

Compton's Encyclopedia

and Fact-Index

F.E. Compton Company

Division of Encyclopaedia Britannica, Inc.

1980 EDITION COMPTON'S ENCYCLOPEDIA

COPYRIGHT © 1980 by F. E. COMPTON COMPANY DIVISION OF ENCYCLOPAEDIA 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

BY F. E. COMPTON COMPANY, DIVISION OF ENCYCLOPAEDIA BRITANNICA, INC.

Library of Congress Catalog Card Number: 78-67841 International Standard Book Number: 0-85229-350-X 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

EXPLORING COMPTON'S—VOLUME 14

Where was the first Labor party launched? 91.

What animal can cast off its tail and then grow a new one? 319.

Why do some plants "form partnerships"? 250 pictures.

What large animal is only an inch long at birth? 2. To what family does the lion belong? 296.

Who learned to "hear" through her fingertips? 24. Why do leaves change color in the fall? 178, 180.



What reptile runs on its hind feet like a man? 320.

What color is a live lobster? 322.

What lawyer wrote a famous national song? 46. Where did Peter the Great build a magnificent "window" toward Europe? 190.

What city was said to be built on human bones? 190.

What explorer gave France its claim to the entire Mississippi Valley? 128.

What state is noted for its thoroughbred horses? 29.

Whose teachings on nonviolent resistance impressed young Martin Luther King, Jr.? 54.

What strenuous game was learned from the American Indians? 98-99.

How much of the land area of the United States is not privately owned? 108.

What British institution is called the Old Lady of Threadneedle Street? 339.

What African town is named for a president of the United States? 204.

Who was the most famous of all the pirates? 48b. When and why was handmade lace smuggled into England? 95.

Which of the Seven Wonders of the World was built to save lives? 270.

In what state are two of the world's largest telescopes? 356.

What will boil on a cake of ice? 301.

What toy helped Franklin find electricity in the lightning? 64.

How do Moslems believe the Koran originated? 74. What kind of rock is made up of animals' shells? 278.

How long have forks been used in Europe? 69.

What sovereign received a pair of the first machine-knit silk stockings? 67.

What invention was the first step toward the reliable calculation of longitude? 158.

How did British sailors get the nickname of "limeys"? 278.

What is a time lock? 325.

Why are green leaves important to man? 177.

Who was America's "lone eagle of the sky"? 288. Why does a kite fly? 63.

What were the "turtle ships"? 76g, 77a pictures. What are the duties of the famous "beefeaters"? 341.

How do natural and man-made laws differ? 165. Why is Liberia of special interest to Americans? 204.

What French nobleman took part in three revolutions? 101.

Who introduced the resolution in the Continental Congress to declare the colonies independent? 180b.

One out of five Koreans has the same surname. What is it? 75b.

How was the territory of the United States doubled at one stroke? 383.

What missionary lived to tell of his lion bite? 316. What reformer made Scotland Protestant? 73.

Who said: "I am the state"? 359.

Who built the first West Point fortifications? 78c.

How was Martin Luther saved from death on his return from the Diet of Worms? 397.

How do we know that European lakes were inhabited 10,000 years ago? 103.

What is a "sheepshank"? 72.

What world language did not have to be invented? 153.

What British author told of India in stories and verse? 59.

Who was the first Republican president of the United States? 284d.

In what season of the year do most lemons ripen?

Which is the only bird that gives us leather? 175. Why are skyscrapers seldom damaged by lightning? 275.

How did the expression "crazy as a loon" originate? 350.

What insect lays its eggs in overlapping rows, like shingles? 23.

How does the ladybug defend itself? 100.



What relative of the leopard is trained to aid in hunting? 196a.

What birds are hatched out on a bed of fishbones? 56.

Why can the lynx hunt so well at night? 399.

Who was the first American to win the Nobel prize in literature? 202.

How did the lyrebird get its name? 400 picture.

Which is better: to practice for five hours continuously or for one hour on five different days? 171.

Explain why lemurs were called "ghosts." 188.

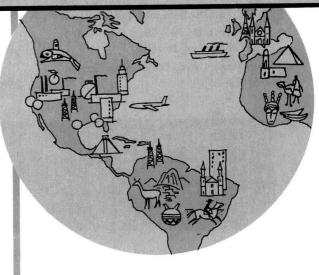
KEY TO PRONUNCIATION



Pronunciations have been indicated in the body of this work only for words which present special difficulties. For the pronunciation of other words, consult the Fact-Index. Marked letters are sounded as in the following words: $c\bar{a}pe$, $a\bar{a}t$, $b\bar{a}t$

HERE AND THERE IN VOLUME 14

AT ODD TIMES when you are just looking for "something interesting to read," without any special plan in mind, this list will help you. With this as a guide, you may visit faraway countries, watch people at their work and play, meet famous persons of ancient and modern times, review history's most brilliant incidents, explore the marvels of nature and science, play games—in short, find whatever suits your fancy of the moment. This list is not intended to serve as a table of contents, an index, or a study guide. For these purposes consult the Fact-Index and the Reference-Outlines.



| Picture Highlights A Tour of Korea | Learning for the Enrichment of Living . 169 Leisure—How to Use It Wisely 185 Talking by Mail—The Art of Letter Writing |
|--|---|
| Reading for Pleasure "In Days of Old, When Knights Were Bold" | Historical Highlights "The First City Founded After the Flood" 61 The Battle of Lexington and Concord 203 Louis—Kings of France 358 Famous People |
| Africa | John Keats, Poet of Beauty 23 |
| | Helen Keller's Triumph over Handicaps . 24 |
| School and Home; Work and Play | John F. Kennedy—35th President of the United States 24a |
| Kindergarten—The First Step from Home | Martin Luther King, Jr.—Champion of Black Rights |
| Skills Together 120 | Lafayette—Hero of Three Revolutions . 101 |
| | |

HERE AND THERE IN VOLUME 14

| Lee—Hero of the Southern Confederacy . 180b The Arts | |
|--|---------------------------------|
| Lenin, the Professional Revolutionary 188 Abraham Lincoln—16th President of the United States 279 Lindbergh—America's "Lone Eagle of the Sky" 288 Charles Lamb's Charming Essays The Sea of Language Around Us Latin America's Creative Writers Basic Language of the Western World A Library Is A Way of Sharing Literary Awards for Writers and Illustrators Literature—A Way of Seeing, A Way of Feeling, A Way of Knowing Longfellow—Best Loved of American Poets | 114 148 153 206 303 |
| The Plant and Animal Kingdoms The "Old Man" of Australia | から |
| Knots, Hitches, and Splices | |
| Marvels of Science and Invention Leningrad—Russia's "Window | .88b |
| Lenses—The Magic in a Curve of Glass . 190 United Kingdom | 336 |
| Light —For Seeing and Growing 260 Los Angeles—City of Sunshine | |
| Lightning—A Gigantic Electric Spark | 350 |
| Linotype—The Machine That Casts Louisiana—Gateway to the | |
| Lines of Type | 362 |
| | 397 |



K2. The earth's second highest mountain is officially named K2. Also known as Mount Godwin Austen and as Dapsang, the 28,250-foot-high peak is in the Karakoram mountain system of northern Kashmir near the border of Pakistan and China.

K2 was long considered unclimbable because of its great height and almost unbroken slopes of rock and ice. The ascent is precipitous and full of overhangs, and there are few areas where climbers can camp.

The first of several attempts to reach K2's summit was made in 1902. Several persons were killed in these climbs. In 1954 an Italian expedition succeeded. It was led by geologist Ardito Desio and consisted of 11 climbers, 6 scientists, and more than 500 porters. Achille Compagnoni and Lino Lacedelli, the team chosen to attempt the final portion of the climb, are credited with having reached the summit.

THESE ARTICLES ARE IN THE FACT-INDEX

Kabotie, Fred Kadar, Janos Kaesong, North Korea Kafir Kafka, Franz Kaganovich, Lazar Moiseevich Kagawa, Toyohiko Kagera River Kagoshima, Japan Kahanamoku, Duke Kahn, Otto Hermann Kahului, Hawaii Kaibab National Forest Kaifeng, People's Republic of China Kailua, Hawaii Kailvard school Kairouan, Tunisia Kaiser, Georg Kaiser, Henry J(ohn) Kaiserslautern, West Germany Kajima Peace Award

Kalah, Assyria Kalakaua, David Kalamazoo, Mich. Kalamazoo Case, The Kalamazoo College Kalantian, Code of Kalat, Pakistan Kaleidoscope Kalgan, People's Republic of China Kalidasa Kalinin, Mikhail Ivanovich Kalinin, Russia Kaliningrad, Russia Kalispell, Mont. Kallikak Kalm, Peter Kalmar, Sweden Kalmus, Herbert Thomas Kalthoeber, Charles Kamakura, Japan

KAMCHATKA (kăm-chăt'ka). From the eastern part of Soviet Siberia the long, bleak peninsula of Kamchatka extends south about 750 miles between the Sea of Okhotsk and the Bering Sea. From its tip a chain of islands, the Kurils, leads to Japan. Coastal plains are covered with tundra growth, and forests clothe the lower mountain slopes. In the southeast a higher range is covered with volcanoes, some active. Klyuchevskaya (15,192 feet) is Siberia's highest peak. The peninsula's area is about 105,000 square miles. Its population is estimated at 210,000.

Kama River

THESE ARTICLES ARE IN THE FACT-INDEX

Kamehameha I Kamel, George Joseph Kamerlingh Onnes, Heike Kamikaze Kamimura, Hikonojo, Baron Kamloops, B. C. Kampen, Netherlands Kanawha River Kanazawa, Japan Kanchenjunga Kandahar, Afghanistan Kandinski, Vasili Kandy, Sri Lanka Kane, Elisha Kent Kane, Harnett Thomas Kane, Paul Kaneohe, Hawaii

KANGAROO. When Capt. James Cook was exploring the coast of Australia in 1770, his men were amazed by a strange animal. At times it stood upright, braced on its hind legs and huge tail. It moved by great leaps. Thus white men first met the great gray kangaroo, the "boomer" or "old man" of Australia.

More than a hundred species of the kangaroo family live in the open spaces of Australia, New Guinea, and

This baby kangaroo, or "joey," is leaning out of the pouch of its watchful mother to nibble on vegetation.



nearby islands. They belong to the *marsupial* order (animals that carry their young in pouches). The kangaroo's body is specially built for jumping. In this way it differs from other marsupials. However, the kangaroo family should not be confused with the so-called kangaroo rats, the jerboas, and similar jumping rodents of America, Africa, and Asia.

The great gray kangaroo reaches a weight of 200 pounds and a length of ten feet from nose to tip of tail. The tail alone is about four feet long, and the strong muscles at the base make it nearly as thick as the animal's body. There are four toes on each of the two hind feet. The second toe from the outside is much stronger and longer than the others and ends in a huge claw. This toe and the shorter outside toe are used in the great leaps that the kangaroo makes. It can leap along the ground at 30 miles an hour.

Three fourths of the animal's size and weight are in its hindquarters. The front legs are short and slender, with two small five-toed paws. These are used like hands in taking hold of food. They are drawn up against the chest in jumping.

The female has a large pouch on the belly made by a fold in the soft furry skin. When the single, inchlong, naked baby kangaroo is born, it finds shelter in this pouch. There it attaches itself to one of the mother's nipples, which swells inside the baby's mouth so that for several weeks it cannot loosen its grip. It is unable at first to draw out milk for itself or to swallow it. The mother has muscles that pump her milk down the baby's throat.

The young kangaroo is called a "joey" in Australia. When the joey is about four months old, it is able to lean out of the sheltering pouch and nibble grass. Soon it climbs out and learns to hop around in search of food. It continues for several weeks longer to climb back into the pouch for sleep and safety. If sudden danger threatens while the young kangaroo is



HOPPING AT HIGH SPEED

Powerful hind-leg muscles enable some kangaroos to move at speeds of about 30 miles an hour over short distances.

some distance away, the mother starts toward it at full speed, gathers it up in her forepaws as she passes, and tucks it into her pouch.

Other Kinds of Kangaroos

The red kangaroo and the wallaroo are nearly as large as the great gray kangaroo. Next in size are various species popularly known as wallabies. These larger types are usually found in small groups, or "mobs." They move from place to place, feeding on grass, shrubs, and the leaves of small trees. Their keen noses, ears, and eyes warn them of danger from hunters or wild dogs. Kangaroos are hunted because of the damage they do to crops and for their tender flesh and their skins, which produce fine leather.

Timid as it is, the kangaroo fights hard when cornered. It stamps its hind feet and growls. With its front paws it pushes its attackers within reach of a blow from its back feet. It can rip a dog to death with a single stroke. When chased by a pack, a kangaroo sometimes jumps into a lake or stream.

The smaller kangaroos include the rock wallabies, the hare wallabies, and the rat kangaroos. They live in hidden places in cliffs or in thick brush. A few species live in trees. These tree kangaroos have much shorter hind legs and longer forelegs than the others. They do not hop but climb among the branches like small bears. Some of these smaller kangaroos eat berries and small insects as well as grass and leaves.

Scientific Facts About Kangaroos

Fossil remains of about 30 different kangaroo species have been found in Australia. Among them were several giant types, one of which is estimated to have stood fully ten feet tall.

Kangaroos make up the family Macropodidae of the marsupial order (Marsupialia). The great gray kangaroo is Macropus giganteus. Other marsupials are the phalangers (Phalangeridae), including the cuscus, koala, and several Australian opossums; wombats (Phascolomyidae); bandicoots (Peramelidae); Tasmanian devil (Dasyuridae); Tasmanian wolf (Thylacynidae); banded anteater (Myrmecobiidae); marsupial mole (Notoryctidae); and true opossums (Didelphidae), including the opossum of North America.

Helplessness at birth is typical of all marsupials. The young do not reach the same degree of development inside the mother's body as do the young of higher mammals. They are born sooner and complete the early stages of their growth in the mother's pouch.

The marsupials lie between the most primitive egglaying mammals, such as the duckbill, or platypus, and the spiny anteater of the order *Monotremata*, and the higher orders, which include all the remaining mammals. (See Australia; Duckbill; Opossum; Tasmania.)

THESE ARTICLES ARE IN THE FACT-INDEX

K'ang Hsi Kankakee, III. Kannapolis, N. C.

KANSAS-

The Wheat-Growing State



Kansas Department of Economic Development The fertile plains of central and western Kansas usually produce more wheat than any other section of the country. This wheat field near Sublette is ready for harvesting.

KANSAS. One of the greatest farming states in the nation is Kansas. Its fertile prairies yield from 200 million to nearly 300 million bushels of wheat yearly. In most years this is more than is grown in any other state. The state's output is usually about one fifth of the total United States crop. Kansas is also one of the top five states in broomcorn, rye, and sorghum for grain, forage, and silage.

Kansas is the most centrally located state, not including Alaska and Hawaii. It lies halfway between Canada and Mexico. Until Alaska and Hawaii became states, the geographic center of the United States was in Smith County, two miles northwest of Lebanon. Just 42 miles to the south, in Osborne County, is the geodetic center of North America. All geodetic surveys on the continent are keyed to this point. (See also Surveying.)

The state is named for the Kansa tribe of Sioux Indians who once lived along the Kansas (or Kaw) River. Kansa is a Sioux word meaning "wind people." Because of its many sunflowers Kansas is nicknamed the Sunflower State. It is also called the Jayhawker State, from a Civil War term for Kansas troops and for guerrilla forces operating in the state.

Population (1970): 2,249,071—rank, 28th state. Urban, 65.3%; rural, 34.7%. Persons per square mile, 27.5—rank, 37th state.

Extent: Area, 82,264 square miles, including 477 square miles of water surface (14th state in size).

Elevation: Highest, Mount Sunflower, 4,135 feet, in Wallace County; lowest, Verdigris River at Oklahoma border, 686 feet; average, 2,000 feet.

Geographic Center: 15 miles northeast of Great Bend.

Temperature (° F.): Extremes—lowest, -40° (Lebanon, Feb. 13, 1905); highest, 121° (near Alton, July 24, 1936, and other locations and earlier dates). Averages at Topeka—January, 28.8°; July, 79.9°; annual, 54.9°. Averages at Wichita—January, 32.0°; July, 80.9°; annual, 57.1°.

Precipitation (inches): At Topeka—annual average, 32.36 (including 20.5 snowfall). At Wichita—annual average, 28.41 (including 14.7 snowfall).

Land Use: Crops, 57%; pasture, 35%; forest, 3%; other, 5%.

For statistical information about Agriculture, Communication, Education, Employment, Finance, Fishing, Forests, Government, Health Care, Manufacturing, Mining, Population Trends, Trade, Transportation, Vital Statistics, and Welfare, see KANSAS FACT SUMMARY.

Survey of the Sunflower State

Kansas is in the north-central region of the United States. It is bordered by four states—Oklahoma on the south, Colorado on the west, Nebraska on the north, and Missouri on the east. Its only natural boundary is in the northeast, where the Missouri River flows between Kansas and the state of Missouri before turning eastward at Kansas City.

The state is shaped like a rectangle, almost twice as long as it is wide. Its greatest length, from east to west, is 411 miles. Its greatest width, from north to south, is 207 miles. The total area of Kansas is 82,264 square miles, including 477 square miles of inland water surface.

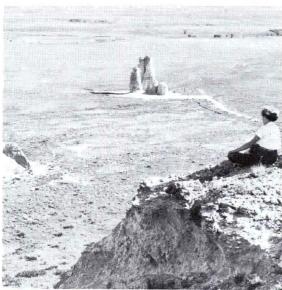
The State's Four Natural Regions

Although Kansas is generally level, it consists of four distinct natural regions. In the east are the Osage Plains and the Glacial Plains. Both regions are part of the Central Lowland of the United States. Western Kansas, a part of the Great Plains, is divided into the High Plains and the High Plains Border.

In Wallace County, near the western border, is Mount Sunflower (4,135 feet), the highest point in the state. From here the surface slopes down to a low of 686 feet along the Verdigris River at the Kansas-Oklahoma boundary in the southeast.

The High Plains cover the western end of the state. This is a rolling tableland with little rainfall and few trees. From west to east the elevation slopes from 4,000 to 3,000 feet above sea level.

The High Plains Border occupies west-central Kansas. It is an intermediate zone between the higher



Kansas Industrial Development Commission

Castle Rock, a 70-foot chalk spire near Utica, is visible for miles. Gove County has many of these unusual chalk formations.

region of the west and the lower plains to the east. In the south-central part of this region are the prairies of the Great Bend of the Arkansas River.

The Glacial Plains lie in the northeastern corner of the state. During the Ice Age, glaciers deposited a layer of fertile soil in this region. To the west are the low, grass-covered Flint Hills.

The Osage Plains extend over southeastern Kansas. This is gently rolling, rich farmland. In Cowley and Butler counties and to the north are the Flint Hills. These hills cross the state in a north-south direction.

Most of the rivers of Kansas flow from west to east. The northern half of the state is drained by the Kansas (Kaw) River, formed by the junction of the Republican and Smoky Hill rivers in Geary County. The chief river of southern Kansas is the Arkansas. Its tributaries include the Cimarron in the southwest and the Verdigris and Neosho in the east.

Climate and Weather

Because it is about 600 miles from any large body of water, Kansas has a continental climate. Summers are hot and winters are cold.

Stanton County receives the least precipitation (rain and melted snow)—about 15 inches a year. From west to east the rainfall gradually increases until it reaches a maximum of 40 inches in the extreme southeast. The growing season varies from 160 days a year in the northwest to 200 days a year along the southeast border. Like the other plains states, Kansas is subject to occasional droughts and tornadoes.

Natural Resources and Conservation

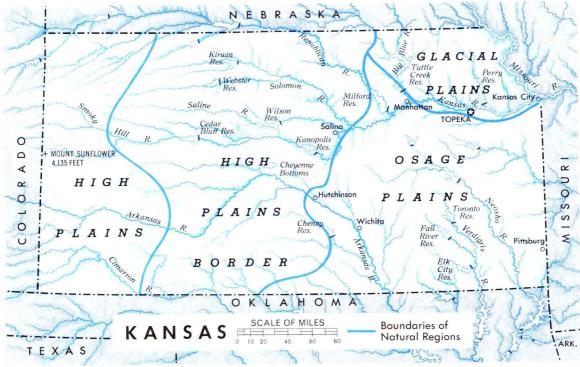
The Sunflower State's chief natural resource is its soil. The flat plains of western Kansas are ideal for large-scale wheat growing. The fertile farmland of eastern Kansas produces corn and other crops. There are also extensive grazing lands, chiefly bluestem grass in the east and buffalo grass in the west.

Kansas farm products help make food processing one of its most important manufacturing industries. Petroleum and natural gas are the state's principal mineral resources.

The chief conservation problem in Kansas has been the protection of the soil from erosion by wind and water. This has been partly accomplished by improved farming practices and by the planting of trees. (See also Conservation.) In the northern half of the state the rivers of the Missouri Basin are being developed primarily for flood-control and irrigation purposes. Since 1925 many of the state's natural resources have been administered by the Kansas Fish and Game Commission.

People of the Sunflower State

What is now Kansas was the home of several tribes of Plains Indians. These included the Kansa, Osage, Pawnee, and Wichita. Several tribes of Indians came into the area from the East after 1830, when Congress authorized their removal west of the Mississippi River. After Kansas was opened to white settle-



ment in 1854, the Indians began to surrender their lands. By about 1880 most of the tribes had been resettled in Indian Territory (now Oklahoma). Today there are only about 8,500 Indians in Kansas.

The Kansas-Nebraska Act of 1854 brought a rush of settlers into the region. Proslavery men from Missouri and antislavery groups from as far away as New England fought for control of the territory. In 1855 there were only about 8,600 people in Kansas. Five years later the population had increased to more than 107,000.

The state's greatest growth in population came during the 25 years that followed the Civil War. Many of the new settlers were farmers from the Eastern states. They took up land opened by the Homestead Law of 1862. Only a few foreign immigrants came to Kansas. Today the number of foreign born is less than 2 percent of the population. Of the total foreign stock, Germans are the most numerous. Negroes make up about 5 percent of the population.

Products of the Land

About 90 percent of Kansas is cropland or pasture. There are about 90,000 farms in the state. More than 10,000 of these are larger than 1,000 acres. The size of the average farm is about 550 acres.

The most important crop by far is wheat. Most of it is a hard, winter variety grown on large farms that are highly mechanized. The record yield was some 308 million bushels produced in 1952. The chief wheat-growing counties are Sumner, Reno, Ford, Thomas, Barton, Harper, McPherson, and Finney.

This map shows the four natural regions and the surface features of Kansas. The use that can be made of the land is related to the physical features of each region.

Sorghum for grain is the second most valuable crop. It is produced largely in the southwest. Hay, especially alfalfa and sweet clover, is grown throughout the state. Other important crops are corn, soybeans, sugar beets, and barley. Of the state's livestock, cattle and calves produce the largest cash income. Cattle and sheep are grazed mainly in the central part and in the west. Dairying and the raising of hogs and poultry are important in the east.

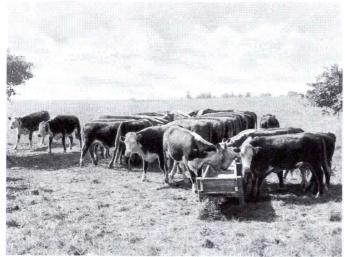
Petroleum accounts for about three fifths of the value of the state's mineral production. The western part of Kansas is the most productive area. Next in value is natural gas. Other valuable minerals are helium, cement, stone, and salt.

Manufacturing and Cities

Only about one out of every six workers in Kansas is engaged in manufacturing. The chief industry is the manufacture of aircraft, motor vehicles, and other transportation equipment. Second in importance is the processing of foodstuffs, such as flour and meal, meat, bakery goods, and dairy products.

The third most important industry is the making of chemicals and related products. These include explosives, soap, and vegetable and animal oils. Next in value is the refining of petroleum. The manufacture of nonelectrical machinery and clay and glass products is also important.

The largest city in the state is Wichita, on the Arkansas River. It is noted for its food processing,





TWO SOURCES OF KANSAS' WEALTH

The cattle industry is the state's largest source of farm income. This herd of Herefords (left) is being fattened in a feedlot.

oil refineries, and aircraft manufacture (see Wichita). Kansas City, second in size, is a livestock and meatpacking center where the Kansas and Missouri rivers meet. Nearby is rapidly growing Overland Park. Across the state line is the twin city, Kansas City, Mo. (see Kansas City, Kan.). About 60 miles upstream from the mouth of the Kansas River is Topeka, the state capital and third largest city (see Topeka).

In the northeast are Lawrence, on the Kansas River, and Leavenworth, on the Missouri. Salina, a flour-milling and meat-packing city, is on the Smoky Hill River. Hutchinson is located on the Arkansas River.

Its industries are based on wheat, oil, and salt. Pittsburgh and Coffeyville are the largest cities of the southeast. Manhattan lies near the junction of the Big Blue and Kansas rivers.

The Development of Transportation

The first "highway" for wheeled vehicles across the Kansas region was the Santa Fe Trail, which was opened by William Becknell in 1821. It ran from Independence, Mo., west and south through Council Grove and Pawnee Rock to Santa Fe, N. M. The second great route to the West that passed through Kansas was the Oregon Trail (see Oregon Trail).

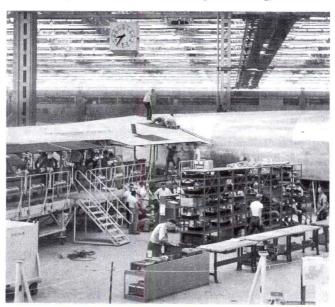
Today the Sunflower State is served by a network of modern roads. Kansas maintains some 10,000 miles of primary highways and other state roads. The chief east-west routes are Interstate 70 (which incorporates parts of US 40) and US 36, 24, 50, 54, and 160; the major north-south highways are US 83, 283, 183, 281, 81, 77, 75, 59, and 69. In 1956 the state opened Interstate 35, a 236-mile turnpike from Kansas City through Topeka and Wichita to the Oklahoma border.

Petroleum is by far the state's most important mineral. Much of the oil is processed in this modern refinery (right) at Augusta.

The first railroad in the state was a five-mile line from Elwood to Wathena, opened in 1860. By 1873 the Atchison and Topeka Railroad (now The Atchison, Topeka and Santa Fe Railway) had been completed across the state. Today more than a dozen railroads serve Kansas, with most of the trackage in the eastern half. Another important form of transportation is the barge line on the Missouri River.

Recreation in Kansas

About 60 state parks and state lakes have been established to provide fishing, swimming, and other



MANUFACTURING IN WICHITA

One of the great airplane-production centers of the world is Wichita. Busy assembly lines turn out both military and commercial aircraft.

recreation for the people of the Sunflower State. Some of the leading points of interest in Kansas are mementos of pioneer days. Boot Hill Cemetery at Dodge City, the Pawnee Capitol at Fort Riley, Fort Scott, and Fort Hays are among these. Fort Larned, once an important military post on the Santa Fe Trail, is administered by the National Park Service.

At Abilene are the Dwight D. Eisenhower Library, the Eisenhower Museum, and the president's boyhood home. Wichita is the site of the annual National Baseball Congress. The Kansas State Fair is held at Hutchinson and the Mid America Fair at Topeka.

Growth of the School System

The first schools in Kansas were religious missions established among the Indians in the 1820's. In 1827 the federal government sent Daniel Morgan Boone, son of Daniel Boone, to teach farming to the Indians in Jefferson County. In 1855 the first territorial legislature provided for a system of free public schools. From this law came the organization of school districts administered by county superintendents.

Compulsory attendance for children of school age has been in effect since 1874. The first high school was built in Chapman in 1889. Today the public educational system is directed by the State Board of Education, composed of seven members.

The largest school of higher learning is the University of Kansas, at Lawrence, with the University of Kansas Medical Center, at Kansas City. Also state supported are Kansas State University of Agriculture and Applied Science, at Manhattan; Wichita State University, at Wichita; and three other state universities, at Emporia, Pittsburg, and Fort Hays. Other schools are Washburn University of Topeka; Benedictine College, at Atchison; Ottawa University, at Ottawa; and Bethany College, at Lindsborg.

Government and Politics

The capital of Kansas was chosen by popular vote in 1861. Topeka was the winner over Lawrence. The state is governed under its original constitution, adopted in 1859 and effective 1861.

The chief executive officer is the governor, elected every four years. Lawmaking is in the hands of the Senate and the House of Representatives. The judiciary is headed by the Supreme Court. Kansas pioneered in the development of a legislative council, which studies public problems and prepares bills for the legislature. The legislative coordinating council consists of three senators and four representatives.

In politics Kansas has long been a predominantly Republican state. It has elected only seven Democratic governors in its history. In presidential elections Kansas has voted Republican each time except in 1892, 1896, 1912, 1916, 1932, 1936, and 1964. Alfred M. Landon, governor from 1933 to 1937, was the unsuccessful Republican candidate for president in 1936. Dwight D. Eisenhower, whose boyhood home was in Abilene, was elected the 34th president of the United States in 1952 and reelected in 1956.



Wolfe Commercial Photo Service

The Shawnee Methodist Mission was opened in 1839 to teach Indian children. Its site is just south of Kansas City.

HISTORY OF KANSAS

On May 30, 1854, Kansas was organized as a territory out of what had been the old Missouri Territory, sometimes called "Indian country." Three of its boundaries were the same as they are today—the state of Missouri on the east, the 40th parallel on the north, and the 37th parallel on the south. Its western border extended to the Rocky Mountains. When Kansas became a state, on Jan. 29, 1861, its western boundary was set at the "twenty-fifth meridian of longitude west from Washington (D. C.)." The area west of this line was made a part of Colorado Territory. The following sections tell how Kansas developed into a modern state.

Exploration to Statehood

In 1541 Coronado and his party of Spanish explorers became the first white men to enter what is now Kansas (see Coronado). Little was known of the region when the United States acquired all but the southwestern corner of the present state in 1803 (see Louisiana Purchase). The remainder was secured by the United States from Texas in 1850.

During the first half of the 1800's, the chief settlements in the Indian country were forts erected to keep peace on the frontier. Fort Leavenworth was built in 1827, Fort Scott in 1842, and Fort Riley in 1853. By 1850 the population numbered only about 1,500 whites and some 34,000 Indians.

In 1854 the territory was opened to white settlement by the Kansas-Nebraska Act (see Kansas-Nebraska Act). Congress left it up to the settlers to decide whether they wanted Kansas to become a free state or a slave state. The earliest arrivals were proslavery people from Missouri. They founded Leavenworth and Atchison. Later, free-state forces established settlements at Lawrence and Topeka.

For four years the two groups battled for control of "bleeding Kansas." In 1856 Lawrence was sacked

KANSAS

by a proslavery party. In revenge John Brown and his followers massacred five men along Pottawatomie Creek near Lane. Gradually the antislavery settlers became dominant. In 1859 a convention at Wyandotte (later Kansas City) adopted a free-state constitution that was ratified by popular vote. In 1861 Kansas was admitted to the Union as the 34th state.

Growth of the Modern State

In 1867 the first herd of Texas longhorn cattle was driven along the Chisholm Trail to the railroad at Abilene. This began the cattle boom that lasted until the 1880's. Meanwhile Mennonite pioneers from Russia introduced a hardy new type of wheat, called Turkey Red. First grown near Hillsboro in 1874, it provided the basis of today's bountiful crops of Kansas wheat.

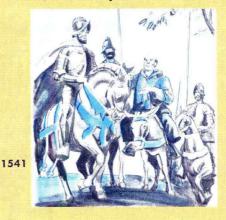
During the 1890's farmers expressed their discontent with low farm prices by joining the Granger movement and the Populist party. This was also the era when Carry Nation became nationally famous for smashing Kansas saloons that disregarded antiliquor laws.

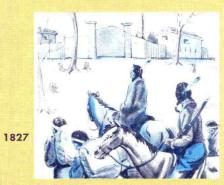
By 1900 most of the state's farmland had been claimed by settlers. Because of the drought-created Dust Bowl and low farm prices, Kansas lost almost 80,000 residents between 1930 and 1940. During the 1940's and 1950's this loss was more than made up by an increase of some 379,000 persons. Between 1960 and 1970 the population increased by nearly 71,000 persons, a gain of 3.2 percent but 10.1 percent less than the national growth. During the 1960's the major industries of Kansas were expanding at a slow rate. They were unable to provide job opportunities for all of the Kansas farm workers who had been displaced by mechanization. (See also United States, sections "North Central Plains" and "Great Plains"; individual entries in the Fact-Index on Kansas persons, places, products, and events.)

AGRICULTURE, INDUSTRY and RESOURCES OFB 87 Sheep O Na Barley G GGPH Sheep Oats PbZ WICHITA Aircraft, Food Processing KANSAS CITY Food Processing, Chemicals, Automobiles, Machinery, **Metal Products** DOMINANT LAND USE Specialized Wheat Wheat, General Farming MAJOR MINERAL OCCURRENCES Wheat, Range Livestock Coal Limestone Wheat, Grain Sorghums, Range Livestock Clay Na Salt Cattle Feed, Hogs Natural Gas Petroleum Gp Gypsum Lead Livestock, Cash Grain Helium Zinc Livestock, Cash Grain, Dairy General Farming, Livestock, Cash Grain Major Industrial Areas General Farming, Livestock, Special Crops © Copyright HAMMOND INCORPORATED, Maplewood, N. J. Range Livestock

Notable Events in Kansas History

- 1541—Coronado, searching for city of Quivira, reaches central Kansas.
- 1723—Étienne de Bourgmont builds Fort Orléans.
- 1803—France sells Louisiana, including most of Kansas, to U. S.
- 1804—Kansas included in District of Louisiana under Indiana Territory; made part of Louisiana Territory in 1805. Lewis and Clark enter Kansas.
- 1806—Zebulon M. Pike explores Republican River area.
- 1812—Territory of Missouri created.
- 1819—Western Engineer, first steamboat in Kansas, carries Stephen H. Long's expedition.
- 1821—William Becknell opens route of Santa Fe Trail.
 1824—Presbyterian mission founded on Neosho River.
- 1825-Kansa (Kaw) and Osage Indians cede land.
- 1827—Fort Leavenworth established. Daniel Morgan Boone founds Indian school in Jefferson County.
- 1830—Shawnee Methodist Mission for Indians established near Turner; moved to site near Shawnee in 1839.
- 1842—John C. Frémont leads first of several expeditions through Kansas. Fort Scott established.
- 1843—Wide-scale migration to Oregon country begins.
- 1849—California gold seekers follow Kansas trails.
- 1853—Fort Riley established.
- 1854—Kansas-Nebraska Act creates Kansas Territory; temporary capital, Fort Leavenworth; governor, A. H. Reeder. Leavenworth, Lawrence, Atchison, and Topeka founded.
- 1855—First territorial legislature meets at Pawnee, then at Shawnee Mission; legalizes slavery. Free State party forms separate government. Wakarusa War occurs over slavery.
- 1856—Proslavery men sack Lawrence. John Brown leads free-state raiders in massacre along Pottawatomie Creek.
- 1857—Proslavery Lecompton Constitution rejected.
- 1859—Antislavery Wyandotte Constitution adopted.
 Atchison and Topeka Railroad chartered.
- 1860—Pony Express crosses Kansas en route to West. First oil well in Kansas drilled near Paola.
- 1861—Kansas becomes 34th state, January 29; capital, Topeka; governor, Charles Robinson.
- 1863—Confederates led by William Quantrill sack Lawrence.
- 1864—University of Kansas organized at Lawrence. Confederate Gen. Sterling Price raids Kansas.
 1867—First herd of Texas cattle driven to Kansas.
- 1874—Mennonites introduce Turkey Red wheat to U. S.
- 1878—Chevenne raid is last Indian skirmish in state.
- 18/8—Cheyenne raid is last Indian skirmish in state
- 1880—Kansas adopts state prohibition amendment.
- 1899—Carry Nation begins her saloon-smashing raids.
- 1903—Present State Capitol completed.
- 1948—Kanopolis Dam on Smoky Hill River completed; Fall River Dam, in 1949; Cedar Bluff Dam on Smoky Hill River, in 1951.
- 1951-Floods cause great damage.
- 1952—Dwight D. Eisenhower, who spent his boyhood in Abilene, elected 34th president of U. S.
- 1954—Eisenhower Museum, adjacent to boyhood home, opens in Abilene; Dwight D. Eisenhower Library founded in Abilene in 1962. In historic Brown vs. Topeka Board of Education decision, U. S. Supreme Court bans segregation in public schools.
- 1956—Construction of Kansas Turnpike completed.
- 1965—Agricultural Hall of Fame and National Center opened near Kansas City. Fort Scott designated national historic monument.
- 1976 Mid-American All-Indian Center opens in Wichita.









1874



STATE FLOWER: Wild Sunflower



STATE SEAL: Plowman represents agriculture; steamboat symbolizes commerce; wagon train, Indians, and buffalo depict early history.



STATE TREE: Cottonwood



STATE BIRD: Western Meadowlark

Kansas Profile

FLAG: See Flags of the United States. MOTTO: Ad Astra per Aspera (To the Stars Through Difficulties).

SONG: 'Home on the Range'-words, Brewster Higley; music, Dan Kelly.

Visitors to the Sunflower State are struck by the extent of its flat terrain. To many Kansans the vast plains are a blessing, for the wealth of the state lies in and under its soil. Record wheat crops are often harvested. Kansas is a leading producer of sorghum, hay, and corn. Plump cattle graze throughout the state. Kansas packinghouses prepare Kansas-bred livestock for national markets. In addition, rich petroleum and natural-gas deposits lie beneath the western part of the state.

The early settlers' conflicting views jeopardized the stability of young Kansas. Proslavery and abolitionist groups fought savagely during the brief territorial years of "bleeding Kansas." Then, after the Civil War, gunmen and outlaws terrorized the cow towns—Dodge City, Abilene, Wichita—that arose at railroad cattle-shipping terminals. With great determination, the people of Kansas survived these trials and brought peace to their land.

Before the settlers staked out Kansas, it was a windswept grassland across which great herds of buffalo roamed. These herds had vanished by the end of the 19th century, destroyed largely by hunters who furnished meat to transcontinental railroad workers. Much of the grass had also disappeared, plowed under by farmers who came to the state from New England and the South.

Modern Kansas has experienced floods and droughts, falling farm prices, and a dwindling of owner-operated farms. Steps have been taken to cope with these problems. Large reservoirs have been built for flood control and irrigation. These also serve as recreational sites. The state has made successful efforts to attract industry and thus provide jobs for displaced farmers. In such cities as Topeka, Kansas City, and Wichita flourishing manufacturing enterprises are preparing the way for the further urbanization of Kansas.