
A DICTIONARY
OF ART TERMS
AND
TECHNIQUES

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Preface

This volume is designed as an up-to-date reference book that presents, in succinct form, the explanations of terms encountered in the study and practice of the visual arts and in their literature. The areas covered are painting, drawing, sculpture, printmaking, ceramics, and a number of closely allied fields. Each entry contains the kinds of information appropriate to its subject, whether these be definitions, historical accounts, descriptions of periods, schools, or styles of art, or explanations of technical processes and materials. Processes are described in some detail, but instructions are not given, since the dictionary is not intended as a substitute for technical manuals.

Purely architectural terms are not included, because a large volume would be required to deal adequately with so vast a subject. Any attempt at coverage here would necessarily be selective rather than complete. Terms in Oriental art, with the exception of a few that have virtually become part of the English language, have also been omitted because of their special nature. Although there are no biographical entries for artists, authors, and inventors, many are named, with their dates, in entries dealing with styles or techniques with which they are associated.

In order to help advance the cause of a standard nomenclature, special emphasis has been given to accepted terminology. The nomenclature of the arts, and especially that of artists' materials and procedures, is far from standardized; there is confusion of terms, there are survivals of obsolete and archaic terms, and there are errors in adapting foreign terms to American usage. In this book, the names of pigments now used by artists are those established by the Paint Standard, promulgated by the U.S. Department of Commerce, and accepted by artists and manufacturers for the past quarter of a century. The terminology of printmaking is that of the Print Council of America. Chemical and physical designations are in accord with the usage of societies and publications in the field of paint technology.

I am indebted to Charles McCurdy, of Queens College, and to the art historian Louis James for their considerable contributions to this book; also to Lawrence Majewski, of the Conservation Center, Institute of Fine Arts, New York University, and to Andrew Stasik, of the Pratt Graphic Art Center, for frequent counsel. Leon Polansky, Sydney Starr, and Mary Buckley, of Pratt Institute, added much to the entries on sculpture, ceramics, and color, respectively. Martha Albert, of Pratt Institute; George Comptis, painter and gallery director; Ruth Olson, art historian; and Roberta Paine, of the Metropolitan Museum of Art, also gave time to the preparation of the manuscript. I particularly want to thank Patrick Barrett, Dictionary Editor of the Thomas Y. Crowell Company reference book staff, for his constant helpfulness.

A

Aaron's Rod. A rounded decorative molding with a motif of an entwined serpent, vines, leaves, and tendrils.

abaculus. A little-used word for TESSERA.

abbozzo. In painting, the first outline or drawing on the canvas; also, the first underpainting. In sculpture, a block of stone, lump of clay, or chunk of wood that has been reduced to a rough form of the ultimate work: The word *abbozzo* is Italian, literally meaning sketch.

ABC art. See MINIMAL ART.

abraum. A red EARTH COLOR used as a mahogany stain.

absolute alcohol or anhydrous alcohol. ETHYL ALCOHOL freed of all traces of water by chemical processes; ordinary grain alcohol contains about 6% water. Anhydrous alcohol may be mixed with mineral spirits, turpentine, and a number of other solvents.

abstract art. Any art in which the depiction of real objects in nature has been subordinated or entirely discarded, and whose aesthetic content is expressed in a formal pattern or struc-

ture of shapes, lines, and colors. Sometimes the subject is real but so stylized, blurred, repeated, or broken down into basic forms as to be unrecognizable. Art that is partly broken down in this way is called semiabstract. When the representation of real objects is completely absent, such art may also be called nonrepresentational or NONOBJECTIVE, a term first used by Wassily Kandinsky (1866-1944), one of whose watercolors, done in 1910, is considered by some authorities to be the first completely abstract painting.

An abstract element or intention appears in works of art and decoration throughout the history of art, from Neolithic stone carvings onward. But abstraction as an aesthetic principle began in the early 20th century with the development of CUBISM by Pablo Picasso (1881-) and Georges Braque (1882-1963). Other important early stages in the development of abstract art were NEO-PLASTICISM in Holland and SUPREMATISM in Russia. See also ABSTRACT EXPRESSIONISM; ACTION PAINTING; GEOMETRIC ABSTRACTION; OP ART.

abstract expressionism. A style of nonrepresentational painting that combines abstract form and expressionist emotional value. Abstract ex-

pressionism, which developed in New York City in the mid-1940's, became fully established during the 1950's and was the predominant style associated with the New York School. A variety of styles exist within the movement. The paintings are typically bold, forceful, and large in size. The colors tend to be strident, and accidental effects, such as the natural flow of oil colors without restraint, are often present. The movement's single most important figure is Jackson Pollock (1912-1956), a statement by whom gave rise to the term ACTION PAINTING, which is closely related to abstract expressionism. Pollock's fluid paints and enamels were poured, dripped, and splattered onto the canvas; a single color was often used to create a lacy mesh of opaque color over the surface, much like the transparent veil in a conventional oil painting.

Abstract expressionism stems mainly from the European NEO-EXPRESSIONIST painting of Wassily Kandinsky (1866-1944) and others. It was stimulated by the presence in New York, during World War II, of a remarkable group of expatriate European painters, including Chagall, Duchamp, Léger, and Miró. A most important forerunner of the movement was Arshile Gorky (1904-1948), whose surrealist forms and discordant color had great influence on the work of his contemporaries. Among the more prominent abstract expressionist painters are Willem de Kooning (1904-), Adolph Gottlieb (1903-), Mark Rothko (1903-1970), Franz Kline (1910-1962), Philip Guston (1913-), and Robert Motherwell (1915-).

acacia. Pharmaceutical term for GUM ARABIC.

academic. In art, conforming to traditional standards, or to a discipline

based on the standards of an official ACADEMY, which are usually conservative. In the 20th century the term has come to be used mainly in a pejorative sense, to characterize a strictly representational type of art that still adheres to the canons of 19th-century taste and technique, although these have long since been challenged by modern developments from Impressionism onward. The modernist does not always condemn all representational art; he usually admires its outstanding examples, while applying the epithet "academic" to what he considers mediocre; repetitive, and inconsequential.

academician. An elected member of an ACADEMY; also, an adherent of ACADEMIC styles and principles.

academicism. Conformance with ACADEMIC standards and precepts. The term also may be used to denote an element of academic influence in work that departs from traditional principles.

Académie des Beaux-Arts. The academy of fine arts of the Institut de France. Its activities include sponsorship of the Ecole des Beaux-Arts (see BEAUX-ARTS, ECOLE DES) and the official salon or art exhibition held annually in Paris. Popularly known as the Academy, it is not to be confused with the French Academy (*Académie Française*), a literary honor society. See also ACADEMY.

academy. A body of artists organized for such purposes as promoting a national art, training artists, and enhancing the professional and economic status of its members through periodic exhibitions and through the conferral of membership as an honor. Academies were founded in Italy as early as the 16th century, in France in the 17th century, in England in the 18th, and in

America in the 19th. Enjoying official or quasi-official status, the academies have consistently maintained conservative standards, excluding from recognition all artists whose works and ideas on art depart from the traditional academic criteria of excellence. Academies are notorious for repeatedly embracing work rejected by a previous generation, while rejecting the innovative work of their own times, which is left for a later generation to recognize and incorporate into a new standard as inflexible as the old.

During the first quarter of the 20th century, the work of artists whose ideas had developed beyond 19th-century academic restrictions had little exposure apart from the one-man show. With the founding of museums of modern art and increasing public and commercial appreciation of abstract and other modern work, innovative artists lost their dependence upon academic approval, and the traditional controversies between academicians and heretics became far less virulent. The academies continue to flourish as centers for the work of traditionally or conservatively oriented artists. Among the important existing academies are the *ACADÉMIE DES BEAUX-ARTS* in Paris, the *ROYAL ACADEMY OF ARTS* in London, and the *NATIONAL ACADEMY OF DESIGN* in New York.

academy blue. An unstandardized term for a blue COMPOSITE PIGMENT of a greenish shade, the best grades of which should be made of ultramarine blue and viridian.

academy board. An inexpensive panel used for small oil paintings and sketches. It is made of heavy smooth cardboard coated with a ground that has sufficient tooth for oil paint. Academy board has been largely replaced by CANVAS BOARD and various specialty

boards, which may be embossed to imitate a canvas weave.

academy figure. A drawing or painting of a human figure, half life-size, executed as a practice study or for purposes of instruction rather than as creative art. Hence, the term is used as a derogatory designation for any dull or lifeless rendition of the human form in a work of art.

acajou. A name sometimes used for MAHOGANY.

acanthus. A semi-stylized leaf motif that occurs throughout the history of art, notably in capitals of the Corinthian order of Greek architecture and



ACANTHUS. Carved on a Corinthian capital.

the Roman Composite order, and in carvings of the 12th century. Named for a plant that is widespread in the Mediterranean area, the acanthus motif is sometimes used in a variant form showing a close resemblance to the leaves of the thistle, dandelion, celery, or parsley.

acaroid resin. See ACCROIDES.

accelerated test. A test of paints, pigments, or other materials used by painters. It is conducted in a laboratory with specialized equipment for subjecting such materials to forces that

simulate those which cause fading, cracking, or other failures to which paintings are liable on long aging. Accelerated test conditions do not duplicate those of natural aging exactly, for they are far more severe and concentrated, but they do give an accurate indication of the comparative resistance of various materials and combinations of ingredients, and make it possible to rate their relative values.

A typical accelerated test is one used to compare the relative resistance of various coating materials to PHOTO-CHEMICAL EMBRITTLEMENT on aging. Thin metal panels are coated with the material with a film applicator; and exposed to ultraviolet light for a predetermined number of hours under scientifically controlled conditions. One panel of each material is then bent over a standard steel rod or mandrel and examined for indications of cracking. The ultraviolet exposure is continued intermittently until sufficiently definite results are obtained. A few days of such exposure will cause embrittlement comparable to the effects of many years of exposure to daylight. See also FADE OMEETER, WEATHER OMEETER.

accelerator. Any substance which hastens a reaction. In sculpture, the alum used to hasten the setting of plaster of Paris or the material added to Portland cement to speed the development of strength; also, the chemical added to a mixture of polyester resin and hardener to speed the hardening process and allow the hardening time to be controlled. In painting, a chemical DRIER is sometimes called an accelerator.

accroides or scaroid resin. A strongly colored RESIN occurring in two different forms, red and yellow, collected from Australian grass trees (genus *Xanthorrhoea*). The resin,

known also as gum accroides, has fairly good film-forming properties and has long been used in the manufacture of yellow, red, and orange colored VARNISHES. Despite the development of bright dyestuffs for this purpose, accroides is still employed for certain industrial purposes. Older names for the resin are Botany Bay gum, black-boy gum, and xanthorrhoea. See COLORED RESINS.

acetate. See CELLULOSE ACETATE.

acetic ether. See ETHYL ACETATE.

acetone. One of the most powerful VOLATILE SOLVENTS of the lacquer-solvent or paint-remover type; also called dimethyl ketone. It is one of the least toxic when properly handled. Acetone is highly flammable; its vapors will flash or catch fire even below the freezing point. See also METHYL ACETONE.

acetylene. A gaseous, colorless hydrocarbon. When used in a burner, it gives off nearly fifteen times as much light as ordinary illuminating gas. It contains a triple bond, and polymerizes readily. Acetylene is used for OXYACETYLENE WELDING in a torch or blowpipe that combines acetylene and oxygen.

acetylene black. One of many varieties of CARBON BLACK; similar to BENZOL BLACK.

achromatic colors. White, black, and the grays, as distinguished from the chromatic colors. See CHROMA.

acid bath. In ETCHING, the container or tray of MORDANT in which the object to be etched is immersed. In the etching of metal plates for printing, the tray containing the mordant must be of an acid-resistant material such as

porcelain or glass. Sometimes WALLING WAX is used to build a containing wall around the edges of the plate, obviating the use of an acid bath.

acid number or acid value. A laboratory measurement used to indicate the amount of free fatty acid contained in a vegetable DRYING OIL—an important consideration in selecting an oil for a given purpose. The acid number represents the milligrams of potassium hydroxide required to neutralize the free fatty acids in a gram of oil. Oils of higher acid number (5 to 10) are preferred for grinding paints, while those of lower denomination (1 to 3) are considered more suitable for use in varnishes and other clear coatings. In the production of artists' oil colors, however, the superior color stability or non-yellowing properties of the lower-numbered varnish oils is a more significant factor than ease of grinding, and consequently such oils are frequently so employed.

acid resist. A RESIST specifically used to block the corrosive action of a MORDANT on a surface.

Acra red. A trade name for the yellowish or "scarlet" shade of QUINACRIDONE RED.

acrolith. A statue, especially of ancient Greece, with head and extremities of marble, supported by a trunk of wood or other material, covered with real or metal-plate draperies, and sometimes gilded.

acrylic brush. See BRUSH, ACRYLIC.

acrylic canvas. Canvas especially prepared with polymer primer for use with POLYMER COLORS. Since these paints have greater and longer-lasting flexibility than oil colors, painting in oils on an acrylic canvas is contrary to

the FAT-OVER-LEAN rule; also, adhesion between an acrylic surface and oil color is of doubtful permanence.

acrylic colors. Artists' colors made by dispersing pigments in a vehicle made from a polymethyl methacrylate (see ACRYLIC RESIN) solution in mineral spirits. They are sometimes called straight acrylic colors or plastic paints to distinguish them from the POLYMER COLORS, which contain acrylic and other resins dispersed in water. Acrylic colors do not yellow; they dry very rapidly; and they are easy to remove with mineral spirits or turpentine. These qualities make them useful for INPAINTING to restore damaged or obliterated areas in conservation work. Acrylic colors with a plasticizer added are sold in tubes under the manufacturer's trade name of Magna colors, as is a special VINYL-RESIN solution called Magna varnish that is insoluble in turpentine and mineral spirits. This serves as an ISOLATING VARNISH, since acrylic paint is so soluble that it cannot be overpainted. Magna varnish may also be used in oil painting for the same purpose.

acrylic resin. Any of a group of synthetic resins made by polymerization of acrylic acid esters. Polymethyl methacrylate is the most important of the group. One form of it is readily soluble in turpentine and mineral spirits; it is available as a heavy solution in mineral spirits under the trade names Acryloid F-10 and Lucite 44. Another type, insoluble in these solvents, is sold as a heavy solution in toluol under the name of Acryloid B-72. Methyl methacrylate or acrylic solutions are used in the manufacture of PICTURE VARNISH and ACRYLIC COLORS, and in lacquers and many other industrial products. Another type of acrylic resin is produced in a water dispersion, polymerized by

emulsification. It is sold under the trade name Rhoplex 34 and is used in the manufacture of POLYMER COLORS. Polymethyl methacrylate in solid form, best known by the trade names Plexiglas and Lucite, is a permanent, non-yellowing, glass-like PLASTIC that is frequently used in modern sculpture and constructions. It may be cast, extruded, machined, and welded or shaped by heating.

acrylic varnish. See PICTURE VARNISH.

Acryloid. See ACRYLIC RESIN.

actinic light. See ULTRAVIOLET LIGHT.

action painting. A form of ABSTRACT EXPRESSIONISM associated with the New York school, sometimes used as a

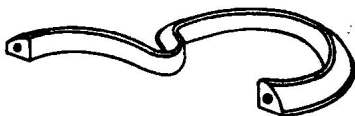
synonym for abstract expressionism. Action painting is done by applying the paint with rapid, forceful, impulsive brush strokes, or by splashing or hurling it directly onto the surface, in order to create a work which records the force of the artist's feelings as well as the dynamism of the act of painting. The most celebrated action painter is Jackson Pollock (1912-1956). The French equivalent of action painting is *Tachisme*.

additive color. See COLOR.

à deux crayons. A chalk drawing, done in two colors, almost always red chalk and black chalk or charcoal.

adhesion of oil paint. To prevent the separation of paint from its ground, fresh colors should be used that have not thickened on the palette and so lost some of their adhesiveness. The ground should have enough absorbency to grip the paint by penetration, although not enough for it to sink in completely. Also, the ground should have a certain amount of tooth, or surface roughness, to afford the paint a mechanical anchorage.

adjustable curve ruler. A ruler that can be bent and held in any curve desired. One type is made of a flat, thin strip of metal, which functions as the straightedge, welded to a flexible



ADJUSTABLE CURVE RULER



ACTION PAINTING. Jackson Pollock's *Number 12* (1949), oil on paper mounted on composition board. (Collection, The Museum of Modern Art, New York, Gift of Edgar Kaufmann, Jr.)

metal cable that can be bent into any curve desired and will retain that position. Another type consists of a lead rod encased in a flexible plastic body that has a smooth edge along which

the artist traces with a pencil or ruling pen. Both types of adjustable curve rulers are available in a number of lengths up to about 30 inches. The adjustable curve ruler is used as a ruler in general drafting, either in conjunction with or as a replacement for the FRENCH CURVE. See also SPLINE.

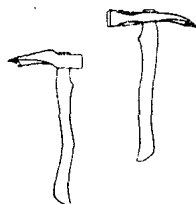
adjustable triangle. A draftsman's TRIANGLE, one side of which has an adjustable arm that can be clamped at various angles. A protractor between the adjustable arm and the side to which it is hinged measures the angle at which it is clamped. The adjustable triangle was designed to obviate the draftsman's need for many differently shaped triangles. See also DRAFTING MACHINE.

Adrianople red. An obscure name for TURKEY RED.

adsorption. Molecular cohesion in which a thin layer of one substance adheres strongly to another as if it were "glued on." Adsorption is distinguished from the more common word absorption, which denotes simply the propensity of a solid to imbibe or soak up a liquid as a sponge soaks up water. All forms of matter—gases, liquids, or solids—can be adsorbed by solid surfaces. The process may be considerably enhanced when a substance is transformed, either chemically or physically, into the colloidal state and when the receiving surface is absolutely clean. The resulting adsorbed layer becomes so firmly attached to the surface of the receiving substance that it can usually be removed only by strong abrasion. An example is seen in lithography, in which the entire process depends upon the ability of the crayon or tusche to produce on the stone or plate an adsorbed layer of fatty acid that will be receptive to the printing ink.

advancing and retreating colors. In painting, the apparent tendency of the WARM COLORS (the reds and oranges) to advance toward the viewer and the COOL COLORS (the blues and violets) to recede. This concept is in part derived from the phenomenon observable in nature that moisture in the atmosphere affects not only the SATURATION, or intensity, of the color of a distant object but also its HUE; that is, an object seen far away will seem bluer or grayer than it does when viewed up close. Accordingly, advancing and retreating colors have been considered an aspect of AERIAL PERSPECTIVE and have been employed in landscapes that attempt to portray recession by using "atmospheric" perspective as well as geometric systems of perspective. The concept of advancing and retreating colors has for over a century been applied with reserve, however, by artists who realize that its strict application in landscape painting would result in such effects as blue sunsets. Because of the erratic behavior of color in nature, the advancing and retreating color theory cannot be considered an infallible rule of thumb in painting.

adze or adz. A cutting tool, used in sculpture to rough-shape wood. The simplest form of adze has an arched blade with a slightly curved chisel edge, set at right angles to the handle. Adzes are frequently double-ended tools as, for example, with a gouge bit and a curved bit.



ADZES

ae. or aet. Abbreviations for the Latin word *aetatis* (genitive of *aetas*), meaning "aged" or "of age." Inscribed with a number on the background or rear of a portrait, it indicates the age of the sitter at the time he was painted. Such inscriptions were fairly common on portraits up to the middle of the 19th century, after which they were rarely used.

Aegean art. Art of the 26th–12th centuries B.C. in mainland Greece and the Greek islands. See MINOAN; CYCLADIC; HELLADIC; MYCENAEAN.

aerial perspective. In landscape painting, an illusion of recession obtained by the depiction of atmospheric effects. When seen through a volume of air, the colors of a distant object or scene appear progressively fainter and, depending on the amount of moisture in the air, progressively cooler or bluer (see ADVANCING AND RETREATING COLORS). This phenomenon dictates that the background of a landscape should be less distinct in both outline and color than its foreground. Chinese painters achieved atmospheric recession in landscapes by interposing mists or clouds, in progressively weaker tones, between middle distances (often hills) and the mountains of the background. Aerial perspective, insofar as it relates to gradation of color and distinctness, is relevant to all conventional landscapes that employ spatial illusion; it is usually an adjunct to LINEAR PERSPECTIVE.

aerugo. Corrosion or rust on metals, especially the green PATINA on copper or bronze; also called verdigris.

aes ustum. An ancient name for the copper oxide or corrosion that constitutes the PATINA on copper and bronze.

African blackwood or grenadilla. A hard, close-textured hardwood (from *Dalbergia melanoxylon*) of a dark purple or plum color; also called Mozambique ebony. It has good carving properties. Because it also has good resonance qualities, it is used for clarinets and other woodwind instruments. African blackwood is botanically related to ROSEWOOD.

African cherry. See CHERRYWOOD.

African mahogany. See MAHOGANY.

African rosewood. See BUBINGA.

African walnut. See TIGERWOOD.

African whitewood. See AYOUS.

after. Word used in an artist's inscription to indicate that his picture or sculpture was modeled on the work of another artist. It generally signifies a faithful copy of the original, but may also be used for a work that differs somewhat from the earlier work, as in Van Gogh's drawing after Millet's *The Reapers*. A typical inscription, on the back of a painting, would read: "Portrait of James Smith by Robert Jones, 1898, after Gilbert Stuart, 1793."

after-yellowing. See YELLOWING.

agalma. A term used by the Greeks at first to designate any piece of sculpture, later to mean a statue of a god. Sometimes the term was also used for a painted portrait.

agalmatolite. A soft grayish, greenish, or yellowish stone; also called pagodite. It was used by the Chinese for carving pagodas and images.

agate. A very hard, semiprecious stone with a striped or variegated pat-

tern. Polished gray agate is used to make the **BURNISHERS** used in gilding, which are sometimes called agates.

agglutinant. Any glue or adhesive, especially a **BINDER** used in aqueous paints, pastel crayons, and drawing inks.

aggregate. The inert material or materials mixed with cement to make concrete. A fine material such as sand, a material with medium-sized particles such as marble dust, or a coarse material such as crushed rock may be used. Sometimes all three of these materials are used in a mix. The term is also applied to similar inert materials used to create coarse textures in plaster, stucco, and mortar.

airbrush. An implement resembling an oversize fountain pen, with an attached container that holds an ounce or less of fluid paint and a thin hose



AIRBRUSH (Courtesy of Paasche Airbrush Co.)

leading to a source of compressed air or carbonic gas. The airbrush is used to create smooth gradations of tones and colors. It is a delicate miniature version of the **SPRAY GUN**. Airbrush technique is usually distinguishable from brush painting, and is used much more frequently by commercial artists than by fine-arts painters.

aircraft curve. See **FRENCH CURVE**.

air drain or air jet. See **VENT**.

air eraser. An implement resembling an oversize fountain pen, with an attached container and a thin hose

leading to a source of compressed air or carbonic gas. The reservoir holds an ounce or less of a finely divided abrasive which removes ink or paint from paper.

à jour or ajouré. Decorated with pierced or translucent shapes, letting in the "daylight," as the French names imply. The terms apply to openwork designs in silversmithing and other metalwork (see **PIERCING**), in woodwork, and in lace and embroidery.

Alabama Cream. A type of American **MARBLE**, suitable for sculpture. Among the hard, fine-grained, creamy white varieties are Madre Cream and Cream Blanc.

alabaster. A snow-white, translucent or semitranslucent variety of gypsum (calcium sulfate), so soft that it can be blocked with a handsaw and readily carved. It is so easily scratched that it is durable only indoors, under conditions of careful conservation. The alabaster referred to by the ancients is a different and more durable stone, onyx marble.

alabastron. A form of ancient Greek pottery—a small, tear-shaped oil flask with a rounded bottom. It was used for many purposes, for example, by athletes to carry the oil that they rubbed on their bodies. See **VASE SHAPES** for illustration.

à la Grecque. In the Greek style. This term was long used to describe works of art done in imitation of or strongly influenced by the style of ancient Greek art, particularly of its more obvious characteristics.

Albani stone. See **PEPERINO**.

Albany slip. A **SLIP CLAY** obtained near Albany, N.Y. It can produce a

blackish-brown glaze. Albany slip and similar clays from other localities were used by early American potters in making STONEWARE.

Alberene stone. Trade name for a Virginia SOAPSTONE that ranges in color from a medium gray to a fairly deep black.

alcohol. See ETHYL ALCOHOL; METHANOL; ABSOLUTE ALCOHOL; DENATURED ALCOHOL.

alcohol colors. Brilliant liquid colors made from alcohol-soluble aniline dyes in a water-miscible vehicle. The colors are especially designed to be applied with an airbrush and to be used for work that is to be reproduced. They are particularly useful in cartography, and can be used on many surfaces that will not take water paints. Alcohol colors are not sufficiently lightproof to be used for permanent fine-arts purposes.

alembic. Old term for a still. The invention of distillation is generally credited to the physicians of Alexandria in the third century, and the term derives from the Arabic word *al-anbig*, meaning a still, which in turn comes from the Greek *ambix*, meaning a spouted cup.

Alexandria blue or Alexandrian blue. Another name for EGYPTIAN BLUE.

Alexandrian art. See HELLENISTIC PERIOD.

alizarin brown. A rather dull, reddish, transparent brown pigment. It is made by a variation of the ALIZARIN CRIMSON process and has the same pigment properties. It may also be the product of an occasional off-color or unsuccessful batch of alizarin crimson.

alizarin carmine. An obsolete term for ALIZARIN CRIMSON.

alizarin crimson. A bright, transparent, red LAKE pigment with a maroon mass tone and a bluish undertone; made from the synthetic dyestuff alizarin (dihydroxy anthraquinone), a derivative of anthracene, a coal-tar product. Although it is not in the same class of absolute permanence as the furnace-made mineral pigments, alizarin crimson is completely acceptable for permanent easel painting under the normal conditions for preservation of works of art. The artist's principal deep-red pigment, alizarin crimson is a clear ruby-red when used transparently, and produces bright, rosy pinks when mixed with white. Careful painters will not attempt to use it full strength for its mass tone in oil, since it tends to crack in a fine alligator pattern when spread out in layers without the structural reinforcement of denser pigments. The superlative type of alizarin crimson available since the 1920's is more brilliant than the older types; it can be freely mixed with all other pigments on the approved list for artists, will not react with white lead, and will not turn brown when mixed with iron-bearing pigments.

Discovered in 1868 by two German chemists, C. Graebe and C. Liebermann, alizarin was the first of the natural dyestuffs to be synthesized. In the ensuing years synthetic alizarin superseded natural alizarin both in pigment manufacture and in textile dyeing, while alizarin crimson soon replaced an older pigment, Madder Lake. Alizarin crimson has far greater tinting strength than madder lake, and since it is free from purpurin, which is impermanent, it also has greater color stability. However, the artists' color called rose madder is still available from some European sources. Alizarin crimson or

burnt sienna is sometimes mixed with SEPIA to make Roman sepia. Alizarin carmine is an obsolete term for alizarin crimson.

alizarin violet. A transparent violet pigment made from synthetic PURPURIN; also known as violet madder lake. Alizarin violet is similar to ALIZARIN CRIMSON in pigment properties but not sufficiently permanent for artists' use, since it turns dark or blackish on long exposure to light.

alizarin yellow. A dull, rather brownish, transparent yellow pigment. Made by the same process as ALIZARIN CRIMSON, alizarin yellow has identical pigment properties but is not reliably permanent.

alkaline glaze. A ceramic GLAZE whose FLUX is an alkali, such as borax or soda ash, rather than lead. The alkaline glazes are fired at low temperatures and are capable of producing spectacular effects, such as the Egyptian and Persian blues. Since alkalis are soluble and have a tendency to cake while in a glaze suspension, there are limitations on their use.

alkanet. A red NATURAL DYESTUFF extracted from the root of a European plant, *Alkanna tinctoria* (false alkanet), and also from an Oriental plant, *Lawsonia alba* (true alkanet). Since it fades with relative rapidity, alkanet is no longer used for dyeing textiles or for making lake pigments.

alkyd resins. A group of synthetic resins with excellent film-forming properties, used in fine-quality industrial house paints, enamels, and varnishes since the 1930's. Some use has been made of the alkyds in artists' materials but little has been published about this development. The most successful varieties, which have good

retention of color and flexibility, are of considerable promise as ingredients of oil-painting mediums. As vehicles for paints, they are less attractive because of their tendency to form skins through rapid surface-drying. The type in use is known as oil-modified alkyd; it contains a drying oil as part of its makeup. The varieties made with safflower, soya bean, or tobacco-seed oils have greater color retention than those made with linseed oil, which in turn have greater resistance to weathering.

alla prima. A method of oil painting in which the final effects are achieved in the initial application of paint; also called direct painting. *Alla prima* is the alternative to the technique of covering the canvas layer by layer. The French term for *alla prima* is *au premier coup*.

alligating or alligator cracks. A form of CRACKLE which appears on paintings in a pattern resembling the design of alligator hide.

alloy. A combination of two or more metals which have been melted or fused together. Brass is an alloy of copper and zinc, bronze of copper and tin. Steel, which contains iron and carbon, may also be classed as an alloy, although carbon is a nonmetal. In general, alloys are harder and more fusible, though less malleable, than the substances of which they are made. They also tend to be more resistant to corrosion and to have a lower melting point than the parent metals. The color or appearance of an alloy is different from that of the metals which compose it.

all-purpose ground. See MULTIPURPOSE GROUND.

altarpiece. A decorative screen, a painting, a set of painted or carved

panels, or a structure incorporating painting, statuary, or relief carving, set upon or behind and above an altar. A typical Renaissance altarpiece consisted of a set of religious paintings on hinged panels (often a TRIPTYCH), the frames of which might be finely carved, gilded, or polychromed, or encrusted with jewels. A PREDELLA often appeared below the main panels. The Italian word *ancona*, the French *retable*, the English *rearedos*, and the Spanish *retablo* are used more or less interchangeably as synonyms for altarpiece. *Reredos* sometimes refers more specifically to an ornamental stone or wood screen or wall behind an altar. The term *ancona* is used of a panel painting elaborately framed or an ornate polyptych elaborately carved and gilded or polychromed. Some Renaissance Italian altarpieces were made of Della Robbia ware, with figures in high relief. The magnificent "Pala d'oro" altarpiece in the cathedral of St. Mark, Venice, includes gold work, Byzantine enamel, and statuary. The largest and most luxurious altarpieces are those of Spain and Latin America, in the baroque and churrigueresque styles. Carved in wood or stone, and often gilded and painted, these *retablos* sometimes reach from the floor into the vaulting. Others are made of elaborately worked silver. See illustration at TRIPTYCH.

alto-rilievo. Italian for high RELIEF.

alumina hydrate. Aluminum hydroxide; manufactured in the form of a white, fluffy, lightweight powder, and used as an INERT PIGMENT. Alumina hydrate is valuable as a BASE for LAKE pigments, as it becomes virtually colorless when dispersed in oil. It tends to impart a desirable brushing consistency to oil colors and to assist in stabilizing pigment dispersion.

aluminum. A very lightweight bluish, silver-white metal. Due to a protective oxide which forms on its surface, it has a high resistance to corrosion. It melts at 1220° F and can be cast and welded. It is available in a wide variety of colors, and is used when lightness combined with strength is desired. Although aluminum is the most abundant metal in the earth's crust, it was not discovered until 1825 and was not used extensively until the 20th century.

aluminum leaf. A thin leaf used in GILDING for a silvery effect. Because it has a relatively dull, leaden appearance, aluminum leaf is an inferior substitute for SILVER LEAF and PALLADIUM LEAF. It is used chiefly in the commercial arts for such purposes as sign writing and stamping titles and designs on book covers.

aluminum paint. An industrial paint or lacquer pigmented with powdered aluminum metal (see ALUMINUM POWDER). It is used as a protective coating and to create a dullish silvery decorative effect. It should not be used in works of art because its metallic luster is coarse and dull and becomes more so with age, as does the luster of paint made with BRONZE POWDERS.

aluminum powder. A metallic pigment that is mixed with bronzing liquid to make so-called silver paint. Aluminum paint will not tarnish, but it lacks the luster that real silver leaf has when first applied to a surface. Because of this leaden quality and a slightly grainy texture, aluminum paint is not suitable for gilding, but it has wide commercial and industrial applications.

Alundum. Trade name for a form of aluminum oxide used as an abrasive.

amaranth. 1. A hardwood of a rich, purplish color, from trees (genus *Peltogyne*) native to the Guianas and sometimes used for carving; also called purpleheart. It has a close, even texture, and much of it has an interesting, variegated grain.

2. A natural purple dyestuff made from amaranth wood. Named for a mythical unfading flower, its permanence is equally mythical, for pigments made from it fade badly in sunlight.

amasette. French term for a horn spatula formerly used to gather the color while grinding paint. Its modern equivalent would be a stainless-steel spatula or slice.

amber. A fossil RESIN dug from the ground, the most extensive deposits occurring in beds in East Prussia along the shores of the Baltic Sea. Amber is familiar through its use in beads and ornaments, and it has long been considered the varnish resin *par excellence* because it is the hardest of all resins. But it is also the least soluble. Only a small amount can be made to go into solution at high temperatures, even when mixed with oils and other resins, so that amber varnishes actually contain very little amber. Investigators feel that medieval authors who constantly referred to it in their recipes may have confused amber with some other resin, possibly sandarac, and that this may account for its widespread reputation.

American vermilion. A heavy LAKE pigment made on a base of red lead, orange mineral, or chrome red, with a brilliant synthetic dyestuff such as eosine. It is not permanent for use in artists' paints. American vermilion is also known as imitation vermilion and vermillionette.

Amherst sandstone. A pale SANDSTONE from Lorrain County, Ohio. It is

available in gray, buff, and variegated colors.

ammonia. A colorless alkaline gas, a combination of nitrogen and hydrogen, commonly used in various concentrations as a cleaner and emulsifier in a solution known as ammonia water. When a recipe used in permanent painting calls for an alkali, ammonia is preferred because it is volatile and therefore leaves no remnant or alkaline by-product.

amorino. See PUTTO.

amorphous. A term used to describe a homogeneous, solid material that has neither a regular crystalline structure nor a sharply defined melting point and that breaks with a conchoidal fracture, that is, with an undulating surface like that of a lump of broken glass or a lump of resin, both of which are examples of amorphous materials.

amphora. An ancient Greek vase form. The amphora is a large, tapering ceramic jar with two handles, which was used for storage of such items as oil, wine, and grain. One type tapered to a foot or base, while another had a point at the bottom and was stored in a rack rather than standing upright. A third type, the neck amphora, had an offset neck. See illustration at VASE SHAPES.

amyl acetate; amyl alcohol. See BANANA OIL.

A.N.A. Abbreviation added to their names by associate members of the NATIONAL ACADEMY OF DESIGN.

anaglyph. A piece of sculpture or a decoration worked in RELIEF, as a cameo or a boss, as distinguished from a DIAGLYPH.