

**VOLUME** 

T-Tz'u pages 1-344

# Compton's Encyclopedia

and Fact-Index

Compton's Learning Company, a division of Encyclopædia Britannica, Inc.

Chicago · Auckland · Geneva · London · Madrid · Manila Paris · Rome · Seoul · Sydney · Tokyo · Toronto

#### 1991 EDITION COMPTON'S ENCYCLOPEDIA

COPYRIGHT © 1991 by COMPTON'S LEARNING COMPANY DIVISION OF ENCYCLOPÆDIA BRITANNICA, INC.

All rights reserved for all countries.

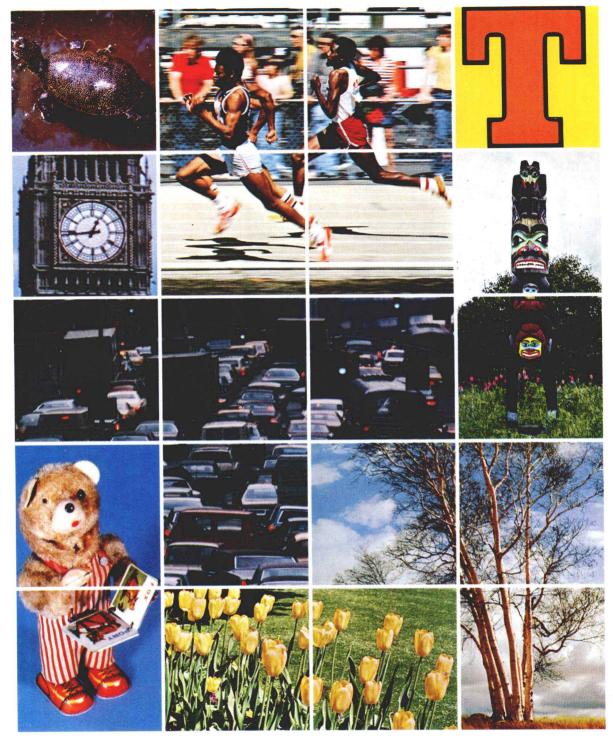
No part of this work may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

COPYRIGHT © 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991
BY COMPTON'S LEARNING COMPANY, DIVISION OF ENCYCLOPÆDIA BRITANNICA, INC.

Library of Congress Catalog Card Number: 89-81651 International Standard Book Number: 0-85229-530-8 Printed in U.S.A.



THE UNIVERSITY OF CHICAGO COMPTON'S ENCYCLOPEDIA IS PUBLISHED WITH THE EDITORIAL ADVICE OF THE FACULTIES OF THE UNIVERSITY OF CHICAGO



PHOTOS: Row 1: (far left) Joe B. Blossom—Photo Researchers/EB Inc.; (center) Gale Constable—Duomo. Row 2: (far left) Katherine Young/EB Inc.; (far right) Charles May—Photo Researchers. Row 3: (left) D. Healey—Magnum. Row 4: (far left) Nelson C. McClary; (right) G. Lord—Shostal/EB Inc. Row 5: (center) J. Horace McFarland Company.

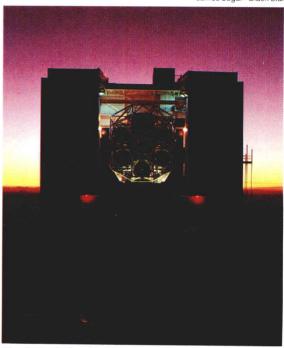
### **EXPLORING VOLUME 23**

Hirmer Fotoarchiv Munchen

James Sugar-Black Star



Why did the tomb of King Tutankhamen remain completely intact for nearly 2,000 years while dozens of other tombs in the same area were robbed of their treasures? 331.



How large is the effective mirror when the six 72-inch mirrors in this telescope focus together? 67.

The American expatriate Mary Cassatt painted '5 O'Clock Tea' while she was living in France. In what country did the custom of afternoon tea originate? 45.



'5 O'Clock Tea', oil on canvas, by Mary Stevenson Cassatt, Maria Hopkins Fund, Museum of Fine Arts, Boston



What is the altitude above sea level of the world's highest large lake and on which continent is it located? 194.

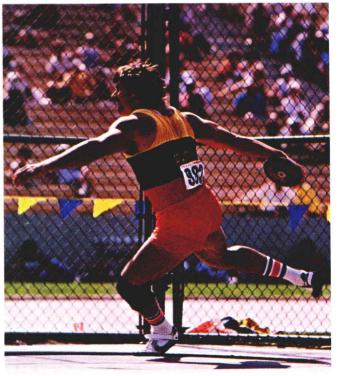
Jacques Jangoux

Why did Toulouse-Lautrec, the creator of the 'Moulin Rouge' group of posters and paintings, have pitifully short legs? 236.



EDI Studio Barcelona

In throwing field events what is the weight difference between the discus thrown by men and that thrown by women? 245.



Steven E. Sutton-Duomo



What picturesque city is so remote that it is rarely seen by tourists? 186 illustration.

What does QWERTY signify? 342.

In what famous London landmark was the Nazi leader Rudolf Hess imprisoned in 1941? 237.

What handicraft is a major industry in Turkey? 323 illustration.

How does a pyrometer work? 167.

About how long is a cubit? 2.

What two straits link the Sea of Marmara with the Black Sea and the Aegean Sea? 319.

What is the name of the first woman elected prime minister of the United Kingdom? 151.

Why is a water-repellent finish on a garment more comfortable than a waterproof one? 141.

Who was the first vice-president of the United States to succeed to the presidency because of the president's death? 333.

What is mercerizing and what does it do? 176.

During the Middle Ages, what European country produced the best and most cloth? 144.

What famous English painter exhibited at the Royal Academy at the age of 15? 327.

How many states receive electrical power service from the power-generating stations of the Tennessee Valley Authority? 101 illustration.

Why are capital letters sometimes called uppercase letters? 336.

What Russian revolutionary was assassinated in Mexico in 1940? 291.

What factor partially accounts for the high success rate of skin grafts? 250.

Where is the largest State Capitol in the United States? 128 illustration.

What are naval stores and how did they get their name? 328.

What was the original purpose of the German autobahns? 234.

Where in the United States is there a replica of the Parthenon built with the same dimensions as the original? 92 illustration.

Who was president of the United States when the Korean War began? 298.

What name is given to the first five books of the Hebrew Bible? 227.

What group of corrupt politicians finally lost their power as a result of Thomas Nast's editorial campaign against them? 333.

Who was the first woman to travel in space? 111.

What new mode of transmission that emerged in the 1980s has theoretically made it possible for a cable to carry hundreds of millions of messages? 63.

How can you estimate the age of a tree? 277.

Why do some tigers become man-eaters? 184.

Private automobiles account for what percentage of all passenger transportation in the United States? 256 graph.

What effect does a gravitational field have on clocks? 190.

What American patriotic society developed into a powerful political machine? 18.

What birds sometimes line their nests with hair they snatch from squirrels' tails? 197.

How did the thistle save the Scots from the Norse invaders? 171.

What is the nation's oldest state police force? 124.

What general of the Civil War won a battle while the order for his removal was on the way? 172.

How did iced tea originate? 46.

What Italian poet wrote some of his best works in a madhouse? 33.

Why can termites thrive on a diet of wood? 111.

What president of the United States later became chief justice of the United States? 10.

What continent is the home of the tiger? 183.

Harry Truman was given the middle initial S. What does that initial stand for? 294.

What famous composer was helped for many years by a wealthy woman he never met? 44.

How were the foundations of Swiss independence laid? 79.

What country lies on the "roof of the world"? 180.

What is registered by a tachometer? 3.

What United States city is famous for its handmade cigars? 19.

In what country is Africa's highest peak? 22.

What pudding is derived from the roots of the cassava plant? 27.

How does the standard relay race differ from a medley relay race? 244.

What is the law of primogeniture? 196.

Tierra del Fuego, the island group making up the southern tip of South America, is divided between what two countries? 183.

Who was called the greatest football player and the greatest male athlete of the first half of the 20th century? 175.

What is the Kroll process? 193.

What four championships must a tennis player win to achieve a Grand Slam? 108.

What is the Baudot code? 58.

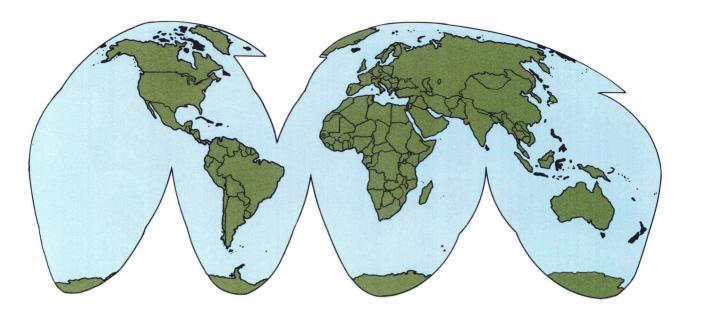
How does the temperature at which it incubates affect a turtle egg? 329.

Where is the world's longest single line of railroad track? 266.

What kind of revolt had its start in California in 1978? 37.

What are the four basic taste sensations? 215.

How did the Great Smoky Mountains get their name? 81 illustration.



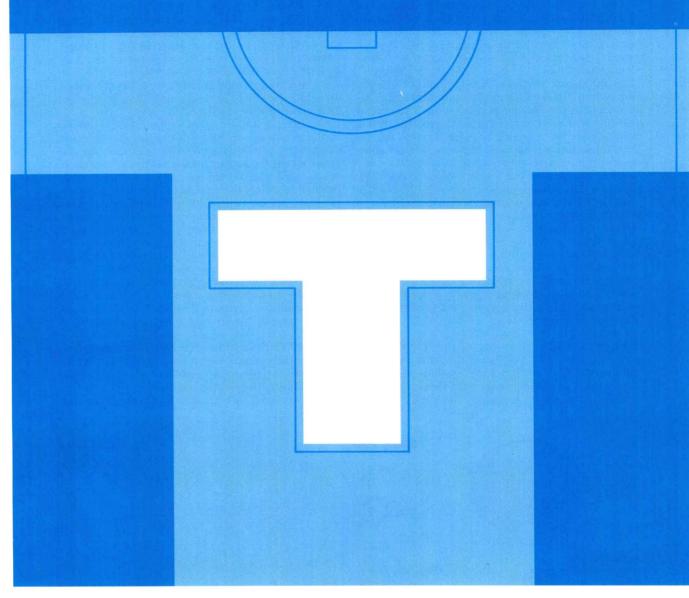
## **HERE AND THERE IN VOLUME 23**

From the A-1 satellite to the zygote cell, thousands of subjects are gathered together in Compton's Encyclopedia and Fact-Index. Organized alphabetically, they are drawn from every field of knowledge. Readers who want to explore their favorite fields in this volume can use this subject-area outline. While it may serve as a study guide, a specialized learning experience, or simply a key for browsing, it is not a complete table of contents.

ii

Arts	Titanium
Peter Ilich Tchaikovsky 44	
Alfred, Lord Tennyson 109	Living Things
William Makepeace Thackeray 145	8
Theater	Tapir
Dylan Thomas	Tea
Henry Thoreau	Termite
James Thurber	Thistle
J.R.R. Tolkien	Tiger
Leo Tolstoi	Tobacco
Arturo Toscanini	Tomato
Henri de Toulouse-Lautrec 236	Tree
Mark Twain	Trout
Type and Typography	Tumbleweed
1 2 4 30 (1882)	Turkey
Physical Science	Turtle
Tantalum	Medicine
Edward Teller 79	1,10d10IIIC
Time	Teeth and Gums 51
Tin	
	Tendon

Therapy	Turkey
Throat	Turkmen Soviet Socialist Republic 326
Tongue	TT'
Tissue Transplantation	History
Trauma Center	
	William Howard Taft 6
Technology and Business	Taiping Rebellion
	Talleyrand
Tachometer	Tammany Hall
Tank	Zachary Taylor 41
Tape Recorder	Tecumseh
Taxidermy	Mother Teresa
Technology 48	Margaret Thatcher
Telecommunication	Third World
Telegraph	Thirty Years' War
Telemetry 60	Titles of Nobility
Telephone	Tito
Telescope	Trojan War
Television	Leon Trotsky
Textile	Pierre Elliott Trudeau
	Harry S. Truman
	House of Tudor
Tools	Nat Turner
Traffic and Traffic Control	Nat Turner
Transistor	Social and Political Science
Transportation	Social and Political Science
Truck and Trucking	
Tunnel	Tariff
Turbine	Taxation
Typesetting	Terrorism
	Totalitarianism
Geography	Trademark
	Treaty
Tadzhik Soviet Socialist Republic 4	
Tahiti	Potpourri
Taiwan	
Tanzania	Tabernacle
Tasmania	Table Tennis
Tehran	Taj Mahal
Tennessee	Talmud
Texas	Taoism
Thailand	Tapestry
	Tattoo
Thames River	Temperance Movement
Tibet	
Tijuana	Tennis
Timbuktu	Tent
Togo	Thanksgiving
Tokyo	Theosophy
Tonga	Jim Thorpe
Toronto	Bill Tilden
Transkei	Torah
Transylvania	Totemism and Taboo
Trinidad and Tobago 288	Tower of London
	Tower of London
Tripoli	Toys
1	Toys
internal control of the control of t	Toys



# The letter T

probably started as a sign for a mark or brand, as in Egyptian hiero-glyphic writing (1) and in a very early Semitic writing used about 1500 B.C. on the Sinai Peninsula (2). About 1000 B.C., in Byblos and other Phoenician and Canaanite centers, both forms of this sign were used for the sound "t." They were given the name taw, meaning "mark" (3).

The Greeks named the sign tau. They also changed its form slightly by omitting the top of the upright stroke (4). The Romans took this sign into Latin. From Latin the form of the capital letter T came without change into English.

The English small handwritten "t" is simply the capital letter written quickly with curves (5). This form appeared in the handwriting of later Roman times. In English these curves connect the letter to its neighbors (6). One printed form of the small "t" omits the connecting lines but keeps the bottom curve.

× 1	+ 2
+X 3	<b>T</b>
# 5	ate 6

**TABARI, AT-** (839?–923). In the 3rd century of Islam's history the scholar Abu Ja'far Muhammad ibn Jarir at-Tabari was a brilliant interpreter of the Koran and the compiler of an exhaustive history of his religion (see Islam; Koran). In his lifetime his work spanned most of the Muslim sciences, but he is today remembered as author-compiler of 'Koran Commentary' and 'History of Prophets and Kings'.

At-Tabari was born about 839 in Amol, Tabaristan, now in Iran. His family's wealth and his natural abilities made it possible for him to study in the major learning centers of Iraq, Syria, and Egypt. During his travels he collected many oral and written reports from numerous scholars and libraries. He used them later in his own writing. At-Tabari spent the later years of his life as a teacher and writer in Baghdad, capital of the 'Abbasid caliphate, where he died in 923.

In the 'Koran Commentary' at-Tabari used all the historical information and textual interpretations he could collect about the Koran. By not passing his own judgment, he admitted on principle that the sacred book could be interpreted many ways. In the 'History of Prophets and Kings', too, he made no attempt to deal with the problems of differing accounts of events. Covering the period from the creation to AD 915, the work was primarily the story of a religious tradition, with God as supreme actor.

**TABERNACLE.** According to the tradition preserved in the Bible, the Tabernacle was a portable sanctuary used by the Israelites as a place of worship during their wanderings in the wilderness. In Hebrew it is called *mishkan*, meaning "dwelling," because

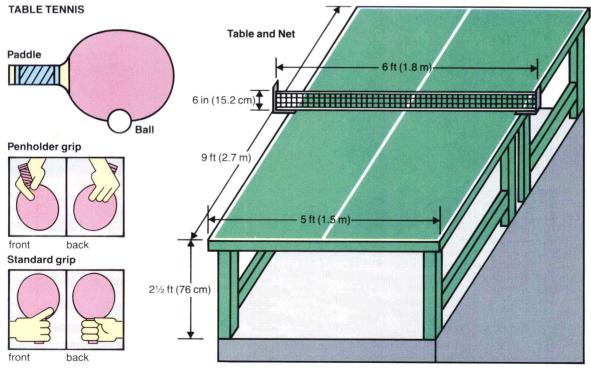
Yahweh, the God of the Israelites, lived there among his people, or 'ohel mo'ed, meaning "tent of meeting," because Yahweh met there with Moses (see Moses).

The Tabernacle was made of gifts from the people of Israel—gold, silver, bronze, brass, acacia wood, fine and ordinary linen, tanned rams' hides, and violet, purple, and scarlet veils. It consisted of the Most Holy Place, or Holy of Holies, and the Holy Place, or Holy, and was a boothlike structure 30 cubits long, 10 cubits wide, and 10 cubits high. (A cubit is about 18 inches, or 46 centimeters.)

The Ark of the Covenant, containing the tablets of the Ten Commandments—was the sole object in the Most Holy Place, which could be entered only by Moses and by the high priest on the Day of Atonement. It was there that the presence of Yahweh supposedly dwelled. The Holy Place could be entered by ordinary priests. It contained the Table of the Showbread, the Menorah, or seven-branched candlestick, and an incense altar. In the court surrounding the Tabernacle were the four-horned altar of burnt sacrifice and a laver for the ritual cleansings of the priests. Ordinary worshipers could not go beyond the court.

In modern usage the term tabernacle can refer to a receptacle on the altar of some churches in which the communion elements of bread and wine are kept. It is often metal—sometimes gold-lined—and veiled.

**TABLE TENNIS.** One of the fastest-moving indoor sports is table tennis, which is also called Ping-Pong. The game is played with paddles and a lightweight celluloid ball. The paddles are made of wood and are usually surfaced on both sides with rubber, sandpa-



2

per, leather, or cork. Experienced players usually use a paddle surfaced with a slightly sticky, soft sheet of rubber atop a thin layer of spongy plastic or rubber. Such paddles provide increased power and spin but are more difficult to learn to control. The illustration gives the proper table and net dimensions.

Table tennis rules resemble those of regular tennis (see Tennis). Two or four persons may play. The first side to gain 21 points is the winner. If the score reaches 20 to 20, play continues past 21 until one side gains a 2-point lead and thereby wins.

The game begins with the service, or serve. The first player (the server) must toss the ball up and hit it on the way down with his paddle, bouncing it from his side of the table, over the net, and onto the other court. The server loses a point if the ball is hit into the net or it fails to land on the other side of the table. This rule applies throughout the game. The ball must be returned after its first bounce, or a point is lost. Service changes sides every five points. In games over 21 it changes sides with every point past 20.

The exact origin of table tennis is unknown. It became popular during the last half of the 19th century. The celluloid ball was introduced in the 1890s and the solid, rubber-faced paddle in 1905. When the game boomed in popularity in the 1920s, the International Table Tennis Federation (ITTF) was formed. The United States Table Tennis Association, founded in the early 1930s, is a member of the ITTF. Since 1957 the ITTF has sponsored international competitions every two years.

#### TABOO see TOTEMISM AND TABOO.

**TABOR, Horace** (1830–99). One of Colorado's most colorful silver barons, Horace Tabor became a legend in his own lifetime. He made and lost an estimated 9-million-dollar fortune in 15 years.

Horace Austin Warner Tabor was born in Holland, Vt., on Nov. 26, 1830. In 1855 he joined a company of immigrants traveling to Kansas. There he served two years as a member of the Topeka legislature. In 1857 he returned to Vermont to marry Augusta Pierce. Tabor took his family to Colorado in 1859 to join the Pikes Peak gold rush.

Tabor's one-third share in the Little Pittsburgh silver mine earned him more than 1.5 million dollars by the time the mine was sold. When Oro City was incorporated and renamed Leadville in 1878, Tabor became its first mayor. The following year he became Colorado's lieutenant governor. He served until 1883, when he filled out an unexpired three-month term in the United States Senate. Tabor divorced Augusta, and in 1882 he married a young divorcée, Elizabeth McCourt ("Baby") Doe.

Tabor's civic contributions included the Tabor Grand Opera House in Denver. The financial panic of 1893 brought him ruin. He died on April 10, 1899. His widow was found in a mine shack in 1935, frozen to death. Tabor's life was the basis of the opera 'The Ballad of Baby Doe' by Douglas Moore.

**TACHOMETER.** Airplanes, boats, and many cars are equipped with tachometers that indicate the engine speed—that is, the speed of a rotating shaft in revolutions per minute (rpm). The word tachometer comes from the Greek *tachos*, "speed," and *metria*, "measure." Because an unexpected loss of engine speed often leads to trouble, observing the instrument dial allows an operator to anticipate engine failure.

The speedometer of an automobile is also a type of tachometer in which the rpms of the drive shaft are measured. For a known average tire diameter, the wheel's rpm can be converted to the vehicle's speed, which is then displayed on the dial in miles per hour, kilometers per hour, or both.

In many car speedometers, a flexible cable geared to the drive shaft rotates a permanent magnet within the speedometer. This produces a magnetic field in a surrounding drum that tends to turn the drum. The drum is restrained by a spring to which the instrument's pointer is connected. The faster the engine speed, the more the spring is loaded and the pointer deflected.

Electric tachometers generally utilize a small generator whose output voltage varies with the rotational speed of the shaft. In this case the output dial is simply a voltmeter calibrated to indicate rpm (see Galvanometer). In some modern cars the addition of a microchip computer permits the engine speed and the vehicle speed to be displayed through a numerical readout or in terms of a series of indicating marks in which the number of marks shown is proportional to the speed.

Early mechanical tachometers operated by centrifugal force, driving a set of revolving fly-ball weights outward as the speed increased. These were connected through a linkage to a spring that was compressed as the balls spun outward. A pointer coupled to the spring then indicated the speed. This device was invented by the Scottish engineer James Watt, who also used it to control the early steam engines (see Steam Engine).

A different device must be used if there is no way to connect the instrument directly to the engine shaft. For example, garage mechanics may use a vibrating-reed tachometer to test the performance of engines not equipped with a permanently installed tachometer. This instrument consists of a series of marked vibrating reeds. Since engines vibrate slightly with a frequency that varies with their speed, placing the instrument on the engine will cause one of the tuned reeds to vibrate and thus indicate the rpm.

Other devices can also be used as tachometers when the rotating shaft is visible. One of these is the stroboscope in which the frequency of a light pulse can be adjusted until a mark on the rotating shaft appears stationary. The frequency at which this occurs can then be read in rpms. The small stroboscopes on some record player turntables also serve as tachometers. Here the speed of the turntable is adjusted until the strobe marks are steady, corresponding to the correct rpm setting for the record.

**TACITUS, Cornelius** (55?–120?). Little is known of the great Roman historian Tacitus. He was educated to be an orator and became a senator and a consul. Agricola, a Roman general and governor of Britain, was his father-in-law. Pliny the Younger was his good friend and admirer.

The works of Tacitus are filled with dramatic power and clearly drawn character studies. The 'Annals' deals with the emperors Tiberius, Claudius, and Nero. Only 12 of the original 18 books survive. The 'Histories' deal with the events of the first century of the Roman Empire. They too are incomplete.

Of the minor works surviving, 'Agricola', a biography, includes an account of the conquest of Britain; 'Germania' contains information on German tribal customs; and 'A Dialogue on Oratory' sheds light on Roman culture. (See also Latin Literature.)

TACOMA, Wash. The city of Tacoma, 150 miles (240 kilometers) from the Pacific Ocean, has one of the finest natural harbors in the world. Here, on Commencement Bay at the southern



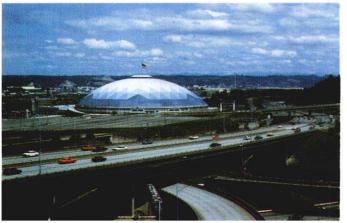
end of Puget Sound, ships find ample docking facilities. The port of Tacoma operates large public marine terminals with berthing capacity for several ships. Privately-owned docking facilities provide additional berth space for many more vessels. Switching systems owned by the port connect the harbor to the transcontinental railroads that serve Tacoma.

Incoming ships bring logs, lumber, and copper and other ores. Outbound vessels are loaded with wheat from eastern Washington, lumber, plywood, furniture, copper, aluminum, chemical products, paper, and other products.

Although some industries left the Tacoma area in the decades following World War II, there are still about 60 manufacturing firms located here. The variety of manufacturing includes food products, textiles, lumber and wood products, furniture, paper, printing and publishing, chemicals, petroleum, glass- and stoneware, rubber and plastic products, metal products, machinery, electrical equipment, and transportation equipment—primarily shipbuilding and aircraft construction.

The Tacoma Dome, located near Interstate 5, opened in 1983. It is the largest wooden-domed arena in the world.

Rod Koon-Port of Tacoma



The city is located in a beautiful setting. From the waterfront it rises to a plateau and then climbs into the green hills. West of the city is the broad sweep of Puget Sound. The rugged Olympic Mountains stand across the sound to the northwest. Some 50 miles (80 kilometers) to the southeast, dominating the Cascade Range, is snowcapped Mount Rainier.

Within Tacoma is Wright Park's arboretum. In Point Defiance Park are gardens, virgin forest, a lake, an aquarium, a zoo, and restored Fort Nisqually. The city is the site of the University of Puget Sound, Pacific Lutheran University, and Washington State Historical Society Museum. In 1983 the Tacoma Dome was opened. At 15 stories in height and spanning 530 feet (160 meters), it is the world's largest wooden-domed arena. Fort Lewis and McChord Air Force Base are near the city.

Tacoma serves as a market and wholesale distributing point for the farming and timber areas west to the Pacific Ocean and 60 miles (100 kilometers) to the south. Power is supplied by city-owned hydroelectric plants in the mountains and by a federal plant on the Columbia River. The nation's first municipally owned moving sidewalks are in downtown Tacoma.

The Tacoma Narrows Bridge spans Puget Sound. Rebuilt in 1950 after being destroyed during a storm, this four-lane structure, 5,979 feet (1,822 meters) long, is one of the longest suspension bridges in the world.

Captain George Vancouver made the first recorded visit to Tacoma's future site in 1792. Nearby Fort Nisqually was built by the Hudson's Bay Company in 1833. In 1852 Nicholas De Lin set up the first business in the area when he built a sawmill. Old Tacoma was laid out in 1868. New Tacoma was established by the Northern Pacific Railway when it arrived in 1873. The two areas were consolidated in 1884. During both World Wars the city was a shipbuilding center. Boatbuilding continues to be a major industry. The seat of Pierce County, it has a council-manager form of government. Population (1985 estimate), 160,800.

TADPOLE see AMPHIBIAN.

TADZHIK SO-VIET SOCIALIST REPUBLIC. The southernmost republic in the Soviet Union is the Tadzhik Soviet Socialist Republic. Located in Central Asia, the republic is bounded on



the south by Afghanistan, on the east by China, and on the west and north by the Soviet republics of Uzbek and Kirgiz. Often called Tadzhikistan, its total area is 55,250 square miles (143,100 square kilometers). The capital city is Dushanbe.

The republic consists in general of high mountain terrain. In the Pamir range there are several mountains more than 20,000 feet (6,100 meters) high.

Among them are Lenin Peak at 23,405 feet (7,134 meters) and Communism Peak, the highest mountain in the Soviet Union, at 24,590 feet (7,495 meters). To the south of Communism Peak is the glacier called Lednik Fedchenko. At 48 miles (77 kilometers) in length, it is the largest glacier in the Soviet Union.

The chief rivers of the republic are the Zeravshan, the Syr Darya, and the Amu Darya (formerly the Oxus), the longest river in Central Asia (see Amu Darya). There are many lakes, some of which were formed by glaciers or avalanches that blocked existing streams. Largest of the glacier-formed lakes is Karakul.

The lowlands are hot and dry in summer, with an average annual rainfall of less than 10 inches (25 centimeters). In the foothills it is cooler, and there is more rain. In the high mountains the yearly average temperature is below freezing, and there is little rain.

The Tadzhik peoples, who make up more than half the population, speak a form of Persian called Tadzhik. They are Muslims, as are their close neighbors, the Uzbeks. The Muslims of Central Asia have perpetuated their religious practices and education in spite of strong opposition from the Soviet government. Other major ethnic groups in the population include Uzbeks, Russians, Tatars, Germans, and Ukrainians.

About half of the population is engaged in collective farming in which the land is owned by the government and the work is performed by communities of people. The collectivization of agriculture began in 1928. One third of the workers are in the industrial sector, and about one eighth are white-collar workers.

Although half of the people work in farming, the republic has a great variety of industry and manufacturing. There are rich mineral deposits of iron, lead, zinc, antimony, mercury, gold, tin, and tungsten. There are also nonmetallic deposits of common salt, carbonates, fluorite, arsenic, quartz sand, asbestos, and precious and semiprecious stones. Coal is the major fuel resource, though there are considerable deposits of petroleum and natural gas.

Among the products made in Tadzhikistan are cotton and silk textiles, carpets, clothing, footwear, dried fruits, wines, tobacco, cement, equipment for use in the petroleum industry, electrical equipment, household appliances, and spare parts for tractors and agricultural machinery. The major agricultural products are cereals, cotton, potatoes, vegetables, and fruits and berries.

Many of the Tadzhiks were brought under Russian rule late in the 19th century. After the Revolution of 1917, much of the region was attached to other republics. In 1929 Tadzhikistan became a separate republic. A major earthquake struck the republic in January 1989, killing about 275 people and burying two villages in mud and clay. In February 1990, after several thousand Armenian refugees from Azerbaijan arrived in Tadzhikistan, volatile anti-Armenian riots erupted in Dushanbe. Soviet authorities then declared a state of emergency to prevent the chaos that resulted from a similar outbreak a month earlier in Azerbaijan. Population (1989 estimate), 5,112,000.

**TAEGU, South Korea.** Located in the southeastern region of the country, Taegu is the only major city of South Korea situated entirely away from the coast. The city sits in a valley surrounded by a ring of mountains that reach a height of about 3,500 feet (1,070 meters). Because of its location, it has greater extremes of weather than do coastal cities. It has both the coldest winters and the hottest summers of South Korea's urban centers. To the west of the city the Naktong and Kumho rivers meet.

One of the most fascinating of South Korea's cultural attractions is located to the west of Taegu. The Haeinsa Temple, adjacent to the Kayasan National Park, is a major tourist attraction. The term temple is misleading. Haeinsa is actually a large complex of 93 buildings spread over several miles. This Buddhist shrine, begun in AD 802, contains a number of valuable religious treasures, the most significant of which is the Tripitika, a collection of more than 80,000 wooden blocks engraved with Buddhist scriptures. Carved in the 13th century, these blocks contain the most complete set of Buddhist religious texts in Asia.

Closer to the city there are a number of recreational areas, including the Susung Reservoir, used for skating in the winter and boating in the summer; the Tong Chon Resort; Mangwuli Park; and Apsan Park. From Apsan Park a cable car takes visitors up the Ap Mountain for a view of the city. There are three museums in the area containing a variety of historical and cultural treasures.

Taegu, whose population has increased tenfold since 1950, is one of the most industrialized cities of South Korea. Noted especially for its textile manufacturing, it has, in addition, metal and machine industries. The city is also a transportation hub and a market center. Its West Gate market is one of the oldest and largest in the country.

Although Taegu's industries and markets play a significant role in the nation's economy, the city is far better known in the Far East for the quality of the apples produced in the surrounding area. This agricultural business started early in the 20th century when Presbyterian missionaries from the United States grafted cuttings from American apple trees onto the local erab apple trees.

The missionaries were also responsible for a notable feature of Taegu's cultural life—its schools. The first Western school, Keisung Boys' Academy, was started in the 1890s. Today the city has five universities and several colleges. Its leading schools are Kyongbuk National University, Yongnam University, Keimyung Christian University, Taegu University, and Hyosong Women's University.

There have been human settlements on the site of Taegu since prehistoric times, probably dating back to the Stone Age. Centuries later the settlements had become a walled city dominated by the Talsong fortress. During the Yi Dynasty from 1392 to 1910, Taegu was the capital of Kyongsang Province. Today it is the capital of North Kyongsang. Population (1989 estimate), 2,206,000.

# WILLIAM H. TAFT— 27th President of the United States

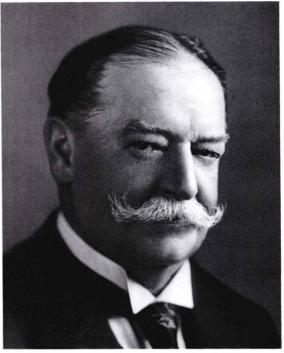
TAFT, William Howard (1857–1930; president 1909–1913). The only man in the nation to hold its two highest offices was William Howard Taft. He was the 27th president of the United States and later (1921–30) the chief justice of the United States. No man was better fitted for these posts by long years of experience. He had been in public office almost continuously since 1881. He was the first civil governor of the Philippines (1901–3) and secretary of war in President Theodore Roosevelt's Cabinet (1904–9), only two of the many high positions he held.

#### A Large and Smiling Man

His large size and his famous chuckle made Taft a memorable figure. He was five feet eleven inches tall, with fair skin, clear blue eyes, and light hair. At the time he was president, he weighed 350 pounds. He joked about his bulk and took no offense at the jokes of others. Asked to accept a "chair of law" at Yale University, he replied that he would if they could make it a "sofa of law." Chairs were a problem. He always "looked before he sat" to avoid armchairs or antiques in which he might get stuck or collapse.

When he was governor of the Philippines he made a trip into the mountains for his health. He cabled Secretary of War Elihu Root: "Stood trip well. Rode horseback 25 miles to 5,000 feet elevation." Root cabled back: "Referring to your telegram . . . how is the horse?"

His biographer, Henry F. Pringle, has described the Taft chuckle: "It was by all odds the most infectious chuckle in the history of politics. It started with a silent trembling of Taft's ample stomach. The next sign was a pause in the reading of his speech, and the spread of a slow grin across his face. Then came a kind of gulp which seemed to escape without his being aware that the climax was near. Laughter fol-



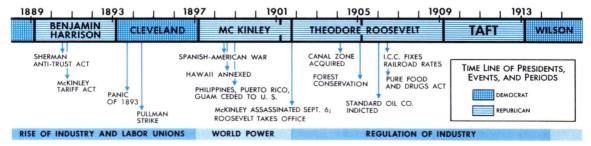
May

lowed hard on the chuckle itself, and the audience invariably joined in."

He had a reputation for laziness and for putting things off from day to day that was probably unfounded, for he accomplished a vast amount of work. A brilliant conversationalist and storyteller, he was a perfect host. He loved to entertain and be entertained, and he often dined out in private homes, though presidents usually do not do so while they are in office. In spite of his size he was a graceful dancer and played tennis well. He rode horseback almost daily, was an ardent golfer, and a baseball "fan."

#### Mrs. Taft a Gracious Hostess

Mrs. Taft also contributed a great deal to the gracious social life of the White House. She was a fine musician, and her frequent musicales with guest artists were delightful affairs. In her travels with her husband she had learned to love the cherry blossoms



of Japan, and the evening band concerts on the Luneta, a drive in Manila, capital of the Philippine Islands. Mrs. Taft was responsible for the planting of the famous cherry trees along the Tidal Basin in Washington. She had Potomac Park converted into a Luneta, with a bandstand at either end. On pleasant summer evenings people strolled or drove through the park, visiting with their friends and listening to the music. The president often attended, riding his big black horse. (See also White House, section "Hostesses of the White House.")

#### Ancestry and Childhood

William Howard Taft was born into a wealthy and prominent family of Cincinnati, Ohio. The first Taft in America, Robert, was a carpenter and farmer. He came from England and settled in Massachusetts some time before 1667. William's father, Alphonso, was a successful lawyer and judge. He was secretary of war and attorney general in President Grant's Cabinet and minister to Austria-Hungary and Russia.

Alphonso's first wife, Fanny Phelps, died in 1852. Two sons, Charles Phelps and Peter Rawson, survived from this marriage. In 1853 he married Louisa Torrey. They had five children, of whom four survived—William Howard, born Sept. 15, 1857, Henry Waters, Horace Dutton, and Fanny Louise.

The family lived in a large house in the Mt. Auburn section of Cincinnati. William Howard was known as "big lub," for he was heavy from infancy. Goodnatured and popular, he had a happy, normal boyhood. He engaged in feuds and battles with stones with the "gangs" of neighboring hills. He played baseball in an old quarry and swam and skated. In the summer the five boys visited grandfather Torrey in Millbury, Mass., and paid for their vacations by cutting wood in his wood lot. William attended the Unitarian church; he was a member all his life.

In 1874 Taft entered Yale University, from which his father was graduated. Although he was not a brilliant student he was a plodder, and in 1878 he was graduated second in his class. He received his degree from the Cincinnati Law School in 1880.

He practiced law very little. His father's prominence and his own friendly personality won him a succession of political appointments—assistant district attorney (1881), collector of internal revenue (1882–83), judge of the state Supreme Court (1887–90), solicitor general of the United States (1890–91), and judge of the federal circuit court (1891–99). By now he was dreaming of an appointment to the United States Supreme Court, his greatest ambition.

#### Marriage and Family

Taft first met Helen (Nellie) Herron, daughter of a Cincinnati attorney, at a winter night's coasting party. A few years later she organized a literary "salon" of which he was a member. They were married in June 1886. Mr. Herron gave them a lot on Walnut Hills, and they built a house overlooking the Ohio River. They had three children—Robert

### TAFT'S ADMINISTRATION

American occupation of Cuba ended (1909) Dispute with Venezuela arbitrated (1909) Payne-Aldrich Tariff passed (1909) Rules of House of Representatives reformed (1910) Postal Savings Bank created (1910) Publication of campaign expenses in federal elections required (1910) Mann-Elkins Act (1910) Standard Oil Company and tobacco trusts dissolved by Supreme Court (1911) Bills for tariff reductions vetoed (1911) Parcel Post established (1912 Panama Canal Tolls Bill passed (1912) Territorial government set up in Alaska (1912) New Mexico and Arizona admitted (1912) Arbitration treaties with France and Great Britain (1912) 16th Amendment adopted, giving Congress power to levy income taxes (1913) Department of Labor created (1913); Children's Bureau (1912)

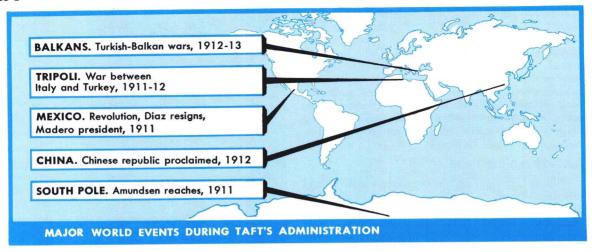
Alphonso, Helen, and Charles Phelps. In 1892 they went to Murray Bay, Quebec, on the St. Lawrence. They returned nearly every summer thereafter. (See White House, section "Children in the White House.")

#### Governor of the Philippines

In 1900 President McKinley made Taft President of the Philippine Commission. His task was to form a



President and Mrs. Taft are shown with their three children. Charles (left) became a lawyer. Helen Taft Manning was dean of Bryn Mawr College and professor of history. Robert was a United States senator and Republican leader of the Senate.



civil government in a country disrupted by the Spanish-American War and the insurrection of Aguinaldo.

Taft became very fond of the Filipinos and soon endeared himself to them. General Arthur MacArthur, the military governor, had been ruling them in despotic fashion and the two men came into immediate conflict. On July 4, 1901, Taft was appointed civil governor of the Philippines, with full responsibility for reorganizing the national and municipal governments, the judiciary and police, and the taxation system. Taft went to Rome to discuss the land ownership of the Spanish friars with the pope. As a result of his negotiations, all but 10,000 of 400,000 acres owned by the friars was purchased for  $7\frac{1}{2}$  million dollars and sold in small parcels on easy terms. By 1912 there were 50,000 new landowners.



In a 1905 newspaper cartoon Secretary of War Taft attacks obstacles to the Panama Canal. In his shovel are "General Red Tape" and "Yellow Jack," the yellow fever peril. President Roosevelt and Uncle Sam look on.

#### Secretary of War-Roosevelt's "Trouble Shooter"

At the end of 1903 President Roosevelt requested that Taft replace Elihu Root as secretary of war. When Roosevelt went on his frequent trips away from Washington he felt that all would go well because he had "left Taft sitting on the lid." During an illness of John Hay, Taft was acting secretary of state. After Hay's death, Root returned to the Cabinet as secretary of state. Roosevelt, Taft, and Root worked together so closely and so harmoniously that they came to be known as the "three musketeers."

As Roosevelt's "trouble shooter," Taft traveled almost as much as his chief. He visited the Canal Zone many times to supervise actual construction of the Panama Canal. In 1905, while the Russo-Japanese War was being waged, Roosevelt thought it would be wise to send his strong, peaceful secretary of war on a trip to the Far East. He visited the Japanese royal family and let it be known that the United States was determined to maintain peace in the Pacific. In 1906 he rushed to Cuba to stop a threatened revolution.

#### The Presidency

As the elections of 1908 drew near, Roosevelt began to think of a successor who would continue his policies. The story is told that one evening in the White House, in conversation with Mr. and Mrs. Taft, Roosevelt leaned back in an armchair, closed his eyes, and in a funereal voice said, "I am a seventh son of a seventh daughter, and I have clairvoyant powers. I see a man weighing 350 pounds. There is something hanging over his head. I cannot make out what it is. At one time it looks like the presidency, then again it looks like the chief justiceship." "Make it the presidency," said Mrs. Taft. "Make it the chief justiceship," said Mr. Taft. Mrs. Taft and his brothers persuaded him to accept the nomination for the presidency. He was easily elected over William Jennings Bryan, who was now defeated for the third time. In 1909, with James S. Sherman as vice-president, he began a term that was doomed to trouble.