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ENCYCLOPEDIA

15

JUDG  
LONG

# FUNK & WAGNALLS

## Standard REFERENCE


REGISTERED UNITED STATES PATENT OFFICE

# ENCYCLOPEDIA



VOLUME 15

JUDGMENT—LONG BRANCH

  
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# LIST OF ABBREVIATIONS USED IN THE TEXT

<b>abbr.</b>	abbreviated	<b>Gael.</b>	Gaelic	<b>OHG.</b>	Old High German
<b>a-c</b>	alternating current	<b>gal.</b>	gallon	<b>ON.</b>	Old Norse
<b>A.D.</b>	Anno Domini	<b>Gen.</b>	General	<b>ONF.</b>	Old Norman
<b>agg.</b>	agglomeration	<b>Ger.</b>	German		French
<b>alt.</b>	altitude	<b>Gr.</b>	Greek	<b>O.T.</b>	Old Testament
<b>A.M.</b>	ante meridiem	<b>Heb.</b>	Hebrew	<b>oz.</b>	ounce
<b>anc.</b>	ancient	<b>Hind.</b>	Hindustani	<b>Phil.</b>	Philippine
<b>Ar.</b>	Arabic	<b>Hon.</b>	Honorable	<b>P.M.</b>	post meridiem
<b>AS.</b>	Anglo-Saxon	<b>h.p.</b>	horsepower	<b>Pol.</b>	Polish
<b>A.S.S.R.</b>	Autonomous Soviet Socialist Republic	<b>hr.</b>	hour	<b>pop.</b>	population
<b>at.no.</b>	atomic number	<b>Hung.</b>	Hungarian	<b>Port.</b>	Portuguese
<b>at.wt.</b>	atomic weight	<b>I.</b>	Island	<b>prelim.</b>	preliminary
<b>b.</b>	born	<b>i.e.</b>	that is	<b>pron.</b>	pronounced
<b>B.C.</b>	before Christ	<b>in.</b>	inch	<b>q.v.</b>	which see
<b>bev</b>	billion electron volts	<b>Ind.</b>	Indian	<b>r.</b>	reigned
<b>b.p.</b>	boiling point	<b>Ir.</b>	Irish	<b>R.</b>	River
<b>B.T.U.</b>	British Thermal Unit	<b>It.</b>	Italian	<b>rev.</b>	revised, revision
<b>bu.</b>	bushel	<b>Jr.</b>	junior	<b>Rev.</b>	Reverend
<b>Bulg.</b>	Bulgarian	<b>K.</b>	Kelvin	<b>Rum.</b>	Rumanian
<b>C.</b>	centigrade	<b>kg</b>	kilogram	<b>Russ.</b>	Russian
<b>cent.</b>	century	<b>km</b>	kilometer	<b>S.</b>	south ; southerly ; southern
<b>Chin.</b>	Chinese	<b>lat.</b>	latitude	<b>sec.</b>	second
<b>cm</b>	centimeter	<b>Lat.</b>	Latin	<b>Skr.</b>	Sanskrit
<b>Co.</b>	County	<b>lb.</b>	pound	<b>Sp.</b>	Spanish
<b>colloq.</b>	colloquial	<b>lit.</b>	literally	<b>sp.gr.</b>	specific gravity
<b>cu.</b>	cubic	<b>long.</b>	longitude	<b>sq.</b>	square
<b>Czech.</b>	Czechoslovakian	<b>m</b>	meter	<b>S.S.R.</b>	Soviet Socialist Republic
<b>d.</b>	died	<b>m.</b>	mile	<b>Sum.</b>	Sumerian
<b>Dan.</b>	Danish	<b>M.</b>	Middle	<b>Sw.</b>	Swedish
<b>d-c</b>	direct current	<b>mev</b>	million electron volts	<b>temp.</b>	temperature
<b>Du.</b>	Dutch	<b>mg</b>	milligram	<b>trans.</b>	translation, translated
<b>E.</b>	east; easterly; eastern	<b>min.</b>	minute	<b>Turk.</b>	Turkish
<b>ed.</b>	edition	<b>M.L.</b>	Medieval Latin	<b>U.K.</b>	United Kingdom
<b>e.g.</b>	for example	<b>mm</b>	millimeter	<b>U.N.</b>	United Nations
<b>Egypt.</b>	Egyptian	<b>mod.</b>	modern	<b>U.S.</b>	United States
<b>Eng.</b>	English	<b>m.p.</b>	melting point	<b>U.S.A.</b>	United States of America
<b>est.</b>	estimated	<b>M.P.</b>	Member of Parliament	<b>U.S.S.R.</b>	Union of Soviet Socialist Republics
<b>et seq.</b>	and following	<b>m.p.h.</b>	miles per hour	<b>var.</b>	variety
<b>ev</b>	electron volt	<b>Mt.</b>	Mount, Mountain	<b>W.</b>	west ; westerly ; western
<b>F.</b>	Fahrenheit	<b>N.</b>	north ; northerly ; northern	<b>yd.</b>	yard
<b>fl.</b>	flourished	<b>N.T.</b>	New Testament		
<b>fr.</b>	from	<b>OE.</b>	Old English		
<b>Fr.</b>	French	<b>OF.</b>	Old French		
<b>ft.</b>	foot				
<b>g</b>	gram				

*Note.*—The official abbreviations for the States of the Union are used throughout. For academic degrees, see article DEGREE, ACADEMIC. For additional abbreviations of units of measure, see article WEIGHTS AND MEASURES. Some abbreviations which are self-explanatory have been omitted.

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## STANDARD REFERENCE ENCYCLOPEDIA

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**JUDGMENT**, in law in England and the United States, a judicial determination of the rights and obligations of the parties to a civil action. Judgments are generally classified as *final judgments* and *interlocutory judgments*. In a final judgment a court or referee makes a complete and definitive disposal of all issues in the action; final judgments made in cases in which the defendant interposes no defense to the complaint made by the plaintiff are called *default judgments*. In an interlocutory judgment the court determines some of the rights of the parties, but reserves for future determination the unsettled issues in the action and the extent of the relief to be given the plaintiff. The party to whom relief is given in the form of a judgment for money damages is called a *judgment creditor*, and the adverse party is called a *judgment debtor*. By statute in most jurisdictions in the United States, a final judgment constitutes a lien on the real property of a judgment debtor. By law in most States, unpaid judgments are presumed to have been paid or satisfied after twenty years.

The judgments in equity actions usually are called decrees. Decrees are enforced by proceedings to punish for contempt of court known as contempt proceedings; see **CONTEMPT**. In actions for divorce or separation a judgment directing a husband to pay alimony is enforceable by contempt proceedings. Judgments for money damages are enforced by the process of execution (q.v.).

**JUDITH**, in the Old Testament, Jewish heroine who saved her native town, Bethulia. The Babylonian general Holofernes, at the bidding of King Nebuchadnezzar II, was besieging Bethulia in Judæa, when Judith gained access to him by her beauty, drugged him, and then cut off his head. The Jews, taking heart, fell on the leaderless Babylonians and routed them. The story forms the subject of the *Book of Judith*, which is regarded as apocryphal in the Protestant Bible, but as canonical in the Roman Catholic version.

**JUDO**. See **JUJITSU**.

**JUGGERNAUT** or **JAGANNATH** (Skr. *Jagannātha*, "lord of the world"), a title of the Hindu god Vishnu (q.v.) or Krishna. It is applied to him in a special ritual celebrated

at the town of Puri, Orissa, India, where the temple to him was completed in the 12th century. During the annual festival of Rathayatra, attended by multitudes of Hindu pilgrims, an enormous wooden car, on which is mounted an idol representing the god, is dragged by the pilgrims through deep sand to another temple outside the city. This ceremony takes several days to perform. Although occasionally a frenzied pilgrim has thrown himself under the wheels of the car, the popular belief that self-immolation by the worshipers in vast numbers is a part of the religious ceremony is without foundation in fact. Because of the popular misconception, however, the term "juggernaut" is often used to characterize an invincible crushing force, as in the expression "military juggernaut".

**JUGOSLAVIA**. See **YUGOSLAVIA**.

**JUGURTHA** (d. 104 B.C.), King of Numidia, grandson of Masinissa. After the death of his uncle, Micipsa, who succeeded Masinissa on the throne, Jugurtha invaded the dominions of Micipsa's son, Adherbal, and usurped the throne. He was defeated in a war with the Romans (Jugurthine War, 111-106 B.C.) and was taken to Rome as a prisoner to be exhibited in the triumph of Sulla in 104 B.C. He died in prison.

**JUILLIARD MUSICAL FOUNDATION**, a privately endowed institution to aid students in obtaining musical education and to bring about a deeper interest in music in the United States. The Foundation was incorporated in 1920 under a special act of the New York State legislature. It has an endowment fund of about \$12,000,000 bequeathed to it by Augustus D. Juilliard (1836-1919), a New York cotton merchant, but uses only the income from that fund. The principal activity of the Foundation is the maintenance of the Juilliard School of Music, New York City. Originally the School consisted of the Juilliard Graduate School and the Institute of Musical Art (founded in 1905); the two units were consolidated in 1946.

**JUJITSU**, **JIJITSU**, or **JUJUTSU** (Japanese *ju*, "yielding"; *jutsu*, "art"), Japanese method of personal combat without weapons, relying not upon muscular strength but upon a studied knowledge of leverage and of the

weak points in the human anatomy. The jujitsu expert, by yielding before the onslaught of an opponent, seeks to throw the opponent off balance, and to use the force of the onslaught to disable his adversary. A person skilled in jujitsu can disable his opponent temporarily by striking a nerve, by cutting off the circulation of blood, or by dislocating a joint or breaking a bone. Using similar methods, he can disable an opponent permanently or even kill him. The closed fist is not used in jujitsu; disabling blows are delivered by slashing with the margin of the open palm.

An important part of the equipment of a practitioner of jujitsu is the knowledge of how to fall without incurring injury; this maneuver is accomplished by twisting the body so as to fall upon pads of muscle, rather than upon the base of the spine or upon a joint. Body weight and muscular development are unimportant in jujitsu, the most important requisites being agility, speed, and presence of mind.

Jujitsu has been in use in Japan since the beginning of the 7th century B.C. Until the fall of the feudal system, the art was practiced only by the Japanese nobility, especially the samurai (q.v.), who kept its methods secret. In the 19th century the Japanese began to teach the milder techniques of jujitsu in their public schools, and private jujitsu academies were opened. The art was taught to members of the military and police forces. Students of jujitsu were kept on strict diets, and the study of the art became a method of physical culture which is still widely used in Japan today. Control of temper, necessary for effective practice of jujitsu, was stressed; students who became angry when provoked were not allowed to continue their jujitsu studies. Techniques of killing an opponent by means of jujitsu were still kept secret, and were known to only a few experts in the country.

Toward the end of the 19th century, Professor Jigoro Kano, a nobleman of Tokyo, collected many of the simple techniques of jujitsu into a new system which he called *judo*. The system was introduced into Europe and America and several schools were established. During World War II, the soldiers of many countries, including the U.S., were taught basic jujitsu holds; special forces, such as the commandos and rangers (qq.v.), were taught the technique in detail. Since then, the police forces of many cities in the U.S. and Europe have been trained in the art. Recently several private jujitsu schools in the U.S.

have begun teaching the hitherto secret killing methods of jujitsu.

**JUJUBE**, common name of evergreen and deciduous shrubs and trees of the genus *Zizyphus*, in the Buckthorn family. Jujubes are native to tropical and subtropical regions all over the world. Plants of the genus have small, regular flowers which produce drupaceous fruits. The common jujube, *Z. sativa*, native to warm regions of Eurasia, and the Indian jujube, *Z. vulgaris*, native to S. Asia, produce fruits which are dried as sweetmeats. Chinese jujube, *Z. jujuba*, a native of the Mediterranean region, is often called Christ's-thorn because of a tradition that the crown of thorns worn by Jesus Christ was made from its branchlets. The tree is widely cultivated in China for its fruit, and is grown as an ornamental plant in warm areas of the United States. The lotus tree, *Z. lotus*, is a N. African species which produces a mealy fruit used by the Africans to make cakes.

**JUKES**, a pseudonym substituted for the real name of a family investigated in 1874 by the Prison Association of New York. The report of the Association, prepared by the American sociologist Richard Louis Dugdale (1841-83), and published in 1875 under the title of *The Jukes*, revealed an extraordinary family history of crime, disease, and pauperism. The family was descended from a backwoodsman, called "Max" in the report, whose two sons married two "Jukes" sisters, one of whom is known as "Margaret, mother of criminals". Of 1200 descendants and blood relations, 709 were traced, of whom 280 had received public support as paupers, 140 were convicted criminals who had served terms in prison, and a large proportion were victims of mental or nervous disease. The cost of the family to the State of New York in the 75 years covered by the study was estimated at \$1,308,000. The genealogical study of the Jukes has been used by a number of workers in the social sciences and in psychopathology, particularly as evidence of a hereditary basis for such phenomena as mental disorder and feeble-mindedness.

**JULIA** (39 B.C.-14 A.D.), the only child of the Roman emperor Augustus. She was married at the age of fourteen to Marcus Claudius Marcellus, son of Octavia, sister of Augustus. After her husband's death, two years later, she was married to the Roman general Marcus Vipsanius Agrippa, to whom she bore three sons and two daughters. He died in 12 B.C., whereupon Julia was given in marriage to Tiberius, stepson of Augustus and later



emperor. Julia became notorious for profligacy and vice, and was banished from Rome by her father.

**JULIAN**, or (Lat.) FLAVIUS CLAUDIUS JULIANUS (331-63), surnamed the Apostate, on account of his renunciation of Christianity, Roman emperor from 361 to 363 A.D., born in Constantinople. In 355 he was made Cæsar, governing Gaul, Britain, and Spain. He became popular with his troops, who proclaimed him emperor in 361, and on the death of Constantius II in the same year, he succeeded to the throne. In March, 363, he set out on an expedition against the Persians, and was fatally wounded in a battle in the desert beyond Ctesiphon.

**JULIANA** (1909- ), Queen of the Netherlands, only daughter of Wilhelmina (q.v.) and Duke Henry of Mecklenburg-Schwerin. In 1937 she married Prince Bernhard of Lippe-Biesterfeld, to whom she subsequently bore four daughters: the heiress presumptive, Princess Beatrix (1938), Princess Irene (1939), Princess Margriet Francisca (1943), and Princess Maria Christina (1947). When Germany occupied the Netherlands in 1940 she removed to Canada with her family, going from there to England in 1944, and returning to the Netherlands in 1945. On Oct. 14, 1947, owing to the illness of her mother, Queen Wilhelmina, she temporarily assumed royal power in the Netherlands, ruling as Princess Regent until Dec. 1, 1947, when Wilhelmina resumed her rule. She became regent for the second time on May 14, 1948, and on Sept. 4 of that year Queen Wilhelmina, after fifty years as ruler of the Netherlands, abdicated in her favor, becoming Princess Wilhelmina. On Sept. 6, 1948, Juliana was crowned queen of the Netherlands in Amsterdam.

**JULIAN CALENDAR.** See CALENDAR.

**JULIUS II**, original name GIULIANO DELLA ROVERE (1443-1513), Pope (1503-13), born in Albissola, Italy. He formed the League of Cambrai (1508) against Venice and the Holy League (1511) against France; as a result of the ensuing struggles he secured his hold upon the Papal States (q.v.) near Rome and extended papal rule over parts of northern Italy. He was the patron of many Renaissance artists, notably Bramante, Raphael, and Michelangelo.

**JULIUS CÆSAR.** See CÆSAR, GAIUS JULIUS..

**JULLUNDUR**, city of Punjab State, Republic of India, 260 m. by rail n.w. of Delhi. It is a flourishing commercial and industrial center. Sugar refining, flour milling, and tex-

tile manufacturing are the chief industries. Pop. (1961) 222,569.

**JULY**, the seventh month of the year in the modern calendar, consisting of thirty-one days. It was the fifth month of the year in the Roman calendar and was called *Quintilis*, or fifth month, by the Romans until Julius Cæsar changed the name to *Julius* after himself. See CALENDAR.

**JULY REVOLUTION**, the revolution of July, 1830, in Paris, which overthrew the Bourbon dynasty, in possession of the throne of France since the restoration of Louis XVIII in 1814 (see FRANCE: History). The main cause of the July Revolution was the policy of reaction followed by Louis and his successor, Charles X, who became king in 1824. Under Charles, two classes, the nobility and the clergy, foes of democratic progress, were shown special favor. A partial indemnity was granted by Charles to the nobles for the lands the state had confiscated during the French Revolution; the Jesuits, who had been driven out of the country during that Revolution, were readmitted and education was placed under clerical control. In addition, Charles took severe measures against the liberty of the press and appointed (Aug. 9, 1829) as his minister of foreign affairs and in general charge of domestic affairs the unpopular ultraroyalist Auguste, Prince de Polignac (1780-1847). In March, 1830, the lower branch of the legislature, the Chamber of Deputies, demanded the dismissal of the prince and of other ministers of the king. In response the king dissolved the legislature. The returns from the elections ordered by the king to select a new parliament indicated that the new legislature would be even more strongly opposed to the policies of Charles than its predecessor.

On July 26th, a few days before the new legislature was to meet, Polignac issued ordinances completely suspending the liberty of the press and declaring the new elections null and void. On July 27th, led in part by the noted general, the Marquis de Lafayette, and by the statesman Jacques Laffitte (1767-1844), the middle and working classes of Paris rose in revolt. The next day, against the opposition of the king's troops, they took possession of the municipal government in the Hôtel de Ville and of the cathedral of Notre Dame. By the 29th, the entire city was in the hands of the insurrectionists, and Charles withdrew his minister's ordinances. It was too late, however, to save his throne. The middle-class insurrectionists demanded that he abdi-



cate and that Louis Philippe of the house of Bourbon-Orléans be given the throne. On July 30th Louis Philippe arrived in Paris, and although he was opposed by the workers, the bourgeois party supporting him was strong enough to cause Charles to abdicate and flee the country, and to have the legislature elect Louis Philippe as king.

Since the triumph of the reactionary elements at the Congress of Vienna (1815), following the final defeat of Napoleon at the Battle of Waterloo, democratic elements everywhere in Europe had been awaiting a suitable time to revolt. The July Revolution acted as a signal for democratic uprisings on the European continent. Belgium, which had been made part of Holland by the Congress of Vienna, revolted and established its independence; see **BELGIUM: History**. In Poland a violent uprising took place against Russian rule (see **POLAND: History**), which was suppressed only after heavy fighting. In Germany and Italy numerous revolts, none of which was successful, took place against the authority of the absolutist rulers of the various grand duchies, kingdoms, and other divisions of those two countries; see **EUROPE: History**; **ITALY: History**.

**JUMNA** (anc. *Jomanes*), river in N. India, principal feeder of the Ganges (q.v.), rising in the w. Himalayas at a height of 10,849 ft. above sea level. After a southerly course of about 95 m. it enters the plains at Fyzabad, from which it follows a winding route through Delhi and Agra to Allahabad, where it joins the Ganges, after a total course of 860 m. The confluence of the Jumna and Ganges is a place of pilgrimage for Hindus. The river is navigable by barges, and is used for irrigation purposes.

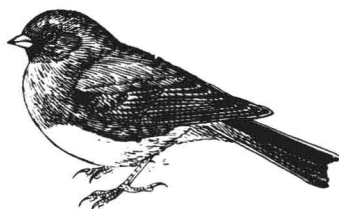
**JUMPING.** See **TRACK AND FIELD ATHLETICS**.

**JUMPING BEAN**, seeds of tropical and subtropical New World shrubs of the genera *Sebastiania* and *Sapium*, belonging to the Spurge family. The seeds are usually infested with larvae of a small moth, *Carpocapsa asaltitans*, related to the codling moth. The larva occupies about one fifth of the interior of the seed, and, when the seed is placed on a flat surface, its movements disturb the balance of the seed, causing the seed to roll from side to side, turn over endwise, or actually jump. The seeds are commonly called Mexican jumping beans in the United States.

**JUNAGARH** or **JUNAGADH**, capital of a former native state of the same name, now a part of Gujarat State, Republic of India. The city is 60 m. by rail s.w. of Rajkot.

Nearby is the forest of Gir, the only place in India where lions are still found. The city contains a college, a library, and a museum. Manufactured products include copper and brass ware and gold and silver embroidered work. Cotton, rice, millet, sesame, and sugar cane are raised in the surrounding area. Area of former state, 3897 sq.m.; pop., about 815,000. Pop. of city (1961) 74,298.

**JUNCO** or **SNOWBIRD**, common name for any American bird in the genus *Junco* of the Finch family. Juncos are slate-colored birds with white abdomens, white outer tail feathers, and pink bills. They are about six to seven



*Slate-colored junco, Junco hyemalis*

inches long. The birds breed in cold regions such as the arctic regions of Canada and Alaska or the tops of high mountains. In winter-time they are found from s. Canada to Central America. The common junco of N.E. United States is *J. hyemalis*, the slate-colored junco. *J. oreganus*, the Oregon junco, is found in N.W. United States; *J. phaeonotus*, the red-backed junco, is found in the mountains of S.W. United States.

**JUNE**, the sixth month of the year in the Gregorian calendar, consisting of thirty days. The etymology of the name is uncertain, different authorities deriving the name from the Roman goddess Juno, the gentile name Junius, or from the Latin *iuniores* as opposed to *maiores* for May, the two months being dedicated to youth and old age, respectively. June was the fourth month in the old Roman calendar. At the time of Julius Caesar's reform of the calendar it had 29 days, to which Caesar added a thirtieth. See **CALENDAR**.

**JUNEAU**, capital of Alaska, and port of entry, situated on Gastineau Channel, opposite Douglas Island, with which it is connected by a bridge, and about 870 nautical miles N.W. of Seattle, Washington. It is served by steamships and by air lines. Juneau is the fourth-largest city in Alaska, the site of all Federal and State administrative offices, and the headquarters of the first division of the judicial district of Alaska. After governmental service, the most important industry

in Juneau is gold mining. The Alaska-Juneau Mine, on the outskirts of the city, is one of the largest gold mines in the world. Other industries in the city and vicinity are fishing, lumbering, stock raising, dairying, and fur farming. Glacier Bay National Monument (q.v.) lies about 60 miles n.w. of Juneau. The site of Juneau was first settled in 1880 as a gold-mining center. It was made the capital of Alaska in 1900, and in 1906 the governmental offices were moved to Juneau from Sitka. Pop. (1960) 6797.

**JUNE BEETLE** or **JUNE BUG**, common name for any of several beetles in the Scarab family, so called because the adults appear each year about June 1. In northern U.S. the name is applied to the numerous species in the genus *Phyllophaga*, known in the South, where they emerge earlier, as "May bugs". The brown, stout-bodied adults are about one inch long and feed on leaves. The larvae, known to horticulturists as "white grubs", burrow in soil, feeding on the roots of plants and often doing damage to grass lawns. The larval stage persists for two to three years.

In southern U.S. the name "June beetle" is applied to the figeater, *Cotinus nitida*, a green and brown insect which, in the adult stages, feeds on ripe figs and other fruit. The larvae, like those of the northern June beetle, live in the ground and eat plant roots, but do little damage to important plants. The name "June beetle" is applied in Europe to beetles of the genus *Rhizotrogus*, closely related and similar in habits to the June beetles of northern U.S. See SCARAB.

**JUNEBERRY.** See SHADBUSH.

**JUNG**, CARL GUSTAV (1875–1961), Swiss psychologist and psychiatrist, born in Basel, and educated at the universities of Basel, Zurich, and Paris. He was the head physician of the Psychiatric Clinic at Zurich from 1905 to 1909, and from 1933 to 1940 taught psychology at the University of Technology in Zurich; in 1945 he was appointed professor of medical psychology at the University of Basel. The Carl Gustav Jung Institute was founded (1948) in Zurich for training analysts in Jung's techniques of psychotherapy.

Jung was perhaps the earliest convert to the psychoanalytic doctrines of Sigmund Freud (q.v.), and remained a disciple until 1911, when he founded an independent neo-Freudian school under the name of "analytic psychology" with its center at Zurich. Analytic psychology rejects the Freudian concepts of the libido (q.v.) as sexual in nature and of psychoneurosis as sexual in origin, placing emphasis upon the libido as a creative force

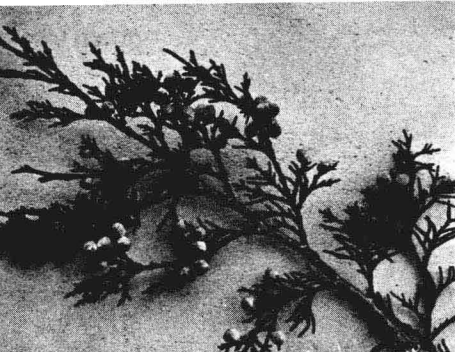
or will to live, and upon the conflicts of patients under psychotherapy as products of immediate problems in adjustment. The unconscious is considered to be an undeveloped element in personality, and to contain a collective or racial factor, inherited from ancestors, as well as an individual content. Jung also devised and used an elaborate classification of personality in terms of introversion and extroversion. Among his works are *The Theory of Psychoanalysis* (1912), *Psychology of the Unconscious* (1916), *Contributions to Analytical Psychology* (1928), *Modern Man in Search of a Soul* (1933), *Psychology and Alchemy* (1949), *The Psychology of the Transference* (1953), *Undiscovered Self* (1958), and *Flying Saucers* (1961). See PSYCHOANALYSIS.

**JUNGFRAU**, mountain of the Bernese Alps, Switzerland, located on the border between the cantons of Bern and the Valais and rising to a height of 13,669 ft. above sea level. It was ascended for the first time in 1811. A railroad, the highest in Europe, ascends the mountain to Jungfrauoch, a point 11,340 ft. above sea level.

**JUNGLE FOWL**, common name for any of the wild, galliform birds of the genus *Gallus* common in the Orient. *G. gallus* of India is believed to be the ancestor of the common fowl (q.v.); a well-known subspecies is the bankiva, found in Java. Three other species are known: *G. sonnerati* of India; *G. varius* of the Malay Archipelago; and *G. lafayetti* of Ceylon. These birds are hunted as game.

**JUNIPER**, common name of evergreen trees and shrubs of the genus *Juniperus*, belonging to the Pine family. The genus includes about forty species, native to cold and temperate regions of the Northern Hemisphere. Junipers produce two types of leaves: needlelike, sharp-pointed, articulated leaves without oil glands, arranged in twos or whorls of three; and small scalelike leaves with oil glands on the lower surfaces. Some juniper plants produce the different types of leaves on separate plants, others produce needlelike leaves on younger plants, and scalelike leaves on older plants, and some plants bear both kinds simultaneously. In most species, male and female cones are borne on separate plants. Male cones are dry, and bear pollen-producing cells on shield-shaped scales. Female cones, which are fleshy when mature, have fused scales, giving a solid, berrylike appearance. The "berry", which varies from 1/4 to 1/2 inch in diameter, is red or purple, and contains one to eight bony seeds.

Common juniper, *J. communis*, is a shrub or small tree, 6 to 13 feet in height, which



U.S. Forest Service

Branch of western red cedar, *Juniperus scopulorum*, a species of juniper

grows on dry soil throughout the temperate and cold regions of Eurasia and North America. Unripe fruits of common juniper yield oil of juniper, which is used in the manufacture of varnish, and in medicine, as a diuretic. Ripe fruits are used for flavoring gin (q.v.). Creeping juniper or savin, *J. horizontalis*, is a prostrate shrub, bearing scalelike leaves, which grows on rocky or sandy banks in N.E. United States and E. Canada. The red cedar or red savin, *J. virginiana*, native to temperate North America, may grow as a shrub or tree. The trees may grow as tall as 100 feet and the trunk may be as much as 5 feet in diameter. Red cedar produces cedar oil, used as a clearing agent in histology, and as immersion oil. The tree has ragged bark and red, durable, aromatic heartwood, used extensively for manufacture of pencils, woodwork, clothing chests, fence posts, and telegraph poles. "Cedar chests" are especially desirable as clothing chests because the wood contains a pungent oil which repels insects, such as moths. Wood of a related species, the Bermuda cedar, *J. bermudiana*, native to Bermuda, is used for the same purposes.

Other species native to North America include: California juniper, *J. californica*, native to S.W. United States; western red cedar, *J. scopulorum*, native to the northern Rocky Mountains; Mexican or rock juniper, *J. mexicana*, native to Mexico and Texas; western juniper, *J. occidentalis*, native to Washington, Oregon, and California; and alligator juniper, *J. pachyphloea*, native to the southern Rocky Mountains. After the common juniper, the most abundant juniper of Europe is the savin, *J. sabina*, which grows throughout the mountains of central Europe. It has scalelike, glandular leaves, and the inflorescences yield oil of savin, used in medicine as a stimulant, diaphoretic, anthelmintic, and emmenagogue. The Chinese juniper, *J. chinensis*, a species

native to W. Asia, is a tree growing as tall as 60 feet, and bearing bright-green leaves.

Many species of juniper, particularly Chinese juniper, red cedar, common juniper, and savin, are cultivated in the United States as ornamental trees and shrubs. Prostrate varieties are commonly used in borders, and small columnar trees are popular as adjuncts of lawns and informal gardens.

**JUNÍPERO**, SERRA. See SERRA, JUNÍPERO.

**JUNIUS**, pseudonym of the unknown author of a series of sixty-nine polemical letters published between November 21, 1768, and January 21, 1772, in a London newspaper, the *Public Advertiser*. The principal intent of the writer was to discredit the administration of Prime Minister Augustus Henry Grafton; Junius charged Grafton and other members of the government with personal immorality, and vented his wrath on King George III. Grafton was eventually compelled to resign from office as a result of these attacks. The letters, written in a vigorous prose style, were widely read; before 1772 at least twelve unauthorized editions had been published. In 1772 the collection was revised by the author, who added a dedication to the people of England and a preface. Speculation about the identity of the author persisted for many years following the appearance of the first letters; more than forty persons, at various times, were held to be the author. The probable author, in the view of many scholars, is the British government official and writer Sir Philip Francis (q.v.).

**JUNO**, one of the planetoids (q.v.), the third to be discovered, first observed by the German astronomer Karl Ludwig Harding in 1804. It revolves about the sun in 1592 days.

**JUNO**, in Roman religion, the chief goddess of the Romans, closely connected with every aspect of the life of women. She was worshipped as goddess of childbirth (*Juno Lucina*), as giver of counsel (*Juno Moneta*), as savior in time of peril (*Juno Sospita*), as presiding over marriage (*Juno Pronuba*). Originally an ancient Italian deity of light and the sky, Juno came in time to be regarded as queen of heaven, and consequently was worshipped as *Juno Regina*. Under the influence of Greek mythology, she was identified with Hera (q.v.), leading goddess of the Greek pantheon; and as Hera was the wife of Zeus (q.v.), so Juno was made the consort of Jupiter (q.v.). The Juno of Latin poetry has many of the characteristics of Hera, such as hatred of the Trojans. In the religious worship of the Romans, Juno shared a dominant posi-

tion with Jupiter and Minerva (q.v.). The distinctive character of Juno as a woman's goddess was emphasized by her special festival, the *Matronalia*, the celebration of which on March 1 was restricted to Roman matrons.

G.E.D.

**JUPITER**, the largest planet in the solar system and, next to Venus, the brightest of the planets. Its mean distance from the sun is 484 million miles, about 5.2 times that of the earth. The time it takes for a complete revolution about the sun is 11.86 years. Jupiter is markedly flattened at the poles, the polar diameter being 82,900 miles and the equatorial diameter 88,800 miles. The volume of Jupiter is approximately 1300 times that of the earth; since its mass is 318 times that of the earth, its mean density is one fourth that of the earth, or 1.4 times that of water. The rotation period of the planet is approximately ten hours; the period of rotation of areas close to the equator is apparently slightly less than that of areas at higher latitudes.

The surface of the planet, as seen through a telescope, is marked by a number of parallel bands or belts of different widths. The belts themselves and the spots and other markings observed in these belts undergo considerable variation. The most notable marking on Jupiter is a large oval spot, about 8700 miles wide and 25,000 miles long, which is definitely known to have been observed in 1878, but was probably seen at an earlier date. Because of its color and size it became known as the "Great Red Spot". The Great Red Spot has diminished in color with the passing of the years, and except for a period of time in 1937 when its color was very pronounced, it has faded considerably and only its outline has remained partially visible.

The variable nature of the surface features, the difference in rotation period in different latitudes, the high reflecting power, the existence of the Great Red Spot over a long period of time, and the low density of the planet indicate that the planet is probably composed of a relatively small solid core surrounded by a very thick layer of atmosphere. Spectroscopic studies show that the atmosphere of Jupiter contains mostly methane and ammonia. Temperature measurements indicate that the temperature of the visible surface is about  $-135^{\circ}$  C. ( $-211^{\circ}$  F.). It is believed that the semi-permanent markings may be clouds of droplets of ammonia, inasmuch as ammonia is close to its boiling point at the temperature and pressure of the planet's atmosphere. In 1955 radio waves from

Jupiter were detected for the first time by means of radio telescopes (see RADIO ASTRONOMY). Studies of the signals suggest that the radio waves result from large-scale disturbances in Jupiter's atmosphere.

Jupiter has twelve known satellites. The four brightest were discovered by Galileo in 1610, and were the first celestial bodies to be discovered by means of the telescope. They are easily visible with a pair of binoculars. These "Galilean satellites" are named Io, Europa, Ganymede, and Callisto, but are generally designated by the Roman numerals I, II, III, IV, in order of their distance from the planet; they are all comparable in size and mass with the earth's moon. The other eight satellites are too small and faint to be seen except with powerful telescopes.

Jupiter also has associated with it a family of comets (q.v.), the orbits of which bear a definite relationship to that of Jupiter. According to one theory of the origin of comets, the comet family associated with Jupiter resulted from eruptions thrown out from Jupiter. Because of its great size Jupiter causes serious perturbations in the orbits of other planets, of all planetoids (q.v.), and of comets, and its influence on the motion of other heavenly bodies makes it extremely important in the science of celestial mechanics.

**JUPITER**, or JOVE, in Roman religion, the most important deity of the pantheon. He was originally the god of the sky, the personification of heaven, and hence was worshiped as god of rain (*Jupiter Pluvius*), of thunder (*Jupiter Tonans*, or *Jupiter Tonitrualis*), of lightning (*Jupiter Fulgurator* or *Jupiter Fulminator*), and of serene skies (*Jupiter Sereinator*). As the protector of Rome he was called "the best and most high" (*Jupiter Optimus Maximus*), and was worshiped in a temple on the Capitoline Hill (see JUPITER CAPITOLINUS, TEMPLE OF), whence he was termed *Jupiter Capitolinus* and *Jupiter Tarpeius*. Notable among his various other surnames were *Jupiter Imperator*, the ruler; *Jupiter Invictus*, the unconquerable; *Jupiter Opitulus*, the helper; *Jupiter Prædator*, the giver of booty; *Jupiter Stator*, the supporter; *Jupiter Triumphator*, the giver of triumph, and *Jupiter Victor*, the conqueror. As *Jupiter Fidius* he was guardian of law, defender of truth and protector of justice and virtue. The Romans identified Jupiter with Zeus (q.v.), the supreme deity of the Greeks, and assigned to the Roman god the attributes and myths of the Greek divinity; the Jupiter of Latin literature, therefore, has many Greek charac-

teristics, but the Jupiter of Roman religious worship remained substantially untouched by the Greek influence. With Juno and Minerva (qq.v.) Jupiter formed the triad whose worship was the central cult of the Roman state. The annual festivals in honor of Jupiter included the *ludi Romani* or *ludi Magni*, celebrated in September, and the *ludi Plebei*, held in November.

G.E.D.

**JURA**, a range of mountains on the west frontier of Switzerland. Beginning in southwest France on the north bank of the Rhone River at Saint-Genix, the range extends northward, forming the west bank of the river until it reaches the Swiss frontier near Geneva. From that point it follows the boundary line in a long curve toward the northeast, finally passing wholly into Switzerland, and terminating on the south bank of the Rhine River west of its confluence with the Aar. The range thus defined is the Jura proper, but many geographers apply the name also to the mountains north of the Rhine and south of the Rhone, considering that these rivers merely make two breaks in an otherwise continuous chain. South of the Rhone the chain is known as the Jura Alps and merges with the Alps of Dauphiné and other branches of the western Alps. North of the Rhine an irregular chain extends east of the Schwarzwald through Württemberg and Bavaria as far as the Main River. This chain, called the German, or Swabian and Franconian, Jura, is similar to the Jura proper in the character of its rock formations, but different in its structure, being formed entirely by faulting.

The Jura Mountains proper consist of a series of parallel folds in the strata, forming together a plateau nearly 200 miles long and 20 to 35 miles wide. These folded ridges have in many places suffered transverse fractures, which, in the form of steep gorges known as cluses, add greatly to the picturesque character of the landscape. The general height of the range is 3000 to 5000 feet. It is highest near the south end, west of Lake Geneva, where the Crête de la Neige has an altitude of 5653 feet. Other prominent summits are the Reculet, 5643 feet; the Dôle, 5507 feet; and Mont Tendre, 5512 feet. The east slope falls abruptly towards the lacustrine basin forming the plain of Switzerland and occupied by the lakes of Geneva, Neuchâtel, Bienne, and Morat; westward and northward the slope is more gradual toward the Saône valley.

**JURASSIC PERIOD**, a geological period of the Mesozoic era, after the Triassic and be-

fore the Cretaceous. The period began roughly 150,000,000 years ago and lasted for approximately 40,000,000 years. It was named for the Jura Mountains of Switzerland where extensive geological deposits belonging to the period occur. In Europe the rock system of the period is divided into eighteen series, but in the United States geologists recognize only three series: the Lower, Middle, and Upper Jurassic.

During the Jurassic period the Atlantic shore line of the U.S. was located farther east than at the present time. As a result no Jurassic deposits of marine origin occur in the eastern U.S. In the western U.S., however, a large trough, known as the Rocky Mountain geosyncline, extended from northwestern Canada to Mexico, following approximately the present line of the Rocky Mountains. This great trough was invaded by the ocean from the north, forming a large tongue of the Arctic Ocean known as the Sundance Sea. The sea covered portions of Montana, Wyoming, Idaho, North Dakota, South Dakota, Nebraska, Colorado, and Utah. Toward the end of the period the sea receded, leaving extensive marine deposits, among them the Morrison formation which has yielded more fossils of large dinosaurs than any other group of rocks. In some portions of the mountain States thick beds of wind-blown sand were laid down at this period, the so-called "Red Beds". At the very end of the Jurassic period, a tremendous upheaval in the southwestern portion of the country, the Sierra Nevada or Nevadian Revolution, produced the Sierra Nevada range and the Cascade range.

In other parts of the world, marine Jurassic deposits are found in Australia, England, the Himalayas, and Japan. Some of these Jurassic formations contain coal and other minerals of economic importance such as lithographic limestone. The gold deposits of the Sierra Nevadas are of Jurassic origin.

The vegetation of the Jurassic period was abundant and consisted in great part of evergreens, palms, and tree ferns. Smaller plants included herbaceous ferns and scouring rushes which formed the undergrowth in the forests. The flora of the period was very widely distributed and many of the same species were found alike in Siberia, the arctic, North America, and England. Geologists deduce from this cosmopolitan distribution that the climate of the period was mild, even in the regions of the subarctic and subantarctic.

The most conspicuous animals belonging to



the period were the dinosaurs, among them the brontosaurus and tyrannosaurus. Other reptiles included the flying pterodactyls and the marine ichthyosaurs. A group of marine reptiles that has survived to the present day, the turtles, also made their first appearance in Jurassic times. Archaeopteryx, the first known bird, which represents the link between the reptiles and modern birds, belongs to the Jurassic period. The mammals of the period were small, and apparently lived on all of the continents except Australia. See MESOZOIC ERA.

**JURISPRUDENCE** (Lat. *jurisprudentia*, from *jus*, "law", and *prudentia*, "knowledge"), knowledge of the law and its interpretation, or the science and philosophy of law. In ancient Rome the term was used in the former sense. Those who were so skilled in the law, whether they were of unofficial position or judges, that they could declare what the rule would be in a novel or otherwise doubtful case were called *juris prudentes*; and the body of law built up by their concurrent interpretation was called *juris prudentia*. This development of law by interpretation is akin to what among English-speaking peoples is called "case" law, law arising from a body of decided cases, and in France and Spain the term "jurisprudence" is still used in that sense.

More commonly, however, especially in modern times, English-speaking peoples use the word "jurisprudence" to describe what was often called at an earlier period the philosophy of law, and what Continental writers now call the theory or the science of the law. An English or American treatise on jurisprudence, or on the science or principles of law, undertakes to determine what law is, i.e., what are the essential elements in our conception of law; what relation law bears to the cognate social sciences, politics, ethics, and economics; how law originates, in popular customs, judicial usage, and legislation, and how it ceases to exist by desuetude, change of usage, abrogation, or repeal; how it is applied with reference to persons, time, and place, and how it is enforced. Jurisprudence are the natural-law school, the analytical conceptions with which law operates, e.g., legal relations, rights, and duties. It may undertake to classify law and to construct a system or framework in which every rule of modern law, or perhaps of all law, past and present may find an appropriate place. It may, although it more rarely does, attempt to classify all the relations which the law rec-

ognizes or creates and which it regulates or orders, e.g., the relations of state and government to other forms of association and to individuals, and the relations of private associations and of individuals to each other. It may, although it still more rarely does, analyze the fundamental conceptions of the family, of property, and of succession.

The principal modern schools of jurisprudence are the natural-law school, the analytical school, the historical school, the comparative school, and the sociological school. The differences among the first three are mainly to be found in their views of the nature and origin of law and its relation to ethics.

To the natural-law jurist, law is antecedent to the state; to the analytical jurist, it is the creation of the state; and to the historical jurist, state and law are social products, developing side by side, each influencing the other. To the natural-law jurist, law is cognizable by pure reason; to the analytical jurist, it is the command of the sovereign power; to the historical jurist, it is the formulated wisdom of man. To the natural-law jurist, law is applied ethics, and, in the extreme form of the theory, that which is not right is not law. To the analytical jurist, a law which commands what is ethically wrong or forbids what is ethically right is not the less a law if it proceeds from the political sovereign. The historical jurist accepts in this respect the position taken by the analytical school, but points out that it is difficult for a lawmaker to act otherwise than in accord with the contemporary sense of right, and that laws which run counter to that sense are not likely to be enforced. Historical jurisprudence differs from analytical jurisprudence chiefly in emphasizing the great part played by social custom in developing and establishing law. To the analytical jurist customary law, including judicial custom, is an anomaly; he would abolish it by covering the whole field of social relations with written codes.

The natural-law school has its roots in the Stoic philosophy (see STOICISM) and the Roman jurisprudence; it was increasingly dominant in Europe from the Reformation to the close of the eighteenth century; see NATURAL LAW. The theory of the analytical school was first sharply formulated by the English philosopher Thomas Hobbes in his *Leviathan*. The views of this school, however, did not originate in England. The tendency to exalt the function of the legislator appeared on the Continent at the close of the Middle Ages

and was associated with the efforts of the national states to rid themselves of the chaos of varying provincial and local customs which had taken form during the Middle Ages. This end could be attained only by national legislation, and has been fully attained only by the adoption of national codes. See CODE.

The historical school dates from the nineteenth century, as a reaction against natural-law ideas. The German jurist Friedrich Karl von Savigny first clearly defined the principles of historical jurisprudence in 1814. No great antagonism exists between the historical and the comparative school. This latest school, or tendency, of which the leading early exponents were the German legal scholar Rudolf von Jhering (1818-92), and Albert Hermann Post (1839-95), represents a widening of the field of investigation. Not only is each national law studied historically but the various national systems are compared at similar stages of development. As a result of this process, not only may the normal course of legal development be discovered, but that which is universal and human may be separated from that which is particular to a single nation or to a special stage of development; and then, as Jhering hoped, it may eventually become possible to write a history of the law of the world. Leading English and American writers on comparative law are Henry Sumner Maine, Frederick William Maitland, Oliver Wendell Holmes, James Barr Ames (qq.v.), and Sir Frederick Pollock (1845-1937).

The sociological school of jurisprudence is largely a product of the 20th century. Its approach to the analysis of law differs from that of the other schools in that it is concerned less with the nature and origin of law than with its actual functions and end results. The proponents of sociological jurisprudence seek to view law within a broad social context rather than as an isolated phenomenon distinct from and independent of other means of social control. They are concerned with practical improvement of the legal system and feel that this can be achieved only if legislation and court adjudications take into account the findings of other branches of learning, particularly the social sciences. The leader of the school of sociological jurisprudence is the American jurist Roscoe Pound.

A loose application of the term "jurisprudence" makes it practically equivalent to the word "law" itself, as in the phrase "medical jurisprudence", meaning the law connected with the field of medicine. W.O.D.

**JURY** (Lat. *juratus*, "sworn", from *jus*, "right", "law"), in law, a sworn body of laymen who are constituted the judges of the truth of factual evidence on trial of an action or proceeding, and, on instruction of the court, apply the law to the facts. Such a jury is known also as petit jury or trial jury. See also CORONER; GRAND JURY.

The exact origin of the jury system is not known with certainty, various writers having attributed it to different European peoples which at an early period developed methods of trial not unlike the early jury trials in England. It seems probable that the jury in England was derived directly from the Norman institution of recognition by sworn inquest, which was substituted by the Norman conquerors for the method of trial by battle. The *Curia Regis*, or King's Court, might direct the sheriff to select four knights of the county, by whom twelve knights were selected to serve as *recognitors*, whose duty it was, after being duly sworn, to inquire as to various matters of interest to the new rulers of England which might be subject of public inquiry, for example, matters affecting taxation of a subject. As early as the reign of Henry II (1154-89) it had become customary for suitors in certain cases affecting the title to real estate to apply to the *Curia Regis* for the summoning of recognitors to ascertain either from their own knowledge or upon inquiry from others the truth of the matter in issue, and their verdicts, if unanimous, were accepted as conclusive. It was natural that other questions of fact arising in the King's Court should be disposed of in a similar manner, and the gradual transformation of the recognitors into the common-law jury followed as a matter of course. Originally the jurymen were not only judges of fact, but they were witnesses often selected because of their knowledge of the customs and the people of the locality, and possibly of the suitors themselves. During the reign of Henry IV, however, the judges of the courts of common law restricted the jury to the performance of its function as a judge of fact upon the evidence submitted to it, which is the single function of the jury in modern practice.

The first step toward summoning a jury is the issuing of a writ or precept of a court to the trial of any case, whether civil or criminal, having jurisdiction over jury trials, directed to the sheriff and called at common law a *venire facias* ("cause to come"), commanding him to summon citizens residing in the county to attend at a term of court for the purpose



of serving as jurors. In the United States each State has its own qualifications for those who must serve as jurymen. In general, all jurors must be U.S. citizens, of twenty-one years of age or over, and of approved integrity. The group of jurors called at any one time is known as a panel. Both the State courts and the Federal courts have independent lists of jurors which are made up under the direction of officials known as commissioners of jurors. Jurors are paid, as provided by statute, for time spent serving on juries.

At the trial the selection of the jury is made subject to the direction of the presiding judge. The names of the jurymen are drawn by lot by the clerk of the court, and as their names are called the jurymen take their seats in the jury box until twelve are thus chosen. The parties to the action or their attorneys may then exercise their right to eliminate undesirable members from the jury by means of challenge. Both the defense and the prosecution may examine the jurors for the purpose of ascertaining whether cause for challenge in any particular case exists. After a satisfactory jury has been drawn, the jury is sworn, and the trial (q.v.) proceeds. In general, during the progress of a trial, all questions of law are determined by the court and questions of fact by the jury. The limits of the inquiry as to facts are determined by the pleadings and the rules of evidence (q.v.). Whether evidence is properly admissible or not is a question for the court, but the weight and credibility of the evidence admitted are determined by the jury. The court, however, may decide a question of fact without sending the question to the jury, if there is no conflict of evidence on the point. The court may also interpret written instruments received in evidence without the aid of the jury.

After all the evidence has been given, if a case is made for the jury (i.e., if there is conflicting evidence of a doubtful question of fact), the counsel for the defendant "sums up" (i.e., addresses the jury, reviewing the evidence in the case and commenting upon it in a manner favorable to his side of the case); he is followed in like manner by counsel for the plaintiff or prosecution, as the case may be. The judge then makes his charge to the jury. The charge is a statement of the rules of law applicable to the evidence in the case, and it is given for the purpose of aiding the jury to render a correct verdict. The jury then retires from the courtroom and is locked into a room until an agreement as to the verdict

is reached, or until the presiding judge deems it improbable that an agreement will be reached. In case no agreement is reached, a new trial may be had. All the twelve members of a jury must agree upon a verdict, which in a civil trial may be "for the plaintiff" or "for the defendant", and in a criminal trial "guilty" or "not guilty". The verdict of a jury is decisive and cannot be disturbed unless rendered contrary to law or against the weight of evidence, in which case it may either be set aside by the presiding judge, or the judgment rendered thereon may later be set aside on appeal. See VERDICT.

Special juries (i.e., juries specially selected in order to secure jurymen of more than common intelligence) were known at common law and were expressly authorized by statute. Statutes in many of our States of the U.S. now provide for the selection of special juries for the trial of cases of great importance or difficulty.

**JUSSERAND, JEAN JULES**, in full JEAN ADRIEN ANTOINE JULES JUSSERAND (1855-1932), French diplomat and writer, born in Lyons. He studied law and in 1876 entered the diplomatic service. He was a consul in London in 1878, and in the following year he became legal adviser to the French embassy in London. He was appointed minister to Denmark in 1890 and ambassador to the United States in 1902; he held the latter position until he retired in 1925. His works include *English Wayfaring Life in the Middle Ages* (1884), *Literary History of the English People* (3 vols., 1895-1909), *With Americans of Past and Present Days* (1916), and *What Me Befell* (published posthumously in 1933).

**JUSTICE, DEPARTMENT OF**, one of the ten departments of the executive branch of the Federal government of the United States. It is administered by the attorney general (q.v.), a member of the Cabinet appointed by the President with the approval of the Senate. The principal functions of the department include the provision of means for the enforcement of the Federal laws, and the investigation of violations thereof; the supervision of the Federal penal institutions; the furnishing of legal counsel in cases involving the Federal government, and the conduct of all suits brought before the U.S. Supreme Court in which the Federal government is concerned; the interpretation of laws relating to the activities of the other Federal departments; and the rendering of legal advice, up-

on request, to the President and the members of the Cabinet.

For almost a century after the establishment of the United States, most of the above-listed functions were performed by the office of the attorney general, created in 1789. With the rapid growth of the United States during the 19th century, and the concomitant expansion of the powers of the Federal government, the duties of the attorney general became increasingly varied and complex, necessitating the creation of a full-fledged executive department under his direction. This need was met in 1870 with the passage of the "Act to Establish the Department of Justice". Since the enactment of this law, the department has undergone numerous reorganizations and expansions; in a recent year its principal component units included the Office of the Solicitor General, the Federal Bureau of Investigation, the Immigration and Naturalization Service, the Lands Division, the Office of Alien Property (see separate articles for descriptions of the preceding units), the Antitrust Division, the Tax Division, the Civil Division, and the Criminal Division. Under the general supervision of the attorney general and the heads of the component units, the functions of the department are carried out by the United States attorneys and United States marshals stationed in all of the States, territories, and possessions of the United States. The U.S. attorneys and marshals are appointed by the President with the approval of the Senate, upon the recommendation of the attorney general, for terms of four years.

The Antitrust Division is charged with the enforcement of the Federal antitrust laws and related enactments; the most important of the antitrust laws are the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914; see TRUST. The division is headed by an assistant attorney general, appointed by the President with the approval of the Senate, on the recommendation of the attorney general. Upon the receipt of complaints from private individuals or corporations, or on its own initiative, the division, in co-operation with the Federal Bureau of Investigation, conducts investigations leading to criminal prosecutions or suits in equity, designed to dissolve monopolies and to curb restraints of interstate and foreign trade.

The Tax Division, headed likewise by an assistant attorney general, is responsible for the conduct of all civil suits arising out of the internal revenue laws. It exercises compromise and settlement functions with re-

spect to tax litigation and controls the conduct of proceedings involving tax liens, mandamus, injunctions, and other writs. In addition it has jurisdiction over all questions of intergovernmental tax immunity. The division also controls and supervises criminal prosecutions arising under the internal revenue laws, except those involving the liquor tax laws. It collaborates with U.S. attorneys in the conduct of such litigation in trial and appellate courts.

The Civil Division supervises all matters relating to civil suits and claims, not otherwise assigned, involving the United States and its officers, agents, and employees. Its jurisdiction includes cases involving patents, fraud, tort claims, customs, and veterans' affairs. In addition it assumes responsibility for certain Court of Claims cases, such as those arising out of procurement and construction contracts.

The Criminal Division, under an assistant attorney general, is entrusted with the enforcement of the Federal criminal laws. It generally directs United States attorneys in the conduct of criminal prosecutions for violations of the Federal laws relating to such matters as counterfeiting, forgery, bribery, extortion, kidnaping, national banking and bankruptcy, narcotics, white slave traffic, labor-management relations, crimes on the high seas and on Federal government reservations, treason, espionage, sedition, and other offenses against the internal security of the nation. The Division also handles various types of civil cases, notably those arising under the immigration and naturalization laws and under the laws which relate to the manufacture and the sale of food, drugs, and cosmetics.

**JUSTICE OF THE PEACE**, in the judicial system of England and the United States, a judicial public officer with limited powers. In the United States the jurisdiction of the justice of the peace is defined by the statutes of the several States. In some States a justice of the peace may try only misdemeanors; in other States he has authority to act only as a committing magistrate and has no trial jurisdiction in criminal cases; in still other States, he has authority to try civil disputes in matters involving up to \$300, as well as limited criminal jurisdiction.

The office of justice of the peace, created as early as 1630, was one of the first instrumentalities of government created by the American colonists. The principal function of the official was the maintenance of order; his