ltd.), 145
 — Traffic control, computer aids for, 479
 — Control, future developments in, 478
 — Control, need for better, 1
 — Control system, integrated, 478
 — Growing volume of, 1
 — Transport, outlook for 1961, 160-163
 Airbrosse electric hand brush, Peugeot (Rudson Wood & Co. Ltd.), 848
 Aircraft, Airedale, on show at Coventry, 641
 — Armstrong Whitworth Argosy, 1
 — Atomic power for ramjet propulsion, 800
 — Propulsion for, USAEC suspends programme, 632
 — Avro 771, BS75 ducted fan engine for, 204
 — Avro-748, 1, 684
 — BAC One-Eleven (British Aircraft Corp. Ltd.), 683
 — Beagle-Auster Airedale, 684
 — Blind landing, development of British Visual Guide Path Indicator System, 533
 — Bristol Britannia, order from Ghana Airways, 233
 — British Aircraft Corp. type 107, BS75 ducted fan engine for, 204
 — British, presenting in Paris, 684
 — C160 Transall, France, Britain and West Germany co-operate on, 113
 — C160 Transall, Nordavia and Weser and Hamburger co-operate on, 113
 — C160 Transall, Rolls-Royce engines for, 113
 — Caravelle (Sud Aviation), 429
 — Caravelle, flight simulator of, for Alitalia Air Line (Redifon), 801
 — Carrier *Enterprise*, reactor critical, 192
 — *Hercules* renamed *Vikrant* for Indian Navy, 429
 — *Vikrant* commissioned for Indian Navy, 429
 — Comet, Olympic Airways place repeat order, 465
 Aircraft Components Ltd., historical note, 694
 — Components, testing for life on, 502
 — Dart Herald, 1
 — Dart Herald, for Maritime Central Airways (Handley Page Co.), 265
 — Dart Herald, for Nordair (Handley Page Co.), 265
 — Dassault Mirage III, first flight of, 429
 — de Havilland Dove 8 for J. C. Bamford (Excavators) Ltd., 257
 — DH125 (de Havilland Aircraft Co. Ltd.), 577
 — Engine, Avon jet, longer overhaul life for (Rolls-Royce Ltd.), 497
 — Avon jet, for Mirage III aircraft (Rolls-Royce), 429
 — Conway jet, for VC10 aircraft (Rolls-Royce Ltd.), 233
 — Gnome, for Boeing-Vertol 107 and Agusta-Bell 204B helicopters (de Havilland Engine Co.), 673
 — Gnome turbine (de Havilland), 17
 — Gyron Junior, trial flight of Javelin aircraft with (de Havilland), 269
 — Industry, exports of, 133
 — Leonides (Alvis Co.), 61
 — Lift/thrust, Bristol Siddeley Pegasus turbofan, 710
 — Lift/thrust, for VTOL aircraft, 710-711
 — Pegasus, for VTOL aircraft, Bristol Siddeley, 684
 — Propeller turbine, for light aircraft (Rover Co. Ltd.), 293
 — Rear mounted, advantages of, 882
 — Spey, for BAC One-Eleven aircraft (Rolls-Royce Ltd.), 683
 — Spey, development of (Rolls-Royce Ltd.), 787
 — Starter, steam operated (AEI Ltd.), 403
 — Tyne, for C160 Transall aircraft (Rolls-Royce Ltd.), 113
 — Engineering workers, rejection of wage increase, 9
 — Executive, jet engine, 577
 — Export sales, 541
 — Gloster Javelin, trial flight with de Havilland Gyron Junior engines, 269
 — Hawker VTOL, P1127, progress report on, 461
 — Helicopter, Agusta-Bell 204B, de Havilland Gnome engines for, 673
 — Boeing-Vertol 107, de Havilland Gnome engines for, 673
 — in Royal Navy, 273
 — S64 Sikorsky skycrane (United Aircraft Corp.), 320
 — Hovercraft. See *Hovercraft*
 — Industry, Paper Protection Mask, 667
 — Jane's all the world's, by J. W. R. Taylor (book), 396
 — Landings, automatic, with Para-Visual Director (PVD) equipment, 402
 — Light, propeller turbine for (Rover Co. Ltd.), 293
 — and missiles, manufacture of, by M. P. Guibert (review), 706
 — Navigation, moving display map for, 852
 — Noise tests on, 377
 — Noratlas to be replaced by C160 Transall aircraft, 113
 — NX-2, nuclear powered, tests on, 16
 — Outlook for 1961, 34, 122-125
 — Para-Visual Director (PVD) equipment for (Smiths Aviation), 402
 Aircraft Porous Media Inc., filter assemblies, 188
 — Propeller fatigue, 503
 — Propeller test rig, 503
 — Servicing anytime anywhere, 694-695
 — Short SC.1, 684
 — Short SC5 (Short Bros. & Harland Ltd.), 683
 — Short VTOL, model of, 684
 — Show at Coventry (W. S. Shackleton (Aviation) Ltd.), 641
 — Spitfire: story of a famous fighter, by B. Robertson (review), 23
 — Structures, introduction to the theory of, by D. Williams (review), 157
 — Supersonic airliners, studies on, 820
 — Problems in, conference on, 761
 — Terrier, on show at Coventry, 641
 — Undercarriage fatigue, 502
 — Undercarriage testing, 502
 — Vickers Vanguard, 1
 — Vickers VC10, Conway jet engines for, 233
 — Vickers VC10, details of, 882-883
 — Vickers VC10, English Electric constant speed generator drives for, 809
 — Vickers VC10, order from BOAC, 233
 — Vickers VC10, order from Ghana Airways, 233
 — Vickers Viscount, All Nippon Airways, 465, 873
 — Vickers Viscount, order from Ghana Airways, 233
 — VTOL, Bristol Siddeley Pegasus engine for, 684
 — VTOL, commuter carrying capacity of, 241
 — VTOL, lift/thrust engines for, 710-711
 — War planes of the second world war: fighters, by W. Green (review), 23
 — X15 rocket, re-entry nose cone for (Northrop), 41
 Airedale aircraft, Beagle-Auster, 684
 — on show at Coventry, 641
 Airfields and roads overseas, use and control of vegetation on, by K. E. Clare, 829
 Airflow buffing mops (W. Canning & Co.), 586

- Airmix powder mixer (Wm. Gardener & Sons (Gloucester) Ltd.), 692
- Airport, Baghdad international, 888
- Brussels, Marconi radar units for, 609
 - Civil, operating losses, 159
 - Kuwait international, 888
 - Oxford, new control tower, 833
- Airtemp air conditioner (Chrysler Airtemp Ltd.), 693
- Airwell Co., air conditioning unit, 816
- Aitken, Sir Robert, on Birmingham University, 689
- Aiton & Co. Ltd., exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519
- Akimenko, A. D., on Continuous Casting of Steel in Commercial Use (book), 576
- Akroyd, T. N. W., on failure mechanism of saturated concrete, 658-659
- Alarm, fire, in BBC Television Centre, 402
- Colarm (Walter Kidde Co. Ltd.), 352
 - Overhead line (trade publication), 200
 - Switch (AEI Ltd.), 190
 - Unit, Add-On (Thomas Industrial Automation Ltd.), 766
- Albu, A., on modernization needs railwaymen. See LETTER, 92; on how hasty innovation caused disaster, 183; review of Short History of Technology, 395; biographical note, 396; on making small arms in Pakistan, 853
- Alcan of Canada, aluminium busbars for Komati power station, 618
- Alcan Industries Ltd., equipment for Thames crossing of supergrid, 52; Noral 28S alloy for lens mounts, 179; high purity aluminium (trade publication), 264; aluminium roof for Weeton reservoir, 321; aluminium for pontoon for Esso at Milford Haven (Whittingham & Mitchell), 343; aluminium suspension clamp, 507; Noraltrace traced pipework, 550; Noralduct transformer coolers, 803; Noral 3s alloy tubes for heat exchanger, 867
- Alcan (UK) Ltd., aluminium in the home, 130; aluminium for cables (trade publication), 640; covered hopper railway wagons of aluminium, 717
- Alcol Holding Pty. and subsidiaries, bought by Metal Industries Ltd., 397
- Alcon Thames centrifugal pump (Arthur Lyon & Co.), 826
- Alcosa vacuum pump (William Allday & Co. Ltd.), 145
- Alder, R. B., on Electromagnetic Field, Energy and Forces (review), 297-298
- Alders (Tamworth) Ltd., variable speed paper machine drive installed (Crompton Parkinson and Brookhirst Igranite Ltd.), 334
- Alers Hankey, J., screening for busbars at Komati power station, 618
- Alfa Romeo Giulietta Sprint Speciale motor car, 329
- Algebra, Boolean, and its applications, by J. E. Whitesitt (book), 808
- Alitalia Air Line, Caravelle flight simulator for (Redifon), 801
- All Nippon Airways, Viscount aircraft for, 465, 873
- All-Union Chamber of Commerce, Russian, sponsorship of British Trade Fair, Moscow, 705
- Allday, William, & Co. Ltd., Alcosa vacuum pump, 145
- Allen, Edgar, & Co. Ltd., *Trackwork Engineering*, 765
- Allen, P. W., & Co. Ltd., spot light, 353; magnifier, 444; viewer, 766
- Allen-Stoekicht gear units for CEGB (W. H. Allen, Sons & Co.), 429
- Allen, V. L., on Trade Unions and the Government (review), 363
- Allen, W. D., on Neutron Detection (review), 396
- Allen, W. H., Sons & Co., Allen-Stoekicht gear units for CEGB, 429; turbo-alternator for Rhodesian Triangle Sugar Estates, 809
- Alley Compressors Ltd., Alley air compressors, 763
- Allied Electronics Ltd., Altron power supply, 383
- Alloy, lightweight, for space engineering, 613
- Alloy Metals Review*, 274
- Outlook for 1961, 70-73
 - of precious metals, table of, 210
 - of precious metals, uses in brazing, 210-211
 - Steels (trade publication), 808
 - See also under specific alloy types
- Aloxite abrasive medium, 586
- Alpha active materials, apparatus for determining the mechanical properties of, M. J. Notely and P. M. French (paper), 456
- Alshawi, Major General M., on Basrah Petroleum Co., 25
- Alternator sets, diesel, National/Brush for Machinoimport (Hawker Siddeley), 809
- for transport vehicles, the application of, by Dr. W. D. Sutherland, 492
 - Turbo, for Rhodesian Triangle Sugar Estates (W. H. Allen & Sons), 809
 - See also *Generator*; *Turbo*
- Altron power supply (Allied Electronics Ltd.), 383
- Alumina ceramic (trade publication), 808
- Aluminised asbestos curtaining material (Turner Bros. Asbestos Co. Ltd.), 243
- Aluminium (trade publication), 808
- and aluminium alloys, inspection and testing procedure for, BS L100 (BSI), 407
 - Brazing paste (Eutectic), 135
 - Busbars for Komati power station, 618
 - — Large, pass tests, 618
 - — Testing for Komati power station, 618
 - for cables (trade publication), 640
- Aluminium Co. of America, transmission towers for GEC "Project EHV," 11; aluminium furniture designs, 130
- Aluminium Co. of Canada Ltd., aluminium railway wagons with covered hoppers, 717
- Aluminium Co. Ltd., transformer coolers from integral sheet, 803
- Aluminium compounds, US Bureau of Standards research programme on, 269
- Aluminium Corrugated and Troughed Sheet* (brochure), 47
- Aluminium Courier*, 207
- Aluminium Development Association, *Aluminium Corrugated and Troughed Sheet*, 47; *Aluminium Courier*, 207
- Extrusions (trade publication), 298
 - Foil for cooking, 207
 - for food packaging, 207
 - Furniture, 130
 - Heat exchanger (Wellington Tube Works), 867
 - High purity (trade publication), 264
 - in the home, 130, 207
 - Honeycomb (trade publication), 808
 - — (CIBA), 90-91
 - — Doors (Otis Elevator Co.), 91
 - — Platens (Pasolds), 91
 - — Waveguides (Marconi), 91
 - Ladder (H. C. Slingsby Ltd.), 207
 - Launderers, Marinite used for, 770
 - and magnesium alloys, elevated temperature properties of (ASTM book), 110
 - Makes light work, 207
 - Mast for yawl *Manita* (British Aluminium), 47
 - Panels adhesive bonded (Bonallack Ltd.), 587
- Aluminium Plant & Vessel Co. Ltd., renamed APV Co. Ltd., 429
- Pontoon for Esso at Milford Haven (Whittingham & Mitchell), 343
 - Railway wagons with covered hoppers (Alcan (UK) Ltd.), 717
 - Roof for Weeton reservoir, 321
 - Sheet (James Booth Aluminium Co.), 587
 - Ships, fire protection for (Turners Asbestos Cement Co. Ltd.), 407
 - Stud welding tool (Crompton Parkinson), 399
 - Suspension clamp (Alcan Industries Ltd.), 507
- Aluminium-tin bearings for big ends (Glacier), 446
- Tracer pipes, 550
 - for trawlers, 275
- Alumino-silicate glass development, 551
- Alvis Co. Ltd., Alvis Leonides engine, 61; Royal Air Force and South African Air Force orders for Alvis fire crash tenders, 61; Stalwart cargo carrier, 61; demand maintained for Alvis 3 litre motor car, 61
- Always thorium plant, India, 725
- Alyn tube cutting machine (British Oxygen Co. Ltd.), 517
- Amalgamated Engineering Union, annual conference, 625; overtime work for members, 625; wage claim by, 625
- Amber Oils Ltd., silicone grease in aerosol pack, 343
- Ambuco Ltd., Waagner-Biro gas scrubber, 14; Ambuco Venturi fume cleaning plant, 890
- America. See *United States*; see also *Latin America*
- American Atomic Energy Corp., trials of Winston beryllium monitor, 905
- American Dayco Corp., testing radiator hoses to destruction, 21
- American Industrial Hygiene Convention, 905
- American Institute of Industrial Engineers, request for reports on research, 689
- American Machine & Foundry Co. Ltd., atomic reactor for Teheran University, 16; Master Slave manipulator, 103; swimming pool reactor for McMaster University, 725; atomic reactor for Lardarelle power station, 800; Automatic Pinspotter machine for ten-pin bowling, 889
- American Marc Inc., marine diesel engines, 594
- American Motors Corp., gifts to customers, 113
- American Nuclear Society, winter meeting of, 686
- American Rocket Society, meeting with Institute of Aerospace Science, 856
- American Society for Testing Materials, methods of physical and chemical testing of industrial water, 15; elevated temperature properties of aluminium and magnesium alloys, 110; symposium on Hydraulic Fluids (review), 157; use of radioisotopes for soil density measurements, 192; Symposium on Air Pollution Control (book), 200; Symposium on Newer Metals (review), 332; Symposium on Durability and Weathering of Structural Sandwich Constructions (book), 364; Symposium on Effect of Water-Reducing Admixtures and Set-Retarding Admixtures on Properties of Concrete (review), 462; Symposium on Durability and Weathering of Structural Sandwich Constructions (review), 806; Basic Mechanisms of Fatigue (review), 903
- See also *United States*
- Ames Crosta Mills & Co. Ltd., use of pvc bellows, 739
- AMF Atomics Inc., Tokai-Mura atomic reactor, 16; design of on-power atomic refuelling machine, 148; atomic reactor for Buffalo University, 456
- AMF Ltd., Tissuglas glass fibre tissue paper, 275; Maxim Aquavap evaporator, 651; Automatic Pinspotter machine for ten-pin bowling, 889
- Amigo Machine Co. Ltd., feed unit, 859
- Ammunition, rifle, 830
- Amosite asbestos, Caposite (Cape Insulation & Asbestos Products Ltd.), 519
- Ampere demand meter (Ferranti Ltd.), 444
- Ampex Great Britain Ltd., television tape recorder, 650
- Amplifier with low noise characteristics (Marconi), 400-401
- Maser, 401
 - X-ray image, Marconi, for Toronto hospital, 397
- Amstel Club, *How the Amstel Club Works*, 865; meeting at Zurich, 865; United Dominions Trust as member for UK, 865
- AMT (B'ham) Ltd., unit heads (trade publication), 24
- AMY automatic yarn monitor for linen industry, 813
- Analogue devices for network analysis, by P. G. Kendall and P. G. Parrot, 302
- Analysers, differential, 864
- Analysis, chemical, of cast iron and foundry materials, by W. Westwood and A. Mayer (review), 66
- Grundlagen der, by E. Landau (review), 364. See LETTER, 477
 - Rapid, of freshly mixed concrete, by C. D. Turton, 659
 - Spectrochemical (trade publication), 872
- Anatrol, an analogue on-line process control computer, by M. James and W. T. Lee (paper), 181
- Analytical techniques and remote handling of samples used in the processing of samples from HTGC loop irradiations, by P. E. Brown *et al.*, 520
- Anderson, A., on Astracon electronic tube, 236
- Anderson, Sir Donald, on liner *Canberra*, 753
- Anderton coal shearer and loader, 603
- Anderton Foundry Co. Ltd., Victoria Line underground railway, 414
- Andrews, W. H., on diffusion and absorption coefficients of beryllium, 696
- Angle Bay, Milford Haven ocean terminal for BP Co., 626, 633
- Anglesey, new factory for Midland Electrical Manufacturing Co., 217
- Wylfa, atomic power station, application to Ministry of Power for consent for, 288
 - Atomic power station, public inquiry into, 632
- Anglia motor car, 823
- Angus, George, & Co. Ltd., Bellofram diaphragm seals, 629
- Animated display device, Movotron (Technical Designs Ltd.), 851
- Ankobra bridge, Ghana, 765
- Annealing for quality and economy, 202
- Annunciator (Londex Ltd.), 692
- Ansaldo, negotiations with Euratom for ship's atomic reactor, 256; study of plans for atomic propelled tanker ship, 288
- Antarctic expedition, Australian. See *Australian*
- Antenna, by L. Thourel (book), 364
- Anthology of Houses, by M. Pidgeon and T. Crosby (book), 264
- Anti-Corrosion Manual, 1960 (review), 156
- Antisigma-minus hyperon, discovery of, 104
- Antitrust Laws of the United States of America, by A. D. Neale (review), 427-428
- Apelt, C. J., on Field Computations in Engineering and Physics (book), 496
- Apex Construction Ltd., Apex cutter mill, 12; drier, 57; Apex blending machine, 251; laboratory press, 253; vacuum driers (trade publication), 364; process equipment (trade publication), 364; exhibits at Leipzig Trade Fair, 641; sales to Leuna-Werke WV, 641; sales to Schleifmaschinen-Werke, 641
- Apex Marine Ltd., use of Kraft honeycomb in boatbuilding, 90; Ceabird Mk II boat, 90; Ceawren boat, 90; Ceacruiser boat, 90
- Apollo project (Martin Co.), 856
- Appleby-Frodingham Steel Co., ore handling plant ordered from GEC Ltd., 113
- Appliance, domestic, industry, poor sales for 1960, 309, 365
- Electric and industrial furnaces by V. Paschkis and J. Persson (book), 298
- Application des Gaz, Camping Gaz stoves and lanterns distribution through Camping Gaz International, 152
- Applicator for protection tapes (Gordon & Gotch), 739
- Apprentices, building, increase in, 185
- National, dinner, 689
- Apprenticeship schemes, 209
- APS Stechkin pistol, 830
- APV Co. Ltd., APV plate evaporator, 430-432
- Aqaba deep water port, 888
- Aqualeo oil fired immersion heater (Lion Stamping Co. Ltd.), 352
- Aquavap evaporator, Maxim (AMF Ltd.), 651
- Arab Revolt of 1955-1958: Divide and Lose, by Ionides (book), 624
- An engineer looks at, by H. Addison, 624
- Araldite epoxy resin (CIBA (ARL) Ltd.), 375
- Resin styling models (Austin), 855
- Arborite Co. (UK) Ltd., plastic laminates, 375
- Arborite Ltd., use of automated plastic laminating presses, 740
- Arc (BOC journal), 774
- Arc furnace. See *Furnace, electric*
- Arc Manufacturing Co. Ltd., welding machine, CO₂ process, 529; on welding equipment and customers' requirements, 568
- Welding. See *Welding*
- Archaeological societies, instruments required for, 476
- Archdale, James, biographical note, 702
- Archdale, James, & Co. Ltd., Preselect radial drilling machine, 702-704; historical note, 702; automatic platen machine for Ferranti Ltd., 841
- Architects, naval. See *Naval architects*
- Architecture, industrial, by J. F. Munce (book), 540
- Naval, basic, by K. C. Barnaby (book), 640
- Arcon Monitor Roof (Taylor Woodrow (Arcon)), 897
- Arctic microwave cooking oven (Lewispoint Holdings Ltd.), 240
- Ardleigh Engineering Ltd., thermostat, 527
- Argentina, UK export prospects in, 193
- Argentina, development of uranium deposits, 387
- IAEA experts to visit, 387; uranium ore processing, 387
- Argonaut atomic reactor for California University, 632
- Argonne National Laboratory, Model 8 Master Slave manipulator, 103; design of SL-1 atomic reactor, 148; shut-down of EBWR atomic reactor, 419
- Argosy aircraft, Armstrong Whitworth, 1
- Argus computer for Babcock & Wilcox, Ltd. (Ferranti Ltd.), 365, 366
- for ICI Ltd. (Ferranti Ltd.), 365, 366
- Argus computer in process control, by W. F. M. Payne, 181
- Argyris, C., on Understanding Organisational Behaviour (book), 608
- Arid zone hydrology, by Prof. H. Schoeller, 55
- Ariel Hotel, Foamglas roof for (Russell Diplock Associates), 698
- Ariel Motor Co., Ariel Leader motorcycle, 194-196
- Arithmetic gearbox (Mattersons Ltd.), 188
- Arm, mechanical, General Mills (General Mills Inc.), 103
- Armaments, design and development in, 34
- Future exhibitions and trade fairs on, 35
 - Industry, expansion and investment in, 37
 - — External factors affecting, 35
 - — Forecast for 1961, 37
 - — Long term research in, 37
 - — Management and labour in, 36
 - — Plant and materials supply in, 36
 - — Production in, 37
 - — Market trends in, 36
 - — Outlook for 1961, 34
- Armo Ltd., Idealarc submerged arc squirt welding machine, 416
- Armour Research Foundation, metal fibre seals, 475
- Arms, small, improved: army fire power, by R. M. Ogorkiewicz, 830-831
- in Pakistan, 853
- Armstrong, Richard M., licence agreement with Dicon SA de CV, 497
- Armstrong Whitworth Equipment Ltd., servo valve, 485
- Armstrong Whitworth (Metal Industries) Ltd., new equipment for roll production shops, 39; gyratory crushers (trade publication), 396
- Armstrong Whitworth, Sir W. G., Aircraft Ltd., Argosy aircraft, 1; orders placed for fire detection equipment, 769
- Army Fire Power: Improved Small Arms, by R. M. Ogorkiewicz, 830-831
- Arnot, W. D., on designer and writer, 552; on library minded engineers and scientists, 312; on national use of technical information, 719. See LETTER, 885
- Arrol, Sir William, & Co. Ltd., Forth Road Bridge, 10, 449, 451; bridge for Regents Canal Dock, 483
- Articles and Events service of ENGINEERING, 746
- Artifex abrasive wheel (Finishing Aids and Tools Ltd.), 835
- Artrite Ltd., new formulated resins, 773
- Arundel, L. L., on fast cutting with carbon dioxide coolant, 266-267
- Arup, Ove, & Partners, nuclear research centre for Oxford University, 832; roof of Smithfield Market, 863
- Asbestos, aluminized, curtaining material (Turner Bros. Asbestos Co. Ltd.), 243
- Amosite, Caposite (Cape Insulation & Asbestos Products Ltd.), 519
 - Based insulation material, Marinite (Marinite Ltd.), 770
 - Cement (trade publication), 264
 - Industrial applications, by D. V. Rosato (review), 263-264
 - Origin, production and utilization, by W. E. Sinclair (review), 263-264
 - Textiles (trade publication), 808
- Ascension Island, Nike-Zeus computer for, 269
- Asea, Västerås, atomic reactors for Marviken atomic power station, 16
- Ashmore, Benson, Pease & Co., agreement with Pennsylvania Engineering Corp., 25; furnaces for Broken Hill Pty. Co., 25; blast furnaces for Ford Motor Co., 201; fifty blast furnaces (trade publication), 576
- Ashwell, D. G., on Mathematical Tool-Kit for Engineers (review), 232
- Ashworth, D. S., review of Transformers and Generators for Power Stations, 806; biographical note, 808
- Asphalt, mastic, transporter for (Braham, Patterson & Benham Ltd.), 319
- Associated Bearing Co., formation of, 665; plant for India, 665
- Associated British Machine Tool Makers, Sir Greville Maginness resigns as Chairman, 348; E. Parkinson resigned from the board, 348; J. W. Butler elected chairman, 348
- Associated Cement Co. of India, member of AVB Co., 765
- Associated Commercial Vehicles, share capital of Transport Equipment (Thornycroft) bought, 299
- Associated Electrical Industries Ltd., export drive, 17; formation of AEI Appliances, 17; thermal generating unit for Australia, 69; oil circuit breaker, 87; appointed as electrical consultants to Indian Government, 109; generators for McKay Creek power station, 187; flow transmitter, 189; alarm switch, 190; distribution transformers for London Electricity Board, 233; high voltage tap changers for CEGB, 233; Ediswan RF power valve, 253; formation of British Space Development Co., 257; *AEI Engineering*, 262; control board for Russian tyre factory, 267; line protector, 279; W. D. Sinclair appointed manager of rectifier engineering, 397; Dr. J. C. Read appointed consultant on rectifiers, 397; steam aircraft engine starter, 403; exhibit at Rand Show, 465; electric locomotive for South African Railways, 465; exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519; profit statement, 533; position and prospects, 533; activities of, 533; possible loss on Berkeley atomic power station, 533; development of British Visual Glide Path Indicator System, 533; formation of AEI-Davy United Steelworks Automation Unit, 533; Easter School of, 556; on plant and customers' requirements, 566; on electrical equipment and customers' requirements, 568; formation of British Space Development, 585; Lord Chandos' statement awaited, 585; to form joint company with GEC Ltd., 601; electrical equipment for Philippines cotton mill,

- 609; position and prospects, 633; Lord Chandos' report, 633; export orders, 633; increased turnover, 633; steam condensers for CEGB, 665; exhibit at British Trade Fair, Moscow, 705; research arrangements with C. A. Parsons Co., 737; Channel cable to link UK and French grid systems, 753; turboelectric propulsion machinery for liner *Canberra*, 754; mine winding gear, 787; discussions at BEAMA export conference, 841; Walmsley Group order paper machine drives for Russia, 897; see also *AEI*
- Associated Electrical Industries (Manchester) Ltd., oil circuit breaker, 418
- Associated Electrical Industries (Rugby) Ltd., Machine Tool Drives (trade publication), 68; electronic equipment (trade publication), 608
- Associated Engineering Group, position and prospects, 61; capital expenditure programme, 61; overseas expansion, 61; increased turnover and profits, 61; subsidiaries of, 61; development programme, 61; overseas subsidiaries of, 61; trading results before tax, tables of, 61; associated companies, 61; purchase of Pistone Borgo, 61; purchase of Societe E. Demolin, 61; South African associated companies, 61; purchase of S.A.F. de Pistone Borgo, 61
- Associated Motor Cycles, position and prospects, 457; increasing sales, 457; formation of Indian Co., 457; trading profit, 457
- Associated Television, formation of British Space Development Co., 257; new studios opened at Elstree, 505; formation of British Space Development, 585
- Association of British Chambers of Commerce, sponsorship of British Trade Fair, Moscow, 705
- Association of Consulting Engineers, increase in membership, 888; annual report, 888; overseas work of members, 888
- ASTM. See *American Society for Testing Materials*
- Aston Martin DB4 motor car, 329; comfort and performance, 663
- Aston Martin Lagonda Ltd., to take over motor car manufacture from David Brown Industries Ltd., 61; take over operations of Tickford Ltd., 61
- Astra atomic reactor. See *LETTER*, 5
- Astracron electronic tube development (Westinghouse Electric Corp.), 236, 565
- Astronomy, dynamical, introductory treatise to, by H. C. Plummer (book), 464
- Radio, outlook for 1961, 74-77
- Spherical, compendium of, by S. Newcomb (book), 332
- Aswan High Dam, 624
- Hydro-electric scheme, 888
- Atkins, I. R., on New Survey of BBC Experimental Colour Transmissions (book), 364
- Atkins, W. S., & Partners, atomic energy centre at Dacca, 734; Durgapur steelworks, 735
- Atlantic crossings, pros and cons of, 585
- Atlantic Research Corp., laboratory mixing machine, 597; time and events sequencing apparatus, 175
- Atlas Copco (Great Britain) Ltd., air compressors, 253; Roughrider tractor compressor unit, 797
- Atlas digital computer, first production model (Ferranti Ltd.), 609
- Atlas Preservative Co. Ltd., adhesives, 698
- Atmospheric pollution. See *Air pollution; Clean air; Smog*
- Atomenergi, AB, atomic reactors for Marviken atomic power station, 16
- Atomic accidents. See *Accident*
- Activity in Scandinavia, 563-564
- Applications for valves (trade publication), 776
- Assembly, sub-critical, details of (Vickers-Armstrongs), 487-488
- Sub-critical, details of (Societe Anonyme de Machines Electrostatiques), 487-488
- Sub-critical, Uranie II, 487
- Building programme in Norway, 564
- Clock, 705
- Atomic Energy of Canada Ltd., Gammacell irradiator, 727
- Energy Centre, Dacca, 734
- Atomic Energy Co. of Sweden, formation of, 563; activities of, 563
- Engineering, Marine and Welding Exhibition, 519, 527, 559, 629
- in North Chili, by E. Friedmann M., 148
- Peaceful uses of, agreement between Russia and UKAEA, 800
- Peaceful uses of, photographic exhibition on (Ilford Ltd.), 192
- Programme for Czechoslovakia, 15
- Atomic Energy Research Establishment, Harwell, Dr. R. Spence appointed deputy director, 632; Dr. W. Wild appointed head of chemistry division, 632; Wigner energy release carried out on BEPO atomic reactor, 632; investigations into neutron spectrum measurements, 696
- Engineers and physicists, University training facilities for, 104
- Training of, role of computers in, 864
- Explosives, development for peaceful purposes, 224
- Fuel, beryllium canning of, 725
- and canning, 664
- Cartridge, burst, principles of detection of, by F. T. Law, 599
- Ceramics as, 368
- Cermets as, 369
- Coated particle research, 455
- Comprehensive study of, 368-369
- Element, burst, detection of radioactivity from, 599
- Elements, course on at Imperial College, 420
- Elements, irradiated, new machining method, 104
- Elements, neutron temperature in reactors when moderator is closely associated with, by R. G. Freemantle and J. S. Harper, 455
- Atomic fuel element skips, protection of, 506
- Elements for superheating, 59
- Elements, types of failure, 599
- ENGINEERING research report on, 368-369
- for Finland, US to supply free of charge, 104
- Natural uranium, USAEC send to Turkey, 456
- Testing (South African Atomic Energy Board), 609
- Thorium as, by U. M. Staebler, 896
- Uranium alloys as, 368
- Uranium carbide as, 369
- Uranium dioxide as, 368
- Uranium metal as, 368
- Atomic Industrial Forum Inc., C. H. Weaver elected president, 148
- Insurance protection, new formula for calculating, USAEC, 896
- Materials, US view on, 781
- Mechanisms of Fracture (Massachusetts Institute of Technology) (review), 903
- Planning in Brazil, 147
- Plant, Egypt's long range plans for, 832
- High power density prototype, agreement between USAEC and Consumers Power Co. and GEC Ltd. (US), 192
- Power in Brazil, the case for, 147
- Commonwealth investment in, 725
- Facility, Hallam, 420
- Atomic Power Group, contract for Sizewell atomic power station, 287, 288
- Latin America survey of, 147
- Plant, Humbolt Bay, 419
- Plant, Pathfinder, 419
- Plant, PM-3A, for McMurdo Sound (Martin Co.), 16
- Plant of 700 MW(e) to be built in US, 632
- Plant for USAEC, design by Atomics International, 256
- Plant, Valle de Torbalina, Centrales Nucleares del Norte apply for permission to establish, 456
- Programme, civilian, in the US, 419
- for ramjet propulsion, 800
- Station, Anglesey, public inquiry into, 632
- Station, Australia to consider, 832
- Stations (Babcock & Wilcox Ltd.), 697
- Station, Berkeley, CEGB open atomic laboratories at, 768
- Station, Berkeley, possible loss by AEI Ltd., 533
- Station, Berkeley, progress report, 287
- Station, Bohunice, Czechoslovakia, 15
- Station, Bradwell, first reactor in operation by August, 832
- Station, Bradwell, progress report, 287
- Station, Dungeness, progress report, 288
- Station, Hamstead, Isle of Wight, no news available, 288
- Station, Hinkley Point, model of, 850
- Station, Hinkley Point, progress report, 288
- Station, Hunterston, progress report, 288
- Station, Hunterston, X-ray check of reactor pressure vessels, 235
- Station, India to build second, 664
- Station, Marviken, approval sought for, 16
- Station, Obrigheim, new company formed to build, 256
- Station, Oldbury, tenders invited for, 288
- Stations, outlook for 1961, 114-117
- Station, Shippingport, 419
- Station, Sizewell, contract awarded to Atomic Power Group, 287, 288
- Station, Sizewell, work commenced, 520
- Stations, steam turbines for, 295
- Stations, table of, 287
- Station, Trawsfynydd, progress report, 288
- Station, Trawsfynydd, valves for burst slug detection system (Plessey Nucleonics Ltd.), 788
- Station, Trombay, Canada gives reactor headers as gift, 256
- Station, Voronezh, first turbine completed, 192
- Station, Wylfa, Anglesey, application to Ministry of Power for consent for, 288
- Steel for, cinema film (USAEC), 256
- Projects, USAEC investment in, 419
- aircraft carrier *Enterprise*, criticality achieved in reactor, 192
- Aircraft, NX-2, tests on (Convair), 16
- Aircraft, USAEC suspends programme for, 632
- Ships, Euratom projects on, 768
- Ships, general safety requirements for, 520
- Ships, general technical conditions for (Bureau Veritas publication), 520
- Ships, projects for, submissions to Euratom by France, Germany, Holland and Italy, 16
- Ship *Savannah*, reactor to operate at 10 per cent full power, 148
- Ship, speculation on in UK, 356
- Submarine, contracts for second for UK, 224
- Submarine, electrical propulsion machines for (Laurence, Scott & Electromotors Ltd.), 488
- Submarine *Dreadnought*, plastic coated lead bars as ballast (Plastic Coatings Ltd.), 135
- Submarine, *George Washington*, underwater record, 224
- Submarine *Sam Houston* launched, 388
- by M. W. Thring (book), 298
- Prospects in Finland, report on, 16
- Radiation. See *Radiation*
- Reactor, accidents. See *Accidents*
- Advanced epithelial thorium, critical assembly (Atomics International), 224
- Advanced gas cooled, Windscale to be completed in July, 664
- Aqueous homogeneous, 420
- Argonaut, for California University, 632
- Astra. See *LETTER*, 5
- BEPO, for production of tellurium, 243
- Atomic reactor, BEPO, Wigner energy release carried out, 632
- Beryllium oxide, experiment, USAEC assign design, construction and test to General Atomics, 256
- Big Rock Point, 419
- Boiling water, 419
- Boiling water, for Pacific Gas & Electric Co., 800
- Bonus, 59, 419; under construction in Puerto Rico, 148
- Borax IV, 896
- Borax V, 59, 419
- BR3 Mol, 768
- for Buffalo University, 456
- Burst slug detection equipment, 599
- Calder Hall type, plutonium recycle in, by L. J. Barbieri *et al* (paper), 455
- Calder Hall, twelve months continuous operation completed, 256
- Camp Century, shut down ordered, 256
- Canada-India, 725; opening ceremony and address, 356
- CANDU, 725
- Caroline Virginia tube, 420
- Control rod drives, improved technique for, 632
- Critical safety in, 355
- Data processing equipment for (Sunvic Controls Ltd.), 600
- in Denmark, table of, 564
- Detection system for burst slugs, 599
- Diphenyl (Marquardt Corp.), 800
- Dresden, shut down due to breakage, 224
- Drum type precipitator for (Intertechnique), 599
- Dual purpose, USAEC to build, 664
- EBR-1, 420
- EBR-2, 420
- EBWR, 419; shut down at Argonne National Laboratory, 419
- Elk River, 59, 896; criticality expected, 419
- ESSOR, 388
- Euratom to participate in costs of, 768
- Experimental gas cooled, 420
- Experimental, outlook for 1961, 114-117
- Fast burst, project of USAEC, 224
- Fast, Dounreay, criticism of, 664
- Fast, Dounreay, gas entrainment problems in, 664
- Fast, Dounreay, problems encountered in, 664
- Fast, pulsed neutron method to aid calculations, 696
- Fast sodium cooled, 420
- Fuel cycles of, comparison between thorium-uranium 235 and uranium 238-uranium 235, by T. R. S. Shanstrom, 896
- Future systems for, 600
- Gas cooled, 420
- Gas cooled, experiment at National Reactor Testing Station of USAEC, 223
- Gas entrainment in, 664
- for Germany, contract awarded (North American Aviation Inc.), 104
- Gift from Canada to India, 148
- Gift from Curtiss-Wright Corp. to Pennsylvania State University, 455
- Harwell school courses on, 832
- Haskell Canyon, 419
- Heavy water, 420
- Hector, for Winfrith Heath (Fairey Engineering Ltd.), 104
- High temperature, Australian Atomic Energy Commission plans for, 488
- HRE-2, accident, 355
- Instrumentation in, 191
- Investigations, 896
- Irradiation, oxidation of uranium-dioxide by water vapour under, by B. R. Harder, *et al*, 60
- in Israel, progress report on, 192
- Jason, future uncertain, 632
- JEEP in Norway, 563
- Kahl/Main, 768
- Kiwi-A3, completion of, 388
- LAMPRE-1, criticality achieved, 664
- for Lardale power station (Mitchell Engineering and American Machine & Foundry Co.), 800
- License granted to Pennsylvania State University, 16
- License granted by USAEC for Washington State University, 388
- License for National Aeronautics and Space Administration, 632
- Low power, Petten, tender issued for building to house, 256
- Low temperature process steam, 832
- Lynchburg Source, request to modify from Babcock & Wilcox Co., 800
- for Malaya University, 16
- Marcoule, 768; accident, 355
- Maritime gas cooled, critical experiment, safety fuse for, 16
- Materials, properties of, and the effects of radiation damage, conference, 388
- ML-1, critical, 664
- ML-1, delivery to National Reactor Testing Station, 388
- Moata, critical (Australian Atomic Energy Commission), 632
- Molten salt, 420
- Molten Salt experiment, use of thorium in, 896
- Nestor, criticality achieved at Winfrith Heath, 456
- Neutron temperature in when moderator is closely associated with fuel elements, by R. G. Freemantle and J. S. Harper (paper), 455
- in Norway, table of, 564
- NPD, 725
- NRU, 725
- NRX, 725
- Nuclear merchant ship, experiments with by Babcock & Wilcox Co., 800
- Nuclear superheat, 419
- for nuclear superheating, by R. E. Rice and M. Norvick, 59
- OCRE, 725
- OMRE, 419
- Organic cooled, 419
- Atomic reactor, organic cooled and moderated commercial interest in, 456
- Organic cooled, prototype, 420
- Organic moderated and cooled, design for Baden Wurttemberg Power Plant Planning Association given to Atomics International, 632
- for Ohio State University (Lockheed Aircraft Corp.), 104
- Pathfinder, 59
- in Philippines, 104
- Plants, superheat, under construction in US, table of, 60
- Pluto, physics measurements during the commissioning of, by C. J. England *et al*, 224
- Power, Euratom projects, 768
- Power, schedules by Euratom, 768
- Pressure vessel welds, Pantak x-ray units to check, 235
- Pressurised water, 419
- Pressurised water, USAEC terminate, 456
- Pressurised water, USS *Enterprise*, 192
- Process tubes of Zircaloy 2, 60
- R1, Stockholm, 563
- RC-1 undergoing modifications at Casaccia Nuclear Centre, 488
- Research, for London, Liverpool and Manchester Universities, 753
- Resonance absorption in, L. Dresner (book), 112
- S2DS, now critical, 664
- Safety aspects for Philadelphia Electric Co. proposed construction, 224
- Savannah River, 420, 909
- Shields at Stillington (Whessoe Ltd.), 512
- Ship, Euratom contracts and negotiations for, 256
- Ship, *Savannah* to operate at 10 per cent full power, 148
- Silicon carbide for, by Dr. G. H. Buter (paper), 455
- Simulators, 864
- Simulator, Elliott ND481, for Berkeley Nuclear Laboratories, 864
- Simulator, experiments that may be performed on, 864
- Simulators (General Precision Systems Ltd.), 864
- Simulators, hire of (IBM Data Centre), 864
- Simulator (Miles Highvoltage Ltd.), 864
- Simulator (Short Bros. & Harland Ltd.), 532
- Simulator, Simlac, for Calder Hall Operations School (Short Bros. & Harland), 864
- Simulator (Vickers Armstrongs), 864
- Simulator, Vickers Mark IIa block diagram of, 864
- Site criteria (USAEC), 456
- SL-1, accident and explosion in, 355
- SL-1, bowing of boron strips in, 355
- SL-1, committee to consider future use of, 664
- SL-1, control rods sticking, 356
- SL-1, explosion at Idaho, 148
- SL-1 high power operation of, 356
- SL-1, loss in shutdown reactivity margin, 356
- SL-1, radiological units and measurements, 356
- SL-1, severe damage to core of, 388
- SL-1, use of boron as burnable poison, 355
- Small pressurised water, 59
- SNAP 2 Development System, now critical, 664
- Sodium, experiment, 896
- Spectral Shift Control, USAEC appoint Babcock & Wilcox to study, 664
- Spectral shift controlled, thorium cycle in, by H. C. Edlund, 896
- Supercriticality in, 355
- Superheat development, GEC Ltd. (US) to build, 256
- for superheated steam generation, 59
- Superheating, by R. E. Rice and M. Norvick, 59
- Superheating, Russian, 60
- Superheating, US, 60
- in Sweden, table of, 564
- Swimming pool, for McMaster University, 725
- Tape type precipitators for, 599
- Teakettle, accident at, 355
- for Teheran University (American Machine & Foundry), 16
- Thermal sodium cooled, 420
- Thorium (Consolidated Edison Co.), 419
- Thorium, Consolidated Edison, influences of thorium on the design of, by H. S. Barringer and J. C. Deddens, 896
- Thorium, fuel element assembly for (Consolidated Edison), 896
- Thorium, fuel element loading of, 896
- Thorium, power distribution in, 896
- Tokai-Mura, US to aid Japan with, 16
- Tory II A-1, first power test, 800
- Triga, for Bandung Institute of Technology, US to aid, 800
- Triga, for Columbia University, 632
- Triga, for Cornell University, 800
- Triga, simplified instrumentation for (General Atomics), 519
- at Trombay, India, opened, 148
- for Tuwaiha proposed, Russian report on, 256
- Universities applying for grants to build, 104
- in universities, by Dr. N. S. Grassam, 60
- in universities, USAEC funds for, 60
- in US, 419
- Valecitos boiling water, 419
- for Venezuela under construction, 147
- Vera, critical, 356
- Vera, UKAEA release of information on, 631
- Water moderated, in Denmark, 564
- Windscale, beryllium cladding programme abandoned, 664
- Windscale, charge-discharge machine for, 519

- Atomic reactor, Windscale, failure detection equipment in, 600
 — WTR, accident in, 355
 — Yankee Atomic Electric Co., 419
 — ZEEP, operation of, 725
 — Zero Power, at Cornell University, USAEC to provide fuel for, 800
 — Refuelling machine, on-power, design of (AMF Atomics), 148
 — Research centre, Latvia, 104
 — Centre, Oxford University, 832
 — CERN physicists to study in Russia, 348
 — Expansion of, 800
 — Photographic emulsions used in (Ilford Ltd.), 192
 — Rocket engine, development of, 140, 800
 — Engine, proposals for research on, 388
 — Steam supply system for power generation, USAEC invite utility companies to participate, 192
 — Structures, research on, 832
 — Superheating, economic attractions of, 59
 — Technique, use of air and gas bearings in, 255-256
 — Training in Prague, 15
 — Waste problems in France, 16
 Atomics International, E. D. Needham appointed director, 148; critical assembly for advanced epithermal thorium atomic reactor, 224; design of atomic power plant for USAEC, 256; design of organic moderated and cooled reactor for Baden Württemberg Power Plant Planning Association, 632; superconducting magnetic alloy, 909
 Atul Products, Ltd., expansion and training programme, 577
 Audco plug valve (Audley Engineering Co. Ltd.), 353
 Audley Engineering Co. Ltd., Audco plug valve, 353
 Auriema, Ad., Inc., Eclipse "Whispering Power" packaged boiler, 12; high fidelity pick up, 220; RES temperature controller, 318
 Auster Aircraft Ltd., acquired by BEAGLE, 833
 Austin Hopkinson & Co. Ltd., compressed air motors, 763
 Austin Motor Co. Ltd., disk brake conversion set for Austin-Healey Sprite motor car (Donald Healey Motor Co.), 197; estimate of replacement cars required for UK, 365; Gypsy motor vehicles ordered by film companies, 497; industrial gas-turbine engine, 417; development of gas turbine vehicle engine, 424; automatic gear manufacturing machines installed (Churchill), 458; "Seven" motor car towing Nymph caravan on continental tour, 497; Healey motor car restyled and power increased, 760; styling models in Araldite epoxy resin, 855
 Australia, atomic power station, 832
 — Atomic programme of, 725
 — Beryllium supplies in, 488
 — Ferrous forging in, 741
 — Graduate immigrants wanted, 9
 — Imports, 577
 — Imports of UK cars, 365
 — Internal credit squeeze, 577
 — McKay Creek power station in service, 187
 — Migrant, by J. M. Giles (review), 746-747
 — Motor car sales tax, 365
 — Steelworks projects in, 741
 — Supertanker berth at Sydney, 735
 — Tax concessions, 429
 — Thermal generating unit for (AEI Ltd.), 69
 — Trade missions, 429
 — Trading balance, 577
 — Australian Antarctic Expedition, oil, depot at Mawson Base (BP), 25
 — Australian Atomic Energy Commission, plans for high temperature atomic reactor, 488; Moata atomic reactor critical, 632; creation of, 725
 — Australian Iron & Steel Co., orders placed with Head Wrightson (Australia) Pty. Ltd. for plant, 541; tinplate cut up line for, 741
 — *Australian Mechanical Engineering*, 741
 — Australian Motor Industries Ltd., sound trading conditions, 299; sales increase, 299
 — Australian National Antarctic Research Expedition, oil depot at Macquarie Island (BP), 25
 — Austria, Contracts with Russia, 785
 — Export Council for Europe mission to, 549
 — Increase in industrial production, 681
 — Pathfinder Mission for, 681
 — Authors, notes for (Iron & Steel Institute publication), 494
 — Auto Safety Devices, motor car safety belts, 261
 — Auto-Unit marine water pressure set (Megator Pumps & Compressors Ltd.), 445
 — Autoclean Road Tests (review), 462-463
 — Autoclean Ltd., motor car safety belts, 261
 — Autodyne, by O. Benedikt (book), 428; (review), 775
 — Automatic machine (trade publication), 68
 — — (Rockwell Machine Tool), 354
 — — Single spindle, Bechet (Dowling & Doll Ltd.), 14
 — Automatic Pinspotter machine for ten-pin bowling (American Machine & Foundry Co.), 889
 — Automatic Telephone & Electric Co. Ltd., Branch Exchange (trade publication), 112; exhibit at Moscow British Trade Fair, 697; Inductorphone, 697
 — Automatic Vending Exhibition, 721
 — Automation, business (Block & Anderson Ltd.) 706
 — — and computation, British conference on. See *British*
 — Automobile. See *Motor car*
 — Automobile Association, touring dept., 799
 — Automotive Engineers, Society of. See *Society*
 — Autonomics, research at NPL, 709
 — Autopak arc welding equipment (Rockwell Ltd.), 203
 — Autopoint time switch (Venner), 88
 Autoradiography of detector foils, neutron density measurement by, by A. Ertaud and P. Zaleski, 388
 Autosafe Ltd., nylon safety lap belt for motor cars, 179
 Autotest (Production) Ltd., swivelling wheel unit with brakes, 788
 Autovista petrol pump (BP Ltd.), 206
 AVB Co., member firms of, 765; project at Durgapur, 765
 Aveley Electric Ltd., Jahre system capacitance standards, 254; Grossen Uphi universal meter, 351
 Aveling-Barford Ltd., orders taken at Leipzig Fair, 673
 Avery, W. & T. Ltd., *Survey*, 394; Avery Universal Testing Machine, 542-544; historical note, 542
 Aviation, British, 1960, Sell's (Business Dictionaries book), 68
 — Instruments, outlook for 1961, 74-77
 — Civil, Ministry of, on airport operating losses, 159
 — Ministry of, agreement with US Federal Aviation Agency on secondary radar, 1; research for on fast cutting of steel with carbon dioxide as coolant (Morfax Ltd.), 266-267; integrated air traffic control system, 478; rocket propulsion establishment, 899
 Avon engine, longer overhaul life for (Rolls-Royce Ltd.), 497
 — Jet engines for Mirage III aircraft (Rolls Royce), 429
 Avro 748 aircraft, 1, 684
 Axle finishing machine (L. J. R. Sanders Engineering Co.), 727
 — Planetary, Rockwell, 873
 Axoil gear pumps (Drysdale & Co. Ltd.), 537
 Azaroff, Dr. L. V., appointed director of Illinois Institute of Technology X-ray diffraction laboratory, 85
- ## B
- BABAUD, M. J., on graphical recording, 804
 Babcock & Wilcox (Caldeiras) SA., position and prospects, 697
 Babcock & Wilcox Co., experiments using Nuclear Merchant Ship Reactor, 800; request to modify Lynchburg Source Reactor, 800; initial fuel shipment to atomic propelled ship *Savannah*, 288
 Babcock & Wilcox Ltd., order placed for Ferranti Argus computer, 365, 366; exhibit at Engineering Marine, Welding and Nuclear Energy Exhibition, 519; pressure vessels, boilers and piping for Sizewell atomic power station, 520; to study Spectral Shift Control Atomic Reactor for USAEC, 664; position and prospects, 697; profits, 697; atomic power station contracts, 697; installations for CEGB, 697; subsidiaries of, 697; member of AVB Co., 765
 "Baby" hand bandsaw (Soag Machine Tools Ltd.), 384
 BAC One-Eleven aircraft (British Aircraft Corp. Ltd.), 683
 Backing-off attachment (A. A. Jones & Shipman Ltd.), 859
 Bacon, F., historical note, 7
 Bacon, F. T., fuel cell development, 268
 Baden Württemberg Power Plant Planning Association, design of organic moderated and cooled reactor given to Atomics International, 632
 Badenia Calculators Ltd., folding office, 504
 Bader, Scott, & Co. Ltd., pvc pastes and primers (trade publication), 872
 Baghdad International Airport, 888
 Baghdad drainage project, 888
 — Pact, 624
 Bagnall, W. G., purchased by W. H. Dorman, 809
 Bahler tube bending machine (Addison), 251
 Bailey, A. B., on liquid hydrogen as rocket fuel, 899
 Bailey, C. H., Ltd., operation in Malta GC, 728
 Bailey Industries Malta Ltd. See *BIM Ltd.*
 Bailey (Malta) Ltd., activities of, 728
 Bailey Meters & Controls Ltd., Digilog print-out scanner, 13
 Bailey, R., on selling commercial vehicles in Europe, 146; on if Britain joins the European Common Market, 792
 Bailly, C. W., design of Jaguar XK engine, 887
 Baker, L. R., on machine tool availability, 620
 Baker Perkins Ltd., continuous weigher, 102; rotor set, 559
 Baking, outlook for 1961, 164-167
 Balance, gas density, 780
 Balancing machine for engines (Tinius Olsen Testing Machine Co.), 335
 Balderhead reservoir, dam for (Richard Costain (Civil Engineering) Ltd.), 333
 Baldwin Industrial Controls, air drill, 531
 Bale splitter (Sutcliffe Hydraulics Ltd.), 383
 Balfour, Beatty & Co. Ltd., duplication of Blackwall Tunnel, 349-350; AVB project at Durgapur, 765
 Ball bushings (trade publication), 776
 — Drives, recirculating (trade publication), 776
 Ball, R. D., review of The Autodyne, 775; biographical note, 776
 — Surface testing machine, Talysurf (Taylor, Taylor & Hobson Ltd.), 58
 — Units, conveyor, Omni-track, 339
 Ballantine voltmeter (Sylvan Ginsbury Ltd.), 279
 Balligand, Dr. P. L., appointed deputy director of IAEA, 420; biographical note, 420
 Ballistic camera. See *Camera*
 — Manned space flight, America's, by G. V. E Thompson, 662
 Balloons, pipe-sealing (George MacLellan & Co., Ltd.), 803
 Baltospot X-ray unit (Pantak Ltd.), 319
 Balzers High Vacuum Ltd., high vacuum equipment (trade publication), 676
 Bamford, J. C. (Excavators) Ltd., de Havilland Dove 8 aircraft purchased, 257
 Banana tube system for colour television, 814-815
 Band conveyors. See *Conveyors*
 Bandsaw. See *Saw*
 Bandung Institute of Technology, US to aid with Triga atomic reactor, 800
 Banister, Harry, & Partners, new factory for British Enka Ltd., 483
 Bank Bridge Rubber Co. Ltd., neoprene soles and heels for industrial safety boots, 211
 Bank, Export-Import. See *Export-Import*
 — Rate, effect of, 386
 — Effect on Germany, 386
 — Movements in, 257
 — World. See *International Bank*
 Banker's Guide to Marine Insurance of Goods, by V. Dover and G. A. Calver (book), 364; (review), 774-775
 Banks, Sir Joseph, historical note, 7
 Bar, water (trade publication), 840
 Bara d, Dr. M. L., on low level jet weather phenomenon, 749
 Barauni power station, 86
 Barbados, abattoir and flying fish plant in, 736
 — Deep water harbour, 733
 Barber Greene ditching machine (Jack Olding & Co. Ltd.), 798
 Barbieri, L. J., et al., on plutonium recycle in Calder Hall type reactor, 455
 Barber Electrical Services Ltd., Straightaway convactor-drier, 584
 Barclay Curle, engines for P & O ships, 299
 Barclays Bank Ltd., to hire a cheque sorter/reader from IBM, 25; interest paid by South Durham Steel & Iron Co., 105
 Bardahl Products Ltd., No-Melt grease, 587; calcium based grease, 587
 Bariloch Physics Institute, IAEA grant to, 387
 Barkas, W. W., on behaviour of timber, 627
 Barlow & Young, deep water harbour, Barbados, 733
 Barnaby, K. C., on Basic Naval Architecture (book), 640
 Barney, W. W. J., Corp., new bus station at George Washington Bridge, 627
 Barnhill Secondary Modern School, use of Pye closed circuit television, 447
 Barnsley, J., & Co. Ltd., Thames crossing of supergrid, 52
 Barrels of plywood (Venesta Plywood Ltd.), 803
 Barringer, H. S., on influences of thorium on design of Consolidated Edison Thorium Reactor, 896
 Barrus, E. P. (Concessionaires) Ltd., hydraulic rams (trade publication), 200
 Bartho, F. T., review of AC Motor Control and Distribution Gear, 575; biographical note, 576
 Bartram, Col. R. A., on review of Sunderland shipbuilding, 113
 Base Group, Leonard and Grant as consulting engineers, 809
 Baskets, metal (trade publication), 496
 Basrah Petroleum Co., agreement to increase port dues, 25
 Bassett-Lowke Ltd., models for industry, 850-851
 Batch Air-O-Line pneumatic control unit (Honeywell), 826
 — Counters (Pentechique Ltd.), 857
 Batching machine, counter (Photoelectronics (MOM) Ltd.), 254
 — Plant, Mixconcret (Service Engineering), 145
 Baths, 44
 — Bilston (Bilston Foundries), 44
 — Princess (Bilston Foundries), 44
 Bath-in-the-kitchen unit, Bink (Bink Unit Developments Ltd.), 584
 Bathroom, is there one in your house? (Bilston Foundries publication), 44
 Battelle Memorial Institute, electrolytic machining process, 175; development of electrochemical machining, 300; new data on tungsten sheet, 337; research on compressive strengths of metal columns, 337; research on coated particle atomic fuel, 455; research on tantalum, 469; cold extrusion technique for titanium, 545; research on Magnesium-lithium alloys, 613; roll bonded sandwich panels, 619
 Battersea College of Technology, course on fracture of metals, 281
 Battery, electric, rechargeable, Permabeam (Chilton Electric Products Ltd.), 472
 — Tubular cell (Crompton Parkinson Ltd.), 254
 — See also *Cell*
 Bauer, P. T., on Indian Economic Policy and Development (review), 838-839
 Baxenden Chemical Co. Ltd., chemical formulation for sprayable urethane foams, 438
 Baxter, Prof., on Australian Atomic Energy Commission plans for high temperature atomic reactor, 488
 Baxter, Prof. J. P., on beryllium canning of atomic fuel, 725
 Baxter, Woodhouse & Taylor Ltd., collapsible ducting, 375
 Baybutt, S., on Leyland Motors Ltd., 841
 Bayham Ltd., R & G level gauge, 528
 BCAC. See *British Conference on Automation and Computation*
 BEAGLE. See *British Executive & General Aviation Ltd.*
 Beagle-Auster Airedale aircraft, 684
 Beakley, G. C., on Engineering: The Profession and Elementary Problem Analysis (review), 607
 Beams, Glulam. See *Glulam*
 BEAMA. See *British Electrical and Allied Manufacturers Association*
 Beardmore, William, & Co. Ltd., falling demand for castings and forgings, 105; no dividend paid to parent company, 105; capital expenditure of, 105; position and prospects, 105; cable saddles for Forth Road Bridge, 452
 Bearing, air and gas, application in the atomic field, 255-256
 — Air and gas, disadvantages of, 255
 — Air and gas, historical survey of, 255
 — Air and gas, load capacity variation of, 255
 — Air and gas, pressure fed, 255
 — Air and gas, pressure variation in, 255
 Bearing, air and gas, self acting, 255
 — Air and gas, start up problems with, 255
 — Air and gas, vibrational instability of, 255
 — Boxes, automatic machining of, 334
 — Bushes, ptf/bronze (Bound-Brook), 178
 — of Deva metal (Universal Metallic Packing Co.), 178
 — DU (Glacier Metal Co. Ltd.), 178
 — Gas, hydrodynamic type, principles and applications of, by G. W. K. Ford et al., 255
 — Graphite (Morgan Crucible Co.), 178
 — Layouts for pelletizers (Roballo Engineering Co. Ltd.), 788
 — Material, dry, DQ (Glacier Metal Co. Ltd.), 178
 — — Fluorosint (Polypenco), 178
 — — Nylatron GS (Polypenco), 178
 — — Ptf bronze, 178
 — Outlook for 1961, 70-73
 — Ptf, unlubricated, 178
 — Repair service (trade publication), 540
 — Reticular 20 per cent tin-aluminium, development and performance of, by P. G. Forrester, M. J. Neale and A. D. Newman, 446
 — Surfaces, avoiding seizure, 41
 — — Dry, DG and DL treatments for (Glacier Metal Co. Ltd.), 788
 — Thrust, parallel surface. See *LETTER*, 48
 — Tin-aluminium, for big ends (Glacier), 446
 Beaver, Sir Hugh, conference on professional engineers, 277; on engineers, 442
 Bechet single spindle automatic machine (Dowling & Doll Ltd.), 14
 Beck, Sir Adam, power station, 218
 Beck & Pollitzer, transport of British exhibits to British Trade Fair in Moscow, 429
 Beck, S. D., on Simplicity of Science (review), 330
 Bedding, A. R., on engineer's status, 276-277
 Bedford, Italians in. See *LETTERS*, 136, 244
 Beeching, Dr. R., appointed chairman of Railways Board, 405, 480; appointment welcomed by Engineers' Guild, 593; study groups for British Railways, 817; press conference, 817; study of overseas railway developments, 649
 Beeby, G. H., on safety begins in the boardroom, 556
 Beer, S., review of Decisions, Values and Groups, 870; review of Notes on Operations Research, 870; biographical note, 872
 Behaviour, organizational, understanding, by C. Argyris (book), 608
 Belidor, B. F., historical note, 7
 Bell Automatic Design System, BLADES (Bell), 269
 Bells in St. Paul's Cathedral, 281
 Bell Telephone Co., prolonging orbital life of satellites, 845
 Bell Telephone Laboratories, computer designed by computer, 269; BLADES Bell Automatic Design System, 269; electromagnetism by superconductivity, 336; continuous light from optical maser, 337; speech synthesized by digital computer, 781; solar cells, 877; electrochemical polishing of germanium and silicon, 909
 Bellofram diaphragm seals (George Angus & Co., Ltd.), 629
 Bellows, pvc (Plastic Coatings Ltd.), 739
 Belmos Co. Ltd., flameproof starter, 598; flameproof remote control (trade publication), 748
 Belt conveyor. See *Conveyor*
 — Drive, Poly-V (William Kenyon & Sons Ltd.), 536
 — — Powergrip (William Kenyon & Sons Ltd.), 536
 — — Wedge (trade publication), 708
 — Safety, assemblies for motor vehicles, BS 3254 (BSI), 718
 — — Diagonal, are best in car accidents, by D. C. Herbert, 718
 — — Motor car, anchorages for, 261
 — — Motor car, Bluebird car tests on, 261
 — — Motor car, cost of, 229
 — — Motor car, manufacturers, committee of, 229; members of the committee, 229
 — — Motor car, summarizing, 229
 — — Motor car, table of manufacturers of, 261
 — — Motor car, tests on, 229
 — Seat, assemblies for motor vehicles, BS 3254 (BSI), 229
 — Vee, wedge-belt, Spacaver (Fenner), 86
 Belting (trade publication), 264
 Belyankin, F. P., on behaviour of timber, 627
 Ben Patents Ltd., position and prospects, 17; portable air compressor, 189
 Bending machine, pipe, Staffa (Chamberlain Industries Ltd.), 190
 — Tube, Bahler (Addison), 251
 — Tube, Staffa-Herbert (Chamberlain Industries Ltd.), 825
 Bendix Corp., agreement with Simms Motor & Electronic Corp., 801
 Bendix electric fuel pump (Motor Books & Accessories Ltd.), 855
 Benedikt, O., on the Autodyne (book), 428; (review), 775; on Solution of Magnetic Circuits by Graphical Methods (review), 296
 Benjamin Franklin Bridge, insurance policy covering atomic explosion, 356
 Bennett, H. E., on Noble Metal Thermocouples (book), 551
 Bennis Thermoflash Ltd., distillation plant (trade publication), 364
 Benson, C. S., on Graphic Statics (book), 904
 Bentley Engineering Co., knitting machinery ordered by Technoproimport, 429
 Bentley motor car, orders taken at New York automobile show, 505
 Bentone & Stone Ltd., pneumatic equipment, 763
 BEPO atomic reactor for tellurium production, 243
 — Reactor, Wigner energy release carried out, 632
 Beranek, L. L., on Noise Reduction (review), 871
 Bergbaumechnik, by J. Maercks and W. Ostermann (book), 872

- Berkeley atomic power station, progress report, 287; possible loss by AEI Ltd., 533; CEBG open atomic laboratories at, 768
- Berkeley Nuclear Research Laboratory, progress report, 287; opening of, 388; Elliott ND481 atomic reactor simulator for, 864
- Berlinetta Grand Touring motor car, 65
- Motor car, Ferrari, 329
- Bernadini, Prof. G., similarity between moon and electron, 205
- Berne Union. See *Union d'Assureurs des Credits Internationaux*
- Berry, G., review of Noise Reduction, 871; biographical note, 872
- Berths built at Mombasa Harbour, 828
- Beryllium canning of atomic fuel, 725
- Cladding for Windscale atomic reactor abandoned, 664
- Compounds, US Bureau of Standards research programme on, 269
- Conference on metallurgy of, 757
- Diffusion and absorption coefficients of, by W. H. Andrews, 696
- Monitor, electronic, Winston, 905
- Oxide Atomic Reactor Experiment, USAEC assign design, construction and test to General Atomics, 256
- Supplies in Australia, 488
- Beta-emitting isotopes, identification by liquid scintillation counting, by W. P. Hutchinson (paper), 456
- Betatron, Siemens, for Head Wrightson Teesdale (Pantak Ltd.), 267
- Bethlehem Steel Co., second deck for George Washington bridge, 51
- Bethlehem Steelworks, reorganization of, by F. W. Taylor, 8
- Betriebstechnik: Grundlagen (Verlag Chemie) (book), 332
- Verfahren und Operationen (Verlag Chemie) (book), 112
- Better Opportunities in Technical Education (White Paper), 45, 53
- Bevelling machine, Pullmax (Alfred Herbert Ltd.), 562
- BEWAG project of Euratom, 768
- Beyer Peacock Co., position and prospects, 769; profit, 769; diesel hydraulic locomotives, 769; agreement with S. & S. Corrugated Paper Machinery Co., 769; voluntary liquidation of Metropolitan-Vickers Beyer Peacock Co., 769
- Beyer Peacock (Hymek) Ltd., diesel hydraulic locomotives, 769; diesel hydraulic locomotive for British Railways, 788
- Beynon, D. B., on foremen training 177
- Bi-Nickel process (Electro-Chemical and W. Canning), 135
- Bibliography on Axial-Flow Compressors, including Blades, Cascades and Other Related Material, by R. Bramley and E. McCoy (UKAEA book), 104
- BIC Construction Co. Ltd., submarine power cable from Jura to Kintyre, 777
- BICERA. See *British Internal Combustion Engine Research Association*
- Bicycle. See *Cycle*
- Bierman, H., Jr., on Capital Budgeting Decision (book), 200
- Big ends, tin-aluminium bearings for (Glacier), 446
- Big Rock Point atomic reactor, 419
- Biggs, W. D., on Brittle Fracture of Steel (review), 871-872
- Bigwood, Joshua, & Son Ltd., heavy machine tools, 763
- Bihar, Barauni power station, 86
- Bikini temperature controller (Fielden Electronics Ltd.), 652
- Billig, K., on Structural Concrete (book), 708
- Bilston Foundries Ltd., *Is There a Bathroom in Your House?*, 44; Bilston baths, 44; Princess bath, 44
- Bilton, J., on two-element fluid couplings, 885
- BIM Ltd., activities of, 728; Solar water heaters, 728; association with Jablo Ltd., 728
- Bin controller (Thomas Industrial Automation Ltd.), 190
- Litter, "Town Number One," Design Centre award for (G. A. Harvey & Co. (London) Ltd.), 712
- Binary coded scale, 346
- Bink Unit Developments Ltd., Bink bath-in-the-kitchen unit, 584
- Biology, space, by J. S. Hanrahan and D. Bushnell (book), 364
- Bioul, A. J. L., on safety screen instead of safety belt for motor cars, 229
- BIP Chemicals Ltd., export of plastics chemicals, 257
- BIP Engineering Ltd., export of plastics machinery, 257
- Biplex filter (Zwicky Ltd.), 559
- Fluid filter (Zwicky Ltd.), 188
- Bird, G. L. H., appointed education officer of Machine Tool Trades Association, 53; biographical note, 53
- Birfield Group, position and prospects, 149; quarterly trading results, 149; position and prospects, 565
- Birks Store, new department store for, 159
- Birmingham, new shopping centre for, 691
- Birmingham-Preston Motorway, Lancashire County Council award contracts to Sir Alfred McAlpine & Sons and Leonard Fairclough Ltd., 233
- Birmingham Small Arms Co., centenary, 7; share capital of Churchill Machine Tool Co. purchased, 348
- Birmingham University, application for grant for atomic reactor, 104; symposium on Computers for the Chemical Engineer, 180; M.Sc. degree in highway and traffic engineering, 689. See *LETTER*, 790; pulsed neutron generator installed, 696; model of roof of, 863
- Birth of the Bomb, by R. W. Clark (book), 576
- Birwelco Ltd., use of British Oxygen Alyn Mark I tube cutting machine, 517
- Bishop, R. E. D., on damping a rotating shaft, 312-313, 654. See *LETTER*, 588
- BISRA. See *British Iron and Steel Research Association*
- Bitumen handling, fire precautions in, 217
- Bitumen, roofing, exports of (William Briggs & Sons), 489
- BP Book of Motor Cycle Racing, by M. Walker (review), 807
- BP Gases Ltd., Camping Gaz stockists, 152
- Black & Decker Ltd., Handy Utility electric tool, 106; battery powered hand drill, 628
- Black, Prof. M., appointed as consultant to British Executive and General Aviation, 348; biographical note, 348
- Blackburn, P. G., on protective coatings, 136-137
- Blackett, Prof. P. M. S., Thomas Hawksley Lecture, 323
- Blackman, Keith, Ltd., exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519
- Blackman, R. V. B., on Jane's Fighting Ships (book), 396
- Blackwall Tunnel, duplication of, 349-350
- Blackwood, John, Hodge & Co., appointed as U.K. representatives of Ellicott Machine Corp., 25
- Blade fan, protection for, 506
- Turbine, long exhaust, research on (English Electric Co.), 303
- BLADES Bell Automatic Design System (Bell), 269
- Blakeborough, J., & Sons, Ltd., centenary, 7; valves for nuclear applications (trade publication), 776
- Blanchard, C. H., on Introduction to Modern Physics (book), 158; (review), 607-608
- Blanks, steel, preparing for cold forging, 634
- Blankets, electric, outlook for 1961, 168-171
- Blast furnace. See *Furnace*
- Major rock plug, near dam, by F. L. Lawton and M. D. Lester, 895
- Blasting experiments to study effects on buildings, 482
- Studies, experimental (National Research Council of Canada booklet), 482
- Blaw Knox Ltd., supergrid towers for Thames crossing, 52; paving machine, 253; Batchmaster for Nickolls Ready Mixed Concrete Ltd., 235; Gyramixer for Nickolls Ready Mixed Concrete Ltd., 235; Vari-speed truckmixer, 598
- Blend furniture range, 272
- Blending machine, Apex (Apex Construction Ltd.), 251
- Suba (Suba Hydraulics Ltd.), 858
- Waring Aseptic Dispersall Blendor (Waring Products Corp.), 403
- Waring Blendor (Winston Electronics Ltd.), 102
- Bleuet butane stove (Forges d'Alais), 150
- Bliss, E. W., Co., equipment for converting metal powder into strip, 587
- Block & Anderson Ltd., *Business Automation*, 706
- Blowpipe, cutting, Firefly (BOC Ltd.), 221
- Blue Scout rocket, as transport for radio telescope, 237
- Blue Streak missile, cost of, 381
- Bluebird motor car, tests on safety belts, 261
- Blueprint for integrated flow production of steel, 805
- Blyth B power station, overhead crane for (Cowans, Sheldon & Co. Ltd.), 884
- Board, control, components (trade publication), 748
- Board of Trade, co-operation with BEAMA on display at International Household Goods and Hardware Fair, 133; approval for Murphy Radio Ltd. system for continuous weighing of belt conveyed solids, 203; exhibit at British Trade Fair, Moscow, 705; discussions at BEAMA export conference, 841; see also *Export Credit Guarantee Dept.*
- Boardroom, safety begins in the, by G. H. Beeby, 556
- Boat, Ceabird Mk. II, use of Kraft honeycombe in, 90
- Ceacruiser, use of Kraft honeycombe in, 90
- Ceawren, use of Kraft honeycomb in, 90
- Glass reinforced plastic for (trade publication), 298
- Motor cruiser (Thornycroft), 132
- Plastic sandwich construction for (Watercroft), 834
- Ranger (Dell), 132
- Show, International, 45, 132. See *Correction*, 89
- Small, increase in, 45
- Users, Ministry of Transport consider seamanship tests for, 381
- Boatbuilding, use of Kraft honeycomb in, 90
- Boby, Robert, Ltd., continuous malt making plant, 741
- Bockris, J. O'M., on Physicochemical Measurements at High Temperature (review), 66
- Bodies, rigid, elementary treatise on the dynamics of a system of, by E. J. Routh (book), 428
- Bodley, F. H., on simple computing relays, 181
- Boeing-Vertol 107 helicopter aircraft, de Havilland Gnome engines for, 673
- Bohemia, radioactive deposits in, 15
- Bohunic atomic power station, Czechoslovakia 15
- Boichenko, M. C., on Continuous Casting of Steel (book), 428
- Boiler circulation, analysis of, 545
- Coal-fired (Cochrane & Co.), 354
- Fired, industrial, efficiency of, by C. D. Gunn, 534-535
- Control by computer, 366
- Electrode (HVE Electric Ltd.), 485
- ENGINEERING survey report on, 522
- House Practice, by J. N. Williams (review), 538
- Manufacturers comments on, 566
- Oil-fired (Henry Wilson & Co. Ltd.), 352
- Outlook for 1961, 114-117
- Packaged, Eclipse "Whispering Power" (Ad. Auriema Ltd.), 12
- Preventing acid corrosion in, 782-783
- Redfyre Centramatic 35, Design Centre award for (Newton Chambers & Co. Ltd.), 712
- Boiler scaling equipment, ultra-sonic, Crustex Descaling (H.N. Electrical Supplies Ltd.), 397
- Sinupac (Cochran & Co., Annan, Ltd.), 534
- Stone-Platt (Stone-Platt Industries Ltd.), 652
- Stone-Vapor (J. Stone & Co.), 762
- Vertical, Cochran (Cochran & Co., Annan, Ltd.), 534
- Boilerhouse plant, outlook for 1961, 114-117
- Boilermakers' Society, agreement to forego "dirty money," 281
- Boiling, film, 631
- Mechanism, 631
- Nucleate, 631
- Role of surface conditions in, by P. Griffith and J. D. Wallis, 631
- Boley, A. B., on Theory of Thermal Stresses (book), 68
- Bolinders Co. Ltd., V-belts, 445
- Bolster outfit for press (Hunton Ltd.), 484
- Bolts, close-fitting (S. Marsden & Sons), 452
- Grip, Gilbert Roberts, for Forth Road Bridge (A. P. Newall & Co. Ltd.), 452
- and nuts, outlook for 1961, 70-73
- Bolton, J. E., formation of Solartron Electronic Group Ltd., 874
- Bolton, Thomas, & Sons, Ltd., exhibit at British Trade Fair, Moscow, 705; installation of copper extrusion plants, 773; stock acquired by British Insulated Callender's Cables Ltd., 777
- Bomb, birth of the, by R. W. Clark (book), 576
- Bombay, opening of Canada-India atomic reactor, 356
- State, Kyna hydro-electric power project, 829
- Bonallack Ltd., aluminium panels adhesive bonded, 587; Pneumatorator bulk transport vehicle, 766
- Bondsman Footwear Ltd., industrial safety boots, 211
- Bonnell, R. P., on Woomera's optical range, 750-751
- Bonnet shake prevented by Du Pont neoprene, 855
- Bonus atomic reactor, 59, 419; under construction in Puerto Rico, 148
- Booker Bros., McConnell Co., profits, 897; position and prospects, 897; subsidiaries of, 897; credit arrangements for customers, 897; partnership with Societe Anonyme Des Gaz Industriels, 897
- Booker Group, combining with SOGAZ (SA des Gaz Industriels) of Brussels, 777; subsidiaries of, 777; to buy SA Chaudières Samson, 777; interests of, 809; formation of Triveni Engineering Works, 809; licence agreement with George Fletcher Co., 809; licence agreement with Duncan Stewart Co., 809; licence agreement with Peter Britherhood Co., 809
- Bookers Engineering Holdings Group, interests of, 809
- Bookers Sugar Machinery Group, records in orders and output, 897
- Boole, G., on Treatise on the Calculus of Finite Differences (book), 776
- Boolean Algebra and Its Applications, by J. E. Whitesitt (book), 808
- Booth, James, Aluminium Co., Delta Metals Co. interest in, 565; Kaiser Aluminium Corp. interest in, 565; aluminium sheet, 587
- Booth, spray (trade publication), 396
- Booth's Distilleries Ltd., use of pvc compressed air line, 771
- Boots, industrial safety (Bondsman Footwear Ltd.), 211
- Safety, 513
- Borate glasses, by L. Ya. Mazelev (review), 361
- Borax Consolidated Ltd., liaison with Rauma-Rekola Oy to import Timbor impregnated timber, 867
- Borax IV atomic reactor, 896
- V atomic reactor, 59, 419
- Borden Co., plans for factory in Mexico with British Industrial Plastics Co., 257
- BORE. See *Beryllium Oxide Atomic Reactor Experiment*
- Borgward, turnover of, 257; public ownership proposed, 257; position and prospects of, 257
- Borgward, Dr. C., prospective purchase of Borgward Co., 257
- Boring head, Briney (Precision Gear Machines & Tools Ltd.), 354
- Machine, earth, Salem (F. Taylor & Sons (Manchester) Ltd.), 796
- Electronic horizontal, Kearns (H. W. Kearns & Co. Ltd.), 18-20
- Fine (Buma Engineering Co. Ltd.), 222
- Portable, Ebco (Earth Boring Machine Co.), 486
- Vertical, for Armstrong Whitworth (Richards), 39
- Bornu Railway extension in Nigeria, 732
- Boron as burnable poison in SL-1 atomic reactor, 355
- Chemistry, Soviet research in (Consultants Bureau) (book), 808
- by J. A. Kohn, W. F. Nye and G. K. Gaule (book), 676
- Strips, bowing of, in SL-1 atomic reactor, 355
- 10 nucleus, 832
- 11 nucleus, 832
- Bottling, outlook for 1961, 164-167
- Bouche, C., on Kolbenverdichter: Einführung in Arbeitsweise, Bau und Betrieb von Luft- und Gasverdichtern mit Kolbenbewegung (book), 640
- Boulton Paul Aircraft Ltd., development of Suproform rubber press technique, 367
- Boulton Scaffolding Ltd., scaffold tube coupler, 384
- Bound-Brook Bearings Ltd., ptf bronze bearing bushes, 178
- Bourceau, M., on classification of atomic propelled ships, 520
- Bowden, W. R., on criticism of motor car salesmen, 113.
- Bowers, E. H., review of Symposium on Hydraulic Fluids, 157; biographical note 158
- Bowling, ten-pin, Automatic Pinspotter machine for (American Machine & Foundry Co.), 889
- Ten-pin, historical note on, 889
- Bowmakers, annual statement, 257; overall hire purchase debt, 257; growth of consumer credit in UK, 257; association with Lloyds Scottish Finance Ltd., 257; profits, 257; assets, capital and reserves, 257; association with Societe Holding de Financement et de Credit SA (Eurocredit), 257
- Boydell, E., & Co. Ltd., Muir-Hill concrete dumping truck, 189
- Boyle, R., historical note, 7
- BP Research Centre, oil consumption studies, 846-847
- BPS Machinery and Spares, appointed sole agents for Staehely gear hobbing machines, 577
- BR3 atomic reactor, Mol, 768
- B & R Relays Ltd., position and prospects, 17
- Brackets, stair, for scaffolding (Scaffolding (Great Britain) Ltd.), 57
- Bradley, J., on communications satellites, 892
- Bradma Ltd., addressing machines for Kovo of Czechoslovakia, 159
- Bradwell atomic power station, progress report, 287; first reactor in operation by August, 832
- Braham, Patterson & Benham Ltd., mastic asphalt transporter, 319
- Braintree, Lord, on Darlington & Simpson Rolling Mills Ltd., 193
- Braithwaite Burn & Jessop Construction Co. Ltd., AVB project at Durgapur, 765
- Braithwaite & Co. (India), Ltd., AVB project at Durgapur, 765
- Brake, disc, conversion set for Austin-Healey Sprite motor car (Donald Healey Motor Co.), 197
- for motor cars, 501
- on railway wagons, 881
- Hose, plastic (Tecalmit & John Bull Rubber Co.), 17
- Modern, are they always good enough? by G. Wilkins, 197
- Propeller, Dunlop (Dunlop Rubber Co. Ltd.), 852
- See also *Dynamometer*
- Brameast Textile Machinery, order placed by Technoproimport, 429
- Bramley, D. H., on preparing the engineer for management, 411
- Bramley, R., on Bibliography on Axial-Flow Compressors, including Blades, Cascades and Other Related Material (book), 104
- Branch exchange, telephone (trade publication), 112
- Brancker Memorial lecture, 241
- Brand, Charles, & Co. Ltd., Victoria Line underground railway, 414
- Branson Europa NV., Sonogen ultrasonic generator, 827
- Branson Instruments Inc., ultrasonic cleaning equipment, 335
- Brattel Electric Co. Ltd., Braun Turbo Heater fan heater, 548
- Braun Turbo Heater fan heater (Brattel Electric Co. Ltd.), 548
- Bray, E. N., Ltd., protective relay, 418
- Brazil, atomic planning in, 147
- Case for atomic power in, 147
- Electricity supply and demand in, 147
- Hydroelectric plants, 147
- IAEA assistance to Radioisotope Laboratory, 387
- IAEA experts to visit, 387
- IAEA grant to, 387
- Lack of electric power in, 147
- Mambucaba project, 147
- National Cancer Institute, IAEA assistance to, 387
- Rio Grande hydro-electric project, contracting companies, 379
- Brazilian Nuclear Energy Commission, Kennedy & Donkin to draft invitations to tender, 147
- Brazing alloy, copper-palladium-nickel-manganese, 211
- Gold-copper, 211
- Nickel-manganese-palladium, 210
- Palladium-nickel, 211
- Precious metal, 210-211
- Silver-copper, 211
- Silver-copper-palladium, 210
- Silver-palladium-manganese, 210
- Special purpose (Engelhard Industries), 210
- Paste, aluminium (Eutectic), 135
- Breath, analysis of, 645
- Brelite expanded perlite (Expanded Minerals Ltd.), 698
- Bresler, B., on Design of Steel Structures (book), 708
- Brewing, advances in Canada, 741
- Outlook for 1961, 164-167
- Brick efflorescence, research to eliminate, 40
- Fire. See *Firebricks*
- Brick Institute of California, research to eliminate brick efflorescence, 40
- Brickwork, exposed, cleaner surfaces for, 40
- Bridge, air, across Channel, 681
- Ankobra, Ghana, 765
- Benjamin Franklin, insurance policy covering atomic explosion, 356
- Channel, controversy, 681
- Discussion on, 437
- Clifton, model of, 862
- Construction, Dywidag system, 320
- Foot, in prestressed concrete for Ceylon University, 730
- Forth (Redpath, Brown & Co.), 149
- Road, cable saddles for (William Beardmore), 452
- Road, cable splices for (Cable Covers Ltd.), 453
- Road, climbing platform on, 10
- Road, close fitting bolts for (S. Marsden & Sons), 452
- Road, contractors for, 10, 448-454
- Road, constructional details of, 448-454
- Road, erecting main towers, 451

- Bridge, Forth, road, Gilbert Roberts grip bolts for (A. P. Newall & Co. Ltd.), 452
- Road, main tower fabrication, 450
 - Road, protection for steelwork, 449
 - Road, spinning the cables, 453
 - Road, superstructure, 448
 - Road, wire cable for (Dorman Long (Steel) Ltd.), 516
 - George Washington, new bus station at, 627
 - George Washington, second deck for, 50-51, 177
 - Grimsby/Hull, proposal for, 177
 - Isle of Wight-mainland, 480
 - Medway, model of, 862
 - Model of, 863
 - Outlook for 1961, 78-81
 - Port Mann (John Laing & Son Canada Ltd.), 731
 - Projects, 888
 - Regents Canal Dock, 483
 - River Tagus, contractors for, 482
 - Roads and dams (trade publication), 576
 - Kaduna River, Nigeria, 736
 - Runcorn-Widnes, flame cleaning of, 321
 - Severn Road, contracts issued, 379
 - Thelwall (Redpath, Brown & Co.), 149
 - Tromso, 320
 - Universal (Marconi Instruments Ltd.), 319
 - Walt Whitman, insurance policy covering atomic explosion, 356
- Bridgeman, M. R., on tankers and Suez Canal, 633
- Bridges, S. N., & Co. Ltd., Luxury Life power domestic equipment, 472
- Bridgestone Liquefied Petroleum Gas Co., new refrigerated tanker ship for, 439
- Bridgewater Canal, historical note, 7
- Bridgework, high tensile wire for, 516
- Briggs, H., historical note, 7
- Briggs, William, & Sons, position and prospects, 489; Ross Spur Motorway, 489; activities of, 489; exports of Bitumetal roofing, 489; subsidiaries of, 489
- Bright, A. W., on sub-critical assemblies, 685
- Brightside Foundry & Engineering Co. Ltd., rolling mills for English Steel Corp., 113, 127; blooming mill for Iscon Steelworks at Durgapur, 193; order position, 193; acquisition of Graham Firth Steel Products Co., 193; acquisition of Metal Mouldings Ltd., 193; group profits, 193
- Brightside Heating & Engineering Co., position and prospects, 193; order position, 193; overseas contracts, 193
- Brindley, J., historical note, 7
- Briney boring head (Precision Gear Machines & Tools Ltd.), 354
- Bristol Aeroplane Co. Ltd., Australian interests to be taken over by British Aircraft Corp. (Australia) Pty., 897
- Bristol Aircraft Co. Ltd., participation in British Aircraft Corp., 769
- Britannia aircraft, order from Ghana Airways, 233
- Bristol Pneumatic Tools Ltd., Bristol portable air compressor, 796
- Portable air compressor (Bristol Pneumatic Tools Ltd.), 796
- Bristol Siddeley Engines Ltd., licence from Maybach Motorenbau GmbH to produce Maybach diesel engines, 69; BS75 ducted fan engine for aircraft Avro 771 and BAC 107, 204; exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519; recording instruments for ramjet engine, 545; Pegasus engine for VTOL aircraft, 684; Pegasus lift/thrust turbofan engine, 710; diesel hydraulic locomotives, 769
- Bristol Siddeley Journal*, 588
- Bristol University, new School of Chemistry (Holland & Hannen and Cubitts (GB) Ltd.), 365
- Britain to cooperate with France and West Germany building Transall C 160 aircraft, 113
- if she joins the European Common Market, by R. Bailey, 792
- Britannia aircraft, Bristol, order from Ghana Airways, 233
- Britax (London) Ltd., motor car safety belts 261
- British Aircraft Corp. (Australia) Pty., formation of, 897; to take over aircraft and guided weapons interests of Bristol Aeroplane Co., English Electric Co., and Vickers Ltd., 897; Sir Daniel McVey appointed chairman, 897
- British Aircraft Corp. Ltd., Type 107 aircraft, BS75 ducted fan engine for, 204; BAC One-Eleven aircraft, 683; instrument wing of, 700; Vickers participation in, 769; English Electric Co. Ltd. participation in, 769; Bristol Aircraft Co. participation in, 769; formation of British Aircraft Corp. (USA) Inc., 777; Vickers VC 10 aircraft, details of, 882; formation of British Aircraft Corp. (Australia) Pty., 897
- British Aircraft Corp. (USA) Inc., formation of, 777; C. Clarkson appointed head of, 777; A.V.-M. W. C. Sheen appointed director of military sales, 777; Air Chief Marshal Sir Hubert Patch appointed head of overseas military sales, 777
- British Aluminium Co. Ltd., aluminium mast for yawl *Manita*, 47; aluminium furniture, 130; traced pipework, 550
- Association for the Advancement of Science, annual meeting, 137; noise annoyance and its assessment, by Prof. E. J. Richards. See LETTERS, 376, 476
 - Aviation, 1960, Sell's (Business Dictionaries book), 68
- British Broadcasting Corp., experimental colour transmissions, new survey of, by I. R. Atkins, A. R. Stanley and S. N. Watson (book), 364; BBC Handbook 1961 (book), 396, 872; Television Centre fire alarm system, 402; new short wave transmitters for (Marconi Wireless Telegraph Co. Ltd.), 433; order placed with Pye Ltd. for mobile control rooms, 577; designs department, 678; research department, 678; television picture quality, 678-679
- British Building Supplies Ltd., use of DOSP steel flooring, 511
- British Cast Iron Research Association, translation of *Russian Castings Production*, 701
- British Celanese Ltd., steam supply from Spondon "H" plant, 637
- British Central Electrical Co., 13 amp multi-socket, 88
- British Coal Utilisation Research Association experiments with coal and boiler performance, 534; methods for determining sulphur trioxide concentrations, 782
- British Columbia, flexible submarine pipeline to Vancouver Island (BICC), 45
- British Columbia Toll Highway and Bridges Authority, new ferry boats for, 641
- Commonwealth. See *Commonwealth*
 - Year Book, by R. S. Russell (review), 747-748
 - Compressed Air Society, standards, 763
 - Conference on Automation and Computation, revival of, 83; luncheon, 83
- British Cycle Corp., redundancies expected, 141
- and Motor Cycle Industries Association, position of the industry, 141
 - Economy, growth in (Political and Economic Planning) (review), 574
 - Electrical and Allied Manufacturers Association, statement on railway electrification, 25; overseas drive by, 133; meeting of export managers and senior executives of electrical industry, 133; export directory, 133; cooperation with Board of Trade for display at International Household Goods and Hardware Fair, 133; jubilee year, 289; export conference, 289; committees of, 289; conditions of contract 289; A. M. Browne elected president, 447; H. H. Mullens elected deputy president, 447; arc welding electrodes (trade publication), 808; golden jubilee export conference, 841
- British Electrical Power Convention, 137, 849; presidential address, 817
- Employers' Confederation, efficient use of manpower, 97; on misuse of labour in industry, 657; on payroll tax, 657
- British Enka Ltd., new factory for, 483
- British Ermeto Corp. Ltd., Ermeto stop valve, 528
- British European Airways, excess capacity problem, 201; passenger statistics, 201; profits, 201; table of traffic and staff figures, 1960, 201
- British Executive and General Aviation Co. Ltd., Prof. M. Black appointed consultant, 348; Prof. A. D. Young appointed consultant, 348; M. Langley appointed technical director, 348; T. D. R. Carroll appointed deputy chief designer, 348; exhibit at Farnborough Show, 497; Airedale and Terrier aircraft on show at Coventry, 641; setting up by Pressed Steel Co., 833; acquisition of Auster Aircraft Ltd., 833; acquisition of F. G. Miles Ltd., 833
- British Federal Welder and Machine Co. Ltd., on welding equipment and customers requirements 569
- Firms, guide to 25,000, 518
 - Food Manufacturing Industries Research Association, booklets, 522
- British Geon Ltd., Geon pvc and Hycar nitrile rubber for Niplas cable sheathing, 179; nitrile rubber (trade publication), 232
- British Guiana, Tapakuma Scheme, 735
- British Hoist & Rope Co. Ltd., mobile crane (trade publication), 200
- Hydromechanics Research Association, conference on fluids sealing, 440
- British India Electric Construction Co., association with Johnson & Phillips Ltd., 865; enlargement of production, 865
- British Industrial Plastics Co., profits, 257; plans for factory in Mexico with Borden Co., 257; exports, 257; annual meeting, 257; share offer made by Turner and Newall, 257
- British Industrial Products for Canada, CABMA Register of (book), 68; (review), 748
- Industry, concentration in, by R. Evely and I. M. D. Little (review), 23
 - by J. H. Dunning and C. J. Thomas (review), 775-776
 - in Moscow, 705
 - See also *Industry*
- British Institute of Management, Register of Management and Industrial Consultants, 8; Foremen Training conference, 177; *Absence from Work—Incidence, Cost and Control*, 413; J. Marsh appointed director, 513; conference on work study, 900; members of conference panel, 900
- British Insulated Callenders' Cables Ltd., Pluto Channel pipeline, 45; flexible submarine pipeline from British Columbia to Vancouver Island, 45; conductors for Thames crossing of supergrid, 52; cable laying equipment for Russian cable-laying ships, 233; formation of British Space Development Co., 257, 585; exhibit at British Trade Fair, Moscow, 705; Channel cable to link UK and French grid systems, 753; raising new capital, 777; bank overdraft, 777; loan from Prudential, 777; loan from Telcon, 777; acquisition of stock of Thomas Bolton & Sons, 777; submarine power cable from Jura to Kintyre, 777
- British Insulated Callenders' Construction Co. Ltd., crossing towers for Thames crossing of supergrid, 52; laying flexible submarine pipeline, Magna Pipeline Co., 131
- British Insulated Callenders' (Submarine Cables) Ltd., flexible submarine pipeline for Magna Pipeline Co., 131
- Internal Combustion Engine Research Association, engine measurements by radio telemetry, 84
 - Interplanetary Society, proposals for space flight, 662; European Symposium on Space Technology, 685; symposium on communications satellites, 892; symposium on liquid hydrogen as a rocket propellant, 898
- British Iron and Steel Federation, forecast of steel capacity for 1962, 45; C. R. Wheeler elected president, 53; request to Iron and Steel Board for increase in prices, 713; reaction to price changes in steel, 905
- Iron and Steel Research Association, Research on Rolling of Strip (book), 264; measuring strip speeds without contact, 781; experiments on rapid removal of sulphur from steel, 613
- British Journal on Aesthetics*, 574
- Locomotives (book), 428
 - Manufacturers, FBI register for 1961 (book), 396
- British Monorail Ltd., monorail system for UKAEA at Winfrith Heath, 397; conveyor system for Wilmot Breeden, 837
- British Motor Corp., development of gas turbine vehicle engine, 424; orders for sports cars taken at New York automobile show, 505; use of Gloucester as shipping port, 541; working to full capacity, 617; new CAB 2 plant at Longbridge, 617
- National Committee for Non-Destructive Testing, conference of, 553
 - Committee on Space Research, plans for UK's second satellite, 645
- British Non-Ferrous Metals Research Association, *Survey of Nickel and Chromium Recovery in the Electroplating Industry*, 267; development report, 587; annual report, 803; copper tube test, 803
- British Nylon Spinners Ltd., nylon wagon sheets, 275
- British Olivetti Ltd., typewriter market in UK, 212
- Overseas Airways Corp., order for Vickers VC 10 aircraft, 233; use of Avon jet engines, 497; electronic ticket issuing system installed, 601
- British Overseas Fairs Ltd., Stockholm Trade Fair site rates, 617
- British Oxygen Co. Ltd., formation of Davy British Oxygen Ltd., 25; computer controlled plate cutting equipment for Swan, Hunter & Wigham Richardson Ltd., 39; Firefly cutting blowpipe, 221; handling liquid oxygen, 375; Alyn tube cutting machine, 517; oxygen cutting machine, 561; Chromoid No. 101 stainless steel welding electrode, 619; prototype gas analysis equipment, 645; *Arc*, 774
- British Oxygen Engineering Ltd., use of Foamglas insulation on oxygen tanks, 698
- British Pens Ltd., powered pencil sharpener, 472
- British Petroleum Co. Ltd., oil depot at Macquarie Island for Australian National Antarctic Research Expedition, 25; fuel depot at Mawson Base for Australian Antarctic Expedition, 25; production of U.K.'s indigenous oil, 25; Autovista petrol pump, 207; visitors to refineries and installations, 365; new ocean terminal at Angle Bay, Milford Haven, 626, 633
- British Piston Ring Co., new plant for, 61
- British Plastics*, annual review, 834
- British Polar Engines Ltd., marine diesel engine, 559
- Productivity Council, on loss to industry by accidents, 381
 - Racing and Sports Car Club, Racing Car Show, 65
- British Railways, electrification, 25, 149; modernisation conference, 181; freight modernisation scheme in Sheffield area, 379; modernisation needs railwaymen. See LETTER, 92; Dr. R. Beeching appointed chairman, 405, 480; modernisation, Sheffield area, 465; closing down of branch lines and stations, 513; lines, closure, 513; public complaints, 513; staff shortages, 513; Sulzer diesel engines for (Vickers Armstrongs), 595; modernisation plan of, 622; laboratory for engineering research, 681; opposition from road and air, 681; reduction in orders placed to contractors, 769; diesel hydraulic locomotive for, 788; study groups, 817; modernization programme, 817; Plasticell air ducts for, 834; model of bridge, 863; trials of disk brakes for wagons, 881; report on electric train failures, 884
- British Resin Products Ltd., Cellobond polyester resin, 475; *Cellobond Polyester Resins, Technical Manual*, 507; dough moulding compound, 619
- Road Federation, proposal to cut down road user taxes, 341; road development, 817; annual meeting, 817; report of, 817
 - Services, exhibit at Leipzig International Fair, 397; delivery of gear cutting machine to West Germany, 429; transport of Redifon's Caravelle flight simulator to Rome, 801
- British Ropes Ltd., orders from Leipzig Fair 673; wire rope maintenance (trade publication), 776
- British Rototherm Co. Ltd., Zero Re-Set bi-metal thermometer, 891
- British Sarozal Ltd., Hygro-Robot packaged dehumidifiers, 57; multi-pin connectors, 318; Thies universal psychrometer, 351
- Shipbuilding Research Association, P. G. Hodgkinson appointed chief production engineer, 217
- British South African Co., annual statement, 357; profits, 357; interests of, 357; financing of Commonwealth Aluminium Corp., 357; association with Consolidated Zinc Corp., 357; association with Kaiser Aluminium, 357; loan for Kariba dam project, 357; interest in Rhodesian Alloys and Rhodesian Iron and Steel, 357
- British Space Development Co., formation of, 257; firms forming consortium, 257; formation of, 585; aims of, 585; technical committee set up, 585; G.K.C. Pardoe appointed chairman, 585
- British Standards Institution, BS 3288 on specification for insulator and conductor fittings for overhead power lines, 87; BS 3329 on gear planing and shaping machines, 173; BS 693 on welding of mild steel, 173; BS 2062 on basic dimensions for hobs, 173; code CP 332: 601 on gas equipment, 176; BS 449 on use of structural steel in buildings, 186; BS 3254 on seat belt assemblies for motor vehicles, 229; BS 2634 on roughness comparison specimens, 267; collection of information on domestic electrical contracting charges, 381; BS.L100 on inspection and testing procedure for aluminium and aluminium alloys, 407; use of cold formed steel sections in buildings, 483; BS 2994 on cold rolled steel sections, 483; BS 3254, on safety belt assemblies for motor vehicles, 718; Conference of Standards Engineers, 761; views on guarantees, 761; standards, 763
- Steel Castings Research Association, formation of Steel Castings Development Committee, 551
 - Steel Founders Association, cinema film "Your eyes are Precious," 381; formation of Steel Castings Development Committee, 551
- British Sugar Corp. Ltd., use of pvc-coated steel sugar diffusers, 699
- British Tabulating Machine Co., merger with Powers-Samas Accounting Machines Ltd. to form International Computers and Tabulators Ltd., 193
- British Tego Gluefilm Ltd., dry film adhesives, 421
- British Thomson-Houston Co. Ltd., development of Kearns electronic horizontal boring machine, 18-20
- Trade Fair, Moscow, film show, 265; exhibitors taking part, 429, 465, 541, 609, 697, 705, 713; follow up after, 758-759
 - and Industries Mission to Iraq, 785
 - Transport Commission, *Project*, 262; exhibit at Rand Show, 465; to build engineering research laboratory, 681; diesel hydraulic locomotives for, 769; preservation of steam locomotives, 241; see also *British Railways*; *British Road Services*; *British Waterways*
- British United Airways, order placed for ten BAC One-Eleven aircraft, 683
- British United Shoe Machinery Co. Ltd., development of Kearns electronic horizontal boring machine, 18-20
- Visual Glide Path Indicator System, development of, 533
 - Waterways, bridge for Regents Canal Dock, 483; conversion from water cooled to air cooled engines, 594; improvement schemes on River Trent, 558
 - Weed Control Council, symposium on Industrial Weed Control, 621
- Brittle fracture of steel, by W. D. Biggs (review), 871-872
- Brix, V. H., review of Translation from Russian for Scientists, 706-707; biographical note, 708
- Broadway Welding Supplies Pty. Ltd., Dieseler welding machine, 727
- Brockhouse Group, extensive mechanisation of foundry of R. J. Hunt & Son Ltd., 836
- Brockhouse, J., & Co., position and prospects, 17; annual meeting, 17; overseas subsidiaries of, 17
- Brockhouse, J. (South Africa), position and prospects, 17; profits, 17
- Brockhouse, J. L., on J. Brockhouse & Co., 17
- Brocklebank, Sir John, on Cunard Steamship Co., 801
- Broken Hill Pty. Co., converter furnaces ordered from Davy & United Engineering Co., 25; tinplate cut up line for, 741
- Bronx Engineering Co. Ltd., pinch rolls, 13; Pinch-Pyramid plate bending rolls for US, 341; on machine tools and customers requirements, 569; heavy machine tool, 763
- Bronze (trade publication), 264
- /pfe bearing bushes (Bound-Brook), 178; bearing materials, 178
- Broom, H. D., on Broom & Wade Ltd., 17
- Broom & Wade Ltd., profits, 17; subsidiary companies, 17; position and prospects, 17; on air compressors and customers' requirements, 567
- Broomwade-Belge SA, position and prospects, 17; profits, 17
- Brook, A. E., on Aerodynamics for Engineering Students (book), 24
- Brooke, H., on housing, 309; proposed new town at Skelmersdale, 405; on Gunnersbury building scheme, 413; on proposed new town at Dawley, 657; rejection of application to mine ironstone by opencast methods, 689
- Brookes, B. C., on report writing improves with morale, 315-316
- Brookhaven National Laboratory, construction commenced on High Intensity Radiation Development Laboratory, 520
- Brookhirst Igranic Ltd., variable speed paper machine drive installed at Alders (Tamworth) Ltd., 334; Australian sales organisation, 397
- Brossel Freres SA, trucks for ECM use, 206
- Brotherhood, Peter, Ltd., licence agreements with Booker Group and Triveni Engineering Works, 809
- Brouha, L., on *Physiology in Industry* (book), 776
- Brown Bros., steering gear for *Empress of Canada* liner, 605; steering gear for liner *Canberra*, 755; lateral thrust bow propeller for liner *Canberra*, 755
- Brown, D., on David Brown Corp., 61
- Brown David, Corp., position and prospects, 61; profits, 61; contributions to National Insurance Scheme 61; increase in orders, 61; plant investment, 61; Radicon worm reducer units, 61; cooperation with EMI Electronics Ltd., 61; increased orders for tractor division, 61; exports, 61; re-grouping of manufacturing units, 61
- Brown, David, Corp. (Sales) Ltd., double-volute pumps (trade publication), 298
- Brown, David, Industries Ltd., gear testing machine, 56; Aston Martin Lagonda Ltd., to take over motor car manufacture from, 61

- Brown, David, Machine Tool Division, gear cutting machine for West Germany, 429
- Brown, David, & Sons (Huddersfield) Ltd., re-established as separate unit from David Brown Corp., 61
- Brown, David, Tractors Ltd., re-established as separate unit from David Brown Corp., 61
- Brown, E. W., on Introductory Treatise on Lunar Theory (book), 298
- Brown, H. F., on diesel losses on US railways. See LETTER, 92
- Brown, I. D., on Absolute Judgments and Operative-Inspector Relations, 447
- Brown, John, & Co. Ltd., frigate for Royal Navy, 69; Clydebank Yard, new towing carriage for shipyard laboratory, 433
- Brown, John, Land Boilers, formation of consortium with Foster Wheeler Ltd., 325
- Brown, John, Ltd., interest in Firth-Vickers Stainless Steels, 737
- Brown, John (SEND), Ltd., charge-discharge machine for Windscale atomic reactor, 519
- Brown Knight & Truscott Ltd., formation of Kompass Register Ltd., with Engineering Ltd., 518
- Brown, P. E., et al., on remote handling and analytical techniques used in the processing of samples from HTGC loop irradiations, 520
- Brown, S. G., Ltd., steering control system for liner *Canberra*, 755
- Brown & Tawse Plant Ltd., Lambert Hydrocon mobile crane, 661
- Brown, W., on Exploration in Management (review), 540
- Browne, A. M., elected president of BEAMA, 447; biographical note, 447; on BEAMA export conference, 841
- Browning FN pistol, 830
- Machine gun, 831
- Browning's Electric Co. Ltd., Com-Centric commutator lathe, 486
- Brown's, David, by D. Donnelly (book), 428
- Bruges, Dr. E. A., on mixing gases, 213. See LETTER, 313
- Brunner, H., appointed vice-president of Union d'Assureurs des Credits Internationaux, 873
- Bruntons (Musselburgh) Ltd., Forth Road Bridge, 453
- Brush application of paint, 2
- Electric hand, Peugeot Airbrosse (Rudson Wood & Co. Ltd.), 848
- Brush Crystal Co., PZT crystals, 21
- Brush Electrical Engineering, exhibit at Rand Show, 465
- Brussels Airport, Marconi radar units for, 609
- Bryan, J. G., on Shortest Route to Optimum Design, 860-861
- Bryant Electric Co., circuit breaker load centres (trade publication), 748
- Bryce, M. D., on Industrial Development: Guide for Accelerating Economic Growth (review), 707
- Bryden, G., backing for F. T. Clark's ideas on horticultural machinery, 670
- Bryson Industries Ltd., Australian distributors for Jaguar Cars, 299
- BT Stacking truck (Rolatruc Ltd.), 444
- BTR Industries Ltd., position and prospects, 257; subsidiaries of, 257; order position, 257; modernisation programme, 257; profit margin increase, 257; labour shortage, 257; belting for National Coal Board, 257; hose products, 257; aero products, 257; group profits, 257; capital investment, 257; compressed air line from Geon RA 170 pvc, 771; nylon/cotton conveyor belts for NCB, 867
- Bubble chamber, controlled sensitivity, by B. Hahn et al (paper), 192
- Buccluch Estates, development as Thorneybank Industrial Estate, 497
- Buchanan Bros. Ltd., Clyde Economy pressure gauge, 858
- Buck & Hickman Ltd., MagneTRACE milling machine, 767
- Buckland, Dr. W. R., review of Statistics Manual, 574; biographical note, 576
- Budd Co., adhesives to replace spot welding, 687
- Budgeting, capital, decision, by H. Bierman Jr., and S. Smidt (book), 200
- Buffalo University, licence to operate atomic reactor, 456; AMF Atomics Inc. build reactor for, 456; USAEC assistance to, 456
- Buffing mops, Airflow (W. Canning & Co.), 586
- Builders Copper Tube, copper tubes and fittings, 673; Ferranti Sirius computer for data processing, 673
- Building apprentices, increase in, 185
- Construction, applied, by A. Medlycott (book), 496; (review), 806
- Design and development in, 78
- Future exhibitions of, 78
- Guildford Cathedral, by B. Geen, 690-691
- Industry, accidents 209
- — Accident rate in, 381
- — Expansion and investment in, 81
- — External factors affecting, 79
- — Forecast for 1961, 81
- — Lack of advance in, 309
- — Long term research in, 81
- — Management and labour in, 80
- — 1960 as record level, 209
- — Plant and materials supply in, 80
- — Production in, 81
- — Productivity in, 209
- — Trends in, 209
- Market trends in, 79
- Operations, mechanization of, 794-795
- Outlook for 1961, 78-81. See LETTER, 180
- Prefabricated, protection for, 11
- and Public Works Exhibition, 685
- Research Station, loan of vans to DSIR for noise research, 348; mechanization of building operations, 794; sound and thermal insulation, 680; use of models for lighting research, 869
- Scheme, Gunnersbury, 413
- Sheets, plastic coated (Dorman Long (Steel) Ltd.), 105
- Site, mechanical aids on, 794-795
- Slabs, plastic faced, Spectra Glaze (Lilleshall Co. Ltd.), 47
- Building, tender for Petten low power atomic reactor building issued, 256
- Umbrella, completed for S. & J. Litchen Ltd., 186
- Units of Aerated concrete (Thermalite Ytong Co.), 321
- Work, increase in, 465
- Buildings, blasting experiments to study effects on, 482
- Heating, report of the Heating and Ventilating Research Association, 880
- Large, locating fires in, 402
- Prefabricated (trade publication), 200
- — Tubular steel components for (Tubewrights Ltd.), 186
- Use of cold formed steel sections in, 483
- Use of structural steel in, BS 449, 186
- Built by *Davy-United*, 225; (trade publication), 708
- Bulkheads, sound reducing, of Kraft honey-combe, for Deltic locomotive (English Electric Co.), 90
- Bull, John, Rubber Co., licence from Tecalemit to produce plastic brake hose, 17
- Bullers Ltd., insulators for Thames crossing of supergrid, 52
- Bulletin for Industry*, 309
- Bullows, Alfred, & Sons Ltd., paint spraying machine, 56; Hydra-Spray Golden spray gun, 858
- Buma Engineering Co. Ltd., fine boring machine, 222
- Bunsen, R. W., historical note, 7
- Buoys, marine, Trinity House, solar cells to power, 877
- Bureau of Standards. See *United States National Bureau*
- Bureau Veritas, classification of atomic propelled ships, 520; Maritime Technical Committee, 520; *General Technical Conditions for Nuclear Ships*, 520
- Burford, E. F., on British Trade Fair Moscow, 759
- Burgess, K. S., on sub-critical assemblies, 620
- Burgess, R. E., on Progress in Semi-conductors (book), 112; (review), 638
- Burmah Shell Oil Co., talks with India, 405
- Burmeister & Wain, marine diesel engines, 43; difficult order position, 325; new type diesel engine, 325; engine for East Asiatic Co. tanker *Java*, 325; diesel engines, 594
- Burner for car exhaust gas, Smog-Burner (Chromalloy Corp.), 175
- Gas (Gas Council), 531
- (Prior Stokers Ltd.), 530
- (trade publication), 464
- Burness Corlett & Partners, trawlers for Pelagic Trawling Co., 69
- Burnett, C. R., on Introduction to Modern Physics (book), 158; (review), 607-608
- Burnout point, 631
- Burns Commission on Fiji Islands, 873
- Burns & Russell Co., development of plastic faced building blocks, 47
- Burnside Quarry Co., busy year, 489
- Burrard Dry Dock Ltd., ferry boats for British Columbia Toll Highways and Bridges Authority, 641
- Burrill, J. W., on pressure vessel codes, 344
- Burroughs Adding Machine Co., cheque sorting machine for Lloyds Bank Ltd., 25
- Bus, diesel engine (Klockner-Humboldt-Deutz), 595
- Engine (Leyland), 595
- Engines (FNAG), 595
- Bus-bars, aluminium for Komati power station 618
- Aluminium, large, pass tests, 618
- Aluminium, testing for Komati power station, 618
- Bus station, George Washington, 51, 627
- Bush, E. H., on four factors govern petrol consumption, 215. See LETTER, 276
- Bushings, ball (trade publication), 776
- Bushnell, D., on Space Biology (book), 364
- Business Automation*, 706
- Equipment, design and development in, 118
- Future exhibitions on, 119
- Market trends in, 119
- Outlook for 1961, 118-121. See LETTER 212
- Industry, expansion and investment in 121
- Industry, external factors affecting, 119
- Industry, forecast for 1961, 121
- Industry, long term research in, 121
- Industry, management and labour in, 120
- Industry, plant and materials supply in, 120
- Industry, production in, 120
- Business Methods Index*, 156
- B.U.S.M. Co., jigs and fixtures, 18
- Butane lanterns, Camping Gaz (Forges d'Alais) 150-152
- Stove, Bleuett (Forges d'Alais), 150
- Camping Gaz (Forges d'Alais) 150-152
- Butler, J. W., elected chairman of Associated British Machine Tool Makers, 348
- Butler, R. A., on Rome Treaty and European Common Market, 649
- Butter, Dr. G. H., on silicon carbide for nuclear reactors, 455
- Butters, B., appointed chairman of Morris and Butters, 299
- Butters Bros., orders for Canada and Poland, 465; orders from UK shipyards, 465; cranes for Furness Shipbuilding Co. dry dock, 465; formation of Morris and Butters with Herbert Morris Ltd., 299
- Buttresses for dams, lateral stability of, by J. R. Ryzewski, 895
- Buxton, C. R., on Translation from Russian for Scientists (book), 24; (review), 706
- BW Valve Co. Ltd., Winn-Flexiseat valves, 153
- BX Plastics Ltd., Cobex clear pvc, 374; plastics (trade publication), 808
- Bylock Electric Ltd., Tablevac combined vacuum cleaner and occasional table, 504
- daviation and Weser and Hamburger cooperate on, 113; Rolls-Royce engines for, 113
- Cab, crane, plastic (Moto Plastics Ltd.), 739
- Cabinet, assembly, dust-free (Plannair Ltd.) 101
- Filing (trade publication), 112
- Cables, aluminium for (trade publication), 640
- Channel, 302, 309, 753
- Laying ship. See *Ship*
- Reeling machine, Metool (Metropolitan Tool and Products Ltd.), 417
- Saddles for Forth Road Bridge (William Beardmore), 452
- Sheathing, Niplas pvc/rubber (Greengate & Irwell Rubber Co.), 179
- Splices for Forth Road Bridge (Cable Covers Ltd.), 453
- Submarine power, between Jura and Kintyre, 777
- Wire, for Forth Road Bridge (Dorman Long (Steel) Ltd.), 516
- See also *Transmission; Wire Rope*
- Cable and Wireless Ltd., Cammell Laird to build cable laying ship for, 299
- Cableform Ltd., photoelectric detector, 416
- Cables Covers Ltd., cable splices for Forth Road Bridge, 453
- CABMA Register of British Industrial Products for Canada, 68; (review), 748
- Cadiz power station, capacity to be doubled, 273
- Cadoff, I. B., on Thermoelectric Materials and Devices (book), 428
- Caidin, M., on Race for the Moon (book), 200
- Caine, M., on S Man (review), 496
- Cairncross, Prof. A., appointed Economic Adviser to the Government, 97; biographical note, 97; on state of the roads, 341; on need for Commonwealth trade, 405
- Cairo International Agricultural Fair, British exhibits at, 333
- Calculations, Plain Words on, 719
- Calculus of finite differences, treatise on, by G. Boole (book), 776
- Calder Hall atomic reactor, twelve months continuous operation completed, 256
- — Operations School, Simlac atomic reactor simulator for (Short Bros. & Harland), 864
- — Type reactor, plutonium recycle in, by L. J. Barbieri et al (paper), 455
- Caldwell, on export incentives in Australia, 429
- California University, RUM remote underwater manipulator, 143; installation of Argonaut atomic reactor, 632; design of Tory IIA-1 atomic reactor, 800
- Californium, 832
- Calor Gas (Distributing) Co. Ltd., propane for gas-operated trucks, 375
- Calorifier, Norden (Holden & Brooke Ltd.), 827
- Calow, J. R. B., on trends in piston-ring wear in automotive gasoline engines, 521
- Calumet & Hecla, finned tube, 242
- Calver, G. A., on Banker's Guide to Marine Insurance of Goods (review), 774-775
- Cambay power station project, India, 627
- Camco, Inc., new factory in N. Ireland, 609; gas-lift valves, 609
- Camera, automatic (Ilford Ltd.), 325
- Ballistic, use on Woomera WRE range, 750
- Outlook for 1961, 74-77
- Performance, use on Woomera WRE range, 751
- Target aircraft, use on Woomera WRE range, 751
- Television, closed circuit, Nev Eye (Nottingham Electronic Valve Co. Ltd.), 650
- — EMI mini-camera (EMI Electronics Ltd.), 650
- — for Radio Italiana Televisione (Marconi), 541
- WRE interception single shot, 751
- Cameron, Dr. A., on parallel surface thrust bearings. See LETTER, 48
- Cameron, J., on African Revolution (review), 746
- Cameron, S., on Self-Organising Systems (review), 538-539
- Cammell Laird & Co. Ltd., cable laying ship for Cable and Wireless Ltd., 299
- Camp Bird Ltd., Colforg forging press, 102
- Camp Century atomic reactor, shut down ordered, 256
- Campagne Française des Petroles, formation of Total Oil Products (GB) to operate in UK, 1
- Campbell, Gifford & Morton Ltd., report on iron and steel potential in Nigeria, 841
- Campbell, R. S., on Take a Tomato when Touring Abroad, 799
- Camping Gaz International, butane stoves and lanterns (Forges d'Alais), 150-152; equipment stockists in UK, 152
- Camping Trade Association of Great Britain, formation of, 152
- Camrex Paints, Ltd., maintenance paints (trade publication), 872
- Can opener, Edlund (Metcalf & Co. (1950) Ltd.), 848
- Canada, advance in brewing in, 741
- Atomic programme of, 725
- CABMA register of British industrial products for, 68; (review), 748
- Gift to India of atomic reactor, 148
- — of reactor headers to Trombay atomic power station, 256
- Imports from UK, 341
- India Atomic reactor, 725; opening ceremony, 356
- Iron ore production, 729
- Nickel cast iron, in, 738
- Sales prospects of nuclear products overseas, 15
- Six Million HP River Project, 306-307
- Trade balance with US and UK, 159
- Unemployment in, 9
- Uranium research in, 16
- Canadian Association of British Manufacturers *CABMA Register of British Industrial Products for Canada* (book), 68
- Canadian Breweries Ltd., continuous malt making process, 741
- Canadian Government, exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519
- National Railways, aluminium railway wagons with covered hoppers, 717
- North Atlantic Westbound Freight Conference, increase in shipping costs, 233
- Nuclear Association, formation of, 223
- Canadian Pacific Co., liner *Empress of Canada*, 605; 769
- Pulp and Paper Association, research on load bearing capacity of ice, 186
- Canadian Steel Wheel Ltd., position and prospects, 737
- Uranium Research Foundation, formation of, 16
- Canadian Vickers, profits, 769; position and prospects, 769
- Canal, Bridgewater, historical note, 7
- Gharraf, model of, 471
- Canberra* liner, details of, 754-755; maiden voyage of, 753, 754-755; nickel in (International Nickel Co. (Mond) Ltd.), 838
- CANDU atomic reactor, 725
- Canning of atomic fuel with beryllium, 725
- Canning, W., & Co. Ltd., Bi-Nickel process, 135; Stapol sisal mops, 586; Airflow buffing mops, 586
- Cannon (GA) Ltd., Cannonlux kitchen unit 436
- Cannonlux kitchen unit (Cannon (GA) Ltd.), 436
- Capacitance standards, Jahre system (Aveley Electric Ltd.), 254
- Capacity and frequency meter (Solartron), 596
- Cape Insulation and Asbestos Products Ltd., Caposite amosite asbestos, 519; Rocksil rock wool, 519; exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519
- Capital allowance on motor cars, 649
- Budgeting Decision, by H. Bierman, Jr., and S. Smidt (book), 200
- Investment, increasing rate of, 309
- Caposite amosite asbestos (Cape Insulation & Asbestos Products Ltd.), 519
- Capps, A. W., on solar energy claims, 620
- Capricorn. See *Plain Words* articles; see also LETTER, 477
- Captain Foley* trawler, use of aluminium in, 275
- Car Driving for Beginners* (review), 24
- Car Loader (Stephens-Adamson Mfg. Co. of Canada Ltd.), 717
- Motor. See *Motor Car*
- Caravan, Nymph Newton Coachworks, 497
- Caravelle aircraft, 429; flight simulator of, for Alitalia Air Line (Redifon), 801
- Carbides, sintered, as cutting tools for steel, 514
- Uranium, bibliography of, 456
- Carbon dioxide coolant for fast cutting of steel, 266-267
- Disulphide causes piling danger, 483
- Carbon and Its Uses*, 774
- Carbon-14, half-life, 455
- Carborundum Co., Ltd., ceramic tools, 763
- Cardiac defibrillator (Westinghouse Electric Corp.), 175
- Monitor (Westinghouse Electric Corp.), 175
- Pacer (Westinghouse Electric Corp.), 175
- Careers, conventional, 89
- in industry and technical education, year book of, by H. C. Dent (review), 158. See LETTER, 180
- Cargo carrier, Stalwart (Alvis Co.), 61
- Ship. See *Ship*
- Carlton Tower Hotel, completion of, 159
- Carlisle Air Conditioning and Refrigeration Ltd., packaged air conditioning units, 403
- Carmen, Worshipful Company of. See *Worshipful*
- Carneiro, O. A. D., on Mambucaba Power Project in the Central Southern Region of Brazil, 147
- Carnelloe mine project, public enquiry into, 480
- Carolinus Virginia Tube atomic reactor, 420
- Carr, D. P., on trackwork engineering, 765
- Carr, L. H. A., on Relativity for Engineers and Science Teachers (review), 263; on Testing of Electrical Machines (review), 575-576
- Carret, W. O., historical note, 7
- Carrier, straddle (Hystr Co.), 12
- Carrington, Lord, on aircraft carriers, 273
- Carroll, T. D. R., appointed deputy chief designer of British Executive and General Aviation, 348; biographical note, 348
- Carron, W. J., on AEU members and overtime work, 625; to speak at National Apprentices dinner, 689
- Carter, C. F., on Science of Wealth (book), 200
- Carter Gears Ltd., variable speed gear, 693
- Carton board creaser (PATRA), 603
- Cartwright, W. F., on not wisely but too well, 589
- Casaccia Nuclear Centre, RC-1 atomic reactor undergoing modifications, 488
- Cascelloid Ltd., translucent sheeting (trade publication), 232
- Case crawler shovel machine (J. I. Case & Co. Ltd.), 798
- Instrument (trade publication), 640
- Case, J. I., Co. Ltd., case crawler shovel machine, 798
- Cases, plywood (Venesta Plywood Ltd.), 905
- Cassie, Prof. W. F., review of Landscape of Roads, 494-495; biographical note, 496; on teaching traffic engineering, 790
- Casson, Sir Hugh, interior design of liner *Canberra*, 755
- Casson, W., on supplying electrical energy in bulk, 284
- Cassuto, A., on nuclear fuel costs, 505
- Cast-to-form tools (trade publication), 904
- Cast iron. See *Iron*
- Casting cleaning machine (Sinex Engineering Co. Ltd.), 660
- Continuous, of steel, by M. C. Biochenko (book), 428
- Continuous, of steel, in commercial use, by K. P. Korotkov, H. P. Mayorov, A. A. Skvortsov and A. D. Akimenko (book), 576
- — of steel, Weybridge continuous process (Continuous Casting Co. Ltd.), 773
- Falling demand for, 105

- Castings, foundry, in epoxy resin (J. Hobkirk Sons & Co.), 375
- Fractured, repairs to (Metallock), 46
 - Metal (Wandsworth Foundry), 866
 - Pearlitic malleable, Lepaz (Ley's), 202
 - Production, Russian, translation of, 701
 - Repairs to, 46
 - System, cold (Alec Tiranti Ltd.), 867
- Castlehill Sand and Gravel, busy year, 489
- Catalogue of Lewis's Medical, Scientific and Technical Library, 1957-1959, supplement to (book), 24
- Radioactive chemicals (UKAEA), 192
 - Sources (UKAEA), 192
- Catalytic cleaning of fumes, 126
- Catchpole, E. J., on metal honeycomb core, 180. See LETTER, 313
- Caterpillar Tractor Co., Levertons of Spalding as main dealers, 235
- Cathedral, Guildford, cost of, 657; donation by engineers, 657; building of, by B. Geen, 690
- Cathode-ray polarograph, Nashton (Nash & Thompson Ltd.), 677
- Catmure Machine Tool Corp., Ltd., Vero Autodrill turret head drill, 628
- CAV Ltd., transistorised inverter, 132; ac generators, 132; fuel injection (trade publication), 298; Leo III computer ordered, 333; alternators for transport vehicles, 492; exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519; ac generators, 536; DPA distributor fuel injection pump, 602
- Cawtell Research & Electronics Ltd., Tele-Remscope television monitor, 318; materials tester, 693; contract with UKAEA, 801
- Cayzer, Sir Nicholas, on research in shipbuilding, 309
- CBA Engineering Ltd., Port Mann bridge, 731
- CD Productions Ltd., exhibit at British Trade Fair, Moscow, 705
- Ceabird Mk. II boat, use of Kraft honeycomb in, 90
- Ceacruiser boat, use of Kraft honeycomb in, 90
- Ceawren boat, use of Kraft honeycomb in, 90
- Cedric motor car, Japanese, 95
- Cefmo cutting-off machine (Addison), 251
- CEGB. See *Central Electricity Generating Board*
- Cell, crane overload warning (Salford Electrical Instruments Ltd.), 271
- Electric, rechargeable, Permabeam (Chilton Electric Products Ltd.), 472
 - Fuel, by G. J. Young (review), 774
 - Hydrogen-oxygen, 268
 - New, promises higher voltages, 268
 - Sodium, 268
 - Lead telluride, 648
 - Membrane permeation (Ionics Inc.), 237
 - Solar (Bell), 877
 - Experiments, 877
 - to power Trinity House marine buoys, 877
- Cellobond polyester resin (British Resin Products Ltd.), 475
- Cellobond Polyester Resins Technical Manual*, 507
- Celoria, F., on give us the tools, 476
- Cement, asbestos (trade publication), 264
- Cement and Concrete Association, *Digital Computers*, 66; model tests for Hammer-smith flyover, 247; on cement in road bases, 380; *Design and Construction of Open Air Swimming Pools*, 511; model testing service, 862; tests on bridge models and flyover, 862
- Pozzolanic, 483
 - in road bases, 380
 - from steelworks slag (Voest Steel Works), 512
 - See also *Concrete*
- Cementation Group, Maple Cross research centre opened, 187; Dr. R. A. Scott appointed head of research centre, 187
- Census of population, 505
- Centenary, Birmingham Small Arms Co., 7
- Blakeborough, J., & Sons, 7
 - Engineering, 7
 - Industrial, 7
- Massachusetts Institute of Technology, 413
- Central Electricity Generating Board, London supergrid "ring," 52; Thames crossing of supergrid, 52; contractors for Thames crossing of supergrid, 52; table of power station construction by in 1960, 113; high voltage tap changers ordered from AEI Ltd., 233; Grid System, 284; nation wide control for electrical power network, 303; transmission towers to have better appearance, 307; total power sales, 365; West Burton power station boilers ordered from International Combustion Ltd., 365, 371; turbo-alternators for West Burton power station ordered from English Electric Ltd., 365, 371; Allen-Stoekicht gear units ordered from W. H. Allen Sons & Co., 429; supergrid switching equipment ordered from English Electric Co. Ltd., 429; increase of charges for electricity, 541; order placed with Parsons & Co. Ltd. for turbo-generators, 605; reorganisation of regional structure, 609; public inquiry into atomic power station for Anglesey, 632; Spondon "H" plant supplies steam to British Celanese Ltd., 637; contract with AEI Ltd., for steam condensers, 665; orders placed with C. A. Parsons Co., 737; Berkeley atomic laboratories, functions of divisions of, 768; Berkeley atomic laboratories, shielded area of, 768; opening of atomic laboratories at Berkeley, 768; estimates of future power requirements, 849; dry cooling towers for Rugeley power station (English Electric Co. Ltd.), 884; see also *Atomic Power Station*; *Power station*
- Research Laboratories, preventing acid corrosion in boilers, 782-783
 - Office of Information, *Professional Engineers*, 141
- Central Research Laboratories Inc., Model 7 master slave manipulator, 104
- Central Statistical Office, index of industrial production, 309
- Transport Consultative Committee, closing down railway branch lines and stations, 513; annual report, 513
- Centrales Nucleares del Norte, application to establish atomic power plant at Valle de Tobalina, 456
- Centrax Ltd., licence to manufacture Rockwell planetary axles, 873
- Centres, live, for lathes (Insley Industrial Supply Co. Ltd.), 222
- Centrifugal pump. See *Pump*
- Centrifuge, gas, for uranium separation, development of, 223
- Wet, Hydrocyclone (Liquid-Solid Separations Ltd.), 82
- Centromor, Furness Shipbuilding Co. floating dock for United Ships Repair Yards, 265
- Ceramic, alumina (trade publication), 808
- as atomic fuels, 368
 - Cutting tools for steel, 515
 - Silencers for motor cars, 95
 - Special, by P. Popper (book), 708
 - Thermoelectric materials (Westinghouse), 813
 - Tools (Carborundum Co. Ltd.), 763
- Cermets as atomic fuel, 369
- by J. R. Tinklepaugh and W. B. Crandall (book), 808
- Cesioterax medical irradiation device, 15
- Ceylon, electrical power schemes in, 881
- Geological survey of, 387
 - IAEA experts to visit, 387
 - Loan from World Bank, 881
 - Projects in, 881
 - University, prestressed concrete footbridge for, 730
- Chagall, D., review of Lincoln Lords, 296-297; biographical note, 298
- Chain drives (trade publication), 576
- Treatment plant (Incandescent Group), 661
- Chalmers, B., on Physical Examination of Metals (book), 298; (review), 639
- Chambadal, P., on mixing gases, 313. See LETTER, 213
- Chambal Valley Development Scheme, 143
- Chamber, bubble, controlled sensitivity, by B. Hahn *et al.*, 192
- Ionisation (Plessey Nucleonics Ltd.), 891
 - Mean-current fission ionisation, saturation characteristics of, by J. A. Dennis and W. R. Loosemore, 520
- Chamberlain Industries Ltd., Staffa pipe bending machine, 190; Staffa-Herbert tube bending machine, 825
- Chamberlain Plant Ltd., portable compressors, 222
- Chambers, S. P., on ICI Ltd. and ECM, 801
- ChamferTrode grooving electrodes (Eutectic), 835
- Chandos, Lord, on engineers and society, 277, 442; statement awaited on AEI Ltd., 585; on AEI Ltd., 633
- Chandrasekhar, S., on Principles of Stellar Dynamics (book), 496
- Channel bridge controversy, 681
- Discussion on, 437
 - Cable, to be commissioned in September, 309
 - Design of, 302
 - Executive Committee, Channel cable to link UK and French grid systems, 753
 - for linking French and UK grid systems, 753
 - Ferry services and air bridge, 681
 - Pipeline, Pluto, historical note, 45
 - Tube, discussion on, 437
- Channel Tunnel Co., annual meeting of, 856
- Controversy, 681
 - Discussion on, 437
 - and ECM, 856
 - Study Group, 437, 856
- Chapman, R. D., on stress-strain temperature-time relationship for refractory materials, 455
- Charge-discharge machine for Windscale atomic reactor, 519
- Charlton Weddle & Co. Ltd., heating coils for MV *Pindlar*, 242
- Charnley, C. J., on control developments from Mesucora, 804
- Charts (trade publication), 112
- System, Movigraph Rotadates, 127
- Charting progress through the works, 127
- Chaseside Engineering Co. Ltd., Loadmaster shovel loader, 796
- Chaudieres Samson SA, bought by Booker Group and Sogaz (SA des Gaz Industriels) of Brussels, 777; renamed International Samson, 777
- Chemical analysis. See *Analysis*
- Consumption in Commonwealth, 341
 - in UK, 341
 - in Western Europe, 341
 - Containers in pvc, 474
 - Engineers, analysis of sciences and techniques used by, 185
 - Computers for, symposium on, 180
 - Engineering education and practice, survey of, by Prof. R. E. Johnstone, 185
 - Practice, by H. W. Cremer (book), 298
- Chemical Equipment Engineering Ltd., batch drying stove, 145
- Industry, effect of ECM tariff changes, 341
 - in Europe, 341
 - Kinetics, alphabetical index to tables of, homogeneous reactions (National Bureau of Standards circular), 66
 - Machinery exports, 70. See LETTER, 136
 - Outlook for 1961, 70-73
 - and physical testing of industrial water, methods of (ASTM), 15
 - Plant Exhibition, German, 677
 - Outlook for 1961, 70-73
 - Plastics, exports, 257
 - Processing Nomographs, by D. S. Davis (review), 110
 - Radioactive, UKAEA catalogue of, 192
 - Reduction techniques (Sherritt Gordon Mines), 587
- Chemistry, boron, Soviet research in (Consultants Bureau) (book), 808
- Substances, of dyeing, by Dr. T. Vickerstaff (book), 705
- Cheque sorter/reader hired to Barclays Bank Ltd. (IBM Ltd.), 25
- Sorting machine for Lloyds Bank Ltd. (Burroughs), 25
- Cherry, J., on choice of cutting tool materials, 514; on cutting tool design and utilisation, 570
- Chetwynd, B., on proposals for reform in steel industry, 105; on South Durham Steel & Iron Co., 105
- Chevenard-Joumier laboratory furnace (Shandon Scientific Co. Ltd.), 13
- Chevrolet Corvette motor car, 687
- Chieftain tank, infra red direct control system for, 45
- Chili, electrical power in, 147
- Nuclear energy in north zone of, by E. Friedmann M., 148
- Chilton Electric Products Ltd., earth leakage circuit breaker, 351; Permabeam rechargeable electric cell, 472
- Chimney, insulated (Uni-Tubes Ltd.), 680
- Reinforced concrete, by C. P. Taylor and L. Turner (review), 67
- China, building up motor car industry in, 95
- China Navigation Co., refit for ship *Kuala Lumpur*, 699
- Trade with, 233
- Chipbreaker drill, 570
- Chisotron, medical irradiation device, 15
- Chlorine, residual, controller for (Wallace & Tiernan Ltd.), 661
- Chorafas, D. N., on Statistical Processes and Reliability Engineering (review), 362
- Christians & Nielsen, bid for contract on Volta River project, 333; new berths at Mombasa Harbour, 828
- Christie, E., on welding equipment and customers' requirements, 568
- Christmas holiday, road accidents during, 9
- Chromatograph, gas, Griffin D6 (Griffin & George Ltd.), 778-780
- Chromatography, 778
- Gas, 645
- Chromium and nickel recovery in the electroplating industry, survey of (DSIR book), 267
- Plating (trade publication), 298
- Chromoid No. 101 stainless steel welding electrode (BOC Ltd.), 619
- Chronometer, historical note, 7
- Chrysler Airtemp Ltd., Airtemp air conditioner, 693
- Chrysler Corp., Turboflite gas turbine engined motor car, 663
- Chrysler Institute of Engineering, first UK engineer selected by, 689
- Chu, L. J., on Electromagnetic Field, Energy and Forces (review), 297-298
- Chubb & Sons' Lock & Safe Co. Ltd., Chubb "Standard Quality" safe, 642
- Chucks, magnetic (trade publication), 68
- Chugg, W. A., on can Glulam stresses be increased safely, 590; on laminated timber, 829
- Churchill, Charles, & Co. Ltd., demonstration of automatic manufacture of layshaft gears, 458
- Churchill Gear Machines Ltd., automatic machines for gear manufacture for Austin Motor Co., 458
- Churchill Machine Tool Co., share capital purchases by Birmingham Small Arms Co., 348; Sir Greville Maginness resigns as chairman, 348
- Churton, J., on sound and thermal insulation, 680
- Cia Constructora Nacional, S.A., formation of Companhia Anglo-Brasileira de Construcões (CAB), 379
- CIBA (ARL) Ltd., aluminium honeycomb, 90; *Aeroweb Honeycomb Production Information Sheet No. 1*, 362; epoxy bonding and pattern making, 375; Araldite epoxy resin, 375; inclusion in CIBA United Kingdom Ltd., 565; Redux adhesive for aluminium, 587; aluminium honeycomb (trade publication), 808
- CIBA Clayton, inclusion in CIBA United Kingdom Ltd., 565
- CIBA Laboratories, inclusion in CIBA United Kingdom Ltd., 565
- CIBA Ltd., formation of CIBA United Kingdom Ltd., 565; arrangements with Humphreys & Glasgow Ltd. for expansion of Atul Products Ltd., 577; manufacturing processes and technical information for Humphreys & Glasgow Ltd., 577; training of Atul Products Ltd. personnel, 577
- CIBA United Kingdom Ltd., formation of, 565; as holding company for CIBA Laboratories, CIBA Clayton and CIBA (ARL), 565; Dr. h.c. R. Kappeli made chairman, 565; Sir Arthur Vere Harvey appointed managing director, 565; Clayton Aniline Co. to be bought, 565
- Cinema, drive in, Trinidad, steel structure for screen (Sanders & Forsters Ltd.), 187
- Film. See *Film (cinema)*
- Circuit, alternating-current, theory, introduction to, by J. B. Earnshaw (book), 904
- Breaker. See under *Switchgear*
 - Printed, automatic etching of, 773
 - Tester (A. W. Haydon Co.), 416
 - Transistor, analysis, by M. V. Joyce and K. K. Clarke (book), 608
- Cirola and Lodigiani, bid for contract on Volta River project, 333
- Citroen "deux chevaux" motor car, 95
- DS19 motor car, 592
- Civil Aviation (Licensing) Act, 801
- See also *Aviation*
 - Defence, increase in costs, 447
 - Engineering (trade publication), 576
 - in the Commonwealth, 730
 - Contractors, Federation of, handbook (review), 806
 - Design and development in, 78
 - Future exhibitions of, 78
 - Handbook, by L. C. Urquhart (review), 68
 - Industry, expansion and investment in, 81
 - Industry, external factors affecting, 79
 - Industry, forecast for 1961, 81
- Civil engineering industry, long term research in, 81
- Industry, management and labour in, 80
 - Industry, plant and materials supply in, 80
 - Industry, production in, 81
 - Market trends in, 79
 - Outlook for 1961, 78-81. See LETTER, 180
 - Plant, proving tests on, 795
 - Use and control of vegetation in, 829
 - Estimates, grants for new buildings at Sussex University, 447
- Clamp, hydraulic, swing, Newton (Power Jacks Ltd.), 271
- Suspension, aluminium (Alcan Industries Ltd.), 507
- Clan Line, two cargo ships ordered, 1
- Clapham, M. J. S., appointed overseas director of ICI, 533; biographical note, 533
- Clare Bros. Ltd., Convexionaire air heater, 727
- Clare, K. E., on vegetation on roads and airfields overseas, 829
- Clarendon Laboratory, site of new nuclear research centre for Oxford University, 832
- Clark Bros. Co., gas turbine licence to Hawker Siddeley Brush Turbines Ltd., 271
- Clark, C., on European Common Market, 761
- Clark, F. le Gros, on *Growing Old in a Mechanized World* (book), 133
- Clark, F. T., research on horticulture machinery, 670
- Clark, Graham, lecture, 244, 549, 556, 714
- Clark, R. H., on Development of the English Traction Engine (review), 363
- Clark, R. W., on *Birth of the Bomb* (book), 576
- Clarke, Chapman & Co., level luffing deck-cranes (trade publication), 158
- Clarke, K. K., on Transistor Circuit Analysis (book), 608
- Clarke & Stanfield, floating dock for United Ships Repair Yards, 265
- Clark's Press Equipment Ltd., strip oiler, 251
- Clarkson, C., appointed head of British Aircraft Corp. (USA) Inc., 777; biographical note, 777
- Class distinction, Plain Words on, 552
- Clausen, H., on can design be taught in universities, 376. See LETTERS, 476, 789; on designer and writer, 508
- Clay, fire. See *Firebricks*
- Clay Products Promotional Fund, research to eliminate brick efflorescence, 40
- Clayton Aniline Co., to be bought by CIBA United Kingdom Ltd., 565
- Clayton Dewandre Co. Ltd., Clayton-Still heat exchange tube, 528
- Clayton-Still heat exchange tube (Clayton Dewandre Co. Ltd.), 528
- Clean Air Act, requirements of, 549
- Conference, proceedings of diamond jubilee international (National Society for Clean Air book), 68
 - National Society for. See *National Clean Air Year Book*, 870
- Cleaner, vacuum, central plant, Dustmaster (Sir George Godfrey & Partners), 372
- Combined with occasional table, Tablevac (Bylock Electric), 504
 - Outlook for 1961, 168-171
- Cleaning equipment, ultrasonic (Branson Instruments Inc.), 335
- Machine for castings (Sinex Engineering Co. Ltd.), 660
 - Plant, fume, Ambuco Venturi (Ambuco Ltd.), 890
 - Ultrasonic, equipment, 83
- Clearways face shield (Safety Products Ltd.), 319
- Cleaver, A. V., on liquid hydrogen as rocket fuel, 899
- Clegg, S., historical note, 7
- Clerk Maxwell's reciprocal theorem, 862
- Cleveland Bridge & Engineering Co. Ltd., Firth Road Bridge, 10, 449
- Clevite Corp. of America, Clevite PZT spark pump, 21
- Clifford, J. E., electrolytic machining process, 175
- Clifton & Baird Ltd., cutting machines, 763
- Clifton Bridge, model of, 862
- Climate. See *Meteorological*
- Climax Molybdenum Co., designing in steel (trade publication), 808
- Climax Rock Drill & Engineering Co., exhibit at Moscow Trade Fair, 673
- Clinch tube joints (Access Equipment), 101
- Cling-Sling lifter (G. D. Peters & Co. Ltd.), 629
- Clinker, ferric, in dam construction, 483
- Clinometer (Hilger & Watts Ltd.), 726
- CLM, miniature inspection lamp, 253
- Clock, atomic, 705
- Bonus (D. Robinson & Co. Ltd.), 280
 - Outlook for 1961, 74-77
 - Synchronous, 784
 - and watch yearbook, 1961 (book), 576
- Closing machine for wire rope (Larmuth & Bulmer Ltd.), 144, 172
- Cloths, glass (trade publication), 264
- Wire, stainless steel, Micro-Hollander (United Wire Works Ltd.), 439
- Cloud seeding, new theory for, 175
- Club, Amstel. See *Amstel Club*
- Golden Shoe, 856
 - YZ, formed by Royal Society for the Prevention of Accidents, 824
- Clutch, reversible locking (Renold Chains Ltd.), 537
- See also *Coupling*
- Clyde Economy pressure gauge (Buchanan Bros. Ltd.), 858
- Clydeside shipyards, order position, 817
- CNEN. See *Italian Comitato Nazionale per l'Energia Nucleare*
- CO₂. See *Carbon Dioxide*
- Coal-analysis unit, automatic, for Netherlands State Mines (Rontgenapparatenfabriek), 469
- Battle with oil, 273
 - Board, National. See *National Coal Board*
 - Cleaning and blending, 273
 - Cost of, 849
 - in Czechoslovakia, 15
 - Developments in the burning of, 534
 - Fired industrial boilers, efficiency of, by C. D. Gunn, 534-535

- Coal import attempt from US by Steel Co. of Wales, 689
- Industry, outlook for 1961, 160-163
 - in Ruhr, 177
 - Shortage of skilled labour in, 141
 - Mechanized cutting and loading of, by R. Shepherd and A. G. Withers (book), 608
 - Mine. See *Colliery*
 - Mining industry. See *Coal industry*
 - and oil, comparative efficiencies of, 534
 - Plough, 603
 - Price increase, 141
 - Ruhr, cost of, 849
 - Shearer and loader, Anderton, 603
 - Tar/epoxy, polyamide cured, Adcora A3 (E. & F. Richardson), 506
 - Thin seam mining, 669
 - Trepanner, 603
 - Unmined reserves, 273
 - US, cost of, 849
 - from vending machines, 721
 - Coalmining industry, position of, 9
 - Coast Erosion and Defence (DSIR publication), 187
 - Coatbridge, unemployment in, 217
 - Coatings, Adcora anti-corrosive (E. & F. Richardson), 136, 506
 - Coating Contractors Ltd., formation of, 506; anti-corrosion coatings for industry, 506. See *LETTER*, 136
 - of Geon 121 pvc to protect duct (Plastic Coatings Ltd.), 803
 - Hypalon, in use in French gas industry, 243
 - Metal, sprayed (trade publication), 232
 - Nylon powder for (Dohm Ltd.), 835
 - Outlook for 1961, 70-73
 - Plant, dip (Lionel Hook & Sons Ltd.), 858
 - Plastic (trade publication), 264
 - Cobex clear pvc (BX Plastics Ltd.), 374
 - Cochran & Co. Annan Ltd., coal fired boiler, 354; series II vertical boiler, 534; Sinupac boiler, 534
 - Cochran, Air Chief Marshal Sir Ralph, on commuter carrying capacity of VTOL aircraft, 241; Brancker Memorial lecture, 241
 - Cock, blow-down, Mobrey (Ronald Trist & Co. Ltd.), 559
 - Cockaday, P., on industry's attack on polio, 4
 - Cockburns Ltd., ultrasonic cleaning apparatus installed, 83
 - Cockerell, C. S., awarded Viva shield of the Worshipful Company of Carmen, 447
 - Cockcroft, Sir John, address at centennial of Massachusetts Institute of Technology, 413
 - Cocks, W. J. F., on operation of electrical plant in hazardous areas, 281
 - Code of ethics for US electrical industry, 565
 - for pressure vessels, need for unification, 238. See *LETTER*, 344
 - Coding machine, Dedruma (Westwood Paper Ltd.), 827
 - Cody, S. F., historical note, 7
 - Coffee grinder, electric (Norel Electrical Appliances Ltd.), 848
 - Cohen Bros. (Electrical) Ltd., Kwiklift lorry mounted crane, 101
 - Cohen, George, 600 Group Ltd., Pingon tower crane, 628; skip loader, 661
 - Cohen, George, Sons & Co. Ltd., Jones rail crane, 189
 - Cohen, I. B., on Birth of a New Physics (book), 872
 - Colarm fire alarm (Walter Kidde Co. Ltd.), 352
 - Cold Forging Ltd., installation to produce steel blanks for cold forging, 634
 - Formed sections, standard for, 483
 - Rolling, push-button integrated, 490
 - Cole, E. K., Ltd., infra-red heaters, 418
 - Cole, H., review of Borate Glasses, 362; biographical note, 364
 - Cole, Henry A., & Co. Ltd., electronic motor controller, 652
 - Cole, S., appointed Director General of IAEA, 148
 - Colforg forging press (Camp Bird Ltd.), 102
 - Collectors, sludge (trade publication), 428
 - Wood refuse (trade publication), 428
 - Colleges, advanced courses in US, 317
 - of Advanced Technology, list of, 888; running costs of, 888; transfer of command from Local Authorities to independent governing bodies, 888
 - of General Practitioners, formation of Medical Recording Service, 556
 - Collets Holdings Ltd., *For You*, 494
 - Colliery, Kellingley, high speed shaft sinking at, 380, 397
 - Low pressure stowing in, 482
 - See also *Coal*
 - Collis, J., & Sons Ltd., handling equipment for liner *Canberra*, 755
 - Collisions. See *Accidents*
 - Colombo Plan, Canada gives India an atomic reactor, 148
 - Colonial territories, UK engineers in, by J. G. Orr, 715
 - Colour meter, Coloumter (Hilger & Watts), 58
 - Oxides (Ferro Enamels Ltd.), 603
 - Television. See *Television*
 - Coloumter colour meter (Hilger & Watts), 58
 - Colquhoun, Brian, & Partners, abattoir and flying fish plant in Barbados, 736
 - Columbia Pictures Corp., order placed for Austin Gypsy motor vehicles, 497
 - University, RUM remote underwater manipulator, 143; Triga atomic reactor installed, 632; operation of pool type reactor, 632
 - Columns, metal, research on compressive strength of (Battelle Memorial Institute), 337
 - Tied, give a large clear floor area, 764
 - Colvilles Ltd., ore handling plant ordered from GEC Ltd., 113; securities sold back to general public, 325; infra-red plant installed for drying ladle stoppers (GEC), 367
 - Colyer & Southey Ltd., Kamm enlarger, 144
 - Com-Centric commutator lathe (Browning's Electric Co. Ltd.), 486
 - Combined Development Agency, purchase of uranium ore from South Africa, 609
 - Combined Development Corp., overseas options relinquished, 505
 - Combustion, catalytic, for cleaning fumes, 126
 - Combustion Chemicals Ltd., fuel oil improver (trade publication), 872
 - Combustion Engineering Inc., operation of SL-1 atomic reactor, 148
 - Combustion Engineering Ltd., consortium with Fairfield Shipbuilding & Engineering Co. Ltd. and Mitchell Engineering, 333
 - Comet aircraft, Olympic Airways place repeat order, 465
 - Commercial vehicle. See *Motor vehicle*
 - Commissariat a l'Energie Atomique, safety on atomic propelled ships, 520
 - Committee on drop forging, Ministry of Labour reappoints, 593
 - *Common Market* (monthly review), 110
 - *Common Market*, European. See *European Common Market*
 - Commonwealth Aluminium Corp., financing by British South Africa Co., 357; association with Consolidated Zinc Corp., 357; association with Kaiser Aluminium, 357
 - British, Year Book, by R. S. Russell (review), 747-748
 - Civil engineering in, 730
 - Co-operation in education, 722-723
 - and Europe (Economist Intelligence Unit Ltd.) (review), 747-748
 - Investment in atomic energy, 725
 - Need for trade in, 405
 - Production statistics, 556
 - South Africa decides to leave, 533
 - Africa investment in, 357
 - Technical Training Week, 720, 721; exchange of UK trainees with Commonwealth, 761; firms participating in, 737; John Laing Co. participation in, 824
 - See also *Australia*; etc.
 - Communication and indexing of scientific information, 688
 - Microwave, low noise for, 400-401
 - the problem of—science and industry conference, 137
 - Technical, gap in, 753
 - Communications centre, flexibility for, 510
 - *Communications and Electronics Abstracts*, 806
 - Communications satellites, active, by Dr. G. E. Mueller, 893
 - Coded speech transmission with, 892
 - Cost analysis of, 893
 - Engineering and economics of, 892
 - Communications Satellites Inc., formation of, 749
 - Intercontinental, by E. A. Laport, 893
 - Orbital life of, 893
 - Symposium on, 892
 - by G. V. E. Thompson, 892-893
 - Space resources for, 585
 - World, Satellite stations for, 585
 - Communicator, office, Loudspeakerphone (AEI), 384
 - Compacta kitchen unit, 436
 - Compaction machines, table of cost trials on, 795
 - Compagnie Francaises de Phosphates de l'Océanie, manganese mining in New Hebrides, 201
 - Compagnie pour l'Etude et le Développement des Echange Commerciaux (Compadec), River Tagus bridge, 482
 - Companhia Anglo-Brasileira de Constructes (CAB), formation of, 379; Rio Grande hydro electric power scheme, 379
 - Companhia Nacional de Navegacao, motor ship ordered from Nederlandsche Dok en Scheepsbouw Maatschappij, 333
 - Company activities (trade publications), 676, 708
 - British, moving into Europe, 209
 - Moving into ECM, 209
 - Promoting UK space effort, 585
 - Compass, gyro (Sperry Gyroscope Co., Ltd.), 560
 - Complete Scientist (Leverhulme Study Group Report) (book), 776
 - Components (trade publications), 540, 776
 - Tester (Sylvan Ginsbury Ltd.), 692
 - Compound, intermetallic, mechanical properties of, by J. H. Westbrook (review), 463
 - Compressed air line, Geon 170 pvc, 771
 - See also *Pneumatic*
 - Compression devices, magnetic, in thermonuclear work, 324
 - Compressors, air, Alley (Alley Compressors Ltd.), 763
 - (Atlas Copco), 253
 - and customers' requirements, 567
 - Hestair (Hamworthy Engineering Ltd.), 145
 - Hydrovane (Whittaker, Hall & Co. (1929) Ltd.), 763
 - (Joy Sullivan Ltd.), 827
 - Portable (BEN Patents Ltd.), 189
 - Portable, Bristol (Bristol Pneumatic Tools Ltd.), 796
 - Textbook on (F. M. A. Pokorny) (book), 708
 - Tractor unit, Roughrider (Atlas Copco (Great Britain) Ltd.), 797
 - Axial-flow, bibliography on, including blades, cascades and other related material, by R. Bramley and E. McCoy (UKAEA book), 104
 - Flow, UKAEA bibliography on, 104
 - ENGINEERING survey report on, 523
 - Outlook for 1961, 114-117
 - Piston-cylinder, by C. Bouché and K. Wintterlin (review), 640
 - Portable (Chamberlain Plant Ltd.), 222
 - Power pack, Travelair (Air Pumps Ltd.), 827
 - Steam, rotary (Drum Engineering Co. Ltd.), 763
 - Vane type (Shorrock Superchargers Ltd.), 65
 - Compton, Sir Edmund, on losses at civil airports, 159
 - Computation and Automation, British Conference on. See *British*
 - Field, in engineering and physics, by A. Thom and C. K. Apelt (book), 496
 - Process control, the need for more, by L. Gallon (paper), 181
 - Computer aids for air traffic control, 479
 - Analogue, for classroom (Short Bros. & Harland Ltd.), 536
 - Computer, analogue, for educational instruction (Redifon Ltd.), 888
 - and digital, 864
 - On-line process control: Anatrol, by M. James and W. T. Lee (paper), 181
 - Solartron SC 30 (Solartron Electronic Group Ltd.), 874-876
 - Argus, for Babcock & Wilcox Ltd. (Ferranti Ltd.), 365, 366
 - for ICI Ltd. (Ferranti Ltd.), 365, 366
 - for boiler control, 366
 - for the chemical engineer, symposium on, 180
 - for chemical plant, 366
 - Components, "do it yourself," PACE (Electronic Associates), 87
 - (Computers & Tabulators Ltd.), 555
 - Controlled plate cutting (BOC Ltd.), 39
 - Designed by computer, 269
 - Computer Developments Ltd., formation of, 193
 - Digital and analogue, 864
 - Argus, in process control, by W. F. M. Payne (paper), 181
 - Atlas, first production model (Ferranti Ltd.), 609
 - (Cement & Concrete Association book), 66
 - Control of large plants by, 366
 - Speech synthesized by (Bell Telephone Laboratories), 781
 - Efficiency, 366
 - Emidec 2400, for Ministry of Pensions and National Insurance, 325
 - Emidec 2400, for Royal Army Ordnance Corps, 325
 - Ferranti Mercury, optimisation procedure on, 860
 - General purpose electronic analogue, by R. J. A. Paul, 864
 - IBM 650 RAMAC, for data processing in an air route traffic control centre, by H. R. Johnson, Jr., J. E. Erickson, J. E. Speers and J. O. Egloff, 479
 - Leo III, for CAV Ltd. (Leo Computers Ltd.), 333
 - LEO III, for Dunlop Rubber Co., 665
 - LEO III, for wage calculations, 593
 - Nike-Zeus, for Ascension Island, 269
 - On-line digital, for Samuel Fox & Co. Ltd. (E-A Automation Systems Ltd.), 701
 - Packaging for export, 203
 - in Population census, 505
 - and programming, by K. A. Redish, 180
 - Sirius, for Metropole Industries Group (Ferranti Ltd.), 673
 - Computers and Tabulators Ltd., computer, 555
 - in training atomic engineers, 864
 - and variables, 860
 - Computing centre (Electronic Associates Ltd.), 809
 - Relays, simple, by R. J. Redding and F. H. Bodley (paper), 181
 - Service, postal (English Electric Co.), 153
 - Concast A.G., licence to build continuous steel casting plant to Distington Engineering Co., 365
 - Conch Methane Services Ltd., design of refrigerated tanker ship for Bridgestone Liquefied Petroleum Gas Co., 439
 - Concrete, aerated, building units of (Thermalite Ytong Co.), 321
 - Aggregates, specification and handling for large dams, 894
 - Dams for wide valleys, 895
 - Dumping truck, Muir-Hill (E. Boydell & Co. Ltd.), 189
 - Effect of frost on, 321
 - Footbridge, prestressed, for Ceylon University, 730
 - Freshly mixed, rapid analysis of, by C. D. Turton, 659
 - for Hilton Hotel, 627
 - for Italian dams, 483
 - Lean, 380
 - Linings for tunnels, 415
 - Mixing machine, batch (Construction Machinery Ltd.), 797
 - Machine, Winget 3 TS (Winget Ltd.), 810-812
 - Ready mixed, for industry and agriculture, 235
 - Reinforced, chimneys, by C. P. Taylor and L. Turner (review), 67
 - Piling and piled structures, by F. E. Wentworth-Shields, W. S. Gray and H. W. Evans (review), 297
 - Saturated, failure mechanism of, by T. N. W. Akroyd, 658-659
 - Structural, by K. Billig (book), 708
 - Symposium on effect of water-reducing admixtures and set-retarding admixtures on properties of (ASTM) (review), 462
 - Testing laboratory for Imperial College, 673
 - Condensation, film, 631
 - Condensers, steam, for CEGB (AEI Ltd), 665
 - Condolios, E., on hydraulic washing and grading of sands, 894
 - Conductor fittings for overhead power lines, BS 3288 specification (British Standards Institution), 87
 - Cone, nose, re-entry, for X 15 rocket aircraft (Northrop), 41
 - Confederation of Shipbuilding and Engineering Unions, meeting with employers to discuss labour relations in motor car industry, 9; meeting with employers, 281; rejection of request by Vickers-Armstrongs and Swan Hunter, 556
 - Conferences, annual trade union, 348
 - BEAMA export, 841
 - British, on Automation and Computation. See *British*
 - British National Committee for Non-Destructive Testing, 553
 - Canadian North Atlantic Westbound Freight, increase in shipping costs, 233
 - Clean air, proceedings of diamond jubilee international (National Clean Air Society book), 68
 - Education for Management, 886
 - Engineering Education, OEEC, 513
 - Engineering Societies of Western Europe and the United States, representation at Conference on Engineering Education, 513
 - Conferences, European, for management consultants, 381
 - Ministers of Transport, 473
 - Fluid sealing, 440
 - Foremen training, 177
 - Hendon Local Productivity Association, 408
 - Industrial hygiene, 341
 - Weed control, 621
 - International Labour Organisation, 888
 - International Reinforced Plastics, 790
 - Safety Belt Association, 229
 - Machine Translation of Languages and Applied Language Analysis, 854
 - Metallurgy of beryllium, 757
 - Mines rescue superintendents, 802
 - National Industrial Safety, 556, 689
 - Power, 5
 - Power Farming, 299
 - Nigerian industrial development, Sir Norman Kipping leads UK delegation, 149; UK companies represented, 149
 - North Atlantic Passenger, 585
 - Nuclear fusion research, 323
 - Operational Research Society, 757
 - Plasma physics, 323
 - Plastering developments, 553
 - Professional Engineer, 277, 442-443
 - Railway modernisation, 181
 - Reactor materials and the effects of radiation damage, 388
 - Royal Statistical Society, 686
 - Safety of Life at Sea, 520
 - Science and Industry—the Problem of Communication, 137
 - Shipbuilding, 665
 - Standards Engineers, 761
 - Supersonic aircraft, 761
 - Technical libraries in industrial organisations, 262
 - Timber engineering, 552
 - Union d'Assureurs des Credits Internationaux at Vienna, 873
 - Work study, 900
 - Congress on combustion engines, 508
 - Cybernetics, proceedings of, 538
 - First international of International Ergonomics Association, 48
 - Food science and technology, 589
 - International Commission on Large Dams, 894
 - Mesucora, and exhibition, 804
 - Science, international (book), 593
 - Society of Automotive Engineers, International, 687
 - Conn, G. K. T., on Semiconductor Technology (book), 68; (review), 638
 - Connector, continuity (Hepworth Iron Co. Ltd.), 425
 - Gunmetal, Konaxal (Kay & Co.), 857
 - Multi-pin (British Sarozal Ltd.), 318
 - Connell, C. R., on Charles Connell & Co., 457
 - Connell, Charles, & Co. Ltd., two new ships for P & O, 299; new assessment of rateable value for shipyard, 457; position and prospects, 457
 - Consett Iron Co. Ltd., securities sold back to general public, 325; Cromwell Lock extension on River Trent, 558; opening of Hunnsgill plate mill, 777
 - Consolidated Edison Co., thorium atomic reactor, 419; fuel element assembly, 896; influences of thorium on design of reactor, H. S. Barringer and J. C. Deddens, 896
 - Consolidated Pneumatic Tool Co. Ltd., Magnamatic screwdriver, 100
 - Consolidated Zinc Corp., association with Commonwealth Aluminium Corp., 357; association with Kaiser Aluminium, 357
 - Consoweld Corp., use of automated plastic laminating presses, 740
 - Constellation cooker (Creda), 616
 - Construction, building. See *Building*
 - Equipment exhibition, international, 641
 - International exhibition, 796
 - Industry, increase in employment, 381
 - Construction Machinery Ltd., batch concrete mixing machine, 797; Wakefield self loading dumper vehicle, 797
 - Plant (trade publication), 608
 - Structural sandwich, symposium on durability and weathering of (ASTM) (review), 806
 - Constructional equipment, 794-795
 - Growth factors in, 794-795
 - Constructional Services Ltd., triaxial tests on non-metallic brittle materials 659
 - Steelwork Simply Explained, by O. Faber (book), 158; (review), 806
 - Constructors John Brown, extensions to polypropylene plant for ICI Ltd., 457; joint ownership of Wycon Services with Fisons Co., 497
 - Consul Classic 315 motor car, by G. Wilkins, 760
 - Consultants Bureau, *Soviet Research in Boron Chemistry* (book), 808
 - Line management and the, 8
 - and Management, industrial, register of, 8
 - Consulting Engineers, Association of. See *Association*
 - Consumer packaging for export, convention on, 822
 - Plain Words on, 789
 - Consumers Power Co., agreement with USAEC for prototype atomic plant, 192; atomic reactor at Big Rock Point, 419
 - Contact, electrical (trade publication), 298
 - Headed (trade publication), 808
 - Lens, Sphercon, 358
 - Contactor (Dewhurst & Partner Ltd.), 279
 - Heating control, Progress (M.T.E. Control Gear Ltd.), 280
 - Containers, collapsible, Portolite (Marston Excelsior Co.), 867
 - User comment on, 310
 - in pvc for chemicals, 474
 - Continental-Diamond Fibre Ltd., use of automated plastic laminating presses, 740
 - Continuity and phase tester (Martindale Electric Co. Ltd.), 280
 - Continuous Casting Co. Ltd., Weybridge continuous casting process for steel, 773
 - Continuum mechanics, non-linear, and large elastic deformations, by A. E. Green and J. E. Adkins (book), 496

- Contract engineering (trade publication), 676
 Control Developments from Mesucora, by C. J. Charnley, 804
 — Remote, flameproof (trade publication), 748
 — Systems, automatic, introduction to the statistical dynamics of, by V. V. Solodovnikov, 776
 Controller, bin (Thomas Industrial Automation Ltd.), 190
 — Electric-motor, electronic, 652
 — Elektronik (Honeywell Controls Ltd.), 772
 — for gun welding machine (Lancashire Dynamo), 14
 — Proportional action (Honeywell Controls Ltd.), 399
 — Thermostatic, Leonard (Walker, Crosswell & Co. Ltd.), 14
 Convair, Ltd., tests on NX-2 nuclear powered aircraft, 16
 — Dynapak machine, 555
 Convect-drier, Straightaway (Barber Electrical Services Ltd.), 584
 Convention, American Industrial Hygiene, 905
 — British electrical power, 137, 791, 849; presidential address, 817
 — Consumer packaging for export, 822
 Converter (Meterflow Ltd.), 279
 Convexionaire air heater (Clare Bros. Ltd.), 727
 Conveyors (trade publication), 158
 — Armoured flexible, plough for (NCB), 820
 — Ball-units, Omni-track, 339
 — Belt, Mecro (Mining Engineering Co. Ltd.), 531
 — in nylon/cotton for NCB (BTR Industries Ltd.), 867
 — Belts in terylene/cotton (ICI Ltd.), 739
 — Chain (trade publication), 496
 — and customers' requirements, 568
 — ENGINEERING survey report on, 524
 — Framework (Richard Sutcliffe Ltd.), 319
 — Pneumatic (trade publication), 158
 — Sovex (Sovex Ltd.), 837
 — Swivel-Piler for (Stephens-Adamson Mfg. Co. of Canada Ltd.), 717
 — Systems (trade publication), 158
 — (British Monorail Ltd.), 837
 — Weighing system, continuous (Murphy Radio Ltd.), 203
 Conway jet engines for VC10 aircraft (Rolls-Royce Ltd.), 233
 Coode & Partners, reconstruction of Cromwell Weir on River Trent, 558; Indus Basin Projects, 730; Escravos Bar in Nigeria, 731; deep water harbour Barbados, 733; new berths at Mombasa Harbour, 828
 Cook, E. J., on building apprenticeship scheme, 185
 Cook, Sir William, appointed Member for Reactors, UKAEA, 324
 Cooke Troughton & Simms Ltd., M.15 series biological microscope, 62-64; historical note, 62
 Cooker, Creta Constellation, 616
 — Double oven (English Electric Co. Ltd.), 616
 — Fiesta (Moffats Ltd.), 752
 — Gas, for elderly people, 176
 — Hood, ductless (Gold Star Domestic Appliances Ltd.), 816
 — Outlook for 1961, 168-171
 Cooking with aluminium foil, 207
 — Oven, microwave, Arctic (Lewispoint Holdings Ltd.), 240
 Coolant, carbon dioxide, for fast steel cutting, 266-267
 Cooler for cutting oils (L. Sterne), 100
 — Transformer, from integral sheet, 803
 Cooper, A. R., on engineers in management, 277, 443
 Cooper, B. K., on Railway Locomotives (book) 428; (review), 606
 Cooper Committee, reference to 373
 Cooper Formula junior motor car, 65
 Cooper, G. A., on losses by railway diesels, 92
 Cop-Ex Copy-Out paper, 873
 Copelin, P., on motor industry depression and employment position, 97
 Copes Regulators Ltd., desuperheater, 529
 Copestick, L. B., formation of Solartron Electronic Group Ltd., 874
 Copier, drawing (trade publication), 112
 Copper and alloys (trade publication), 298
 — See also *Bronze*
 — Extrusion plants, 773
 — Free-turning (trade publication), 298
 Copper-gold brazing alloy, 211
 — from ore without melting, 587
 Copper-palladium-nickel-manganese brazing alloy, 211
 Copper-palladium-silver brazing alloy, 210
 — Pipes, fittings for (trade publication), 540
 Copper-silicon-nickel alloy, Mallory 53 (Johnson Matthey & Co. Ltd.), 835
 Copper-silver brazing alloy, 211
 — Tube test (British Non-Ferrous Metals Research Association), 803
 Copying unit, hydraulic, Hydro-Copier (Vero Precision Engineering Ltd.), 444
 Cordiner, R., testimony before Senate Investigating Committee, 657
 Cork material, granulated, Hydrocor (Expandite Ltd.), 551
 Cornelius, P., on Electrical Theory on the Giorgi System (review), 839-840
 Cornell University, research on car safety belts, 718; Triga atomic reactor under construction, 800; USAEC to provide fuel for Zero Power atomic reactor, 800
 Cornish Mining Development Association, aims of, 480
 Corona rings for aerial system, 205
 Corrector cargo winch (Laurence Scott & Electromotors Ltd.), 528
 Corrosion, acid, preventing in boilers, 782-783
 — Adcora coatings to combat (E. & F. Richardson), 506
 — Anti-, manual, 1960 (Scientific Surveys Ltd.) (review), 156
 — Dry, in engineering plant, 646
 — Getting to grips with, 646-647
 — in engines, 521
 — of mild steel, inhibiting (National Chemical Laboratory), 845
 — in motor car bodies, 687
 — Pipeline, defeating, 512
 Corrosion, preventative, CRC2-26 (Hellerman Ltd.), 699
 — Problems—and Four Solutions, 506
 — of petroleum industry (review), 156
 — Protection painting system, Ferrogel (John S. Graig & Co. Ltd.), 47
 — Reaction Consultants, CRC2-26 corrosion preventative, 699
 — Research (United States Steel Corp.), 687
 — of steel, Kenderisation to prevent, 237
 Corvette motor car, Chevrolet, 687
 Coseley Buildings Ltd., pre-fabricated steel buildings, 225; directors tour of Far East, 225; overseas prospects, 225
 Cosmic ray research, photographic technique for, 236
 COSPAR. See *International Committee on Space Research*
 Cossor Ltd., radar reflectors of Kraft honey-combe, 90
 Cost of Freedom, by H. C. Wallich (review), 839
 Costa Rica, loan from World Bank for new power station, 307
 Costain, Hansen & Yuncken, construction of department store for Birks Store, 159
 Costain, Richard (Civil Engineering) Ltd., dam for Balderhead reservoir, 333
 Costain, Richard, Ltd., extensions to Nottingham University, 483; Escravos Bar in Nigeria, 731; association with Raymond International, 731; deep water harbour, Barbados, 733
 Costing, guide to principles of, in European non-ferrous metals industry (review), 199
 Cottage Textile Development Corp., cotton mills in Philippine Islands, 609; order for electrical gear to AEI Ltd., 609; equipment for cotton mills ordered from Platt Bros. (Sales) Ltd., 609; order placed with Ruston-Paxman for diesel engines, 609
 Cottingham, Dr. W. H., to study nuclear research in Russia, 348
 Cotton, Dr. F. H., review of Synthetic Rubber Technology, 676; biographical note, 676
 Cotton/nylon conveyor belts for NCB (BTR Industries Ltd.), 867
 Cotton, R. F., review of Technique of Photomicrography, 230; biographical note, 232
 Cotton/terylene conveyor belts (ICI Ltd.), 739
 Cotton, Thomas, Ltd., flame cleaning Runcorn-Widnes bridge, 321
 Coulson, Prof. C. A., review of Electromagnetic Field, Energy and Forces, 297-298; biographical note, 298
 Council of Industrial Design, design in engineering, 554
 — of International Organisations for Medical Science, 593
 — for Scientific and Industrial Research, report for 1960, 753
 — Workers, wage increases, 447
 Counters, batch (Pentechique Ltd.), 857
 — Batching machine (Photoelectronics (MOM) Ltd.), 254
 Counting machine, marking (Hellerman Ltd.), 596
 Countries, developing, aid for, 505
 Coupler for scaffold tubes (Boulton Scaffolding Ltd.), 384
 Coupling, Duolastik Torque Transfer Link (Metalastik Ltd.), 536
 — Fluid, two-element, 853. See *LETTER*, 885
 — Gear, flexible, Nyflex (Sier-Bath Gear & Pump Co. Inc.), 371
 — Pipeline, to eliminate expansion joints (Aero Controls Ltd.), 461
 — See also *Clutch*
 Courier Satellite, G. F. Senn and P. W. Siglin, 893
 Courses, advanced, in US colleges, 317
 — Atomic fuel elements at Imperial College, 420
 — Export studies, 593
 — Fracture of metals, 281
 — Harwell Reactor School, 832; for senior technical executives, 420
 — Hydraulics, 97
 — Indexing, 674
 — Industrial oil hydraulics, 97
 — Information scientists, 110
 — Introduction to Industry, 281
 — LCC, 373
 — Post graduate, scheme by Institution of Chemical Engineers, 793
 — Spirax Postal Instruction, 217
 Courtney, E. L., on welding equipment and customers' requirements, 569
 Coutts Bank Ltd., closed circuit television installed, 905
 Cowans, Sheldon & Co. Ltd., overhead crane for Blyth B power station, 884
 Coventry Climax Engines Ltd., Coventry Climax Fire Pump engine, 842; historical note, 842
 Coventry Gauge & Tool Co., machine tools for Russia, 873
 Coventry Laminates Ltd., model motor cars, 21
 Coventry Radiator & Presswork Ltd., increase in capacity, 61
 Coventry Victor Motor Co., Ltd., petrol and diesel engines, 132; hydraulic reverse reduction gearbox, 132
 Cowan, Col. P. J., historical note, 7
 Cowan, T. W., historical note, 7
 Cox, H. L., review of Structure of Metals—a Modern Conception, 903-904; review of Atomic Mechanisms of Fracture, 903-904; review of Basic Mechanisms of Fatigue, 903-904; review of Metal Fatigue, 903-904; review of Friction and Wear, 903-904; biographical note, 904
 Cox, Sir Harold Roxbee, appointed chairman of DSIR council, 657; biographical note, 657
 Cox & Wright Ltd., work transporters for shoe industry, 635
 Crabtree miniature circuit breakers, 88
 Crack detection inks and powders (Southern Tools Ltd.), 275
 Craig, John S., & Co. Ltd., Ferrogel corrosion protection painting system, 47
 Crandall, W. B., on Cermets (book), 808
 Cranes (Butters Bros.), 465
 — Cab, plastic (Moto Plastics Ltd.), 739
 Cranes, crawler mounted (trade publication), 200
 — Deck, level luffing (trade publication), 158
 — Designed from first principles, 206
 — Jib, tubular design (Tubwrights Ltd.), 636
 — Leptoptilus (Holland Cranes), 206
 — Lorry Loader (R. H. Neal & Co. Ltd.), 383
 — Mounted, Kwiklift (Cohen Bros.), 101
 — Mounted, Lorain (Vales Plant), 100
 — Mobile (trade publication), 200
 — (Hyster), 554
 — Lambert Hydrocon (Brown & Tawse Plant Ltd.), 661
 — (Priestman Bros. Ltd.), 797
 — Rapiet, export sales of (Ransomes & Rapier Ltd.), 577
 — Overhead, for Blyth B power station (Cowans, Sheldon & Co. Ltd.), 884
 — Overload warning cell (Salford Electrical Instruments Ltd.), 271
 Crane Packing Ltd., shaft seal, 56
 — Rail, Jones (George Cohen Sons & Co. Ltd.), 189
 — Tower, 794
 — Pingon (George Cohen 600 Group Ltd.) 628
 — Truck, diesel electric (Steel Engineering Products Ltd.), 796
 — Tubular jib design for dry dock, 636
 — See also *Hoist; Derrick*
 Cranfield Work Study School, use of models, 868
 Crash fire tenders, Alvis (Alvis Co.), 61
 Craven, B., on studies of reactions between uranium dioxide and graphite, 256
 Craven Bros. Ltd., roll turning lathes for Armstrong Whitworth Ltd., 39; horizontal milling machine for Armstrong Whitworth Ltd., 39
 Craven Electronics Ltd., Craven continuous belt weighing machine, 890
 Cravens Ltd., new rolling stock for Metropolitan Line, 820
 Crawley College of Further Education, Redifon analogue computer for, 888
 Crawley Industrial Products Ltd., Crawley Midget Miner, 669; Crawley-Wilcox Continuous Miner, 669; sensing device, 669
 Crawley Midget Miner (Crawley Industrial Products Ltd.), 669
 Crawley-Wilcox Continuous Miner (Crawley Industrial Products Ltd.), 669
 CRC2-26 corrosion preventative (Hellerman Ltd.), 699
 Creaser, carton board (PATRA), 603
 Creta Constellation cooker, 616
 Creta Ltd., hob and oven units, 436
 Credit, consumer, growth in UK, 257
 Creed & Co. Ltd., teleprinters (trade publication), 640
 Creek, F. R. L., on latest practice in generator design, 282
 Creep testing machine (Mohr and Federhaff AG.), 530
 Cremer, H. W., on Chemical Engineering Practice (book), 298
 Cresap, M. W., Jr., on Westinghouse Electric Corp., 325
 Criticality, effect of density of hydrogen and uranium on, by E. V. Garner and K. D. B. Johnson (paper), 456
 Croda Ltd., rust preventatives (trade publication), 264
 Cromer, O. C., on Thermal Engineering (book), 364
 Crompton Parkinson Ltd., tubular cell battery, 254; variable speed paper machine drive installed at Alders (Tamworth) Ltd., 334; testing aluminium bus-bars for Komati power station, 618; slip ring motors, 661; fractional H.P. motors for Fisher and Paykel, 897
 Crompton Parkinson (Stud Welding) Ltd., aluminium stud welding tool, 399
 Crompton, R. E. B., historical note, 7
 Cromwell Lock extension on River Trent, 558
 Cromwell Weir reconstruction on River Trent, 558
 Consistor elapsed time indicator (Transipak Electronic Engineers), 767
 Crookes, Sir William, historical note, 7
 Croome, A., on Hover Craft (review), 708
 Croppers and presses (trade publication), 68
 Crosby, T., on Anthology of Houses (book), 264
 Crosby Valve & Engineering Co. Ltd., Masonic control valve, 352
 Cross-Channel. See *Channel*
 Cross chord tool, 570
 Crossley Bros. Ltd., taper turning lathe, 251; Crossley-Trurnit screw thread hammering machine, 398; Trurnit thread forming machine, 629
 Crow, E. L., on Statistics Manual (review), 574
 Crow, William L., Construction Co., new bus station at George Washington Bridge, 627
 Crowe, S., on Landscape of Roads (review), 494-495
 Crowthorne Engineering Co. Ltd., centre lathes (trade publication), 24
 Croydon County Borough, redevelopment of municipal offices, 873; expansion of services, 873
 Crucibles (trade publication), 808
 Cruddace, R. G., on liquid hydrogen as rocket fuel, 899
 Crushers, gyratory (trade publication), 396
 — Hazemag (Joy-Sullivan Ltd.), 13
 Crustex Descaling ultra-sonic boiler scaling equipment (H.N. Electrical Supplies Ltd.), 397
 Crystals and Crystal Growing, by A. Holden and P. Singer (book), 808
 — Growth (Faraday Society) (review), 394
 — Melt temperature control for, 772
 — PZT (Brush Crystal Co.), 21
 CSEU. See *Federation of Shipbuilding and Engineering Unions*
 CT live centres for lathes (Innsley Industrial Supply Co. Ltd.), 222
 Cub electric drill (Wolf Electric Tools Ltd.) 106-108
 Cultivator, Landmaster 150, exhibit at Cairo Fair (Landmaster Co.), 333
 — Rotary, Gardenmaster 85 (Landmaster Ltd.), 670-672
 Cumming, A. P., on civil engineering contracts 180
 Cunard Eagle Airways, position and prospects, 801
 Cunard Steamship Co. Ltd., tenders for new Atlantic liner, 341; position and prospects, 801; profits, 801
 Cunard White Star Co., operation of Q-3 ship, 801
 Cunningham, J. W. B., appointed managing director of UKAEA Engineering Group, 324
 Curium-242 as heat source, 800
 Curran, Edward, Engineering Ltd., Foamglas in curtain walls, 698
 Currie, R. M., on work study, 900
 Curry, W. T., on working stresses for structural laminated timber, 829
 Curtain coating with paint, 3
 — Wall, use of foam glass in, 698
 Curtaining material of alminized asbestos (Turner Bros. Asbestos Co. Ltd.), 243
 Curtis, A. R., on propagation of thermal waves through graphite with uniform cooling, 224
 Curtiss-Wright Corp., gift of atomic reactor to Pennsylvania State University, 455
 Cut-off machine (A. & S. Osmond, Ltd.), 561
 — Trenches made quicker and cheaper, 350
 Cutter, abrasive (trade publication), 68
 Cutting machines (Clifton & Baird Ltd.), 763
 — Oxygen (British Oxygen Co. Ltd.), 561
 — for tube, Alyn (British Oxygen Co. Ltd.), 517
 — Tubefile (General Precision Systems Ltd.), 766
 Cutting-off machine (trade publication), 24
 — Machine, Cefmo (Addison), 251
 — Oils and occupational dermatitis, 184
 — Technique for tubing, 337
 — Tool design and utilization, by J. Cherry, 570-571
 — Inserted tips, 570
 — Materials, choice of, by J. Cherry, 514-515
 — Surfom (Firth Cleveland), 100
 Cybernetics, congress on, proceedings of, 538
 Cycle industry, short time working in, 141
 — Motor. See *Motor cycle*
 Cyclone dust collector (trade publication), 496
 Cylinders, air (Scovill Manufacturing Co. Schrader Division), 87
 — Block liners sprayed (Metco Ltd.), 771
 — Pressure variations in petrol engines, by J. P. Soltau, 361
 Cyprus, capital expenditure for, 585
 — Development schemes for, 585
 — Proposed extensions to port facilities at Limassol and Famagusta, 585
 — UK aid to, 585
 — UN economic survey mission to, 585
 Cyrogenics, progress in, by K. Mendelssohn (book), 872
 Czechoslovak Academy of Sciences, foundation of Research Institute of Nuclonics, 15
 — Atomic energy programme, 15
 — Bohunice atomic power station, 15
 — Coal in, 15
 — Industrial application of radioisotopes, 15
 — Medical irradiation devices in, 15
 — OMNIA trade corporation, 15
 — Polythene plant for, 609
 — Research Institute of Nuclonics, 15
 — Uranium resources of, 15

D

- DACCA University, atomic energy centre, 734
 DAF motor car. See *LETTER*, 4
 Dahomey, IAEA assistance mission to, 387
 Daimler Benz Co., use of disc brakes, 501
 Daimler Co. Ltd., acquired by Jaguar Cars Ltd., 389; fleetline passenger vehicle, 389; SP250 motor car, 687
 Dale, E., on Great Organisers (book), 464; (review), 640
 Dale, John, use of Marinite for aluminium laundries, 770
 Daly, B. B., on small fan efficiencies, 620
 Dalziel, S., on human implications of work study, the case of Pakitt Ltd., 183
 Dam, ageing of facing membranes of, by J. Thévenin, 895
 — Aswan high, 624
 — for Balderhead reservoir (Richard Costain (Civil Engineering) Ltd.), 333
 — Built above non-resistant rock, by A. Astrup and S. Sällström, 894
 — Concrete, for wide valleys, 895
 — Dokan, aggregate specification based on the, by D. N. W. Earp, 894
 — Earth, sealing, 895
 — Esch-sur-Sûre, protected by synthetic rubbers, 11
 — Ferric clinker in, 483
 — Gandhi Sagar, inaugural opening of, 143
 — Guma Valley, 731
 — for India, 730
 — Italian, concrete for, 483
 — Kariba, project, British South Africa Co., loan for, 357
 — Large, innovations in construction of, 894-895
 — International Commission on. See *International*
 — Specification and handling of concrete aggregates, 894
 — Lateral stability of buttresses for, by J. R. Ryzewski, 895
 — Maintaining impervious faces of, 895
 — Major rock plug blast near, F. L. Lawton and M. D. Lester, 895
 — Mangla, 730
 — Manicouagan, 306
 — Outlook for 1961, 78-81
 — Rana Pratap Sagar, work commenced, 143
 — River Koyna, 829
 — Roads and bridges (trade publication), 576
 — Rockfill, sealing, 895
 — Safety and economy factors for, by H. K. Fairbanks and R. A. Sutherland, 895
 — Tarbela, 730
 — Underground works of, 894

- Dam, Warragamba, aggregates for, by T. B. Nicol, 894
 — Wide river, Russian experience of, by G. A. Rousseaux and V. P. Likhachev, 895
- Damp, insulation for, 680
- Dampcourse, No. 3 Pluvex (Ruberoid Co. Ltd.), 619
- Damping a rotating shaft, 312. See LETTER, 654
- Daniels, T. H. & J., Ltd. model layouts for training, 868
- Danish Atomic Energy Commission, formation of 564; participation in Halden project, 564
 — See also *Denmark*
- Danube River, improvement of cargoes on, 473
- Darchem Engineering Ltd., timber dome for insulation erection, 512
- Darlington Forge Ltd., forging steel rings, 635
- Darlington & Simpson Rolling Mills, Ltd., position and prospects, 193; record output, 193; production increase, 193; profits, 193
- Dart Herald aircraft, 1; for Maritime Central Airways (Handley Page Co.), 265; for Nordair (Handley Page Co.), 265
- Dartford Paper Mills, adaptation of Flygt electric sewage pump, 517
- Darwent, T. J., on shortest route to optimum design, 860-861
- Darwins Ltd., magnetic chucks (trade publication), 68
- Dassault Mirage III aircraft, first flight of, 429
- Data converting, outlook for 1961, 118-121
 — Handling, outlook for 1961, 118-121
 — Logging scanner (Microcell), 222
 — Processing (trade publication), 608
 — Equipment for atomic reactors (Sunvic Controls Ltd.), 600
 — Equipment, design and development in, 118. See LETTER, 212
 — Equipment, future exhibitions on, 119
 — Equipment industry, expansion and investment in, 121
 — Equipment industry, external factors affecting, 119
 — Equipment industry, forecast for 1961, 121
 — Equipment industry, labour and management in, 120
 — Equipment industry, long term research in, 121
 — Equipment industry, plant and materials supply in, 120
 — Equipment industry, production in, 120
 — Equipment, market trends in, 119
 — Equipment, outlook for 1961, 118-121
 — Outlook for 1961, 118-121
 — Systems, automatic, by R. H. Gregory and R. L. Van Horn (book), 264
 — Recording, outlook for 1961, 118-121
 — Reproducing, outlook for 1961, 118-121
 — Storing, outlook for 1961, 118-121
 — Transmitting, outlook for 1961, 118-121
- Dauncey, S. R., review of Science in Space, 67-68; biographical note, 68
- Dauphine motor car, Renault, aerostable suspension uses neoprene, 581
- Davey, Paxman, & Co. Ltd., diesel unit for New Hebrides manganese mines, 201; propulsion machinery for Canadian ferry boats, 641
- David Brown's, by D. Donnelly (book), 428
- David, E. E., Jr., on Waves and the Ear (book), 776
- David, Shri V. V., on Gandhi Sagar Dam, 143
- Davidson & Co. Ltd., pneumatic conveyors (trade publication), 158; Sirocco air heater, 890
- Davies, E. O., on Selwood Orbital engine, 789-790. See LETTER, 853
- Davies, W. J., on foremen training, 177
- Davis, D. S., on Chemical Processing Nomenclatures (review), 110
- Davis, F. A., on Statistics Manual (review), 574
- Davis, H. M., on general purpose integrating flame photometer, 388
- Davison, G. H., review of Occupational Information: Its Development and Application, 22; biographical note, 24
- Davison, J., on employment and training of foremen, 212
- Davy-Ashmore Group, plant for Poland, 873
- Davy Ashmore Ltd., formation of, 25; formation of Davy British Oxygen Ltd., 25
- Davy British Oxygen Ltd., formation of, 25
- Davy & United Engineering Co., converter furnaces for Broken Hill Pty. Co., 25; formation of Steel Processes Division, 25; merger with Power-Gas Corp. to form Davy-Ashmore, 25; rolling mills for English Steel Corp., 113, 127; Durgapur (trade publication), 576; Built by Davy-United (trade publication), 708; Durgapur steelworks, 735; patents on non-contact strip speed measuring equipment, 781
- Davy & United Instruments Ltd., gamma ray thickness gauges, 777; contract with Stankoimport, 777; Gaugemeter System of Automatic Gauge Control, 777
- Davy-United Ltd., Built by Davy-United, 225; blooming and slabbing mill for A/S Norsk Jernverk, 225; breaking-down mill for ICI Ltd., 225
- Dawe Instruments Ltd., vibration limiter, 351; acquired by Simms Motor & Electronics Corp., 801
- Dawley, new town proposed at, 657
- Dawson Bros. Ltd., dunking machine, 190; solvent degreasing plant, 422
- Dawson, R. F., on analysis of cost of road improvement schemes, 373
- Day, J. R., on Railway Locomotives (book), 428; (review), 606; on More Unusual Railways (review), 608
- Daystrom Ltd., Xactray thickness measurer, 222
- Dayton, Dr. W. R., on atomic materials, 781
- D.C. & Young (Engineers) Ltd., wrapping and filling machines (trade publication), 364
- DCX-1 facility, three years successful operation of, 800
- DCX-2 facility, to be in operation by autumn, 800
- DD seal (Flexibox Ltd.), 820
- Deaeration and filtration (trade publication), 232
- Deason, Dr. R. F., review of Physicochemical Measurements at High Temperature, 66; biographical note, 68
- Dead Sea Works Ltd., call for tenders for construction works, 905
- Deaths by gas poisoning, 176
 — in the home, 176
 — on the road at Christmas, 97
- Debortoli, R. A. et al., on Forces Convection Heat Transfer Burnout Studies for Water in Rectangular Channels and Round Tubes, 631
- de Carle, J., formation of Sphercon Contact Lens Co. Ltd., 358
- de Carmoy, G., on survey of US private investment in Europe, 209
- Decca Navigator Co. Ltd., Decca Navigator Mark 10, 390
- Decca Radar Ltd., formation of British Space Development Co., 257, 585; radar console, 530
- Decisions, Values and Groups, by D. Willner (review), 870
- Decks, rod (trade publication), 396
- Deckwelding machine, Muramatic (Murex Welding Processes Ltd.), 561
- Deddens, J. C., on influences of thorium on design of Consolidated Edison Thorium Reactor, 896
- Dedruma coding machine (Westwood Paper Ltd.), 827
- Deere-Lanz crawler loader (J.D. Tractors Ltd.), 484
- Defence, civil, increase in costs, 447
 — Problems, German, by H. E. Jahn, K. Neher and H. Pfeill (review), 838
- Deformations, elastic, large and non-linear continuum mechanics, by A. E. Green and J. E. Adkins (book), 496
 — and equilibrium of elastic solids by V. Volterra and E. Volterra (book), 840
- Degrease and spray phosphate (trade publication), 872
- Degreaser chemicals, 422
- Degreasing, continuous, 422
 — Plant (Dawson Bros. Ltd.), 422
 — Solvent, maximum efficiency in, 422
- de Haas, W. A., elected chairman of Netherlands atom Forum, 455
- de Havilland Aircraft Co. Ltd., Dove 8 aircraft for J. C. Bamford (Excavators) Ltd., 257; formation of British Space Development Co., 257; Redux process press installed (Head Wrightson Teesdale Ltd.), 367; Prospects for aircraft, 577; DH 125 aircraft, 577
- de Havilland Engine Co., Ltd., order for Gnome turbine engines from Agusta Helicopter Manufacturing Co., 17; trial flight of Gloster Javelin aircraft with Gyron Junior engines, 269; Gnome engines for Boeing-Vertol 107 and Agusta-Bell 204B helicopters, 673
- de Havilland history, an outline of, by C. M. Sharp (book), 540
- Dehumidifier, packaged, Hygro-Robot (British Sarozal), 57
- Deighton, M. O., on precision relay pulse generator, 388
- de Klerk, Senator, opening of uranium metal plant in Johannesburg, 520
- de Lacroix, G. R. J. E. L., review of Manufacture of Aircraft and Missiles, 706; biographical note, 708
- Delaney Gally Ltd., motor car safety belts, 261
- De Laval Ljungström (Great Britain) Ltd., steam turbines (trade publication), 298; adjusting gear tooth contacts *in situ*, 701
- De Laval Ljungström Turbine Co., adjusting gear tooth contacts *in situ*, 701
- Delaware River Port Authority, insurance policy covering Benjamin Franklin Bridge and Walt Whitman Bridge against atomic explosion, 356
- Delforce, C. G., on plant and customers requirements, 566
- Dell Quay Yacht Yard Ltd., Ranger boat, 132
- Delrin acetal plastic for gear pump (Du Pont), 507
- del Rio, C. S., appointed head of IAEA reactor division, 632
- Delta Metal Co., interest in South Africa with McKechnie Bros., 565; interest in James Booth Aluminium with Kaiser Aluminium Co., 565; C. H. Edwards and Sperry & Co. brought into the Group, 565; export sales, 565; profits, 565; lorry with bonded aluminium panels, 587
- Deltadine pressure switch (Pall Corp.), 486
- Deltic locomotive, sound reducing bulkheads of Kraft honeycomb (English Electric Co.), 90
- Demag AG, order placed with David Brown Machine Tool Division for gear cutting machine, 429
- Demolition & Construction Co. Ltd., Maple Cross research centre for Cementation Group, 187
- Denmark, atomic reactors in, 564
 — Atomic work, international assistance for, 564
 — Export Council of Europe mission to, 549
 — Pathfinder Mission to, 681
 — Riso research centre in, 564
 — Water moderated atomic reactors, in, 564
 — See also *Danish*
- Dennis, J. A., on saturation characteristics of mean-current fission ionisation chambers, 520; on fast neutron counter for dosimetry, 520
- Denny-Brown stabilisers for liner *Canberra*, 755
- Dent, Allcroft (Overseas) Ltd., operation in Malta GC, 728
- Dent, H. C., on Year Book of Technical Education and Careers in Industry (review), 158. See LETTER, 180
- Denver Equipment Co., flotation machines, 738
- Denyer, G. E., review of Science Survey, 1, 330; review of Frontiers in Science, 330; review of Men and Molecules, 330; review of From Galaxies to Man: A Story of the Beginnings of Things, 330; review of Eye on Research, 330; review of Scientific Research in British Universities, 330; biographical note, 332
- Department of Scientific and Industrial Research, *Fire Protection in Factory Buildings*, 142; *Sound Absorbing Materials*, 211; survey of salt wastage in electroplating industry, 267; *Survey of Nickel and Chromium Recovery in the Electroplating Industry*, 267; rubbers (trade publication), 298; *Scientific Research in British Universities* (review), 330; survey of noise in London, 348; *Forces Applied to the Floor by the Foot in Walking*, 652; grants for special research, 753, 761; grant to Oxford University for nuclear research centre, 832; grant to Rubber and Plastics Research Association of Great Britain, 845; see also under specific establishments
 — of Technical Cooperation, creation of, 505
- Derating, industrial, 665
- Deriaz, P., Deriaz reversible pump-turbine, 226-228; biographical note, 226
- Deriaz reversible pump-turbine (English Electric Co.), 226-228
- d'Erlanger, L. F. A. S., on Channel Tunnel and ECM, 856
- Dermatitis, occupational, and cutting oils, 184
- Derrick, Hallen (MacGregor & Co.), 652
 — Unit (Thomas Smith & Sons (Rodley) Ltd.), 425
 — See also *Crane*
- Derry, T. K., on Short History of Technology (review), 395
- Derwent, Lord, on road maintenance, 473; on road development, 817
- Descaling tool, pneumatic (Etablissements Barthod), 399
- Desert, revolt in the, by T. E. Lawrence, 624
- Design, advanced, calls for advanced testing, 717
 — Centre Awards for 1961, 712
 — of cutting tools and utilisation, by J. Cherry, 570-571
- Design Forecast, 131
- Design, hydraulic, and irrigation, by S. Leliavsky (review), 675-676
 — Industrial, moves into engineering, by W. H. Mayall, 554-555
 — Optimising routine, 860
 — Optimum, shortest route to, by J. G. Bryan and T. J. Darwent, 860-861
 — Simpler, complicate production, 602
 — Systems, preliminary, by J. J. Jerger (review), 674
 — Teaching at university, 376. See LETTERS, 476, 508, 789
 — Training for, 555
- Desuperheater (Copes Regulators Ltd.), 529
- Detector, gas, Sieger (Newage (Manchester) Ltd.), 726
- Mapel Holiday (Metal & Pipeline Endurance Ltd.), 890
- Photoelectric (Cableform Ltd.), 416
- Short circuit (Spemby Ltd.), 351
- de Trafford, R. E. F., on Elliott-Automation Group, 833
- Detwiler, C. G., personnel neutron dosimeter, 191
- Deutsche Gold-Und Silberscheideanstalt Vormalss Roessler, patent on bearing surface treatment, 41
- Deutschmark, increase in value of, 341
- "Deux chevaux" motor car, Citroën, 95
- Deva metal bearings (Universal Metallic Packing Co.), 178
- Development Insurance Fund, International, United Nations report on, 473
 — Loan Fund, conditions imposed by, 265
- Devenish, W. H., British delegate to IEC, 40
- Devereux & Davies, general hospital for Trinidad, 733
- De Ville, E., on Heat Engines (book), 872
- Dew point meter (Shaw Moisture Meters), 416
- Dewar, J. P., on polishing stainless steel, 586
- Dewhurst & Partner Ltd., contractor, 279; EGO electronic grading operator, 484
- Dexion Ltd., DOSP steel flooring, 511
- DG dry bearing surface treatments (Glacier Metal Co. Ltd.), 788
- DH 125 aircraft (de Havilland Aircraft Co. Ltd.), 577
- D.H.: An Outline of de Havilland History, by C. M. Sharp (book), 540
- Diamond as cutting tool for steel, 515
 — Man-made (General Electric Research Laboratories), 211
- Dick, A., on Standard Triumph International, 480
- Dicke, R. H., on Introduction to Quantum Mechanics (book), 298; (review), 607-608
- Dicon SA de CV, licence agreement with Kestner Evaporator and Engineering, 497; licence agreement with Richard M. Armstrong, 497
- Dictating machine (trade publication), 112
- Dictionary of Electronics, by H. Carter (book), 640
- Die casting machine (Strojexport), 221
 — Press, for car body panels, 460
 — Punching machine, Edel (F. J. Edwards Ltd.), 485
 — Steels (trade publication), 808
- Dielectric material, Eccospheres (Emerson & Cuming Co.), 149
- Diesel-electric power units, outlook for 1961, 114-117
 — Engine. See *Engine*
 — Engineers and Users Association, meeting of, 595
 — Exhaust Fume Abatement Society, campaign to reduce diesel exhaust fumes, 835
 — Power units, outlook for 1961, 114-117
- Dieseler welding machine (Broadway Welding Supplies Pty. Ltd.), 727
- Diesoleum tanks for Macquarie Island oil depot, 25
- Differences, finite, treatise on the calculus of, by G. Boole (book), 776
- Diffusers, sugar, pvc-coated steel for, 699
- Diffrillator, cardiac (Westinghouse Electric Corp.), 175
- Digilog print out-scanner (Bailey Meters), 13
- Digital coded scale, 346
- Digital Computers (Cement & Concrete Association), 66. See also *Computer*
- Diligence, Plain Words on, 476. See LETTER, 589
- Diode, silicon, miniature (AEI), 41
- Dip coating with paint, 3
- Diphenyl atomic reactor (Marquardt Corp.), 800
- Diplock, Russell, Associates, Foamglas for roof of Ariel Hotel, 698
- Direct-current machines. See *Electrical machines*
- Directory, Kompas Register, 549
 — of Opportunities for Graduates (review), 158; (book), 428
 — Railway Officials and Year Book (book), 396
 — Swedish export, 1960 (General Export Association of Sweden) (review), 331
- Disaster, how hasty innovation caused, by A. Albu, 183
- Disc brakes. See *Brake*
- Discharges, high current, measurement of pressure gradient in, by M. G. Rusbridge, 456
- Discriminator, transistor pulse-height, by L. Stanchi, 224
- Dishmaid dishwashing machine (Electrolux), 340
- Dishwashing machine, Dishmaid (Electrolux), 340
- Disk brakes. See *Brake*
- Display device, animated, Movotron (Technical Designs Ltd.), 851
 — Map, moving, for aircraft navigation, 852
- Disposomatic waste disposer (Haigh Engineering Co. Ltd.), 536
- Distillation engineering, progress in (Verlag Chemie book), 232
 — Plant (trade publication), 364
 — Plant for crude oil (ICI Ltd.), 587
- Distillers Co. Ltd., coal burning experience, 577; Micro metering pump, 14; research for on fast cutting of steel with carbon dioxide as coolant (Morfax Ltd.), 266-267
- Distington Engineering Co., continuous steel casting plant for Shelton Iron and Steel Co., 365; licence from Concast A.G. to build continuous steel casting plant, 365
- Distribution gear and AC motor control, by R. T. Lythall (review), 575
- Ditching machine, Barber Greene (Jack Olding & Co. Ltd.), 798
- Djakarta Atomic Energy Institute, IAEA to advise, 387
- DKW, Junior motor car, 501
- DL dry bearing surface treatments (Glacier Metal Co. Ltd.), 788
- Dobbie McInnes Ltd., Teledep ullage indicators, 270
- Dock, dry (Furness Shipbuilding Co.), 465
 — Dry, tubular jib design crane for, 636
 — Fenders (Goodyear Tire & Rubber Co.), 771
 — Floating, for United Ships Repair Yards through Centromor (Furness Shipbuilding Co.), 265
 — Labour relations at, engineering industry's concern about, 141
- Documentation, Journal of, 706
- Dodds, Dr. D. M., lectures at AEI's Easter School, 556
- Dohm Ltd., Dohm-Yorax syphon, 825; nylon powder for coating, 835
- Dohm-Vorax syphon (Dohm Ltd.), 825
- Dokan Dam, aggregate specification based on the, by D. N. W. Earp, 894
- Dolby, E. R., historical note, 7
- Dollar Exports Council, renamed Western Hemisphere Export Council, 641
- Dollis Hill research station of GPO, 910-911
- Dollond, J., historical note, 7
- Dolphin vertical pump (Hamworthy Engineering Ltd.), 353
- Domestic aids, design and development in, 168
 — Forecast for 1961, 171
 — Future exhibitions on, 169
 — Industry, external factors affecting, 169
 — Industry, long term research in, 171
 — Industry, management and labour in, 171
 — Industry, plant and materials supply in, 171
 — Industry, production in, 171
 — Market trends in, 170
 — Outlook for 1961, 168-171
 — Appliance industry, low level of activity in, 309, 365
 — Equipment, 472, 436
 — Power, Luxury Life (S. N. Bridges & Co. Ltd.), 472
- Dominion Malting (Ontario) Ltd., continuous malt making process, 741
- Dominion Reefs, withdrawing from uranium field, 223
- Donald, W. C., on consultancy, 381
- Donnelly, D., on David Brown's (book), 428
- Doors of aluminium honeycomb (Otis Elevator Co.), 91
 — Fire, in factories, 142
 — Machine access, lightweight (Lynester Products Ltd.), 87
- Dorman Long (Bridge & Engineering) Ltd., Forth Road Bridge, 10, 449; steelwork for Runcorn-Widnes bridge, 321
- Dorman Long & Co. Ltd., annual report, 105; price reduction in rolled steel products, 105; group profits, 105; reserve, 105; activities of, 105; position and prospects, 105; plastic coated steel (trade publication), 264; securities sold back to general public, 325
- Dorman Long (Steel) Ltd., reserve of, 105; position and prospects, 105; activities of, 105; plastic coated building sheets, 105; pvc coated Terylene ventilation ducting installed, 475; capital expenditure on Middlesbrough Wire Works, 516; wire cable for Forth Road Bridge, 516
- Dorman, W. H., Ltd., Fairbanks-Morse to sell Dorman diesel engines in US, 265; diesel engine, 527; on diesel engines and customers' requirements, 567; English Electric Co. Ltd., offer for share capital of, 809; purchase of W. G. Bagnall, 809
- Dosimeter, neutron, for personnel, 191
- Dosimetry, fast neutron counter for, by J. A. Dennis and W. R. Loosemore, 520
- DOSP steel flooring (Dexion Ltd.), 511

- Dough moulding compound (British Resin Products Ltd.), 619
- Douglas Aircraft Co., roll bonded sandwich panels, 619
- Dounreay Admiralty station, Capt. H. A. Kidd appointed to command, 420
- Fast atomic reactor, criticism of, 664; gas entrainment problems in, 664; problems encountered in, 664
- Dounreay Symposium cinema film (UKAEA), 256
- Dove Bros. Ltd., Guildford Cathedral, 690-691
- Dove 8 aircraft for J. C. Bamford (Excavators) Ltd. (de Havilland), 257
- Dover, V., on Banker's Guide to Marine Insurance of Goods (review), 774-775
- Dow Chemical Co., instrument training programmes, 824
- Dowling & Doll Ltd., Bechet single spindle automatic machine, 14; tool grinder (trade publication), 68; automatic (trade publication), 68; Schaffner milling machine, 484
- Downham, Dr. E., on damping a rotating shaft, 588. See *LETTER*, 654
- Dowson, A. G., on Italians in Bedford, 244
- Dowty Electricals Ltd., Hermic switches, 86
- Dowty Equipment Ltd., activities of, 694-695; servicing facilities of, 694-695; stand at Paris International Aeronautical Exhibition, 694; historical note, 694
- Dowty, Sir George, on Malta production, 69
- Dowty Group, activities of, 694-695; historical note, 694; servicing facilities of, 694-695; stand at Paris International Aeronautical Exhibition, 694; small boats, 45
- Dowty hydraulic pit proper (Dowty Mining Equipment Ltd.), 517
- Dowty Mining Equipment Ltd., Dowty hydraulic pit prop, 517
- Dowty-Moog servo-valve (Dowty Rotol Ltd.), 818-819
- Dowty Rotol Ltd., licence agreement with Moog-Servo Controls Inc., 818; Dowty-Moog servo valve, 818-819; testing of aircraft components, 502
- Dowty Seals, Ltd., Malta subsidiary, Malta Rubber, 69; new type silicone seals, 519; manufacture in Malta, 728
- DPA distributor fuel injection pump (CAV Ltd.), 602
- DQ dry bearing material (Glacier Metal Co. Ltd.), 178
- Dragline excavator, walking, Rapier (Ransomes & Rapier Ltd.), 697
- Dragon Project, construction of core structure (Neratom), 104
- Drainage and Irrigation Department of Malaya, Krian irrigation scheme, 736
- Laundry, pitch fibre piping for (Key Engineering), 243
- Pipes (Tough Plastics Ltd.), 474
- Project at Baghdad, 888
- System at Khartoum, 888
- Draper, C. S., on Inertial Guidance (book), 540
- Draughtman's templates, Speedraft (Keuffel & Esser Co.), 87
- Dravo industrial space heater (Powell Duffryn Modulair Ltd.), 858
- Drawing copier (trade publication), 112
- Office equipment and materials exhibition, national, 5
- Dreadnought* submarine, plastic coated lead bars as ballast (Plastic Coatings Ltd.), 135
- Dresden atomic power station, reactor shut-down due to breakage, 224; reactor becomes critical, 419; design of atomic reactor, 419
- Dresner, L., on Resonance Absorption in Nuclear Reactors (book), 112
- Drew, G. A., on Anglo-Canadian trade, 159
- Drier (Apex Construction Ltd.), 57
- Convecter, Straightaway (Barber Electrical Services Ltd.), 584
- Gas, Holmes-Kemp (W. C. Holmes & Co. Ltd.), 532
- Vacuum (trade publication), 364
- See also *Dryer*
- Drill, air (Baldwin Industrial Controls), 531
- Design and utilization, 570
- Chipbreaker, 570
- Electric, Cub (Wolf Electric Tools Ltd.), 106-108
- Electric, Safetymaster (Wolf Electric Tools Ltd.), 106-108
- Hand, battery powered (Black & Decker Ltd.), 628
- Oil feed, 570
- Rock, Handril (Holman Bros.), 397
- Rock, Holman Silver 3 Handril (Holman Bros. Ltd.), 498-500
- Spiralpoint, 570
- Turret head, Vero Autodril (Catmur), 628
- Drilling, electronically controlled (EMI Electronics Ltd.), 837
- Ladder, at Loch Awe, 10
- Machine, multi-spindle (Strojexport), 221
- Multi-spindle (B. Elliott (Machinery) Ltd.), 562
- Machine, radial, Archdale Preselect (James Archdale & Co. Ltd.), 702-704
- Rig, Gardner-Denver Air Trac (Wickman Ltd.), 145
- (Joy-Sullivan Ltd.), 628
- Drink and driving, Plain Words on, 180
- Drivall Ltd., post driver, 693
- Drives, ball, recirculating (trade publication), 776
- Belt, Poly-V (William Kenyon & Sons Ltd.), 536
- Powergrip (William Kenyon & Sons Ltd.), 536
- Chain (trade publication), 576
- Constant speed, for generators on Vickers VC10 aircraft (English Electric), 809
- Hydraulic and hydrostatic, outlook for 1961, 164-167
- Hydraulic, Hydro-Titan (Keelavite Hydraulics Ltd.), 102
- Machine tool (trade publication), 68
- Wedge belt (trade publication), 708
- Driving and drink, Plain Words on, 180
- Droop and Rein milling machine, 399
- Drop forging. See *Forging*
- Drum, distribution (Light & Power Accessories Co. Ltd.), 485
- Drum Engineering Co. Ltd., rotary steam compressors, 763
- Making plant (Moon Bros. Ltd.), 484
- Opener (Moon Bros. Ltd.), 826
- Dry-Dock. See *Dock*
- Dryer (AEI Marine Dept.), 352
- Spin, Scales-Spin (Summerscales), 272
- Spray (Engineering Appliances Ltd.), 692
- See also *Drier*
- Drysdale & Co. Ltd., Axoil gear pumps, 537
- DU bearings (Glacier Metal Co. Ltd.), 178
- Dual-Trol recycling timer (Industrial Timer Corp.), 859
- Dubo retaining rings (Fan Disk Ltd.), 867
- Ducts for acid fumes, 474
- Air, of Plasticell for British Railways, 834
- Protected by Geon 121 pvc coating (Plastic Coatings Ltd.), 803
- Ducting, collapsible (Baxter, Woodhouse & Taylor Ltd.), 375
- Effluent, protection for, 506
- in pvc-polyester (Tanks & Linings Ltd.), 507
- Pvc, steel reinforced, Vacuflex (Recon (Pipelines) Ltd.), 835
- Ventilation, pvc coated Terylene (Robert Watson & Co.), 475
- Dufay Ltd., formation of Dufaylite Developments Ltd., 90
- Dufaylite Developments Ltd., honeycomb developments, 90
- Dufton, R., appointed director of research at St. Dunstan's, 556; biographical note, 556
- Dummer, G. W. A., on Electronic Equipment Reliability (book), 232; (review), 362
- Dump hauler vehicle, rear, Shawnee Poole, 797
- Dumper vehicle, self-loading, Wakefield (Construction Machinery Ltd.), 797
- Dumping truck, concrete, Muir-Hill (E. Boydell & Co. Ltd.), 189
- Dungeness atomic power station, progress report, 288
- Dunking machine (Dawson Bros. Ltd.), 190
- Dunlop Advisory Services Ltd., use of factory planning models, 868
- Dunlop Chemical Products Division, sprayed seals of rubber latex for mines, 802
- Dunlop Rubber Co. Ltd., plan for tyre factory in Nigeria, 341; LEO III computer installed, 665; propeller brake, 852
- Dunlop propeller brake (Dunlop Rubber Co. Ltd.), 852
- Dunlop Sports Co. Ltd., overseas sales, 421; position and prospects, 421
- Dunning, J. H., on British Industry (review), 775-776
- Dunsheath, Dr. P., collection of donations for Guildford Cathedral, 657
- Duolastik Torque Transfer Link coupling (Metalastik Ltd.), 536
- Duplex traced pipework (Reynolds Metals Co.), 550
- Du Pont Co. (UK) Ltd., Viton for petrol pump seals, 475; raw neoprene, 211
- Du Pont de Nemours Co., position and prospects, 565; fall in income, 565; overseas business, 565
- Du Pont de Nemours International SA., raw hypalon, 243; resistor compositions, 135
- Viton petrol pump gaskets, 855
- Du Pont Information Service, Delrin acetal plastic for gear pump, 507
- Duraglas reinforcing (Turner Bros. Asbestos Co. Ltd.), 343
- Duramat reinforcing (Turner Bros. Asbestos Co. Ltd.), 343
- Durgapur (trade publication), 576
- Industrial area, 765
- Development of, 765
- Steelworks, 735
- Brightside blooming mill commissioned, 193
- Mr. Nehru's visit to, 565
- Progress of work, 25
- Schedule, 741
- Durham motorway, proposal to use disused railway track, 320
- University, symposium on "Urban Survival and Traffic," 93, 473
- Dust cabinet, 343
- Collector, cyclone (trade publication), 496
- Collecting plant (Tilghman's Ltd.), 457
- Collection (trade publication), 708
- Dustmaster central vacuum cleaning plant (Sir George Godfrey & Partners), 372
- Dyeing, physical chemistry of, by Dr. T. Vickerstaff (book), 705
- Dynamic Behaviour of Thermoelectric Devices, by P. E. Gray (review), 111-112
- Equilibrium as economic aim, by J. Hennessey, 249
- Self-pinch plasmas in thermonuclear work, 323
- Dynamical astronomy, introductory treatise to, by H. C. Plummer (book), 464
- Dynamics of halting a line of traffic, by W. A. Woods, 655-656
- Statistical, of automatic control systems, introduction to, by V. V. Solodovnikov (book), 776
- Stellar, principles of, by S. Chandrasekhar (book), 496
- of a system of rigid bodies, elementary treatise on, by E. J. Routh (book), 428
- Dynamo. See *Generator*
- Dynamometers, hydraulic, Machinimport order from Heenan & Froude, 333
- See also *Brake*
- Dynapak machine (Convair), 555
- Dyson, J. & J., Ltd., steelworks refractories (trade publication), 264
- Dywidag system of bridge construction, 320
- Earle, Sir George, trophy, of Royal Society for Prevention of Accidents, awarded to John Laing Construction Ltd., 689
- Earltram Ltd., electronic control for work transporter, 635
- Earnings, average, 89
- Engineers, survey of, 89
- See also *Income; Salary; Wages*
- Earnshaw, J. B., on Introduction to AC Circuit Theory (book), 904
- Earp, D. N. W., on aggregate specification based on the Dokan Dam, 894
- Earth Boring Machine Co., Ebco portable boring machine, 486
- East African Railways and Harbours Authority, new berths at Mombasa Harbour, 828
- East Asiatic Co., new tanker *Java*, 325; engine for tanker *Java* ordered from Burmeister & Wain, 325
- East Central Nuclear Group, abandonment of heavy water project, 800
- Eastern-Bloc, UK exports to, 233; UK trade with, 233
- Ebco portable boring machine (Earth Boring Machine Co.), 486
- EBR-1 atomic reactor, 420
- EBR-2 atomic reactor, 420
- EBWR atomic reactor, 419
- Reactor shut down at Argonne National Laboratory, 419
- Eccles, Sir David, on Government White Paper *Better Opportunities in Technical Education*, 53; to speak at National Apprentices dinner, 689; on transfer of command of Colleges of Advanced Technology from Local Authorities to independent governing bodies, 888
- Ecco radar reflector (Emerson & Cuming Co.) 149
- Eccoshield atomic radiation shielding material (Emerson & Cuming Co.), 149
- Eccospheres dielectric material (Emerson & Cuming Co.), 149
- Echo-sounder, Metron (Marconi), 339
- Ecker, R., on current trends in steam turbine design, 294
- Eclipse magnetic strip (James Neill & Co.), 343
- "Whispering Power" packaged boiler (Ad. Auriema Ltd.), 12
- Economic aim, dynamic equilibrium as, by J. Hennessey, 249
- Association, International Congress of, 854
- Conditions 1960, survey of (OEEC), 45
- Growth, guide for accelerating: industrial development, by M. D. Bryce (review), 707
- Stages of, by W. W. Rostow (review), 674
- Policy and development of India, by P. T. Bauer (review), 838-839
- Economics of Shipbuilding in the United Kingdom, by J. R. Parkinson (review), 463-464
- Economist Intelligence Unit Ltd., Commonwealth and Europe (review), 747-748
- Economy, British, growth in (Political and Economic Planning) (review), 574
- in light and heat, 648
- in materials, models make for, 862-863
- Economy pressure gauge, Clyde (Buchanan Bros. Ltd.), 858
- and safety factors for dams, by H. K. Fairbanks and R. A. Sutherland, 895
- World, changes in, 133
- Eczema, facial, in sheep, 159
- Edel die punching machine (F. J. Edwards Ltd.), 485
- Eden, H. A., review of Guide to the Principles of Costing in the European Non-Ferrous Metals Industry, 199; biographical note, 200
- Eden, J. F., mechanization of building operations, 794
- Edleys Ltd., furniture (trade publication), 112
- Edinburgh Corp. Water Department, use of "pillow" tanks, 310
- Edinburgh, HRH Duke of, on canning and freezing of food, 1; opening of National College of Food Technology, 1; to attend meeting of Illuminating Engineering Society, 408; Graham Clark lecture, 244, 549, 556, 714; Patron of National Apprentices dinner, 689; Prize for Elegant Design, 712; opening of Royal College of Technology, 761
- Edison: a Biography, by M. Josephson (book), 428; (review), 807
- Ediswan RF power valve (AEI Ltd.), 253
- Edlund can opener (Metcalf & Co. (1950) Ltd.), 848
- Edlund, H. C., on thorium cycle in spectral shift controlled reactors, 896
- Education, chemical engineering, and practice, survey of, by Prof. R. E. Johnstone (paper), 185
- Commonwealth cooperation in, 722-723
- Engineering, conference on, OEEC, 513
- in Russia, by S. P. Timoshenko (review), 330
- Further, Staff college for. See *Staff*
- for management, Conference on, 886
- Ministry of, sponsorship of National College of Food Technology, 1; subject exemptions to holders of O.N.C. Diplomas 447; Whitworth Fellowships offered by, 824
- Plans for Ghana, 723
- for science and industry, 413
- Technical, abstracts from British sources (National Foundation for Educational Research), 838
- Better opportunities in (White Paper), 45 53, 556
- and careers in industry, year book of, by H. C. Dent (review), 158. See *LETTER*, 180
- Government's ten-point scheme, 53
- in Nigeria, 722
- in Nyasaland, 722
- in Rhodesia, 722
- and Training of Professional Mechanical Engineers (Institution of Mechanical Engineers booklet), 317
- See also *College; Courses; Teaching; Training, etc.*
- Educational instruction, analogue computer for (Redifon Ltd.), 888
- Educational Productions Ltd., *Car Driving for Beginners* (review), 24
- Edwards, C. H., Co., inclusion in Delta Metals Co., 565
- Edwards, F. J., Ltd., stock list (trade publication), 68; Edel die punching machine, 485
- Edwards, H. D., review of Chemical Processing Nomographs, 110; biographical note, 112
- Edwards High Vacuum Ltd., induction furnace, 596; Reciprotor vacuum pressure pump, 598
- Edwards, Prof. R. S., on electricity, 791
- Efco Furnaces Ltd., shaker hearth furnaces (trade publication), 428
- Effluent ducting, protection for, 506
- Pipes (Tough Plastics Ltd.), 474
- Egelstaff, Dr. P. A., review of Neutron Detection, 396; biographical note, 396; on the measurement of a scattering law for a moderator, 520
- Egloff, J. O., on IBM 650 RAMAC Computer for Data Processing in an Air Route Traffic Control Centre, 479
- EGO electronic grading operator (Dewhurst & Partner Ltd.), 484
- Egypt, long range plans for atomic plant, 832
- EHV Project (GEC (US)), 11; 85
- Ekco Electronics Ltd., licence agreement with Wilcox Electric Co., 421
- Elastomers, outlook for 1961, 70-73
- Elcontrol Ltd., water sampler, 101; flame failure unit, 254; oil-burning control equipment, 762
- Elderly people, workshops and employment for, 413
- Electric Construction Co., Ltd., motor generator, 280
- Electric furnaces. See *Furnaces*
- Generator. See *Alternator; Generator; Turbo*
- Locomotive. See *Locomotive, electric*
- Machine. See *Electrical machine; see also Alternator; Generator; Motor; Turbo*
- Mains. See *Cable*
- Motor. See *Motor; electric*
- Electric power. See *Electrical power; Electricity; see also Power*
- Railways. See *British Railways*
- Electric Resistance Furnace Co. Ltd., heat treatment furnaces (trade publication), 428
- Electrical appliance industry, poor sales for 1960, 365
- Contacts (trade publication), 298
- Contracting costs, domestic, collection of information on, 381
- Contractors, Roll of Approved, 308
- Energy in bulk, supplying, by W. Casson, 284-285
- Engineer, place of formal study in the post-graduate training of (Institution of Electrical Engineers), 317
- Engineers Exhibition, 280; 418
- Post graduate training for, 317
- Equipment and customers requirements, 568
- ENGINEERING'S survey report on, 524
- for industries other than coal mining, installation and maintenance of flame-proof and intrinsically safe, 281
- for motor cars, 286
- Explosion shapes tough metals (GEC (US)) 645
- Grid system, 284-285
- Systems of France and UK linked by Channel cable, 753
- Industry, order statistics, 785
- Research in, 881
- Ten year plan for, 849
- US, Code of Ethics, 565
- Machines, direct-current, by H. B. Ranson and E. T. A. Webb (book), 872
- Testing of, by L. H. A. Carr (review) 575-576
- Networks and linear graphs, by S. Seshu and M. B. Reed (book), 640
- Plant, operation on hazardous areas, by W. J. F. Cocks, 281
- Regulations governing operation of in petroleum installations, 281
- (Trade publications), 748
- Power, CEBG sales, 365
- Control, warning system for (Ferranti Ltd.), 40
- Convention, 137, 791; in Europe, by J. H. M. Sykes, 791
- Network of CEBG, nation-wide control of, 303
- Networks, design calculations for, 302
- Networks, Electrical Research Association analyst to study problems of, 302
- Networks, fault studies in, 302
- Networks, power flow studies in, 302
- Networks, general aspects of, 302
- Networks, restriking voltage in, 302
- Networks, transient stability studies in, 302
- Schemes in Ceylon, 881
- Systems, Russian, map of interconnections, 305
- Units, outlook for 1961, 114-117
- See also *Electricity; Power*
- Electrical Remote Control Co. Ltd., latching relay, 252; Star timer, 279
- Research Association, analyst to study problems of electrical power networks, 302; annual report, 677
- Technicians training in India, 109
- Theory on the Giorgi System, by P. Cornelius (review), 839-840
- Transmission system, Russian, map of, 304
- Electricity Commission of New South Wales, thermal generating unit ordered from AEI Ltd., 69; order placed with Ferranti Ltd. for transformers, 69
- Demands for the future, 817
- Direct conversion of heat to, by J. Kaye and J. A. Welsh (review), 111-112
- Do's and Don'ts, 308
- Generated by lead telluride cells, 648
- Increase in charges, 541
- Industry, outlook for 1961, 160-163
- Safety first with, 308
- Supply Commission of the Union of South Africa, boiler drums for, 270; Komati power station, 618; use of aluminium busbars, 618; contractors for Komati power station, 618

- Electricity supply industry, standardization in, 285
- Tapping the grid, 284
 - Thermal, improved efficiency for, 237
 - Undertakings of the World (book), 396
 - See also *Electrical power; Power*
- Electrics, motor car, 286
- Electro-Chemical Engineering Co. Ltd., Bi-Nickel process, 135; zinc electrodeposition plant for France, 135
- Electro-Clock elapsed time indicator (Aeromarine Ltd.), 826
- Electro-erosion machining of metals, by A. L. Livshits (book), 158
- for profiling grooves, 301
- Electro-erosive production machinery (Vyskumny Ustav Mechanizacie A Automatizacie), 301
- Electro-hydraulic servo controls, use of, 818-819
- Electro-magnetic spaced signal and pulse generators for neutron chopper-spinning units, by L. V. Lewis, 388
- Electro Tech Corp., gold plating, 83
- Electro-technical commission, international. See *International*
- Electrochemical machining, basic principles of, 300
- Technique of, 300
 - Polishing. See *Polishing*
- Electrode, dropping mercury, device for the synchronization of two, by W. H. Lockwood (paper), 456
- pH (W. G. Pye & Co. Ltd.), 58
 - Welding. See *Welding electrode*
- Electroluminescence, 648
- Electroluminescent panel, Locator (MK Electric), 88
- Electrolux Ltd., Dishmaid dishwashing machine, 340
- Electrolytic machining process (Battelle Memorial Institute and Steel Improvement & Forge Co.), 175
- Electromagnetic field, energy and forces, by R. M. Fano, L. J. Chu and R. B. Alder (review), 297-298
- Machines, evolution of, by Dr. E. Kuffel (book), 606
- Electromagnetism by superconductivity (Bell Telephone Laboratories), 336
- Electrometer, dynamic, UNIVEL, 15
- Electron accelerator, linear, Stanford University, 488
- Heavy, new theory for, 205
 - Optics in television, by I. I. Tsukkerman (book), 776
 - Similarity with muon or mu meson, 205
- Electronic Associates Ltd., PACE "do it yourself" computer components, 87; analogue computing centre, 809
- Assemblies, microminiaturization of, proceedings of symposium on, by E. F. Horsey and L. D. Shergalis (review), 198
 - Engineering Assoc., London meeting, 265
 - Equipment (trade publication), 608
 - Reliability, by G. W. A. Dummer and N. Griffin (book), 232; (review), 362
 - for Swedish Air Force (Marconi), 397
 - Function blocks, molecular, outlook for 1961, 33
 - Grading operator, EGO (Dewhurst & Partner Ltd.), 484
 - Ignition system for motor cars (Joseph Lucas Ltd.), 501
 - Motor controller (Henry A. Cole & Co. Ltd.), 652
 - Nuclear, proceedings of the symposium on nuclear electronics (review), 426
 - Storage tube, high resolution, Tenicon (Mullard Ltd.), 236
 - Tube, Astracon, development of (Westinghouse Electric Corp.), 236, 565
- Electronics and Communications Abstracts*, 806
- Electronics, dictionary of, by H. Carter (book), 640
- Exports, 133
 - Forecast for 1961, 33
 - Long term research in, 33
 - Management and labour in, 32
 - Plant and material supply in, 32
 - Production in, 32
 - Future exhibitions and trade fairs on, 30
 - Industry, expansion and investment in, 32
 - Japanese research progress, 613
 - Nuclear, symposium (review), 426
 - Plastics for (Emerson & Cuming Co.), 149
 - and telecommunications, design and development in, 30
 - and telecommunications industry, external factors affecting, 31; market trends in, 31
 - and telecommunications, outlook for 1961, 30
- Elektronik controller (Honeywell Controls Ltd.), 772
- Electroplating industry, survey of nickel and chromium recovery in (DSIR book), 267
- Wastage of salts in, 267
- Electrostatic accelerator, 488
- Generator Group, Van de Graaff generator for Oxford University nuclear research centre, 832
 - Paint spraying plant, Megastron (SAMES (GB) Ltd. and Aerostyle Ltd.), 571
 - Precipitation (trade publication), 496
 - Spraying of paint, 2
- Electrotechnical standards, rationalization of, 40
- Electrotechnology, introduction to, by S. J. Kowalski (book), 428
- Elegance and power in continental cars, by G. Wilkins, 592
- Elemental isotope 103, discovery of, 832
- New, 832
- Elettrotecnica Rini S.p.A., relays and protectors, 609
- Eley, G. C. R., on Richard Thomas & Baldwins, 289
- Elite motor car (Lotus), 65, 687
- Elizabeth, H.M. Queen, at Royal College of Advanced Technology, Salford, 761
- Elk River atomic reactor, 59, 896; criticality expected, 419
- Ellicott Machine Corp., agreement with Stothert & Pitt, 25; John Blackwood, Hodge & Co. appointed as UK representatives, 25
- Elliott-Automation Group, formation of Rotron Controls Ltd., 289; agreement with Rotron Controls Corp., 833; position and prospects, 833; turnover, 833; annual report, 833; order position, 833; licence agreement with Jervis B. Webb, 833; agreement with Warner & Swasey, 833; mechanization of the Post Office, 833; formation of joint company with Leybold's Nachfolger, 833; association with Litton industries, 833
- Elliott-Litton Ltd., cooperation with Litton Industries Inc., 357; formation of Elliott-Litton Ltd., 357; control valves (trade publication), 776
- Elliott, B. (Machinery) Ltd., multi-spindle drilling machines, 562
- Elliott Bros. (London) Ltd., computers for export, 203; packaging export computers, 203; formation of Rotron Controls Ltd., 289; sequence selector, 418; private symposium and exhibition on Analytical Instrumentation of Industrial Process Control, 720; instrumentation system for gas flow control, 805
- Elliott, J. F., on Thermochemistry for Steel-making (review), 231-232
- Elliott-Litton Ltd., formation of, 357
- Elliott ND 481 atomic reactor simulator for Berkeley Nuclear Laboratories, 864
- Elliott-Nucleonics Ltd., water radioactivity monitor, 58
- Elliott, R. L., on automatic 1,000 channel read-out system, 456
- Elliott, S. W., visit to Russia, 761
- Ellison, D., Ltd., liquid distribution control unit, 416
- Ellison, George, Ltd., air break switchgear, 354
- Elsom, C. H., & Partners, research centre at Maple Cross for Cementation Group, 187
- Elstub, St. J. de H., appointed chairman of ICI metals division, 533; biographical note, 533
- Elysia*, trials of Ferrogel corrosion protection painting system, 47
- Embassy Machine & Tool Co. Ltd., Wiest indexing machine, 102
- Emelyanov, Prof. V. S., head of Russian delegation to UK, 800
- Emerson & Cuming Co., plastics for electronics, 149; Microcell Ltd. as UK marketing agent, 149; Ecco radar reflector, 149; Eccoshield atomic radiation shielding material, 149; Eccospheres dielectric material, 149
- Emerson Electric Manufacturing, licence agreement with Lancashire Dynamo Electronic Products, 233
- Emhart (UK) Ltd., unit glass melters for Forster's Glass Co., 83
- EM-2 rifle, 830
- EMI Electronics Ltd., Emidec 2400 computers for Ministry of Pensions and National Insurance and Royal Army Ordnance Corps, 325; instrument housing in polyester resin, 475; data processing (trade publication), 608; EMI mini-camera television camera, 650; electronically controlled drilling, 837; EMI-Grimston positioning table, 837; closed circuit television for Coutts Bank Ltd., 905
- EMI-Grimston positioning table (EMI Electronics Ltd.), 837
- EMI Ltd., Fairbanks-Morse as agents for, 265; Emicon control system for milling machine, 399
- EMI mini-camera television camera (EMI Electronics Ltd.), 650
- Emicon control system for milling machine (EMI Ltd.), 399
- Empire State Atomic Development Associates Inc., formation of, 256; to build superheat atomic reactor, 256
- Employment in manufacturing industries, table of, 309
- Statistics, 97, 281, 381, 793
 - for Scotland, 881
- Employment and Workshops for the Elderly*, 413
- Employment of young people, 721
- Empress of Canada* liner, 769; details of, 605; maiden voyage of, 605; sold to India, 713
- E.M.S. Electrical Products Ltd., Trolley-master collector track, 383
- Emulsions, photographic, used in atomic research (Ilford Ltd.), 192
- Encapsulation of electric motor windings with epoxy resin, 293
- Encyclopedia of Science and Technology, McGraw-Hill (review), 607-608
- End-quench unit (Metallurgical Services), 444
- ENEAC. See *European Nuclear Energy Agency*
- Energy distribution in thermonuclear work, 323
- Loss, sources of in thermonuclear work, 324
- Enfield Chemicals Ltd., lagging paints (trade publication), 904
- Enfield Rolling Mills Ltd., electrode materials for welding equipment (trade publication), 872
- Engelhard Hanovia Lamps Ltd., Hanovia Turbofan heater, 548
- Engelhard Industries, special purpose brazing alloys, 210; immersion gold solution (trade publication), 264; platinum metals (trade publication), 298
- Engine, aero. See *Aircraft engine*
- Aircraft. See *Aircraft engine*
 - Atomic rocket, development and research on, 388, 800
 - Automotive gasoline, trends in piston-ring wear in, by J. R. B. Calow and S. R. Epton, 521
 - Balancing machine (Tinius Olsen Testing Machine Co.), 335
 - Bleed air, valve for, Hymatic (Hymatic Engineering Co. Ltd.), 425
 - BS75 ducted fan (Bristol Siddeley), 204
 - Combustion, congress on, 508
 - Cooling systems, thermostatically controlled, 521
 - Cooling times, 521
 - Corrosion in, 521
 - Diesel, and customers' requirements, 567
 - (W. H. Dorman & Co. Ltd.), 527
 - ENGINEERING survey, report on, 522
 - Manufacturers of, 594
- Engine, diesel, marine, 594
- Marine (British Polar Engines Ltd.), 559
 - Marine (Burmeister & Wain), 43
 - Marine (Götaverken), 42
 - Marine for large ships, 42-43
 - Marine, by C. C. Pounder (review), 902
 - Marine (Sulzer Bros. Ltd.), 42
 - Perkins, for Volga motor car, 641
 - (Société Alsacienne de Constructions Mécaniques), 560
 - Stationary, 594
 - Sulzer, for British Railways (Vickers-Armstrongs), 595
 - Sulzer, for P. & O. ships (Barclay Curle), 299
 - Sulzer, for P. & O. ships (David Rowan), 299
 - Transport (trade publication), 298
 - for trawlers (Bristol Siddeley), 69
 - Turbochargers for (Hawker Siddeley Brush Turbines Ltd.), 786
 - US sales of W. H. Dorman Ltd., 265
 - for vehicles, 595
 - Versatile, continues to thrive, 594-595
 - See also *Aircraft engine; Diesel; Motor-car engine*
- Ducted fan, cuts fuel and noise, 204
 - Fire pump, Coventry Climax (Coventry Climax Engines Ltd.), 842-844
 - Heat, by E. De Ville (book), 872
 - Industrial, outlook for 1961, 114-117
 - Internal combustion, new type (William R. Selwood Ltd.), 637
 - Combustion. See also *Turbines, gas*
 - Marine. See *Engine, diesel*
 - Measurements by radio telemetry (BICERA), 84
 - Motor-car. See *Engines, petrol; Motor-car engines*
 - Oil. See *Engine, diesel*
 - Orbital, Selwood (William R. Selwood), 682
 - See *LETTERS*, 789, 853
 - Parts, measuring operating temperatures of, 663
 - Petrol, cylinder pressure variations in, by J. P. Soltan (paper), 361
 - and diesel (Coventry Victor Motor Co. Ltd.), 132
 - More power by smooth fuel burning, 361
 - See also *Aircraft engine; Motorcar*
 - Ramjet, recording instruments for, 545
 - Rocket, atomic, 388, 800
 - Simplifying, 140
 - Thermodynamic data for, 269
 - Run hotter and live longer, 521
 - Temperatures, hardness testing for, 433
 - Traction, English, development of, by R. H. Clark (review), 363
 - Rally at Birmingham, 508
 - (Trade publications), 298
 - Vertical shaft (Villiers Engineering Co. Ltd.), 693
 - Zed crank, 790
- Engineers' earnings, survey of, 89
- in Colonial territories, by J. G. Orr, 715
 - Engineers' Guild, survey of engineers' earnings, 89; formation of Wine Club, 317; conference on the professional engineer, 442-443; appointment of Dr. Beeching welcomed, 593
 - Library-minded. See *LETTER*, 312
 - Looks at the Arab Revolts, by H. Addison, 624
 - in management, by A. R. Cooper, 443
 - Mathematical tool-kit for, by H. A. Webb and D. G. Ashwell (review), 232
 - Post-university on-the-job training for, by E. J. Manganiello and V. F. Hlavin, 317
 - Preparing for management, by D. H. Bramley, 411
 - Professional, conference on, 442-443
 - Employment and development, conference on, 277
 - (Ministry of Labour booklet), 141
 - Status of. See *LETTER*, 276
 - Relativity for, and science teachers, by L. H. A. Carr (review), 263
 - in society, by Lord Chandos, 442
 - and the technician, by D. J. Mann, 442
 - Women as, Plain Words on, 620
 - See also *Civil; Electrical; Mechanical, etc.*
- ENGINEERING, Foremen Training conference, 177; survey of foremen problem, 177; research report on atomic fuels, 368-369; questionnaire to engineering firms, 522; survey on engineering plant, 522-526. See *LETTER*, 552; Articles and Events service, 746; plant inquiry of, 753; see also *Engineering Ltd.*
- Engineering Appliances Ltd., spray dryer, 692
- Centenaries, 7
 - Centre, organization of group stands at trade fairs, 397; "British Equipment for Mexican Industry" stand at Mexico City exhibition, 397
 - Contract (trade publication), 676
 - Contribution to the future, 442-443
 - Courses. See *Courses*
 - Design. See *Design*
 - Education. See *Education*
 - Heat transfer, by H. Schenck (review), 156
 - High degree of, by F. B. Roberts (ICI Ltd. booklet), 177, 185
 - Industrial design moves into, by W. H. Mayall, 554-555
 - Industries, capital investment in, 241
 - Concern about labour relations at docks and ports, 141
 - Effect on if Britain joins the European Common Market, 792
 - in New Zealand, historical note on, 745
 - Order statistics, 785
 - Instruments. See *Instruments*
 - Laboratory. See *Laboratory; National Engineering; National Physical Engineering Ltd.*, participation in formation of Kompass Register Ltd., 518
 - Management, by S. A. Robertson (book), 68; (review), 426
 - Marine, Welding and Nuclear Energy Exhibition, 519, 527; exhibits at, 559, 629
 - Metallurgy, by R. A. Higgins (book), 872
 - and physics, field computations in, by A. Thom and C. J. Apelt (book), 496
 - Plant. See *Plant*
- Engineering products, exports of, 341
- The Profession and Elementary Problem Analysis, by H. W. Leach and G. C. Beakley (review), 607
 - Progress, human aspects of, by Sir Willis Jackson, 817
 - Project (trade publication), 676
 - Reliability, and statistical processes, by D. N. Chorafas (review), 362
- Engineering Replacements Holdings Ltd., increase in profits, 61
- Standards. See *British Standards Institution; Standards*
 - Students, aerodynamics for, by E. L. Houghton and A. E. Brook (book), 24
 - Studies in secondary schools (LCC report), 373
 - Technology and safety, by R. Hurst, R. N. Lyon and C. M. Nicholls (review), 111
 - Training. See *Training*
 - See also *Civil; Electrical; Mechanical, etc.*
- Engis Ltd., Hyprez grinding and lapping compounds, 173; Hyplicator for Hyprez compounds, 173; diamond lapping machine, 890
- England, C. J., et al., on physics measurements during the commissioning of Pluto, 224
- English Aviation Ltd., instrument wing of, 700
- English Electric Canada Division of John Inglis Ltd., hydraulic turbines for Grand Rapids power station, 265
- English Electric Co. Canada, large transformer for Ontario Hydro, 389
- English Electric Co. Ltd., Kraft honeycomb sound reducing bulkheads for Deltic locomotive, 90; postal computing service, 153; Super Staines welding electrode, 211 steam turbines and condensers for second atomic submarine, 224; Deriaz reversible pump-turbine, 226-228; gas turbine locomotive, 239; propulsion equipment for Cable & Wireless Ltd. cable laying ships, 299; research on long turbine exhaust blades, 303; weldability (trade publication), 332; turbo-alternators for West Burton power station, 365, 371; position and prospects, 389; annual statement, 389; accounts, 389; losses of subsidiaries, 389; profits, 389; supergrid switching equipment for CEBG, 429; quality control system for sheet metal, 459; exhibit at Rand Show, 465; vibrator motor, 517; rotary actuators, 527; turbines for Canada, 541; on welding equipment and customers' requirements, 568; award of scholarships and exhibitions, 593; double oven cooker, 616; exhibit at British Trade Fair, Moscow, 758; participation in British Aircraft Corp., 769; copper extrusion plant for Thomas Bolton & Sons Ltd., 773; constant speed generator drives for Vickers VC10 aircraft, 809; offer for share capital of W. H. Dorman, 809; propulsion machinery for hydrographic survey ship of Royal Australian Navy, 841; diesel electric installations for New Zealand Railways, 841; diesel electric installations for Cable & Wireless Ltd., 841; dry cooling towers for Rugeley power station, 884; Australian interests to be taken by British Aircraft Corp. (Australia) Pty., 897
- English Electric Group, exhibit at British Trade Fair, Moscow, 705
- English Electric Valve Co., vapour valves for BBC transmitters, 433
- English Steel Corp., rolling mills ordered from Davy & United Engineering Co. and Brightside Foundry & Engineering Co., 113, 127; forging steel rings, 635; orders taken at Leipzig Fair, 673; position and prospects, 737; profits, 737; sales, 737
- English Steel Forge & Engineering Corp., position and prospects, 737; shortage of skilled labour, 737
- Engraver, abrasive (trade publication), 24
- Enlarger, Kamm (Colyer & Southey Ltd.), 144
- Entreprise Aboux & Cie, use of hypalon coatings for gas industry, 243
- Enterprise atomic propelled aircraft carrier, criticality achieved in reactor, 192
- Entwistle & Kenyon, bought by Prestige Group, 489
- Environmental Effects on Materials and Equipment* (National Academy of Sciences), 606, 706
- Epoxy/coal tar, polyamide cured, Adcora A3 (E. & F. Richardson), 506
- Epoxy coating, solventless, Adcora SP (E. & F. Richardson), 506
- Resin, Araldite, styling models of (Austin), 855
- Epton, S. R., on trends in piston-ring wear in automotive gasoline engines, 521
- Equation, one velocity neutron transport, approximate solution of in an infinite medium, by G. Rowlands, 224
- Equilibrium and deformation of elastic solids, by V. Volterra and E. Volterra (book), 840
- Dynamic, as an economic aim, by J. Hennessey, 249
- Equipment & Engineering Co. Ltd., Simplex hydraulic jack, 798
- Environmental effects on (National Academy of Sciences), 606
 - Non-standard (trade publication), 748
- Ergonomics Association, International. See *International*
- Erickson, J. E., on IBM 650 RAMAC computer for data processing in an Air Route Traffic Control Centre, 479
- Ermeto stop valve (British Ermeto Corp. Ltd.), 528
- Ernst, Wilhelm, und Sohn, *Hütte des Ingenieurs Taschenbuch* (book), 232
- Erosion and defence of the coast (DSIR publication), 187
- Erroll, F., on management consultants, 381
- Ertaud, A., on neutron density measurement by autoradiography of detector foils, 388
- Escalators, lifts and paternosters (trade publication), 158
- Esch-sur-Sûre dam, protection with synthetic rubbers, 11
- ESCOM. See *Electricity Supply Commission of South Africa*

- Escravos River, mole construction on, 731
 Esperance Longdoz, iron granulation plant, 126
 Essen, Dr., awarded Russian Poplov medal, 705; atomic clock, 705
 Esso Petroleum Co. Ltd., application for licences to prospect in Hampshire, Surrey, Sussex and Kent, 25; new butyl rubber plant to be built at Fawley refinery (Foster Wheeler), 333; aluminium pontoon at Milford Haven (Whittingham & Mitchell), 343; exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519
 Essor atomic reactor, 388
 Estevez, J. M. J., on Manipulation of Thermoplastic Sheet, Rod and Tube (book), 24
 Estuary, Tees, hydraulic model of, 877
 Etablissements Barthod, pneumatic descaling tool, 399
 Ether Ltd., flame controller, 417
 Ethics, code of, for US electrical industry, 565
 Ethylene-oxide (trade publication), 264
 Ethylene production (trade publication), 708
 Euclid (Great Britain) Ltd., Euclid crawler tractor, 796
 Euphrates and Tigris rivers, regime of, by Ionides (book), 624
 Euratom. See *European Atomic Energy Commission*
 Europe, chemical industry in, 341
 — Commercial vehicle production, table of, 146
 — and the Commonwealth (Economist Intelligence Unit Ltd.) (review), 747-748
 — Export Council for. See *Export*
 — UK firms moving into, 209
 — US private investment in, 209
 — Western, imports from UK, 341
 — Promising markets of, 681
 European Agricultural and Industrial Fair, Sweden, 181
 European Atomic Energy Commission, projects for atomic reactors for ship propulsion submitted by France, Germany, Holland and Italy, 16; research centre to be built at Karlsruhe, 16; formation of Transatom information office with UKAEA and USAEC, 192; contract with Hamburg Gesellschaft für Kernenergieverwertung and Interatom for atomic ship propulsion project, 256; negotiations with French Atomic Energy Commission for ships atomic reactor, 256; negotiations with Fiat and Ansaldo for ships atomic reactor, 256; negotiations with Netherlands for ships atomic reactor, 256; Ispra Centre of, 387; Karlsruhe Transuranium Institute of, 387; negotiations with Netherlands, 387; research programme in branch establishments, 387; setting up of Joint Research Centre, 387; seventy contracts for, 387; United States agreement with, 388; Italian Government hands over Ispra Nuclear Research Centre to, 488; contract for cooperation with Plasma Physics Institute, 696; fusion research contract with French Commissariat à l'Énergie Atomique, 696; fusion research contract with Italian Comitato Nazionale per l'Energie Nucleare, 696; annual general report, 768; atomic power reactors schedules, 768; BEWAG project, 768; contact with Institute of Nuclear Studies, 768; contact with UKAEA, 768; contact with KEMA Co., 768; KBWP project, 768; nuclear ship propulsion projects, 768; ORGEL Project, 768; to participate in reactor costs, 768; power reactor projects, 768; research activities of, 768; SELNI Co. project, 768; take over of Ispra centre, 768
 European Coal and Steel Community, cost of coal, 849
 — Committee of Paint and Printing Ink Manufacturers' Associations, 841
 — Common Market, countries, table of technical regulations for commercial vehicles, 146; range of trucks designed for, 206; transport regulations, 206; UK companies moving into, 209; fast growth of, 649; imports of member countries, 649; UK imports to, 649; as an export market, 649; effects on UK food prices if UK joins, 761; if Britain joins, by R. Bailey, 792; UK exports to, 792; and UK Government decision awaited, 801; and the Channel Tunnel, 856
 — Conference of Ministers of Transport, 473
 — Economic Community, growth of countries in, 473
 — Electric power situation, by J. H. M. Sykes, 791
 — Exports Council, activities of, 149
 — Free Trade Association, expansion in rail-borne goods traffic, 473
 — General Galvanisers Association, *Bulletin*, 774
 — Management consultants visit UK, 413
 — Non-ferrous metals industry, guide to the principles of costing in (review), 199
 — Nuclear Energy Agency, to collaborate with IAEA, 16
 — Organisation for Nuclear Research, experiments on similarity between muon and electron, 205; three physicists to study basic nuclear research in Russia, 348
European Productivity, 209
 — Productivity Agency, *European Productivity*, 209
 — Symposium on Space Technology, 685
 — Transport of goods by rail, 473
 Europium oxide, bibliography of, 456
 Eurospace launcher plan, 623
 Eutectic Welding Alloys Co. Ltd., aluminium brazing paste, 135; EutechTode 66 welding electrode, 211; QuenchWeld process for cast iron, 835; ChamberTode grooving electrodes, 835; EytecTode welding electrode, 835
 EutechTode welding electrode (Eutectic), 835
 EutechTode 66 welding electrode (Eutectic Welding Alloys Co. Ltd.), 211
 Evans, D. S., on scales for coding quantities electrically, 346-347
 Evans, H. W., on Reinforced Concrete Piling and Piled Structures (review), 297
 Evaporating system, Multiflash (G. & J. Weir Ltd.), 604
 Evaporation plant for seawater (G. & J. Weir) 497
 Evaporator, Maxim Aquavap (AMF Ltd.), 651
 — New, fresh water from the sea, 604
 — Plate, APV (APV Co. Ltd.), 430-432
 — Seawater (International GEC), 439
 Evely, R., on Concentration in British Industry (review), 23
 Events in 1961 (ENGINEERING booklet), 244
 Evered, D. S., on Rocket Propellant Handbook (review), 200
 Evo-Stik impact adhesive 633 (Evo-Ltd.), 407
 Evo-Ltd., Evo-Stik impact adhesive 407, 633
 Evolution of an Engine—the Jaguar XK, by B. Lister, 887
 Ewart, William, & Son Ltd., collaboration with Short Bro. and Harland, 635; electronic inspection device for linen yarn, 635; AMY automatic linen yarn monitor, 813
 Exactor Ltd., Exactor Trabon lubrication equipment, 762
 Excavating machine, Loering (NCK-Rapier Ltd.), 798
 Excavator, Rapier walking dragline (Ransomes & Rapier Ltd.), 697
 Exchange, branch, telephone (trade publication), 112
 Excitation systems for generators, 283
 Executive and work, Plain Words on, 376
 Exhaust gas burner for motor cars, Smog-Burner (Chromalloy Corp.), 175
 — Pulse studies, generator for, by W. A. Woods, 128-129
 — Sizes for steam turbines, 284
 Exhibition, agricultural and food equipment, 165
 — Armaments, 35
 — Arrangement of (Advertising Publications Co. Ltd.), 685
 — Automatic vending, 721
 — British Trade Fair (Moscow), 713; British exhibits ready for transit to, 429; exhibitors at, 465, 541, 609, 697, 705; films at, 265; follow up after, 758-759
 — Building and civil engineering, 78
 — Building and public works, 685
 — Cairo International Agricultural Fair, British exhibits at, 333
 — Commercial vehicles, international, 146
 — of craft training at Merthyr Tydfil College, 737
 — Data processing and business equipment, 119
 — Domestic aids, 169
 — East German Republic, in Moscow, 809
 — Electrical engineers, 280, 418
 — Engineering, Marine, Welding and Nuclear Energy, 519, 527; exhibits at, 559, 629
 — European Agricultural and Industrial Fair (Sweden), 181
 — Furniture, 272
 — German Chemical Plant, 677
 — Heating and insulating, 5
 — of the Institute of Physics and the Physical Society, 58
 — International Aeronautical, Paris, 694
 — Boat Show, 45, 132. See *Correction*, 89
 — Construction Equipment, 641, 796
 — Household Goods and Hardware Fair, 133
 — Labour, Turin, 509
 — Refrigeration and air conditioning, 834
 — Trade Fair (Poznan), British Exhibitors at, 873
 — Leipzig Fair, 641; British exhibitions at, 273, 397; orders for UK exhibitors, 429, 673
 — Malta GC, 728
 — Materials processing, 71
 — Mesucora, and Congress, 804
 — Mexico City, Engineering Centre group stand exhibit, 397
 — Modern jewellery, 277
 — Motor car shows, 95
 — National, drawing office equipment and materials, 5
 — Laboratory apparatus and materials, 5
 — New York automobile show, orders taken for sports cars at, 505
 — Photographic, on peaceful uses of atomic energy (Ilford Ltd.), 192
 — Plastics, 5
 — Power plant and prime movers, 114
 — Poznan International Fair, 641
 — Private, and symposium on Analytical Instrumentation of Industrial Process Control (Elliott Bros. (London), Ltd.), 720
 — Racing Car Show, exhibits at, 65
 — Rand Show, UK exhibitors at, 465
 — Royal Show, 888
 — Russian trade and industry, exhibits for, 299
 — Scientific and engineering instruments, 75
 — Service industries, 161
 — Stockholm Trade Fair, 617
 — Sydney Trade Fair, 541
 — Telecommunications and electronics, 30
 — and trade fairs, future, on production plant, 27
 — Transport, 123
 Eximbank. See *United States Export-Import Bank*
 Expanded Metal Co. Ltd., research on plaster protection for steelwork, 343
 Expanded Minerals Ltd., Brelite expanded perlite, 698
 Expanded plastic. See *Plastic*
 Expanded Plastics Ltd., expanded polystyrene mouldings (trade publication), 232
 Expandite Adhesives Ltd., adhesives (trade publication), 808
 Expandite Ltd., line marker (trade publication), 200; Hydrocor granulated cork material, 551; Hydrofoil waterstop, 551; interlay for black-tops (trade publication), 808; water bar (trade publication), 840
 Expedition, Australian Antarctic See *Australian*
 — South Greenland, St. Andrews University See *St. Andrews*
 Experts, Plain Words on, 440
 Exploration in management, by W. Brown (review), 540
 Explosion, electrical, shapes tough metals (GEC(US)), 645
 — in SL-1 atomic reactor, 355
 Explosives, atomic, development for peaceful purposes, 224
 Exports of aircraft, 541
 — Aircraft-engine industry, 133
 — to Argentina, 193
 — Chemical machinery, 70. See *LETTER*
 — Comparison table of, 133
 — Conference of BEAMA, 841
 — Convention on consumer packaging for, 822
 — Council for Europe, OEEC approve formation of, 45; pathfinder missions to countries, 549; optimistic view of UK exports, 549; Pathfinder Missions to countries, 681
 — Credit Guarantee Department, 585, 873, 897
 — Directory, Swedish, 1960 (General Export Association of Sweden) (review), 331
 — to Eastern-Bloc, 233
 — to ECM countries, 649
 — Electronics industry, 133
 — Engineering products, 341
 — to European Common Market, 792
 — Facing up to the realities, 133
 — Failure record, 681
 — Gas machinery, 70. See *LETTER*, 136
 — Germany, increase in car, 25
Export Guide (GEC booklet), 133, 193, 201, 617
 Export-Import Bank, loan to Ghana, 333; loan to Marinduque Iron Mines Agents Inc., 587
 — Instruments industry, 133
 — Instruments, table of, 76
 — to Jordan, 265
 — to Latin America, 341
 — Locomotive manufacturing industry, 681
 — of Machine tools, 365, 673
 — Machinery to Canada, 341
 — to US, 341
 — Market, small firms in, 45
 — Motor cars, 365
 — Cars in "completely knocked down condition," 724
 — Vehicles, 146
 — to Nordic market, 617
 — Office machinery, 333
 — Optimistic view of, 549
 — Packaging for computers, 203
 — Plastics machinery, 257
 — Plastics materials, 257
 — Prospects, 617
 — to Russia, 299
 — Sales, 241
 — Shipbuilding industry, 681
 — Shipping costs, increase in, 233
 — to Spain, 299
 — Steel, 45
 — Studies, courses in, 593
 — to Sweden, 617
 — Trends, inquiry into, 849
 — to Western Europe, 341
 Exporters, services to, 617
 Extractor fan. See *Fan*
 Extrusions, aluminium (trade publication), 298
 — Cold, technique for titanium, 545
 — Plants for copper, 773
 — Steel (trade publication), 872
 Eye injury in industry, 381
 — on research, by G. R. Taylor (review), 330
- ## F
- FABER, O., on Constructional Steelwork Simply Explained (book), 158; (review), 806
 Faber, Oscar, & Partners, model of factory roof of Texas Instrument Co., 863
 Fabrique Nationale d'Armes de Guerre, diesel engined bus, 595
 Face shield, Clearways (Safety Products Ltd.), 319
 Facel Vega Facellia motor car, 592
 Facellia motor car, Facel Vega, 592
 Facing machine, horizontal (A. Kitchen-D. Walker Ltd.), 766
 Factor of safety, based on probability, by N. L. Svensson, 154-155. See *LETTER*, 313
 Factories, access for fire appliances, 142
 — Act, 1959, 201
 Factory accidents. See *Accidents*
 — Buildings, fire protection in, by G. J. Langdon-Thomas (DSIR publication), 142
 — Chief inspector of, annual report of, 721
 — Design and fire precautions, 142
 — Fire doors in, 142
 — Extinguishers in, 533
 — Fighting in (Ministry of Labour booklet), 217
 — Precautions in, 217
 — Model (Molins Machine Co. Ltd.), 868
 — Planning models (Dunlop Advisory Service Ltd.), 868
 — Safety routes in, 142
 Fafnir Bearing Co., new factory at Hedgesford, 541
 Fahnstock, S. L., on aluminium furniture, 130
 Failure, probability of, 155
 Fair, trade. See *Exhibition*
 Fairbanks, H. K., on safety and economy factor for dams, 895
 Fairbanks-Morse, to sell Dorman diesel engine by agreement, 265; importation of EMI electronic products, 265; agents for Alfred Herbert machine tools, 265
 Fairclough, Leonard, Ltd., contract for Birmingham-Preston Motorway, 233
 Fairey Air Surveys Ltd., aerial survey of Skelmersdale new town area, 673
 Fairey Engineering Ltd., Hector atomic reactor for Winfrith Heath, 104
 Fairfield Shipbuilding & Engineering Co. Ltd., technical assistance agreement with Westinghouse Electric International Co., 333; consortium with Mitchell Engineering and Combustion Engineering, 333; contracts taken at Leipzig Fair, 497; exhibit at Moscow British Trade Fair, 497; diesel engines for East Germany, 497
 Fall-out, radioactive, in air and rain, by D. H. Pierson *et al*, 60
 — Reduction in, 60
 Famagusta, proposed extension to port facilities, 585
 Fan blades, protection for, 506
 Fan Disk Ltd., Dubo retaining rings, 867
 — Extractor, Super Minex (Jones & Stevens Ltd.), 240
 — Heaters, 548. See *LETTER*, 620
 Fanghanel, P., & Co., Ltd., mattress spring testing machine, 404
 Fano, R. M., on Electromagnetic Field, Energy and Forces (review), 297-298
 Faraday Medal awarded to Dr. J. Stratton by Institution of Electrical Engineers, 348
 Faraday, Michael, historical note, 7; by A. E. Jeffreys (book), 264; (review), 395; on Advice to a Lecturer (book), 464
 Faraday Society, *Crystal Growth* (review), 394
 Farming art, irrigation as, 54
 — Increase in labour costs, 299
 — See also *Agriculture; Irrigation; Tractors*
 Farnborough Show, BEAGLE exhibit at, 497
 Fast Burst Reactor project of USAEC, 224
 Fasteners (trade publication), 264
 — and screws (trade publication), 776
 Fatigue, aircraft propellers, 503
 — Undercarriage, 502
 — Basic mechanisms of (ASTM) (review), 903
 — Metal, by J. A. Pope (review), 903
 Fault locator, line (Ferranti Ltd.), 418
 Faust, Dr. C. L., electrolytic machining process, 175
 Fawcett Preston & Co. Ltd., hydro-pneumatic accumulator (trade publication), 364
 Fawley refinery, new butyl rubber plant to be built (Foster Wheeler), 333
 FBR Project of USAEC, 224
 FCI, interest paid by South Durham Steel & Iron Co., 105
 Feates, F. S., *et al*, on Vacuum Ultra-Violet Source Radiation of High Intensity, 388
 Federation of British Industries, meeting on exports of Agricultural Engineers Association, 201; survey of industrial trends, 241; cost, output and price comparison statistics, 241; trade team on tour in Spain, 273; mission to Nigeria, 341; *FBI Register of British Manufacturers*, 1961 (book), 396; biographical notes on scholarship winners, 793; scholarship scheme, 793; inquiry into industrial and export trends, 849
 — of Civil Engineering Contractors, sponsorship of International Construction Equipment Exhibition, 641; Handbook (review), 806
 Fédération Européenne d'Associations Nationales d'Ingénieurs, representation at Conference on Engineering Education, 513
 Federation of Manufacturers of Construction Equipment, sponsorship of International Construction Equipment Exhibition, 641
 Feed control system (Richardson Scale Ltd.), 399
 — Pumps. See *Pumps*
 — Unit (Amigo Machine Co. Ltd.), 859
 — Water. See *Water*
 Feedback Ltd., square-wave generator, 188
 Feeding machine, transfer (Turner Bros. Ltd.), 144
 Fei, G., on market for typewriters, 212
 Felbeck, Dr. D. K., review of Brittle Fracture of Steel, 871-872; biographical note, 872
 Felt, roofing, Venales self-locking nails for, 483
 Fenders, dock (Goodyear Tyre & Rubber Co.), 771
 Fenner, J. H., & Co. Ltd., SpacesVer wedge-belt Vee belts, 86; wedge belt drives (trade publication), 708
 Fenton, G. W., on engineers on British Railways, 92-93
 Fenwick, Gore & Partners, 8
 Ferguson, C. N., exchange visit to Australia, 761
 Ferodo Ltd., Taylor Woodrow to build new factory for, 289; friction materials (trade publication), 766
 Ferranti Ltd., warning system for electrical power control, 40; transformers for Australia, 69; transformers for Lewiston power station project, Niagara, 239; Argus computers ordered for ICI Ltd. and Babcock & Wilcox Ltd., 365, 366; line fault locator, 418; ampere demand meter, 444; new works at Thornybank Industrial Estate, 497; first production model of Atlas digital computer, 609; Sirius computer for Metropole Industries Group, 673; packaged electrical substation for T. Wall & Sons (Meat & Handy Foods) Ltd., 701; reorganisation and modernisation programme, 841; automatic platen machine for, 841; Mercury computer, optimisation procedure on, 860; experiments with solar cells, 877
 Ferrari Berlinetta motor car, 329
 Ferrari Superamerica motor car, 592
 Ferric clinker used in dam construction, 483
 Ferritic alloy steels, table of uses of, 274
 Ferro Enamels Ltd., new factory completed, 603; colour oxides, 603
 Ferrogel corrosion protection painting system (John S. Craig & Co. Ltd.), 47
 Ferry services across Channel, 681
 FEST, contracts with Russia, 785
 Festschrift Richard Grammel, by K. von Sanden (book), 200
 Ffestiniog pumped storage scheme, switchgear for (GEC), 651
 Fiat, negotiations with Euratom for ships atomic reactor, 256; study of plans for atomic propelled tanker ship, 288
 Fiberfil Inc., strengthening of thermoplastics with glass fibres, 406
 Fibre, metal, seals, 475
 — Terylene polyester, sewing thread (John Smith & Co.), 587
 Fibreboard, flameproof, Pyrestos Dribord (Pyrestos Ltd.), 375
 Fibreclad Ltd., demonstrations of newly formulated resins, 773
 Fidler, A. G. S., investigation on new town proposed for Dawley, 657

- Greece, IAEA expert to visit, 387
 Greek Nuclear Research Centre, IAEA to assist, 387
 Green, A. E., on Large Elastic Deformations and Non-Linear Continuum Mechanics (book), 496
 Green, Sir John, on Thos. Firth & John Brown Ltd., 105
 Greencoat Electronics Ltd., position and prospects, 17
 Greengate & Irwell Rubber Co., Niplas pvc/rubber cable sheathing, 179
 Greenhalgh, G. H., review of Scandinavian Research Guide, 331-332; biographical note, 332
 Greenland, South, St. Andrews University expedition to. See *St. Andrews*
 Gregory, D., historical note, 7
 Gregory, J., historical note, 7
 Gregory, R. H., on Automatic Data Processing Systems (book), 264
 Greiner, Emil, agents in US for Winston Electronics Ltd., 905
 Grenfell, Cmdr. H. F. P., on MTD (Mangula) Ltd., 457
 Gresham & Craven Co., position and prospects, 357
 Grid System, 284
 — Linking of France and UK, 753
 — Operation and protection, 285
 Griffin D6 Gas Chromatograph (Griffin & George Ltd.), 778-780
 Griffin & George Ltd., glassware (trade publication), 676; historical note, 778; Griffin D6 Gas Chromatograph, 778-780
 Griffin, N., on Electronic Equipment Reliability (book), 232; (review), 362
 Griffin & Tatlock Ltd., historical note, 778
 Griffith, P., on Role of Surface Conditions in Nucleate Boiling, 631; on heat transfer, 631
 Griffiths (Lambeth) Engineering Co. Ltd., Padi-Power power tug, 767
 Grimsby/Hull Bridge, proposal for, 177
 Grinding, centreless, of rubber (A. Scrivener Ltd.), 635
 — Compound, Hyprez (Engis Ltd.), 173
 — Machine, belt (Addison Tool Co. Ltd.), 319
 — Centreless, Hartex (Rockwell), 253
 — Coffee, electric (Norel Electrical Appliances Ltd.), 848
 — Tool (trade publication), 68
 Grit, abrasive, Macolaep (Monks & Crane), 135
 — Stores on MI Motorway, 11
 Grodsky, Dr. M., on project Apollo, 856
 Grooves, profiling by electro-erosion, 301
 Grosberg, Dr. P., review of Mechanics for Textile Students, 675; biographical note, 676
 Grossen Uphi universal meter (Aveley Electric Ltd.), 351
 Ground effect machine, Skimmer, 637
 — Machines, outlook for 1961, 122-125
 Groups, decisions and values, by D. Willner (review), 870
 Grove Building (Hanworth) Ltd., new factory for Spring Grove Laundry, 764
 Grunberg, H., on Camping Gaz equipment, 150
 Grundlagen der Analysis, by E. Landau (review), 364. See *LETTER*, 477
 Guarantees, British Standards Institution's views on, 761
 — Customers' rights under, 348
 Guardaire air conditioning unit (Winston Electronics Ltd.), 816
 Guenault, P. H., on Control of Monopoly in the United Kingdom (review), 427-428
 Guest, G. R., on diesel engines and customers' requirements, 567
 Guidance, inertial, by C. S. Draper, W. Wrigley and J. Hovorka (book), 540
 Guide, banker's, to marine insurance of goods, by V. Dover and G. A. Calver (review), 774-775
 — to 25,000 British Firms, 518
 Guildford Cathedral, building of, by B. Geen, 690-691
 — Cost of, 657
 — Donations from engineers, 657
 Guinness, Arthur, & Co. Ltd., plans for brewery in Nigeria, 341
 Guma Valley Dam, 731
 Guns, machine, 831
 — 105 mm, British, for M60 tank, 45
 — Machine, Browning, 831
 — FN general purpose, 831
 — Spray, Hydra-Spray Golden (Alfred Bullocks & Sons Ltd.), 858
 — Submachine, 830
 — Lancaster, 830
 — Schmeisser, 830
 — Sterling, 830
 Gunn, C. D., on efficiency of coal fired industrial boilers, 534-535
 Gunner, A. M., on off-peak heating, 276
 Gunnersbury building scheme, 413
 Gurklis, Dr. J. A., electrolytic machining process, 175
 Gutzwiller, E., of Basle, association with Bowmakers, 257
 GWB Furnaces Ltd., electric arc melting furnaces for Steel, Peck & Tozer, 82; new furnaces for Earle, Bourne & Co. Ltd., 367; bell-type furnace, 891
 Gyro compass (Sperry Gyroscope Co. Ltd.), 560
 — Integrating (Ketay Ltd.), 859
 — Sub-miniature (Lear Inc.), 153
 Gyron Junior engine, trial flight of Javelin aircraft with, 269
 Gyroscope, miniature integrating, MIG (Minneapolis-Honeywell Regulators Corp), 700
- H**
- HADDON, D., on W. H. Dorman Ltd., 265
 Hadfields Ltd., jaw breakers (trade publication), 396; die steels (trade publication), 808; alloy steels (trade publication), 808
 Hagan Controls Ltd., power positioner, 859
 Hague, Sir Kenneth, on Babcock & Wilcox Ltd., 697
 Hahn, B., on controlled sensitivity bubble chamber, 192
 Hahn & Kolb Great Britain Ltd., Tornomat shaping machine, 596
 Haigh Engineering Co. Ltd., Disposomatic waste disposer, 536
 Hair as packaging material. See *LETTER*, 93
 Hairlok Co. Ltd., packaging plan for computers for export, 203
 Hairlok Laboratories Ltd., experimental packaging of computers for export, 203
HAL Technical Society Digest, 774
 Halcrow, Sir William, & Partners, Victoria Line underground railway, 414; Strathfarrar and Kilmarnock project, 471; supertanker berth at Sydney, Australia, 735; Tapakuma Scheme in British Guiana, 735; Krian irrigation scheme in Malaya, 736
 Halden project in Norway, 564
 Hales, S., historical note, 7
 Hall effect and related phenomena by E. H. Putley (book), 264; (review), 638
 Hall Harding Ltd., drawing office (trade publication), 112
 Hall, H. T., on materials at high pressures, 614-615
 Hall, J., on precoated steel strip, 48
 Hall, J. & E., Ltd., electric platform hoists (trade publication), 158; lifts equipment (trade publication), 158; "Paternoster" lifts, 338. See *LETTER*, 476; refrigerating plant for liner *Canberra*, 755
 Hallam atomic power facility, 420
 Hallen derrick (MacGregor & Co.), 652
 Hallikainen, K. E., on application of analysis instruments, 720
 Halo shower unit (Reinforced Plastic Developments), 44
 Hambro, Sir Charles, tour of Mexico, 641
 Hamburg Gesellschaft für Kernenergieverwertung, contract with Euratom and Interatom for atomic ship propulsion project, 256
 Hamilton Ltd., rubber road marking posts, 321
 Hamilton Safe Sines rubber road marking posts (Hamilton Ltd.), 321
 Hamilton, William, new ship for P & O, 299
 Hammer finish (trade publication), 904
 Hammering machine, screw thread, Crossley-Trurnit (Crossley Bros. Ltd.), 398
 Hammersmith flyover, details of, 246-247
 — Model of, 862
 Hammond, P., review of Relativity for Engineers and Science Teachers, 263; biographical note, 264; review of Contactor Switchgear, 206; review of Textbook of High Voltage Technology, 296; review of Solution of Magnetic Circuits by Graphical Methods, 296; biographical note, 298; review of Michael Faraday, 395; biographical note, 396; review of McGraw-Hill Encyclopedia of Science and Technology, 607-608; review of Introduction to Mechanics, Matter and Waves, 607-608; review of Introduction to Modern Physics, 607-608; review of Introduction to Quantum Mechanics, 607-608; biographical note, 608; review of Electrical Theory on the Giorgi System, 839-840; biographical note, 840
 Hammond profile polishing machine (Morris), 56
 Hampshire, Esso seek oil prospecting licence for, 25
 Hamstead, Isle of Wight, atomic power station, no news available, 288
 Hamworthy Engineering Ltd., Hestair air compressor, 145; Dolphin vertical pump, 353
 Hancock & Co. (Engineers) Ltd., flame planer, 529; on welding equipment and customers requirements, 569
 Hancock, H., on Theory of Maxima and Minima (book), 776
 Hancock, N. N., on post graduate training of electrical engineer, 317
 Handbook, civil engineering, by L. C. Urquhart (review), 68
 Handley Page Dart Herald aircraft, 1; for Maritime Central Airways and Nordair, 265
 Handling (trade publications), 158, 708
 Handling, data, outlook for 1961, 118-121
 — Paper (trade publication), 158
 — Plant, mechanical, *ENGINEERING* survey report on, 524
 — Remote, and analytical techniques used in the processing of samples from HTGC loop irradiations, by P. E. Brown *et al*, 520
 Handril, Holman Silver 3, rock drill (Holman Bros. Ltd.), 498-500
 Handy Utility electric tool (Black & Decker), 106
 Hanger (Luminated Ceilings Ltd.), 597
 Hanovia Turboflo fan heater (Engelhard Hanovia Lamps Ltd.), 548
 Hanrahan, J. S., on Space Biology (book), 364
 Hansen, V., Heizöl-Handbuch für Industriefuerungen (review), 263
 Hanton, W. A., on Mechanics for Textile Students (book), 68; (review), 675
 Harbour, deep water, for Barbados, 733
 — Mombasa, four berths built at, 828
 — Salaverry, Peru, model of, 470. See *LETTER*, 685
 — Works overseas, 888
 Harcourt, W. V., review of Commonwealth and Europe, 747-748; review of British Commonwealth Year Book, 747-748; biographical note, 748
 Hardcastle, A. F., on control of off-peak floor warming, 880
 Harder, B. R., on oxidation of uranium-dioxide by water vapour under reactor irradiation, 60
 Hardness, significance in abrasive wear, 546
 — Testing for engine temperatures, 433
 Hardware and household goods fair, international, 133
 Hardypick Ltd., queries on equipment, 762
 Hare, J., chairmanship of talks between employers and unions in motor car industry, 593; meeting of British Employers Confederation, 657; on improving industrial labour relations, 888
 Harland Engineering Co. Ltd., order placed with W. H. Allen Sons & Co. for Allen-Stoekicht gear units for CEGB, 429
 Harland & Wolff Ltd., modernisation and completion of aircraft carrier *Vikrant* for Indian Navy, 429; diesel engines, 594
 Harper Engineering & Electronics Group, new companies added to, 325; profits, 325; Samuel Platt Ltd. joins group, 325; Morrisflex Group joins group, 325; J. B. & S. Lees joins group, 325; Spembly Ltd. joins group, 325; indirect exports of group, 325
 Harper, John, & Co. Ltd., SG iron (trade publication), 808; cast-to-form tools (trade publication), 904
 Harper, J. S., on neutron temperature in reactors having moderator closely associated with fuel elements, 455
 Harriman Ripley Inc., *Moorgate and Wall Street*, 505
 Harrison, Dr. D., review of Fluidization and Fluid-Particle Systems, 230-231; biographical note, 232
 Harrison, J., historical note, 7
 Harrison, R. W., accident to, 824; membership of YZ Club, 824
 Harrison, T. R., on Radiation Pyrometry and its Underlying Principles of Radiant Heat Transfer (review), 427
 Harrison, W. J., work on air and gas bearings, 255
 Hart, Dr. C. A., review of University College, Ibadan, 747; biographical note, 748
 Hartenberg, Prof. R., on Kinematics: A German-English Glossary, 156
 Hartex grinding machine, centreless (Rockwell), 253
 Harvesting machinery, outlook for 1961, 164-167
 Harvey, Sir Arthur Vere, appointed managing director of CIBA United Kingdom Ltd., 565
 Harvey, G. A., & Co. (London) Ltd., boiler drums for Mitchell Engineering Ltd., 270; Design Centre award for "Town Number One" litter bin, 712
 Harvie-Watt, Sir George, on Monotype Corp., 489
 Harwell Atomic Energy Establishment. See *Atomic Energy Research Establishment*
 Harwell Mirror Machine Experiment, model to test, 877
 Harwell Reactor School, course for senior technical executives, 420; courses, 832
 Haskell Canyon atomic reactor, 419
 Haslett, A. W., on Science Survey, 1 (review), 330
 Hassan, W., design of Jaguar XK engine, 887
 Hassell & McConnell, new department store for Birks Store, 159
 Haviland, R. P., on spacecraft, 623; on communications satellites, 893
 Hawk missile, companies producing for NATO 397
 — Mobile launchers for (Northrop Corp.) 397
 Hawker P1127 VTOL aircraft, progress report on, 461
 Hawker Siddeley Avro 771 aircraft, BS 75 ducted fan engine for, 204
 Hawker Siddeley Brush Turbines Ltd., gas turbine pumping sets for trans-Syrian pipeline, 271; products of, 271; turbo-charges for diesel engines, 786
 Hawker Siddeley Group Ltd., small boats, 45; to exhibit at Sydney Trade Fair, 541; jet engine executive aircraft, 577; space research, 585; formation of British Space Development, 585
 Hawker Siddeley Industries Ltd., exhibit at Moscow Trade Fair, 465; National Brush diesel alternator sets for Machinimport, 809
 Hawker Siddeley Nuclear Power Group, Nestor atomic reactor for Winfrith Heath, 456; Langley plant to close down, 488; to close Langley works, 505; to close down, 632; future of Jason atomic reactor uncertain, 632
 Hawkins, J., demonstration in US of Winston Beryllium electronic monitor, 905
 Hawley, C., on Lincoln Lords (review), 296-297
 Hawthorne, E. P., on nuclear graphite, 5
 Haycock, A. H., on Principles of Machine Woodworking: Sawing and Planing (review), 903
 Haydon, A. W., Co., dc motor, 13; stepping motor, 101; circuit tester, 416
 Hayes Grammar School, use of Pye closed circuit television, 447
 Hayters (Sales) Ltd., self-propelled scythe, 767
 Haywood, H. C. F., on weather protection for production cars, 687
 Haywood, R. W., review of VDI Steam Tables, 840; biographical note, 840
 Hazemag crusher (Joy-Sullivan Ltd.), 13
 Heads, unit (trade publication), 24
 Head Wrightson (Australia) Pty. Ltd., orders for ore treatment plant, oxygen steel-making plant and tinplate cut-up plant received from Australian Iron & Steel Co., 541; tinplate cut up plants, 541, 741
 Head, Wrightson & Co. Ltd., filtration and deaeration (trade publication), 232; cooling towers (trade publication), 396; electrostatic precipitation (trade publication), 496
 Head Wrightson Iron Foundries Ltd., Victoria Line underground railway, 414
 Head Wrightson Iron & Steelworks Engineering Ltd., ore handling plant for Appleby-Frodingham Steel Co. and Colvilles, 113; lime handling plant for Priest Furnaces, 113; oxygen steelmaking plant for Australia, 541
 Head Wrightson Machine Co., tin plate cut-up plant for Australia, 541, 741
 Head Wrightson Minerals Engineering Ltd., ore treatment plant for Australia, 541
 Head Wrightson Teesdale Ltd., Siemens betatron for (Pantak Ltd.), 267; Redux process press for de Havilland Aircraft Co., 367; steel bridge for Regents Canal Dock, 483
 Headland Gauges Ltd., Microtechnica profile projector, 528
 Healey, Donald, Motor Co., disc brake conversion set for Austin-Healey Sprite motor car, 197
 Health, Royal Society for the Promotion of. See *Royal*
 Heart lung machine, Melrose, 705
 Heat to electricity, direct conversion of, by J. Kaye and J. A. Welsh (review), 111-112
 — Engines, by E. De Ville (book), 872
 — Exchange tube, Clayton-Still (Clayton Dewandre Co. Ltd.), 528
 — Exchangers (trade publication), 396
 — Aluminium (Wellington Tube Works), 867
 — Flux, critical, 631
 — Geothermal, for salt from seawater, 873
 — Industrial (trade publication), 640
 — Insulation. See *Heat*
 — and light economies, 648
 — "Heat of the Matter" cinema film for Gas Council (Stewart Films), 265
 — Source, curium 242 as, 800
 Heat transfer engineering, by H. Schenck (review), 156
 — Transfer, forced convection, burnout studies for water in rectangular channels and round tubes, by R. A. Debertoli *et al*, 631
 — by P. Griffith, 631
 — Medium (trade publication), 904
 — Radiant, radiation pyrometry and its underlying principles of, by T. R. Harrison (review), 427
 — Water, technology, 631
 — Treatment furnaces (trade publication), 428
 — of steels, by H. Stüdemann (book), 904
 Heater, air, Convexioneira (Clare Bros. Ltd.), 727
 — McClary-Easy (General Steel Wares Ltd.), 752
 — Sirocco (Davidson & Co. Ltd.), 890
 — Block storage (Thermadore (Great Britain) Ltd.), 880
 — Convector, outlook for 1961, 168-171
 — Fan, Braun Turbo Heater (Brattel Electric Co. Ltd.), 548
 — Fan, Hanovia Turboflo (Engelhard Hanovia Lamps Ltd.), 548
 — Fan, small, 548. See *LETTER*, 620
 — Fan (Solatron Electronic Group), 548
 — Immersion, oil fired, Aqualeo (Lion Stamp- ing Co. Ltd.), 352
 — Infra-red (E. K. Cole Ltd.), 418
 — Room (GEC Ltd.), 418
 — Space, industrial, Dravo (Powell Duffryn Modular Ltd.), 858
 — Water, electric, Sadia (Aidas Electric Ltd.), 699
 — Sink, Sto-a-way (GEC), 584
 — Storage, 1960 sales, 365
 Heathcoat, J., historical note, 7
 Heather, D. S., on Associated Motor Cycles, 457
 Heating buildings, report of the Heating and Ventilating Research Association, 880
 — Central, circulating pump for (Pulsometer Pumps Ltd.), 222
 — Coils for MV *Pindar* (Charlton Weddle & Co. Ltd.), 242
 — Control contactors, Progress (M.T.E. Control Gear Ltd.), 280
 — Domestic, by W. F. B. Shaw (book), 428
 — Electromagnetic, in thermonuclear work, 323
 — Floor, for swimming pool, 511
 — and Insulating Exhibition, 5
 — Jacket, Isojacket (Isopad Ltd.), 486
 — Mechanism for thermonuclear work, 323
 — Methods in thermonuclear work, 323
 — Off-peak, 276
 — Outlook for 1961, 78-81
 — of paint, 2
 — Storage, 880
 — Tape, Hotfoil (MEI Co. Ltd.), 339
 Heating and Ventilating Research Association, report on heating buildings, 880
 Heavy water. See *Water*
 Heck, negotiations between Tecalemit Ltd. and authorities regarding new factory, 641
 Hector atomic reactor for Winfrith Heath (Fairley Engineering Ltd.), 104
 Hedley, Thomas, Ltd., coal burning experience, 577
 Heels and soles of neoprene rubber for industrial safety boots (Bank Bridge Rubber Co. Ltd.), 211
 Heenan & Froude, hydraulic dynamometers for Machinimport, 333
 Helical Bar & Engineering Co. Ltd., table of weights and sectional areas (trade publication), 540
 Helicopter. See *Aircraft*
 Helium in natural gases, field method of measurement of, by M. Wilkins *et al*, 60
 Hellenic Shipyards, launching of ship *World Hope*, 1
 Heller System for cooling towers, 884
 Hellermann Ltd., marking counter, 596; CRC-26 corrosion preventative, 699; degrease and spray phosphate (trade publication), 872
 Helstrom, C. W., on Statistical Theory of Signal Detection (review), 395
 Hematite pig iron (Millom Hematite Ore & Iron Co.), 641
 Hendon Local Productivity Association Conference, 408
 Hendry, D., contracts with Russia, 905
 Hennessey, J., on dynamic equilibrium as economic aim, 249; on nationalisation takes a different twist, 322; on when unfair shares mean bigger shares, 386; review of Antitrust Laws of the United States of America, 427-428; review of Control of Monopoly in the United Kingdom, 427-428; biographical note, 428; review of Inflation and Society, 495-496; biographical note, 496; review of Financial Incentives for Management, 539-540; biographical note, 540; review of Growth of the British Economy, 574-575; biographical note, 576; review of Nationalized Industry and Public Ownership, 639-

- 640; biographical note, 640; review of Stages of Economic Growth, 674; biographical note, 676; review of Industrial Development: Guide to Accelerating Economic Growth, 707-708; biographical note, 708; review of British Industry, 775-776; biographical note, 776; review of Indian Economic Policy and Development, 838-839; biographical note, 840
- Henshel's Handbook on Locomotives (review), 838
- Henson, A. F., review of Radioisotopes: A New Tool for Industry, 464; biographical note, 464
- Hepworth & Grandage Ltd., development programme of, 61
- Hepworth Iron Co. Ltd., continuity connector, 425
- Herald motor car, Triumph, price cut, 465; Herald motor car, Triumph, by G. Wilkins, 581
- Herbert, Alfred, Ltd., Fairbanks-Morse as US agents for, 265; Pullmax bevelling machine, 562; agents for James Archdale & Co. Ltd., 704; appointed agents for Flexibox lapping machines, 865; historical note, 901; research department of, 901; current projects of, 901; electrical laboratory of, 901
- Herbert, Edward G., Ltd., agents for Tinius Olsen Testing Machine Cos. engine balancing machine, 335
- Hercules aircraft carrier, renamed *Vikrant* for Indian Navy, 429
- Hermic switches (Dowty Electrics Ltd.), 86
- Hershkowitz, B. H., on rockets, future reliability concepts and ramifications, 140
- Heslop, Dr. J., review of Physical Examination of Metals, 639; biographical note, 640
- Hessayon, Dr. D. G., on Be Your Own Gardening Expert (book), 706; on Be Your Own Lawn Expert (book), 706
- Hestair air compressor (Hamworthy Engineering Ltd.), 145
- Hewetson, J. A., & Co. Ltd., Taurus double boarded wood floors, 243
- Hewitt, D. J., on quality control of production, 804
- Heynes, W. M., on Jaguar engine, 887; on milestones in the life of an automobile engineer, 887; design of Jaguar XK engine, 887
- H.F. Industrial Services Ltd., Acme plastics welding machine, 628
- Hickish, Dr. D. E., on industrial hygiene, 341
- Hicks, D. C., accident to, 824; membership of YZ Club, 824
- Hiduminium 400 as thermal neutron shielding material, 455
- Higgins, R. A., on Engineering Metallurgy (book), 872
- High Definition Television Ltd., closed circuit television for schools, 650
- High Duty Alloys Ltd., hiduminium 400 as thermal neutron shielding material, 455
- High Holborn, road widening scheme at, 480
- High Intensity Radiation Development Laboratory, construction commenced, 520
- High Speed Steel Alloys Ltd., *Alloy Metals Review*, 274
- High Vacuum Engineering Ltd., formation of Vacuum Research (Cambridge) Ltd., 83
- High Voltage Engineering Corp., Van de Graaff accelerator for Padua University, 488; Van de Graaff generator for Oxford University nuclear research centre, 832
- High-Voltage technology, textbook of, by G. Lesch (review), 296
- Highway engineering, Birmingham University M.Sc. degree in, 689. See LETTER, 790
- Handbook, by K. B. Woods (review), 494
- by L. J. Ritter, Jr., and R. J. Paquette (review), 494
- Trans-Canada (Laing), 865
- See also *Motorway; Road*
- HILAC heavy ion linear accelerator experiments, 832
- Hilditch, J. B., historical note, 7
- Hildred, Sir William, on airlines, 1
- Hilger & Watts Ltd., Colourmeter colour meter, 58; scintillation counter, 188; clinometer, 726; spectrochemical analysis (trade publication), 872
- Hill, D., research on gas analysis, 645
- Hill, E., on shipyards and workers, 281
- Hill, Philip, Higginson, Erlangers Ltd., *Moor-gate and Wall Street*, 505
- Hill, Dr. R. B., review of Mechanical Properties of Intermetallic Compounds, 463; biographical note, 464
- Hill, R. G., on vehicles and diesel engines, 595
- Hillhead Hughes Co. Ltd., tests on new type precipitator, 403
- Hillier, J. A., on instrumentation for traffic studies, 493
- Hilti fixing tool (Ucan Developments Ltd.), 254
- Hilton Hotel, 627
- Hilton, Dr. W. F., on communications satellites, 893
- Hind Construction Co. Ltd., AVB project at Durgapur, 765
- Hindson, R., on national use of technical information, 885-886
- Hindustan Aircraft, *HAL Technical Society Digest*, 774
- Hindustan Machine Tools Factory, production increasing, 741
- Hingorani, N. G., on High Voltage Direct Current Power Transmission (review), 22
- Hinkley Point atomic power station, progress report, 288; model of, 850
- Hinton, Sir Christopher, policy of, 768
- Hinton, L. T., on electronics industry, 265
- Hipope Mule sack loader (H. C. Pope Ltd.), 767
- HIRD. See *High Intensity Radiation Development Laboratory*
- Hirn, G. A., work on air and gas bearings, 255
- History, de Havilland, an outline of, by C. M. Sharp (book), 540
- Hitachi Ltd., electronic research, 613
- Hlavin, V. F., on post university on-the-job training for engineers, 317
- H.N. Electrical Supplies Ltd., Crustex Descaling ultra-sonic boiler scaling equipment, 397
- Hobs (trade publication), 24
- Basic dimensions of, BS 2062, 173
- Unit (Creda), 436
- Hobart Manufacturing Co. Ltd., use of and comments on Paper Protection Mask, 666
- Hobber (trade publication), 24
- Hobbing machines, gear, Staehely, BPS Machinery and Spares appointed sole agents, 577
- Gear (Strojexport), 220
- Hobbs Mecha-Matic automatic gearbox, 357
- Hobbs Transmission Ltd., Hobbs Mecha-Matic automatic gearbox, 357
- Hobkirk, J., Sons & Co., foundry casting in epoxy resin, 375
- Hoblyn, E. H. T., on exports of gas and chemical machinery, 136
- Hobson, H. M., Ltd., Model 7 master slave manipulator, 104; exhibit at Engineering Marine, Welding and Nuclear Energy Exhibition, 519; liquid level controller, 529
- Hodgkinson, P. G., appointed chief production engineer to British Shipbuilding Research Association, 217; biographical note, 217
- Hoffmann Manufacturing Co. Ltd., position and prospects, 697; shortage of skilled manpower, 697; spending on plant and machinery, 697
- Hoists, 794
- Electric platform (trade publication), 158
- See also *Crane; Transporter; Derricks*
- Holden & Brooke Ltd., Nordon calorifier, 827
- Holden, A., on Crystals and Crystal Growing (book), 808
- Holden, H. A., review of Practical Manual of Industrial Finishes, 199-200; biographical note, 200
- Holder, electrode, Terrier (Interlas Ltd.), 57
- Holiday, Christmas, road accidents during, 9
- Holiday detector, Mapel (Metal & Pipeline Endurance Ltd.), 890
- Holland, atomic propulsion of ships project submitted to Euratom, 16
- Holland. See also *Netherlands*
- Holland Cranes, Leptoptilus crane, 206
- Holland & Hannen and Cubitts (Great Britain) Ltd., concrete foundation for new blast furnace at Ford Motor Co., 265; School of Chemistry for Bristol University, 365; redevelopment of civic centre for Keynsham Urban District Council, 365; use of tower cranes, 794
- Holland & Hannen and Cubitts (North West) Ltd., factory for British Enka Ltd., 483
- Holland & Hannen and Cubitts (Scotland) Ltd., swimming pool for Glasgow University, 159
- Holland & Hannen and Cubitts (Trinidad) Ltd., Port of Spain maternity hospital, 733
- Holler, K., on Norway and overseas capital, 233
- Holloway Bros. Ltd., foundations for Thames crossing of supergrid, 52
- Holloway, P. W. E., on training for civil engineers, 442
- Holman Bros. Ltd., Handril rock drills, 397; historical note, 498; Holman Silver 3 Handril rock drill, 498-500; exhibit at Moscow Trade Fair, 673
- Holmes-Catalytic combustion fume cleaning process (W. C. Holmes & Co. Ltd.), 126
- Holmes-Kemp gas driers (W. C. Holmes & Co. Ltd.), 532
- Holmes, W. C., & Co. Ltd., catalytic fume cleaner for Kinloch (Provision Merchants) Ltd., 126; hydrogen sulphide scrubber (trade publication), 428; Holmes-Kemp gas driers, 532
- Holroyd, John, & Co. Ltd., bronze (trade publication), 264
- Holt, A. F., redevelopment of Croydon municipal offices, 873
- Holyhead, unemployment in, 217
- Home, aluminium in, 130, 207
- Deaths in the, 176
- Equipment for, 436
- Safe use of gas in (leaflet), 176
- Honeycomb, aluminium (trade publication), 808
- (CIBA), 90-91
- Doors (Otis Elevator Co.), 91
- Platens (Pasolds), 91
- Waveguides (Marconi), 91
- Commercial, 90-91. See LETTER, 180
- as impact absorber for aerial delivery packs, 90
- Kraft, in boatbuilding, 90
- Profiled sections of, 90
- Radar reflectors of, 90
- for sound reducing bulkheads for Deltic locomotive (English Electric Co.), 90
- Makers of, 91
- Production information sheet no. 1, Aero-web (CIBA(ARL) Ltd.), 361
- Properties of, table, 91
- Structures, 180. See LETTER, 313
- Table of comments on, 91
- Technique (Dufaylite Developments Ltd.), 90
- Honeywell Controls Ltd., control system for Forster's Glass Co., 83; Protectoglo flame failure relay, 220; pulse switch, 279; proportional action controller, 399; recording instruments for ramjet engine, 545; Elektronik controller, 772; Batch Air-O-Line pneumatic control unit, 826
- Honing machine (trade publication), 68
- Hood, cooker, ductless (Gold Star Domestic Appliances Ltd.), 816
- Hook, Lionel, & Sons Ltd., dip coating plant, 858
- Hoover Ltd., fall in profits, 421; position and prospects, 421; future expansion, 421; to exhibit at Sydney Trade Fair, 541; participation in Commonwealth Technical Training Week, 737
- Hopkins, M. R., Taylor-Hobson Talysurf, 258
- Horizon British Productions, order placed for Austin Gypsy motor vehicles, 497
- Horsley Bridge and Thomas Piggott Ltd., suspension towers for supergrid Thames crossing, 52
- Horsley, E. F., on Proceedings of Symposium on Microminiaturisation of Electronic Components (review), 198
- Horsley, Smith & Co. (Hayes) Ltd., Taurus double boarded wood floors, 243
- Horton, H. L., on Machinery's Handbook (book), 576
- Hose, brake, of plastic (Tecaletit and John Bull Rubber Co.), 17
- Polyethylene, 275
- Radiator, testing to destruction (American Dayco Corp.), 21
- Rubber, non-crushable, Rebound (Good-year), 587
- Hospitals, expanding programme for, 753
- Gas analysis technique for, 645
- General, for Trinidad, 733
- Maternity, for Port of Spain, 733
- Toronto, Marconi X-ray image amplifier for, 397
- Hot Dip Galvanisers Association, hot dip galvanising (trade publication), 840
- Hotel, Ariel, Foamglas roof for (Russell Diplock Associates), 698
- Carlton Tower, completion of, 159
- Hilton, 627
- and Restaurants in Great Britain and Ireland (book), 396
- Hotfoil heating tape (MEI Co. Ltd.), 339
- Houghton, E. L., on Aerodynamics for Engineering Students (book), 24
- Houldridge, D. L., on technical college libraries, 92
- Houses, anthology of, by M. Pidgeon and T. Crosby (book), 264
- is there a bathroom in your? (Bilston Foundries publication), 44
- Purchase and Housing Act, 1959, 44
- Solar, 508. See LETTER, 620
- Household goods and hardware fair, international, 133
- Housing associations, Government loans for, 309
- Instrument, in polyester resin (EMI), 475
- and Local Government, Minister of, public inquiry into Carnelloe mine project, 480
- Minister of, appointment of Sir Richard Manktelow to conduct public inquiry into Skelmersdale new town, 657
- Ministry of, proposed new town at Dawley, 657
- Outlook for 1961, 78-81
- Hovercraft can fill the transport gap, 582-583
- by A. Croome (review), 708
- Hovercraft Development Ltd., development of Hovercraft systems, 582-583
- Jet systems, 582
- Performance over waves, 583
- Sidewall or curtain 582
- Systems and configurations, 582
- Undersurface configurations, 582
- Hovorka, J., on Inertial Guidance (Book), 540
- Howard, John, & Co. Ltd., Severn Road Bridge contract, 379
- Howard, P. M., on hair for packaging, 93
- Howard, Dr. P. R., review of High Voltage Direct Current Power Transmission, 22; biographical note, 24
- Howard, W. W., Bros. & Co. Ltd. mahogany for America's Cup Yacht, 475
- Howe, Lord, opening Racing Car Show, 65
- Howitt, L. C., swimming pool for Manchester, 511
- Howland, W. E., on finding the ideal site, 4
- See LETTER, 213
- Hoyt Metal Co. of Great Britain Ltd., adhesion tester, 529
- HRE-2 atomic reactor accident, 355
- HTGC loop irradiations, remote handling and analytical techniques used in the processing of samples from, by P. E. Brown *et al.*, 520
- Hudson, C. H., review of Marine Diesel Engines, 902-903; biographical note, 904
- Hughes Aircraft Co., Mobot manipulator, 520
- Hughes, C., development of Selwood Orbital engine, 682
- Hughes, P. M., on national use of technical information, 821-822. See LETTER, 885
- Hull/Grimsby Bridge, proposal for, 177
- Human aspects of engineering progress, by Sir Willis Jackson, 817
- Capacity and production, 133
- Implications of work study, the case of Pakitt Ltd., by S. Dalziel and L. Klein, 183
- Humble Oil & Refining Co., use of finned tubes, 242
- Humbolt Bay atomic power plant, 419
- Hume & Tottenham Ltd., design of timber dome, 512
- Humphreys & Glasgow Ltd., arrangements with CIBA Ltd., for expansion of Atul Products Ltd., 577; manufacturing processes and technical information from CIBA Ltd., 577
- Humphreys, Howard, & Sons, Guma Valley Dam, 731
- Humphries, J., review of Spaceflight Technology, 902; biographical note, 904
- Hungary, Motor Transport Scientific Research Institute, sulpho-nitro cementing of steel and cast iron, 85
- Hunslet Engine Co. Ltd., exhibit at Rand Show 465
- Hunt, R., Ranger boat design, 132
- Hunt, R. J., & Son Ltd., extensive mechanization of foundry, 836
- Hunter, Sir Ellis, on rate burden on steel, 105; on Dorman Long & Co., 105; on Redpath Brown & Co., 149
- Hunter, G. J., on determination of radioiodine, 60
- Hunterston atomic power station, X-ray check of reactor pressure vessels, 235; progress report, 288
- Hunton Ltd., press bolster outfit, 484
- Hunting Technical Services Ltd., survey of and drainage design for Indus Basin, 512
- Hurst, R., on Technology, Engineering and Safety (review), 111
- Husband & Co., bridge for Regents Canal Dock, 483; prestressed concrete footbridge for Ceylon University, 730
- Hutchings, E., Jr., on Frontiers in Science (review), 330
- Hütte: des Ingenieurs Taschenbuch (Wilhelm Ernst und Sohn) (book), 232
- Hutton, G., on Inflation and Society (review), 495-496
- Hutton, Prof. R. S., on New Library of Science and Invention, 688
- Huyghens, C., historical note, 7
- HVE Electric Ltd., electrode boiler, 485
- Hydra-Spray Golden spray gun (Alfred Bullows & Sons Ltd.), 858
- Hydrapak hydraulic pump (Tangyes Ltd.), 603
- Hydraulic design and irrigation, by S. Liliavsky (book), 54, 298; (review), 675-676
- Drive, Hydro-Titan (Keelavite Hydraulics Ltd.), 102
- Drives, outlook for 1961, 164-167
- Engineering development laboratory of Glenfield & Kennedy Ltd., 878-879
- Equipment and customers' requirements, 568
- Equipment, ENGINEERING survey report on, 523
- Fluids, Silcodyne H and M (ICI Ltd.), 667
- Symposium on (ASTM) (review), 157
- Investigations, 470. See LETTER, 685
- Press. See *Press*
- Pump. See *Pump*
- Research, international association for. See *International*, 585
- Tipping gear (Telehoist Ltd.), 83
- Turbine. See *Turbine; Power plant*
- Hydraulics, applied and fundamental, 878-879
- Course on, 97
- Industrial oil, course on, 97
- Research Board, hydraulic model of Tees Estuary, 877
- Station, *Coast Erosion and Defence*, 187
- See also *Hydrodynamic; Irrigation; Water Hydraulics & Pneumatics Ltd.*, hydraulic valve control, 530
- Hydro-Copier hydraulic copying unit (Vero Precision Engineering Ltd.), 444
- Hydroelectric power in Bombay State at Kyna, 829
- Hydro-Electric Power Commission of Ontario, Sir Adam Beck power station, 218; effect of blasting on buildings, 482; turbines ordered from John Inglis Co., 541
- Hydro-electric power in New Zealand, 745
- in Norway, exploitation of, 563
- Schemes, 888
- Scheme, Aswan, 888
- Scheme, Loch Awe, 10
- Hydro-Titan hydraulic drive (Keelavite Hydraulics Ltd.), 102
- Hydrocarbon oils duty, 713
- Hydrocon mobile crane, Lambert (Brown & Tawse Plant Ltd.), 661
- Hydrocor granulated cork material (Expandite Ltd.), 551
- Hydrocyclone wet centrifuge (Liquid-Solid Separations Ltd.), 82
- Hydrodynamic lubrication, 434
- Type gas bearings, principles and applications of, by G. W. K. Ford *et al.*, 255
- Hydrofool high pressure pump (Tangyes Ltd.), 561
- Hydrofool waterstop (Expandite Ltd.), 551
- Hydrogen, liquid, behaviour in space, 899
- Production plants, 898
- as rocket propellant, 898-899
- Spillage hazards, 898
- Thermal insulation for, 898
- Moderated lattices, resonance escape possibilities and self-shielding factors in, by A. J. Taylor, 224
- Oxygen fuel cell, 268
- Rocket fuel, ignition troubles with, 899
- Sulphide scrubber (trade publication), 428
- and uranium, densities of, and their effect on criticality, by E. V. Garner and K. D. B. Johnson (paper), 456
- Hydrology, arid zone: recent developments, by Prof. H. Schoeller, 55
- Hydrostatic drives, outlook for 1961, 164-167
- Hydrovane air compressors (Whittaker, Hall & Co. (1929) Ltd.), 763
- Hygienic Wireworks Ltd., Blend range of furniture using Stelvetite vinyl coated steel, 272
- Hygiene, industrial, conference on, 341
- Hygro-Robot packaged dehumidifier (British Sarozal), 57
- Hymatic Engineering Co. Ltd., Hymatic engine bleed air valve, 425; flow control valves, 857
- Hypalon coatings in use in French gas industry, 243
- Hypalon, raw (Du Pont), 243
- Hyperon, antisigma-minus, discovery of, 104
- Hypersilid chemical pump (Lee, Howl & Co. Ltd.), 560
- Hyperstatic structures, by J. A. L. Matheson and A. J. Francis (book), 112; (review), 806
- Hyplicator for Hyprez compounds (Engis Ltd.), 173
- Hyprez compounds, Hyplicator for (Engis Ltd.), 173
- Hyprez grinding and lapping compound (Engis Ltd.), 173
- Hyster Co., straddle carrier, 12
- Hyster mobile crane, 554

- ICOLD. See *International Commission on Large Dams*
- ICRU. See *International Commission on Radiological Units and Measurements*
- Idaho, explosion of SL-1 atomic reactor in, 148
- Idealarc submerged arc squirt welding machine (Armco Ltd.), 416
- Ideas, financial backing for, 96
- Plain Words on, 136
 - of small firms, better backing for, 96
- Idlewild window in hurricane. See **LETTER**, 212
- IDM Electronics Ltd., gold plating, 83
- IEC. See *International Electro-Technical Commission*
- I.F. transformers, miniature (Wireless Telephone Co. Ltd.), 153
- Ignition system, electronic, for motor cars (Joseph Lucas Ltd.), 501
- without coil or battery, 21
- Ilford Ltd., photographic emulsions used in atomic research, 192; photographic exhibition on peaceful uses of atomic energy, 192; increase in turnover, 325; increase in exports, 325; technical agreement with S.E. De Productos Fotograficos SA Valca, 325; German subsidiary, 325; possible extensions in Europe, 325; extension to Australian facilities, 325; automatic camera, 325; extension to Ramsden Laboratories, 325; new organization for home sales, 325; solution to production bottlenecks, 325
- Illinois Institute of Technology, X-ray diffraction laboratory, 85; Dr. L. V. Azaroff appointed director of X-ray diffraction laboratory, 85; metal fibre seals, 475
- Illuminating Engineering Society, Duke of Edinburgh to attend meetings, 408; "Recommendations for Good Interior Lighting," 408
- Illumination. See *Light; Lighting; Lamps*
- Imhof, Alfred, Ltd., instrument cases (trade publication), 640
- Imor lathe (Gate Machinery Co. Ltd.), 562
- Impact absorber for aerial delivery packs, honeycomb as, 90
- Imperial Aluminium Co. Ltd., aluminium for trawler fittings and fishrooms, 275; aluminium extrusions (trade publication), 298; purchase of aluminium foil container division of Prestige Group, 489; Unitrace traced pipework, 550; aluminium (trade publication), 808
- Imperial Chemical Industries of Australia and New Zealand, to take minority interest in YIM-Yorkshire Fittings (Australia) Pty Ltd., 61
- Imperial Chemical Industries Ltd., joint ownership of Yorkshire Imperial Metals with Yorkshire Copper Works (Holdings) Ltd., 61; position and prospects, 149; new capital to be raised, 149; capital investments, 149; profits, 149; *A High Degree of Engineering*, 177, 185; concern for staff, 177; engineers employed by, 177; breaking-down mill from Davy-United, 225; Integron finned tube, 242; silicones (trade publication), 264; plasterboard (trade publication), 264; zirconium (trade publication), 298; titanium (trade publication), 298; copper and alloys (trade publication), 298; free-turning copper (trade publication), 298; to establish plant in Rotterdam, 341; new research laboratories at Runcorn Heath, 341; order placed for Ferranti Argus computer, 365, 366; isocyanate foams, 438; polypropylene plant capacity to be doubled, 457; Propathene polypropylene, 457; Tufplas process tank for (Tough Plastics Ltd.), 474; H. Smith appointed technical director, 480; change in high level posts, 533; St. J. de H. Elstub appointed chairman of metals division, 533; M. J. S. Clapham appointed as overseas director, 533; to build crude oil distillation plant, 587; position and prospects, 601; sales, 601; assets, 601; home sales, 601; exports, 601; expansion in UK, 601; construction programme, 601; polythene plants for Europe, 609; formation of Nuclear Developments Ltd., 631; meeting to discuss silicone hydraulic fluids, 667; Silcodyne H and M hydraulic fluids, 667; exhibit at British Trade Fair, Moscow, 705; Silcoset 100 silicone rubber, 771; Silcoset 103 silicone rubber, 771; Silcoset 104 silicone rubber, 771; formation of Nuclear Developments Ltd., 777; effect of ECM, 801; position and prospects, 801; Tube-in-Strip transformer coolers, 803; titanium (trade publication), 808; Terylene in industry (trade publication), 840; heat transfer medium (trade publication), 904
- Imperial College of Science and Technology, application for grant for atomic reactor, 104; course on atomic fuel elements, 420; expansion of, 626; extensions to, 673; concrete testing laboratory for, 673; pulsed neutron generator installed, 696
- Import-Export Bank, conditions imposed by, 265
- of motor cars to US fall, 69
 - from Russia, 299
 - from Spain, 299
- Impresit, bid for contract on Volta River project, 333
- IMR bench press (H. G. Stevens Co. Ltd.), 57
- Incandescent Group, chain treatment plant, 661
- Incandescent Heat Co. Ltd., gas mixtures (trade publication), 464; industrial heat (trade publication), 640
- Incentives, financial, for management, by R. C. Smith (review), 539-540
- Income distribution, table of characteristics, 89
- and taxes, Plain Words on, 312
 - See also *Earnings; Salary; Wage*
- Incorporated Consultants Ltd., 8
- Index of industrial production, 309
- Indexers, Society of. See *Society*
- Indexing and communication of scientific information, 688
- Course on (Society of Indexers), 674
 - Machine, Wiest (Embassy Machine), 102
- India, atomic power plant for, 664
- Atomic programme of, 725
 - Atomic reactor as gift from Canada, 148
 - Reactor, Trombay, 148
 - Cambay power station project, 627
 - Canada-India atomic reactor at Bombay, 356
 - Dams proposed by, 730
 - Heavy electrical training in, 109
 - Industrial development at Durgapur, 765
 - Importation and use of oil, 405
 - Industrial Training Institutes in, 109
 - Machine tool prospects in, 741
 - Narmada Valley Project opened, 731
 - Purchase of *Empress of Canada* liner, 713
 - Skefko to build ball bearing factory in, 665
 - Third five year plan, 881
 - Thorium plant at Alwaye and Trombay, 725
 - Training electrical technicians in, 109
- Indian Co., formation of, 457
- Economic policy and development, by P. T. Bauer (review), 838-839
 - Engineers to train in UK, 109
 - Government, AEI appointed as electrical consultants, 109
 - Navy, aircraft carrier *Vikrant* commissioned, 429
- Indian Oil Co., plans to import oil from Russia, 405
- Indian Steelworks Construction Co., Durgapur steelworks, 25, 565
- Indicator, elapsed time, Cronsistor (Transipak Electronic Engineers), 767
- Voltage range (Martindale), 56
- Indonesia, IAEA experts to visit, 387
- Spinning mills for, 265
 - US aid for Triga atomic reactor for Bandung Institute of Technology, 800
- Induction motor. See *Motor, electric*
- Tracer (Addison Electric Co. Ltd.), 660
- Inductorphone (Automatic Telephone & Electric Ltd.), 697
- Indus Basin Projects, 730
- Projects, grants for, 730
 - Survey of and drainage design for (Hunting Technical Services Ltd.), 512
- Industrial and agricultural fair, European, Sweden, 181
- Architecture, by J. F. Munce (book), 540
 - Consultants and management, register of, 8
 - Derating, 665
 - Design. See *Design*
 - Development, guide for accelerating economic growth, by M. D. Bryce (review), 707
 - Engineers, American Institute of. See *American*
 - Hygiene. See *Hygiene*
 - Industrial Models, models, 868
 - Oil hydraulics, course on, 97
 - Organizations, new technical libraries in, conference on, 262
 - Products, British, for Canada, CABMA register of (review), 748
 - Production, index of, 309
 - Overall, 309
 - Statistics, 713
 - Relations Handbook (book), 593
 - in motor car industry, talks on, 480
- Industrial Salvage, 241
- Industrial Timer Corp., Dual-Trol recycling timer, 859
- Industrial Trade Fairs Ltd., transport and organizers for British Trade Fair in Moscow, 429; UK exhibitors for Sydney Trade Fair, 541
- Training Council, list of Regional Committee chairmen, 793; nine Regional Committees set up, 793
 - Training Institutes in India, 109
 - Trends, inquiry into, 849
 - Statistics on, 241
 - Weed Control Conference, 621
- Industrija Motora Rakovica, production rights for Leyland Worldmaster chassis, 577
- Industry, British, concentration in, by R. Evely and I. M. D. Little (review), 23
- by J. H. Dunning and C. J. Thomas (review), 775-776
 - in Moscow, 705
 - Bulletin for, 649
 - for (Treasury publication), 309
 - Effect of payroll tax on, 437
 - Introduction to, course on, 281
 - Nationalized, and public ownership, by W. A. Robson (review), 639-640
 - Other than coal mining, installation and maintenance of flameproof and intrinsically safe electrical equipment, 281
 - Physiology in, by L. Brouha (book), 776
 - Plain Words on, 685
 - and science—the problem of communication, conference, 137
 - Scottish, growth of, 881
 - Technical education and careers in, year book of (review), 158. See **LETTER**, 180
 - University's research for, 434-435
- Inertial guidance, by C. S. Draper, W. Wrigley and J. Hovorka (book), 540
- Inflation and society, by G. Hutton (review), 495-496
- Information departments, use for selling, by E. N. Simons, 395
- Scientific, indexing and communication, 688
 - Scientists, activities of, 653, 719, 821
 - Course, 110
 - Services, library and, 885
 - Technical, national use of, 653. See **LETTERS**, 719, 757, 821, 885
- Infra red direct control system for Chieftain tank, 45
- Heaters (E. K. Cole Ltd.), 418
 - Plant for drying ladle stoppers (GEC), 367
 - Xenon searchlight for M60 tank, 45
- Infrared Physics, 838
- Ingard, U., on Introduction to Mechanics, Matter and Waves (book), 364; (review), 607-608
- Inglis, John, & Co. Ltd., hydraulic turbines for Grand Rapids power station, 265; reactor headers for Trombay atomic power station, 256; slow expansion, 389; turbines for Hydro Electric Power Commission of Ontario, 541
- Ink, crack detection (Southern Tools Ltd.), 275
- Inland waterways. See also *British Waterways; Canal; River*
- Innovation, hasty, how it caused disaster, by A. Albu, 183
- Insley Industrial Supply Co. Ltd., CT live lathe centres, 222
- Inspection unit, X-ray, portable (Westinghouse), 673
- Inspector-operative relations, absolute judgments and, by I. D. Brown, 447
- Institute of Advanced Motorists, Sir Howard Roberts and Sir Richard Nugent appointed to Council of, 856
- of Aerospace Science, meeting with American Rocket Society, 856
 - of Industrial Engineers, American. See *American*
 - of Marketing and Sales Management, 113
 - of Nuclear Studies, contact with Euratom, 768
 - of Petroleum, Model Code of Safe Practice in Petroleum Industry, 281
 - of Physics, exhibition of, 58
- Institution of Chemical Engineers, questionnaire sent to members, 185; Prof. E. Johnstone's inquiry among, 411; scheme for post graduate courses, 793
- of Civil Engineers, joint meeting with Institutions of Mechanical and Electrical Engineers, 244; discussion on Channel tunnel, tube and bridge, 437; formation of British National Committee, 585; members of International Association for Hydraulic Research, 585; aid to Commonwealth Technical Training Week, 720
 - of Electrical Engineers, joint meeting with Institutions of Civil and Mechanical Engineers, 244; *Place of Formal Study in the Post Graduate Training of an Electrical Engineer*, 317; Proceedings of, 317; Lord Nelson made Honorary Member, 348; Faraday Medal awarded to Dr. J. Stratton, 348; on growing importance of electronics, 856
 - of Locomotive Engineers, jubilee celebrations, 377; lunch, 681; fiftieth anniversary, 681
 - of Mechanical Engineers, *The Private Car* (book), 24; B. G. Robbins retires from post of secretary, 217; K. H. Platt appointed as secretary, 217; joint meeting with Institutions of Civil and Electrical Engineers, 244; *Education and Training of Professional Mechanical Engineers*, 317; Thomas Hawksley Lecture by Prof. P. M. S. Blackett, 323; *Proceedings of Automobile Division* (book), 428; presentation of paper on tin-aluminium bearings, 446; investigations on high pressure boilers, 545; aid to Commonwealth Technical Training Week, 720
 - of Metallurgists, Structure of Metals—a Modern Conception (review), 903
 - of Nuclear Engineers, first lecture by Dr. N. S. Grassam, 60
 - Structural Engineers, aid to Commonwealth Technical Training Week, 720
- Instituto Nacional de Industria, loan from Eximbank for enlarging Cadiz power station, 273
- Instituto Venezolano de Investigaciones Cientificas, information of construction of atomic reactor for Venezuela, 147
- Instruments, analysis, applications of, by K. E. Hallikainen, 720
- for archaeological societies, 476
 - Aviation, outlook for 1961, 74-77
 - Cases (trade publication), 640
 - Exports of, 76
 - Housing in polyester resin (EMI), 475
 - Industry, exports of, 133
 - Medical, outlook for 1961, 74-77
 - Power supply (Advance Components Ltd.), 891
 - Scientific and engineering, design and development, 74
 - and engineering, future exhibitions of, 75
 - and engineering, industry, expansion and investment in, 76
 - and engineering, industry, external factors affecting, 75
 - and engineering, industry, forecast for 1961, 77
 - and engineering, industry, long term research in, 77
 - and engineering, industry, management and labour in, 76
 - and engineering, industry, plant and materials supply in, 76
 - and engineering, market trends in, 75
 - and engineering, outlook for 1961, 74-77
 - Sensitive manufacture of, 700
 - Talyron and Talyrsurf (Taylor, Taylor & Hobson Ltd.), 737
 - Technology, Society of. See *Society*
 - Training programmes of Dow Chemical Co, 824
- Instrumentarium, exhibition of spectacle frames in New York, 333; sale of manufacturing rights to Metzler, 333
- Instrumentation in atomic reactors, 191
- Power plant, outlook for 1961, 74-77
 - for traffic studies, by J. A. Hillier, 493
- Insulating and heating exhibition, 5
- Slabs (trade publication), 264
- Insulation for heat, damp and noise, 680
- Load bearing, foamed glass as, 698
 - Material, asbestos based, Marinite (Marinite Ltd.), 770
 - Machinable, uses of, 770
 - Polyester, Rosite (Rosite Ltd.), 507
 - Sound, 680
 - Spraying urethane foams for, 438
 - Thermal, 680
 - (Industrial buildings) act, 142
 - for liquid hydrogen, 898
 - Panels of Plasticell, 834
- Insulator fittings for overhead power lines, BS 3288 specification (British Standards Institution), 87
- Insurance fund, international development, United Nations report on, 473
- Marine, of goods, Banker's guide to, by
- V. Dover and G. A. Calver (book), 364; (review), 774-775
- Insurance protection, atomic, new formula for calculating, USAEC, 896
- Integron finned tube (ICI Ltd.), 242
- Intercontinental Satellite Communications System, by E. A. Laport, 893
- Inter-Governmental Maritime Consultative Organisation, symposium on safety requirements for atomic propelled ships, 520
- Interatom, contract with Euratom and Hamburg Gesellschaft für Kernenergieverwertung for atomic ship propulsion project, 256
- Interlas Ltd., Terrier electrode holder, 57; Sigma arc welding machine, 527; on welding equipment and customers' requirements, 569
- Intermetallic compounds, mechanical properties of, by J. H. Westbrook (review), 463
- Intermit Ltd., on diesel engines and customers requirements, 567; on air compressors and customers' requirements, 567
- Internal-combustion engine. See *Engine; Aircraft engine; Motor engine; Tractor; Turbine, gas*
- International Association for Hydraulic Research, 585
- Atomic Energy Agency, assistance for Czechoslovakia's atomic programme, 15; to collaborate with ENEA, 16; report on atomic prospects in Finland, 16; atomic fuel for Finland, 104; S. Cole appointed Director General, 148; D. R. Toll appointed special assistant to Director General, 148; Conference on Plasma Physics and Controlled Nuclear Fusion Research, 323; agreement on research with Government of Monaco and Oceanographic Institute of Monaco, 387; assistance missions to Dahomey, Liberia and Nigeria, 387; experts and atomic equipment to be sent to many countries, 387; Dr. P. L. Balligand appointed deputy director, 420; symposium on safety requirements for atomic propelled ships, 520; Dr. D. Popovic appointed director of safeguard division, 632; D. W. Pearce appointed head of health, safety and waste disposal, 632; C. S. del Rio appointed head of reactor division, 632; C. Simano appointed head of technical supplies, 632; request from Yugoslavia for assistance for Triga atomic reactor, 632; contract with US and Norway for enriched uranium fuel, 800; Nora zero power critical assembly made available to by Norway, 800
 - Bank for Reconstruction and Development, loans for small electrical schemes, 307; loan to Costa Rica for new power station, 307; loan to Ghana, 333; loan to Japanese National Railways, 649; loan to Ceylon, 881
 - Boat Show, 45, 132. See *Correction*, 89
 - International Boilers and Radiators Ltd. combining with SOGAZ (SA des Gaz, Industriels) of Brussels, 777; to buy SA Chaudieres Samson, 777; production commended, 897
 - International Business Machines Ltd., cheque sorter-reader hired to Barclays Bank Ltd., 25
 - Classification Society, conditions as applied to atomic propelled ships, 520
 - International Combustion Ltd., boilers for West Burton power station, 365, 371
 - International Combustion Products Ltd., rod decks (trade publication), 396
 - Commercial Vehicles Exhibition, 146
 - Commission on Large Dams, Congress of, 894
 - on Radiological Units and Measurements, report on SL-1, atomic reactor, 356
 - Committee on Space Research, plans for UK's second satellite, 645
 - International Computers and Tabulators, Ltd., formation of, 193; overseas markets, 193; position and prospects, 193; profits, 193; 1301 computer, 193; formation of Computer Developments Ltd. with GEC Ltd., 193; customer service, 193; subsidiary companies, 193; formation of company in Holland with Ruys' Handelsvereniging NV, 193; Computer College, 193; Vickers participation in, 769
 - *International Congress of Science*, 593
 - Construction Equipment Exhibition, 641 796
 - Economic Association Congress, 854
 - Electro-Technical Commission, annual meeting, 40; opened by Dr. Radhakrishnan, 40; rationalisation of electro-technical standards, 40
 - Ergonomics Association, first international congress, 48
 - International General Electric Co., transistors D.C. power supply, 41; encapsulated distribution transformer, 425; seawater evaporator, 439; aerosol packs of cold cure rubber, 551; plan for communications satellites, 749; formation of Communications Satellites, Inc., 749
 - Household Goods and Hardware Fair, Cologne, 133
 - Labour Exhibition, Turin, 509
 - Organisation, conference, 888
 - International Marine Radio Co. Ltd., Solas lifeboat radio, 561
 - International Morrison-Knudson Co. Inc., River Tagus bridge, 482
 - Motor Show, Geneva, 592
 - International Nickel Co. of Canada, Ni-Hard nickel cast iron, 738
 - International Nickel Co. (Mond) Ltd., new type of alloy steel, 407; *Nickel in S.S. Canberra*, 838
 - International Rectifier Co. (Great Britain) Ltd., rectifiers, 13; silicon rectifiers, 41; selenium rectifiers, 85; silicon stack rectifiers, 403
 - Refrigeration and Air Conditioning Exhibition, 834
 - Reinforced Plastics Conference, 790
 - Safety Belt Association, conference of, 229

- International Samson, new name for SA Chaudieres Samson (qv), 777; G. M. Reniers appointed chairman, 777; M. Sirmind appointed vice-chairman, 777
- International Silver Co., sponsorship of powder metal research at Stevens Institute of Technology, 267
- International Standard Triumph, assuming responsibility for car condition at time of delivery to customer, 480; record car sales at New York automobile show, 505
- International Systems Control, formation of, 881; Dr. D. N. Truscott appointed managing director, 881
- Wrought Non-Ferrous Metals Council, *Guide to the Principles of Casting in the European Non-Ferrous Metals Industry* (review), 199
- International Ytong Co. AB., association with Laing Group, 321
- Intertechnique, drum type precipitator for atomic reactors, 599
- Introduction to Industry, course on, 281
- Invention and science, national reference library of, 688
- New library of, by Prof. R. S. Hutton, 688
- Inverawe power station, tunnel from Loch Awe barrage, 10
- Invertor, transistorised (CAV Ltd.), 132
- Invest-Import, power station equipment for Barauni power station, 86
- Investment, capital, increasing rate of, 309
- Investment Corp. of India, to participate in Sefko bearing factory in India, 665
- in manufacturing industries, table of, 309
- in Nigeria, 341
- Private, rise in, 309
- South African, in Commonwealth, 357
- Iodine-132, 243
- Ion, heavy, linear accelerator experiments, 832
- Ionic injection in thermonuclear work, 324
- Ionics Inc., membrane permeation cell, 237
- Ionides, on Divide and Lose: The Arab Revolt of 1955-1958 (book), 624; Regime of the Rivers Tigris and Euphrates (book), 624; Water Resources of Transjordan and Their Development (book), 624
- Ionisation chambers, fission, mean-current, saturation characteristics of, by J. A. Dennis and W. R. Loosemore, 520
- (Plessey Nuclonics Ltd.), 891
- Ionosphere, radio waves in, by K. G. Budden (book), 496
- Iraq, British Trade and Industries Mission to, 785
- Demand for greater industrialization, 785
- Negotiations with Iraq Petroleum Co., 25
- Oil revenues increase, 25
- Iraq Petroleum Co., negotiations with Iraq Government, 25; gas turbine pumping sets for trans-Syrian pipeline (Hawker Siddeley Brush), 271
- Russian report on proposed atomic reactor at Tuwaitha, 256
- Irish Sugar Co., freeze dried food factory opened, 756
- Iron, additional costs to production, table of, 713
- Cast, chemical analysis of, and foundry materials, by W. Westwood and A. Mayer (review), 66
- Linings for tunnels, 415
- Nickel, Canadian uses of, 738
- Nickel, Ni-Hard, 738
- QuenchWeld process for welding (Eutectic), 835
- Sulpho-nitro cementing of, 85
- Welding to steel, 469
- Curtain countries, representatives at talks at Joint Nuclear Research Institute, 104
- Foundry, reducing scrap in, 38
- Industry, increasing costs in 713
- Potential in Nigeria, 841
- Magnetic, Super Permo (Samuel Osborn & Co. Ltd.), 619
- Molten, granulation of, 126
- Ore, Canada now ready to produce, 729
- See also *Ore*
- Iron Ore Co., Canadian participation in, 729
- Pig, hematite (Millom Hematite Ore & Iron Co.), 641
- Output of, 373
- SG (trade publication), 808
- and Steel Board, depreciation allowance for South Durham Steel & Iron Co., 105; estimate of expenditure on modernisation of steel industry, 617; report on steel industry to Ministry of Power, 617; *Development in the Iron and Steel Industry*, 617; request from British Iron and Steel Federation for price increase, 713; report for 1960, 849; steel price increases, 905
- Holding and Realisation Agency, sale of steel companies securities, 325
- Industry, development in, 617
- Institute, Sir Charles Goodeve appointed President, 181; annual general meeting, 181; proposed visit to USA, 477; *Notes for Authors*, 494
- Trade Confederation, suspension of members by Steel Co. of Wales, 9
- See also *Steel; Metallurgy*
- Ironstone, opencast mining of, application by Richard Thomas & Baldwins rejected, 689
- Ironwork, structural. See *Bridge; Floor; Column; Roof; Steelwork; Structure*
- Irradiated atomic fuel elements, new method of machining, 104
- Irradiation, atomic reactor, oxidation of uranium-dioxide by water vapour under, by B. R. Harder *et al.*, 60
- Device, medical, Cesioterax, 15
- Medical, in Czechoslovakia, 15
- Medical, Chisotron, 15
- Effects on semiconductors (Oak Ridge National Laboratory), 469
- Loop, HTGC, remote handling and analytical techniques used in the processing of samples from, by P. E. Brown *et al.*, 520
- Unit, Gammacell, 519
- See also *Radiation*
- Irradiator, Gammacell (Atomic Energy of Canada Ltd.), 727
- Irrigation as an engineering science, 54
- as farming art, 54
- and hydraulic design, by S. Leliavsky (book), 54, 298; (review), 675-676
- Projects in Northern Rhodesia, 905
- in Punjab, 730
- Scheme, Krian, in Malaya, 736
- World, 54-55
- Irving Air Chute Co., nylon safety harness for motor cars, 179; motor car safety belts, 261
- ISCON. See *Indian Steelworks Construction Co.*; see also *Durgapur*
- Isle of Wight, Hamstead atomic power station, no news available, 288
- Plans for bridge or tunnel to mainland, 480
- Isocyanate foams (ICI Ltd.), 438
- Isojacket heating jacket (Isopad Ltd.), 486
- Isopad Ltd., Isojacket heating jacket, 486
- Isotopes, beta-emitting, identification by liquid scintillation counting, by W. P. Hutchinson (paper), 456
- Isotope Developments, cobalt unit for automatic control unit for Forster's Glass Co., 83
- 103 element, discovery of, 832
- Ispra Nuclear Research Centre, 387; Italian Government hands over to Euratom, 488; take over by Euratom, 768
- Israel, atomic reactors being built, U.S. assistance with, 192
- IAEA expert to visit, 387
- Italian Comitato Nazionale per l'Energie Nucleare, fusion research contract with Euratom, 696
- Italians in Bedford. See *LETTERS*, 136, 244
- Italy, atomic propulsion of ships project submitted to Euratom, 16
- Boom conditions in, 681
- Concrete for dams, 483
- Economic expansion of, 721
- Export Council of Europe mission to, 549
- Ispra Nuclear Research Centre handed over to Euratom, 488
- OEEC report on, 721
- Pathfinder Mission to, 681
- Television cameras ordered from U.K., 541
- Unemployment in, 721
- Ivanov, Yu. M., on behaviour of timber, 627

J

- JABLO Ltd., association with BIM Ltd., 728
- Jacks built into revolving workpiece table (H. W. Kearns & Co. Ltd.), 131
- Hydraulic, Simplex (Equipment & Engineering Co. Ltd.), 798
- Jacket, heating, Isojacket (Isopad Ltd.), 486
- Jackson, H. S., on Translation from Russian for Scientists (book), 24, 902; (review), 706
- Jackson, J. M., on Control of Monopoly in the United Kingdom (review), 427-428
- Jackson, Sir Willis, opening of AEI's Easter School, 556; on human aspects of engineering progress, 817
- Jaggi thread whirling machine (Vaughan Associates Ltd.), 145
- Jaguar Cars Ltd., position and prospects, 97; full time working continued, 97; "nep" talk by Sir William Lyons, 97; XKSS motor car, 329; GT motor car, 329; position and prospects, 389; exports, 389; increase in US sales, 389; profits, 389; acquisition of Daimler Car Co., 389; sales increasing, 389; sports car faster, lighter, quieter, by G. Wilkins, 393; E-type motor car, 393; increase in sales in Switzerland, 465; production of E type motor car, 491; evolution of XK engine, 887
- Jahn, H. E., on German Defence Problems (review), 838
- Jahre system capacitance standards (Aveley Electric Ltd.), 254
- James, Dr. A. T., gas density balance, 780
- James, D., review of Introduction to the Theory of Aircraft Structures, 157-158; biographical note, 158
- James, M., on anatrol: an analogue on-line process control computer, 181
- James Motor Cycle Co. Ltd., short time working, 141
- Jane's All the World's Aircraft, by J. W. R. Taylor (book), 396
- Jane's Fighting Ships, by R. V. B. Blackman (book), 396
- Japan, colour television service, 505
- electronics research progress, 613
- Exports to US, 209
- Motor car industry, 95
- Radio production, 209
- Sewing machine exports from, 209
- Steel production, 617
- Television set production, 505
- Tokai-Mura atomic reactor, 16
- Tokaido railway line, 649
- Transport facilities in, 649
- World Bank loan to Japanese National Railways, 649
- Japanese Atomic Energy Commission, plan for atomic power station, 632; irradiation tests to be made by Westinghouse Electric International, 632
- Japanese Cedric motor car, 95
- National Railways, World Bank loan to, 649
- Jarvis, W. F., on adequate wiring, 784
- Jason atomic reactor, future uncertain, 632
- Java tanker, Burmeister & Wain engine for, 325
- Javelin aircraft, Gloster, trial flight with de Havilland Gyron Junior engines, 269
- Jaw breakers (trade publication), 396
- J.D. Tractors Ltd., Deera-Lanz crawler loader, 484
- JEEP atomic reactor in Norway, 563
- Jefferson, S., on Radioisotopes: A New Tool for Industry (review), 464
- Jeffreys, A. E., on Michael Faraday (book), 264; (review), 395
- Jenkins, A., on technical college libraries, 137
- Jennison, Dr. R. C., instrumentation for UK's second satellite, 645

- Jephcott, Sir Harry, retires from chairmanship of DSIR council, 657
- Jerger, J. J., on Systems Preliminary Design (review), 674
- Jessen, Dr. G. N., formation of Sphercon Contact Lens Co. Ltd., 358
- Jewellery, modern, exhibition of, 277
- Jig boring machine (Strojexport), 221
- Jobs, unfilled, statistics on, 97
- Johnson British Electric Ltd., position and prospects, 17
- Johnson, H. R., Jr., on IBM 650 RAMAC Computer for Data Processing in an Air Route Traffic Control Centre, 479
- Johnson, K. D. B., on densities of hydrogen and uranium and effect on criticality, 456
- Johnson Matthey & Co. Ltd., electrical contacts (trade publication), 298; *Noble Metal Thermocouples*, by H. E. Bennett (book), 551; seam-welding wheel blanks (trade publication), 808; headed contacts (trade publication), 808; Mallory 53 alloy of nickel-silicon-copper, 835
- Johnson & Phillips Ltd., repeater switch, 144; position and prospects, 865; turnover, 865; profits, 865; overseas subsidiaries of, 865; association with British India Electric Construction Co., 865
- Johnson, R. M., on computers for data processing, 593
- Johnstone, Prof. R. E., on survey of chemical engineering education and practice, 185; on work of chemical engineers, 185; inquiry among members of Institution of Chemical Engineers, 411
- Joint, expansion, controlled-flexing, Flexon (Flexicon Corp.), 716
- Pipeline couplings to eliminate (Aero Controls Ltd.), 461
- Joint Nuclear Research Institute, talks between Iron Curtain country representatives, 104; proton-synchrotron experiments, 104; new bubble chamber, 104; discovery of antisigma-minus hyperon, 104
- Joint Radio Committee, 785
- Tube, Clinch (Access Equipment), 101
- Jones, A. A., & Shipman Ltd., honer (trade publication), 68; agreements with Praga Tools Corp., 741; backing-off attachment, 859
- Jones, R. A., to attend Chrysler Institute of Engineering, 689
- Jones rail crane (George Cohen Sons & Co. Ltd.), 189
- Jones & Stevens Ltd., Super Minex extractor fan, 240
- Jones, Sir Walter Benton, on United Steel Companies, 105
- Jordan, imports from UK, 265
- US aid for, 265
- Jordan, R. H., on plant and customers' requirements, 566
- Josephson, M., on Edison: a Biography (book), 428; (review), 807
- Joseph, N. H., on machine tools and customers' requirements, 569
- Journal of Documentation*, 706
- Journal of the National Research Council of Thailand, 706
- Joy International SA, overseas operations of, 193
- Joy Manufacturing (Canada), products, 193
- Joy Manufacturing Co., subsidiaries of, 193; manufacturing in the Commonwealth, 193; position and prospects, 193; exports, 193
- Joy-Sullivan Ltd., Hazemag crusher, 13; exports, 193; drilling rig, 628; air compressor, 827
- Joy-Sullivan N221 double drum slusher, 350
- Joyce, M. V., on Transistor Circuit Analysis (book), 608
- Jugoslavia. See *Yugoslavia*
- Jungbluth friction saw (Addison Tool Co. Ltd.), 527
- Junior powder pump (Mono Pumps Ltd.), 532
- Jura to Kintyre submarine power cable, 777

K

- KADUNA River, Nigeria, road bridge over proposed, 736
- Kay & Co. (Engineers) Ltd., Konaxal gunmetal connectors, 857
- Kahl/Main atomic reactor, 768
- Kaiser, consulting engineers for Volta River project, 333
- Kaiser Aluminium Corp., association with Commonwealth Aluminium Corp., 357; association with Consolidated Zinc Corp., 357; interest in James Booth Aluminium Co., 565
- Kamm enlarger (Colyer & Southey Ltd.), 144
- Kane, Douglas (Sealants) Ltd., Loctite sealant resins, 134
- Kappeli, Dr. h. c. R., chairman of CIBA United Kingdom Ltd., 565
- Karatotova, T., on temperature effect of self-quenching Geiger-Muller counters, 192
- Kariba dam project, British South Africa Co. loan for, 357
- Karlsruhe, site for new Euratom research centre, 16
- Karlsruhe Transuranium Institute of Euratom, 387
- Kaye, J., on Direct Conversion of Heat to Electricity (review), 111-112
- KBWP project of Euratom, 768
- Kearney & Trecker CVA Ltd., agreements with Praga Tools Corp., 741
- Kearns, H. W., & Co. Ltd., Kearns electronic horizontal boring machine, 18-20; revolving workpiece table with built in jacks, 131
- Keays, H. de J., on standardisation in engineering plant design, 552
- Keelavite/Gury hydraulic pumps (Keelavite Hydraulics Ltd.), 189
- Keelavite Hydraulics Ltd., Keelavite/Gury hydraulic pumps, 189; Hydro-Titan hydraulic drive, 102
- Keele College, request for University status, 657
- Keepin, G. R., on neutron pulsing techniques, 696
- Kellingley Colliery, high speed shaft sinking at, 380, 397
- Kellock, A., review of Migrant Australia, 746-747; biographical note, 748
- Kellogg International Corp., ethylene production (trade publication), 708
- Kellogg, M. W., Co., *Pressure Drop for Flow of Fluids in Round Pipe*, 153; development of sodium fuel cell, 268
- Kelvin & Hughes (Marine) Ltd., radar systems for liner *Canberra*, 755
- KEMA Co., contract with Euratom, 768
- Kendall, P. G., on analogue devices for network analysis, 302
- Kenderi, T., development of Kenderisation protection of steel, 237
- Kenderisation protection of steel, 237
- Kennedy & Donkin, to draft invitations to tender for Brazilian Nuclear Energy Commission, 147
- Kennedy, President, suspension of atomic propulsion for aircraft programme, 632
- Kent, Esso seek oil prospecting licence for, 25
- Kent, George, Ltd., Russian students visit factory, 865
- Kent Kordless Ltd., powered pencil sharpener, 472
- Kenyon, William, & Sons Ltd., Powergrip belt drive, 536; Poly-V belt drive, 536
- Kenyon, William, & Sons (Thermal Insulations), Ltd., Foamglas foamed glass, 698
- Keppie, Henderson & Partners, swimming pool for Glasgow University, 159
- Kerr, C. Jr., development of roller road for traffic, 481, 497
- Kerry's (Ultrasonics) Ltd., Omark stud welding machine, 532; on miscellaneous plant and customers' requirements, 569
- Kestner Evaporator & Engineering, licence agreement with Dicon SA de CV, 497
- Kestrel radio telephone (Marconi), 825
- Ketay Ltd., integrating gyro, 859
- Keuffel & Esser Co., Speedraft draughtsman's templates, 87
- Key Engineering Co. Ltd., pitch fibre piping for laundry drainage, 243
- Keynsham Urban District Council, redevelopment of civic centre (Holland & Hannen and Cubitts (GB) Ltd.), 365
- Keyseating machine, large, for Manganese Bronze and Brass Co. Ltd. (Mortimer Machine Tool Co. Ltd.), 335
- Khartoum drainage system, 888
- Kidd, Capt. H. A., appointed to command Admiralty station at Dounreay, 420
- Kidde, Walter, Co. Ltd., Colarm fire alarm, 352
- Kier, J. L., & Co., Ltd., new berths at Mombasa Harbour, 828
- Kilburn, Dr., development of Atlas computer, 609
- Kinematics: A German-English Glossary, by Prof. R. Hartenberg and T. P. Goodman, 156
- Kinetheodolites, use on Woomera WRE range, 750
- Kingsbury, A., work on air and gas bearings, 255
- Kingsford, P. W., on Biography of F. W. Lanchester (book), 110; on F. W. Lanchester: Life of an Engineer (book), 428
- Kinloch (Provision Merchants) Ltd., catalytic combustion fume cleaner installed, 126
- Kinnear Moodie & Co., high speed shaft sinking, 397; Victoria Line underground railway, 414
- Kintyre to Jura submarine power cable, 777
- Kipping, Sir Norman, delegation to Nigerian Industrial Development Conference, 149
- Kirchhoff, G. R., historical note, 7
- Kirk, Geo. F., Ltd., umbrella building for S. & J. Litchen Ltd., 186
- Kirov Works, turbine for Voronezh atomic power station, 192
- Kirschbaum, E., on Destillier- und Rektifizier-technik (review), 263
- Kirtleside, Lord Douglas of, on BEA 201
- Kit, B., on Rocket Propellant Handbook (review), 200
- Kitchen, bath-in-the-, unit, Bink (Bink Unit Developments Ltd.), 584
- Equipment, domestic, 584
- Power for, 472
- Unit, Compacta, 436
- Unit, Cannonlux (Cannon (GA) Ltd.), 436
- by J. E. Walley (book), 158
- Kitchen A.,-D., Walker Ltd., horizontal facing machine, 766
- Kiwi-A3 atomic reactor, completion of, 388
- Kiwi-B test programme, 800
- K & L Steelfounders & Engineers, orders taken at Leipzig Fair, 673
- Klein, L., on human implications of work study: Pakitt Ltd., 183
- KLM Royal Dutch Airlines, trials of Para-Visual Director (PVD) Equipment, 402
- Klockner-Humboldt-Deutz, diesel engine bus, 595
- Knollys, Lord, on trade with Russia, 758
- Koering excavating machine (NCK-Rapier Ltd.), 798
- Koffman, J. L., review of Railway Locomotives, 606-607; review of British Locomotives, 606-607; biographical note, 608
- Kohn, J. A., on Boron (book), 676
- Kolbuszewski, Prof., on traffic engineers, 689
- Kollbrunner, C. F., on Hydraulic Bending Press (book), 232
- Komati Power station, use of aluminium bus-bars, 618; contractors for, 618
- Kompass Register*, 518, 549; formation by Engineering Ltd. and Brown Knight and Truscott Ltd., 518; M. Gordon appointed managing director, 518; aims and objects of register, 518
- Konaxal gunmetal connectors (Kay & Co.), 857
- Korea, IAEA expert to visit, 387
- Suwon Institute of Agriculture to receive IAEA assistance, 387
- Korotkov, K. P., on Continuous Casting of Steel in Commercial Use (book), 576
- Kotah Barrage inauguration of, 143
- Kovo, order to Bradma Ltd. for addressing machines, 159

- Kowalski, S. J., on Introduction to Electro-technology (book), 428
 Koyna River dam, 829
 Kraft honeycomb in boatbuilding, 90
 — Profiled sections of, 90
 — Radar reflectors, 90
 — Sound reducing bulkheads for Deltic locomotive (English Electric Co.), 90
 Kraushaar, W. L., on Introduction to Mechanics, Matter and Waves (book), 364; (review), 607-608
 Krauss-Maffei, diesel-hydraulic locomotives, 595
 Kresser, T. O. J., on Polypropylene (book), 496
 Kreutz, Fritz, of Düsseldorf, bearings for Hammersmith flyover, 247
 Krian irrigation scheme in Malaya, 736
 Kröger, F. A., on Progress in Semiconductors (book), 112
 K.S.M. Stud Welding Ltd., stud welding machine, 628
 Kuala Lumpur, ship, refit for, 699
 Kucher, Dr. A. A., Levacar system, 622
 Kuffel, Dr. E., on Evolution of Electromagnetic Machines (book), 606
 Kuhn, N., on German mathematics vocabulary, 477
 Kuljian Corp., Barauni power station, 86
 Kuwait International Airport, 888
 Kwiklift lorry mounted crane (Cohen Bros.), 101
 Kyle, J. M., second deck for George Washington bridge, 51
 Kyna hydro-electric power project in Bombay State, 829
- L**
- LABELS**, adhesive (trade publication), 112
 Labgear Ltd., Unicam power supply, 318
 Laboratory apparatus and materials exhibition, national, 5
 — of Food Investigation Organisation. See LETTER, 276
 — Food research. See LETTER, 276
 — Hydraulics (Glenfield), 878
 — Testing for abrasive wear, 546
 — See also *National Engineering; National Physical*
 Labouchere, Sir George, on Anglo-Spanish trade, 299
 Labour in agricultural and food equipment industry, 166
 — in building and civil engineering industry, 80
 — in data processing and business equipment industry, 120
 — in domestic aids industry, 171
 — Exhibition, international, Turin, 509
 — Immobility, 97
 — and management in armaments industry, 36
 — in production plant industry, 28
 — in telecommunications and electronics industry, 32
 — in materials processing industry, 71
 — Ministry of, survey on demand for technicians, 53; *Professional Engineers*, 141; *Fire Fighting in Factories*, 217; *Industrial Relations Handbook*, 593; reappointment of committee on drop forging, 593; inquiry into earnings of manual workers, 625; *Ministry of Labour Gazette*, 625; wage statistics, 625; regulations for unsealed radioactive substances, 632; *Accidents—How They Happen*, 721; *Prevention of Accidents to Young Workers*, 721; report for 1960, 793; employment figures for Scotland, 881
 — Misuse in industry, 657
 — Organisation, International. See *International*
 — in power plant and prime mover industry, 116
 — Relations at docks and ports, engineering industry's concern about, 141
 — Relations, industrial, improving, 888
 — Relations in motor car industry, meeting to discuss, 9
 — in scientific and engineering instruments industry, 76
 — in service industries, 161
 — Shortage of, 209, 437
 — Skilled, shortage of, 209, 241
 — in transport manufacturing industry, 124
 — See also *Manpower*
 Lac Jeannine mine, 729
 Ladder, aluminium (H. C. Slingsby Ltd.), 207
 — Drilling at Loch Awe, 10
 Ladle stoppers, infra red plant for drying (GEC), 367
 Lagging paints (trade publication), 904
 Laing Development Co., development of Thornybank Industrial Estate, 497; new shopping centre for Birmingham, 691
 Laing Group, association with International Ytong Co. AB., 321
 Laing Housing, estates developed or begun, 865
 Laing, John, Co., discussion session by directors and pupils, 824; participation in Commonwealth Training Week, 824
 Laing, John, Construction Ltd., award of Sir George Earle Trophy, 689; new shopping centre for Birmingham, 691
 Laing, John, & Son (Canada) Ltd., Port Mann bridge, 731
 Laing, John, & Son, major works of, 865; work for Vickers Armstrongs, 865; work for Head Wrightson, 865; work for Petrochemicals, 865; work for Richard Thomas & Baldwins, 865; work for Mobil Oil Co., 865; work for British Transport Commission, 865; work for Bowater Packaging, 865; annual review, 865; housing estates, 865; overseas schemes, 865
 Laing, W. K., awarded Sir George Earle Trophy, 689; on training people, 824; on John Laing & Son, 865
 Laird, J., historical note, 7
 Laird, M., historical note, 7
 Lake Taupo geothermal power station project, New Zealand, 98
 Lambert Hydrocon mobile crane (Brown & Tawse Plant Ltd.), 661
 Lambertson & Co., Ltd., tube upsetting machine, 507
 Lamble, J. H., on technical college libraries, 212-213. See LETTER, 244
 Laminate, decorative, Respatex (Getz Bros. & Co.), 619
 Laminate, plastic (Arborite Co. (UK) Ltd.), 375
 Laminated timber, glued, structural, production standards for, 590
 — Working stresses and stress grading for, 829
 Laminating presses, automated for plastics (Pathex (Canada) Ltd.), 740
 Lamp, inspection, miniature (CLM), 253
 — Tungsten filament, microminiature, Mite-t-Lite (Thorn Electrical), 237
 — Xenon, for searchlight for M60 tank, 45
 — See also *Light; Lighting*
 LAMPRE-1 atomic reactor, criticality achieved, 664
 Lanark Avalanche Shed (Laing), 865
 Lancashire County Council, contracts for Birmingham-Preston Motorway awarded to Sir Alfred McAlpine & Sons and Leonard Fairclough Ltd., 233
 Lancashire Dynamo Coates Pty., amalgamation with Godfrey Electrical Industries Pty., 397; formation of M.I. Australia Pty., 397
 Lancashire Dynamo Electronic Products Ltd., controller for gun welding machine, 14; licence agreement with Emerson Electric Manufacturing, 233; transistorized photoelectric equipment, 825
 Lancaster, J. F., on pressure-vessel codes, 238. See LETTER, 344
 Lancaster, new university for, 657
 Lancaster, F. W., biography of, by P. W. Kingsford (book), 110; Life of an Engineer, by P. W. Kingsford (book), 428
 Lanchester sub-machine gun, 830
 Lancia Zagato Appia motor car, 592
 Lands, backward, water brings to life, by A. N. M. Robertson, 54-55
 Landau, E., on Grundlagen der Analysis (review), 364
 Landmaster Ltd., Landmaster 150 rotary cultivator exhibit at Cairo Fair, 333; Gardenmaster 85 Rotary Cultivator, 670-672
 Landscape of roads, by S. Crowe (review), 494-495
 Lane, I., tour of Far East for Cosley Buildings Ltd., 225
 Lang, N., development of fan heaters, 548
 Lang Pneumatic Ltd., *Pneumatation News*, 198
 Langdon-Thomas, G. J., on fire protection in factory buildings, 142
 Langley, Brigadier C. A., report on electric train failures, 884
 Langley, M., appointed technical director of British Executive and General Aviation, 348; biographical note, 348; formation of Tiltman-Langley Ltd., 348
 Langlois-Berthelot, R., on Transformers and Generators for Power Stations (review), 806
 Language analysis, applied, and machine translation of language, conference on, 854
 — Machine translation of, and applied language analysis, conference on, 854
 Lanterns, butane, Camping Gaz (Forges d'Alais), 150-152
 Lapham, J. H., review of Banker's Guide to Marine Insurance of Goods, 774-775; biographical note, 776
 Laport, E. A., on Intercontinental Satellite Communications System, 893
 Lapp Insulator Co., corona rings for Machias Bay radio station aerial, 205
 Lapping compound, Hyprez (Engis Ltd.), 173
 — Machine, diamond (Engis Ltd.), 890
 — Flexibox, Alfred Herbert Ltd. appointed agents for, 865
 Lardarelle power station, atomic reactor for (Mitchell Engineering and American Machine & Foundry Co.), 800
 Larmuth & Bulmer Ltd., wire rope closing machine, 144, 172
 Latex rubber sprayed seals in mining, 802
 — Synthetic, use of "pillow" tanks to transport, 311
 Latham, G. H., on Whitehead Iron & Steel Co., 357
 Lathes, centre (trade publication), 24
 — Monarch (Rockwell Machine Tool Co., Ltd.), 384
 — Commutator, Com-Centric (Brownings' Electric Co. Ltd.), 486
 — Copying (Strojexport), 220
 — CT live centres for (Insley Industrial Supply Co. Ltd.), 222
 — Gallic 16 (Mondiale), 554
 — Imor (Gate Machinery Co. Ltd.), 562
 — Milling machine used as, 127
 — Roll turning, for Armstrong Whitworth (Craven), 39
 — Taper turning (Crossley Bros. Ltd.), 251
 — Turret, automatic (Strojexport), 220
 — (Technoimpex Foreign Trading Co.), 485
 Latin America, atomic power survey, 147
 — Imports from UK, 341
 Lattices, hydrogen moderated, resonance escape possibilities and self-shielding factors in, by A. J. Taylor, 224
 Latvia, atomic research centre to be established by Russia, 104
 Lauf-Lumenite (Pty) Ltd., new factory for, 61; increase in profits, 61
 Launch, motor. See *Boat*
 — Steam, modern, and steamboats, 574
 — See also *Boat*
 Launchers, mobile, for Hawk missile (Northrop Corp.), 397
 Launder, aluminium, Marinite used for, 770
 Laundry drainage, pitch fibre piping for (Key Engineering), 243
 — Linen hire (Spring Grove Laundries Ltd.), 669
 Laureau, R., appointed President of Sperry Europe Continental Co., 389
 Laurence, Scott & Electromotors Ltd., electrical machinery and control gear, 348; electrical propulsion machines for second atomic propelled submarine, 488; Corrector cargo winch, 528
 Law, F. T., on principles of burst cartridge detection system, 599
 Laws, antitrust, of the United States of America, by A. D. Neale (review), 427-428
 — Trade union, by N. A. Citrine (review), 363
 Lawn, be your own expert, by Dr. D. G. Hessayon (book), 706
 Lawrence Radiation Laboratory, discovery of new element, 832
 Lawrence, T. E., on revolt in the desert, 624
 Lawson, D. F., on Technique of Photomicrography (review), 230
 Lawton, F. L., on major rock plug blast near dam, 895
 Layout, 3-D model, use and abuse of, 868-869
 Layshaft gears produced automatically, 458
 Lazard Bros., discussions at BEAMA export conference, 841
 Lea, F. C., on Machining of Steel (book), 68
 Leach, H. W., on Engineering: The Profession and Elementary Problem Analysis (review), 607
 Lead Development Association, lead pigments (trade publication), 264
 Lead Industries Association, *Lead*, 648
 Lead Plymax X-ray screens (Venesta), 343
 — Pigments (trade publication), 264
 — Telluride cells, 648
 Leader Motorcycle, Ariel, 194-196; general data on, 196
 Leak detector (GEC (US)), 102
 — Micro-, detection of Vacuum Research, 83
 Leander class frigates, three to be built for Royal Navy, 69
 Lear Inc., sub-miniature gyro, 153
 Learning, World of (book), 396
 Leaute, Prof. A., opening address of Mesucora Exhibition and Congress, 804
 Leber, G., plan for German trade unions, 141
 Lectralevel liquid level control system (Londex Ltd.), 597
 Lecturer, advice to, by Michael Faraday (book), 464
 Lee, Howl & Co. Ltd., Hypersilid chemical pump, 560
 Lee, J. E., entertains Russian students, 865
 Lee, P., foundation of Coventry Climax Engines Ltd., 842
 Lee, W. T., on anatrol: an analogue on-line process control computer, 181
 Lees-Bradner gear hobbing machine (Precision Gear Machines & Tools Ltd.), 726
 Lees, J. B., & S., inclusion in Harper Engineering and Electronics Group, 325
 Legal and General Assurance Society, Millbank Development, 809
 Leicester, Lovell & Co. Ltd., use of "pillow" tanks, 310
 Leipzig Fair, 641; British exhibitors at, 273; British Road Services Exhibit at, 397; order for UK exhibitors, 429; UK orders at, 673
 Leliavsky, S., on Irrigation and Hydraulic Design (book), 298; (review), 675-676
 Lemass, S. F., opening of freeze dried food plant of Irish Sugar Co., 756
 Lens, contact, Sphercon (Sphercon Contact Lens Co. Ltd.), 358-360
 — Mounts of Noral 28S alloy (Taylor, Taylor & Hobson), 179
 — Zoom, television, Varotal (Taylor, Taylor & Hobson Ltd.), 737
 Leo Computers Ltd., Leo III computer for CAV Ltd., 333
 Leo III computer for CAV Ltd. (Leo Computers Ltd.), 333
 — for Dunlop Rubber Co., 665
 — for wage calculations, 593
 Leonard and Grant, consulting engineers to Base Group, 809
 Leonard mixing valve, 44
 — Thermostatic controller (Walker, Crossweller & Co. Ltd.), 14
 Leonides engine (Alvis Co.), 61
 Lep Transport, transport of British exhibits to British Trade Fair in Moscow, 429
 Lepaz pearlitic malleable castings (Ley's), 202
 Leptoptilus crane (Holland Cranes), 206
 Lesch, G., on Textbook of High Voltage Technology (review), 296
 Lesser, J. E., & Sons Ltd., prefabricated buildings (trade publication), 200
 Lester, M. D., on major rock plug blast near dam, 895
 Letsky, B. M., on Practical Manual of Industrial Finishes (review), 199-200
 Letter mail, processing of, 910-911
 Letters, pattern, in polyethylene (AEL Plastic (Aldridge) Ltd.), 551
 Levacar system (Ford), 622
 Level gauge, R & G (Bayham Ltd.), 528
 — Indicator, Levelator (Thomas Industrial Automation Ltd.), 12
 — Liquid, controller (H. M. Hobson Ltd.), 529
 Levelator level indicator (Thomas Industrial Automation Ltd.), 12
 Leverhulme Study Group Report: Complete Scientist (book), 776
 Levertons of Spalding, dealers for Capercillar Tractor Co., 235; reclamation of worn tractor parts, 235
 Lewis, E. F., petition to Board of Trade, 333
 Lewis, H. K., & Co., *Supplement to the Catalogue of Lewis's Medical, Scientific and Technical Library, 1957-1959* (book), 24
 Lewis, John, & Sons, trawlers, 275
 Lewis, L. V., on Electro-Magnetic Speed Signal and Pulse Generators for Neutron Chopper Spinning Units, 388
 Lewis Research Centre, aero space propulsion research, 317; graduate training, 317
 Lewispoint Holdings Ltd., microwave Arctic cooking oven, 240
 Lewis's medical, scientific and technical library, supplement to the catalogue of, 1957-1959 (book), 24
 Leybold's Nachfolger, formation of new company with Elliott-Automation Group, 833
 Leyland Motors Ltd., export of vehicles, 69; increase in vehicle production, 69; use of Leyland engines by Brossel Freres SA for ECM trucks, 206; acquisition of Standard-Triumph International, 225; annual report, 225; position and prospects, 225; overseas prospects, 225; group turnover, 225; profits, 225; demand for diesel engines, 225; order position, 225, 299; order from Southdown Motors, 299; production rights for Worldmaster chassis for Industrija Motora Rakovica 577; diesel engine bus, 595; installation of nitriding plant, 635; bus orders received 841; buses for Edinburgh Corp., 841; buses for Trent Motor Traction, 841; buses for Western Welsh Omnibus, 841; buses for Birkenhead Corp., 841
 Leyland Worldmaster chassis, production rights for Industrija Motora Rakovica, 577
 Ley's Malleable Castings Co., Ltd., Lepaz pearlitic malleable castings, 202; continuous casting equipment installed, 202
 Liardet, G. E., on Simms Motor & Electronic Corp., 801
 Liberia, IAEA assistance mission to, 387
 Librarians and information officers. See LETTERS, 821, 885
 Library, Lewis's medical, scientific and technical, 1957-1959, supplement to the catalogue to (book), 24
 — Minded engineers and scientists, 212. See LETTERS, 244, 312
 — National Lending, of Science and Technology, 688
 — National Reference, of Science and Invention, 688
 — New, of science and invention, by Prof. R. S. Hutton, 688
 — (Public Lending Right) Bill, 230
 — Science Museum, 688
 — Technical college. See LETTERS, 92, 137, 212
 — Technical, new, in industrial organisations, conference on, 262
 Licencia, licensing authority for Kenderisation steel protection process, 237
 Liddel, Dr. D., historical note, 7
 Life at sea, safety of, conference on, 520
 Lifeboat radio, Solas (International Marine Radio Co. Ltd.), 561
 Lift equipment (trade publication), 158
 — Escalators and Paternosters (trade publication), 158
 — Paternoster, 338. See LETTER, 476
 — Operation of, 338
 Lifter, Cling-Sling (G. D. Peters & Co. Ltd.), 629
 — (Martonair Ltd.), 561
 — Sack, Teleloader (Telehoist Ltd.), 541
 Light, continuous, from optical maser (Bell Telephone Laboratories), 337
 — and heat economies, 648
 Light & Power Accessories Co. Ltd., distribution drum, 485
 Light, spot (P. W. Allen & Co. Ltd.), 353
 — Standard, absolute, research at NPL, 709
 — See also *Lamp; Lighting*
 Lighthill, Prof. M. J., studies for supersonic airliners, 820
 Lighting, interior, recommendations for good (Illuminating Engineering Society), 408
 — Research, use of models, 869
 — See also *Lamps; Lights*
 Likhachev, V. P., on Russian experience of wide river dams, 895
 Liliavsky, S., on Irrigation and Hydraulic Design (book), 54
 Lilleshall Co. Ltd., Spectra Glaze plastic faced building slabs, 47
 Lilley, Prof. E., on ultra-ionospheric flight of radio telescopes by Blue Scout rocket, 237
 Limassol, proposed extension of port facilities, 585
 Lin, T. Y., on Design of Steel Structures (book), 708
 LINAC linear accelerator for Moscow Trade Fair (Vickers Research), 673
 Lincoln Electric Co. Ltd., historical note, 578; Lincoln motor generator for welding, 578-580
 Lincoln Lords, by C. Hawley (review), 296-297
 Lincoln Motor generator for welding (Lincoln Electric Co. Ltd.), 578-580
 Lindley, A., on exports and overseas visits by executives, 201
 Lindley, Dr. B. C., review of Direct Conversion of Heat to Electricity, 111-112; review of Dynamic Behaviour of Thermoelectric Devices, 111-112; biographical note, 112
 Line Management and the Consultant, 8
 — Marker (trade publication), 200
 — Overhead, alarm (trade publication), 200
 — Protector (AEI Ltd.), 279
 Linen industry, AMY automatic yarn monitor for, 813
 — Research Association, AMY automatic yarn monitor, 813
 — Yarn, electronic inspection device for, 635
 Linder *Canberra*, details of 754-755; maiden voyage of, 753, 754-755; nickel in (International Nickel Co. (Mond) Ltd.), 838
 — Cunarder for Atlantic, tenders to be issued, 341
 — for cylinder blocks, sprayed (Metco Ltd.), 771
 — *Empress of Canada*, 769; details of, 605; maiden voyage of, 605; sale to India, 713
 — *Gorjistan* for Strick Line (John Readhead & Sons), 665
 — *Oriana*, 753, 769
 — Passenger, Russian design for, 809
 — *Windsor Castle*, model of, 851
 — See also *Ships*
 Linings, cast iron, for tunnels, 415
 — Concrete, for tunnels, 415
 — No-bolt, halve tunnelling time, 414-415
 Link-Belt Co., waste treatment plant (trade publication), 428; sludge collectors (trade publication), 428; sprockets (trade publication), 904
 Lion Stampig Co. Ltd., Aqualeo oil fired immersion heater, 352
 Lipton Products Ltd., on hydraulic equipment and customers' requirements, 568
 Liquid distribution control unit (D. Ellison Ltd.), 416
 — Level control system, Lectralevel (Londex Ltd.), 597
 — Controller (H. M. Hobson Ltd.), 529
 — Oxygen. See *Oxygen*
 — Separating solids suspended in, 82

- Liquid-Solid Separations Ltd., Hydrocyclone wet centrifuge, 82
- Lister, B., on panorama of performance, 65; on grand touring cars today, 329; review of BP Book of Motor Cycle Racing, 807; biographical note, 808; on evolution of an engine—the Jaguar XK, 887
- Litchen, S. & J., Ltd., umbrella building completed for, 186
- Lithgow, Sir William, tour of South America, 1; on shipbuilding techniques, 1
- Lithgows Ltd., possible establishment of shipyards in South America, 1
- Lithium compounds, US Bureau of Standards research programme on, 269
- Irradiating to produce tritium, 696
- Magnesium alloys, research on, 613
- Litter bin, "Town Number One," Design Centre award for (G. A. Harvey & Co. (London) Ltd.), 712
- Little, I. M. D., on Concentration in British Industry (review), 23
- Littlejohn, W. G., review of Technology, Engineering and Safety, 111; biographical note, 112
- Litton Industries Inc., co-operation with Elliott Automation Ltd., 357; formation of Elliott-Litton Ltd., 357; association with Elliott-Automation Group, 833; sound recording equipment for Radio Eirean, 873
- Liverpool Steam Ship Owners' Association, annual report, 405
- Liverpool traffic jams, 177
- University, application for grant for atomic reactor, 104
- Research atomic reactor for, 753
- Living standards, high, from cheap power, 98
- and working, Plain Words on, 885
- Livshits, A. L., on Electro-Erosion Machining of Metals (book), 158
- Lloyd, Major General C., on Commonwealth Technical Training Week, 721
- Lloyd, F. H., & Co., foremen training, 177
- Lloyd, S., on shortage of labour, 209; on increase in national productivity, 209; Budget speech, 617; speech to Foreign Press Association, 617
- Lloyds Bank Ltd., cheque sorting machine installed (Burroughs), 25
- Lloyds Packing Warehouses Ltd., transport of British exhibits to British Trade Fair in Moscow, 429
- Lloyds Scottish Finance Ltd., association with Bowmakers, 257
- Load/strength relationship, 154
- Loader, automatic (Precision Gear), 417
- Crawler, Deere-Lanz (J.D. Tractors Ltd.), 484
- Sack, Hipope Mule (H. C. Pope Ltd.), 767
- Shovel, Loadmaster (Chaseside Engineering Co. Ltd.), 796
- Skip (George Cohen 600 Group Ltd.), 661
- Loadmaster shovel loader (Chaseside Engineering Co. Ltd.), 796
- Location system for staff (Westrex Co. Ltd.), 173
- Locator electroluminescent panel (MK Electric), 88
- for line faults (Ferranti Ltd.), 418
- Loch Awe hydroelectric scheme, 10
- Ladder drilling at, 10
- Tunnel to Inverawe power station, 10
- Loch Turret Spillway, model of, 470
- Lock, Cromwell, extension of on River Trent, 558
- Lock mechanism on River Trent, 558
- Lockheed Aircraft Corp., atomic reactor for Ohio State University, 104
- Lockspeiser, Sir Ben, to speak at National Apprentices dinner, 689
- Lockwood & Carlisle Ltd., automatic welding of pistons, 203
- Lockwood, W. H., on device for synchronisation of two dropping mercury electrodes, 456
- Locomotive and Allied Manufacturers Association, *British Locomotives* (book), 428; (review), 606; exhibit at Rand Show, 465
- Locomotives, British (book), 428; (review), 606
- Costs of, 681
- Deltic, sound reducing bulkheads of Kraft honeycomb (English Electric Co.), 90
- Diesel, losses on US railways. See LETTER, 92
- Diesel-hydraulic (Beyer Peacock Co.), 769
- Diesel-hydraulic, for British Railways (Beyer Peacock (Hymek) Ltd.), 788
- Diesel-hydraulic (Krauss-Maffei), 595
- Diesel-hydraulic, *Taurus* (Yorkshire Engine Co. Ltd.), 652
- Electric, for South African Railways (AEI Ltd.), 465
- Gas turbine (English Electric Co. Ltd.), 239
- Henschel's handbook on (Henschel Werke GmbH) (review), 838
- Manufacturers, exports, 681
- Future standardisation of products, 681
- Outlook for 1961, 122-125
- Railway, by J. R. Day and B. K. Cooper (book), 428; (review), 606
- Steam, preservation of, 241
- Loctite sealant resins (Douglas Kane (Sealants) Ltd.), 134
- Lodge Equipment Ltd., Adams Sport training machine, 912
- Lodge Plugs Ltd., alumina ceramic (trade publication), 808
- Loewy Engineering Co. Ltd., copper extrusion plant for Thomas Bolton & Sons Ltd., 773
- Londex Ltd., pressure switch, 280; power factor regulator, 418; pressure switch, 444; Lectralevel liquid level control system, 597; annunciator, 692; contactors (trade publication), 748; electromagnetic valves (trade publication), 776
- London Aluminium Co. Ltd., factories moved to new plant at Wombourn, 173
- County Council, survey of noise in London, 348; educational responsibilities, 373; *Engineering Studies in Secondary Schools*, 373; courses, 373; High Holborn road widening scheme, 480; bridge for Regents Canal Dock, 483
- London Electricity Board, distribution transformers ordered from AEI Ltd., 233
- General Shipowners' Society, losses caused by tally clerks strike to members, 141
- London & Overseas Freighters Ltd., carriage of Russian oil, 873
- London, noise survey, 348
- Supergrid "ring" around, 52
- Transport Executive, Victoria Line underground railway, 414-415; new rolling stock for Metropolitan Line, 820; see also *Railways, underground*
- Underground Railways. See *London Transport Executive; Railways, underground*
- University, research atomic reactor for, 753
- Longmore, W. J. M., tour of South America 641
- Loom, shuttleless, Onemack (Mackie & Sons) 761
- Loop irradiations, HTGC, remote handling and analytical techniques used in the processing of samples from, by P. E. Brown *et al.*, 520
- Loosemore, W. R., on saturation characteristics of mean-current fission ionisation chambers, 520; on fast neutron counter for dosimetry, 520
- Lorain lorry mounted crane (Vales Plant), 100
- Lorry. See *Motor vehicle*
- Lorry Loader crane (R. H. Neal & Co. Ltd.), 383
- Los Alamos Scientific Laboratory, Kiwi-B test programme, 800
- Los Angeles, withdrawal from Improved Cycle Boiling Water Project, 388
- Lotts Equipment, distributors of National shower cubicle, 44
- Lotus Elite, motor car, 65, 329, 687
- Formula junior motor car, 65
- Loudspeakerphone office communicator (AEI), 384
- Lovell, Prof. Sir Bernard, exhibition of work of at British Trade Fair, Moscow, 705
- Low Moor Fine Steels Ltd., steel extrusions (trade publication), 872
- LOX. See *Oxygen, liquid*
- Lubricants (trade publication), 264
- Lubricating oils. See also *Oil*
- Lubrication equipment, Trabon (Exactor Ltd.), 762
- Hydrodynamic, 434
- Lubricators, Stauffer pressure screw, in nylon (Trendon Ltd.), 47
- Lucas Heights Australian Atomic Energy Commission Research Establishment, new method for machining nuclear fuel elements, 104
- Lucas, Joseph, Ltd., components for Austin gas turbine vehicle engine, 424; electronic ignition system for motor cars, 501; DL3 windscreen wiper, 855
- Luitakila River irrigation scheme, 905
- Lumenated Ceilings Ltd., hangar, 597
- Lunar theory, introductory treatise on, by E. W. Brown (book), 298
- Lung/heart machine, Melrose, 705
- Lurgi gasification, regulation and distribution with, 805
- Lutyens, D. M., on Physics of Television (book), 808
- Luxury Life power domestic equipment (S. N. Bridges & Co. Ltd.), 472
- Lymer, A., on mechanical sealing as it stands today, 572-573
- Lynchburg Source Reactor, request to modify from Babcock & Wilcox Co., 800
- Lynester Products, Ltd., lightweight machine access doors, 87
- Lynn, C., development of roller road for traffic, 481, 497
- Lyon, Arthur, & Co. (Engineers) Ltd., Alcon Thames centrifugal pump, 826
- Lyon, R. N., on Technology, Engineering and Safety (review), 111
- Lyons, Sir William, on Jaguar Cars Ltd., 97; "pep" talk to Jaguar workers, 97; on Jaguar Cars Co., 389; on Jaguar Co. policy, 887
- Lysak, W. W., on progress in Skycrane development, 320

M

- M1 Motorway, grit stores along, 11
- M2 Medway Motorway, tenders issued, 233
- M15 microscope, biological (Cooke, Troughton & Simms Ltd.), 62-64
- M60 tank, British 105 mm gun for, 45; infra red xenon searchlight for, 45
- MacDonald, R., on The American Way, 92
- MacGregor & Co. (Cargo Handling) Ltd., MacGregor sliding roof for railway freight wagons, 402; Hallen derrick, 652
- MacGregor sliding roof, 402
- Machias Bay radio station, US Navy, 205
- Machine access doors, lightweight (Lynester Products Ltd.), 87
- Direct current, by H. B. Ranson and E. T. A. Webb (book), 872
- Electrical, testing of, by L. H. A. Carr (review), 575-576
- Electromagnetic, evolution of, by Dr. E. Kuffel, (book), 606
- Guns. See *Guns*
- Sorting gives a better service, 910-911
- Sport by, 912
- Tools (trade publications), 24, 68
- Availability, 620
- Customers' requirements, 569
- Drives (trade publication), 68
- ENGINEERING's survey report on, 525
- exports, 673
- Heavy (Joshua Bigwood & Son Ltd.), 763
- Heavy (Bronx Engineering Co. Ltd.), 763
- Heavy (W. H. A. Robertson & Co. Ltd.), 763
- Heavy (Rushworth & Co. Ltd.), 763
- Industry, exports, 365
- Industry, good order position, 365
- Industry, orders above average, 777
- Industry, sales statistics, 365
- Machine tools, orders and deliveries, table of statistics on, 841
- Performance, improving, 901
- Production, 673
- Prospects in India, 741
- Rise in orders and deliveries, 841
- for Russia, 873
- Trades Association, G. L. H. Bird appointed education officer, 53; machine tool order statistics, 69; exports, 365; deliveries, 365; sales statistics, 365; order position of industry, 365; increase in machine tool industry production, 673; answers to queries, 763; statistics on orders, 777
- Machinery's Handbook, by H. L. Horton (book), 576
- Machining, electrochemical principles of, 300
- Technique of, 300
- Electro-erosion, of metals, by A. L. Livshits (book), 158
- Electrolytic (Battelle Memorial Institute and Steel Improvement and Forge Co.), 175
- of steel, by F. C. Lea and E. N. Simons (book), 68
- Machinoimport, hydraulic dynamometers ordered from Heenan & Froude, 333; order to Hawker Siddeley for National/Brush diesel alternator sets, 809
- Mackay Industrial Equipment Ltd., Morewear Goose detachable dumper truck, 596
- Mackay, K., discussions with Herr W. Ulbright on diesel engines for East Germany, 497
- Mackenzie, J. D., on Physicochemical Measurements at High Temperature (review), 66
- Mackie & Sons, Onemack shuttleless loom, 761
- Maclay, J. S., appointment of committee on power stations, 373
- Maclean, I., on standards, 761
- MacLellan, George, & Co. Ltd., pipe-sealing balloons, 803
- MacLeod, C. J., new method of reservoir construction, 350
- MacMillan, Rt. Hon. H., address at centennial of Massachusetts Institute of Technology, 413
- Macloaapp abrasive grits (Monks & Crane), 135
- Macpherson, N., opening ceremony of new Anglesey factory for Midland Electrical Manufacturing Co., 217
- Macquarie Island oil depot (BP Co.), 25
- Mac. See also *Mc*
- Maercks, J., on Bergbaumechanik (book), 872
- Magco Ltd., magnetic vibrator, 252
- Magga Dan ship, transport of diesel tanks to Macquarie Island, 25
- Maginness, Sir Greville, resigns as chairman of Associated British Machine Tool Makers and Churchill Machine Tool Co., 348
- Magna Pipeline Co., order to BICC for flexible submarine pipeline, 45; flexible submarine pipeline ordered from Callenders, 131; natural gas pipeline from British Columbia to Vancouver Island, 131
- Magnamatic screwdriver (Consolidated Pneumatic), 100
- Magnesium and its alloys, by C. S. Roberts (review), 297
- and aluminium alloys, elevated temperature properties of (ASTM book), 110
- Compounds, US Bureau of Standards research programme on, 269
- Magnesium Data Manual*, 224
- Lithium alloys, research on, 613
- Magnetic alloy, superconducting (Atomic International), 909
- Circuits, solution by graphical methods, by O. Benedikt (review), 296
- Compression devices in thermonuclear work, 324
- Magnetic & Electrical Alloys Ltd., exhibit at British Trade Fair, Moscow, 705
- Magnetic iron, Super Permo, 619
- Strip, Eclipse (James Neill & Co.), 343
- MagneTRACE milling machine (Buck & Hickman Ltd.), 767
- Magnifier (P. W. Allen & Co. Ltd.), 444
- Mahogany for yacht, 475
- Mahr tester (Henry Pels & Co. Ltd.), 629
- MAIB. See *Malta Aids to Industry Board*
- Mail, automatic reading of, 911
- Destination sorting of, 910
- Extraction coding of, 910
- Letter, processing of, 910-911
- Machine codes on, 911
- Sorting gives a better service, 910-911
- Preparation in post offices, 910
- Public coding of, 911
- Mains, electric. See *Cable*
- Makarov PM pistol, 830
- Makins, Sir Roger, on criticism of Dounreay Fast Atomic Reactor, 664
- Malaviya, K. D., on oil tanks with Standard Vacuum and Burmah Shell, 405
- Malaya, Krian irrigation scheme in, 736
- University, atomic reactor for, 16
- Mallett, Sir Victor, on Skefko Ball Bearing Co., 665
- Mallory 53 alloy of nickel-silicon-copper (Johnson Matthey & Co. Ltd.), 835
- Malt making, continuous process, 741
- Malta Aids to Industry Board, applications received by, 69
- Malta, investment incentives in, 728
- Market research survey for, 69
- Marsa Industrial Estate, new factories for, 69
- Malta Rubber, new factory for in Malta, 69
- Malta, trade fair, 728
- UK companies manufacturing in, 728
- Workshop of the Mediterranean, 728
- Mambucaba Power Project in the Central Southern Region of Brazil, by O. A. D. Carneiro, 147
- Man, from galaxies to, a story of the beginnings of things, by J. Pfeiffer (review), 330
- How to make him feel at home in space, by G. V. E. Thompson, 623
- Management in agricultural and food equipment industry, 166
- in building and civil engineering industry, 80
- Centre, Sundridge Park, courses in export studies, 593
- Management Consultancy, progress of, 381
- Consultants Association, 8; visit arranged for European consultants, 413; use of 3-D models, 868
- European conference of, 381
- in data processing and business equipment industry, 120
- in domestic aids industry, 171
- Education for, conference on, 886
- Engineer in, by A. R. Cooper, 443
- Engineering, by S. A. Robertson (book), 68
- by S. A. Robertson (review), 426
- Exploration in, by W. Brown (review), 540
- Financial incentive for, by R. C. Smith (review), 539-540
- and industrial consultants, register of, 8
- and labour in armaments industry, 36
- and labour in production plant industry, 28
- and labour in telecommunications and electronics industry, 32
- Line, and the consultant, 8
- in materials processing industry, 71
- in power plant and prime mover industry, 116
- Preparing the engineer for, by D. H. Bramley, 411
- and public relations, by D. Finn (review), 394
- in scientific and engineering instruments industry, 76
- in service industries, 161
- in transport manufacturing industry, 124
- Manchester, swimming pool, 511
- University, application for grant for atomic reactor, 104; facilities for training nuclear engineers and reactor physicists, 104; research atomic reactor for, 753
- Mandoval Ltd., research on plaster protection for steelwork, 343
- Manfield Ltd., electronically controlled work transporter installed, 635
- Manganese Bronze & Brass Co. Ltd., large keyseating machine bought from Mortimer Machine Tool Co. Ltd., 335; lateral thrust bow propeller for liner *Canberra*, 755
- Manganese-copper-palladium-nickel brazing alloy, 211
- palladium-nickel brazing alloy, 210
- silver brazing alloy, 210
- Manganiello, E. J., on post university on-the-job training for engineers, 317
- Mangla Dam, 730
- Manicouagan Dam, 306
- River hydroelectric project, 306-307
- Power schemes on, 306
- Manipulating equipment (Nuclear Equipment Ltd.), 103
- Manipulator, closing the gap in, 103
- Heavy duty (A. C. Wilson & Partners Ltd.), 104
- Duty, with bagging system, 103
- Duty (Palatine Tool), 104
- Master Slave (American Machine & Foundry Co. Ltd.), 103
- Slave (Argonne National Laboratories), 103
- Slave, model 7 (Central Research Laboratories Inc.), 104
- Slave, model 7 (H. M. Hobson Ltd.), 104
- Slave (Pye Ltd.), 103
- Mobot (Hughes Aircraft Co.), 520
- Power, with joy-stick control (GEC), 104
- Remote underwater, RUM, 143
- Manita* yawl, aluminium mast for (British Aluminium), 47
- Manitoba Hydroelectric Board, hydraulic turbines for Grand Rapids power station ordered from John Inglis Ltd., 265
- Manktelow, Sir Richard, appointed by Minister of Housing to conduct public inquiry into Skelmersdale new town, 657
- Mann, D. J., on engineer and technician, 442; on professional engineers, 277
- Manners, N., on food research laboratories, 276
- Manpower, making the best use of, 97
- Mining, and fuel policy, 9
- Misuse of, in industry, 657
- See also *Labour*
- Manual, anti-corrosion, 1960 (Scientific Surveys Ltd.) (review), 156
- of industrial finishes, practical, by B. M. Letsky (review), 199-200
- Manufacturing industry, capital expenditure in, 465
- Decline in unemployment in, 381
- Table of investment, employment and output 309
- Map display, moving, for aircraft navigation, 852
- Holder (trade publication), 776
- Mapel Holiday detector (Metal & Pipeline Endurance Ltd.), 890
- Marco Conveyor & Engineering Co., copper extrusion plant for Thomas Bolton & Sons Ltd., 773
- Marconi Group, radio and communications equipment for liner *Canberra*, 755
- Marconi Instruments Ltd., voltmeter, 58; universal bridge, 319; position and prospects, 389; X-ray image amplifier, 397; sales tour of Germany and Scandinavia, 577; exhibit at British Trade Fair, Moscow, 705
- Marconi International Marine Communication Co. Ltd., Metron echo-sounder, 339; position and prospects, 389; exhibit at British Trade Fair Moscow, 758; Kestrel radio telephone, 825
- Marconi Italiana, losses, 389
- Marconi Ltd., aluminium honeycomb waveguides, 91
- Marconi Research Laboratories, study of amplifiers with low noise characteristics, 400-401
- Television, closed circuit, as aid to motor car production, 334
- Marconi Wireless Telegraph Co. Ltd., position and prospects, 389; electronic equipment for Swedish Air Force, 397; new short wave transmitters for BBC, 433; television cameras for Radio Italiana Televisione, 541; radar units for Brussels Airport, 609; connection with Regie des Voies Aeriennes, 609; use of and comments on Paper Protection Mask, 667

- Marconi X-ray image amplifier for Toronto hospital, 397
- Marcoule atomic reactor, 768; accident, 355
- Margam Slag Co. Ltd., formation of, 342; processing of blast furnace slag, 342
- Margaret, HRH Princess, on Keele College, 657
- Marinduque Iron Mines Agents Inc., copper plant in Philippine Islands, 587; loan from Export-Import Bank, 587
- Marine diesel engines, by C. C. Pounder (review), 902
- Engines. See also *Engine, Diesel*
- Marine Diesel News*, 198
- Marine engines. See *Engine; Turbine; Marine propulsion*
- Exhibition, Engineering, Welding and Nuclear Energy, 519, 527; 559, 629
- Insurance of goods, Banker's guide to, by V. Dover and G. A. Calver (book), 364; (review), 774-775
- Marine Marchande, safety on atomic propelled ships, 520
- Marine propulsion, outlook for 1961, 122-125
- See also *Engine; Turbine; Propeller*
- Marinite Ltd., Marinite asbestos based insulation material, 770; Marinite for aluminium launders, 770; Marinite television tube supports, 770
- Maritime Central Airways, Dart Herald aircraft for (Handley Page Co.), 265
- Gas Cooled Reactor Critical Experiment, safety fuse for, 16
- Marker, line (trade publication), 200
- Market research survey for Malta Government, 69
- Trends in agricultural and food equipment, 166
- in armaments, 36
- in building and civil engineering industry, 79
- in data processing and business equipment, 119
- in domestic aids, 170
- in materials processing industry, 71
- in power plant and prime mover industry, 115
- in production plant, 27
- in scientific and engineering instruments, 75
- in service industries, 161
- in telecommunications and electronics industry, 31
- in transport manufacturing industry, 123
- See also *Trade*
- Markham & Co. Ltd., charge-discharge machine for Windscale atomic reactor, 519
- Marking machine (Phillips Bros. & Ellis Ltd.), 12
- Marples, E., on motor car safety belts, 229; on M2 Medway Motorway, 233; on tender for new Cunarder Atlantic liner, 341; formation of committee on docks and harbours, 513; on railways, 681; on city to city road transport, 817
- Marples, Ridgeway & Partners Ltd., Hammersmith flyover, 246-247
- Marquardt Corp., diphenyl atomic reactor, 800
- Marron Machines Ltd., Super-Stork sanding machine, 827
- Marryat & Scott Ltd., lifts, escalators and paternosters (trade publication), 158
- Marsa Industrial Estate, Malta, new factories for, 69
- Marsden, S., & Sons, close fitting bolts for Forth Road Bridge, 452
- Marsh, J., appointed director of British Institute of Management, 513; biographical note, 513
- Marshall, E., Design Centre award for transistor radio, 712
- Marshall, R. F., lectures at AEI's Easter School, 556
- Marshall Sons & Co. Ltd., orders taken at Leipzig Fair, 673; Road-Marshall Highwayman road roller, 798
- Marston Excelsior Ltd., Portolite collapsible containers, 867
- Martin, Dr. A. J. P., gas density balance, 780; gas chromatography technique, 778
- Martin Co., operating licence for critical experimental facility, 15; PM-3A nuclear power plant for McMurdo Sound, 16; project Apollo, 856; ablative material for Pershore ballistic missile, 909
- Martindale Electric Co. Ltd., voltage range indicator, 56; phase and continuity tester, 280
- Martonair (Canada) Ltd., use of Vyon plastic for air valve silencing, 243
- Martonair Ltd., lifter, 561; on plant and customers requirements, 566; on pneumatic equipment and customers requirements, 568
- Marviken atomic power station, approval sought for, 16
- Maser amplifier, 401
- Optical, 401
- Continuous light from (Bell Telephone Laboratories), 337
- Continuous wave (IBM), 129
- Maserati motor car, 329
- Mashinimport, 758
- Mask, paper protection (Gordon & Gotch), 666
- Masonellan control valve (Crosby Valve), 352
- Masonry, silicon treatments for, 587
- Massa, C., on Hydraulic Bending Press (book), 232
- Massachusetts Institute of Technology, centennial, 413; *Notes on Operations Research* (book), 428; USAEC assistance to, 456; *Notes on Operations Research* (review), 870; *Atomic Mechanisms of Fracture* (review), 903
- Massey-Ferguson Ltd., position and prospects, 489; coal burning experience, 577
- Mast, aluminium for yawl *Manita* (British Aluminium), 47
- Master Slave manipulator. See *Manipulator*
- Masterlock blocks (Metalock), 46
- Mastiff tractor shovel (Matbro Ltd.), 797
- Matbro Ltd., fork trucks (trade publication), 158; Mastiff tractor shovel, 797
- Materials (trade publications), 232, 264, 298, 808, 840, 872, 904
- Materials and drawing office equipment exhibition, national, 5
- Environmental effects on (National Academy of Sciences), 606
- and equipment, environmental effects on (National Academy of Sciences book), 706
- Handling, vibrator motor to help, 517
- High temperature, research at NPL, 709
- and laboratory apparatus exhibition, national, 5
- Models make for economy in, 862-863
- and plant supply in armaments industry, 36
- and plant supplies in production plant industry, 29
- and plant supply in telecommunications and electronics industry, 32
- Processing, design and development in, 70
- Future exhibitions on, 71
- Industry, expansion and investment in, 73
- Industry, external factors affecting, 71
- Industry, forecast for 1961, 73
- Industry, long term research in, 73
- Industry, management and labour in, 71
- Industry, market trends in, 71
- Industry, production in, 72
- Processing, outlook for 1961, 70-73. See *LETTER*, 136
- Supply in agricultural and food equipment industry, 167
- in data processing and business equipment industry, 120
- in domestic aids industry, 171
- and plant in building and civil engineering industry, 80
- in power plant and prime mover industry, 116
- in scientific and engineering instruments industry, 76
- in service industries, 162
- in transport manufacturing industry, 124
- Tester (Cawtell Research & Electronics Ltd.), 693
- Mathematical Tool-Kit for Engineers, by H. A. Webb and D. G. Ashwell (review), 232
- Mathematics, modern, great ideas of, by J. Singh (book), 808
- Teachers, shortage of, 888
- Vocabulary, German, 477
- Mather & Platt, trade with Russia, 457; position and prospects, 457; turnover, 457; profits, 457; trade with Russia, 705; historical note, 705; exhibit at British Trade Fair, Moscow, 705; alternator for Rhodesian Triangle Sugar Estates, 809
- Mather, W. L., on trade with Russia, 705
- Matheson, J. A. L., on Hyperstatic Structures (book), 112; (review), 806
- Mattei, J., on manufacture in Malta GC, 728
- Matter, waves and mechanics, introduction to, by U. Ingard and W. L. Kraushaar (book), 364; (review), 607-608
- Mattersons Ltd., Arithmetic gearbox, 188
- Matthews, J., on shipyards and workers, 281; on powers of union officials, 593
- Mattress spring testing machine (P. Fanghanel & Co. Ltd.), 404
- Testing machine (Vi-Spring Ltd.), 404
- Matz, W., on Wärme- und Stoffaustausch in Arbeitsdiagrammen (review), 263
- Maudling, R., on exports, 241
- Maudslay, J., historical note, 7
- Maufe, A. de L., elected chairman of Motor Car Safety Belt Manufacturers Committee, 229
- Maufe, Sir Edward, Guildford Cathedral, 690
- Maunsell, G., and Partners, Hammersmith flyover, 246-247
- Mavor & Coulson Ltd., reduction of scrap level in iron foundry, 38
- Mawson Base oil depot (BP Co.), 25
- Maxfield, M. W., on Statistics Manual (review), 574
- Maxim Aquavap evaporator (AMF Ltd.), 651
- Maxima and minima, theory of, by H. Hancock, (book), 776
- Maxwell Clerk, reciprocal theorem of, 862
- Maxwell, J. C., historical note, 7
- May & Hassell, Timbor impregnated timber, 867
- Mayall, W. H., on industrial design moves into engineering, 554-555
- Maybach diesel engines for trawlers (Bristol Siddeley), 69
- Maybach Motorenbau GmbH, licence to Bristol Siddeley to produce Maybach diesel engines, 69
- Mayer, A., on Chemical Analysis of Cast Iron and Foundry Materials (review), 66
- Mayorov, H. P., on Continuous Casting of Steel in Commercial Use (book), 576
- Mazelev, L. Ya., on Borate Glasses (review), 362
- McAlpine, Sir Alfred, & Sons, contract for Birmingham-Preston Motorway, 233
- McAlpine, Sir Robert, & Sons, completion of Carlton Tower Hotel, 159; new building for E. S. & A. Robinson Group at Bristol, 626; extensions to Toronto subway, 734
- McCance, Sir Andrew, on education for science and industry, 413
- McClary-Easy air heater (General Steel Wares Ltd.), 752
- McCobb, P., aluminium furniture design, 131
- McCorquodale, Lord, on apprenticeship schemes, 209
- McCoy, E., on Bibliography on Axial-Flow Compressors, including Blades, Cascades and Other Related Material (book), 104
- McDowell, John, historical note on patents for concrete mixing machines, 810
- McFadzean, Sir William, on exports, 549; on selling to Western Europe, 681
- McGowan, H. E., Jr., on Camco Inc., 609
- McGraw-Hill Encyclopedia of Science and Technology (review), 607-608
- McKay Creek power station in service, 187
- McKechnie Bros., common interests with Delta Metal Co., 565
- McKenzie, C. H., appointed chairman of committee on power stations in Scotland, 373
- McKenzie Committee, formation of, 373
- McKinlay Electrical Manufacturing Co. Ltd., model of bridge for British Railways, 863
- McLean, Leslie, Ltd., Tipp-Ex Type-Out and Cop-Ex Copy-Out papers, 873
- McLeod gauge (NGN Electrical Ltd.), 384
- McMaster University swimming pool atomic reactor, 725
- McMurdo Sound, PM-3A nuclear power plant for (Martin Co.), 16
- MCP Melita Ltd., operation in Malta GC, 728
- McVey, Sir Daniel, appointed chairman of British Aircraft Corp. (Australia) Pty., 897
- Mc. See also *Mac*
- Meal and pellets (Pine & Son Ltd.), 423
- Mears Bros. Ltd., foundations for Thames crossing of supergrid, 52
- Measurement of surfaces, 258-260
- Measurer, thickness, Xactray (Daystrom Ltd.), 222
- Measuring unit (Venner Electronics Ltd.), 445
- Mecha-Matic automatic gearbox, Hobbs, 357
- Mechanical aids on site, 794-795
- Engineers, professional, education and training of, 317
- Handling plant, ENGINEERING survey report on, 524
- Properties of intermetallic compounds, by J. H. Westbrook (review), 463
- Sealing as it stands today, by A. Lymer, 572-573
- Waveguides, by M. Redwood (book), 608
- Merchandise Marks Act of 1926, 233
- Merchandise Marks Committee, public inquiry on imported refrigerators, 233
- Mechanics, matter and waves, introduction to, by U. Ingard and W. L. Kraushaar (book), 364; (review), 607-608
- Non-linear continuum, and large elastic deformations, by A. E. Green and J. E. Adkins (book), 496
- Quantum, introduction to, by R. H. Dicke and J. P. Wittie (book), 298; (review), 607-608
- for Textile students, by W. A. Hanton (book), 68; (review), 675
- Mechanised world, growing old in, by F. le Gros Clerk (book), 133
- Meco belt conveyor (Mining Engineering Co. Ltd.), 531
- Medcalfe & Co. (1950) Ltd., Edlund can opener, 848
- Medical instruments, outlook for 1961, 74-77
- Irradiation device, Cesium, 15
- Device, Chisotron, 15
- Recording Service, aims and objects of, 556; formation of, 556
- Science, council of international organisations for, 593
- Scientific and technical library, Lewis's, 1957-59, supplement to the catalogue of (book), 24
- Mediterranean, Malta GC the workshop of, 728
- Mediterranean Wire Ropes, MAIB approve application for Malta production, 69
- Medlock, R. S., entertains Russian students, 865
- Medleycott, A., on Applied Building Construction (book), 496; (review), 806
- Medway Bridge, model of, 862
- Motorway M2, tenders issued, 233
- River, radar installation on, 465
- Megator Pumps & Compressors Ltd., Auto-Unit marine water pressure set, 445
- Megastatron electrostatic paint spray (Acrostyle Ltd.), 571, 598
- MEI Co. Ltd., Hotfoil heating tape, 339
- Meissner, C. R., on Sixth National Symposium on Vacuum Technology (book), 364
- Mellor, H. & T. (Engineers) Ltd., foil press, 190
- Melrose heart/lung machine, 705
- Melters, glass (Emhart (UK) Ltd.), 83
- Melting furnace. See *Furnace*
- Membrane permeation cell (Ionics Inc.), 237
- Memmert, G., on resonance absorption in heterogeneous systems, 456
- Men and molecules, by C. R. Theiler (review), 330
- Mendelssohn, K., on Progress in Cryogenics (book), 872
- Menrow pump (Mono Pumps Ltd.), 820
- Menzel, Prof. D. H., on ultra-ionospheric flight of radio telescopes by Blue Scout rocket, 237
- Menzies, L. J., appointed president of Union d'Assureurs des Credits Internationaux, 873
- Mercantile Bank, loan to Ceylon, 881
- Mercedes Benz, GP motor car, 65; motor car production, 410; 220SE motor car, 501
- Merchant ships. See *Ships; Liners; Tankers, etc.*
- Mercury computer, Ferranti, optimisation procedure on, 860
- Electrodes, dropping, device for the synchronisation of two, by W. H. Lockwood (paper), 456
- Satellite, 623
- Programme of US, 662
- Space project, US, 557
- Meridian, precision indication of the, equipment, PIM, 700
- Mersey, bridge recommended for, 177
- New tunnel recommended, 177
- Merseyside, unemployment in, 217
- Merthyr Tydfil College, exhibition of craft training, 737
- Merz & McLellan, *Progress in Power*, by J. Rowland, 296; Wairakei geothermal project in New Zealand, 732
- Mess- und Regeltechnik (Verlag Chemie book), 200
- Mesucora, control developments from, by C. J. Charnley, 804
- Exhibition and Congress, 804
- Metachemical Processes Ltd., electrochemical machining process, 300
- Metal alloys, precious, table of, 210
- Precious, uses of in brazing, 210-211
- Cast, making moulds for with undercuts, 866
- Casting. See *Casting*
- Coatings, sprayed (trade publication), 232
- Columns. See *Columns*
- Cutting with carbon dioxide coolant, by L. L. Arundel, 266-267
- Determination of the mechanical and technological properties of, by B. M. Gliner (book), 68
- Metal fatigue, by J. A. Pope (review), 903
- Fibre seals, 475
- Filled polyester compound, 867
- Fracture of, course on, 281
- Metal Industries Ltd., purchase of Alcol Holding Pty. and subsidiaries, 397
- Machining of. See *Machining*
- Metal makers prod furniture designers, 130
- Newer, symposium on (ASTM) (review), 332
- Non-ferrous, European industry, guide to the principles of costing in (review), 199
- Outlook for 1961, 70-73
- Physical examination of, by B. Chalmers and A. G. Quarrell (book), 298; (review), 639
- Metal & Pipeline Endurance Ltd., Mapel Holiday detector, 890
- Plastic working of, 434
- Platinum (trade publication), 298
- Powder to produce metal sheet, 267
- to strip, equipment for converting (E. W. Bliss Co.), 587
- Precious, years, two hundred, by R. E. Wilson (book), 264
- Sheet. See *Sheet*
- Structure of—a modern conception (Institute of Metallurgists) (review), 903
- Tough, shaped by electrical explosion (GEC (US)), 645
- See also *Metallurgy*
- Metalaces (Metalock), 46
- Metalastik Ltd., Duolastik Torque Transfer Link coupling, 536
- Metalelectric Furnaces Ltd., atmosphere controlled batch furnace for Stewarts and Lloyds, 635; Unicarb furnace for Ford Motor Co., 635; nitriding plant for Leyland Motors Ltd., 635
- Metallisation Ltd., sprayed metal coatings (trade publication), 232
- Metallizing Equipment Co., renamed Metco Ltd., 771
- Metallographic specimens (trade publication), 808
- Metallurgical Services, end-quench unit, 444
- Metallurgy of beryllium, conference on, 757
- Engineering, by R. A. Higgins (book), 872
- See also *Iron and Steel; Metal; Metallographic; Foundry; Steel; etc.*
- Metalock (Britain) Ltd., repairs to fractured casting, 46; Metalock keys, 46; Metalaces, 46; Masterlock blocks, 46
- Metco Ltd., sprayed liners for cylinder blocks, 771; *Metco News*, 771
- Metco News*, 771
- Meter, ampere demand (Ferranti Ltd.), 444
- Frequency and capacity (Solartron), 596
- Gas, Zephyr (Parkinson Cowan), 159
- (Sturtevant Engineering), 805
- Universal, Gossen Uphi (Aveley Electric Ltd.), 351
- Water (Parkinson Cowan Measurement), 825
- (Parkinson Cowan), 597
- Meterflow Ltd., flowmeter, 254; converter, 279
- Meteorological experiments by Texas University, 749
- Metex, agreement with Forano Co., 333
- Metool cable reeling machine (Metropolitan Tool & Products Ltd.), 417
- Metox oxide resistors (Welwyn Electric), 56
- Metron echo-sounder (Marconi), 339
- Metropole Industries Group, Ferranti Sirius computer for data processing, 673
- Metropolitan-Cammell Carriage & Wagon Co., output declined, 769; Vickers participation in, 769
- Metropolitan-Cammell-Weymann Ltd., bus bodies for Gradsko Saobracajno Preduzece, 577
- Metropolitan Line, new rolling stock for, 820
- Metropolitan Tool & Products Ltd., Metool cable reeling machine, 417
- Metropolitan-Vickers Beyer Peacock Co., voluntary liquidation of, 769
- Metzler, purchase of rights to manufacture spectacle frames from Instrumentarium, 333
- Mexican industry, British equipment for, Engineering Centre's group exhibit, 397
- Mexico City Exhibition, Engineering Centre group stand exhibit, 397
- IAEA experts to assist in, 387
- Micanite & Insulators Co., historical note, 421; subsidiaries of, 421; products, 421
- Michael & Partners Ltd., reservoir for River Dove Water Board, 350
- Michel, A., on hydraulic grading and washing of sands, 894
- Michigan (Great Britain) Ltd., tractor shovel, 598
- Michigan University, USAEC assistance to, 456
- Micro-Hollander stainless steel wire cloth (United Wire Works Ltd.), 439
- Micro-leak detection (Vacuum Research), 83
- Micro metering pump (Distillers Co. Ltd.), 14
- Microcell Electronics Division, data logging scanner, 222
- Microcell Ltd., agreement with Emerson & Cuming Co. to market plastics for electronics in UK, 149; position and prospects, 257; Plasticell expanded pvc, 551, 739, 834
- Micrometrical Manufacturing Co., formation of, 258; Profilometer, 258
- Microminiaturisation of electronic assemblies, proceedings of symposium on, by E. F. Horsey and L. D. Shergalis (review), 198
- Microphotography. See *Photomicrography*
- Microscope, biological, M15 series (Cooke Troughton & Simms Ltd.), 62-64
- Microtechnica profile projector (Headland Gauges Ltd.), 528
- Microtopography, surface, by S. Tolansky (review), 576
- Microwave communication, low noise for, 400-401
- Radio. See *Radio*
- Midget Miner, Crawley (Crawley Industrial Products Ltd.), 669
- Midland Bank Ltd., Forward Trust as subsidiary of, 159
- Midland Electrical Manufacturing Co., new factory in Anglesey, 217
- Midland Industries Ltd., MilTherMatic steam trap, 153

- Midland Silicones Ltd., silicone treated paper (trade publication), 232; MS4 silicone grease, 343; new plant for, 551; production of methyl chloride commenced, 551; cold cure silicone rubber, 551; silicone compounds (trade publication), 808; suppliers of processed silicone rubber (trade publication), 872
- MIG miniature integrating gyroscope (Minneapolis-Honeywell Regulators Corp.), 700
- Migrant Australia, by J. M. Giles (review), 746-747
- Miles, F. G. Ltd., acquired by BEAGLE, 833
- Miles Hivolt Ltd., 487; subcritical assemblies, 487. See LETTER, 620; agents for Inter-technique drum type precipitator, 600; zone refiner, 660; atomic reactor simulator, 864
- Miles, John, & Partners, iron granulation plant, 126
- Millford Haven, Angle Bay ocean terminal for BP Co., 626, 633
- Milhaud, M. J., on problems of international organisations, 593
- Mill, cutter, Apex (Apex Construction Ltd.), 12
- Housing, silver replica, presented to Mr. Nehru, 565
- Pepper, electric, "Peppy" (General Trade Equipment Ltd.), 472
- Provender (Turner-Heesen), 423
- Pulverising, model of, 850
- Rolling. See *Rolling Mills*
- Millbank Development, Vickers Building, Plasticell thermal insulation panels for, 834, 809
- Miller, E., on Thermoelectric Materials and Devices (book), 428
- Millet, Levens Ltd., printed circuits automatically etched, 773
- Milling, end, 571
- Face, 571
- Machine, control system for, Emicon (EMI Ltd.), 399
- (Droop & Rein), 399
- Gambin, 554
- Horizontal, for Armstrong Whitworth (Craven), 39
- as lathe, 127
- MagneTRACE (Buck & Hickman Ltd.), 767
- Range of (TOS), 234
- Schaffner (Dowling & Doll Ltd.), 484
- (Strojexport), 221
- of unit construction, 234
- Vertical (Technoimpex), 416
- Outlook for 1961, 164-167
- Millom Hematite Ore & Iron Co., relining blast furnace, 641; hematite pig iron, 641
- Mills, J., on Construction of Ford Specials (review), 638
- Mills, Lord, on iron and steel industry, 777
- MilTherMatic steam trap (Midland Industries Ltd.), 153
- Mine, Carnelloe, project, public inquiry into, 480
- Lac Jeannine, 729
- Low pressure stowing in, 482
- Rescue Superintendent's Conference, 802
- Winding gear (AEI Ltd.), 787
- See also *Coal; Collieries; Mining; Ores; Winding*
- Miner, Continuous, Crawley-Wilcox (Crawley Industrial Products Ltd.), 669
- Midget, Crawley (Crawley Industrial Products Ltd.), 669
- Mechanical, in faulted shale, by L. B. Underwood, 894
- Mineral oils. See *Oils*
- Outlook for 1961, 70-73
- Resources, apathy towards, 480
- See also *Coal; Mining; Ores*
- Minerva Mouldings Ltd., handles for Wolf electric soldering irons, 619
- Mini-camera television camera, EMI (EMI Electronics Ltd.), 650
- Mini-Minor motor car, 823
- Minima and maxima, theory of, by H. Hancock (book), 776
- Mining, coal, thin seam, 669
- See also *Coal; Colliery*
- Mining Engineering Co. Ltd., Mecob belt conveyor, 531
- Mining equipment (trade publication), 496
- and kindred subjects, historic books on (book), 296
- Manpower and fuel policy, 9
- Outlook for 1961, 78-81
- Research Establishment, sensing device, 669
- Sprayed seals of rubber latex in, 802
- Techniques in Mont Blanc tunnel, 143
- Minipack water pressure system (Mono Pumps Ltd.), 560
- Minirupteur circuit breaker (Societe SERMEC), 275
- Ministry of. See *Education; Health, etc. Ministry of Labour Gazette*, 625
- Minneapolis-Honeywell Regulator Corp., MIG miniature integrating gyroscope, 700
- Minnesota Mining & Manufacturing Co., use of lead telluride cells, 648
- Mirage III aircraft, Dassault, first flight of, 429
- Mirrlees, exhibit at Moscow Trade Fair, 465
- Mirror Machine Experiment, Harwell, model to test, 877
- Missiles and aircraft, manufacture of, by M. P. Guibert (review), 706
- Ballistic, Pershing, 909
- Blue Streak, cost of, 381
- Hawk, companies producing for NATO, 397
- Mobile launchers for (Northrop Corp.), 397
- Outlook for 1961, 34
- Missiles and Rockets, 198
- Seaslug, guidance system for (GEC Ltd.), 909
- Mississippi River, revetment construction on, 627
- Mistless spraying of paint, 2
- Mitchell Engineering Ltd., boiler drums for South Africa, 270; consortium with Fairfield Shipbuilding & Engineering Co. Ltd. and Combustion Engineering, 333; freeze drying plant, 335; uses of Marinite, 770; design of boiling water atomic reactor for Lardarelle power station, 800; experience in South Africa, 533; formation of Mitchell Engineering Proprietary Ltd., 533
- Mitchell Engineering Proprietary Ltd., formation of, 533
- Mitchells, Ashworth, Stansfield & Co. Ltd., motor car safety belts, 261
- Mitcheson, T., Ltd., trawlers for Pelagic Trawling Co., 69
- Mite-t-Lite miniature tungsten filament lamp (Thorn Electrical), 237
- Mitsubishi Nagasaki, diesel engines, 594
- Mitsubishi Nippon Heavy Industries, refrigerated tanker ship for Bridgestone Liquefied Petroleum Gas Co., 439
- Mitsui Bussan Kaysha, contract for Viscount aircraft on behalf of All Nippon Airways, 465
- Mitsui Co., acceptance of first Viscount aircraft for all Nippon Airways, 873
- Mixconcrete batching plant (Service Engineering), 145
- Mixing machine, concrete (Construction Machinery Ltd.), 797
- Concrete, Winget 3½ TS (Winget Ltd.), 810-812
- Domestic, outlook for 1961, 168-171
- Food, Peugeot Squirrel (Rudson Wood & Co. Ltd.), 848
- High speed, Waring (Winston Electronics Ltd.), 251
- Laboratory (Atlantic Research Corp.), 697
- Powder, Airmix (Wm. Gardener & Sons (Gloucester) Ltd.), 692
- Reverse drum (Winget Ltd.), 798
- MK Electric Co. Ltd., Locator electro-luminescent panel, 88
- ML-1 atomic reactor, delivered to National Reactor Testing Station, 388; criticality, 664
- Moata atomic reactor critical (Australian Atomic Energy Commission), 632
- Mobil Oil Co., SETRA rig for testing radiation resistant oils and greases, 191
- Mobot manipulator (Hughes Aircraft Co.), 520
- Mobrey blow-down cock (Ronald Trist & Co. Ltd.), 559
- Model of bridge, 863
- Clifton Bridge, 862
- in Cranfield Work Study School, 868
- Engineering's universal language, 850-851
- Factory (Molins Machine Co. Ltd.), 868
- Planning (Dunlop Advisory Service Ltd.), 868
- Roof, 863
- Full size, 851
- Gharraf canal, 471
- Hammersmith Flyover, 862
- Hinkley Point atomic power station, 850
- Hydraulic, of Tees Estuary, 877
- (Industrial Models), 868
- for industry (Bassett-Lowke Ltd.), 850-851
- for industry (Partridge's Models Ltd.), 856, 862-863
- for industry (Westway Models Ltd.), 849
- Layouts, 3-D, use and abuse of, 868-869
- for training (T. H. & J. Daniels Ltd.), 868
- for lighting research, 869
- Liner *Windsor Castle*, 851
- Loch Turret Spillway, 470
- Make for economy in materials, 862-863
- Medway Bridge, 862
- Motor cars (Coventry Laminates Ltd.), 21
- for planning (Simon Engineering), 868
- Pulverising mill, 850
- Roof of Birmingham University, 863
- Salaverry Harbour, Peru, 470. See LETTER, 685
- Short VTOL aircraft, 684
- in silver (Garrard & Co. Ltd.), 852
- Slabbing mill at Abbey Works, 850
- Smithfield Market roof, 863
- Styling, in Araldite epoxy resin (Austin), 855
- Testing service of Cement and Concrete Association, 862
- Thermonuclear theory test, 877
- Uses of, 856, 862-863
- Visual Planning Systems, 868
- Working, 868
- Kits of (Weyco Sales Ltd.), 868
- Moderator, measurement of scattering law for, by P. A. Egelstaff, 520
- Modern Machine Tools Ltd., position and prospects, 17
- Moffats Ltd., Fiesta cooker, 752
- Mohr and Federhaff AG., universal testing machine, 530; creep tester, 530
- Mohr, John, & Sons, agreement with Newton Chambers & Co. for production of Mohr designed blast furnaces, 665; historical note, 665; furnace for Republic Steel Corp. of America, 665; furnace for United States Steel Corp., 665
- Moisture content, measurement of, by K. Ukai, 894
- Continuous measurement of, by D. J. Fraade, 720
- Mole construction on Escravos River, 731
- Molecular electronic function blocks, outlook for 1961, 33
- Molecules and men, by C. R. Theiler (review), 330
- Molins Fliptop Packaging machine (Molins Machine Co. Ltd.), 610-612
- Molins Machine Co. Ltd., Molins Fliptop Packaging machine, 610-612; model of factory, 868
- Molten Salt atomic reactor experiment, use of thorium in, 896
- Molybdenum disulphide oil additive (trade publication), 872
- Mombasa Harbour, berths built at, 828
- Monaco, agreement on research with IAEA and Oceanographic Institute of Monaco, 387
- Monaghan, G., on two-element fluid couplings, 853-854. See LETTER, 885
- Monarch centre lathe (Rockwell Machine Tool Co. Ltd.), 384
- Mond, Dr. L., historical note, 7
- Mond Nickel Co. Ltd., chromium plating (trade publication), 298
- Mondiale Gallic 16 centre lathe, 554
- Mondolfo, Dr. L. F., new theory on silver iodide cloud seeding, 175
- Monitor, automatic, for linen yarn industry, AMY, 813
- Foam, Super-Jet (Pyrene Co. Ltd.), 484
- Water radioactivity (Elliott-Nucleonics Ltd.), 58
- Monk, A., & Co. Ltd. fish ladder for River Trent, 558
- Monks & Crane, Macolaep abrasives grits, 135; Fortemat horizontal bandsaw, 726
- Mono Pumps Ltd., Junior powder pump, 532; Menrow pump, 820; Minipack water pressure system, 560
- Monometer, vacuum, NEL (NGN Electrical Ltd.), 857
- Monopoly, control of in the UK, by P. H. Guenault and J. M. Jackson (review), 427-428
- Monorail installation for UKAEA at Winfrith Heath, 397
- Monotype Corp., exports and new equipment, 489; new plant at Dunfermline, 489; annual report, 489; position and prospects, 489
- Mont Blanc tunnel, mining techniques in, 143
- Moog-Servo Controls Inc., servo valves, 818; licence agreement with Dowty Rotal Ltd., 818
- Moon Bros. Ltd., drum making plant, 484; drum opener, 826
- Moon, race for the, by M. Caidin (book), 200
- Moore, H. R., on Associated Engineering Group, 61
- Moore, R. V., appointed managing director of UKAEA Reactor Group, 324
- Moorgate and Wall Street, 505
- Mops, buffing, Airflow (W. Canning & Co.), 586
- Sisal, Stapol (W. Canning & Co.), 586
- Morale, report writing improves with, by B. C. Brookes, 315-316
- Morecambe Electrical Equipment Co. Ltd., switchboards, 701
- Morewear Goose detachable dumper truck (Mackay Industrial Equipment Ltd.), 596
- Morfax Ltd., research on fast steel cutting with carbon dioxide as coolant, 266-267; specialist services (trade publication), 576; servicing equipment (trade publication), 676
- Morgan Crucible Co. Ltd., graphite bearings, 178; tube furnaces (trade publication), 464; *Carbon and Its Uses*, 774
- Morgan, J. H., on spending for farm mechanisation, 299
- Morgan Refractories Ltd., firebricks (trade publication), 232; mullite firebrick (trade publication), 808
- Morganite Carbon Ltd., *Carbon and Its Uses*, 774
- Morganite Crucible Ltd., crucibles, furnaces and foundry accessories (trade publication), 808
- Morgantown gas recycle system, 224
- Morocco, IAEA experts to visit, 387
- Morris, B. O., Ltd., Hammond profile polishing machine, 56; abrasive cutter (trade publication), 68
- Morris & Butters, formation of by Butters Bros. & Co. and Herbert Morris Ltd., 299; B. Butters appointed chairman, 299; A. Sykes appointed managing director, 299
- Morris, Herbert, Ltd., conveyor systems (trade publication), 158; formation of Morris & Butters with Butters Bros. & Co., 299
- Morris, J., on damping a rotating shaft, 621. See LETTERS, 312, 654
- Morris Motors Ltd., return to overtime working, 480
- Morrisflex Group, inclusion in Harper Engineering and Electronics Group, 325
- Morrison-Knudsen, bid for contract on Volta River project, 333
- Morse, Sir Arthur, on Bowmakers, 257
- Mortimer Machine Tool Co. Ltd., large key-seating machine for Manganese Bronze & Brass Co., 335
- Morton, B., on openings for new works in US, 136
- Moscow, British industry in, 705
- British Trade Fair. See *British Trade Fair (Moscow)*
- East German Republic Exhibition, 809
- Motherwell Bridge & Engineering Co. Ltd., Pantak x-ray units to check reactor pressure vessel welds, 235; Hunterston atomic power station pressure vessels, 235
- Moto Plastics Ltd., plastic crane cab, 739
- Motor boat. See *Boat*
- Motor Books & Accessories Ltd., Bendix electric fuel pump, 855
- Motor car accidents, diagonal safety belts are best in, by D. C. Herbert, 718
- Alfa Romeo Giulietta Sprint Speciale, 329
- Alvis 3 litre (Alvis Co.), 61
- Aston Martin DB4, 329; more comfort and performance for, 663
- Austin Healey, restyled and power increased, 760
- Austin Healey Sprite, disc brake conversion set for (Donald Healey Motor Co.), 197
- Austin Seven, towing Nymph caravan on continental tour, 497
- Berlinetta Grand Touring, 65
- Bluebird, tests on safety belts, 261
- Bodies, corrosion in, 687
- Body panels, press dies for, 460
- Boom in Germany, 365
- Brakes, modern, are they always good enough?, by G. Wilkins, 197
- British, rising sales in Switzerland, 465
- Capital allowance on, 649
- Cedric, Japanese, 95
- Ceramic silencers for, 95
- Chevrolet Corvette, 687
- Citroen "deux chevaux," 95
- Citroen DS19, 592
- Components, 410
- Consul Classic 315 fills the gap in the Ford range, by G. Wilkins, 760
- Continental, power and elegance in, by G. Wilkins, 592
- Motor car, Cooper Formula junior, 65
- Corrosion free finish, 687
- DAF. See LETTER, 4
- Daimler SP 250, 687
- Designed to Feel at Home Anywhere, by J. Rabson, 724
- Disc brakes, 501
- DKW junior, 501
- Motor Car Driving for Beginners (review), 24
- Motor car electrical equipment, 286
- Electrics, reliability of, 286
- Electrics are taking over new tasks, by J. Rabson, 286
- Electronic ignition system for (Joseph Lucas Ltd.), 501
- Engine, Jaguar XK, by B. Lister, 887
- Engine, rear, revolution in racing cars, by G. Wilkins, 630
- Engine, sports, in stainless steel, 139
- Engine, stainless steel, TnT (Tyce Engineering Corp.), 139
- Exhaust gas burner, Smog-Burner (Chromalloy Corp.), 175
- Export in "completely knocked down condition," 724
- Exports fall, 365
- Exports from Germany, 201
- Exports from Germany increase, 25
- Facel Vega Facellia, 592
- Ferrari Berlinetta, 329
- Ferrari Superamerica, 592
- Firms, short time working in, 309
- Ford Anglia, 823
- Formula junior, 65
- Fuel consumption in, 112. See LETTER, 854
- Grand touring, today, by B. Lister, 329
- Imports in US, 69
- Increase of, 215
- Industry, in China, 95
- Industry in Germany, 410
- Industry, industrial relations talks, 480
- Industry in Japan, 95
- Industry, labour relations in, meeting to discuss, 9
- Industry in Poland, improvising in, 95
- Industry, short time in, 97
- Industry, statement signed by unions and employers, 593
- Industry, strikes in, 593
- Industry. See also *Motor industry*
- Jaguar E-type, details of, 393; production of, 491
- Jaguar GT, 329
- Jaguar, lighter, faster, quieter, by G. Wilkins, 393
- Jaguar XKSS, 329
- Lancia Zagato Appia, 592
- Lotus Elite, 65, 329, 687
- Lotus Formula junior, 65
- Maserati, 329
- Mercedes 220SE, 501
- Mercedes Benz, production, 410
- Mercedes GP, 65
- Mini-Minor, 823
- Minor faults in, 823
- Model (Coventry Laminates Ltd.), 21
- New models' teething troubles, by J. Rabson, 823
- Orders taken for UK cars at New York automobile show, 505
- Outlook for 1961, 122-125
- Petrol consumption research, 215-216
- Peugeot 404, 592
- Plastics in, 687
- Preparing for a foreign tour, 799
- Motor Car, Private (book), 24
- Motor car production, closed circuit television as aid to, 334
- Production compromise, 823
- Production, weather protection for, by H. C. F. Haywood, 687
- Quality in, 95
- at Racing Car Show, 65
- Racing, rear engine revolution in, by G. Wilkins, 630
- Racing, show, exhibits at, 65
- Renault Dauphine, aerostable suspension uses neoprene, 581
- Safety belts, anchorages for, 261
- Safety belts, Bluebird car tests on, 261
- Safety belts, cost of, 229
- Safety belt manufacturers, committee of, 229; members of committee, 229
- Safety belts, summarising, 229
- Safety belts, table of manufacturers of, 261
- Safety belts, tests on, 229
- Safety screen instead of safety belt by A. J. L. Bioul, 229
- Safety straps for, 179
- Sales, continuing depression in, 97
- Salesmen, more effort needed by, 113
- Shows, 95
- Small, stimulus to research. See LETTER, 4
- South Africa reduce import quota, 69
- Sports, engine in stainless steel, 139
- Sports, orders taken at New York automobile show, 505
- Standard, tuning kits for (Speedwell Ltd.), 65
- Superchargers (Shorrock Superchargers Ltd.), 65
- Testa Rossa Ferrari, 65
- Trends in, 410
- Trends in design, 95
- Triumph Herald—13 per cent More Power, by G. Wilkins, 581; price reduction, 465
- Turboflite with gas turbine engine (Chrysler Corp.), 663
- Volga, Perkins diesel engine for, 641
- Volkswagen, new design for, 410
- Zaporozhets, production in Russia, 95
- See also *Motor vehicle*
- Compressed air (Austin Hopkinson & Co. Ltd.), 763
- Cycle, Ariel Leader (Ariel Motor Co.), 194-196
- Industry, short time working in, 141
- Racing, BP book of, by M. Walker (review), 807
- Electric, AC, control and distribution gear, by R. T. Lythall (review), 575

- Motor, electric, Controller, electronic (Henry A. Cole & Co. Ltd.), 652
 — DC (A. W. Haydon Co.), 13
 — Improved protection for windings, 293
 — Slip ring (Crompton Parkinson Ltd.), 661
 — Split-field (Vactric), 101
 — Stepping (A. W. Haydon Co.), 101
 — Windings encapsulated with epoxy resin, 293
 — Generator (Electric Construction Co. Ltd.), 280
 — for welding, Lincoln (Lincoln Electric Co. Ltd.), 578-580
 — Industry, extended period for H.P. repayments, 133
 — Research Association, research on safety belts, 229; facilities available, 724; proving ground, 823; research and development facilities, 823
 — Who's who in the (book), 840
 — See also *Motor-car industry*
 — Internal-combustion. See *Aircraft engine; Engine; Motor-car engine; Motor car; Tractor*
 — Launches. See *Boat*
 — Lorries. See *Motor vehicles*
 — Marine. See *Engine; Marine propulsion; Turbine*
 — Petrol. See *Engine, petrol; Boat; Motor car; Tractor*
 — Show, International, Geneva, 592
 — Transport Scientific Research Institute, Hungary, sulpho-nitro cementing of steel and cast iron, 85
 — Vehicles, alternators for, 492
 — Austin Gypsy, ordered by film companies, 497
 — Bus. See *Bus*
 — Bulk transport, Pneumatorator (Bonalack & Sons Ltd.), 766
 — Commercial, European production, 146
 — Commercial, exports, 146
 — Commercial, International Exhibition, 146
 — Commercial, selling in Europe, by R. Bailey, 146
 — Commercial, technical regulations in ECM countries, table of, 146
 — Daimler Fleetline, 389
 — Diesel engine for, 595
 — Dumper. See *Dumper*
 — Engine, gas-turbine (Austin), 424
 — Industry, full-time working, 381
 — Lorries, heavy, table of technical regulations for in ECM countries, 146
 — Manufacture, outlook for 1961, 122-125
 — (Passenger Insurance) Bill, 197, 229
 — Pollution Control Board, tests on Smog-Burner car exhaust gas burner, 175
 — Safety belt assemblies for BS 3254 (BSI), 718
 — Seat belt assemblies for, BS 3254 (BSI), 229
 — Trucks designed for ECM, 206
 — Trucks, outlook for 1961, 122-125
 — Truck. See also *Truck*
 — Vans, outlook for 1961, 122-125
 — Vibrator (English Electric Co., Ltd.), 517
 Motorway accident distribution, 625
 — Birmingham-Preston, Lancashire County Council award contracts to Sir Alfred McAlpine & Sons and Leonard Fairclough Ltd., 233
 — Design, safety aspects of, by W. F. Adams, 625
 — Durham, proposal to use disused railway track, 320
 — M1, grit stores along, 11
 — Medway, M2, tenders issued, 233
 — Ross Spur (William Briggs & Sons), 489
 — Tunis project, 809
 Mott, Hay & Anderson, Forth Road Bridge, 10, 448; report on Liverpool traffic jams, 177; recommendation for new tunnel and bridge for Mersey, 177; Runcorn-Widnes bridge, 321; duplication of Blackwall Tunnel, 349-350; Severn Road Bridge, 379; Victoria Line underground railway, 414
 Moulds, cast metal, making with undercuts, 866
 — in Tandium metal, 866
 Moulding compound, dough (British Resin Products Ltd.), 619
 — Expanded polystyrene (trade publication), 232
 — Mechanised, transforms foundry, 836
 — See also *Foundry*
 Mountford, J., & Co., sub station for North Western Electricity Board, 867
 Mounting, flexible (Silentbloc Ltd.), 425
 Movement simulated on flat picture (Technical Designs Ltd.), 851
 Movigraph Rotadates chart system, 127
 Movotron animated display device (Technical Designs Ltd.), 851
 Moxey Ltd., copper extrusion plant for Thomas Bolton & Sons Ltd., 773
 MTD (Mangula) Ltd., annual report, 457; position and prospects, 457
 M.T.E. Control Gear Ltd., Progress heating control contactors, 280
 Mu meson, similarity with electron, 205
 Mueller, Dr. G. E., on active communications satellites, 893
 Muir-Hill concrete dumping truck (E. Boydell & Co. Ltd.), 189
 Mullard Equipment Ltd., linear accelerator for x-ray examination of welds, 191; exhibit at British Trade Fair, Moscow, 758
 Mullard Ltd., transistor power unit, 189; Tenicon high resolution storage electronic tube, 236; melt temperature control for crystals, 772
 Mullard Research Laboratories, Banana tube system for colour television, 814-815
 Mullens, H. H., elected deputy president of BEAMA, 447; on A. Reyrolle & Co., 633; on C. A. Parsons Co., 737
 Muller, L., on safety of rock abutments, 894
 Muller-Munk, Peter, Associates, study of steel for furniture, 130
 Müllett, L. B., transferred from UKAEA to National Institute for Research in Nuclear Science, 632
 Mullite firebrick (trade publication), 808
 Multiflash evaporating system (G. & J. Weir Ltd.), 604
 Multi-socket, 13 amp (British Central Electrical Co.), 88
 Munce, J. F., on Industrial Architecture (book), 540
 Muntz, Alan, & Co. Ltd., automatic air valves, 270
 Muon, similarity with electron, 205
 Muramatic deckwelder (Murex Welding Processes Ltd.), 561
 Murex Welding Processes Ltd., Muramatic deckwelder, 561
 Murphy Radio Ltd., Board of Trade approval for system for continuous weighing of belt conveyed solids, 203
 Museum telephone exchange, tower building for, 219, 236
 Mystic Adhesive Products, association with Gordon & Gotch (Sellotape) Ltd., 666
- ## N
- N.A.G. Press, *Watch and Clock Yearbook*, 1961 (book), 576
 Nails, self-locking, Venales, for roofing felt, 483
 Nairn, P., review of Principles of Machine Woodworking: Sawing and Planing, 903; biographical note, 904
 Napier, D., & Sons Ltd., losses, 389; to exhibit at Sydney Trade Fair, 541
 Napier, R., historical note 7
 Narmada Valley Project opened in India, 731
 Nash & Thompson Ltd., Nashon cathode-ray polarograph, 677
 Nashon cathode-ray polarograph (Nash & Thompson Ltd.), 677
 National Academy of Sciences, *Science in Space* (review), 67; *Environmental Effects on Materials and Equipment*, 606, 706
 National Aeronautics and Space Administration, proposals for research into nuclear rocket engine, 388; licence to operate atomic reactor, 632; plans for UK's second satellite, 645; development of atomic rocket engine, 800
 — Apprentices dinner, 689
 — Association for Clean Air, research on diesel oil additives, 835
 National/Brush diesel alternator sets for Machinimport (Hawker Siddeley), 809
 — Cancer Institute of Brazil, IAEA assistance to, 387
 — Certificates of Commerce, 447
 — Chemical Laboratory, inhibiting corrosion of mild steel, 845
 National Coal Board, recruiting campaigns, 9; manpower statistics, 9; revenue increase, 141; rise in wages bill, 141; meeting with National Union of Mineworkers, 141; wage offer refused, 141; shortage of skilled labour, 141; demand for pvc belting, 257; mechanisation programme, 273; sales campaign, 273; cleaning and blending coal, 273; battle with oil, 273; A. Robens appointed chairman, 405; low pressure stowing in mines, 482; spring campaign, 577; drive to increase productivity, 603; mechanisation, 603; use of Anderton coal shearer and loader, trepanner and plough, 603; success of sales efforts, 641; demonstration houses opened in Pimlico, 641; on coal imports from US 689; sale of coal from vending machines, 721; plough for armoured flexible conveyor, 820; nylon/cotton conveyor belts for (BTR Industries Ltd.), 867
 — College of Food Technology, opened by Duke of Edinburgh, 1; sponsored by Ministry of Education, 1
 — Council of Social Service, *Employment and Workshops for the Elderly*, 413
 — Drawing Office Equipment and Materials Exhibition, 5
 — Engineering Laboratory, studies of abrasive wear resistance, 546-547
 — Federated Electrical Association, agreement on costs and profits, 381
 — Federation of Building Trades Employers, apprenticeship scheme, 185; annual report, 209; index of work, 209; trends in building industry, 209; sponsorship of International Construction Equipment Exhibition, 641
 — Foundation for Educational Research, experimental use of closed circuit television in schools, 447; *Technical Education Abstracts from British Sources*, 838
 National Gas & Oil Engine Co. Ltd., exhibit at Moscow Trade Fair, 465
 — Industrial Fuel Efficiency Service, heat and power surveys, 549
 — Safety Conference, 556, 689
 — Salvage and Recovery Council, main aims of, 241; *Industrial Salvage*, 241
 — Inspection Council for Electrical Installation Contracting, Roll of Approved Contractors, 308
 — Institute for Research in Nuclear Science, to assume responsibility for particle accelerators from UKAEA, 632; L. B. Mullett transferred from UKAEA, 632; Nimrod proton synchrotron, 632; aid to Oxford University for nuclear research centre, 832
 — Joint Advisory Council, on misuse of labour in industry, 657
 — Ford Negotiating Committee, meeting with Ford management, 97
 — Laboratory Apparatus and Materials Exhibition, 5
 — Lending Library of Science and Technology, 688
 — Old People's Welfare Council, report on workshops and employment for the elderly, 413
 — Paint Federation, formation of Paint Manufacturers' Joint Executive Council, 841
 — Physical Laboratory, research on materials at high pressures, 614-615; research at, 709
 — Power Conference, 5
 — Farming Conference, 299
 National Production Advisory Council, meeting of, 209
 — Reactor Testing Station, Idaho, explosion at, 148; gas cooled reactor experiment, 223
 — Reference Library of Science and Invention, 688
 — Research Council of Canada, research on load bearing capacity of ice, 186; *Experimental Blasting Studies*, 482
 — Council of Ghana, health physics unit set up, 725
 — Development Corp., financial backing for ideas, 96; powers of, 96; activities of, 96; purpose of, 96; backing for small firm's ideas, 96
 — Shower cubicle (Watts Metal Industries Ltd.), 44
 — Society for Clean Air, *Clean Air Year Book*, 870; *Proceedings of Diamond Jubilee International Clean Air Conference* (book), 68
 — Swedish Road Board, research on car safety belts, 718
 — Union of Mineworkers, development of coal shortage, 9; meeting with National Coal Board, 141; National Coal Board wage offer refused, 141
 — of Vehicle Builders, disapproval of unofficial strikes, 447
 Nationalisation Acts, 322
 — Takes a Different Twist, by J. Hennessy, 322
 Nationalised industry and public ownership, by W. A. Robson (review), 639-640
 NATO. See *North Atlantic Treaty Organisation*
 Natural gas pipeline from British Columbia to Vancouver Island, 45, 131
 Naval architecture, basic, by K. C. Barnaby (book), 640
 Navigation, aircraft, moving map display for, 852
 — of rivers, 55
 Navigator, Decca, Mark 10 (Decca Navigator Co. Ltd.), 390-392
 Navy, Royal. See *Royal Navy*
 Nchanga Consolidated Copper Mines, haulage-way through hard rock, 380
 NCK-Rapier Ltd., crawler mounted cranes (trade publication), 200; position and prospects, 697; record turnover, 697; Koering excavating machine, 798
 Neal, R. H., & Co. Ltd., Lorry Loader crane, 383
 Neale, A. D., on Antitrust Laws of the United States of America (review), 427-428
 Neale, M. J., on Design and Performance of Reticular 20 per cent Tin-Aluminium Bearings, 446
 Neat, W. N., review of Fundamentals of Rocket Propulsion, 200; review of Rocket Propellant Handbook, 200; biographical note, 200
 Nederlandsche Dok en Scheepsbouw Maatschappij, motor ship for Companhia Nacional de Navegacao, 333
 Needham, E. D., appointed director of Atomic International, 148
 Negretti & Zambra Ltd., contract engineering (trade publication), 676
 Neher, K., on German Defence Problems (review), 838
 Nehru, J., inauguration of Gandhi Sagar Dam and Kotah Barrage, 143; visit to Durgapur steelworks, 565; presentation of silver replica of mill housing to, 565; opening of Narmada Valley project, 731
 Neill, James, & Co. (Sheffield) Ltd., Eclipse magnetic strip, 343
 NEL. See *National Engineering Laboratory*
 NEL vacuum manometer (NGN Electrical Ltd.), 857
 Nelson Engineering Co. Ltd., non-standard equipment (trade publication), 748
 Nelson, Lord, made Honorary Member of Institution of Electrical Engineers, 348; biographical note, 348; on English Electric Co. Ltd., 389
 Neoprene for aerostable suspension of Renault Dauphine motor car, 581
 — for bonnet shake prevention (Du Pont), 855
 — Coating, Adcora P6 (E. & F. Richardson), 506
 — Covers for circuit breakers, 275
 — Raw (Du Pont (UK) Ltd.), 211
 — Soles and heels for industrial safety boots (Bank Bridge Rubber Co. Ltd.), 211
 Neratoom, construction of core structure of Dragon Project, 104
 Nervi, Dr. P. L., George Washington bus station, 51, 627
 Nesterov, M., on building development in Russia, 299
 Nestor atomic reactor, Winfrith Heath, criticality achieved, 456
 Netherlands Atom Forum, formation of, 455; W. A. de Haas elected chairman, 455; representation at Foratom, 455
 — Negotiations with Euratom, 387
 — Negotiations with Euratom for ship atomic reactor, 256
 — State Mines, installation of automatic coal-analysis unit, 469
 — See also *Holland*
 Neutrino reactions, further studies of, 909
 Neutron chopper spinning units, electromagnetic speed signal and pulse generators for, by L. V. Lewis, 388
 — Counter, fast, for dosimetry, by J. A. Dennis and W. R. Loosemore, 520
 — Density measurements by autoradiography of detector foils, by A. Ertaud and P. Zaleski, 388
 — Detection, by W. D. Allen (review), 396
 — Diffusion measurements, 696
 — Dosimeter for personnel, 191
 — Exploration, 487. See *LETTERS*, 620, 685
 — Generators, 696
 — Method to aid calculations in fast atomic reactors, 696
 — Production, 696
 — Pulsed, techniques, 696
 — Spectra applications, 696
 — Temperature in reactors having moderator closely associated with fuel elements, by R. G. Freemantle and J. S. Harper, 455
 Neutron, thermal, shielding material, hiduminium 400 as, 455
 — Transport equation, one velocity, approximate solution of in an infinite medium, by G. Rowlands, 224
 Nev Eye closed circuit television camera (Nottingham Electronic Valve Co. Ltd.), 650
 New Hebrides manganese mines, diesel power equipment for, 201
 New, P. and A., Ltd., hammer finish (trade publication), 904
 New York automobile show, orders for sports cars taken at, 505
 — City Transit Authority, new subway cars ordered from St. Louis Car Co., 497
 — Port, plan for world trade centre, 405
 — Port of, Authority, study of arterial facilities, 50
 — State Power Authority, developments at Niagara, 218
 New Zealand atomic energy programme, 725
 — Development of resources in, 745
 — Diverse industry, 745
 — Electric power statistics, 98
 — Electricity Department, power statistics, 98; historical note, 98
 — Facial eczema in sheep investigation, 159
 — Future development in, 745
 — Geothermal power station project at Lake Taupo, 98
 — Historical note on engineering industry in, 745
 — Hydro-electric and geothermal moves in, 745
 — Ministry of Works, geothermal project at Wairakei, 732
 — New industries operating in, 745
 — New sources for power stations, 98
 — Population increasing in, 745
 — Power projects under construction, 98
 — Water power and cheap electricity in, 98
 Newage (Manchester) Ltd., Sieger gas detector, 726
 Newall, A. P., & Co. Ltd., bolts for Forth Road Bridge, 10; Gilbert Roberts grip bolts for Forth Road Bridge, 452
 Newcomb, S., on Compendium of Spherical Astronomy (book), 332
 Newman, A. D., on design and performance of reticular 20 per cent tin-aluminium bearings, 446
 Newman, Hender & Co. Ltd., Newman-Velan valves, 629
 Newman, Hender Group, valves and valve fittings, 571
 Newman Industries Ltd., encapsulating electric motor windings with epoxy resin, 293
 Newman-Velan valves (Newman, Hender & Co. Ltd.), 629
 Newmark Instruments Ltd., AMY automatic linen yarn monitor, 813
 Newton Chambers & Co. Ltd., agreement with John Mohr & Sons to produce Mohr designed blast furnaces, 665; historical note, 665; position and prospects, 697; high turnover, 697; order position, 697; close working with Ransomes & Rapier Ltd., 697; capital expenditure, 697; acquisition of Ronuk Ltd., 697; subsidiaries of, 697; Design Centre award for Redfye Centramatic 35 boiler, 712
 Newton Swing Clamp hydraulic clamp (Power Jacks Ltd.), 271
 Newtown Coachworks, continental tour of Nymph caravan, 497
 NFBTE. See *National Federation of Building Trades Employers*
 NGN Electrical Ltd., McLeod gauge, 384; NEL vacuum monometer, 857
 Ni-Hard nickel cast iron, 738
 Niagara, power and park developments at, 218
 — Power stations at, 218
 Niagara Screens & Plant Ltd., oil country equipment (trade publication), 396
 Nicholls, C. M., on Technology, Engineering and Safety (review), 111
 Nicholson, J., trial flight of Javelin aircraft with Gyrone Junior engines, 269
 Nickel cast iron, Canadian uses of, 738
 — Iron, Ni-Hard, 738
 — and chromium recovery in the electroplating industry, survey of (DSIR book), 267
 — in Liner *Canberra*, 838
 — Manganese-palladium brazing alloy, 210
 — Palladium-copper brazing alloy, 211
 — Palladium brazing alloy, 211
 — Silicon-copper alloy, Mallory 53 (Johnson Matthey & Co. Ltd.), 835
 — Undercoats, Bi-Nickel process (Electro-Chemical and W. Canning), 135
 Nickolls Ready-Mixed Concrete Ltd., Blaw-Knox Batchmaster and Blaw-Knox Gyramixer installed, 235
 Nicol, T. B., on aggregates for Warragamba Dam, 894
 NIFES. See *National Industrial Fuel Efficiency Service*
 Nigeria, Bornu Railway extension, 732
 — Brewery for, 341
 — Development recommendations, 341
 — Federation of British Industries mission to, 341
 — IAEA assistance mission to, 387
 — Iron and steel industry potential, 841
 — Mole construction on Escravos River, 731
 — Road bridge over River Kaduna proposed, 736
 — Technical education in, 722
 — Tyre factory, 341
 — UK investment in, 341
 — United Africa Co. scheme for textile plant in, 341
 Nigerian Federal Government, reports commissioned by on iron and steel industry potential in Nigeria, 841
 — Government Railway, assets and liabilities vested in Nigerian Railways Corp., 732
 — Industrial Development Conference, Sir Norman Kipping leads UK delegation, 149; UK companies represented 149
 — Railways Corp., assets and liabilities of Nigerian Government Railway vested in 732; extension of Bornu Railway, 732

- Nikalium alloy propellers for liner *Canberra*, 754
- Nike-Zeus computer for Ascension Island, 269
- Nilsen, Oliver J. (Australia) Ltd., agreement with A. Reyrolle & Co., 769; formation of Reyrolle Nilsen (Australia) Ltd., 769
- Nimrod proton synchrotron, 632
- 1961, Events in (ENGINEERING booklet), 244
- Outlook. See *Outlook*
- Niplas pvc/rubber cable sheathing (Greengate & Irwell Rubber Co.), 179
- Nippon Denkyoku Kabushiki Kaisha, agreement with GEC Ltd. for manufacture of graphite, 15
- NISRC. See *National Industrial Salvage and Recovery Council*
- Nitrile rubber (trade publication), 232
- Nitrogen, high purity plant (Petrocarbon Developments Ltd.), 398
- Nitrovit pellets (Pine & Son Ltd.), 423
- Nixon, F., on need for more engineers, 442
- No-Melt grease (Bardahl Products Ltd.), 587
- Noble metal thermocouples, by H. E. Bennett (book), 551
- Noguchi, I., aluminium furniture design, 131
- Noise annoyance and its assessment, by Prof. E. J. Richards. See *LETTERS*, 376, 476
- Insulation for, 680
- Low, for microwave communication, 400-401
- Reduction, by L. L. Beranek (review), 871
- by ducted fan engine, 204
- Research at NPL, 709
- Survey in London, 348
- Tests on aircraft, table of, 377
- Nomographs, chemical processing, by D. S. Davis (review), 110
- Non-destructive testing (trade publication), 264
- Non-ferrous metals. See *Metal*
- Nora zero power critical assembly available to IAEA in Norway, 800
- Noral 28S alloy, lens mounts of (Taylor, Taylor & Hobson), 179
- Noralduct transformer coolers (Alcan Industries Ltd.), 803
- Noraltrace traced pipework (Alcan Industries Ltd.), 550
- Noratlas aircraft to be replaced by C 160 Transall aircraft, 113
- Nordair, Handley Page Dart Herald aircraft for, 265
- Nordavia, C 160 Transall aircraft, 113
- Norden calorifier (Holden & Brooke Ltd.), 827
- Norel Electrical Appliances Ltd., electric coffee grinder, 848
- Norgren, C. A., Ltd., air filter regulator, 252
- Norris, Henty & Gardner Ltd., transport diesels (trade publication), 298
- Norris, Maj. Gen. Sir Kingsley, on careers in Australia, 9
- Norsk Jernverk A/S, blooming and slabbing mill from Davy-United, 225
- North American Aviation Inc., contract for atomic reactor for Germany, 104
- Space and Information Systems Division, K. B. Gay appointed director, 148
- North Atlantic Passenger Conference, 585
- Treaty Organisation, Hawk missile for, 397
- Westbound Freight Association, increase in shipping costs, 233
- North British Locomotive Co. Ltd., exhibit at Rand Show, 465; torque converter, 763
- North Carolina State College, USAEC assistance to, 456
- of Scotland Hydro-Electric Board, submarine power cable from Jura to Kintyre, 777
- Western Electricity Board, increase in charges for electricity, 541; sub station for (J. Mountford & Co.), 867
- Northampton College of Advanced Technology, course for information scientists, 110
- Northrop Corp., re-entry nose cone for X 15 rocket aircraft, 41; Q-Ball sensor, 41; mobile launchers for Hawk missile, 397
- Norway, atomic building programme in, 564
- Reactors in, 564
- Reactor JEEP, 563
- Enriched uranium 235 fuel contract, 800
- Export Council of Europe mission to, 549
- Halden project in, 564
- Hydro-electric sources in, 563
- Institute of Atomic Energy, 563
- Nora zero power critical assembly available to IAEA, 800
- Outside capital investment in, 233
- Pathfinder Mission to, 681
- Pegmatite deposits in, 563
- Nostalgia, Plain Words on, 588
- Nose cone, re-entry, for X 15 rocket aircraft (Northrop), 41
- Notely, M. J., on apparatus for determining the mechanical properties of alpha active materials, 456
- Nottingham Electronic Valve Co. Ltd., Nev-Eye closed circuit television camera, 650
- Nottingham University, extensions to, 483
- Nozljector oil purifier (Sharples Centrifuges Ltd.), 531
- NPD atomic reactor, 725
- NPL. See *National Physical Laboratory*
- NRDC. See *National Research Development Corporation*
- NRU atomic reactor, 725
- NRX atomic reactor, 725
- Nu-Swift Industries Ltd., fire extinguishers, 533; profits table, 533; position and prospects, 533
- Nu-Swift Ltd., three-shift working commenced, 201; heavy orders placed, 201
- Nubex Standard silicone treatment for masonry (Nubold Developments Ltd.), 587
- T4 silicone treatment for masonry (Nubold Developments Ltd.), 587
- W silicone treatment for masonry (Nubold Developments Ltd.), 587
- Nubindex silicone treatment for masonry (Nubold Developments Ltd.), 587
- Nubold Developments Ltd., Nubindex, Nubex Standard, Nubex T4 and Nubex W silicone treatments for masonry, 587
- Nuclear Developments Ltd., formation of, 631, 777
- Nuclear Electronics, Proceedings of the symposium on nuclear electronics (review), 426
- Energy, engineering, marine and welding exhibition, 519, 527; exhibits at, 629
- Engineers, Institution of. See *Institution Nuclear Engineering Ltd.*, exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519
- Nuclear Equipment Ltd., manipulating equipment, 103
- Fusion research, conference on, 323
- Power, steel for, cinema film (UKAEA), 256
- Propulsion, by M. W. Thring (book), 298
- Reactor. See *Atomic reactor*
- Society, American. See *American*
- Superheating, economic attractions of, 59
- See also *Atomic*
- Nucleate boiling, 631
- Role of surface conditions in, by P. Griffith and J. D. Wallis, 631
- Nuclei of boron 10 and boron 11, 832
- Nucleus boron 10, 832
- Nuffield Organisation, use of Gloucester as shipping port, 541
- Nugent, Sir Richard, appointed to Council of Institute of Advanced Motorists, 856; biographical note, 856
- Nuraphalte roofing method, 483
- Nuts and bolts, outlook for 1961, 70-73
- Speed (trade publication), 640
- Nuttall, E., Sons & Co. Ltd., Victoria Line underground railway, 414
- NX-2 nuclear powered aircraft, tests on (Convair), 16
- Nyasaland, technical education in, 722
- Nydqvist & Holm AB (Nohab), atomic reactors for Marviken atomic power station, 16
- Nye, W. F., on Boron (book), 676
- Nyflex flexible gear coupling (Sier-Bath Gear & Pump Co. Inc.), 371
- Nylatron GS bearing material (Polypenco), 178
- Nylon/cotton conveyor belts for NCB (BTR Industries Ltd.), 867
- Glass fibres to strengthen, 406
- Powder for coating (Dohm Ltd.), 835
- Safety straps for motor cars, 179
- Stauffer pressure screw lubricators (Trebdon Ltd.), 47
- Wagon sheets (British Nylon Spinners Ltd.), 275
- Washers, 867
- Nymph caravan (Newtone Coachworks), 497
- O**
- OAK Ridge National Laboratory, irradiation effects on semiconductors, 469
- O'Brien, W. J., Decca Navigator design, 390
- Obrigheim atomic power station, new company formed to build, 256
- Occupational information, development and application, by C. L. Shartle (review), 22
- OCBRE atomic reactor, 725
- Oceanographic Institute of Monaco, agreement on research with Monaco Government and IAEA, 387
- O'Ceard Co., bought by Prestige Group, 489
- O'Dea, W. T., on university action on factors of safety, 313
- OEEC. See *Organisation for European Economic Cooperation*
- Office Appliance and Business Equipment Trades Association, petition to Board of Trade, 333
- Equipment (trade publication), 112
- Office Equipment Co. Ltd., equipment (trade publication), 112
- Folding (Badenia Calculators Ltd.), 504
- Furniture (trade publication), 112
- Machinery, export earnings of, 333
- Ogden, W. E., on Delta Metal Co., 565
- Ogorkiewicz, R. M., on army fire power: improved small arms, 830-831
- Ohio State University, atomic reactor for (Lockheed Aircraft Corp), 104
- Oils, additive, 521
- Additive, molybdenum disulphide (trade publication), 872
- Battle with coal, 273
- Burning control equipment (Elcontrol Ltd.), 762
- and coal, comparative efficiencies of, 534
- Consumption studies (BP Research Centre), 846-847
- Country equipment (trade publication), 396
- Crude, distillation plant for (ICI Ltd.), 587
- Cutting, and occupational dermatitis, 184
- Depot on Macquarie Island (BP Co.), 25
- at Mawson Base (BP Co.), 25
- Diesel, additive, Redex DD (Redex Ltd.), 835
- Engines. See *Engine, diesel*
- Equipment, 1960, production value, 341
- Feed drill, 570
- Fuel, improver (trade publication), 872
- Gasification (trade publication), 708
- Hydraulics, industrial, course on, 97
- Hydrocarbon, duty, 713
- Importation and use in India, 405
- Production in UK, 25
- Purifier, Nozljector (Sharples Centrifuges Ltd.), 531
- Radiation resistant, testing of, 191
- Revenues for Iraq increase, 25
- Switch. See *Switchgear*
- Viscosity, 847
- See also *Lubrication; Petroleum*
- Oiler for strip (Clark's Press Equipment Ltd.), 251
- Oilsand Project, atomic explosives for, 224
- Old, B. W., review of Corrosion Problems in the Petroleum Industry, 156-157; review of Anti-Corrosion Manual, 1960, 156-157; biographical note, 158
- Oldbury atomic power station, tenders invited for, 288
- Olding, Jack, & Co. Ltd., Barber Greene ditching machine, 798
- Olsen, Tinius, Testing Machine Co., engine balancing machine, 335
- Olympic Airways, improved passenger carrying figures, 465; repeat order for more Comet aircraft placed, 465
- Omark Industries Inc., stud welding machine, 532
- Stud welding machine (Kerry's (Ultrasonics) Ltd.), 532
- OMF-Ferralba open press (Rushworth & Co.), 353
- Omni-track conveyor ball-units, 339
- OMNIA trade corporation of Czechoslovakia, formation of, 15
- OMRE atomic reactor, 419
- O'Neill, Capt. T., on Government loan to Short Bros. & Harland, 429
- Onemack shuttleless loom (Macfie & Sons), 761
- Onslow, Earl of, gift of land for Guildford Cathedral, 690
- Onsrud routing machine, 554
- Ontario, Hydro-Electric Power Commission of. See *Hydroelectric*
- Opel, increase in sales in Switzerland, 465
- Opener, can, Edlund (Metcalf & Co. (1950) Ltd.), 848
- for drums (Moon Bros. Ltd.), 826
- Operations research, notes on (M.I.T.) (book), 428; (review), 870
- Operation Spear, compensation plan for employees affected by (Steel, Peech & Tozer Co.), 824
- Operational Research Society, conference of, 757
- Operative-inspector relations, absolute judgments and, by I. D. Brown, 447
- Opportunities for graduates, directory of (review), 158
- Optical maser, 401
- Continuous light from (Bell Telephone Laboratories), 337
- Continuous wave (IBM), 129
- Range of Woomera WRE, 750-751
- Square (Taylor, Taylor & Hobson Ltd.), 417
- Optics, electron, in television, by I. I. Tsukkerman (book), 776
- Outlook for 1961, 74-77
- Optimum design, shortest route to, by J. G. Bryan and T. J. Darwent, 860-861
- Orbital engine, Selwood, 682. See *LETTERS*, 789, 853
- Life of communications satellites, 893
- Orders, shortage of, 241
- Ordinary National Certificates Diplomas, 447
- Ore, iron, Canada now ready to produce, 729
- Organisation for European Economic Cooperation, approval for setting up European export council, 45; survey of economic conditions for 1960, 45; recommendation for UK to increase investments and exports, 45; visit to BP refineries and installations, 365; Conference on Engineering Education, 513; report on Italy, 721; *Problem of Rising Prices*, 793
- Organisers, great, by E. Dale (book), 464; (review), 640
- ORGEL Project of Euratom, 768; ESSOR atomic reactor, 388; twelve contracts signed, 388
- Oriana liner, 753, 769
- Orlit Ltd., new factory for Spring Grove Laundry, 764
- Osborn, Samuel, & Co. Ltd., Super Permo magnetic iron, 619
- Oscilloscope, portable (Solartron), 14
- (Solartron Laboratory Instruments Ltd.), 384
- Osmond, A. & S. Ltd., cutting-off machine (trade publication), 24, 561
- Ostermann, W., on Bergbuamechanik (book), 872
- Othmer, D. F., on Fluidization and Fluid-Particle Systems (review), 230-231
- Otis Elevator Co., aluminium honeycomb doors, 91
- Outardes River hydroelectric project, 306-307
- Outlook for 1961, 26, 30, 34, 70, 74, 78, 114, 118, 122, 160, 164, 168
- Output in manufacturing industries, table of, 309
- Ove Arup & Partners, extensions to Nottingham University, 483
- Oven, cooking, microwave, Arctic (Lewispoint Holdings Ltd.), 240
- Unit (Creda), 436
- Overhead line alarm (trade publication), 200
- Overprinter (Rejafix Ltd.), 252
- Owen, Sir Leonard, appointed Member for Production and Engineering, UKAEA, 324
- Oxford Airport, new control tower, 833
- University, accelerator panel, 832; equipment for nuclear research centre, 832; nuclear research centre for, 832
- Oxidation of uranium-dioxide by water vapour under reactor irradiation, by B. R. Harder *et al.*, 60
- Oxide, colour (Ferro Enamels Ltd.), 603
- of europium, bibliography of, 456
- of gadolinium, bibliography of, 456
- of praseodymium, bibliography of, 456
- Resistors, Metox (Welwyn Electric), 56
- of samarium, bibliography of, 456
- Sintered, as cutting tools for steel, 515
- of uranium. See *Uranium oxide*
- Oxygen-hydrogen fuel cell, 268
- Liquid, handling (British Oxygen Co. Ltd.), 375
- P**
- PACE "do it yourself" computer components (Electronics Associates), 87
- Pacific Gas & Electric Co., construction of boiling water atomic reactor, 800
- Packaging computers for export, 203
- Consumer, for export, convention on, 822
- Food with aluminium, 207
- Machine, Molins Fliptop (Molins Machine Co. Ltd.), 610-612
- Material, hair as. See *LETTER*, 93
- Outlook for 1961, 164-167
- Padua University, High Voltage Corp. to install Van de Graff accelerator, 488
- Paint, application systems, 2-3
- Brush application of, 2
- Conventional spraying of, 2
- Curtain coating with, 3
- Dip coating with, 3
- Paint, electrostatic spraying of, 2
- Flow coating with, 3
- Heating, 2
- Industry, representation on European Committee of Paint and Printing Ink Manufacturers' Associations, 841
- Lagging (trade publication), 904
- Maintenance (trade publication), 872
- Manufacturers' Joint Executive Council, formation of, 841; K. S. Flory as first director, 841
- Multicoloured, Porterfleck (Sissons Bros.), 771
- Primer, pvc (trade publication), 872
- Roller coating with, 3
- Spray, electrostatic, Megastatron (Aerostyle Ltd.), 598
- Spraying, airless, 2
- Machine (Alfred Bullows), 56
- Mistless, 2
- Plant, airless (Aerostyle Ltd.), 767
- Plant, electrostatic, Magastraton (SAMES (GB) Ltd., and Aerostyle Ltd.), 571
- System, which should you use, 2-3
- Tumbling process, 3
- Undercoat, Porterbond (Sissons Bros.), 771
- Painter Bros. Ltd., anchor towers for Thames crossing of supergrid, 52
- Painting system, corrosion protection, Ferrogel (John S. Craig & Co. Ltd.), 47
- Pakistan Atomic Energy Agency, IAEA to advise, 387
- Pakistan Atomic Energy Commission, plans of, 725; atomic energy centre at Dacca, 734
- Atomic programme of, 725
- Small arms in, 853
- UK loan for railway wagon purchase, 465
- Pakit Ltd., the case of, human implications of work study, by S. Dalziel and L. Klein, 183
- Palatine Tool & Engineering (Surbiton) Ltd., heavy duty manipulator, 104
- Palin, H. M., on cycle and motor cycle industry, 141
- Pall Corp., Deltadyne pressure switch, 486
- Palladium-copper-nickel-manganese brazing alloy, 211
- Manganese-silver brazing alloy, 210
- Nickel brazing alloy, 211
- Manganese brazing alloy, 210
- Silver-copper brazing alloy, 210
- Pallion shipyards, modernisation of, 127
- Palmer Aero Products, increased turnover, 257
- Palmer, D. S., review of Statistical Theory of Signal Detection, 395; biographical note, 396
- Palmer's Hebburn, difficult year for, 769
- Pammar Marketing Ltd., Tipp-Ex Type-Out and Cop-Ex Copy-Out papers, 873
- Pandit, Mrs. V. L., formal commissioning of *Vikrant* aircraft carrier, 429
- Panels, aluminium, adhesive bonded (Bonallack Ltd.), 587
- Electroluminescent, Locator (MK Electric), 88
- Motor car body, press dies for, 460
- Rayescent, Westinghouse, 648
- Sandwich, roll bonded (Battelle Memorial Institute), 619
- Panorama of performance, by B. Lister, 65
- Pantak Ltd., X-ray units to check reactor pressure vessel welds, 235; Siemens betatron for Head Wrightson Teesdale Ltd., 267; Baltospot X-ray unit, 319; X-ray unit, 531
- Paper, Cop-Ex Copy-Out, 873
- Paper Equipment Distributing Co., paper handling (trade publication), 158
- Handling (trade publication), 158
- Machine drive, variable, 334
- Maturing machine (trade publication), 396
- Protection mask (Gordon & Gotch), 666
- Self-adhesive, Spi-seal (Spicers Ltd.), 375
- Silicone treated (trade publication), 232
- Tape, self-adhesive (Gordon & Gotch), 666
- Tipp-Ex Type-Out, 873
- Tissue, glass fibre, Tissuglas (AMF Ltd.) 275
- Papropack, paper sack manufacture, 333; new factory in UK, 333
- Paquette, R. J., on Highway Engineering (review), 494
- Para-Visual Director (PVD) equipment for aircraft (Smiths Aviation), 402
- Pardoe, G. K. C., appointed chairman of British Space Development, 585; on communications satellites, 892
- Parglas, dust cabinets, 343
- Paris, British aircraft in, 684
- International Aeronautical Exhibition, 694
- Park and power developments at Niagara, 218
- Parker, Frederick R., Ltd., design of motor cruiser boat for John I. Thornycroft & Co. Ltd., 132
- Parkers (Ancoats) Ltd., Timbor impregnated timber, 867
- Parke, J. J., on Alvis Co., 61
- Parkinson Cowan Industrial Products, Zephyr gas meters, 159; gas fired stoving plant for AEI-Hotpoint, 203
- Parkinson Cowan Measurement, water meter, 597, 825
- Parkinson, E., resigns from board of Associated British Machine Tool Makers, 348
- Parkinson Howard & Associates, bid for contract on Volta River project, 333
- Parkinson, J. R., on Economics of Shipbuilding in the United Kingdom (review), 463-464
- Parr, G., review of Edison: A Biography, 807-808; biographical note, 808; obituary notice, 808
- Parrot, P. G., on Analogue Devices for Network Analysis, 302
- Parsons, C. A., & Co. Ltd., order for turbo-generators from CEGB, 605; position and prospects, 737; increased capacity of, 737; increased turnover, 737; profits, 737; orders from CEGB, 737; research arrangements with AEI Ltd. and Reyrolle Ltd., 737
- Parsons, C. A., Nuclear Research Centre, research report on the work of, 368-369
- Parsons Marine Turbine Co., main machinery for aircraft carrier *Vikrant*, 429

- Parsons Powergas, plant construction (trade publication), 608
- Partridge's Models Ltd., models for industry, 856, 862-863
- Parzen, E., on Modern Probability Theory and Its Applications (review), 362
- Pasadena, withdrawal from Improved Cycle Boiling Water project, 388
- Paschkis, V., on Industrial Electric Furnaces and Appliances (book), 298
- Pasolds Ltd., aluminium honeycomb platens, 91
- Paste, brazing, aluminium (Eutectic), 135
- Preperite rust remover (Pyrene Co. Ltd.), 834
- pvc (trade publication), 264, 872
- Patch, Air Chief Marshal Sir Hubert, appointed overseas director of military sales of British Aircraft Corp. (USA) Inc., 777; biographical note, 777
- Patents. See *Inventions*
- Paternosters, lifts and escalators (trade publication), 158
- Operation of, 338. See LETTER, 476
- Pathex (Canada) Ltd., automated plastic laminated presses, 740
- Pathfinder atomic power plant, 419
- Atomic reactor, 59
- Pathfinder Missions. See *Export Council for Europe*
- PATRA. See *Printing and Allied Trades*
- Pattern letters in polyethylene (AEI Plastics (Aldridge) Ltd.), 551
- Paul, R. J. A., on general purpose electronic analogue computer, 864
- Pauling & Co. (Contractors) (Overseas) Ltd., Tapakuma Scheme in British Guiana, 735
- Pavia University, historical note, 7
- Paving machine (Blaw-Knox Co.), 253
- Paxton, R., to testify before Senate Investigating Committee, 657
- Payne, P. P., & Sons Ltd., flexible strapping tape, 445
- Payne, W. F. M., on argus digital computer in process control, 181
- Paynes Jiffytape Ltd., waterproof cloth tape, self adhesive, 771
- Payroll tax, 549, 617, 657
- Effect on industry of, 437
- Peake, H., on Steel Co. of Wales, 193
- Pearce, D. W., appointed head of IAEA health, safety and waste disposal division, 632
- Pearce, Sir William, historical note, 7
- Pearl & Dean (International) Ltd., sole concessionaires for Moscow Trade Fair Cinema, 265
- Pearson Machine Tool Co. Ltd., hydraulic power pack, 562
- Pedi-Power power tug (Griffiths (Lambeth) Engineering Ltd.), 767
- Peebles, Bruce, Co., agreement with Rega Brucker and Co. for joint production, 565; full size model of electric motor, 851
- Peeva, A., on temperature effect of self-quenching Geiger-Muller counters, 192
- Pegasus engine for VTOL aircraft, Bristol Siddeley, 684
- Pegasus Laboratories Inc., manufacturing rights for equipment to Telehoist Ltd., 429
- Lift/thrust turbofan engine, Bristol Siddeley, 710
- Peglers Ltd., fittings for copper and polyethylene pipes (trade publication), 540
- Pegmatite deposits in Norway, 563
- Peierls, Prof. R., attendance at centennial of Massachusetts Institute of Technology, 413
- Pelagic Trawling Co., six new trawlers ordered, 69
- Pellets, Nitrovit (Pine & Son Ltd.), 423
- Pelletizers, bearing layouts for (Roballo Engineering Co. Ltd.), 788
- Pels, Henry, & Co. Ltd., Steelworker universal machine, 562; Mahr tester, 629
- Peltier effect, 648
- Pencil sharpener, powered (Kent Kordless Ltd.), 472
- Penistone Pure Malt Vinegar Co. Ltd., use of "pillow" tanks, 310
- Penn, W. S., on Synthetic Rubber Technology (review), 676
- Penney, Sir William, appointed deputy chairman of UKAEA, 324
- Pennsylvania State University, licence granted for atomic reactor, 16; free loan of enriched uranium to, by USAEC, 455; Curtiss-Wright Corp., gift of atomic reactor to, 455
- Pensions and National Insurance, Ministry of, Emidex 2400 computer for, 325
- Scheme, State, Goodyear Tyre & Rubber Co. in, 9
- Pentech Ltd., batch counters, 857
- People, market value, Plain Words on, 244
- Speaking to them through their skins, 412
- Young, employment of, 721
- Pepper mill, electric, "Peppy" (General Trade Equipment Ltd.), 472
- "Peppy" electric pepper mill (General Trade Equipment Ltd.), 472
- Perchloroethylene as solvent degreaser, 422
- Performance, panorama of, by B. Lister, 65
- Pergamon Press, *Infrared Physics*, 838
- Perim cargo ship, tests of Marconi Metron echo-sounder (P. & O.), 339
- Perkin, Prof. A. G., historical note, 7
- Perkins Engines Ltd., on diesel engines and customers' requirements, 567; diesel engine for Volga motor car, 641; Perkins diesel Four power unit, 891
- Perkins, F., Ltd., *Marine Diesel News*, 198; sales, 489; power pack diesel set, 530
- Perkins Group, small boats, 45; visit of G. Seeber, 193; exhibit at Poznan International Fair, 641
- Perkins Outboard Motors Ltd., outboard motors for St. Andrews University South Greenland Expedition, 25
- Perlite, expanded, Brelite (Expanded Minerals Ltd.), 698
- Permeable rechargeable electric cell (Chilton Electric Products Ltd.), 472
- Permafence Ltd., protection for prefabricated building, 11
- Permalit Ltd., reinforced plastics tubing (trade publication), 872
- Permeameter, direct reading, 700
- Permeation cell, membrane (Ionics Inc.), 237
- Perrin, M. W., on work study, 900
- Pershing ballistic missile, 909
- Personalities, Plain Words on, 757
- Personnel Administration Ltd., use of 3-D models, 868
- Perspex, 374
- Persson, J., on Industrial Electric Furnaces and Appliances (book), 298
- Peru. See *Salaverry Harbour*
- Petbow Ltd., generator (trade publication), 332
- Peters, G. D., & Co. Ltd., Cling-Sling lifter, 629
- Petree, J. F., on Loss of the *Waratah*, 244
- Petrocarbon Developments Ltd., high purity nitrogen plant for UKAEA, 398
- Petrol consumption, factors governing, by E. H. Bush, 215-216. See LETTER, 276
- and sparking plug efficiency, 215
- and traffic density, 215
- and weather, 215
- Motor. See *Aircraft engine; Boat; Engine; Motor car; Tractor*
- Pump. See *Pump*
- Tanker, road, transformer/relay unit for grounding (GEC), 403
- Petroleum industry, corrosion problems in (Society of Chemical Industry) (review), 156
- Model code of safe practice in, 281
- Installations, regulations governing operation of electrical plant in, 281
- Spirit (Conveyance by Road) Regulations of 1957, 403
- See also *Oil*
- Petten, low power atomic reactor, tender issued for building to house, 256
- Petters Ltd., exhibit at Moscow Trade Fair, 465; marine diesel engines, 594
- Peugeot Airbrosse electric hand brush (Rudson Wood & Co. Ltd.), 848
- 404 motor car, 592
- Squirrel food mixer (Rudson Wood & Co. Ltd.), 848
- Pfeiffer, J., on From Galaxies to Man, a Story of the Beginnings of Things (review), 330
- Pfeill, H., on German Defence Problems (review), 838
- pH electrode (W. G. Pye & Co. Ltd.), 58
- Phantoscope, use in radiation spectrometry and radiation counter characteristics, 191
- Phase and continuity tester (Martindale Electric Co. Ltd.), 280
- Phengard anti-static flooring material (Phoenix Rubber Co.), 512
- Philadelphia Electric Co., USAEC approve safety aspects of proposed Peach Bottom atomic power reactor, 224; research and development of gas cooled reactors, 420
- Philip, George, & Son Ltd., map holder (trade publication), 776
- Philippine Islands, atomic reactor for, 104; IAEA experts to visit, 387; copper production plant for, 587
- Phillips Bros. & Ellis Ltd., marking machine, 12; Star hot press machine, 891
- Phillips, Col. W. E., on Massey-Ferguson, 489
- Phoenix Rubber Co. Ltd., Phengard anti-static flooring material, 512
- Phoenix Textiles, application to MAIB to set up factory in Malta, 69
- Phone system for pressurised suits (Spemby Ltd.), 100
- Phosphate spray and degrease (trade publication), 872
- Photoelectric detector (Cableform Ltd.), 416
- Equipment, transistorised (Lancashire Dynamo), 825
- Photoelectronics (MOM) Ltd., counter batching machine, 254
- Photographic emulsions used in atomic research (Ilford Ltd.), 192
- Exhibition on peaceful uses of atomic energy (Ilford Ltd.), 192
- Technique for cosmic ray research, 236
- Photometer, flame, general purpose integrating, by H. M. Davis, 388
- Spectro- (Unicam Instruments Ltd.), 58
- Photomicrography, technique of, by D. F. Lawson (review), 230
- Photomultipliers and their applications, by J. Sharpe, 761
- Photothiodolite, use on Woomera WRE range, 750
- Physical changes in solids at high pressure, 614
- and chemical testing of industrial water, methods of (ASTM), 15
- Chemistry. See *Chemistry*
- Examination of metals, by B. Chalmers and A. G. Quarrell (book), 298; (review), 639
- Physical Society, exhibition of, 58
- Physicochemical measurements at high temperature, by J. O'M. Bockris, J. L. White and J. D. Mackenzie (review), 66
- Physics and engineering, field computations in, by A. Thom and C. J. Apelt (book), 496
- High polymer, research at NPL, 709
- of high temperature plasmas, applications of, controlled fusion research, by R. F. Post, 323
- Infrared (Pergamon Press), 838
- Measurements during commissioning of Pluto, by C. J. England *et al*, 224
- Modern, introduction to, by C. H. Blanchard, C. R. Burnett, R. G. Stoner and R. G. Weber (book), 158; (review), 607-608
- New, birth of a, by I. B. Cohen (book), 872
- Plasma, conference, 323
- of television, by D. G. Fink and D. M. Lutyens (book), 808
- Physiology in industry, by L. Brouha (book), 776
- Pick-up, high fidelity (Ad. Auriema Inc.), 220
- Pickles, Sir John, presidential address to British Electrical Power Convention, 817
- Pictorial Machinery Ltd., step and repeat machine, 555
- Picture, flat, simulating movement on (Technical Designs Ltd.), 851
- Pidgeon, M., on Anthology of Houses (book), 264
- Pierce, Dr. J. R., on Waves and the Ear (book), 776; on communications satellites, 892
- Pierson, D. H., *et al*, on radio-active fall-out in air and rain, 60
- Pigments, lead (trade publication), 264
- Piled structures, and reinforced concrete piling, by F. E. Wentworth-Shields, W. S. Gray and H. W. Evans (review), 297
- Piling danger caused by carbon disulphide, 483
- Reinforced concrete, and piled structures, by F. E. Wentworth-Shields, W. S. Gray and H. W. Evans (review), 297
- Pilkington Bros., development of aluminosilicate glass with Triplex Safety Glass Co. Ltd., 551; new research laboratories, 713
- Pilkington, Dr. L., on research, 713
- "Pillow" tanks, user comments on, 310
- Pilot Works Ltd., croppers and presses (trade publication), 68
- PIM Precision Indication of the Meridian equipment, 700
- Pin inserter (Rhoden), 100
- Manufacture, report on, by A. Smith, 8
- Pindar motor ship, heating coils for (Charlton Weddle & Co. Ltd.), 242
- Pine & Son Ltd., installation of Turner-Heesen provender mill, 423; Nitrovit formulation pellets and meal, 423
- Pingon tower crane (George Cohen 600 Group Ltd.), 628
- Pinions. See *Gear; Gearing*
- Pinspotter machine, automatic, for ten-pin bowling (American Machine & Foundry Co.), 889
- Pipes, aluminium, traced, 550
- Bending machine, Staffa (Chamberlain Industries Ltd.), 190
- Copper and polyethylene, fittings for (trade publication), 540
- for drainage and effluent (Tough Plastics Ltd.), 474
- Motion, taking care of, 716
- Round, pressure drop for flow of fluids in (M. W. Kellogg Co. book), 153
- Sealing balloons (George MacLellan & Co. Ltd.), 803
- See also *Tube*
- Pipeline, Channel, Pluto, historical note, 45
- Corrosion, defeating, 512
- Couplings to eliminate expansion joints (Aero Controls Ltd.), 461
- Developments in Western Germany, 473
- Natural gas, from British Columbia to Vancouver Island, 131
- Steel, plastic coated, X-Tru-Coat (Republic Steel Corp.), 512
- Submarine, flexible, from British Columbia to Vancouver Island (BICC), 45
- Trans-Syrian, gas turbine pumping sets for (Hawker Siddeley Brush), 271
- Pipework, traced (British Aluminium Co. Ltd.), 550
- British launching of, 550
- Duplex (Reynolds Metals Co.), 550
- Noraltrace (Alcan Industries Ltd.), 550
- Unitrace (Imperial Aluminium Co. Ltd.), 550
- Piping, pitch fibre, for laundry drainage (Key Engineering), 243
- Pistols, 830
- APS Stechkin, 830
- FN Browning, 830
- Makarov PM, 830
- Pistons, automatic welding of (Lockwood & Carlisle Ltd.), 203
- Ring wear in automotive gasoline engines, trends in, by J. R. B. Calow and S. R. Epton, 521
- Pistone AE Borgo, purchased by Associated Engineering Group, 61; new foundry and machine shop for, 61
- Pit prop, hydraulic, Dowty (Dowty Mining Equipment Ltd.), 517
- Pitch fibre piping for laundry drainage (Key Engineering), 243
- Pittsburg Corning Glass Corp., Foamglass foamed glass, 698
- Planer, flame (Hancock & Co. (Engineers) Ltd.), 529
- Planet Products, gear pump in Delrin acetal plastic, 507
- Planing machine, gear, BS 3329, 173
- and sawing; principles of machine wood-working, by A. H. Haycock (book), 68; (review), 903
- Plank, R., on Refrigeration Handbook (book), 676
- Plannair Ltd., dust-free assembly cabinet, 101
- Planned Products (Metallurgy) Ltd., metallurgical specimens (trade publication), 808
- Planning, models for (Simon Engineering), 868
- Plain Words on, 4, 48, 92
- Plant (trade publications), 306, 364, 428, 464, 496
- in agricultural and food equipment industry, 167
- Civil engineering, proving tests on, 795
- Construction (trade publication), 608
- and customers' requirements, 566
- in data processing and business equipment industry, 120
- design standardization, 552
- in domestic aids industry, 171
- Engineering, survey by ENGINEERING, 522-526. See LETTER, 552
- Large, digital computer controls, 366
- Makers, reply to users' criticism, 566-569, 762-763. See LETTER, 620
- Management applications, by D. G. Thompson, 180
- and materials supply in armaments industry, 36
- Supply in building and civil engineering industry, 80
- Supply in production plant industry, 29
- Supply in telecommunications and electronics industry, 32
- Miscellaneous, and customers' requirements, 569
- ENGINEERING survey report on, 526
- in power plant and prime mover industry, 116
- in scientific and engineering instruments industry, 76
- Plant in service industries, 162
- in transport manufacturing industry, 124
- Users, plant makers reply to, 566-569, 762-763. See LETTER, 620
- Plasinter Co. Ltd., plastic coatings (trade publications), 264
- Plasma, dynamic self-pinched, in thermo-nuclear work, 323
- High temperature, applications of physics of, controlled fusion research, by R. F. Post, 323
- Physics Conference, 323
- Institute, contract for cooperation with Euratom, 696
- Semi-static self-pinched, in thermo-nuclear work, 324
- Plaster protection for steelwork, 343
- Plasterboard (trade publication), 264
- Plastering, conference on developments in, 553
- Plastic Coatings Ltd., plastic coated lead bars as ballast for submarine *Dreadnought*, 135; pvc bellows, 739; Geon pvc 121 coating for duct protection, 803
- Plastic Contact Lens Co., association with Sphericon Contact Lens Co. Ltd., 358
- Plastics (trade publication), 808
- Acetal, for gear pump, Delrin (Du Pont), 507
- Brake hose (Tecalemit and John Bull Rubber Co.), 17
- Chemicals exports, 257
- Coated building sheets (Dorman Long (Steel) Ltd.), 105
- Steel (trade publication), 264
- Steel pipeline, X-Tru-Coat (Republic Steel Corp.), 512
- Coatings (trade publication), 264
- Crane cab (Moto Plastics Ltd.), 739
- for electronics (Emerson & Cuming Co.), 149
- Exhibition, 5
- Expanded, uses of, 834
- Faced building slabs, Spectra Glaze (Lilleshall Co. Ltd.), 47
- Glass fibres to strengthen, 406
- Reinforced, for boats (trade publication), 298
- Laminates (Arborite Co. (UK) Ltd.), 375
- Laminating presses, automated (Patex (Canada) Ltd.), 740
- Linings for reservoirs. See LETTER, 93
- Machinery exports, 257
- Material, Vinagel, 867
- in motor cars, 687
- Outlook for 1961, 70-73
- Reinforced, book of practice, 507
- International conference, 790
- Research on, 845
- Tubing, reinforced (trade publication), 872
- Welding machine for, Acme (H.F. Industrial Services Ltd.), 628
- Plasticell air ducts for British Railways, 834
- Expanded pvc material (Microcell Ltd.), 551, 739, 834
- Sandwich construction of boat (Watercroft), 834
- Thermal insulation panels, 834
- Plate, anti-cavitation, for grease pump (Tecalemit Ltd.), 271
- Cutting, computer controlled (BOC Ltd.), 39
- Evaporator. See *Evaporator*
- Platens of aluminium honeycomb (Pasolds), 91
- Platform, climbing, on Forth Road Bridge, 10
- Plating, Barrel (trade publication), 496
- Chromium (trade publication), 298
- Gold (IDM Electronics Ltd.), 83
- Platinum metals (trade publication), 298
- Platt Bros. & Co., spinning mills for Indonesia, 265
- Platt Bros. (Sales) Ltd., cotton mill equipment for Philippine Islands, 609
- Platt, K. H., appointed secretary of Institution of Mechanical Engineers, 217; biographical note, 217
- Platt, Samuel, Ltd., inclusion in Harper Engineering and Electronics Group, 325
- Plessey Co. Ltd., formation of British Space Development, 585; agreement with Rini International for manufacture of Rini products, 609; memory system for Atlas digital computer, 609; demonstration of equipment, 785
- Plessey Nucleonics Ltd., tape type precipitator for atomic reactors, 599; selector valve for burst slug detection system, 788; ionization chamber, 891
- Plough for armoured flexible conveyor (NCB), 820
- Plowman, Dr. J. M., review of *Constructional Steelwork Simply Explained*, 806; review of *Applied Building Construction*, 806; review of *Symposium on Durability and Weathering of Structural Sandwich Constructions*, 806; review of *Federation of Civil Engineering Contractors' Handbook*, 806; biographical note, 808
- Plummer, H. C., on *Introductory Treatise to Dynamical Astronomy* (book), 464
- Pluto Channel pipeline, historical note, 45
- Physics measurements during the commissioning of, by C. J. England *et al*, 224
- Plutonium base charges for industrial/commercial use, 223
- Recycle in Calder Hall type reactor, by L. J. Barbieri *et al*, 455
- Plutonium-239, 896
- Pluvex damp course, No. 3 (Ruberoid Co. Ltd.), 619
- Plymax, lead, X-ray screens (Venesta), 343
- Plywood (trade publication), 264
- Barrels (Venesta Plywood Ltd.), 803
- Cases (Venesta Plywood Ltd.), 905
- Manufacturers' Association of British Columbia, plywood (trade publication), 264
- PM Makarov pistol, 830
- PM-3A nuclear power plant for McMurdo Sound (Martin Co.), 16
- Pneumator bulk transport vehicle (Bonallack & Sons Ltd.), 766
- Pneumatic control unit, Batch Air-O-Line (Honeywell), 826

- Pneumatic equipment (Bentone & Stone Ltd.), 763
 — and customers' requirements, 568
 — ENGINEERING survey report on, 524
 — See also *Compressed air; Compressor*
 Pneumatic Tent Co. Ltd., UK agents for *Camping Gaz*, 152
Pneumatation News, 198
 P. & O-Orient Steam Navigation Group, orders for three new ships placed, 299
 P. & O.-Orient Lines, maiden voyage of liner *Canberra*, 753, 754-755; liner *Oriana*, 753; tests of Marconi Metron echo-sounder on ship *Perim*, 339
 Poisoning, gas, deaths through, 176
 Pokorny F. M. A., *Textbook on Air Compressors* (book), 708
 Poland, improvising in motor car industry, 95
 — Polthene plant for, 609
 — Urea fertiliser plant for (Power-Gas Corp. Ltd.), 873
 Polarograph, cathode-ray, Nashton (Nash & Thompson Ltd.), 677
 Polhammar (or Polhem), C., historical note, 7
 Polhem (or Polhammar), C., historical note, 7
 Polio, industrial response to. See *LETTER*, 4
 Polishing electrochemical, of germanium and silicon (Bell), 909
 — Machine, profile, Hammond (Morris), 56
 — Stainless steel, by J. P. Dewar, 586
 Politecnico di Milano, effects of frost on concrete, 321
 Political and Economic Planning, effect of payroll tax on industry, 437; *Growth in the British Economy* (review), 574
 Polonium-beryllium radioactive source, 488
 Polwarth, Lord, on Scottish industry, 881
 Poly-V belt drive (William Kenyon & Sons Ltd.), 536
 Polyamide cured coal tar/epoxy, Adcora A3 (E. & F. Richardson), 506
 Polyester compound, metal filled, 867
 — Insulation material, Rosite (Rosite Ltd.), 507
 — Pvc ducting (Tanks & Linings Ltd.), 507
 — Resin (trade publication), 808
 — Cellobond (British Resin Products Ltd.), 475
 — Cellobond, technical manual (British Resin Products Ltd.), 507
 — Instrument housing (EMI), 475
 Polyethylene hose, 275
 — Pattern letters (AEI Plastics (Aldridge) Ltd.), 551
 — Pipes, fittings for (trade publication), 540
 — Porous (trade publication), 264
 Polymer, high, physics, research at NPL, 709
 Polymer Corp. of Canada, to build a new plant in UK, 333
 Polymethyl methacrylate, Perspex, 374
 Polypenco Ltd., Fluorosint bearing material, 178; Nylatron GS bearing material, 178
 Polypropylene, by T. O. J. Kresser (book), 496
 — Propathene (ICI Ltd.), 457
 Polystyrene mouldings, expanded (trade publication), 232
 Polytetrafluorethylene. See *Ptfe*
 Polythene plants for Europe, 609
 Polyvinyl chloride bellows (Plastic Coatings Ltd.), 739
 — Chemical containers, 474
 — Clear, Cobex (BX Plastics Ltd.), 374
 — Clear, cost of, 374
 — Clear, uses of, 374
 — Coated sugar diffusers, 699
 — Coated Terylene ventilation ducting (Robert Watson & Co.), 475
 — Ducting, steel reinforced, Vacuflex (Recon (Pipelines) Ltd.), 835
 — Expanded, Plasticell (Microcell Ltd.), 551, 739, 834
 — Geon 170, for compressed air line, 771
 — Pastes (trade publication) 264
 — Pastes and primers (trade publication), 872
 — Plastic coating for duct protection in Geon 121 (Plastic Coatings Ltd.), 803
 — Polyester ducting (Tanks and Linings Ltd.), 507
 — Rubber cable sheathing, Niplas (Greengate & Irwell Rubber Co.), 179
 Pongrass Bros. (Engineering) Pty. Ltd., manifold valve, 727
 Ponsford, E. R., formation of Solartron Electronic Group Ltd., 874
 Pontoon, aluminium, for Esso at Milford Haven (Whittingham and Mitchell), 343
 Pool, swimming, air conditioning and floor heating for, 511
 — Open air, design and construction of (Cement and Concrete Association booklet), 511
 Pope, H. C., Ltd., Hipope Mule sack loader, 767
 Pope, J. A., on Metal Fatigue (review), 903
 Poplov medal, Russian, awarded to Dr. Essen, 705
 Popovic, Dr. D., appointed director of IAEA safeguard division, 632
 Popper, P., on Special Ceramics (book), 708
 Population census, 505
 — Working, statistics on, 793
 Porous Plastics Ltd., Vyon units supplied to Martonair (Canada) Ltd., 243; porous polyethylene (trade publication), 264
 Port Aqaba, deep water, 888
 Port Cartier, ore carriers operating from, 729
 — of Gloucester, used for shipping cars for export, 541
 — Labour relations at, engineering industry's concern about, 141
 — of London Authority, new dock shed for United States Lines, 483
 — Mann bridge (John Laing & Son (Canada) Ltd.), 731
 — of New York, plan for world trade centre, 405
 — of New York Authority, study on arterial facilities, 50
 — of Spain, maternity hospital for, 733
 Portable Welders Ltd., spot welding gun, 144; on welding equipment and customers' requirements, 568
 Porterbond paint undercoat (Sissons Bros.), 771
 Porterfleck multicolour paint (Sissons Bros.), 771
 Portolite collapsible containers (Marston Excelsior Co. Ltd.) 867
 Portugal, Export Council of Europe mission to, 549
 — Pathfinder Mission to, 681
 — Scheme for increasing industrialisation, 681
 Posford, Pavry & Partners, diesel power station for Tema, Ghana, 734
 Positioner, powered (Hagan Controls Ltd.), 859
 Post driver (Drivall Ltd.), 693
 — Office. See *General Post Office*; see also *Mail*
 Post, R. F., on controlled fusion research— applications of physics of high temperature plasmas, 323
 — Rubber, road marking, Hamilton Safe Sines (Hamilton Ltd.), 321
 Postal computing service (English Electric Co.), 153
 Potter, F. H., on window in a hurricane, 212
 Pounder, C. C., on Marine Diesel Engines (review), 902
 Powder, crack detection (Southern Tools Ltd.), 275
 — Nylon, for coating (Dohm Ltd.), 835
 Powell, D. C., on Manipulation of Thermo-plastic Sheet, Rod and Tube (book), 24
 Powell & Co. Ltd., Vertolifter stacking truck, 383
 Powell Duffryn Modular Ltd., Dravo industrial space heater, 858
 Power aids from abroad, 848
 — Cheap, high living standards from, 98-99
 — Conference, national, 5
 — Electric. See *Electrical; Electricity*
 — Electrical. See *Electrical; Electricity*
 — and elegance in continental cars, by G. Wilkins, 592
 — factor regulator (Londex Ltd.), 418
 Power-Gas Corp., merger with Davy United to form Davy Ashmore Ltd., 25; project engineering (trade publication), 676; sulphuric acid (trade publication), 808; urea fertiliser plant for Poland, 873; licence for Toyo Katsuo process, 873
 — Generation, atomic steam supply for, USAEC invite utility companies to participate, 192
 — Steel in, 274
 Power Jacks Ltd., Newton Swing Clamp hydraulic clamp, 271
 — for kitchen and table, 472
 — Lines, overhead, specification for insulator and conductor fittings, BS3288 (British Standards Institution), 87
 — Ministry of, Esso Petroleum seek prospecting licences for Hampshire, Surrey, Sussex and Kent, 25; conservation of fuel supplies, 217; application received for consent for atomic power station at Wylfa, Anglesey, 288
 — More by smooth fuel burning, 361
 — Pack diesel set (F. Perkins Ltd.), 530
 — Hydraulic (Pearson Machine Tool Co. Ltd.), 562
 — Hydraulic, Telepak (Telehoist Ltd.), 541
 — and park developments at Niagara, 218
 — Plain Words on, 276
 — Plant, design and development in, 114
 — Future exhibitions on, 114
 — Industry, expansion and investment in, 116
 — Industry, external factors affecting, 115
 — Industry, forecast for 1961, 117
 — Industry, long term research in, 116
 — Industry, management and labour in, 116
 — Industry, market trends in, 115
 — Industry, plant and materials supply in, 116
 — Industry, production in, 116
 — Instrumentation, outlook for 1961, 74-77
 — Outlook for 1961, 114-117
 — See also *Power station; Substation; Atomic power station*
 — Station, atomic. See *Atomic*
 — Barauni, 86
 — Blyth B, overhead crane for (Cowans, Sheldon & Co. Ltd.), 884
 — Cambay project, India, 627
 — Construction by CEGB in 1960, table of, 113
 — Conventional and atomic, outlook for 1961, 114-117
 — Diesel, for Ghana, 734
 — Geothermal, project at Lake Taupo, New Zealand, 98
 — Inverawe, tunnel from Loch Awe barrage, 10
 — Komati, use of aluminium bus-bars, 618; contractors for, 618
 — Lardarelle, atomic reactor for (Mitchell Engineering and American Machine & Foundry Co.), 800
 — Large, turbo-generators for, 605
 — McKay Creek, Australia, in service, 187
 — in New Zealand, new sources for, 98
 — at Niagara, 218
 — Nuclear. See *Atomic power station*
 — Rugeley, dry cooling towers for (English Electric Co. Ltd.), 884
 — in Scotland, committee to consider, 373
 — Sir Adam Beck, 218
 — Steam turbines for, 294-295
 — Transformers and generators for, by R. Langlois-Berthelot (review), 806
 — on Waikato River, 98
 — West Burton, CEBG order boilers and turbo-alternators, 365, 371
 — See also *Power plant; Substation*
 — Supply, Altron (Allied Electronics Ltd.), 383
 — Instruments (Advance Components Ltd.), 891
 — Transistorised, d.c. (International General Electric), 41
 — Transistorised, Trylab (Rocke International Corp.), 660
 — Unicam (Labgear Ltd.), 318
 — System, unified, Russia will have, by Prof. V. A. Venikov, 304-305
 — Transmission, high voltage direct current, by C. Adamson and N. G. Hingorani (review), 22
 — See also *Gearing; Drives; Transmission*
 — Unit, diesel, Perkins Four (Perkins Engines Ltd.), 891
 — Electric, diesel and diesel-electric, outlook for 1961, 114-117
 — Transistor (Mullard Ltd.), 189
 — Water. See *Hydraulic; Power plant; Hydro-electric; Turbine, hydraulic*
 Powergrip belt drive (William Kenyon & Sons Ltd.), 536
 Powers-Samas Accounting Machines Ltd., merger with British Tabulating Machine Co. to form International Computers & Tabulators Ltd., 193
 Poznan International Fair, 641; British exhibitors at, 873
 Pozzolanic cement, 483
 Praga Tools Corp., increase in production, 741; agreements with Kearney & Trecker CVA Ltd., 741; agreements with F. Pratt & Co. Ltd., 741; agreements with A. A. Jones & Shipman Ltd., 741
 Prague, atomic training in, 15
 — Technical University, atomic training courses, 15; new buildings for, 15
 Praseodymium oxide, bibliography of, 456
 Pratt, F., & Co. Ltd., agreements with Praga Tools Corp., 741
 Pratt & Whitney Aircraft Co., suspension of atomic propulsion for aircraft programme, 632
 Precious metal years, two hundred, by R. E. Wilson (book), 264
 Precipitation, electrostatic (trade publication), 496
 Precipitator, drum type, for atomic reactors (Intertechnique), 599
 — New type (Simon-Carves Ltd.), 403
 — New type, tests on, 403
 — Tape type, for atomic reactors, 599
 Precision Electrical Products (Stockport) Ltd., Progress Fullway Accelerator circulating pumps, 890
 Precision Gear Machines & Tools Ltd., Red Ring gear shaving machine, 144; Briney boring head, 354; automatic loader, 417; Lees-Bradner gear hobbing machine, 726; recirculating ball drives, 776
 Precision indication of the Meridian equipment, PIM, 700
 Preece, Cardew & Rider, deep water harbour Barbados, 733
 Preperite Paste rust remover (Pyrene Co. Ltd.), 834
 Preselect radial drilling machine, Archdale (James Archdale & Co. Ltd.), 702-704
 Press, automated, for plastic laminating (Pathex (Canada), Ltd.), 740
 — Bench, IMR (H. G. Stevens Co. Ltd.), 57
 — Bolster outfit (Hunton Ltd.), 484
 — and croppers (trade publication), 68
 — Dies for car body panels, 460
 — Foil (H. & T. Mellor (Engineers) Ltd.), 190
 — Forging, Colforg (Camp Bird Ltd.), 102
 — Hot, machine, Star (Phillips Bros. & Ellis Ltd.), 891
 — Hydraulic bending, by C. F. Kollbrunner and C. Massa (book), 232
 — Hand (Tangyes Ltd.), 603
 — Laboratory (Apex Construction Ltd.), 253
 — Open, OMF-Ferralba (Rushworth & Co.), 353
 — Printing, offset (Rotaprint Ltd.), 532
 — Reduce process (Head Wrightson Teesdale Ltd.), 367
 — Screw making (Smeral Works), 301
 — Suproform rubber, development of technique (Boulton Paul Aircraft Ltd.), 367
 — Tools (Vernon Tools Ltd.), 763
 — See also *Machine tools*
 Pressed Steel Co. Ltd., *Picture Press*, 225; labour problems at Oxford, 225; widening range of products and customers, 225; opportunities for graduates employed by, 281; exhibit at British Trade Fair Moscow, 759; set up of British Executive and General Aviation Ltd., 833; acquisition of Auster Aircraft Ltd., 833; acquisition of F. G. Miles Ltd., 833; control tower at Oxford Airport, 833; profits, 833; position and prospects, 833; sales of Prestcold refrigerators, 833
 Pressure drop for flow of fluids in round pipe (book), 153
 — Gradient, measurement of in high current discharges, by M. G. Rusbridge, 456
 — Ultra-high, effects on solids, 614-615
 — Vessel codes, need for unification, 238. See *LETTER*, 344
 — Design of, 238
 — Legal control of, 238
 Pressurised suits, phone system for (Spemby Ltd.), 100
 Prestige Group, position and prospects, 489; increase in turnover, 489; purchase of Entwistle & Kenyon, 489; sale of aluminium foil container division to Imperial Aluminium Co., 489; purchase of O' Cedar Co., 489
 Preston-Birmingham Motorway, Lancashire County Council award contracts to Sir Alfred McAlpine & Sons and Leonard Fairclough Ltd., 233
 Preston Woodworking Machinery Co. Ltd., belt sanding machine, 727
 Price, H. L., appointed director of regulation for USAEC, 632; biographical note, 632
 Prices, rising, problem of (OEEC report), 793
 Priest Furnaces, Ltd., lime handling plant ordered from GEC Ltd., 113
 Priestman Bros. Ltd., mobile crane, 797
 Prime movers, design and development in, 114
 — Future exhibitions on, 114
 — Industry, expansion and investment in, 116
 — Industry, external factors affecting, 115
 — Industry, forecast for 1961, 117
 — Industry, long term research in, 116
 — Industry, management and labour in, 116
 — Industry, market trends in, 115
 — Industry, plant and materials supply in, 116
 — Industry, production in, 116
 — Outlook for 1961, 114-117
 Primer. See *Paint*
 Prince, J., on Ferranti Ltd., 841
 Princess bath (Bilston Foundries), 44
 Printed circuits. See *Circuits*
 Printed Circuits Ltd., printed circuits automatically etched, 773
 Printing and Allied Trades Research Association, carton board creaser, 603
 Printing press, offset (Rotaprint Ltd.), 532
 Prior Stokers Ltd., gas burners (trade publication), 464; gas burner, 530
 Private Car (book), 24
 Probability, factor of safety based on, by N. L. Svensson, 154-155. See *LETTER*, 313
 — of failure, 155
 — Theory, modern, and its applications, by E. Parzen (review), 362
 Probe, low-level weather, 749
 Problem of rising prices (OEEC report), 793
 Process control computation, the need for more, by L. Gallon (paper), 181
 — Equipment (trade publication), 364
 — Tubes of Zircaloy 2 for atomic reactors, 60
 Products (trade publications), 640
 — British industrial, for Canada, CABMA register of (review), 748
 Production in agricultural and food equipment industry, 167
 — in armaments industry, 37
 — in building and civil engineering industry, 81
 — in data processing and business equipment industry, 120
 — in domestic aids industry, 171
 Production Engineering Group, report on iron and steel industry potential in Nigeria, 841
 Production Engineering Ltd., investigation of scrap reduction for Mavor & Coulson Ltd., 38
 — and human capacity, 133
 — Industrial, index of, 309
 — Statistics, 713
 — in materials processing industry, 72
 — Overall industrial, 309
 — Plant, design and development, 26
 — External factors affecting, 27
 — Forecast for 1961, 29
 — Industry, expansion and investment in, 29
 — Industry, long term research in, 29
 — Industry, management and labour in, 28
 — Industry, plant and material supplies, 29
 — Industry, production in, 29
 — List of future exhibitions and trade fairs, 27
 — Market trends in, 27
 — Outlook for 1961, 26-29
 — in power plant and prime mover industry, 116
 — in production plant industry, 29
 — in service industries, 162
 — Simpler designs complicate, 602
 — in telecommunications and electronics industry, 32
 — in transport manufacturing industry, 124
 Professional engineer. See *Engineer*
 Profiling grooves by electro-erosion, 301
 Profilometer, 258
 Programming and computers, by K. A. Redish, 180
 Progress Fullway Accelerator circulating pumps (Precision Electrical Products), 890
 — Heating control contactors (M.T.E. Control Gear Ltd.), 280
 — in power, by J. Rowland, 296
 Project (British Transport Commission), 262
 Project Dragon, construction of core structure (Neratoom), 104
 Project EHV, (GEC (US)), 11, 85
 — Engineering (trade publication), 676
 — Oilsand, atomic explosives for, 224
 — Sherwood (USAEC), 85
 Projector, profile, Microtechnica (Headland Gauges Ltd.), 528
 Prop, pit, hydraulic, Dowty (Dowty Mining Equipment Ltd.), 517
 Propagation of thermal waves through graphite with uniform cooling, by A. J. E. Foreman and A. R. Curtis, 224
 Propane for gas-operated trucks (Calor Gas (Distributing) Co. Ltd.), 375
 Propathene polypropylene (ICI Ltd.), 457
 Propellant, rocket, handbook, by B. Kit and D. S. Evered (review), 200
 — Liquid hydrogen as, 898-899
 Propeller, aircraft, fatigue in, 503
 — Test rig for, 503
 — Brake, Dunlop (Dunlop Rubber Co. Ltd.), 852
 — Nikalium, for liner *Canberra*, 754
 — Water tunnel for research on, 813
 Propulsion, atomic. See *Atomic propulsion*
 — Nuclear. See *Atomic propulsion*
 — Ramjet, nuclear power for, 800
 — of ships. See *Atomic propulsion; Marine propulsion; Turbines; Propellers*
 Protection mask, paper (Gordon & Gotch), 666
 Protectoglo flame failure relay (Honeywell Controls Ltd.), 220
 Proton synchrotron, Nimrod, 632
 Prototypia equipment, 804
 Provender mill. See *Mill*
 Prudential Assurance Co. Ltd., loan to British Insulated Callender's Cables Ltd., 777
 Psychrometer, universal, Thies (British Sarozal Ltd.), 351
 Ptfe bearings, 178
 — Unlubricated, 178
 — Bronze bearing bushes (Bound-Brook), 178
 — Bearing materials, 178
 — Tape (trade publication), 264
 Public address unit (Reditune Ltd.), 445
 — Ownership and nationalized industry, by W. A. Robson (review), 639-640
 — Relations and management, by D. Finn (review), 394
 — Works and building exhibition, 685
 Puckey, Sir Walter, on revival of BCAC, 83
 Puerto Rico, Bonus atomic reactor under construction, 148
 — Hydroelectric stations in, 148
 — USAEC advice on atomic matters, 148
 Pullmax bevelling machine (Alfred Herbert Ltd.), 562
 Pulsafe welding shield (Safety Products Ltd.), 57
 Pulse, exhaust, studies, generator for, by W. A. Woods, 128-129
 — Height analyser, Sunvik, 696

- Pulsometer Pumps Ltd., central heating circulating pump, 222
Pumps (trade publications), 298
— Air. See *Compressor*
— Centrifugal (trade publication), 298
— Alcon Thames (Arthur Lyon & Co.), 826
— Anti-corrosion coating for, 506
— Transkem (Transkem Pumps Ltd.), 693
— Chemical, Hypersilid (Lee, Howl & Co. Ltd.), 560
— Circulating, for central heating (Pulsometer Pumps Ltd.), 222
— Progress Fullway Accelerator (Precision Electrical Products), 890
— for concrete, 794
— Double-volute (trade publication), 298
— Drainage (Sumo Pumps Ltd.), 354
— Engine, fire, Coventry Climax (Coventry Climax Engines Ltd.), 842-844
— ENGINEERING survey report on, 523
— Feed (trade publication), 298
— Fire (trade publication), 298
— Fuel, electric, Bendix (Motor Books and Accessories Ltd.), 855
— Injection, distributor, DPA (CAV Ltd.), 602
— Gear, of acetal plastic Delrin (Du Pont), 507
— Axiol (Drysdale & Co. Ltd.), 537
— in Delrin acetal plastic (Planet Products), 507
— (Joseph Young & Sons Ltd.), 353
— Ltd., 271
— High pressure, Hydroflo (Tangyes Ltd.), 561
— Hydraulic, Hydrapak (Tangyes Ltd.), 603
— Keelavite/Gury (Keelavite Hydraulics Ltd.), 189
— Irrigation, for Sudan Government (Firth Cleveland Pumps Ltd.), 333
— Menrow (Mono Pumps Ltd.), 820
— Metering, Micro (Distillers Co. Ltd.), 14
— Outlook for 1961, 114-117
— Petrol, Autovista (BP Ltd.), 206
— Viton gaskets for (Du Pont), 855
— with viton seals (Wayne Tank & Pump Co. Ltd.), 475
— Powder, Junior (Mono Pumps Ltd.), 532
— Rotary, Waterous (Sir George Godfrey & Partners Ltd.), 529
— Self-priming (trade publication), 298
— Sewage, electric, Flygt, 517
— Spark, Clevite PZT (Clevite Corp.), 21
— Turbine, reversible, Deriaz (English Electric Co.), 226-228
— Vacuum, Alcosa (William Allday & Co. Ltd.), 145
— Vacuum-pressure, Reciprotor (Edwards High Vacuum Ltd.), 598
— Vertical, Dolphin (Hamworthy Engineering Ltd.), 353
— (Sykes Ltd.), 660
Punching machine, die, Edel (F. J. Edwards Ltd.), 485
Punjab, irrigation in, 730
Purifier, oil, Nozjector (Sharples Centrifuges Ltd.), 531
Pursel, C. A., on USAEC Superheat Programme, 60
Putley, E. H., on Hall Effect and Related Phenomena (book), 264; (review), 638
"Putting Things in Motion," cinema film, 198
Pvc. See *Polyvinyl chloride*
Pye Ltd., Master Slave manipulator, 103; formation of British Space Development Co., 257; closed television for schools, 447; mobile control rooms for BBC, 577; formation of British Space Development, 585; orders taken at Leipzig Fair, 673; demonstration of equipment, 785; induction generator, 825
Pye Telecommunications Ltd., radar installation on River Medway, 465
Pye, W. G., & Co. Ltd., pH electrode, 58
Pyrene Co. Ltd., Super-Jet foam monitor, 484; Paste Preperite rust remover, 834
Pyrestos Ltd., Pyrestos Dribord flameproof fibreboard, 375
Pyrometer, radiation (UKAEA), 191
— and its underlying principles of radiant heat transfer, by T. R. Harrison (review), 427
Pyropress Engineering Co. Ltd., automatic starting of standby generators, 788
PZT crystals (Brush Crystal Co.), 21
PZT spark pump, Clevite (Clevite Corp.), 21
- Q**
- Q-BALL sensor (Northrop), 41
Quality, controlling on a national basis, 668
Quantum mechanics, introduction to, by R. H. Dicke and J. P. Wittke (book), 298; (review), 607-608
Quarrell, A. G., on Physical Examination of Metals (book), 298; (review), 639
Quarrying, outlook for 1961, 78-81
Quebec Cartier Mining Co., operation of, 729
Queen Mary College, pulsed neutron generator installed, 696
Queen Mary trailer, 248
QuenchWeld process for welding cast iron (Eutectic), 835
Quickfit & Quartz, to exhibit at Moscow Trade Fair, 265
Quinn, E. M., review of Trade Unions and the Government, 363; review of Trade Union Law, 363; biographical note, 364
QVF Ltd., to exhibit at Moscow Trade Fair, 265
- R**
- R1 atomic reactor, Stockholm, 563
Rabson, J., review of Car Driving for Beginners, 24; biographical note, 24; on motor cars and accidents, 229; on motor car electrics, 286; review of Autocar Road Tests, 462-463; biographical note, 464; review of Construction of Ford Specials, 638; biographical note, 640; on cars designed to feel at home anywhere, 724; on are new (car) models teething trouble prone?, 823
Racing car. See *Motor car*
— Show, 65
— Motor cycle, BP book of, by M. Walker (review), 807
Radar console (Decca Radar Ltd.), 530
— Installation on River Medway, 465
— Outlook for 1961, 74-77
— Reflector, Ecco (Emerson & Cuming Co.), 149
— of Kraft honeycomb, 90
— Secondary, agreement between US Federal Aviation Agency and Ministry of Aviation, 1
— Unit, typhoon spotter (Tokyo Shibaura Electric Co.), 577
Radiation, atomic, shielding material, Ecco-shield (Emerson & Cuming Co.), 149
— Counter characteristics, use of phantoscope, 191
— Damage, effects of, and properties of reactor materials, conference, 388
— Limits, revision of (USAEC), 15
— Pyrometry and its underlying principles of radiant heat transfer, by T. R. Harrison (review), 427
— (UKAEA), 191
— Resistant oils and greases, testing of, 191
— Spectrometry, use of phantoscope, 191
— Vacuum ultra-violet source, of high intensity, by F. S. Feates *et al*, 388
— See also *Irradiation*
Radiator hoses, testing to destruction (American Dayco Corp.), 21
Radicon worm reducer gear unit (David Brown Corp.), 61
Radio astronomy, outlook for 1961, 74-77
— Committee, Joint. See *Joint*
Radio-Eirean, sound recording equipment for (Westrex Ltd.), 873
— Emergency (Telefunken GmbH), 252
Radio Italiana Televisione, order placed with Marconi for television cameras, 541
— Lifeboat, Solas (International Marine Radio Co. Ltd.), 561
— Microwave, link and television and telephone services, 236
— Production in Japan, 209
— Research Station, Winkfield tracking station for satellites, 174
— Station, Machias Bay, US Navy, 205
— Telemetry, engine measurements by (BICERA) 84
— Telephone, Kestrel (Marconi), 825
— Telescope. See *Telescope*
— Transistor, Design Centre award for (Ultra Radio), 712
— Transmitter. See *Transmitter*
— Waves in ionosphere, by K. G. Budden (book), 496
— See also *Radar; Television; Thermionic; Valve*
Radioactivation analysis, by D. Gibbons *et al*, 388
Radioactive Chemicals (UKAEA catalogue), 192
Radioactive deposits in Bohemia, 15
— Fall-out in air and rain, by D. H. Pierson *et al*, 60
— Materials, increased use of, 192
— Source of polonium-beryllium, 488
— of radium-beryllium, 488
Radioactive Sources (UKAEA catalogue), 192
— Substances, unsealed, regulations for, 632
Radioactivity, detection of, from burst atomic fuel slugs, 599
— Water, monitor (Elliott-Nucleonics Ltd.), 58
Radioiodine, determination of, by G. J. Hunter *et al*, 60
Radioisotope examination of timber, 749
— Industrial application in Czechoslovakia, 15
— Manual on (USAEC), 16
— New tool for industry, by S. Jefferson (review), 464
— in soil density measurement, 192
Radium-beryllium radioactive source, 488
Raikes, T. H. C., survey of export opportunities in Central and South America, 641
Rail transport, goods, in Europe, 473
— passenger, decline in, 473
Railway, Bornu, extension in Nigeria, 732
— Bridge. See *Bridge*
— British. See *British Railways*
— Locomotives. See *Locomotive*
— More unusual, by J. R. Day, (review) 608
— Officials, directory of, and year book (book), 396
— Outlook for 1961, 160-163
— Products for (trade publication), 608
— Rolling stock. See *Rolling stock*. See also *Locomotive; Wagon*
— Track (trade publication), 676
— Track, disused, proposal to use for Durham Motorway, 320
— Trackwork for, 765
— Train brake. See *Brake*
— Electric, failures of, 884
— Tube. See *Railways, underground; London Transport Executive*
— Underground, Metropolitan Line, new rolling stock for, 820
— Victoria Line, list of consulting engineers and contractors, 414
— Victoria Line, tunnelling equipment for, 414
— See also *London Transport Executive*
— United States, diesel losses. See *LETTER 92*
— Wagon. See *Wagon*
— World, 1960, by H. Sampson (book), 200; (review), 608
Railwaymen, by C. Vincent (review), 608
— Modernisation needs. See *LETTER 92*
Rain and air, radioactive fall-out in, by D. H. Pierson *et al*, 60
Raleigh Cycle Co., four-day week, 141
Rams, hydraulic (trade publication), 200
Rambler Automobile Assembly, new factory in Malta, 69
Ramjet engine, recording instruments for, 545
— Propulsion, nuclear power for, 800
Ramsden Laboratory, extensions to (Ilford Ltd.), 325
Rana Pratap Sagar Dam, work commenced, 143
Rand Show, UK exhibitors at, 465
Range, optical, of Woomera WRE, 750-751
Ranger boat (Dell), 132
Rank Organisation, formation of British Space Development Co., 257
Rank Precision Industries, Ltd., cinema film "Putting Things in Motion," 198; mobile television unit, 650; operations of subsidiaries of, 737
Rank Television, formation of British Space Development, 585
Rank-Xerox Ltd., drawing copier (trade publication), 112
Ransome & Marles Bearing Co. Ltd., ball bushings (trade publication), 776
Ransomes & Rapier Ltd., fire pumps (trade publication), 298; export sales of Rapier mobile crane, 577; orders taken at Leipzig Fair, 673; close working with Newton, Chambers & Co. Ltd., 697; Rapier Walking Dragline excavator, 697
Ranson, H. B., on Direct Current Machines (book), 872
Ranstad, Sweden, new uranium works being built, 223
Rapier mobile crane, export sales of (Ransomes & Rapier Ltd.), 577
Rapier Walking Dragline excavator (Ransomes & Rapier Ltd.), 697
Rates, effect on shipyards, 457
— Effect on steel industry, 105
Rating and Valuation Bill, 665
Rauma-Repola Oy, liaison with Borax Consolidated to import Timbor impregnated timber, 867
Rawlinson, J., duplication of Blackwall Tunnel, 349-350; High Holborn road widening scheme, 480
Ray. See *Cathode ray; X-ray, etc.*
Rayescent panels, Westinghouse, 648
Raymond International, Escravos Bar in Nigeria, 731; association with Richard Costain Ltd., 731
RC-1 atomic reactor undergoing modifications at Casaccia Nuclear Centre, 488
Reactor, atomic. See *Atomic reactor*
Reactor Centrum Nederland, Dr. J. A. Goedkoop appointed managing director of research, 632
Read, Dr. J. C., appointed consultant on rectifiers to AEI Ltd., 397
Read-Out system, automatic 1,000 channel, by R. L. Elliott (paper), 456
Reader, R. W., on Selwood Orbital engine, 789, 853
Readhead, John, & Sons, drop in profit margins, 665; liner *Gorjistan*, 665; position and prospects, 665
Reading matter, Plain Words on, 508
Ready Mixed Concrete Ltd., concrete for Hilton Hotel, 627
Reamer, quick spiral parallel, 570
— Spiral taper pin, 570
Reason, R. E., Taylor-Hobson Talysurf, 258
Rebound rubber hose, non-crushable (Good-year), 587
Reciprocal theorem of Clerk Maxwell, 862
Reciprotor vacuum-pressure pump (Edwards High Vacuum Ltd.), 598
Recon (Pipelines) Ltd., Vacuflex steel reinforced pvc ducting, 835
Recorder, Simplex Mono (James Gordon & Co.), 805
— Tape, for television (Ampex), 650
Recording, data, outlook for 1961, 118-121
— Tape, video, by J. L. Bernstein (book), 708
Rectifiers (International Rectifier Co.), 13
— Selenium (International Rectifier Co.), 85
— Silicon (International Rectifier Co.), 41
— Silicon stack (International Rectifier Co.), 403
Red Ring gear shaving machine (Precision Gear Machines & Tools Ltd.), 144
Redding, R. J., on simple computing relays, 181
Redex Ltd., Redex DD diesel oil additive, 835
Redfyre Centramatic 35 boiler, Design Centre award for (Newton Chambers & Co. Ltd.), 712
Redifon Ltd., flight simulator of Caravelle aircraft for Alitalia Air Line, 801; analogue computer for educational instruction, 888; computer for Welsh College of Advanced Technology, 888; computer for Crawley College of Further Education, 888
Redish, K. A., on computers and programming, 180
Reditune Ltd., public address unit, 445
Redpath, Brown & Co. Ltd., position and prospects, 149; annual report, 149; increased output, 149; railway electrification, 149; work for Thelwall Bridge and Forth Bridge, 149; increase in orders, 149
Redux adhesive (CIBA (ARL) Ltd.), 587
— Process press for de Havilland Aircraft Co. (Head Wrightson Teesdale Ltd.), 367
Redwood, M., on Mechanical Waveguides (book), 608
Reed & Mallik Ltd., Forth Road Bridge concrete viaducts, 10
Reed, M. B., on Linear Graphs and Electrical Networks (book), 640
Reeling machine for cables, Metool (Metropolitan Tool & Products Ltd.), 417
Rees, I., review of Roll Pass Design, 198; biographical note, 200
Refiner, zone (Miles Hivolt Ltd.), 660
Reflector, radar, Ecco (Emerson & Cuming Co.), 149
— of Kraft honeycomb, 90
Refractories, outlook for 1961, 70-73
— Steelworks (trade publication), 264
— Stress-strain time-temperature relationship for, by R. D. Chapman, 455
— See also *Firebricks*
Refrigeration and air conditioning exhibition, International, 834
— Handbook, by R. Plank (book), 676
— Plant for Millbank Development, Sulzer, 809
— Foreign, identification sought for, 233
— Outlook for 1961, 168-171
Refuse collectors, wood (trade publication), 428
Rega Brucker & Co., agreement with Bruce Peebles for joint production, 565
Regeltechnik, Mess- und Verlag Chemie (book), 200
Regents Canal Dock, steel bridge for, 483
Regie des Vois Aeriennes, connection with Marconi's Wireless Telegraph Co. Ltd., 609
Regime of the Rivers Tigris and Euphrates, by Ionides (book), 624
Register of British Industrial Products for Canada, CABMA (book), 68; (review), 748
— of Management and Industrial Consultants, 8
Regulator, power factor (Londex Ltd.), 418
Reines, Dr. F., studies of neutrino reactions, 909
Reinforced concrete. See *Concrete*
Reinforced Plastic Developments Ltd., Halo shower unit, 44
Rejafix Ltd., overprinter, 252
Relativity for Engineers and Science Teachers, by L. H. A. Carr (review), 263
Relay box, telephone controlled (Westinghouse), 784
— Computing, simple, by R. J. Redding and F. H. Bodley (paper), 181
— Control (Westinghouse), 417
— Flame failure, Protectoglo (Honeywell Controls Ltd.), 220
— High voltage (UKAEA), 271
— Latching (Electrical Remote Control Co. Ltd.), 252
— Protective (E. N. Bray Ltd.), 418
— Rotary stepping (Thorn Electrical Industries Ltd.), 293
— (Square D Ltd.), 12
— Transformer unit for petrol tanker grounding (GEC), 403
Reliance Manufacturing Co., position and prospects, 897
Remote handling and analytical techniques used in the processing of samples from HTGC loop irradiations, by P. E. Brown *et al*, 520
Renault Car Co., increase in sales in Switzerland, 465; Dauphine motor car, aerostable suspension using neoprene, 581
Rendel, Palmer & Tritton, ocean terminal for BP Co. at Angle Bay, Milford Haven, 626, 633; extension of Bornu Railway in Nigeria, 732
Reniers, G. M., appointed chairman of International Samson, 777
Rennie, J., historical note, 7
Renold Chains Ltd., reversible locking clutch, 537; chain drives (trade publication), 576
Renwick, Sir Robert, on British Space Development Co., 257; formation of British Space Development, 585
Reports, Plain Words on, 653
— Writing improves with morale, by B. C. Brookes, 315-316
— Techniques of, 315-316
Republic Aviation Corp., tests on metal fibre seals, 475
Republic Steel Corp., corona rings for Machias Bay radio station aerial, 205; X-Tru-Coat plastic coated steel pipeline, 512; Mohr blast furnace for, 665
RES temperature controller (Ad. Auriema Inc.), 318
Research & Control Instruments Ltd., stud welding (trade publication), 332
Research, eye on, by G. R. Taylor (review), 330
Research Institute of Nucleonics, Czechoslovakia, foundation of, 15
— University's, for industry, 434
Reservoir, Balderhead, dam for (Richard Costain (Civil Engineering) Ltd.), 333
— Plastic-lined. See *LETTER 93*
— Weeton, aluminium roof for, 321
Resins, anti-stick. See *LETTER 4*
— Epoxy, Araldite (CIBA (ARL) Ltd.), 375
— Araldite, styling models of (Austin), 855
— to encapsulate electric motor windings, 293
— Flexibiliser for (Shell Chemical Co. Ltd.), 739
— Foundry casting in (J. Hobkirk Sons & Co.), 375
— New formulations (Artrite Ltd.), 773
— Polyester (trade publication), 808
— Cellobond (British Resin Products Ltd.), 475
— Cellobond, technical manual (British Resin Products Ltd.), 507
— Instrument housing in (EMI), 475
— Sealant, Loctite (Douglas Kane (Sealants) Ltd.), 134. See *Correction*, 343
Resistance welding. See *Welding*
Resistor compositions (Du Pont), 135
— Liquid earthing (GEC), 597
— Oxide, Metox (Welwyn Electric), 56
Resonance absorption in heterogeneous systems, G. Memmert, 456
— in nuclear reactors, by L. Dresner (book), 112
— Escape probabilities and self-shielding factors in hydrogen moderated lattices, by A. J. Taylor, 224
Resources, unified, development of, 54
Respatex decorative laminate (Getz Bros. & Co.), 619
Restaurants and hotels in Great Britain and Northern Ireland (book), 396
Restrictive Practices Court, 761
— Court, Registrar of, collection of information on domestic electrical contracting charges, 381
Revel Engineering Co. Ltd., industrial washing machine, 560
Revetment construction of Mississippi River, 627
Revolt, Arab, of 1955-1958: divide and lose, by Ionides (book), 624
— in the desert, by T. E. Lawrence, 624
Revolution, African, by J. Cameron (review), 746
— in wire rope manufacture, 172
Reynolds Metals Co., aluminium furniture designs, 130; Duplex traced pipework, 550

- Reyrolle, A., & Co. Ltd., Reyrolle class LMT switchgear, 290-292; improvement in orders, 585; position and prospects, 633; annual report, 633; orders, 633; profits 633; research arrangements with C. A. Parsons Co., 737; agreement with Oliver J. Nilsen (Australia) Ltd., 769; formation of Reyrolle Nilsen (Australia) Ltd., 769
- Reyrolle Nilsen (Australia) Ltd., formation of, 769
- RF power valve, Ediswan (AEI Ltd.), 253
- R & G level gauge (Bayham Ltd.), 528
- Rhine River, improvement of cargoes on, 473
- Rhoden Partners Ltd., pin inserter, 100
- Rhodes, B., & Son Ltd., sight flow indicator, 531
- Rhodes, Brydon & Youatt Ltd., feed pump (trade publication), 298
- Rhodes, Joseph, & Sons Ltd., up-cutting shears, 692
- Rhodesia, Northern, irrigation schemes, 905; crops of, 905
- Technical education in, 722
- Rhodesian Alloys, British South Africa Co. interest in, 357
- Rhodesian Iron & Steel, British South Africa Co. interest in, 357
- Rhodesian Triangle Sugar Estate, turbo-alternator for, 809
- Rhodin, J. G. A., historical note, 7
- Richard Thomas & Baldwins Ltd., profits, 289; increased turnover, 289; easing in demand for steel, 289; annual report, 289; increase in wages, 289; reduced profit margins, 289; capital expenditure, 289; new medical centre at Ebbw Vale, 289; development of Spencer steelworks, 325; Ebbw Vale scheme, 325; sheet metal quality control system installed (English Electric), 459; GEC electric furnaces installed, 517; application for opencast mining of ironstone rejected, 689; building of Spencer Works, 805; Spencer Works for production in April, 1962, 809
- Richards, Prof. E. J., on noise annoyance, 476-477. See LETTER, 376
- Richards vertical boring machine for Armstrong Whitworth, 39
- Richards, W. J., appointed director of Staff College for Further Education, 657; biographical note, 657
- Richardson, E. & F., Ltd., formation of Coating Contractors Ltd., 506; coating formulations, 506; Adcora coatings, 506
- Richardson, P. D., on fuel consumption in cars, 854
- Richardson, R. J., & Sons Ltd., mobile site shotblasting service, 627
- Richardson Scale Ltd., feed control system, 399
- Richardson, W. G., on diesel engines and customers' requirements, 567; on air compressors and customers' requirements, 567
- Richardsons, Westgarth & Co. Ltd., exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519; to pool resources with G.E.C. Ltd, 777
- Richmond, Michael, nylon safety harness for motor cars, 179
- Ricketson, B. W. A., on liquid hydrogen as rocket fuel, 899
- Ridley, Lord, on Consett Iron Co., 777; on National Coal Board, 777
- Rifles, 831
- Ammunition, 830
- FN self loading, 830-831
- Winchester, 831
- Rigby, W., review of Development of the English Traction Engine, 363; biographical note, 364
- Rigg Bros., new factory for Rigg Welts in Malta, 69
- Rigg, R., on Rigg Bros. and Rigg Welts, 69
- Rigg Welts, new factory in Malta, 69
- Riley, Dr. R. V., review of Chemical Analysis of Cast Iron and Foundry Materials, 66; biographical note, 68
- Ring, piston. See *Piston rings*
- Retaining, Dubo (Fan Disk Ltd.), 867
- Steel, forging, 635
- Rini International, agreement with Plessey Co. for manufacture of Rini products, 609
- Rio Grande hydroelectric project, Brazil, contracting companies, 379
- Rio Tinto Co., formation of Nuclear Developments Ltd., 631, 777
- Risø research centre in Denmark, 564
- Ritolastic waterproofing, 512
- Ritter, L. J., Jr., on Highway Engineering (review), 494
- River Ankobra bridge, Ghana, 765
- Danube, improvement of cargoes on, 473
- Dove Water Board, new reservoir for, 350
- Escravos, mole construction on, 731
- Kaduna, Nigeria, road bridge over, proposed, 736
- Koyna dam, 829
- Luitakila irrigation scheme, 905
- Manicouagan hydroelectric project, 306-307
- Manicouagan, power schemes on, 306
- Medway, radar installation on, 465
- Mississippi, revetment construction on, 627
- Navigation, 55
- Outardes hydroelectric project, 306-307
- Rhine, improvement in cargoes on, 473
- Tagus bridge, contractors for, 482
- Tigris and Euphrates, Regime of, by Ionides (book), 624
- Transport, 55
- Trent, quickening traffic on, 558
- Trent, Navigation, improvement scheme, 558; lock mechanization, 558; Cromwell lock extension, 558; dredging plant on, 558; Cromwell weir, 558
- Tunnel driving under, 349-350
- Volta project, companies bidding for contracts, 333; work to start soon, 333
- Waikato generating stations, 98
- Wear shipyard modernization, 113, 127
- R. & M. Plant Ltd., formation of, 841; hiring out of contractors' plant, 841
- Road accidents. See *Accidents*
- Aggregate, slag as, 342
- and airfields overseas, use and control of vegetation on, by K. E. Clare, 829
- Road bases, cement in, 380
- Campaign Council, symposium on Urban Survival and Traffic, 93, 473
- Casualties, 856
- Construction, dawdling pace of, 817
- Dams and bridges (trade publication), 576
- Deaths, sharp fall in, at Christmas, 97
- Great North, general modernization of, 320
- Interlay for black-tops (trade publication), 808
- Improvement schemes, analysis of the cost of, by R. F. Dawson, 373
- Improvement schemes, Ministry of Transport expenditure on, 373
- Landscape of, by S. Crowe (review), 494-495
- Maintenance, expenditure on, 473
- Marking posts, rubber, Hamilton Safe Sines (Hamilton Ltd.), 321
- Marshall Highwayman road roller (Marshall Sons & Co. Ltd.), 798
- Modernization, 817
- Outlook for 1961, 78-81, 160-163
- Projects, 817
- Research Laboratory, cost of road improvement schemes, 373
- Roller, Road-Marshall Highwayman, 798
- System (Westinghouse), 622
- — Traffic rides "piggy-back" on, 481, 497
- Safety, factors affecting, 97
- Safety (Protective Headgear) Bill, 229
- Slaughter, reducing next Christmas, 9
- Tests, Autocar (review), 462-463
- Toll, 473
- Traffic. See *Traffic*
- User taxes, proposal to cut down, 341
- Widening scheme at High Holborn, 480
- See also *Bridge; Highway; Motorway*
- Roballo Engineering Co. Ltd., bearing layouts for pelletizers, 788
- Robbins, B. G., retires as secretary of Institution of Mechanical Engineers, 217
- Robbins, Lord, on British South African Co., 357
- Robens, A., on coal and mechanical aids, 273; appointment as chairman of National Coal Board, 405; opening of NCB demonstration houses in Pimlico, 641; on coal from vending machines, 721
- Roberts, C. S., on Magnesium and Its Alloys (review), 297
- Roberts, F. B., on A High Degree of Engineering (ICI Ltd. booklet), 177, 185
- Roberts, Gilbert, grip bolts for Forth Road Bridge (A. P. Newall & Co. Ltd.), 452
- Roberts, Sir Howard, presentation of Sir George Earle trophy to W. K. Laing, 689
- on YZ Club, 824; appointed to Council of Institute of Advanced Motorists, 856; biographical note, 856
- Roberts, Sir Peter, on Newton, Chambers & Co. Ltd., 697
- Robertson, A. N. M., on water brings backward lands to life, 54-55
- Robertson, B., on Spitfire: The Story of a Famous Fighter (review), 23
- Robertson, Sir Brian, on future of railways, 681; on locomotive costs, 681
- Robertson, D. R., Skimmer ground effect machine, 637
- Robertson, M. F., review of Exploration in Management, 540; biographical note, 540
- Robertson, S. A., on Engineering Management (book), 68; (review), 426
- Robertson, W. H. A., & Co. Ltd., heavy machine tools, 763
- Robertson, W. S., on Scottish industry, 881
- Robinson, A., & Co. Ltd., ship's telegraph, 425
- Robinson, D., & Co. Ltd., Rodene process timer, 190; bonus clock, 280; Rodene batch control timer, 318
- Robinson, E. S. & A., Group, new building for, at Bristol, 626
- Robinson, Thomas, & Son Ltd., chain conveyor (trade publication), 496
- Robson, W. A., on Nationalized Industry and Public Ownership (review), 639-640
- Rochdale, Lord, chairman of docks and harbours committee to be formed, 513; chairman of Cotton Board, 513
- Rock abutments, safety of, by L. Muller, 894
- Drill, Holman Silver 3 Handril (Holman Bros. Ltd.), 498-500
- Non-resistant, dams built above, by A. Aastrup and S. Sällström, 894
- Plug blast, major, near dam, by F. L. Lawton and M. D. Lester, 895
- Wool, Rocksil (Cape Insulation and Asbestos Products Ltd.), 519
- Rocke International Corp., Trylab transistorized power supply, 660
- Rocket, Aerobee-Hi, 899
- Analysis of faults occurring, 140
- Blue Scout, as transport for radio telescope, 237
- Design studies, 899
- Engine, atomic, research on, 388, 800
- — Simplifying, 140
- — Thermodynamic data for, 269
- Fuels, 898
- Future Reliability Concepts and Ramifications, by B. H. Hershkowitz, 140
- LOX/Liquid hydrogen propelled, 899
- Outlook for 1961, 34
- Propellant Handbook, by B. Kit and D. S. Evered (review), 200
- Propellant, liquid hydrogen as, 898-899
- Propulsion, fundamentals of, by R. E. Weich, Jr., and R. F. Strauss (review), 200
- Reliability, lessons learned in, 140
- Solid propellant (Thiokol Chemical Corp.), 662
- V-2, 662
- Rocksil rock wool (Cape Insulation & Asbestos Products Ltd.), 519
- Rockwell Ltd., Autopak arc welding equipment, 203
- Rockwell Machine Tool Co. Ltd., Hartex centreless grinding machine, 253; automatic machine, 354; Monarch centre lathe, 384
- Rockwell planetary axes, 873
- Rockwell Standard Corp., Rockwell planetary axes, 873; licence for Centrax Ltd. to manufacture Rockwell planetary axes, 873
- Rocol Ltd., lubricants (trade publication), 264; molybdenum disulphide oil additive (trade publication), 872
- Rod decks (trade publication), 396
- Thermoplastic, and sheet and tube, manipulation of, by J. M. J. Estevez and D. C. Powell (book), 24
- Weld filler (trade publication), 264
- Rodene process timer (D. Robinson & Co. Ltd.), 190
- Rodene batch control timer (D. Robinson & Co. Ltd.), 318
- Rodgers, Dr. J. W., review of Symposium on Newer Metals, 332; biographical note, 332
- Roe, A. V., Canada Ltd., interest in Canadian Steel Wheel Ltd., 737
- Roebing, John A., & Co., Forth Road Bridge, 453
- Rogers, J. R., to visit UK on trainee exchange scheme, 761
- Rolatrac Ltd., pallet truck, 252; BT stacking truck, 444
- Roll pass design (review), 198
- Pinch (Bronx Engineering), 13
- Steel, forged (trade publication), 640
- Roller coating with paint, 3
- Road, Road-Marshall Highwayman (Marshall Sons & Co. Ltd.), 798
- — System (Westinghouse), 622
- Traffic rides "piggy-back" on, 481, 497
- Traffic rides "piggy-back" on, 481, 497
- Rolling, cold, push-button integrated, 490
- Mills, cold, automated, 490
- — France to supply East Germany, 497
- Stock, outlook for 1961, 122-125
- — See also *Locomotive; Wagon*
- Strip, research on (BISRA) (book), 264
- Rolls-Royce Ltd., engines for Transall C160 aircraft, 113; Conway jet engines for VC10 aircraft, 233; formation of British Space Development Co., 257; Avon jet engines for Mirage III aircraft, 429; exhibit at Rand Show, 465; longer overhaul life for Avon engines, 497; orders taken at New York automobile show, 505; to exhibit at Sydney Trade Fair, 541; formation of British Space Development, 585; formation of Nuclear Developments Ltd., 631; budget limits home market for cars, 649; Spey engines for BAC One-Eleven aircraft, 683; formation of Nuclear Developments Ltd., 777; development of Spey jet engine, 787; rocket design studies, 899
- Romania, polythene plant for, 609
- Rome Treaty, 649, 761
- Ronson Ltd., exhibit at British Trade Fair, Moscow, 759
- Rontgen rays. See *X-ray*
- Rontgenapparatenfabriek Evershed-Enraf, coal-analysis unit for Netherlands State Mines, 469
- Ronuk Ltd., acquired by Newton, Chambers & Co. Ltd., 697
- Roof, aluminium, for Weeton reservoir, 321
- Arcon Monitor (Taylor Woodrow (Arcon)), 897
- Birmingham University, model of, 863
- Cylindrical shell, design of, by J. E. Gibson (book), 904
- Factory, model of, 863
- Foamglas for, of Ariel Hotel (Russell Diplock Associates), 698
- Lights, translucent (UAM Plastics Ltd.), 179
- Sliding, MacGregor, 402
- — for railway freight wagons, 402
- Smithfield Market, model of, 863
- Trusses for dock shed (Tubwrights Ltd.), 483
- Roofing, Bitumetal, exports of (William Briggs & Sons), 489
- Felt, Venales self-locking nails for, 483
- Nuraphalte method, 483
- Rootes (Australia) Ltd., demand for vehicles maintained, 299
- Rootes, G., on statement signed by employers and unions in motor car industry, 593
- Rootes Group, price cuts, 465; sales increase in Switzerland, 465; orders taken at New York automobile show, 505; reviving sales, 513; dismissal plan shelved, 513; exhibit at British Trade Fair, Moscow, 705
- Rootes, Lord, tour of North America, 641; on opportunities in the Western Hemisphere, 641
- Rootes Motors Inc., US Federal Trade Commission drop charges against, 365
- Rope, wire. See *Wire-rope*
- Rosato, D. V., on Asbestos: Its Industrial Applications (review), 263-264
- Rose, William, Ltd., ptfе tape (trade publication), 264
- Rosenlew, W., half interest in Papropack, 333
- Rosite Ltd., Rosite polyester insulation material, 507
- Roskill, O. W., & Co. (Reports) Ltd., *Who Owns Whom*, 833
- Roskill, S. W., on War at Sea, 1939-1945 (book), 200
- Ross Spur Motorway (William Briggs & Sons), 489
- Rossenbeck, Dr. M., research on motor car petrol consumption, 215-216
- Rostow, W. W., on Stages of Economic Growth (review), 674
- Rotaprint Ltd., *Tone*, 22; offset printing press, 532
- Rotary cultivator, Gardenmaster 85 (Landmaster Ltd.), 670-672
- Rotator set (Baker Perkins Ltd.), 559
- Rothwell, S. H., on Paternoster lifts, 476
- Rotor cooling for generators, 282
- Rotron Controls Corp., formation of Rotron Controls Ltd., 289; agreement with Elliott-Automation Group, 833
- Rotron Controls Ltd., formation of by Elliott Bros. (London) Ltd. and Rotron Controls Corp., 289
- Roughness comparison specimens, BS 2634 on, 267
- Roughrider tractor compressor unit (Atlas Copco (Great Britain) Ltd.), 797
- Rousseaux, G. A., on Russian experience of wide river dams, 895
- Routh, E. J., on Elementary Part of a Treatise on the Dynamics of System of Rigid Bodies (book), 428
- Routing machine (Onsrud), 554
- Rover Co. Ltd., propeller turbine engine for light aircraft, 293; increase of authorized capital, 673
- Rowan, David, engines for P. & O. ships, 299
- Rowing machine (Herbert Terry & Sons Ltd.), 912
- Rowland, J., on progress in power, 296
- Rowlands, G., on approximate solution of one velocity neutron transport equation in infinite medium, 224
- Rownsong Conveyors Ltd., conveyors (trade publication), 158
- Royal Air Force, integrated air traffic control system, 478
- Aircraft Establishment, tests on nylon safety harness for motor cars, 179; new wind tunnel for (Bedford), 469; development of British Visual Glide Path Indicator System, 533; studies for supersonic airliners, 820; moving map display for aircraft navigation, 852
- Army Ordnance Corps, Emidec 2400 computer for, 325
- Australian Air Force, Mirage III aircraft as re-equipment for, 429
- Australian Navy, hydrographic survey ship for, 841
- Automobile Club, recommends safety harness to motorists, 229; research on diesel oil additives, 835
- College of Advanced Technology, new buildings opened by HM the Queen, 761
- of Science and Technology, application for grant for atomic reactor, 104
- of Surgeons, research on gas analysis technique, 645
- Fine Arts Commission, approval of tower building for new Museum telephone exchange, 219, 236
- Jordan Air Force, use of Alvis Leonides engine, 61
- Malayan Air Force, use of Alvis Leonides engine, 61
- Navy, guided missile destroyers for, 273
- — New style ships for, 273
- — Three frigates to be built, 69
- — Use of helicopters, 273
- Show, 888
- Society for Prevention of Accidents, campaign with Gas Council for "Use Gas the Safe Way," 176; award of Sir Sir George Earle Trophy to John Laing Construction Ltd., 689; formation of YZ Club, 824
- — for the Promotion of Health, sound and thermal insulation, 680
- Statistical Society, conference of, 686
- Swedish Navy, Boeing-Vertol 107 and Agusta-Bell 204B helicopters for, 673
- Technical College, renamed Royal College of Advanced Technology, 761
- Royce Electric Furnaces Ltd., diffusion furnace 486
- Rubbers (trade publication), 298
- Applied science of, by W. J. S. Naunton (book), 676
- Centreless grinding of (A. Scrivener Ltd.), 635
- Cold cure, aerosol packs of (International GEC Inc.), 551
- Cold cure silicone (Midland Silicones Ltd.), 551
- Latex sprayed seals in mining, 802
- — Synthetic, use of "pillow" tanks for transport, 311
- Nitrile (trade publication), 232
- and Plastics Research Association of Great Britain, formation of, 845; research on rubber and plastics, 845; grant from DSIR, 845
- Posts for road making, Hamilton Safe Sines (Hamilton Ltd.), 321
- Pvc cable sheathing, Niplas (Greengate & Irwell Rubber Co.), 179
- Research on, 845
- Silicone, processed, suppliers of (trade publication), 872
- — Silcoset 100, 103 and 104 (ICI Ltd.), 771
- Synthetic, technology, by W. S. Penn (review), 676
- — as protection for Esch-sur-Sûre dam, 11
- Ruberoid Co. Ltd., No. 3 Pluvex dampcourse, 619
- Rubert & Co. Ltd. adjustable spanner, 660
- Rubery, Owen & Co. Ltd., MacGregor sliding roof for railway wagons, 402
- Rubinsky, I., on finding the ideal site, 213
- Rugeley power station, CEGB, dry cooling towers for (English Electric Co. Ltd.), 884
- Ruhr, coal industry in, 177
- New industries for, 177
- Steel industry in, 177
- RUM remote underwater manipulator, 143
- Runcorn-Widnes bridge, flame cleaning of, 321
- Rural Cooperative Power Association, Elk River atomic reactor, 419
- Rushworth & Co. Ltd., heavy machine tools, 763
- Rushworth & Co. (Sowerby Bridge) Ltd., OMF-Ferralba open press, 353
- Russell, R. S., on British Commonwealth Year Book (review), 747-748
- Russia, agreement with UKAEA on peaceful uses of atomic energy, 800
- Agriculture in, during 1960, 273
- to assist Czechoslovakia's atomic programme, 15
- Atomic research centre in Latvia, 104
- Cable ships ordered from Wartsila-Koncernen, 233
- Capital investment in industry, 697
- CERN physicists to study basic nuclear research in, 348
- Chemical industry in, 273
- — Plants for (Wycon Services), 497
- Consumer goods production, 273
- Contracts with Solartron Electronics Group via VO Mashpriborgintorg, 905
- — with UK and Austria, 785
- Electrical transmission system in, 304
- Engineering education in, by S. P. Timoshenko (review), 330
- Export of oil to India, 405
- — of oil to Sweden, 265

- Russia, exports to UK, 299
 — Import of machinery from Sweden, 265
 — Imports from UK, 299
 — Industrial growth in, 273
 — Output figures, 273
 — Interconnection of electrical power systems, 305
 — Machine tools for, 873
 — Orders placed for Crustex Descaling ultrasonic boiler scaling equipment, 397
 — Paper machine drives for (AEI Ltd.), 897
 — Passenger liner design, 809
 — Purchase of control board from AEI Ltd. for tyre factory, 267
 — Space flight facts, by G.V.E. Thompson, 557
 — Space vehicle success, 309
 — Superheating atomic reactor, 60
 — at Sydney Trade Fair, 541
 — Tilghman's Ltd. to supply dust collecting plant to, 457
 — Tractor production in, 273
 — Trade with Sweden, 265
 — Trade with UK, 233, 299, 713, 785
 — Trading history with Mather & Platt Ltd., 457
 — Unified power system, by Prof. V. A. Venikov, 304-305
 — Vostok manned space ship success, 549, 557
 — Vostok satellite, 623
 — Zaporozhets baby car production in, 95
 Russian All-Union Chamber of Commerce, sponsorship of British Trade Fair, Moscow, 705
 Russian Castings Production, translation of, 701
 Russian earth satellites, table of, 557
 — Experience of wide river dams, by G. A. Rousseaux and V. P. Likhachev, 895
 — Poplov medal awarded to Dr. Essen, 705
 — Space Flight Facts Reconciled, by G. V. E. Thompson, 557
 — Trade and Industry Exhibition, exhibits for, 299
 — Translation from, for scientists, by C. R. Buxton and H. S. Jackson (book), 24; (review), 706; note on, 902
 Rust preventatives (trade publication), 264
 — Remover, Paste Preperite (Pyrene Co. Ltd.), 834
 — See also *Corrosion*
 Ruston & Hornsby Ltd., diesel power equipment for New Hebrides manganese mines, 201; exhibit at Rand Show, 465
 Ruston-Paxman Ltd., diesel engine for Philippine cotton mills, 609
 Rustyfa consortium, 267
 Ruys' Handelsvereniging NV, formation of new company in Holland with International Computers & Tabulators Ltd., 193
 Ryzewski, J. R., on lateral stability of buttresses for dams, 895
 Ryle, Prof. M., exhibition of work of, at British Trade Fair, Moscow, 705
- S**
- S Man, by M. Caine (review), 496
 S2DS atomic reactor now critical, 664
 S64 Sikorsky skycrane helicopter (United Aircraft Corp.), 320
 Sack loader, Hipope Mule (H. C. Pope Ltd.), 767
 Saddles, cable, for Forth Road Bridge (William Beardmore), 452
 Sadia electric water heater (Aidas Electric Ltd.), 699
 S.A.F. de Pistone Borgo, purchased by Associated Engineering Group, 61
 Safe practice, model code of, in the petroleum industry, 281
 — "Standard Quality," Chubb (Chubb & Sons' Lock & Safe Co. Ltd.), 642-644
 Safe Use of Gas in the Home, 176
 Safety, air, combined operations for, 478
 — Aspects of motorway design, by W. F. Adams, 625
 — Begins in the board room, by G. H. Beeby, 556
 — Belt assemblies for motor vehicles, BS, 718
 — Association, International. See *International*
 — Belts Diagonal, are best in car accidents, by D. C. Herbert, 718
 — Motor car, anchorages for, 261
 — Motor car, Bluebird car tests on, 261
 — Motor car, cost of, 229
 — Motor car, manufacturers, committee of, 229; members of the committee, 229
 — Motor car, summarizing, 229
 — Motor car, table of manufacturers of, 261
 — Motor car, tests on, 229
 — Boots, industrial (Bondsman Footwear Ltd.), 211
 — Campaign on safe use of gas in the home, 176
 — Critical, in atomic reactors, 355
 — and economy factors for dams, by H. K. Fairbanks and R. A. Sutherland, 895
 — Engineering and technology, by R. Hurst, R. N. Lyon and C. M. Nicholls (review), 111
 — Factor of, based on probability, by N. L. Svensson, 154-155. See *LETTER*, 313
 — First with electricity, 308
 — Footwear, 513
 — Fuse for Maritime Gas Cooled Reactor Critical Experiment, 16
 — Industrial, National Conference on, 556
 — of Life at Sea, Conference on, 520
 — Measures for gas appliances, 176
 — National industrial, conference, 689
 Safety Products Ltd., Pulsafe welding shield, 57; Clearways face shield, 319
 Safety regulations, 381
 — Requirements for atomic propelled ships, 520
 Safety Report, 513
 Safety on the roads, factors affecting, 97
 — of rock abutments, by L. Müller, 894
 — Routes in factories, 142
 — Screen instead of safety belt for motor cars, by A. J. L. Bioul, 229
 Safety straps of nylon for motor cars, 179
 Safetymaster electric tool (Wolf Electric Tools Ltd.), 106-108
 Saint. See *Sr.*
 Salaries and wages, Plain Words on, 408
 Salaverry Harbour, Peru, model of, 470. See *LETTER*, 685
 Salem earth boring machine (F. Taylor & Sons (Manchester) Ltd.), 796
 Salesmen, motor car, more effort needed by, 113
 Salev fork lift truck, 554
 Salford Electrical Instruments Ltd., crane overload warning cell, 271
 Sällström, S., on dams built above non-resistant rock, 894
 Salt from seawater and geothermal heat, Fiji Islands, 873
 Salvage, industrial (NISRC book), 241
 — of ship *Vasa*, 625
 Sam Houston atomic propelled submarine launched, 388
 Samerium oxide, bibliography of, 456
 SAMES (GB) Ltd., Megastraton electrostatic paint spraying plant, 571; activities of, 685
 Sampler, water (Elcontrol Ltd.), 101
 Sampson, H., on World Railways, 1960 (book), 200; (review), 608
 Samson, T., on trackwork engineering, 765
 Sand, hydraulic grading and washing of, by E. Condolios and A. Michel, 894
 Sandeman, Dr. E. K., on communications satellites, 892
 Sanders & Forsters Ltd., steel structure for screen of Trinidad drive-in cinema, 187
 Sanders, L. J. R., Engineering Co., axle finishing machine, 727
 Sanderson Fabrics, Sovex conveyor installed, 837
 Sanding machine, belt (Preston Woodworking Machinery Co. Ltd.), 727
 Sandvik Swedish Steels Ltd., tungsten carbide for turning steel, 507
 Sandwich constructions, structural, symposium on durability and weathering (ASTM book), 364
 — Plastic construction for boat (Watercroft), 834
 Sankey-Sheldon Ltd., Unistruts for Shell Centre, 380
 Satellites, communication, 749
 — Active, by Dr. G. E. Mueller, 893
 — Coded speech transmission with, 892
 — Cost analysis of, 893
 — Engineering and economics of, 892
 — is on the way, by G. V. E. Thompson, 892-893
 — Orbital life of, 983
 — Symposium on, 892
 — System, intercontinental, by E. A. Laport, 893
 — Courier, by G. F. Senn and P. W. Siglin, 893
 — Mercury, 623
 — Outlook for 1961, 30
 — Plans for UK's second, 645
 — Prolonging orbital life of (Bell Telephone Co.), 845
 — Russian, table of, 557
 — Stations for world communications, 585
 — Tracking station for, Winkfield, 174
 — Vostok, 623
 Saturation characteristics of mean-current fission ionisation chambers, by J. A. Dennis and W. R. Loosemore, 520
 Saunders, J. T., on University College Ibadan (book), 428; (review), 747
 Savage & Parsons Ltd., joint ownership of Nuclear Equipment Ltd. with General Mills Inc., 103
 Savannah, atomic propelled ship, reactor to operate at 10% full power, 148; initial fuel shipment made from Babcock & Wilcox, 288
 Savannah River atomic reactor, 420, 909
 Saw, band (trade publication), 68
 — Hand "Baby" (Soag Machine Tools Ltd.), 384
 — Horizontal, Fortemat (Monks & Crane Ltd.), 726
 — Sugimoto, 554
 — Circular (Addison Tool Co. Ltd.), 559
 — Friction, Jungbluth (Addison Tool Co. Ltd.), 527
 Sawhney, B. S., appointed chief of Triveni Engineering Works, 809
 Sawing and planing: principles of machine woodworking, by A. H. Haycock (book), 68; (review), 903
 Saxon Engineering Co. Ltd., screens (trade publication), 364
 Sayers, Dr. B. McA., review of Self-Organising Systems, 538-539; biographical note, 540
 SC1 aircraft, Short, 684
 SC5 aircraft, Shoft, 683
 SC30 analogue computer, Solartron (Solartron Electronic Group Ltd.), 874-876
 Scaffold tubes, coupler for (Boulton Scaffolding Ltd.), 384
 Scaffolding (Great Britain) Ltd., stair brackets for scaffolding, 57; Strateline cradle winch, 351; castor wheels (trade publication), 540
 Scaffolding, stair brackets for (Scaffolding (Great Britain) Ltd.), 57
 Scale, binary coded, 346
 — for coding quantities electrically, by D. S. Evans, 346-347
 — Digital coded, 346
 Scales-Spin spin dryer (Summerscales), 272
 Scaling equipment, ultrasonic, for boilers, Crustex Descaling (H.N. Electrical Supplies Ltd.), 397
 Scandinavia, atomic activity in, 563-564
 Scandinavian Council for Applied Research *Scandinavian Research Guide* (review), 331
 Scandinavian Research Guide (review), 331
 Scanner, data logging (Microcell), 222
 — Print-out, Digilog (Bailey Meters), 13
 Scattering law, measurement of for a moderator, by P. A. Egelstaff, 520
 Schaffner milling machine (Dowling & Doll Ltd.), 484
 Schagen, Dr., on banana tube system for colour television, 815
 Scharle, W., on production plants for liquid hydrogen, 898
 Schenck, H., on Heat Transfer Engineering (review), 156
 Schlatter, H. A., Ltd., butt welding machine, 562
 Schmeisser sub-machine gun, 830
 Schmidt, E., on Einführung in die Technische Thermodynamik (review), 263; on VDI Steam Tables (review), 840
 Schneeberger, Dr. M., to study nuclear research in Russia, 348
 Schoeller, Prof. H., on arid zone hydrology, 55
 Schools awarded scholarships and exhibitions by English Electric Co. Ltd., 593
 — Closed circuit television for (High Definition Television Ltd.), 650
 — Circuit television for (Pye), 447
 — Leavers, directory of opportunities for (book), 428
 — Statistics on, 793
 — Secondary, engineering studies in (LCC reporter), 373
 Schrader's, A., Son, division of Scoville Manufacturing Co., air cylinders, 87
 Schwarz, H. F., Decca Navigator development 390
 Sciaky Electric Welding Machines Ltd., on plant and customers' requirements, 566; on welding equipment and customers' requirements, 568
 Science, education for, 413
 — Frontiers, by E. Hutchings, Jr. (review), 330
 — and government, by C. P. Snow (review), 839
 — and industry—problem of communication, conference, 137
 — International congress of (book), 593
 — and invention, library of, by Prof. R. S. Hutton, 688
 — National reference library of, 688
 — Museum Library, 688
 — Simplicity of, by S. D. Beck (review), 330
 Science in Space (review), 67
 Science Survey (1), by A. W. Haslett and John St. John (review), 330
 — Teachers, and engineers, relativity for, by L. H. A. Carr (review), 263
 — and technology, McGraw-Hill encyclopedia of (review), 607-608
 — National lending library of, 688
 — of wealth, by C. F. Carter (book), 200
 Scientific information. See *Information*
 — Instruments. See *Instruments*
 — Manufacturers Association of Great Britain, pleased with results of Moscow Trade Fair, 905
 — Research. See *Research*
 — Research in British Universities (review), 330
 Scientific Surveys Ltd., *Anti-Corrosion Manual*, 1960 (review), 156
 — Technical and Medical library, Lewis's 1957-59, supplement to the catalogue of (book), 24
 Scientist, complete (Leverhulme Study group report) (book), 776
 — Information. See *Information scientist*
 — Library-minded. See *LETTER*, 312
 — Translation from Russian for, by C. R. Buxton and H. S. Jackson (book), 24; (review), 706; note on, 902
 Scintillation counter (Hilger & Watts Ltd.), 188
 — Symposium, 520
 — Counting, liquid, identification of beta-emitting isotopes by, by W. P. Hutchinson (paper), 456
 Scotland, power stations in, committee to consider, 373
 — Unemployment in, 217
 Scott, Bader & Co. Ltd., polyester resin (trade publication), 808
 Scott, Sir Giles G., Forth Road Bridge, 448
 Scott, Dr. R. A., appointed head of Cementation Group research centre, 187; biographical note, 187
 Scott and Wilson, Kirkpatrick & Partners, proposed road bridge over River Kaduna in Nigeria, 736
 Scottish Gas Board, regulation and distribution with Lurgi gasification, 805
 — Industry, growth of, 881
 — Universities, application for grant for atomic reactor, 104
 Scotts' Shipbuilding & Engineering Co. Ltd., frigate for Royal Navy, 69
 Scovill Manufacturing Co., air cylinders, 87
 Scrap, reducing in an iron foundry, 38
 Scratching of sheet metal, paper tapes prevent, 666
 Screens (trade publication), 364
 — X-ray, of lead Plymax (Venesta), 343
 Screwdriver, Magnamatic (Consolidated Pneumatic), 100
 Screws and fasteners (trade publication), 776
 — Making press (Smeral Works), 301
 — Thread hammering machine, Crossley-Trurnit (Crossley Bros. Ltd.), 398
 — Wood, cold flow formed, 398
 Scrivener, A., Ltd., centreless grinding of rubber, 635
 Scrubber, gas, Waagner-Biro (Ambuco Ltd.), 14
 — Hydrogen sulphide (trade publication), 428
 Scrubbing tower (Tough Plastics Ltd.), 474
 Sculling machine (Herbert Terry & Sons Ltd.), 912
 Scythe, self propelled (Hayters (Sales) Ltd.), 767
 S.E. De Productos Fotograficos S.A. Valca, technical agreement with Ilford Ltd., 325
 Sea, safety of life at, conference on, 520
 — War at, 1939-1945, by S. W. Roskill (book), 200
 — See also *Seawater*
 Seaboard and Western Airlines, application to carry passengers on Atlantic route, 489
 Seaborg, Dr. G., nominated as chairman of USAEC, 148; biographical note, 148; on price cuts in uranium, 809
 Seal applications, 573
 — Basic types, 572
 — DD (Flexibox Ltd.), 820
 — Diaphragm, Bellofram (George Angus & Co. Ltd.), 629
 — Engineering, 572
 — Future developments in, 573
 Seal of metal fibre, 475
 — of rubber latex, sprayed, in mining, 802
 — Shaft (Crane Packing Ltd.), 56
 — Silicone (Dowty Seals Ltd.), 519
 — Viton, for petrol pump (Du Pont), 475
 Sealant resins, Loctite (Douglas Kane (Sealants) Ltd.). See *Correction*, 343
 Sealing, fluid, conference on, 440
 — Mechanical, as it stands today, by A. Lymer, 572-573
 — Mechanism of, 572
 Seamanship tests for small boat users considered by Ministry of Transport, 381
 Searchlight, xenon infra red, for M60 tank, 45
 Seaslug guided missile, guidance system for (GEC Ltd.), 909
 Seat belt assemblies for motor vehicles, BS, 229
 Seawater evaporation plant (G. & J. Weir), 497
 — Evaporator (International GEC), 439
 — New, 604
 — Salt, from, using geothermal heat, Fiji Islands, 873
 Sections, cold formed, standard for, 483
 Sectional areas and weights, table of (trade publication), 540
 Seeber, G., official visit to UK, 193
 Seizure of bearing surfaces, avoiding, 41
 Selection by elimination, Plain Words on, 853
 Selector, sequence (Elliott Bros.), 418
 Selenium rectifiers (International Rectifier Co.), 85
 Self-Changing Gears Ltd., torque converter, 661
 Self-organising systems, by M. C. Yovitts and S. Cameron (review), 538-539
 Selling, use information departments for, by E. N. Simons, 385
 Sell's British Aviation, 1960 (book), 68
 SELNI Co. project of Euratom, 768
 Selwood Orbital engine (William R. Selwood), 637, 682. See *LETTERS*, 789, 853
 Selwood, William R., Ltd., new type internal combustion engine, 637; Selwood Orbital engine, 682
 Semiconductors, high temperature operation (Westinghouse), 41
 — Irradiation effects on (Oak Ridge National Laboratory), 469
 — Progress in, by A. F. Gibson, R. E. Burgess, and F. A. Kroger (book), 112; (review), 638
 — Technology, by G. K. T. Conn (book), 68; (review), 638
 Sensing device (Mining Research Establishment), 669
 Sensor, Q-Ball (Northrop), 41
 Sequence selector (Elliott Bros.), 418
 Sequencing apparatus, time and event (Atlantic Research Corp.), 175
 Serenia tanker ship, 769
 Service Electric Co. Ltd., electric whistle, 532
 Service Engineering Co. (Northampton) Ltd., Mixconcrete batching plant, 145
 Service industries, design and development in 160
 — Expansion and investment in, 162
 — External factors affecting, 161
 — Forecast for 1961, 163
 — Future exhibitions on, 161
 — Long term research in, 163
 — Management and labour in, 161
 — Market trends in, 161
 — Outlook for 1961, 160-163
 — Plant and materials supply in, 162
 — Production in, 162
 Service With Overseas Governments, 715
 Services (trade publications), 640
 — Specialist (trade publication), 576
 Servicing equipment (trade publication), 676
 Servo controls, electro-hydraulic, use of, 818-819
 — Valve. See *Valve*
 Servomechanisms and basic synchros (Van Valkenburgh, Nooger & Neville Inc.) (review), 262
 — by P. L. Taylor (review), 262
 Seshu, S., on Linear Graphs and Electrical Networks (book), 640
 SETRA rig for testing radiation resistant oils and greases (Mobil Oil Co. and UKAEA), 191
 Severn Road Bridge, contracts issued, 379
 Sewage pump, electric, Flygt, 517
 — Purification in Singapore, 735
 Sewer inspection by television, 789
 Sewing machine exports from Japan, 209
 SG iron (trade publication), 808
 SGE Signals Ltd., exhibit at Rand Show, 465
 Shackleton, W. S. (Aviation) Ltd., aircraft show at Coventry, 641
 Shacklock, B. W., review of Symposium on Effect of Water-Reducing Admixtures and Set-Retarding Admixtures on Properties of Concrete, 462; biographical note, 464
 Shaft, bent. See *LETTERS*, 312, 588, 621, 654
 — Coupling. See *Coupling*
 — Rotating, damping and whirling of. See *LETTERS*, 312, 588, 621, 654
 — Sinking at high speed at Kellingley Colliery, 330, 397
 Shale, faulted, mechanical miners in, by L. B. Underwood, 894
 Shanahan, C. E. A., review of Thermochemistry for Steelmaking, 231-232; biographical note, 232
 Shandon Scientific Co. Ltd., Chevenard-Joumier laboratory furnace, 13
 Shanstrom, R. T. S., on comparison between thorium-uranium 235 and uranium 238-uranium 235 fuel cycles for reactors, 896
 Shaping machine, gear, BS 3329, 173
 — Tornomat (Hahn & Kolb), 596
 Shares, unfair, when they mean bigger shares, by J. Hennessy, 386
 Sharp, C. M., on D.H.: An Outline of de Navilland History (book), 540
 Sharpe, J., on photomultipliers and their applications, 761; lecture to Russian audience, 761
 Sharpener, pencil, powered (Kent Kordless Ltd.), 472
 Sharples Centrifuges Ltd., Nozjector oil purifier, 531
 Sharples Process Engineers, orders taken at Leipzig Fair, 673

- Shurtle, C. L., on Occupational Information: Its Development and Application (review), 22
- Shavers, dry, outlook for 1961, 168-171
- Shaw Moisture Meters, dew point meter, 416
- Shawnee Poole Ltd., Shawnee Poole rear dump hauler vehicles, 797
- Shears, up-cutting (Joseph Rhodes & Sons Ltd.), 692
- Sheathing, cable, in Niplas pvc/rubber (Greengate & Irwell Rubber Co.), 179
- Sheen, A. V-M. W.C., appointed director of military sales of British Aircraft Corp. (USA) Inc., 777; biographical note, 777
- Sheep, facial eczema in, 159
- Sheet metal from metal powder, 267
- Quality control, 459
- Tapes to prevent scratching of, 666
- Thermoplastic, and rod and tube, manipulation of, by J. M. J. Estevez and D. C. Powell (book), 24
- Wagon, nylon (British Nylon Spinners Ltd.), 275
- Sheeting, aluminium, corrugated and troughed (brochure), 47
- Translucent (trade publication), 232
- Shell Centre, accessibility of services in, 380; use of Unistruts, 380
- Shell Chemical Co. Ltd., flexibiliser for epoxy resins, 739
- Shell Co. of Australia Ltd., supertanker berth at Sydney, 735
- Shell International Petroleum Co. Ltd., Shell Centre, 380; Thornton trace reader, 596
- Shell Mex Ltd., Camping Gaz stockists, 152
- Shell Petroleum Co. Ltd., oil gasification (trade publication), 708; tanker *Serenia*, 769
- Shell Research Ltd., measuring operating temperatures of engine parts, 433; research on additive oils, 521; measuring operating temperatures of engine parts, 663
- Shelton Iron & Steel Co. Ltd., order position, 149; installation of continuous steel casting plant, 365
- Shepherd, Cmdr., space flight of, 662
- Shepherd-Barron, W. P., review of Civil Engineering Handbook, 68; biographical note, 68
- Shepherd, R., on Mechanised Cutting and Loading of Coal (book), 608
- Shepley Booth and Associates, new factory for Fafnir Bearing Co., 541
- Shergalis, L. D., on Proceedings of Symposium on Microminiaturisation of Electronic Components (review), 198
- Sherritt Gordon Mines, chemical reduction techniques, 587
- Sherwood project (USAEC), 85
- Shield, face Clearways (Safety Products Ltd.), 319
- Welding, Pulsafe (Safety Products Ltd.), 57
- Shielding material for atomic radiation, Eccoshield (Emerson & Cuming Co.), 149
- Thermal neutron, hiduminium 400 as, 455
- Thermal, materials, 455
- Ship, aircraft carrier, *Hercules*, renamed *Vikrant* for Indian Navy, 429
- Aircraft carrier, *Vikrant*, commissioned for Indian Navy, 429
- Aluminium, fire protection for (Turners Asbestos Cement Co. Ltd.), 407
- Atomic propelled, general safety requirements for, 520
- Atomic propelled, general technical conditions for (Bureau Veritas publication), 520
- Atomic propelled, *Savannah*, initial fuel shipment made from Babcock & Wilcox, 288
- Atomic propelled *Savannah*, reactor to operate at 10 per cent full power, 148
- Atomic propelled, speculation on in UK, 356
- Atomic propulsion of, Euratom projects on, 768
- See also *Atomic propulsion*
- Cable laying, Cammell Laird builds for Cable & Wireless Ltd., 299
- Cable laying, Russian order to Wartsila-Koncernen for two, 233
- Cargo, *Perim*, tests of Marconi Metron echo-sounder (P & O), 339
- Destroyer, guided missile, for Royal Navy, 273
- *Elysia*, trials of Ferrogel corrosion protection painting system, 47
- Fighting, Jane's, by R. V. B. Blackman (book), 396
- Foreign, carry UK overseas trade, 405
- Frigate, three to be built for Royal Navy, 69
- Hydrodynamics Laboratory, water tunnel for propeller research, 813
- Hydrographic survey, for Royal Australian Navy, 841
- *Kuala Lumpur*, refit for, 699
- *Magga Dan*, transport of dieselium tanks to Macquarie Island, 25
- Model. See *Model; Tank*
- Outlook for 1961, 122-125
- *Pindar*, heating coils for (Charlton Weddle & Co. Ltd.), 242
- Propulsion. See *Atomic propulsion; Engine; Marine propulsion; Propeller; Turbine*
- Research at NPL, 709
- for Royal Navy, new style of, 273
- Salvage. See *Salvage*
- Small, roll damping fins for (Vosper Ltd.), 537
- Tankers. See *Tanker*
- Telegraph (A. Robinson & Co. Ltd.), 42
- Trials of Ferrogel corrosion protection painting system, 47
- Trawlers. See *Trawler*
- *Vasa*, salvage of, 625
- *Waratah*, loss of. See *LETTER*, 244
- *World Hope*, launched, 1
- Yawl, *Manita*, aluminium mast for (British Aluminium), 47
- See also under specific types of ship
- Shipbuilding Conference, 665
- Economics of in the UK, by J. R. Parkinson (review), 463-464
- Industry, drop in exports, 681
- Position of, 1
- Shipbuilding, welding in, joint symposium on, 213
- Shipping costs, increase in, 233
- Management, research and work study in, 309
- Merchant, position and prospects, 405
- Outlook for 1961, 160-163
- Shippingport atomic power station, 419
- Shipyards, Clydeside, order position, 817
- Increase in orders, 201
- Laboratory tank, towing carriage for, 433
- Modernisation on River Wear, 113, 127
- Naval orders for, 273
- New rates a blow to, 457
- Output statistics, 201
- Pallion, modernisation of, 127
- Support for, 69
- Shoes, safety, 513
- Shoppers Guide, 761
- Shopping centre for Birmingham, 691
- Shorrocks Superchargers Ltd., van type compressors, 65
- Short Bros. and Harland Ltd., modernisation of Pallion shipyards, 127; government loan for, 429; exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519; atomic reactor simulator, 532; classroom analogue computer, 536; collaboration with William Ewart & Sons Ltd., 635; electronic inspection device for linen yarn, 635; simulator for rough flying conditions, 677; SC5 aircraft, 683; SCl aircraft, 684; VTOL aircraft model, 684; development of AMY automatic linen yarn monitor, 813; atomic reactor simulators, 864; Simlac atomic reactor simulator for Calder Hall Operations School, 864
- Short circuit detector (Spemby Ltd.), 351
- Short SCl aircraft, 684
- SC5 aircraft (Short Bros. & Harland Ltd.), 683
- VTOL aircraft, model of, 684
- Shotblasting service, mobile site (R. J. Richardson & Sons Ltd.), 627
- Shovel machine, crawler, Case (J. I. Case & Co. Ltd.), 798
- Tractor (Michigan (Great Britain) Ltd.), 598
- Show. See *Exhibition*
- Showers, 44
- Shower cubicle, National (Watts Metal Industries Ltd.), 44
- Unit, Halo (Reinforced Plastic Developments), 44
- Sicard Inc., Sicard Snow Master snowblower, 742-744; historical note, 742
- Siebe, Gorman & Co. Ltd., motor car safety belts, 261
- Sieger gas detector (Newage (Manchester) Ltd.), 726
- Siemens betatron for Head Wrightson Teesdale Ltd. (Pantak Ltd.), 267
- Siemens & Halske, AG., closed circuit television for traffic control, 493
- Sier-Bath Gear & Pump Co. Inc., Nyflex flexible gear coupling, 371
- Sierra Leone, Guma Valley Dam, 731
- Sigma arc welding machine (Interlas Ltd.), 527
- Sigmund Pumps Co., exports increased, 897
- Signal detection, statistical theory of, by C. W. Helstrom (review), 395
- Sikorsky helicopter, S64 skycrane (United Aircraft Corp.), 320
- Silcock, R., & Sons Ltd., use of DOSP steel flooring, 511
- Silcodyne H and M hydraulic fluids (ICI Ltd.), 667
- Silcoset silicone rubbers, 100, 103 and 104 (ICI Ltd.), 771
- Silencers, ceramic, for motor cars, 95
- Silentbloc Ltd., flexible mounting, 425
- Silicon carbide, future for, 455
- for nuclear reactors, by Dr. G. H. Butter, 455
- Transistors (Westinghouse), 41
- Diode, miniature (AEI), 41
- Electrochemical polishing of, 909
- Nickel-copper alloy, Mallory 53 (Johnson Matthey & Co. Ltd.), 835
- Rectifiers (International Rectifier Co.), 41
- Rubbers, Silcoset 100, 103 and 104 (ICI Ltd.), 771
- Stack rectifiers (International Rectifier Co.), 403
- Silicones (trade publication), 264
- Compounds (trade publication), 808
- by S. Fordham (book), 496
- Grease in aerosol pack (Amber Oils Ltd.), 343
- Rubber, cold cure (Midland Silicones Ltd.), 551
- Processed, suppliers of (trade publication), 872
- Treated paper (trade publication), 232
- Treatments for masonry, 587
- Silver 3 Handril rock drill, Holman (Holman Bros. Ltd.), 498-500
- Silver-copper brazing alloy, 211
- Palladium brazing alloy, 210
- Iodide cloud seeding, new theory for, 175
- Models (Garrard & Co. Ltd.), 852
- Palladium-manganese brazing alloy, 210
- Silvester, R., on scale models for hydraulic investigations, 685
- Simano, C., appointed head of IAEA technical supplies, 632
- Simlac atomic reactor simulator for Calder Hall Operations School (Short Bros. & Harland), 864
- Simmering-Grax-Pauker AG., exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519
- Simmonds Accessories Ltd., Speed nuts (trade publication), 640
- Simms Motor and Electronic Corp., position and prospects, 801; profits, 801; fuel injection equipment for Ford Motor Co. (US), 801; agreement with Bendix Corp., 801; acquisition of Dawe Instruments Ltd., 801; subsidiaries of, 801
- Simon-Carves Ltd., precipitator, new type, 403; swimming pool for Manchester, 511; civil engineering (trade publication), 576; polythene plants for Europe, 609
- Simon Engineering, models for planning, 868
- Simon Handling Engineers Ltd., AEI Ltd. to supply with control board for Russian tyre factory, 267; handling (trade publication), 708
- Simons, E. N., on Machining of Steel (book), 68; on use information departments for selling, 385
- Simplex hydraulic jack (Equipment & Engineering Co. Ltd.), 798
- Mono Recorders (James Gordon & Co.), 805
- Simplicity of science, by S. D. Beck (review), 330
- Simpson, C. R. H., review of More Unusual Railways, 608; review of World Railways 1960, 608; review of Railwaymen, 608; biographical note, 608
- Simulators, atomic reactor, 864
- Reactor, Elliott ND 481, for Berkeley Nuclear Laboratories, 864
- Reactor, experiments that may be performed on, 864
- Reactor (General Precision Systems Ltd.), 864
- Reactor, hire of (IBM Data Centre), 864
- Reactor (Miles Highvolt Ltd.), 864
- Reactor (Short Bros. and Harland Ltd.), 532
- Reactor, Simlac, for Calder Hall Operations School (Short Bros. & Harland), 864
- Reactor (Vickers Armstrongs), 864
- Reactor, Vickers Mark IIa, block diagram of, 864
- for rough flying conditions (Short Bros. & Harland Ltd.), 677
- Sinclair, W. D., appointed manager of AEI Ltd. rectifier engineering dept., 397
- Sinclair, W. E., on Asbestos: Its Origin, Production and Utilization (review), 263-264
- Sinelnikov, K. D., magnetic field configuration, 877
- Sinex Engineering Co. Ltd., casting cleaner, 660
- Singapore, sewage purification in, 735
- Singer, P., on Crystals and Crystal Growing (book), 808
- Singh, J., on Great Ideas of Modern Mathematics (book), 808
- Singham, Dr. J. R., review of Heat Transfer Engineering, 156; biographical note, 158
- Singing at work, by A. A. Glossop, 408
- Single point tool design, 570
- Sink water heater, Sto-a-way (GEC), 584
- Sinot, H. J., on small motor car as stimulus to research. See *LETTER*, 4
- Sinupac boiler (Cochran & Co., Annan, Ltd.), 534
- Sirius computer for Metropole Industries Group (Ferranti Ltd.), 673
- Sirmind, M., appointed vice-president of International Samson, 777
- Sirocco air heater (Davidson & Co. Ltd.), 890
- Sisal mops, Stapol (W. Canning & Co.), 586
- Sissons Bros. & Co. Ltd., Porterflex multi-colour paint, 771; Porterbond paint undercoat, 771
- Site, building, mechanical aids on, 794-795
- Ideal. See *LETTERS*, 4, 213
- Sitka spruce trees, Forestry Commission's survey of, 749
- Sizewell atomic power station, contract awarded to Atomic Power Group, 287, 288; work commenced, 520
- Skefko Ball Bearing Co., position and prospects, 665; new bearing factory in India, 665; formation of Associated Bearing Co., 665
- Skelmersdale, aerial survey of (Fairey Air Surveys Ltd.), 673
- Public inquiry into, 657
- Site for new town, 405
- SKF Gothenburg, to participate in Skefko bearing factory in India, 665
- SKF Works, automatic machining of bearing boxes, 334
- Skimmer ground effect machine, 637
- Skin, speaking to people through their, 412
- Skips, fuel element, solventless epoxy protection for, 506
- Skvortsov, A. A., on Continuous Casting of Steel in Commercial Use (book), 576
- Skycrane development, progress in, by W. W. Lysak, 320
- SL-1 atomic reactor, accident and explosion in 355; bowing of boron strips in, 355; committee to consider future use of, 664; control rods sticking, 356; explosion at Idaho, 148; high power operation of, 356; loss in shutdown reactivity margin, 356; radiological units and measurements, 356; severe damage to core of, 388; use of boron as burnable poison, 355
- Slabbing mill, Abbey Works, model of, 850
- Slag from blast furnaces, making good use of, 342
- as road aggregate, 342
- Steelworks, cement from (Voest Steel Works), 512
- Uses of, 342
- Slingsby, H. C., Ltd., aluminium ladder, 207
- Slot-cutting machine (Strojexport), 221
- Sludge collectors (trade publication), 428
- See also *Sewage*
- Slusher, double drum, Joy-Sullivan N221, 350
- Small arms. See *Arms*
- Small Electric Motors Ltd., 134. See *Correction*, 343
- Smart & Brown (Machine Tools) Ltd., position and prospects, 17
- Smeral Works, screw making press, 301
- Smelting furnace. See *Furnace*
- Smidt, S., on Capital Budgeting Decision (book), 200
- Smith, A., report on pin manufacturing process, 8
- Smith, F. H., on just Mr. Smith's way, 137; on library minded engineers and scientists, 244. See *LETTERS*, 92, 137, 212, 312; See also *On the Shelf* articles
- Smith, H., appointed technical director of ICI Ltd., 480
- Smith, John, & Co. (London) Ltd., terylene polyester fibre sewing thread, 587
- Smith, John, of Rodley Ltd., reservoir for River Dove Water Board, 350
- Smith, K. C., on liquid hydrogen as rocket fuel, 898
- Smith Patterson Co. Ltd., Victoria Line underground railway, 414
- Smith, R. A., proposals for space flight, 662
- Smith, R. C., on Financial Incentives for Management (review), 539-540
- Smith, Col. T. E., on shipbuilding orders, 1
- Smith, Thomas, & Sons (Rodley) Ltd., derrick unit, 425
- Smith, W. A., on boilers and customers' requirements, 566
- Smithfield Market, model of roof of, 863
- Smiths Aviation Division, KLM trials of Para-Visual Director (PVD) equipment, 402
- Smog-Burner car exhaust gas burner (Chromalloy Corp.), 175
- SNAP 2 Development System atomic reactor, now critical, 664
- Snow, C. P., on Science and Government (review), 839
- Snow Master snowblower, Sicard (Sicard Inc.), 742-744
- Snowblower, Sicard Snow Master (Sicard Inc.) 742-744
- Snowy Mountains Hydro-Electric Authority, research on car safety belts, 718
- Soag Machine Tools Ltd., "Baby" hand bandsaw, 384
- Soaker flanges, two-piece (Universal Asbestos), 87
- Sociedade Reunidas de Fabricacoes Metalicas Lda. (Sorefame), River Tagus bridge, 482
- Societe Alsacienne de Constructions Mecaniques, diesel engines, 560
- Societe Anonyme Internationale de Telegraphie sans Fil Electronics, order placed with Marconi's for radar units, 609
- Societe Anonyme de Machines Electrostatiques (SAMES), sub-critical atomic assembly, details of, 487-488
- Societe Anonyme Des Gaz Industriels, partnership with Booker Brothers, McConnell Co., 897
- Societe Chemplast, synthetic rubber protection for Esch-sur-Sure dam, 11
- Societe Coehba, Esch-sur-Sure dam, 11
- Societe E. Demolin, purchased by Associated Engineering Group, 61
- Societe Holding de Financement et de Credit SA (Eurocredit), association with Bowmakers, 257
- Societe SERMEC, Minirupteur circuit breaker, 275
- Society of Automotive Engineers International Congress, 687
- of British Paint Manufacturers, formation of Paint Manufacturers' Joint Executive Council, 841
- of Chemical Industry, *Corrosion Problems in the Petroleum Industry* (review), 156; symposium on Industrial Weed Control, 621
- Engineer in, by Lord Chandos, 442
- of Indexers, course on indexing, 674
- Inflation and, by G. Hutton (review), 495-496
- of Instrument Technology, transactions of, 781
- Sockets, electric, 88
- Multi-, 13 amp (British Central Electrical Co.), 88
- Sodium atomic reactor experiment, 896
- Fuel cell, 268
- SOGAZ (SA des Gaz Industriels) of Brussels, to combine with Booker Group through International Boilers and Radiators, 777; to buy SA Chaudieres Samson, 777
- Soil density measurement using radioisotopes 192
- Solar cells (Bell), 877
- Experiments, 877
- for Trinity House marine buoys, 877
- Energy, utilisation of. See *LETTER*, 508
- House, 508. See *LETTER*, 620
- Solar Weld Languelin Ltd., spark erosion equipment, 560
- Solartron Electronic Group, Ltd., fan heater, 548; Solartron SC 30 analogue computer, 874-876; historical note, 874; new offices at Farnborough, 897; contracts from Russia via VO Mashpriborgintorg, 905
- Solartron Laboratory Instruments Ltd., portable oscilloscope, 14; digital voltmeter, 354; oscilloscope, 384; frequency and capacity meter, 596; digital voltmeter, 858
- Solas lifeboat radio (International Marine Radio Co. Ltd.), 561
- Solberg, H. L., on Thermal Engineering (book), 364
- Soldering iron, electric (Wolf Electric Tools Ltd.), 619
- Solent bridge, plans for, 480
- Soles and heels of neoprene rubber for industrial safety boots (Bank Bridge Rubber Co. Ltd.), 211
- Solids, effects of ultra-high pressure on, 614-615
- Elastic, equilibrium and deformation of, by V. Volterra and E. Volterra (book), 840
- Physical changes under high pressure, 614
- Suspended in a liquid, separating, 82
- Solodovnikov, V. V., on Introduction to the Statistical Dynamics of Automatic Control Systems (book), 776
- Soltau, J. P., on cylinder pressure variations in petrol engines, 361
- Solus Schall Ltd., gamma ray source container, 223; non-destructive testing (trade publication), 264
- Solvent degreasing, maximum efficiency in, 422
- Somers, Walter, Ltd., use of Movigraph Rotadates chart system, 127
- Sonogon ultrasonic generator (Branson Europa NV), 827
- Soss, W., on R. Cordiner, 657
- Sound absorbing materials (booklet), 211
- Diffusion (Auto-Thermatic) Ltd., fire detection equipment for Sir W. G. Armstrong Whitworth Aircraft Ltd., 769
- Insulation, 680
- Reducing bulkheads of Kraft honeycomb for Deltic locomotive (English Electric Co.), 90

- South Africa, atomic energy programme, 725
 — Decision to leave Commonwealth, 533
 — Export statistics, 201
 — Import restrictions, 201
 — Imported car quota reduction, 69
 — Investments in Commonwealth, 357
 — Modification of present policy, 565
 — Order placed with AEC Ltd., for vehicles, 777
 — Union of, Electricity Supply Commission of. See *Electricity*
 — Uranium metal plant opened at Johannesburg, 520
 — Uranium oxide deliveries, 223
 — Uranium refining pilot plant at Johannesburg, 609
- South African Atomic Energy Board, testing of nuclear fuels, 609
- South African Railways, electric locomotive for (AEI Ltd.), 465
- South Durham Steel & Iron Co. Ltd., position and prospects, 105; trading profit, 105; interest paid to FCI and Barclays Bank Ltd., 105; depreciation allowance by Iron and Steel Board, 105; steel production at Cargo Fleet works, 105
- South Wales Electricity Board, use of "pillow" tanks, 311
- South Wales Switchgear Ltd., technical training activities of, 721
- South West Suburban Water Co., use of "pillow" tanks, 310
- Southampton University, application for grant for atomic reactor, 104; facilities for training nuclear engineers and reactor physicists, 104; installation of atomic sub-critical assembly, 487; Prof. B. Thwaites appointed professor of theoretical mathematics, 785
- Southdown Motors Ltd., new buses and coaches ordered from Leyland Motors Ltd., 299
- Southern Tools Ltd., crack detection inks and powders, 275
- Sovex Ltd., Sovex conveyors for Sanderson Fabrics, 837
- Soviet Research in Boron Chemistry* (book), 808
 — See also *Russia*
- Space biology, by J. S. Hanrahan and D. Bushnell (book), 364
 — British companies promoting UK effort in, 585
 — Engineering, lightweight alloys for, 613
 — Exploration, UK's restricted activity in, 549
 — Flight, ballistic manned, America's, by G. V. E. Thompson, 662
 — by Major Y. A. Gagarin, 549, 557, 662
 — Knowledge from, 557
 — Proposals for, 662
 — of Cmdr. Shepard, 662
 — Soviet, facts reconciled, by G. V. E. Thompson, 557
 — Techniques, 557
 — Technology, by K. W. Gatland (book), 708; (review), 902
 — How to make a man feel at home in, by G. V. E. Thompson, 623
 — Programme, UK, 623
 — Project Mercury, US, 557
 — Resources for communications, 585
 — Science in (review), 67
 — Ship, manned, Vostok, success of, 549, 557
 — Technology, European symposium on, 685
 — Vehicles, Russian, trade and prestige follow, 309
 — See also *Missile; Rocket; Satellite*
- Spacever wedge-belt Vee belt (Fenner), 86
- Spain, Centrales Nucleares del Norte make application to establish atomic power plant at Valle de Torbalina, 456
 — Export Council of Europe mission to, 549
 — Pathfinder Mission to, 681
 — Scheme for increasing industrialisation, 681
 — Trade with UK, 299
- Spalding, A. R., on Thermal Engineering (book), 364
- Spalding, Prof. D. B., review of Einführung in die Technische Thermodynamik, 263; review of Wärme- und Stoffaustausch in Arbeitsdiagrammen, 263; review of Destillier- und Rektifizierertechnik, 263; review of Heizöl-Handbuch für Industrieferungen, 263; biographical note, 264
- Spanner, adjustable (Rubert & Co. Ltd.), 660
- Spark erosion equipment (Solar Weld Langu-pin Ltd.), 560
 — Pump, Clevite PZT (Clevite Corp.), 21
- Spark plug efficiency and petrol consumption, 215
- Speaking to people through their skins, 412
- Spear, Operation, compensation plan for employees affected by (Steel, Peech and Tozer Co.), 824
- Specialist services (trade publication), 576
- Specification. See *British Standards Institution* and under specific subjects
- Spectra Glaze plastic faced building slabs (Lilleshall Co. Ltd.), 47
- Spectral Shift Control Atomic Reactor, USAEC appoint Babcock & Wilcox to study, 664
 — Controlled reactors, thorium cycle in, by H. C. Edlund, 896
- Spectrophotometer (Unicam Instruments Ltd.), 58
- Spectrochemical analysis (trade publication), 872
- Spectrometer, gamma-ray, 520
- Spectrometry, radiation, use of phantoscope, 191
- Speech synthesized by digital computer (Bell Telephone Laboratories), 781
 — Transmission, coded, with communications satellites, 892
- Speed nuts (trade publication), 640
 — Unit, variable (Strojexport), 220
- Speedraft draughtsman's templates (Keuffel & Esser Co.), 87
- Speedwell Ltd., tuning kits for standard motor cars, 65
- Speers, J. E., on IBM 650 RAMAC Computer for Data Processing in an Air Route Traffic Control Centre, 479
- Spemby Ltd., phone system for pressurised suits, 100; inclusion in Harper Engineering and Electronics Group, 325; short circuit detector, 351
- Spence, Sir Basil, and Partners, extensions to Nottingham University, 483
- Spence, Dr. R., appointed deputy director of AERE, Harwell, 632
- Spencer, H. F., opening of Richard Thomas and Baldwins medical centre at Ebbw Vale, 289; on industrial hygiene, 341; on Spencer Works of Richard Thomas & Baldwins Ltd., 809
- Spencer (Melksham) Ltd., handling equipment for deep water harbour, Barbados, 733
- Spencer, Walter, & Co. Ltd., hobs (trade publication), 24
- Sperry Europe Continental Co., formation of, 389; R. Laureau appointed president, 389
- Sperry Gyroscope Co. Ltd., position and prospects, 389; formation of Sperry Europe Continental Co., 389; to exhibit at Sydney Trade Fair, 541; gyro compass, 560
- Sperryn & Co., inclusion in Delta Metals Co., 565
- Spey engines for BAC One-Eleven aircraft (Rolls-Royce Ltd.), 683
 — Jet engine, development of (Rolls-Royce Ltd.), 787
- Speyer, E., on Solar Energy Claims, 508; See *LETTER*, 620
- Sphercon Contact Lens Co. Ltd., Sphercon contact lenses, 358-360; formation of, 358; association with Plastic Contact Lens Co., 358
- Spherical astronomy, compendium of, by S. Newcomb (book), 332
- Spi-seal self-adhesive paper (Spicers Ltd.), 375
- Spice, H. R., on plastic lined reservoirs, 93
- Spicers Ltd., Spi-seal self-adhesive paper, 375
- Spiralpoint drill, 570
- Spirax Postal Instruction Courses, 217
- Spirax-Sarco Group, expansion of educational facilities, 217; Spirax Postal Instruction Courses, 217; export business, 217
- Spitfire: The Story of a Famous Fighter, by B. Robertson (review), 23
- Splitter for bales (Sutcliffe Hydraulics Ltd.), 383
- Spondon "H" plant, steam supply to British Celanese Ltd., 637
- Sporidesmium Bakeri*, 159
- Sport by machine, 912
 — Training machine, Adams (Lodge Equipment Ltd.), 912
- Sports car. See *Motor car*
 — Engine. See *Motor car engine*
- Spragg, R. C., review of Surface Microtopography, 576; biographical note, 576
- Sprague Electric Co., agreement with Telegraph Condenser Co., 601
- Spray booths (trade publication), 396
 — Gun. See *Gun*
 — Phosphate and degrease (trade publication), 872
- Spraying, airless, of paint, 2
 — Conventional, of paint, 2
 — Electrostatic, of paint, 2
 — Machine, paint (Alfred Bullows), 56
 — Mistless, of paint, 2
 — Plant, paint, airless (Aerostyle Ltd.), 767
- Spring Grove Laundries Ltd., linen hire laundry, 669; automation in, 669; new factory for, 764
- Spring, mattress, testing machine (P. Fanghanel & Co. Ltd.), 404
 — Testing machine (Vi-Spring Ltd.), 404
 — Winding tool (Acru), 826
- Sprite motor car, Austin-Healey, disc brake conversion set for (Donald Healey Motor Co.), 197
- Sprockets (trade publication), 904
- Spruce trees, Sitka, Forestry Commission's survey of, 749
- Spurrier, Sir Henry, on Leyland Motors Co., 225; letter to Leyland stockholders, 225
- Sputnik, trade follows, 309
- SPWR, atomic reactor. See *Atomic reactor*, small pressurised water
- Square D Ltd., relay, 12; push-button stations, 859
 — Optical (Taylor, Taylor & Hobson Ltd.), 417
- Squires, B. J., on Tilghman's Ltd., 457
- Squirrel food mixer, Peugeot (Rudson Wood & Co. Ltd.), 848
- S & S Corrugated Paper Machinery Co., agreement with Beyer Peacock Co., 769
- SSCR. See *Spectral Shift Control Atomic Reactor*
- St. Andrews University South Greenland Expedition, Perkins outboard motors for, 25
- St. Dunstan's, R. Dufton appointed director of research, 556
- St. John, J., on Science Survey, 1 (review), 330
- St. Louis Car Co., subway cars for New York City Transit Authority, 497; order with Westinghouse for propulsion equipment, 497
- St. Paul's Cathedral, bells to be re-hung, 281
- Stabilisers, Denny-Brown, for liner *Canberra*, 755
- Stacey, E. F., on sound and thermal insulation, 680
- Staebler, U. M., on thorium as nuclear fuel, 896
- Staeheley gear hobbing machines, BPS Machinery and Spares appointed sole agents, 577
- Staff College for Further Education, W. J. Richards appointed director, 657
 — Location system (Westrex Co. Ltd.), 173
- Staffa-Herbert tube bending machine (Chamberlain Industries Ltd.), 825
- Staffa pipe bending machine (Chamberlain Industries Ltd.), 190
- Staffordshire, North, University College of. See *University*
- Stair brackets for scaffolding (Scaffolding (Great Britain) Ltd.), 57
- Stalwart cargo carrier (Alvis Co.), 61
- Stanchi, L., on transistor pulse-height discriminator, 224
- Stanchion. See *Beam; Column*
- "Standard Quality" safe, Chubb (Chubb & Sons' Lock and Safe Co. Ltd.), 642-644
- Standard Resistance Welders Ltd., resistance welding machine, 383
- Standard Telephones & Cables Ltd., fire alarm system for BBC Television Centre, 402; electronic ticket issuing system for BOAC, 601; products for railways (trade publication), 608
- Standard-Triumph International, three or four day week, 97; suggested pay cuts, 97; Marconi closed circuit television installed as production aid, 334; price cuts, 465; increase in sales in Switzerland, 465; world assembly plants of, 724
- Standard Vacuum Oil Co., talks with India, 405
- Standards Engineers' Conference, 761
 — United States National Bureau of. See *United States National*
- Stanford University, linear electron accelerator to be built, 488
- Stankoimport, 713, 758
- Stanley, A. R., on New Survey of BBC Experimental Colour Transmissions (book), 364
- Stanton Ironworks Co. Ltd., Victoria Line underground railway, 414
- Stapleton, R. R., on sprayed seals of rubber latex for mines, 802
- Stapol sisal mops (W. Canning & Co.), 586
- Star hot press machine (Phillips Bros. & Ellis Ltd.), 891
 — Timer (Electrical Remote Control Co. Ltd.), 279
- Starrett, L. S., Co. Ltd., Bandsaw (trade publication), 68
- Starter, flameproof (Belmos Co. Ltd.), 598
 — Steam operated, for aircraft engines (AEI Ltd.), 403
- State Pension Scheme, Goodyear Tyre & Rubber Co. to participate, 9
- Static, anti-, flooring material, Phengard (Phoenix Rubber Co.), 512
- Statics, graphic, by C. S. Benson (book), 904
- Stations, push-button (Square D Ltd.), 859
- Statistical Bulletin of the Tin Council*, 473
- Statistical processes and reliability engineering, by D. N. Chorafas (review), 362
 — Society, Royal. See *Royal*
 — Theory of signal detection, by C. W. Helstrom (review), 395
- Statistical Year Book* (United Nations), 713
- Statistics manual, by E. L. Crow, F. A. Davis and M. W. Maxfield (review), 574
- Stator enclosure in generators, 283
 — Windings in generators, 282
- Status symbols, 649
- Stauffer pressure screw lubricators in nylon (Trendon Ltd.), 47
- Steam, superheated, generation by atomic reactor, 59
 — Supply, atomic, for power generation, USAEC invite utility companies to participate, 192
 — Tables, VDI, by E. Schmidt (review), 840
 — Trap, MilTherMatic (Midland Industries Ltd.), 153
 — Turbine. See *Turbine*
- Steamboats and Modern Steam Launches*, 574
- Steatite & Porcelain Products Ltd., insulators for Komati power station, 618
- Stechkin APS pistol, 830
- Stedeford, Sir Ivan, on cycle industry, 141
- Steel, alloy (trade publication), 808
 — New type (International Nickel Co. (Mond) Ltd.), 407
 — Blanks, preparing for cold forging, 634
 — Brittle fracture of, by W. D. Biggs (review), 871-872
 — Capacity, 1962, forecast of, 45
 — Castings Development Committee, formation of by British Steel Founders Association and British Steel Castings Research Association, 551; information service of, 551
- Steel & Co., Steel House offices of, 897
- Steel Co. of Wales Ltd., suspension of melting shop workers, 9; iron granulation plant, 136; order position, 193; position and prospects, 193; output statistics, 193; development plans, 193; ore supplies, 193; improving export record, 193; securities sold back to general public, 325; formation of Margram Slag Co., Ltd., 342; sheet metal quality control system installed (English Electric), 459; attempt to import coal from US, 689; rolling steel for Russia, 785; model of slabbing mill at Abbey Works, 850
 — Components, tubular, for pre-fabricated buildings (Tubwrights Ltd.), 186
 — Consumption, general outlook of, 45
 — Continuous casting in commercial use, by K. P. Korotkov, H. P. Mayorov, A. A. Skvortsov and A. D. Akimenko (book), 576
 — Casting of, by M. C. Boichenko (book), 428
 — Cutting with carbon dioxide coolant, by L. L. Arundel, 266-267
 — Tools for, 514-515
 — Designing in (trade publication), 808
 — Die (trade publication), 808
 — Exports, 45
 — Extrusions (trade publication), 872
 — Ferritic alloys of, table of uses of, 274
 — Flooring, DOSP (Dexion Ltd.), 511
 — Furnace. See *Furnace*
 — for furniture, study and development of, 130
 — Heat treatment of, by H. Stüdemann (book), 904
 — treatment of. See also *Heat Treatment*
 — High speed, analysis table of, 514
 — High speed, as steel cutting tools, 514
- Steel House, new offices for Steel & Co., 879
- Steel Improvement & Forge Co., electrolytic machining process, 175; development of electrochemical machining, 300
 — Industry, capital investment in, 373
 — Competitive times in, 149
 — Costs in, 105
 — Dilemma facing in 1961, 45
 — Expenditure on modernisation, 617
 — Increasing costs in, 713
 — Investment in, 45
 — in Nigeria, 841
 — Production capacity of, 617
 — Productive record, 849
- Steel industry, proposals for reform in, 105
 — Qualified optimism in, 105
 — Rate burden on, 105
 — in Ruhr, 177
 — Securities sold back to general public, 325
 — Integrated flow production of, 805
 — Machining of, by F. C. Lea and E. N. Simons (book), 68
 — Mild, inhibiting corrosion of (National Chemical Laboratory), 845
 — Welding of, BS 693, 173
 — for nuclear power, cinema film (UKAEA), 256
 — Output of, 373
- Steel, Peech & Tozer, order placed for electric arc melting furnaces (GWB Furnaces Ltd.), 82; production commenced on automated cold rolling mill, 490; compensation plan for employees affected by Operation Spear, 824; electric arc reconstruction, 824
 — Pipeline, plastic coated, X-Tru-Coat (Republic Steel Corp.), 512
 — Plastic coated (trade publication), 264
 — in power generation, 274
 — Price changes since 1956, 905
 — Increase request, 713
 — Table for UK and foreign countries, 713
 — Production, additional costs to, table of, 713
 — Costs, 437
 — Statistics, 849
 — World, 105
 — Protection by Kenderisation, 237
 — Pvc-coated, sugar diffusers, 699
 — Rings, forging, 635
 — Rolls, forged (trade publication), 640
 — Rope. See *Wire rope*
 — Sections, cold formed, BS 2994, 483
 — in buildings, use of cold formed, 483
 — Stainless, car engine, TnT (Tyce Engineering Corp.), 139
 — No. 101 Chromoid welding electrode for (BOC Ltd.), 619
 — Polishing made easier, by J. P. Dewar, 586
 — Sports car engine, 139
 — Wire cloth, Micro-Hollander (United Wire Works Ltd.), 439
 — Structural, use in buildings, BS 449, 186
 — Structure for drive-in cinema screen, Trinidad (Sanders & Forsters Ltd.), 187
 — Structures, design of, by B. Bresler and T. Y. Lin (book), 708
 — Sulpho-nitro cementing of, 85
 — Sulphur removal from, 613
 — Trends in, 373
 — Tungsten carbide for turning (Sandvik Swedish Steel Ltd.), 507
 — Vinyl coated, Stelvetite (John Summers & Son Ltd.), 272
 — Welding cast iron to, 469
 — Weybridge continuous casting process for (Continuous Casting Co. Ltd.), 773
 — See also *Iron and Steel*
- Steel Wheel & Axle Pty., position and prospects, 737
- Steelmaking, thermochemistry for, by J. F. Elliott and M. Gleiser (review), 231-232
- Steels Engineering Products Ltd., orders taken at Leipzig Fair, 673; diesel electric truck crane, 796
- Steelwork, constructional, simply explained, by O. Faber (book), 158; (review), 806
 — Plaster protection for, 343
 — Protection on Forth Road Bridge, 449
- Steelworker universal machine (Henry Pels & Co. Ltd.), 562
- Steelworks in Australia, projects, 741
 — Durgapur (India), 735; progress of work, 25; Mr. Nehru's visit to, 565; ahead of schedule, 741
 — Refractories (trade publication), 264
 — Slag, cement from (Voest Steel Works), 512
- Stehling, K. R., on behaviour of liquid hydrogen in space, 899
- Stein Atkinson Vickers Hydraulics Ltd., course on hydraulics, 97; course on Industrial Oil Hydraulics, 97; deceleration valve, 239; lock mechanisation on River Trent, 558
- Steinman, Boynton, Gronquist & London, River Tagus bridge, 482
- Stellar dynamics, principles of, by S. Chandrasekhar (book), 496
- Stelvetite vinyl coated steel (John Summers & Son Ltd.), 272; for furniture, 272
- Step and repeat machine (Pictorial Machinery Ltd.), 555
- Stephens-Adamson Mfg. Co. of Canada Ltd., Swivel-Pile for conveyor, 717; Car Loaders, 717; Swivelloaders, 717
- Stephens, R. B., review of Proceedings of Symposium on Microminiaturisation of Electronic Components, 198; biographical note, 200; review of Nuclear Electronics, 426-427; biographical note, 428
- Sterling sub-machine gun, 830
- Stern, B. T., on national use of technical information, 653-654, 757. See *LETTERS*, 719, 821, 885
- Sterne, L., & Co. Ltd., cooler for cutting oils, 100
- Stevley Coal and Iron Group, mobile site shotblasting service, 627
- Stevens, Frederic B., Inc., barrel plating (trade publication), 496
- Stevens, H. G., Co. Ltd., IMR bench press, 57
- Stevens Institute of Technology, producing metal sheet from metal powder, 267
- Steward, S. F., on stable market for electrical products, 289; on ten year plan for electrical industry, 849; on research in electrical industry, 881
- Stewart, B., review of Systems Preliminary Design, 674; biographical note, 676
- Stewart, Duncan & Co., reference to, 25; licence agreement with Booker Group, 809; productive capacity increased, 897
- Stewart Films, cinema film "Heat of the Matter" for Gas Council, 265
- Stewart, J. C. C., appointed managing director of UKAEA Production Group, 324
- Stewart, Dr. K. H., instrumentation for UK's second satellite, 645

- Stewarts & Lloyds Ltd., iron granulation plant, 126; securities sold back to general public, 325; salary and wage payments by bank credits, 593; use of LEO III computer for wage calculations, 593; installation of controlled atmosphere furnace, 635
- Stillite Products Ltd., insulating slabs (trade publication), 264
- Stinton, Fl. Lt. D., review of War Planes of the Second World War, Fighters, 23-24; review of Spitfire: The Story of a Famous Fighter, 23-24; biographical note, 24
- Sto-a-way sink water heater (GEC), 584
- Stock list of F. J. Edwards Ltd. (trade publication), 68
- Stockholm Trade Fair, 617
- Stolnikov, V. V., on use of lightweight aggregates, 894
- Stone, J., & Co. (Deptford) Ltd., Stone-Vapor boilers, 762; diesel hydraulic locomotives, 769
- Stone-Platt Industries Ltd., Stone-Vapor boilers, 652
- Stone-Vapor boilers (Stone-Platt Industries Ltd.), 652, 762
- Stone, waste, low pressure stowing in mines, 482
- Stoner, R. G., on Introduction to Modern Physics (book), 158; (review), 607-608
- Stop valves. See *Valves*
- Stoppers, ladle, infra red plant for drying (GEC), 367
- Storage heating. See *Heating*
- Tube, electronic, high resolution, Tenicon (Mullard Ltd.), 236
- Stothert & Pitt, agreement with Ellicott Machine Corp., 25; design and erection of plant for Margram Slag Co. Ltd., 342; tubular jib crane for Tilbury dry dock, 636
- Stott, J., on Anti-Stick Resins, 4-5
- Stove, batch drying (Chemical Equipment Engineering Ltd.), 145
- Butane, Bleuét (Forges d'Alais), 150
- Camping Gaz (Forges d'Alais), 149
- Stoving plant, gas fired (Parkinson Cowan), 203
- Straightaway conveyor-drier (Barber Electrical Services Ltd.), 584
- Strain-stress temperature-time relationship for refractory materials, by R. D. Chapman, 455
- Strateline cradle winch (Scaffolding (Great Britain) Ltd.), 351
- Stratton, Dr. J., awarded Faraday Medal of Institution of Electrical Engineers, 348; Biographical note, 348
- Strauss, R. F., on Fundamentals of Rocket Propulsion (review), 200
- Strässler, E., on reactor building by Austria, 5
- Strength/load relationship, 154
- Strength, sustained load, of timber, by H. Tottenham, 627
- Stress, alternating. See *Fatigue*
- analysis, experimental, 435
- Grading and working stresses for laminated timber, 829
- Strain temperature-time relationship for refractory materials, by R. D. Chapman, 455
- Thermal, theory of, by A. B. Boley and J. H. Weiner (book), 68
- Working, and stress grading for laminated timber, 829
- for structural laminated timber, by W. T. Curry, 829
- Strick Line, Gorjistan liner for (John Readhead & Sons), 665
- Strike in motor car industry, 593
- Tally clerks, 141
- Unofficial, disapproval by National Union of Vehicle Builders, 447
- Strip, precoated. See *LETTER*, 48
- Research on rolling of (BISRA) (book), 264
- Speeds, measuring without contact, 781
- Stripper, wire (Vicsteels Ltd.), 352
- Strojexport, automatic turret lathe, 220; copying lathe, 220; variable speed unit, 220; gear hobbing machine, 220; die casting machine, 221; milling machine, 221; multi-spindle drilling machine, 221; slot cutting machine, 221; jig boring machine, 221
- Strontium studies, by K. Williams, 60
- Structural analysis, outlook for 1961, 78-81
- Glued laminated timber, production standards for, 590
- Sandwich constructions, symposium on durability and weathering (book), 364; (review), 806
- Steel in buildings, use of, BS 449, 186
- Steelwork. See *Steelwork*
- Structure of metals—a modern conception (review), 903
- Sandwich, of Plasticell for a boat (Watercraft), 834
- Structures, aircraft, introduction to the theory of, by D. Williams (review), 157
- Hyperstatic, by J. A. L. Matheson and A. J. Francis (book), 112; (review), 806
- Piled, and reinforced concrete piling, by F. E. Wentworth-Shields, W. S. Gray and H. W. Evans (review), 297
- Reinforced concrete. See *Concrete, reinforced*
- Steel, design of, by B. Bresler and T. Y. Lin (book), 708
- Strut. See *Beam; Column*
- Stuart, D. J. K., on longevity of the DAF car belt drive, 4
- Stud welding. See *Welding*
- Stüdemann, H., on Heat Treatment of Steels (book), 904
- Students, engineering, aerodynamics for, by E. L. Houghton and A. E. Brook (book), 24
- Russian, visit George Kent Ltd., 865
- Textile, mechanics for, by W. A. Hanton (book), 68; (review), 675
- Studs Research Centre, Sweden, 563
- Sturgeon, J. H., transfer ceremony of Dove 8 aircraft to J. C. Bamford (Excavators) Ltd., 257
- Sturtevant Engineering Co. Ltd., paper maturing machine (trade publication), 396; wood refuse collectors (trade publication), 428; cyclone dust collector (trade publication), 496; gas meters, 805
- Styles, A. G., models in silver, 852
- Suba blending machine (Suba Hydraulics Ltd.), 858
- Suba Hydraulics Ltd., Suba blending machine, 858
- Submarine, atomic propelled, contracts for second for UK, 224
- — Propelled, electrical propulsion machines for (Laurence, Scott & Electromotors Ltd.), 488
- — Propelled, *Dreadnought*, plastic coated lead bars for ballast (Plastic Coatings Ltd.), 135
- — Propelled, *George Washington*, underwater record, 224
- — Propelled, *Sam Houston*, launched, 388
- Outlook for 1961, 34
- Pipeline, flexible, British Columbia to Vancouver Island (BICC), 45
- Substation, packaged (Ferranti Ltd.), 701
- Subway, Toronto, extensions to, 734
- Sud Aviation, Caravelle aircraft, 429
- Sudan Air Force, use of Alvis Leonides engine, 61
- IAEA expert to visit, 387
- Irrigation pumps for Government (Firth Cleveland Pumps Ltd.), 333
- Suffolk Iron Foundry (1920) Ltd., on welding equipment and customers requirements, 568
- Sugar diffusers, pvc-coated steel, 699
- Sugimoto band saw, 554
- Sulphide of hydrogen scrubber (trade publication), 428
- Sulpho-nitro cementing of steel and cast iron, 85
- Sulphur, rapid removal of from steel, 613
- Trioxide, methods of determining concentration of, 782
- Sulphuric acid (trade publication), 808
- Sulzer Bros. Ltd., marine diesel engines, 42; diesel engines for P & O ships (Barclay Curle), 299; diesel engines for P & O ships (David Rowan), 299; diesel engines for British Railways (Vickers Armstrongs), 595; refrigeration plant for Millbank Development, 809
- Summers, John, & Sons Ltd., United Steel Cos. acquire shares of, 105; position and prospects, 149; increased production, 149; improved earnings, 149; annual statement, 149; capital investment, 149; Shelton Iron & Steel Co. subsidiary of, 149; production table of primary products, 149; Stelvetite vinyl coated steel, 272; securities sold back to general public, 325; pvc-coated steel for sugar diffusers, 699; Stelvetite for Sadia water heaters, 699
- Summers, R. F., biographical note, 53; on John Summers & Sons, 149
- Summerscales, W. & S., Ltd., Scales-Spin spin dryer, 272
- Summit lifting table (Sutcliffe Hydraulics Ltd.), 353
- Sumo Pumps Ltd., drainage pump, 354
- Sun. See *Solar*
- Sundquist, Dr. B. E., new theory on silver iodide cloud seeding, 175
- Sundridge Park Management Centre, courses in export studies, 593
- Sunvic Controls Ltd., data processing equipment for atomic reactors, 600
- Sunvik pulse height analyser, 696
- Super-Jet foam monitor (Pyrene Co. Ltd.), 484
- Super Major agricultural tractors, Fordson (Ford Motor Co. Ltd.), 906-908
- Super Minex extractor fan (Jones & Stevens Ltd.), 240
- Super Permo magnetic iron (Samuel Osborn & Co., Ltd.), 619
- Super Staines welding electrode (English Electric Co. Ltd.), 211
- Super-stork sanding machine (Marron Machine Ltd.), 827
- Superamerica motor car, Ferrari, 592
- Superchargers for motor cars (Shorrock Superchargers Ltd.), 65
- Superconducting magnetic alloy (Atomics International), 909
- Superconductivity, electromagnetism by (Bell Telephone Laboratories), 336
- Supercriticality in atomic reactors, 355
- Supergrid "ring" around London, 52
- Switching equipment for CEGB (English Electric Co. Ltd.), 429
- Thames Estuary crossing of, 52
- Thames crossing of, contractors engaged in, 52
- Towers for Thames crossing (Blaw Knox Ltd.), 52
- for Thames crossing (British Insulated Callender's Construction Co. Ltd.), 52
- Superheat programme of USAEC, by C.A. Pursel, 60
- Superheating atomic reactor. See *Atomic reactor*
- Supermatic washing machine, AEI-Hotpoint (AEI-Hotpoint Ltd.), 326-328
- Suproform rubber press technique, development of (Boulton Paul Aircraft Ltd.), 367
- Surface measurement, 258-260
- Microtopography, by S. Tolansky (review), 576
- Testing machine, ball, Talysurf (Taylor & Hobson Ltd.), 58
- Surform cutting tools (Firth Cleveland), 100
- Surgeons, Royal College of. See *Royal Surrey, Esso seek oil prospecting licence for, 25*
- Surtax, relief on, 549
- Survey (W. & T. Avery Ltd.), 394
- Aerial, of Skelmersdale new town (Fairley Air Surveys Ltd.), 673
- Suspension, aerostable, of Renault Dauphine car uses neoprene, 581
- Susquehanna-Western Inc., USAEC contract with for uranium concentrate, 223
- Sussex, Esso seek oil prospecting licence for, 25
- University, grants for new buildings, 447
- Sutcliffe Hydraulics Ltd., Summit lifting table, 353; bale splitter, 383
- Sutcliffe, Richard, Ltd., conveyor framework, 319; tub puller (trade publication), 496
- Sutherland, R. A., on safety and economy factors for dams, 895
- Sutherland, Dr. W. D., on application of alternators for transport vehicles, 492
- Suwon Institute of Agriculture, IAEA to assist, 387
- Svensson, N. L., on factor of safety based on probability, 154-155. See *LETTER*, 313
- Swan, Hunter & Wigham Richardson Ltd., order for frigate for R.N. and two cargo ships for Clan Line, 1; computer controlled plate cutting equipment installed (BOC Ltd.), 39; frigate for Royal Navy, 69; joint set up with Vickers-Armstrongs, 556
- Sweden, agricultural machinery imported into, 181
- Atomic Energy Co., 563
- Atomic energy programme, 563
- Atomic reactors in, 564
- European Agricultural and Industrial Fair, 181
- Experimental speed limit, 97
- Exports of, 777
- Export Council of Europe mission to, 549
- Export of machinery to Russia, 265
- Imports from EFTA countries, 777
- Import of Russian oil, 265
- Imports from UK, 617
- Natural resources in, 563
- Pathfinder Mission to, 681
- Studsvik Research Centre, 563
- Trade expansion of, 777
- Trade negotiations with Russia, 265
- Uranium deposits in, 563
- Uranium plants, 563
- Uranium works at Ranstad, 223
- Swedish Air Force, electronic equipment for (Marconi), 397
- Export Directory, 1960 (General Export Association of Sweden) (review), 331
- Power Board, approval sought for atomic power station at Marviken, 16
- Road Board, National, research on car safety belts, 718
- Swimming pool, air conditioning and floor heating for, 511
- for Glasgow University, 159
- Open air, design and construction of (Cement and Concrete Association booklet), 511
- Swinson, C. W., on careers in rubber, 180
- Swiss Federation of Watch Manufacturers, committee for quality control, 668
- Switch, alarm (AEI Ltd.), 190
- Electric, 88
- Hermit (Dowty Electrics Ltd.), 86
- Pressure, Deltadyne (Pall Corp.), 486
- Pressure (Londex Ltd.), 280, 444
- Pulse (Honeywell Controls Ltd.), 279
- Repeater (Johnson & Phillips Ltd.), 144
- Time, 784
- Automatic (Venner), 784
- Autopoint (Venner), 88
- Switchboards (Morecambe Electrical Equipment Co. Ltd.), 701
- Switchgear, air break (George Ellison Ltd.), 354
- Circuit breaker, earth leakage (Chilton Electric Products Ltd.), 351
- Breaker, load centres (trade publication), 748
- Breaker, miniature (Crabtree), 88
- Breaker, Minirupteur (Société SERMEC), 275
- Breaker, oil (AEI Ltd.), 87, 418
- Class LMT, Reyrolle (A. Reyrolle & Co. Ltd.), 290-292
- Contactor, by H. Franken (review), 296
- for Ffestiniog pumped storage scheme (GEC), 651
- Outlook for 1961, 114-117
- Switching equipment, supergrid, for CEGB (English Electric Co. Ltd.), 429
- Switzerland, Export Council of Europe mission to, 549
- Pathfinder Mission to, 681
- Sales of UK cars in, 465
- Watch industry, quality control in, 668
- Swivel-Piler for conveyors (Stephens-Adamson Mfg. Co. of Canada Ltd.), 717
- Swiveloader (Stephens-Adamson Mfg. Co. of Canada Ltd.), 717
- Sydney, Australia, supertanker berth for, 735
- Trade Fair, bookings almost complete, 541
- Trade Fair, countries taking part, 541
- Sykes, A., appointed managing director of Morris & Butters, 299
- Sykes, Henry, Ltd., winch, 188
- Sykes, J. H. M., on European electric power situation, 791
- Sykes Ltd., vertical pump, 660
- Sykes, W. E. Ltd., hobber (trade publication), 24
- Sylvan Ginsbury Ltd., Ballantine voltmeter, 279; component tester, 692
- Synchros, basic, and servomechanisms (Van Valkenburgh, Nooger & Neville Inc.) (review), 262
- Synchrotron, proton, Nimrod, 632
- Synthapruft waterproofing, 512
- Syphon, Dohm-Vorax (Dohm Ltd.), 825
- Syrian, trans., pipeline, gas turbine pumping sets for (Hawker Siddeley Brush), 271
- Systems preliminary design, by J. J. Jerger (review), 674
- Self-organising, by M. C. Yovitts and S. Cameron (review), 538-539
- TAL Numatics Ltd., precision seal air valves, 773
- Talbot Stead Tube Co. Ltd., exhibit at Engineering, Marine, Welding and Nuclear Energy Exhibition, 519
- Tally clerks, strike of, 141
- Talysurf instrument (Taylor, Taylor & Hobson Ltd.), 737
- Talysurf ball surface testing machine (Taylor, Taylor & Hobson Ltd.), 58
- Talysurf Instrument (Taylor, Taylor & Hobson Ltd.), 258-260, 737
- Tandium metal, moulds in, 866
- Tangyus Ltd., Hydroflo high pressure pump, 561; Hydrapak hydraulic pump, 603; hydraulic hand press, 603
- Tank, acid storage, 474
- Chieftain, infra red direct control system for, 45
- Diesolium, for Macquarie Island oil depot, 25
- M60, infra red xenon searchlight for, 45; 105 mm British gun for, 45
- "Pillow," user comments on, 310
- Process, in Tufplas, for ICI Ltd. (Tough Plastics Ltd.), 474
- Ship-testing, towing carriage for, 433
- Tanker, atomic propelled, Fiat and Ansaldo study plans for, 288
- Java, Burmeister & Wain engine for, 325
- Refrigerated, for Bridgestone Liquefied Petroleum Gas Co. (Mitsubishi), 439
- Road, petrol, transformer/relay unit for grounding (GEC), 403
- Serenia, 769
- Teledup ullage indicator for (Dobbie McInnes Ltd.), 270
- Tanks & Linings Ltd., pvc/polyester ducting, 507
- Tantalum, greater use of, 469
- Tapakuma Scheme in British Guiana, 735
- Tape, glass fibre (trade publication), 264
- Heating, Hotfoil (MEI Co. Ltd.), 339
- Paper, self-adhesive (Gordon & Gotch), 666
- Prevention of scratching of sheet metal work by, 666
- Protection, applicator for (Gordon & Gotch), 739
- ptf (trade publication), 264
- Recorder, television (Ampex), 650
- Recording. See *Recording*
- Strapping, flexible (P. P. Payne & Sons Ltd.), 445
- Waterproof cloth, self adhesive (Paynes Jiffytape Ltd.), 771
- Tarbela Dam, 730
- Targett, J. D., on breakdown on the motorway, 276
- Tarmac Civil Engineering Co. Ltd., reservoir for River Dove Water Board, 350
- Tarmac Ltd., roads, dams and bridges (trade publication), 576
- Tarslag Ltd., Cromwell Lock extension on River Trent, 558
- Tasker Bros., historical notes, 248; Tasker Museum, 248; Tasker steam engines, 248; Queen Mary trailers, 248; showroom for trailers, 248
- Museum for Tasker steam engines, 248
- Taskers of Andover (1932) Ltd., trailers with protected wheels for ACD Bridge Co., 651
- Taupo Lake geothermal power station project, New Zealand, 98
- Taurus diesel-hydraulic locomotive (Yorkshire Engine Co. Ltd.), 652
- Taurus floors, double boarded wood (Horsley Smith & Co. and J. A. Hewetson & Co.), 243
- Tax burden, redistribution of, 341
- and incomes, Plain Words on, 312
- Payroll, 549, 617, 657; effect on industry, 437
- on road users, proposal to cut down, 341
- See also *Surtax*
- Taylor, A. J., on Resonance Escape Possibilities and Self-Shielding Factors in Hydrogen Moderated Lattices, 224
- Taylor Bros., position and prospects, 737
- subsidiaries of, 737
- Taylor, C. F. (Plastics), vinyl castings, 867
- Taylor, C. P., on Reinforced Concrete Chimneys (review), 67
- Taylor, F., & Sons (Manchester) Ltd., Salem earth boring machine, 796
- Taylor, F. W., reorganization of Bethlehem Steelworks, 8
- Taylor, G. R., on Eye on Research (review), 330
- Taylor-Hobson Talysurf, model 3 (Taylor, Taylor & Hobson Ltd.), 258-260
- Taylor, J. W. R., on Jane's All the World's Aircraft (book), 396
- Taylor, John, & Co., re-hanging bells in St. Paul's Cathedral, 281
- Taylor, P. C., on designer and writer, 476. See *LETTER*, 508
- Taylor, P. L., on Servomechanisms (review), 262; on place of formal study in post graduate training of electrical engineer, 317
- Taylor, Dr. R. G., review of Aero-Thermodynamics and Flow in Turbo-Machines, 110-111; biographical note, 112
- Taylor, Taylor & Hobson Ltd., Talysurf ball surface testing machine, 58; lens mounts of Noral 28S alloy, 179; Taylor-Hobson Talysurf, model 3, 258-260; historical note, 258; optical square, 417; Varotal television zoom lens, 737; Talysurf and Talysurf instruments, 737
- Taylor Woodrow (Arcon), Arcon Monitor Roof, 897
- Taylor Woodrow Construction Ltd., new factory for Ferodo Ltd., 289; new offices at Farnborough for Solartron Electronic Group, 897
- Taylor Woodrow Ltd., training courses for foremen, 177; bid for contract on Volta River project, 333
- Taylor Woodrow (Sierra Leone) Ltd., Guma Valley Dam, 731
- T. C. Spray Finishing Systems (Bede) Ltd., spray booths (trade publication), 396
- Tea Break, Plain Words on, 212
- Teachers, mathematics, shortage of, 888
- Science, relativity for, and engineers, by L. H. A. Carr (review), 263

- Teaching design at university, 376. See LETTERS, 476, 508, 789
 — See also *Course; Education; Training*
 Teakettle atomic reactor accident, 355
 Tecalemit Ltd., sales, 17; licence to John Bull Rubber Co. to make plastic brake hoses, 17; anti-cavitation plate for grease pump, 271; new factory at Poole, 641
 Techmash Trading Corp., order for dust collecting plant for Russia placed with Tilghman's Ltd., 457
 Techmashimport, 758; contract with Wycon Services for chemical plant in Russia, 497
 Technical Ceramics Ltd., accelerometer, 826
 Technical college libraries. See *Library*
 — See also *College*
 — Communication, gap in, 753
 Technical Designs Ltd., Movotron animated display devices, 851; simulating movement on a flat picture, 851
 Technical education. See *Education*
 Technical Education Abstracts from British Sources, 838
 Technical information. See *Information*
 — Progress, Plain Words on, 821
 — Scientific and medical library, Lewis's, 1957-1959, supplement to the catalogue of (book), 24
 — Training week, Commonwealth. See *Commonwealth*
 Technician, electrical, training in India, 109
 — and the engineer, by D. J. Mann, 442
 — Rising demand for, 53
 Technicon-Israel Institute of Technology, IAEA assistance to, 387
 Technoimpex Foreign Trading Co., vertical milling machine, 416; turret lathe, 485
 Technology, engineering and safety, by R. Hurst, R. N. Lyon and C. M. Nicholls (review), 111
 — and science, McGraw-Hill encyclopedia of (review), 607-608
 — and science, national lending library of, 688
 — Short history of, by T. K. Derry and T. I. Williams (review), 395
 Technoproimpot, order placed with Bentley Engineering Co. for knitting machinery, 429; order placed with Brameast Textile Machinery, 429
 Tees Conservancy Commissioners, hydraulic model for Tees Estuary, 877
 — Estuary, hydraulic model of, 877
 Tees Valley and Cleveland Water Board, dam for Balderhead reservoir (Richard Costain (Civil Engineering) Ltd.), 333
 Teheran University, atomic reactor for (American Machine & Foundry), 16
 Telcon, loan to British Insulated Callender's Cables Ltd., 777
 Telcon-Magnetic Cores Ltd., exhibit at British Trade Fair, Moscow, 705
 Telcon Metals Co., exhibit at British Trade Fair, Moscow, 705
 Tele-Remscope television monitor (Cawtell Research & Electronics Ltd.), 318
 Telecommunications and electronics, design and development in, 30
 — and electronics industry, external factors affecting, 31
 — and electronics industry, market trends, 31
 — and electronics, outlook for 1961, 30
 — Future exhibitions and trade fairs on, 30
 — Industry, expansion and investment in, 32
 — Forecast for 1961, 33
 — Long term research in, 33
 — Management and labour in, 32
 — Plant and materials supply in, 32
 — Production in, 32
 Teledep ullage indicators (Dobbie McInnes Ltd.), 270
 Telefunken GmbH, emergency radio, 252
 Telegraph Condenser Co., position and prospects, 601; annual report, 601; profits, 601; agreement with Sprague Electric Co., 601
 Telegraph Construction & Maintenance Co., cable laying equipment for Russian cable-laying ships, 233
 — Ship's (A. Robinson & Co. Ltd.), 425
 Telegraphy, wireless. See also *Valves; Radar; Radio; Television*
 Telehoist Ltd., steel truck bodies, 83; hydraulic tipping gears, 83; new factory at Winsford, 83; acquisition of manufacturing rights from Pegasus Laboratories Inc., 429; exhibit at British Trade Fair, Moscow, 541; Telehoist tipping gear, 541; Teleloader sack lifter, 541; Telepak hydraulic power pack, 541
 Teleloader sack lifter (Telehoist Ltd.), 541
 Telemetry, radio, engine measurements by (BICERA), 84
 Telepak hydraulic power pack (Telehoist Ltd.), 541
 Telephone branch exchange (trade publication), 112
 — Exchange, Museum, tower building for, 219, 236
 — Radio, Kestrel (Marconi), 825
 — Services and microwave radio links, 236
 Teleprinters (trade publication), 640
 Telescopes, radio, outlook for 1961, 30
 — Ultraionospheric flight of by Blue Scout rocket, 237
 Television camera, closed circuit, Nev Eye (Nottingham Electronic Valve Co. Ltd.), 650
 — EMI mini-camera (EMI Electronics Ltd.), 650
 — Closed circuit, as aid to motor car production, 334
 — Circuit, growth and uses of, 650
 — Circuits, for schools (High Definition Television Ltd.), 650
 — Circuit, for schools (Pye Ltd.), 447
 — Circuit, for sewer inspection, 789
 — Circuit, for traffic control (Siemens & Halske, AG), 493
 — Colour, banana tube system for, 814-815
 — New technique for, 814-815
 — Services operating in USA and Japan, 505
 — Electron optics in, by I. I. Tsukkerman (book), 776
 — Linear waveform distortion, 678
 — and microwave radio links, 236
 Television monitor, Tele-Remscope (Cawtell Research & Electronics Ltd.), 318
 — Non-linearity distortion, 679
 — Physics of, by D. G. Fink and D. M. Lutyns (book), 808
 — Picture quality, how the BBC get, 678-679
 — Random noise in, 679
 — Set production in Japan, 505
 — Tape recorder (Ampex), 650
 — Tube supports of Marinite material, 770
 — Unit, mobile (Rank Precision Industries Ltd.), 650
 — Zoom lens, Varotal (Taylor, Taylor & Hobson), 737
 Telex switching exchange at Fleet Building, 510
 Telluride, lead, cells, 648
 Tellurium, production of at Harwell (UKAEA), 243
 Tellurium-132, 243
 Tema, Ghana, diesel power station for, 734
 Temperature controller, Bikini (Fielden Electronic Ltd.), 652
 — RES (Ad. Auriema Inc.), 318
 — Effect of Self-Quenching Geiger-Muller Counters, by A. Peeva and T. Karatoteva, 192
 — Engine, hardness testing for, 433
 — High, materials, research at NPL, 709
 Temperature Ltd., order for air conditioning equipment from Thermal & Plastics Industries (Pty), 159; air conditioning for Imperial College extensions, 673
 Temperature measurement. See *Pyrometry; Thermocouple; Thermometer*
 — Melt, control for crystals, 772
 — Time, stress-strain, relationship for refractory materials, by R. D. Chapman, 455
 Templates, draughtsman's, Speedraft (Keuffel & Esser Co.), 87
 Tenders, fire crash, Alvis (Alvis Co.), 61
 — Outlook for 1961, 78-81
 Tenicon high resolution storage electronic tube (Mullard Ltd.), 236
 Tennant, C., Sons & Co., loan and credit arrangements for United Arab Republic, 649
 Tennant, P., on delivery dates, 201
 Tepper, G., aluminium furniture design, 131
 Terrier aircraft on show at Coventry, 641
 — Electrode holder (Interlas Ltd.), 57
 Territories, colonial, UK engineers in, by J. G. Orr, 715
 Terry, Herbert, & Sons Ltd., rowing machine, 912; sculling machine, 912
 Tersons Ltd., Fleet Building, 510
 Terylene/cotton conveyor belts (ICI Ltd.), 739
 — in industry (trade publication), 840
 — Polyester fibre sewing thread (John Smith & Co.), 587
 — Ventilation ducting, pvc coated (Robert Watson & Co.), 475
 Test rig for aircraft propellers, 503
 — See under specific types of test and materials and items tested
 Testa Rossa Ferrari motor car, 65
 Testing, advanced, advanced design calls for, 717
 — of electrical machines, by L. H. A. Carr (review), 575-576
 — Equipment and customers' requirements, 569
 — ENGINEERING survey report on, 525
 — Machine, ball surface, Talsurf (Taylor, Taylor & Hobson Ltd.), 58
 — Gear (David Brown Industries Ltd.), 56
 — Universal, Avery (W. & T. Avery Ltd.), 542-544
 — Universal (Mohr & Federhaff AG), 530
 — See also under specific types of testing machine
 — Non-destructive (trade publication), 264
 — See also *Test*
 Tewson, G. E., review of Concentration in British Industry, 23; biographical note, 24; review of Swedish Export Directory, 1960, 331; biographical note, 332; review of Public Relations and Management, 394; biographical note, 396; review of Engineering Management, 426; biographical note, 428; review of Economics of Shipbuilding in the United Kingdom, 463-464; biographical note, 464; review of S Man, 496; biographical note, 496; review of Engineering: The Profession and Elementary Problem Analysis, 607; biographical note, 608; review of Great Organisers, 640; biographical note, 640; review of CABMA Register of British Industrial Products for Canada, 748; biographical note, 748; review of Science and Government, 839; biographical note, 840
 Texas College of Agriculture and Mechanics, USAEC assistance to, 456
 Texas Instrument Co., model of roof of new factory, 863
 Texas Science Research Institute, Van de Graff accelerator for, 488
 Texas University, meteorological experiments, 749
 Textile, asbestos (trade publication), 808
 — Students, mechanics for, by W. A. Hanton (book), 68; (review), 675
 Thailand, IAEA to assist with atomic equipment and experts, 387
 — Journal of the National Research Council of, 706
 Thames Estuary crossing by Supergrid, 52
 Theiler, C. R., on Men and Molecules (review), 330
 Thelwall Bridge (Redpath, Brown & Co.), 149
 Thermal electricity, improved efficiency for, 237
 — Engineering, by H. L. Solberg, O. C. Cromer and A. R. Spalding (book), 364
 — Insulation. See *Insulation*
 Thermal Insulation (Industrial Buildings) Act, 142
 Thermal & Plastics Industries (Pty), order for air conditioning equipment placed with Temperature Ltd., 159
 — Stresses, theory of, by A. B. Boley and J. H. Weiner (book), 68
 — Treatment, metals. See *Heat treatment*
 — Waves, propagation through graphite with uniform cooling, by A. J. E. Foreman and A. R. Curtis, 224
 Thermalite Ytong Co., aerated concrete building units, 321
 Thermionic converter experiments (GEC (US)), 237
 Thermochemistry for Steelmaking, by J. F. Elliott and M. Gleiser (review), 231-232
 Thermocouples, noble metal, by H. E. Bennett (book), 551
 Thermodare (Great Britain) Ltd., block storage heater, 880
 Thermodynamics, aero-, and flow in turbomachines, by M. H. Vavra (review), 110
 — Data for rocket engines, 269
 — Theory and practice (reviews), 263
 Thermoelectric devices, dynamic behaviour of by P. E. Gray (review), 111-112
 — Generator experiments (GEC (US)), 237
 — Materials, ceramic type (Westinghouse), 813
 — and devices, by I. B. Cadoff and E. Miller (book), 428
 Thermoelectricity, higher temperature for, 813
 Thermometer, bi-metal, Zero Re-Set (British Rotherm Co. Ltd.), 891
 Thermonuclear devices, size of, 323
 — Reaction, approaching a true, 324
 — Research, 323
 — Theory, model to test, 877
 — Work, basic reactions of, 323
 — Devices inevitably large in, 323
 — Dynamic self-pinched plasmas in, 323
 — Electromagnetic heating in, 323
 — Energy distribution in, 323
 — Forms of containment in, 323
 — Heating mechanisms in, 323
 — High initiating temperatures in, 323
 — Instability and energy loss in, 323
 — Ionic injection in, 324
 — Magnetic compression devices in, 324
 — Semi-static self-pinched plasmas in, 324
 — Sources of energy loss in, 324
 — Tasks for the future, 324
 — Two methods of heating, 323
 Thermoplastic sheet, rod and tube, manipulation of, by J. M. I. Estevez and D. C. Powell (book), 24
 — Glass fibres to strengthen, 406
 Thermostat (Ardleigh Engineering Ltd.), 527
 Thermostatic controller, Leonard (Walker, Crowler & Co. Ltd.), 14
 Thermostat Ltd., air conditioning plant for liner *Canberra*, 755
 Thévenin, J., on ageing of facing membranes of dams, 895
 Thickness measurer, Xactray (Daystrom Ltd.), 222
 Thies universal psychrometer (British Sarozal Ltd.), 351
 Thiokol Chemical Corp., solid propellant rockets, 662
 Thom, A., on Field Computations in Engineering and Physics (book), 496
 Thomas, A., appointed president of Union d'Assureurs des Credits Internationaux, 873
 Thomas, C. J., on British Industry (review), 775-776
 Thomas, E. R., on oil-burning control equipment 762
 Thomas Industrial Automation Ltd., Levelator level indicator, 12; bin controller, 190; Add-On alarm unit, 766
 Thomas, P., on skilled men and engineering vacancies, 209; on accident situation in the building industry, 381
 Thomas, Sir Percy, Severn Road Bridge, 379
 Thompson, D. G., on plant management applications, 180
 Thompson, G. V. E., on Soviet space flight facts reconciled, 557; on how to make a man feel at home in space, 623; on America's ballistic manned space flight 662; on satellite communication is on the way, 892-893
 Thompson, John, Ltd., losses in 1960, 585
 Thomson, Dr. J., on new devices, 804
 Thomson, Prof. J., historical note, 7
 Thomson, J. J., on scientific literature, 688
 Thorium atomic reactor (Consolidated Edison Co.), 419
 — Reactor, fuel element loading summary of, 896
 — Reactor, power distribution in 896
 — cycle in spectral shift controlled reactors, by H. C. Edlund, 896
 — Influences on the design of Consolidated Edison Thorium Reactor, by H. S. Barringer and J. C. Deddens, 896
 — as nuclear fuel, by U. M. Staebler, 896
 — Plants at Alwaye and Trombay, India, 725
 — Research and development with, 896
 — Uranium cycles, 896
 — 235 and uranium 238-uranium 235 fuel cycles for reactors, comparison between, by R. T. S. Shannstrom, 896
 Thorium-232, 896
 Thorn Electrical Industries, Mite-t-Lite micro-miniature tungsten filament lamp, 237; rotary stepping relay, 293
 Thornebank Industrial Estate, development of, 497
 Thorneycroft, P., on cost of Blue Streak missile, 381
 Thornton Laboratories, measuring operating temperatures of engine parts, 433
 — Trace reader (Shell), 596
 Thorneycroft, John I., Ltd., motor cruiser boat, 132
 Thourel, L., on The Antenna (book), 364
 Thread forming machine, Trurnit (Crossley Bros. Ltd.), 629
 — Screw, hammering machine, Crossley-Trurnit (Crossley Bros. Ltd.), 398
 — Sewing, Terylene polyester fibre (John Smith & Co.), 587
 — Whirling machine, Jaggi (Vaughan Associates Ltd.), 145
 — See also *Screw*
 3-D model layouts, use and abuse of, 868-869
 Thurlow, G. G., review of Radiation Pyrometry and its Underlying Principles of Radiant Heat Transfer, 427; biographical note, 428; review of Boiler House Practice, 538; biographical note, 540
 Thwaites, Prof. B., on mathematical education, 785
 Thyroid disorders and treatment with tellurium and iodine, 243
 Thyssen Shaft Sinking Co. Ltd., reservoir for River Dove Water Board, 350; high speed shaft sinking at Kellingley Colliery, 397
 TI (Export) Ltd., orders from Leipzig Fair, 673
 Tickford Ltd., Aston Martin Lagonda Ltd., to take over operations of, 61
 Tigris and Euphrates rivers, regime of, by Ionides (book), 624
 Tilbury Docks, tubular jib design crane for, 636
 Tilghman's Ltd., dust collecting plant for Russia, 457; European contracts, 457
 Tiltman, H., formation of Tiltman-Langley Ltd., 348
 Tiltman-Langley Ltd., formation of, 348
 Timber, behaviour of, 627
 — Engineering, conference on, 552
 — Examination by radioisotopes, 749
 — Impregnated, Timbor, 867
 — Improving quality of, 749
 — Laminated, structural, working stresses for, by W. T. Curry, 829
 — Working stresses and stress grading for, 829
 — Structural glued laminated, production standards for, 590
 — Sustained load strength of, by H. Tottenham, 627
 — See also *Wood*
 Timbor impregnated timber, 867
 Time, elapsed, indicator, Consistor (Transipak Electronic Engineers), 767
 — Elapsed, indicator, Electro-Clock (Aeromarine Ltd.), 826
 — Switch, Autopoint (Venner), 88
 — Temperature, stress-strain, relationship for refractory materials, by R. D. Chapman, 455
 Timer, batch control, Rodene (D. Robinson & Co. Ltd.), 318
 — Process, Rodene (D. Robinson & Co. Ltd.), 190
 — PT5 (Venner Ltd.), 857
 — Recycling, Dual-Trol (Industrial Timer Corp.), 859
 — Star (Electrical Remote Control Co. Ltd.), 279
 — (Venner Ltd.), 485
 Timoshenko, S. P., on Engineering Education in Russia (review), 330
 Tin-aluminium bearings for big ends (Glacier), 446
 — Bearings, 20 per cent reticular, development and performance of, by P. G. Forrester, M. J. Neale and A. D. Newman, 445
 — in-concentrates, table of world production, 480
 — Council, *Statistical Bulletin*, 473
 — World consumption of, 473. See *LETTER*, 588
 Tinklepaugh, J. R., on Cermets (book), 808
 Tixdex Ltd., filing cabinet (trade publication), 112
 Tipp-Ex Vertrieb, Tipp-Ex Type-Out and Cop-Ex Copy Out papers, 873
 Tipping gear, hydraulic (Telehoist Ltd.), 83
 — Telehoist (Telehoist Ltd.), 541
 Tiranti, Alec, Ltd., cold casting system, 867
 Tissuglas glass fibre tissue paper (AMF Ltd.), 275
 Titanium (trade publication), 298, 808
 — as absorption medium for tritium, 696
 — Cold extrusion of, 545
 — Tritiated, 696
 TnT stainless steel car engine (Tyce Engineering Corp.), 139
 Tokai-Mura atomic reactor, US aid for Japan for, 16
 Tokaido railway line in Japan, 649
 Token Construction Ltd., Hilton Hotel, 627
 Tokyo Shibaura Electric Co., typhoon spotter radar unit, 577
 Tolansky, S., on Surface Microtopography (review), 576
 Toledo Woodhead Springs Ltd., leaf springs for American Ford Motor Co., 133
 Toll, D. R., appointed special assistant to Director General of IAEA, 148
 Toll roads, 473
 Tomato, take one when touring abroad, by R. S. Campbell, 799
 Toms, A. H., on can design be taught at universities, 789
 Tone (Rotaprint Ltd.), 22
 Tools, cast-to-form (trade publication), 904
 — Cross chord, 570
 — Cutting, ceramic (Carborundum Co. Ltd.), 763
 — Choice of materials, by J. Cherry, 514-515
 — Design and utilization, by J. Cherry, 570-571
 — Inserted tip, 570
 — Surfing (Firth Cleveland), 100
 — Electric, Handy Utility (Black & Decker), 106
 — Safety-master (Wolf Electric Tools Ltd.), 106-108
 — Fixing, Hilti (Ucan Developments Ltd.), 254
 — Kit, mathematical, for engineers, by H. A. Webb and D. G. Ashwell (review) 232
 — Power, outlook for 1961, 168-171
 — Press (Vernon Tools Ltd.), 763
 — Single point, design of, 570
 Tool Treatments (Chemicals) Ltd., metal baskets (trade publication), 496
 — Utilization, economics of, 571
 Tornomat shaping machine (Hahn & Kolb), 596
 Toronto subway, extensions to, 734
 Torque converter (North British Locomotive Co. Ltd.), 763
 — (Self-Changing Gears Ltd.), 661
 — Meter. See *Dynamometer*
 — Transfer Link Coupling, Duolastik (Metalastik Ltd.), 536
 Tory II A-1 atomic reactor, first power test scheduled, 800
 TOS, range of milling machines, 234
 Total Oil Products (GB), commencement of trading in UK, 1
 Tottenham, H., on sustained load strength of timber, 627

- United Dominions Trust, as UK's member of Amstel Club, 865
- United Kingdom Atomic Energy Authority, bibliography on axial-flow compressors, 104; radiation pyrometer, 191; SETRA rig for testing radiation resistant oils and greases, 191; formation of Transatom information office with USAEC and Euratom, 192; *Radioactive Chemicals* (catalogue), 192; price agreement on uranium oxide, 223; iodine 132, 243; tellurium 132, 243; production of tellurium, 243; high voltage relay, 271; changes in organization, 324; R. V. Moore appointed managing director of Reactor Group, 324; J. B. W. Cunningham appointed managing director of Engineering Group, 324; J. C. C. Stewart appointed managing director of Production Group, 324; Sir William Penney appointed deputy chairman, 324; development and engineering group renamed Reactor Group, 324; formation of Engineering Group, 324; Sir William Cook appointed Member for Reactors, 324; Sir Leonard Owen appointed Member for Production and Engineering, 324; Dr. F. A. Vick appointed Director of Research, 324; Vera atomic reactor critical, 356; overhead monorail for Winfrith Heath establishment, 397; high purity nitrogen plant installed, 398; course at Harwell Reactor School for senior technical executives, 420; criticality achieved tin Nestor atomic reactor at Winfrith Heath, 456; charge-discharge machine for Wind-scale atomic reactor, 519; information on Vera atomic reactor released, 631; research on boiling water heat transfer, 631; responsibility for particle accelerators given to National Institute for Research in Nuclear Science, 632; L. B. Mullett transferred to National Institute for Research in Nuclear Science, 632; exhibit at German Chemical Plant Exhibition, 677; contact with Euratom, 768; automatic starting of standby generators, 788; agreement with Russia on peaceful uses of atomic energy, 800; contract with Cawell Research and Electronics, 801; use of pipe-sealing balloons, 803; model to test Harwell Mirror Machine Experiment, 877; beryllium monitor, 905. See also under specific establishments and projects
- Control of monopoly in, by P. H. Guenault and J. M. Jackson (review), 427-428
- and ECM, Government decision awaited, 801
- Engineers in Colonial territories, by J. G. Orr, 715
- Loan to Ghana, 333
- Steering Group on Space Research, plans for UK's second satellite, 645
- US investments in, 209
- United Nations, report on creation of International Development Insurance Fund, 473; Economic survey mission to Cyprus, 585;
- United Nations Statistical Year Book*, 713
- United Ships Repair Yards, Centromor to supply floating dock built by Furness Shipbuilding Co., 265
- United States, advanced courses at colleges, 317
- Aid to Indonesia for Triga atomic reactor for Bandung Institute of Technology, 800
- Aid for Israeli atomic reactors, 192
- Aid to Japan for Tokai-Mura atomic reactor, 16
- Aid to Jordan, 265
- Air Force, research on speaking to people through their skins, 412; nuclear power for ramjet propulsion, 800
- Antitrust laws of, by A. D. Neale (review), 427-428
- Army, shut down of atomic reactor at Camp Century, 256
- Atomic Energy Commission, revision of radiation limits, 15; *Manual on Radioisotopes*, 16; Borax V atomic reactor, 59; Pathfinder atomic reactor, 59; Bonus atomic reactor, 59; funds for university teaching reactors, 60; Superheat Programme, by C. A. Pursell, 60; Project Sherwood, 85; advice to Puerto Rico on atomic matters, 148; Dr. G. Seaborg nominated as chairman, 148; explosion of SL-1 atomic reactor in Idaho, 148; agreement with Consumers Power Co. for prototype atomic plant, 192; agreement with GEC (US) for prototype atomic plant, 192; formation of Transatom information office with Euratom and UKAEA, 192; invitations to utility companies to participate in atomic steam supply system for power generation, 192; development of gas centrifuge for uranium separation, 223; base charges for plutonium for industrial/commercial use, 223; gas cooled reactor experiment at National Reactor Testing Station, 223; price agreement on uranium oxide, 223; uranium concentrate contract with Susquehanna-Western Inc., 223; approval of safety aspects of proposed atomic power reactor for Philadelphia Electric Co., 224; FBR project, 224; design of atomic power plant by Atomics International, 256; design, construction and test of Beryllium Oxide Atomic Reactor Experiment assigned to General Atomics, 256; licence for atomic reactor at Washington State University, 388; Los Angeles and Pasadena withdraw from improved cycle boiling water project, 388; proposals for research into nuclear rocket engine, 388; investment in atomic projects, 419; loan of enriched uranium to US Universities, 455-456; contract to Battelle for research on coated particle atomic fuel, 455; atomic reactor site criteria, 456; commercial interest in organic cooled and moderated atomic reactor, 456; natural uranium fuel for Turkey, 456; termination of pressurised water atomic reactor project, 456; H. L. Price appointed director of regulation, 632; suspension of atomic propulsion for aircraft programme, 632; survey of operation and maintenance procedures, 632; contract to Babcock & Wilcox to study Special Shift Control Atomic Reactor, 664; increase in budget, 664; to build dual purpose atomic reactor, 664; abandons heavy water project, 800; development of atomic rocket engine, 800 nuclear power for ramjet propulsion, 800; provide fuel for Zero Power atomic reactor at Cornell University, 800; price cuts in uranium, 809; low temperature process steam project, 832; removal of suspension on Wyoming University atomic reactor operation, 832; new formula for calculating atomic insurance protection, 896; low level counting experiments, 909; see also under specific establishments and projects
- United States atomic materials view, 781
- Atomic power plant, 700 MW(e), 632
- Atomic power programme, 419
- Atomic power stations, 419
- Atomic reactors, 419
- Balance of payments, 265
- Ballistic manned space flight, by G. V. E. Thompson, 662
- Canada's adverse trade balance with, 159
- Colour television service, 505
- Contract with Norway and IAEA for enriched uranium 235 fuel, 800
- Convictions for price rigging, 657
- Development Loan Fund, loan to Ghana, 333
- Electricity consumption, 565
- Enriched uranium for France, 388
- Euratom agreement, 388
- Export-Import Bank, loan to Instituto Nacional de Industria for enlarging Cadiz power station, 273
- Federal Aviation Agency, agreement with Ministry of Aviation on secondary radar, 1; airborne weather radar requirement, 421
- Federal Trade Commission, charges against Rootes Motors Inc. dropped, 365
- Imports from Finland, 333
- Imports from Japan, 209
- Imports from UK, 341
- Investment in UK, 209
- United States Lines, new dock shed for, 483
- Mercury programme, 662
- Mercury space project, 557
- Mercury satellite, 623
- Motor car imports, 69
- United States National Bureau of Standards, *Alphabetical Index to Tables of Chemical Kinetics: Homogeneous Reactions*, 66; programme of research on aluminium, beryllium, lithium and magnesium compounds, 269
- Navy, Machias Bay radio station, 205
- Office of Naval Research, RUM remote underwater manipulator, 143
- Private investment in Europe, 209
- Railways, diesel losses on. See LETTER, 92
- United States Steel Corp., study and development of steel for furniture, 130; Mohr blast furnace for, 665; research on corrosion, 687; Quebec Cartier Mining Co. subsidiary of, 729
- United States Steel Export Co., River Tagus bridge, 482
- Superheat atomic reactor plants, 60
- United States Thompson Ramo Wooldridge Inc., formation of International Systems Control, 881
- United States, unemployment in. See LETTER, 136
- See also *America; American*
- United Steel Cos. Ltd., annual report, 105; position and prospects, 105; planned output increase, 105; installation of continuous wide strip mills, 105; acquisition of shares in John Summers & Sons, 105; excess income over expenditure, 105; consolidated surplus, 105; *Roll Pass Design* (review), 198; securities sold back to general public, 325; production commenced on automated cold rolling mills, 490; development of ground as airfield, 577
- United Wire Works Ltd., Micro-Hollander stainless steel wire cloth, 439
- UNIVEL dynamic electrometer, 15
- Universal Asbestos Manufacturing Co. Ltd., two-piece soaker flanges, 87
- Machine, Steelworker (Henry Pels & Co. Ltd.), 562
- Universal Metallic Packing Co., Deva metal bearings, 178
- University(ies), atomic reactors in, by Dr. N. S. Grassam, 60
- Reactors in, applications for grants to build, 104
- Reactors in, USAEC funds for, 60
- Research in, 832
- British, scientific research in (DSIR) (review), 330
- College, Ibadan, by J. T. Saunders (book), 428; (review), 747
- College of North Staffordshire, request for University status, 657
- Grants Committee, aid to Oxford University for nuclear research centre, 832
- at Lancaster, 657
- Research for industry, 434-435
- Teaching design at, 376. See LETTERS, 476, 508, 789
- US, USAEC free loan of enriched uranium to, 455-456
- See also under names of specific universities
- Uphi universal meter, Grosse (Aveley Electric Ltd.), 351
- Upsetting machine for tubes (Lamberton & Co. Ltd.), 507
- Uranic II sub-critical atomic assembly, 487
- Uranium, abundance throughout world, 223
- Alloys as atomic fuel, 368
- Uranium carbide as atomic fuel, 369
- Bibliography of, 456
- Concentrate, USAEC contract with Susquehanna-Western Inc., 223
- Deposits in Sweden, 563
- Dioxide as atomic fuel, 368
- and graphite, studies of reactions between, by B. Craven, 256
- Oxidation by water vapour under reactor irradiation, by B. E. Harder *et al.*, 60
- Enriched, US shipment to France, 388
- Fuel, natural, USAEC send to Turkey, 456
- and hydrogen, densities of, their effect on criticality, by E. V. Garner and K. D. B. Johnson (paper), 456
- Metal as atomic fuel, 368
- Plant opened at Johannesburg, 520
- Oxide, cost of, 223
- and graphite, reactions between under heat, 256
- Price agreement on, 223
- South Africa lengthens deliveries, 223
- Plants, developments in Sweden, 563
- Price cuts, 809
- Refining pilot plant at Johannesburg, 609
- Research in Canada, 16
- Resources of Czechoslovakia, 15
- Separation, gas centrifuge development, 223
- Thorium cycles, 896
- Works at Ranstad, Sweden, 223
- Uranium-233, 896
- Uranium-238, 896
- Uranium-238-uranium-235 and thorium-uranium-235 fuel cycles for reactors, comparison between, by R. T. S. Shanstrom, 896
- Urban survival and traffic, symposium on, 93
- Urethane foams (Baxenden Chemical Co. Ltd.), 438
- Spraying for insulation, 438
- (Wyandotte Chemical Co.), 438
- Urquhart, Dr. D. J., National Lending Library of Science and Technology, 688
- Urwick Management Centre, use of 3-D models, 869
- Urwick, Orr & Partners, use of 3-D models, 869
- Urwic, E. G., & Partners, multi-weld assembly lines for Ford Motor Co., 515
- US Industries (Great Britain) Ltd., presses for General Motors Holden, 397
- US. See *United States*
- USAEC. See *United States Atomic Energy Commission*
- USSR. See *Russia*
- V**
- V-2 rocket, 662
- V-belts (Bolinders Co. Ltd.), 445
- Wedge-belt, SpacasaVer (Fenner), 86
- V-formwork, (Acrow (Engineers) Ltd.), 466-468
- Vacric (Control Equipment) Ltd., split-field motor, 101
- Vacuflex steel reinforced pvc ducting (Recon (Pipelines) Ltd.), 835
- Vacuum cleaner. See *Cleaner*
- Driers (trade publication), 364
- High, equipment for (trade publication), 676
- Manometer, NEL (NGN Electrical Ltd.), 857
- Pump. See *Pump*
- Vacuum Research (Cambridge) Ltd., micro-leak detection, 83
- Technology, sixth national symposium on, by C. R. Meissner (book), 364
- Ultra high, gauge for (Westinghouse), 85
- Ultra-violet source radiation of high intensity, by F. S. Feates *et al.*, 388
- Vales Plant Register Ltd., Lorain lorry mounted crane, 100
- Valle de Torbalina atomic power plant, Centrales Nucleares del Norte apply for permission to establish, 456
- Vallecitos boiling water atomic reactor, 419
- Valleys, wide, concrete dams for, 895
- Values, decisions and groups, by D. Willner (review), 870
- Valves (trade publication), 708
- Air, automatic (Alan Muntz & Co. Ltd.), 270
- Engine bleed, Hymatic (Hymatic Engineering Co. Ltd.), 425
- Precision seal (TAL Numatics Ltd.), 773
- Silencing with Vyon plastic, 243
- for burst slug detection system Plessey Nucleonics Ltd.), 788
- Control (trade publication), 776
- (Gilbarco Ltd.), 445
- Masonellan (Crosby Valve), 352
- Deceleration (Stein Atkinson Vickers Hydraulics Ltd.), 239
- Electromagnetic (trade publication), 776
- Fittings (Newman, Hender Group), 571
- Flexiseat, 153
- Flow control (Hymatic Engineering Co. Ltd.), 857
- Gas control (General Controls Ltd.), 766
- Gas-lift (Camco Inc.), 609
- Hydraulic, control (Hydraulics & Pneumatics Ltd.), 530
- Manifold (Pongross Bros. (Engineering) Pty. Ltd.), 727
- Mixing, Leonard, 44
- (Newman, Hender Group), 571
- Newman-Velan (Newman, Hender & Co. Ltd.), 629
- for nuclear applications (trade publication), 776
- Oil burner (trade publication), 904
- Plug, Audco (Audley Engineering Co. Ltd.), 353
- RF power, Ediswan (AEI Ltd.), 253
- Servo, 818
- Applications of, 819
- (Armstrong Whitworth Equipment Ltd.), 485
- Control principles of, 828
- Dowty-Moog (Dowty Rotol Ltd.), 818-819
- Stop, Ermeto (British Ermeto Corp. Ltd.), 528
- Valves, Vapour, for BBC transmitters (English Electric Valve Co. Ltd.), 433
- Winn-Flexiseat (Charles Winn & Co. Ltd.), 153
- van Bergeijk, W. A., on Waves and the Ear (book), 776
- Van de Graff accelerator for Padua University (High Voltage Corp.), 488
- Van de Graff accelerator for Texas Science Research Institute, 488
- Van de Graff generators for Oxford University nuclear research centre, 832
- Van Horn, R. L., on Automatic Data Processing Systems (book), 264
- van Musschenbroek, P., historical note, 7
- Van Sciver, H. D., on adhesives to replace spot welding, 687
- Van Valkenburgh, Nooger and Neville, Inc., Basic Synchros and Servomechanisms (review), 262
- Vancouver Island, flexible submarine pipeline to, from British Columbia (BICC), 45
- Vanguard aircraft, Vickers, 1
- Variables and computers, 860
- Varispeed truckmixer (Blaw Knox Ltd.), 598
- Varotal television zoom lens (Taylor, Taylor & Hobson Ltd.), 737
- Vasa ship, salvage of, 625
- Vaughan Associates Ltd., Jaggi thread whirling machine, 145
- Vauxhall Motors Ltd., truck production at Merseyside, 83; cost saving awards at, 97; depression and employment position, 97; truck and bus chassis export record, 299; five day week resumed, 299; profit sharing scheme, 413; reduction in accidents, 513; *Safety Report*, 513; position and prospects, 633; annual review, 633; output, 633; export sales, 633
- Vavra, M. H., on Aero-Thermodynamics and Flow in Turbo-machines (review), 110
- VC10 aircraft, Conway jet engines for, 233
- Details of (Vickers), 882-883
- Order from BOAC, 233
- Order from Ghana Airways, 233
- VDE-Verlag, *Gleichstrombahnen und Gleichstromfahrzeuge* (book), 904
- VDI Steam Tables, by E. Schmidt (review), 840
- Veale, J. C., preparation of report for ENGINEERING survey on engineering plant, 522; biographical note, 522
- Vegetation, use and control in civil engineering, 829
- and control on roads and airfields overseas, by K. E. Clare, 829
- Velovent air conditioner (Air Control Installations Ltd.), 528
- Venales self-locking nails for roofing felt, 483
- Vending, automatic, exhibition, 721
- Machines, automatic, 721
- Coal from, 721
- Venesta Plywood Ltd., Lead Plymax X-ray screens, 343; plywood barrels, 803; plywood cases, 905
- Venezuela, information of swimming pool atomic reactor under construction, 147
- Venikov, Prof. V. A., on Russia will have a unified power system, 304-305
- Venner Electronics Ltd., measuring unit, 445
- Venner Ltd., Autopoint time switch, 88; timer, 485; automatic time switch, 784; PT5 timer, 857
- Ventilation ducting, pvc coated Terylene (Robert Watson & Co.), 475
- Outlook for 1961, 78-81
- Venturi fume cleaning plant, Ambuco (Ambuco Ltd.), 890
- Vera atomic reactor, critical, 356
- Reactor, UKAEA release of information on, 631
- Verlag Chemie, *Betriebstechnik: Verfahren und Operationen* (book), 112; *Mess- und Regeltechnik* (book), 200; *Progress in Distillation Engineering* (book), 232; *Betriebstechnik: Grundlagen* (book), 332
- Vernon Tools Ltd., press tools, 763
- Vero Autodrill turret head drill (Catmur), 628
- Vero Precision Engineering Ltd., Hydro-Copier hydraulic copying unit, 444
- Verrolec Ltd., bandsaw (trade publication), 68
- Vertolifter stacking truck (Powell & Co. Ltd.), 383
- Verulam, Lord, first, historical note, 7
- Vessel, pressure. See *Pressure vessel*
- Vi-Spring Ltd., mattress spring testing machine, 404
- Vibration limiter (Dawe Instruments Ltd.), 351
- Vibrator, magnetic (Mageo Ltd.), 252
- Motor (English Electric Co. Ltd.), 517
- Vick, Dr. F. A., appointed Director of Research, UKAEA, 324
- Vickers-Armstrongs (Aircraft) Ltd., Vanguard aircraft, 1; Conway jet engines for VC10 aircraft, 233; order from BOAC for VC10 aircraft, 233; order from Ghana Airways for VC10 aircraft, 233; order from Ghana Airways for Viscount aircraft, 233; Viscount aircraft for All Nippon Airways, 465, 873; constant speed generator drives for VC10 aircraft, 809; details of VC10 airliner, 882-883
- Vickers-Armstrongs (Engineers) Ltd., presses for General Motors Holden, 397; formation of die manufacturing department, 460; Sulzer diesel engines for British Railways, 595; exhibit at British Trade Fair Moscow, 758
- Vickers-Armstrongs Ltd., contract for second atomic submarine, 224; joint set up with Swan Hunter, 556; survey of 1960, 585; member of AVB Co., 765; delivery of first Viscount aircraft to All Nippon Airways, 873
- Vickers-Armstrongs (Shipbuilders) Ltd., *Vikrant* aircraft carrier for Indian Navy, 429; liner *Empress of Canada*, 605; liner *Oriana*, 769; tanker *Serenia*, 769; liner *Empress of Canada*, 769; order position, 769
- Vickers-Armstrongs (South Marston) Ltd., sub-critical atomic assembly, details of, 487-488; factory for Irish Sugar Co., 756; atomic reactor simulators, 864
- Vickers Building, Plasticell thermal insulation panels, 834

- Whitaker, J., & Sons Ltd., *Whitaker's Almanack* (review), 838
- Whitaker, T., review of Reinforced Concrete Piling and Piled Structures, 297; biographical note, 298
- Whitaker's Almanack, 1961 (book), 396; (review), 838
- White, J. L., on Physicochemical Measurements at High Temperature (review), 66
- White, S. S., Industrial Division, abrasive engraver (trade publication), 24
- Whitehead Iron & Steel Co. Ltd., position and prospects, 357; profits, 357; table of five year earnings, 357; diversification, 357
- Whitesitt, J. E., on Boolean Algebra and Its Applications (book), 808
- Whittaker, Hall & Co. (1929) Ltd., Hydrovane air compressors, 763
- Whittie, J. P., on Introduction to Quantum Mechanics (review), 607-608
- Whittingham and Mitchell, aluminium pontoon for Esso at Milford Haven, 343
- Whittingham, R., on Italians in Bedford, 136
- Whitworth Fellowships, former winners of, 824 — Offered by Ministry of Education, 824
- Who Owns Whom*, 833
- Who's Who in the Gas Industry (book), 428
- Who's Who in the Motor Industry (book), 840
- Wickman Ltd., Gardner-Denver Air Trac drilling rig, 145
- Wiest indexing machine (Embassy Machine), 102
- Wiffen & Sons, chemical plant for Russia, 497
- Wiggin, Henry, & Co. Ltd., weld filler rod (trade publication), 264
- Wigner energy release carried out on BEPO atomic reactor at Harwell, 632
- Wilcox Electronics Co., licence agreement with Ekco Electronics Ltd., 421
- Wild-Barfield Electric Furnaces Ltd., high frequency generator, 726
- Wild, Dr. W., appointed head of chemistry division at AERE, Harwell, 632
- Wilkins, G., on What's Happening in the Outside World, 95; on Are Modern Brakes Always Good Enough? 197; on Jaguar Sports Car Faster, Lighter, Quieter, 393; on Something Borrowed, Something Unique, 410; on Triumph Herald—13 per cent More Power, 581; on Power and Elegance in Continental Cars, 592; on Rear Engine Revolution in Racing Cars, 630; on Consul Classic 315 Fills the Gap in the Ford Range, 760
- Wilkins, M., et al, on field method for measurement of helium in natural gases, 60
- Wilkinson, Prof. D., long term research on atomic structures, 832; research programme of, 832
- Willetts, J. R., on future engineers, 443
- Williams, B. J. S., on national use of technical information, 719. See LETTERS, 757, 885
- Williams, D., on Introduction to the Theory of Aircraft Structures (review), 157
- Williams, J. N., on Boiler House Practice (review), 538
- Williams, K., on strontium studies, 60
- Williams, K. R., review of Fuel Cells, 774; biographical note, 776
- Williams, Dr. T. E. H., review of Highway Engineering Handbook, 494; review of Highway Engineering, 494; biographical note, 496
- Williams, T. I., on Short History of Technology (review), 395
- Willner, D., on Decisions, Values and Groups (review), 870
- Wilmot Breeden Ltd., exhibit at British Trade Fair, Moscow, 541; British Monorail conveyor installed, 837
- Wilmot, H., on Beyer Peacock Co., 769
- Wilson, A. C., & Partners Ltd., heavy duty manipulator, 104
- Wilson Electric Transformer Co. Pty., to supply Ferranti transformers to Electricity Commission of New South Wales, 69
- Wilson, Henry, & Co. Ltd., oil fired boiler, 352
- Wilson, J. E., on testing equipment and customers' requirements, 569
- Wilson, R. E., on Two Hundred Precious Metal Years (book), 264
- Wilson, Sir Reginald, on transport systems, 622
- Wimpey & Co. Ltd., Loch Awe to Inverawe power station tunnel, 10
- Wimpey, George, & Co. Ltd., ethylene-oxide (trade publication), 264; formation of Margram Slag Co. Ltd., 342; formation of Anglo-Brasileira de Construcoes (CAB), 379; hydraulic investigations, 470. See LETTER, 685
- Winch, cargo, Corrector (Laurence Scott & Electromotors Ltd.), 528
- Cradle, Strateline (Scaffolding (Great Britain) Ltd.), 351
- (Henry Sykes Ltd.), 188
- Winchester rifle, 831
- Wind power generators, progress in, 677
- Tunnel for Royal Aircraft Establishment, Bedford (GEC), 469
- Windings, electric motor, improved protection for, 293
- Gear, mine (AEI Ltd.), 787
- Tool, spring (Acru), 826
- Window, Idlewild. See LETTER, 212
- Windscale Atomic Energy Establishment, charge-discharge machine for, 519
- Advanced gas cooled atomic reactor completion date, 664
- Atomic reactor, beryllium cladding programme abandoned, 664
- Reactor, failure detection equipment in, 600
- Windscreen wiper, DL3 (Joseph Lucas Ltd.), 855
- Windsor Castle* liner, model of, 851
- Windsor, R. H., orders taken at Leipzig Fair, 673
- Wine Club formed by Engineers' Guild, 317
- Winfrith Heath Atomic Energy Establishment, Hector atomic reactor for (Fairey Engineering Ltd.), 104; monorail installation for, 397; criticality achieved in Nestor reactor, 456
- Wingate, H. S., on International Nickel Co. of Canada, 738
- Winget Ltd., reverse drum mixing machine, 798; Winget 3½ TS concrete mixing machine, 810-812; historical note, 810
- Winkfield tracking station for satellites, 174
- Winn, Charles, & Co. Ltd., Winn-Flexiseat valves, 153
- Winn-Flexiseat valves (Charles Winn & Co. Ltd.), 153
- Winston electronic beryllium monitor, 905
- Winston Electronics Ltd., Waring Blendor blending machine, 102; Waring high speed mixing machine, 251; trigger generator, 318; agents for Waring Aseptic Dispersall Blendor blending machine, 403; Guardaire air conditioning unit, 816; Winston electronic beryllium monitor for US demonstration, 905
- Wintterlin, K., on Kolbenverdichter: Einführung in Arbeitsweise, Bau und Betrieb von Luft- und Gasverdichtern mit Kolbenbewegung (book), 640
- Wiper, windscreen, DL3 (Joseph Lucas Ltd.), 855
- Wire cable for Forth Road Bridge (Dorman Long (Steel) Ltd.), 516
- High tensile for bridgework, 513
- Rope closing machine (Larmuth & Bulmer), 144, 172
- Maintenance (trade publication), 776
- Manufacture, revolution in, 172
- Spooling, 608
- Stripper (Vicsteels Ltd.), 352
- Wireless Telephone Co. Ltd., miniature I.F. transformers, 153
- Wiring, adequate, by W. F. Jarvis, 784
- Withers, A. G., on Mechanised Cutting and Loading of Coal (book), 608
- Wittke, J. P., on Introduction to Quantum Mechanics (book), 298
- Wolf Electric Tools Ltd., Cub electric drill, 106-108; Safetymaster electric tool, 106-108; electric soldering iron, 619
- Wolseley Holdings Ltd., anti-stick resins. See LETTER, 4-5
- Wolverhampton Die Casting Co., four day week commenced, 97
- Women engineers, Plain Words on, 620
- Wonders of the world, the fifteen, by R. Poirier (book), 68
- Wood refuse collectors (trade publication), 428 — See also *Timber*
- Wood, Rudson & Co. Ltd., Peugeot Airbrosse electric hand brush, 848; Peugeot Squirrel food mixer, 848
- Woodfield Rochester Ltd., wire rope spooling (trade publication), 608
- Woodford, W., on work and holidays, 649
- Woodhead, L. A., on technical knowledge, 804
- Woods, K. B., on Highway Engineering Handbook (review), 494
- Woods, W. A., on generator for exhaust pulse studies, 128-129; on dynamics of halting a line of traffic, 655-656
- Woodworking, machine, principles of: sawing and planing, by A. H. Haycock (book), 68; (review), 903
- Wool, rock, Rocksil (Cape Insulation & Asbestos Products Ltd.), 519
- Woomera, Weapons Research Establishment, optical range of, 750-751
- Worboys, Sir Walter, on BTR Industries Ltd., 257
- Work, absence from, incidence, cost and control (BIM publication), 413
- and executives, Plain Words on, 376
- Work, L. A., on first two years after graduation, 440
- Study, airing doubts and fears, 900
- Conference, 900
- Human implications of, the case of Pakitt Ltd., by S. Dalziel and L. Klein, 183
- Questions put to conference panel, 900
- Workers, manual, wage inquiry, 625
- Young, prevention of accidents to (Ministry of Labour leaflet), 721
- Working and living, Plain Words on, 885
- Works, Ministry of, design of new tower building for Museum telephone exchange, 219, 236; design of Fleet Building, 510
- Workshops and employment for the elderly, 413
- World Bank. See *International Bank for Reconstruction and Development*
- Economy, changes in, 133
- Fifteen wonders of, by R. Poirier (book), 68
- World Hope* ship launched, 1
- World of Learning (book), 396
- Mechanized, growing old in, by F. le Gros Clark (book), 133
- Outside, what's happening in, by G. Wilkins, 95
- Railways, 1960, by H. Sampson (book), 200
- Steel production doubled, 105
- Trade centre, New York Port plans for, 405
- Worldmaster chassis, Leyland, production rights for Industrija Motora Rakovica, 577
- Worm reducer gear unit, Radicon (David Brown Corp.), 61
- Worshipful Company of Carmen, award of Viva shield to C. S. Cockerell, 447
- Wrapping machines (trade publication), 364
- WRECISS. See *Camera, WRE, interception single shot*
- Wreck raising. See *Salvage*
- Wren, F. J., on parallel surface thrust bearings, 48
- Wright, Prof. D. A., review of Progress in Semiconductors, 638-639; review of Hall Effect and Related Phenomena, 638-639; review of Semiconductor Technology, 638-639; biographical note, 640
- Wright, L., on apprenticeship schemes, 209
- Wrigley, W., on Inertial Guidance (book), 540
- Writing for engineers, 476. See LETTERS, 508, 552
- Report, improves with morale, by B. C. Brookes, 315-316
- Techniques of, 315-316
- WTR atomic reactor accident, 355
- Wyandotte Chemical Co., chemical formulation for sprayable urethane foams, 438
- Wyatt, L. M., review of Magnesium and Its Alloys, 297; biographical note, 298
- Wycon Services, chemical plants for Russia, 497
- Wylfa, Anglesey, atomic power station, application to Ministry of Power for consent for, 288
- Wyoming University, USAEC removal of suspension of atomic reactor operation, 832

X

- X15 rocket aircraft, re-entry nose cone for (Northrop), 41
- X-band linear accelerator (Vickers), 673
- X-ray diffraction laboratory for Illinois Institute of Technology, 85
- Inge amplifier for Toronto hospital, Marconi, 397
- X-Ray & Radium Ltd., agents for Marconi X-ray image amplifier, 397

Y

- YACHT, mahogany for, 475
- Yale & Towne Manufacturing Co. Ltd., Trojan tractor shovel, 692
- Yankee Atomic Electric Co. atomic reactor, 419
- Yarn, linen, electronic inspection device for, 635
- Monitor, automatic, for linen industry, AMY, 813
- Yarrow, A. F., historical note, 7
- Yates-Owen, E. A., design of dust cabinet, 343
- Yawl. See *Ship*
- Year Book of Technical Education and Careers in Industry (1960), by H. C. Dent (review), 158. See LETTER, 180
- YIM-Yorkshire Fittings (Australia) Pty. Ltd., ICI of Australia and New Zealand to take minority interest in, 61
- Yorkshire Copper Works (Holdings) Ltd., record profits, 61; joint ownership of Yorkshire Imperial Metals with ICI Ltd., 61
- Electricity Board, use of "pillow" tanks, 311
- Yorkshire Engine Co. Ltd., *Taurus* diesel-hydraulic locomotive, 652
- Yorkshire Imperial Metals, joint ownership by ICI Ltd. and Yorkshire Copper Works (Holdings) Ltd., 61; trading profit, 61; cooperation with ICI of Australia and New Zealand, 61
- Young, Prof. A. D., appointed consultant to British Executive and General Aviation, 348; biographical note, 348
- Young, A. E., on making cast metal moulds with undercuts, 866
- Young, G. J., on Fuel Cells (review), 774
- Young, Joseph, & Sons Ltd., gear pump, 353
- Your Eyes are Precious, cinema film, 381
- Yovitts, M. C., on Self-Organising Systems (review), 538-539
- Yrjö Heinonen, indoor sports track at Los Angeles, 333
- Yugoslavia, IAEA member to visit, 387
- Production rights for Leyland Worldmaster chassis, 577
- Request to IAEA for assistance for Triga atomic reactor, 632
- YZ Club formed by Royal Society for the Prevention of Accidents, 824

Z

- ZAGATO Appia motor car, Lancia, 592
- Zagreb Institute of Medical Research, IAEA member to advise, 387
- Zaleski, P., on neutron density measurement by autoradiography of detector foils, 388
- Zaporozhets baby car production in Russia, 95
- Zed crank engine, 790
- ZEEP atomic reactor, operation of, 725
- Zenz, F. A., on Fluidization and Fluid-Particle Systems (review), 230-231
- Zephyr gas meter (Parkinson Cowan), 159
- Zero Power atomic reactor at Cornell University, USAEC to provide fuel for, 800
- Zero Re-Set bi-metal thermometer (British Rototherm Co. Ltd.), 891
- Zinc electro-deposition plant (Electro-Chemical Engineering Co. Ltd.), 135
- Zinn, W. V., Fleet Building, 510
- Zircaloy 2 process tubes for atomic reactors, 60
- Zirconium (trade publication), 298
- Zone refiner (Miles Hivolt Ltd.), 660
- Zoom lens. See *Lens*
- Zwicky Ltd., Uniplex fluid filter, 188; Biplex fluid filter, 188; Uniplex filter, 559; Biplex filter, 559; oil burner valves (trade publication), 904