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Sony, Ex. 1007, p.1



On the cover: Photomicrograph of crystals of vitamin B<sub>1</sub>. (Dennis Kunkel, University of Hawaii)

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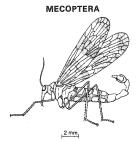
## INTERNATIONAL EDITION

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Sony, Ex. 1007, p.2



Male scorpion fly (Panorpa)

in the fetal intestine, becoming the first fecal discharge of the newborn. { məˈkō·nē·əm }

meconium ileus [MED] Intestinal obstruction in the newborn with cystic fibrosis due to trypsin deficiency. { məˈkō·nē·əm

Mecoptera [INV 200] The scorpion flies, a small order of insects; adults are distinguished by the peculiar prolongation of the head into a beak, which bears chewing mouthparts. { me'käp·tə·rə }

mecystasis [PHYSIO] Increase in muscle length with maintenance of the original degree of tension. { me'sis tə səs media [HISTOL] The middle, muscular layer in the wall of a vein, artery, or lymph vessel. { 'më-dë-ə } media conversion [COMPUT SCI] The transfer of data from

one storage type (such as punched cards) to another storage type (such as magnetic tape). { 'mēdē ə kən,vər zhən }
media conversion buffer [COMPUT SCI] Large storage area,

such as a drum, on which data may be stored at low speed during nonexecution time, to be later transferred at high speed into core memory during execution time. { 'mē·dē·ə kən,vər·zhən ,bəf·

mediad [ANAT] Toward the median line or plane of the body or of a part of the body. { 'mē·dē, ad }

medial [ANAT] 1. Being internal as opposed to external (lateral). 2. Toward the midline of the body. [SCITECH] Located in the middle. { 'mē·dē·əl }

medial arteriosclerosis [MED] Calcification of the tunica media of small and medium-sized muscular arteries. Also known as medial calcinosis; Mönckeberg's arteriosclerosis. { 'mē·dē·əl .är·tir·ē·ō·sklə'rō·səs }

medial calcinosis See medial arteriosclerosis. { 'mē·dē·əl ,kal-

medial lemniscus [ANAT] A lemniscus arising in the nucleus gracilis and nucleus cuneatus of the brain, crossing immediately as internal arcuate fibers, and terminating in the posterolateral ventral nucleus of the thalamus. { 'mē·dē·əl lem'nis·kəs }

medial moraine [GEOL] 1. An elongate moraine carried in or upon the middle of a glacier and parallel to its sides. **2.** A moraine formed by glacial abrasion of a rocky protuberance near the middle of a glacier. { 'mē'dē'əl mə'rān }

medial necrosis [MED] Death of cells in the tunica media of arteries. Also known as medionecrosis. { 'mē·dē·əl ne'krō·

media migration [CHEM ENG] Carryover of fibers or other filter material by liquid effluent from a filter unit. ( 'mē-dē-ə mī'grā·shən }

median [MATH] 1. Any line in a triangle which joins a vertex to the midpoint of the opposite side. 2. The line that joins the midpoints of the nonparallel sides of a trapezoid. Also known as midline. [SCI TECH] Located in the middle. [STAT] An average of a series of quantities or values; specifically, the quantity or value of that item which is so positioned in the series. when arranged in order of numerical quantity or value, that there are an equal number of items of greater magnitude and lesser

magnitude. { 'mē·dē·ən } median effective dose 50. { 'mē·dē·ən i 'fek· tiv 'dōs }

median infective dose See infective dose 50. { 'mē·dē·ən in'fek•tiv 'dos }

median lethal dose See lethal dose 50. [ 'më-dë-ən 'leth-əl

median lethal time [MICROBIO] The period of time required for 50% of a large group of organisms to die following a specific dose of an injurious agent, such as a drug or radiation. { 'mē· dē·ən 'lēth·əl ,tīm }

median mass [GEOL] A less disturbed structural block in the middle of an orogenic belt, bordered on both sides by orogenic structure, thrust away from it. Also known as betwixt mountains; Zwischengebirge. { 'mē dē ən 'mas } median maxillary cyst [MED] Cystic dilation of embryonal

inclusions in the incisive fossa or between the roots of the central incisors. Also known as nasopalatine cyst. { 'mē·dē·ən 'maksə.ler-ē .sist }

median nasal process [EMBRYO] The region below the frontonasal sulcus between the olfactory sacs; forms the bridge and mobile septum of the nose and various parts of the upper jaw

and lip. { 'mē-dē-ən 'nāz-əl ,prā-səs } median nerve test [MED] A test for loss of function of the median nerve by having the patient abduct the thumb at right angles to the palm with fingertips in contact and forming a

pyramid. { 'mē·dē·ən 'nərv 'test`} median particle diameter [GEOL] The middlemost particle diameter of a rock or sediment, larger than 50% of the diameter in the distribution and smaller than the other 50%. \ \mediane media-deən 'pärd-ə-kəl dī,am-əd-ər }

median point [MATH] The point at which all three medians of a triangle intersect. { 'med-ē-ən ,point }

median strip [CIV ENG] A paved or planted section dividing a highway into lanes according to direction of travel. { 'me-

mediastinitis [MED] Inflammation of the mediastinum. { ,mē·dē,as·tə'nīd·əs }

mediastinum [ANAT] 1. A partition separating adjacent parts.
2. The space in the middle of the chest between the two pleurae. { mē·dē·əˈstī·nəm }

medical bacteriology [MED] A branch of medical microbiology that deals with the study of bacteria which affect human health, especially those which produce disease. { 'med-a-kal bak,tirë 'äl ə jë }

medical chemical engineering [CHEM ENG] The application of chemical engineering to medicine, frequently involving mass transport and separation processes, especially at the molecular

level. ('med-akəl kem-akəl en jə'nir iŋ )
medical climatology [MED] The study of the relation between climate and disease. { 'med-o-kəl ,klī-mə'täl-o-jē }

medical electronics [ELECTR] A branch of electronics in which electronic instruments and equipment are used for such medical applications as diagnosis, therapy, research, anesthesia control, cardiac control, and surgery. { 'med-ə-kəl i,lek'trän-

medical entomology [MED] The study of insects that are vectors for diseases and parasitic infestations in humans and domestic animals. { 'med ə kəl en tə mal ə jē }
medical ethics [MED] Principles and moral values of proper

medical conduct. { 'med-a-kel 'eth-iks }
medical examiner [MED] A professionally qualified physi-

cian duly authorized and charged by a governmental unit to determine facts concerning causes of death, particularly deaths not occurring under natural circumstances, and to testify thereto in courts of law. { 'med-a-kal ig'zam-a-nar }

medical frequency bands [COMMUN] A collection of radio frequency bands allocated to medical equipment in the United States. { 'med-a-kal 'frē-kwan-sē ,banz }

medical genetics [GEN] A field of human genetics concerned with the relationship between heredity and disease. [ 'med-akəl iə'ned·iks }

medical geography [MED] The study of the relation between geographic factors and disease. { 'med ə kəl jē'āg rə fē } medical history [MED] An account of a patient's past and

present state of health obtained from the patient or relatives. { 'med·ə·kəl 'his·trē }

medical imaging [MED] The production of visual representations of body parts, tissues, or organs, for use in clinical diagnosis; encompasses x-ray methods, magnetic resonance imaging, single-photon-emission and positron-emission tomography, and ultrasound. { 'med-a-kal 'im-ij-in }

medical microbiology [MED] The study of microorganisms which affect human health. { 'med-o-kel |mi-krō-bi-al-o-je } medical mycology [MED] A branch of medical microbiology that deals with fungi that are pathogenic to humans. { 'med-o-je } kəl mī'käl·ə·jē }

medical parasitology [MED] A branch of medical microbiology which deals with the relationship between humans and those animals which live in or on them. { 'med o kol paro' si'täl•a•iē l

medical protozoology [MED] A branch of medical microbiology that deals with the study of Protozoa which are parasites of humans. { 'med·ə·kəl ˌprō·dō·zō'äl·ə·jē }

medical radiography [MED] The use of x-rays to produce photographic images for visualizing internal anatomy as an aid in diagnosis. { 'med·ə·kəl ˌrād·ē·'äg·rə·fē }

medication [MED] 1. A medicinal substance. 2. Treatment by or administration of a medicine. { ,med·ə'kā·shən }

medicinal [MED] Of, pertaining to, or having the nature of medicine. { məˈdis·ən·əl }

medicinal oil [MATER] A highly refined, colorless, tasteless and odorless petroleum oil used medicinally as an internal lu-

Sony, Ex. 1007, p.3



or bars to form passages for the flow of fluids. [ 'plāt ,fin

plate finish [GRAPHICS] A smooth, hard finish given to paper by a calendering machine. { 'plāt ,fin·ish }

plate girder [CIV ENG] A riveted or welded steel girder having a deep vertical web plate with a pair of angles along each edge to act as compression and tension flanges. [ 'plāt ,gərd-ər ]

plate girder bridge [CIV ENG] A fixed bridge consisting, in its simplest form, of two flange plates welded to a web plate in the overall shape of an I. ( 'plat 'gərd'ər ,brij )
plate glass [MATER] Flat, high-quality glass with plane, par-

allel surfaces. { 'plāt 'glas }

plate ice See pancake ice. { 'plāt ,īs }

plate impedance See anode impedance. { 'plāt im, pēd-ans } plate input power See anode input power. { 'plat 'in,put ,pau-

platelet [HISTOL] See thrombocyte. [HYD] A small ice crystal which, when united with other such crystals, forms a layer of floating ice, especially sea ice, and serves as seed crystals for further thickening of the ice cover. { 'plāt·lət }

platelet-activating factor [IMMUNOL] A phospholipid released by leukocytes that causes aggregation of platelets and other effects, such as an increase in vascular permeability and bronchoconstriction. Abbreviated PAF. { 'plāt·lət 'ak·tə,vād·

plate-load impedance See anode impedance. { 'plat ,lod im,pēd·ans }

plate-making [GRAPHICS] The forming of printing plates; the plate may be an offset plate, gravure plate, or a photogelatin { 'plāt,māk•iŋ }

plate modulation See anode modulation. { 'plat ,maj ə,la-

plate modulus [MECH] The ratio of the stress component  $T_{rr}$ in an isotropic, elastic body obeying a generalized Hooke's law to the corresponding strain component  $S_{xx}$ , when the strain components  $S_{yy}$  and  $S_{zz}$  are 0; the sum of the Poisson ratio and twice the rigidity modulus. { 'plāt ,māj-ə-ləs }

platen [EnG] 1. A flat plate against which something rests or is pressed. 2. The rubber-covered roller of a typewriter against which paper is pressed when struck by the typebars. [MECH ENG] A flat surface for exchanging heat in a boiler or heat exchanger which may have extended heat transfer surfaces.

plate neutralization See anode neutralization. { 'plat ,nurralə.zā·shən }

platen press [GRAPHICS] A type of printing press with a flat surface bearing the inked type; another flat surface, bearing the paper, is pressed against the type; small hand presses are ordi-

narily of this sort. { 'plat-on pres } plate proof [GRAPHICS] A proof obtained from a printing plate. { 'plat ,pruf }

plate pulse modulation See anode pulse modulation. { 'plat pəls mäjə,lā shən }

plate resistance See anode resistance. { 'plāt ri, zis tons } plate saturation See anode saturation. [ 'plat, sach o, ra shon ] plate scale [ASTRON] The ratio of the angular distance between two stars to the linear distance between their images on

a photographic plate. { 'plāt ˌskāl } plate-shear test [ENG]. A method used to get true shear data on a honeycomb core by bonding the core between two thick steel plates and subjecting the core to shear by displacing the plates relative to each other by loading in either tension or compression. { 'plāt ',shir ,test } plate tectonics [GEOL] Global tectonics based on a model of

the earth characterized by a small number (10-25) of semirigid plates which float on some viscous underlayer in the mantle; each plate moves more or less independently and grinds against the others, concentrating most deformation, volcanism, and seismic activity along the periphery. Also known as raft tectonics. 'plāt tek'tän·iks }

plate theory [ANALY CHEM] In gas chromatography, the theory that the column operates similarly to a distillation column; for example, chromatographic columns are considered as consisting of a number of theoretical plates, each performing a

partial separation of components. { 'plāī', thē-ə-rē } plate tower [CHEMENG] A distillation tower along the internal height of which is a series of transverse plates (bubble-cap or sieve) to force intimate contact between downward flowing liquid and upward flowing vapor. { 'plāt ,tau ər }

plate-type exchanger [MECH ENG] Heat-exchange device similar to a plate-and-frame filter press; fluids flow between the frame-held plates, transferring heat between them.  $\{ 'pl\bar{a}t , t\bar{t}p \}$ iks,chän·jər }

plate vibrator [ENG] A mechanically operated tamper fitted

with a flat base. { 'plāt vī'brād ər }
plate wave [ACOUS] A type of ultrasonic vibration generated in a thin solid, such as a sheet of metal having a thickness of less than one wavelength, and usually consisting of a variety of simultaneous modes having different velocities; it is used in metal inspection. Also known as Lamb wave. { 'plāt ˌwāv } platform [COMPUT SCI] The hardware system and the system software used by a computer program. [GEOL] 1. Any level or almost level surface; a small plateau. 2. A continental area covered by relatively flat or gently tilted, mainly sedimentary strata which overlay a basement of rocks consolidated during earlier deformations; platforms and shields together constitute cratons. [MIN ENG] A wooden floor on the side of a gangway at the bottom of an inclined seam, to which the coal runs by gravity, and from which it is shoveled into mine cars. [ORD] 1. Temporary or permanent solid bed on which artillery pieces are supported to give greater stability. 2. Metal stand at the base of some types of guns upon which the gun crew stands while serving the gun. { 'plat,form } platform balance [ENG] A weighing device with a flat plate

mounted above a balanced beam. { 'plat,form ,bal ons } platform beach [GEOL] A looped bar or ridge of sand and

gravel formed on a wave-cut platform. { 'plat,form bech } platform blowing [ENG] Special technique for blow-molding large parts made of plastic without sagging of the part being formed. { 'plat,form bloin }

platform conveyor [MECH ENG] A single- or double-strand conveyor with plates of steel or hardwood forming a continuous platform on which the loads are placed. { 'plat,form kən,vā-

platform deck [NAV ARCH] A partial deck fitted in the hold
of a ship. { 'plat,form ,dek }
platform erection [NAV] In the alignment of inertial navi-

gation equipment, the alignment of the stable platform vertical axis with the local vertical. { 'plat,form i,rek-shon }

platform facies See shelf facies. { 'plat,form ,fā shēz } platform framing [BUILD] A construction method in which each floor is framed independently by nailing the horizontal framing member to the top of the wall studs. { 'plat, form, fram.

platform reef [GEOL] An organic reef, generally small but more extensive than a patch reef, with a flat upper surface. 'plat, form , ref }

platina [MET] A white brittle brass containing 75% zinc and 25% copper, used for jewelry. { pla'ten a }

plating [MET] Forming a thin, adherent layer of metal on an

plating rack [MET] A fixture that holds, and conducts current to, a piece of work during electrodeposition. { 'plād-iŋ, rak } platinic chloride See chloroplatinic acid. { plə'tin-ik 'klör,īd } platinic sodium chloride See sodium chloroplatinate. { plə'tin·ik 'sōd·ē·əm 'klor,īd }

platinic sulfate See platinum sulfate. { plo'tin ik 'səl,fāt } platiniridium [MINERAL] A silver-white cubic mineral composed of platinum, iridium, and related metals, occurring in grains. { 'plat-ən-ə'rid-ē-əm }

platinite See platynite. { 'plat-on,īt }
platinochloride See chloroplatinate. { 'plat-on-ō'klor,īd }
platinocyanide [INORG CHEM] A double salt of platinous cyanide and another cyanide, such as K<sub>2</sub>Pt(CN)<sub>4</sub>, used in photography and fluorescent x-ray screens. Also known as cyano-

platinate. { ',plat-ən-ō'sī-ə,nīd }
platinoid [MET] 1. Resembling or related to platinum. 2. A copper-nickel-zinc alloy used for electrical resistance wire.

platinotron [ELECTR] A microwave tube that may be used as a high-power saturated amplifier or oscillator in pulsed radar applications; requires permanent magnet just as does a magnetron. { plə tin ə trän }

platinous chloride See platinum dichloride. [ 'plat-an-as 'klor.īd }

platinous iodide See platinum iodide. { 'plat-on-os 'ī-o,dīd } platinum [CHEM] A chemical element, symbol Pt, atomic number 78, atomic weight 195.09. [MET] A soft, ductile,

