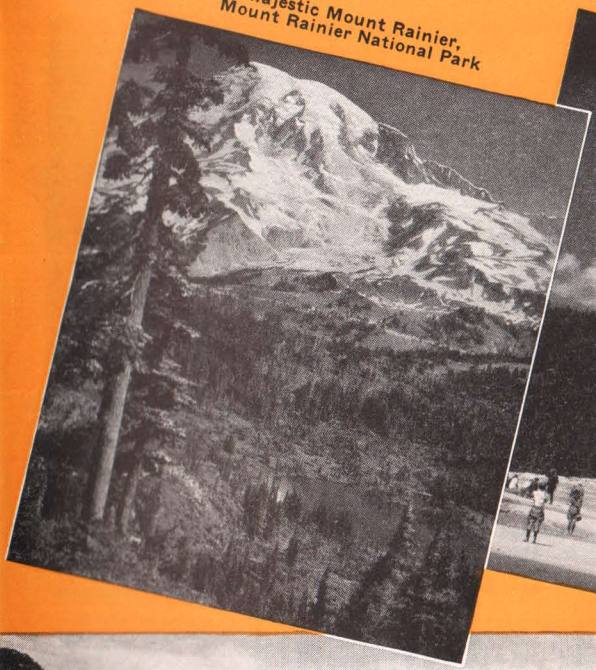
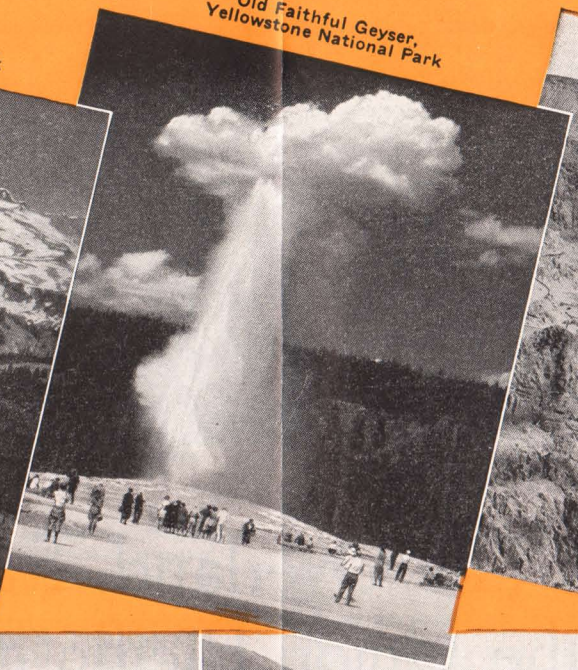
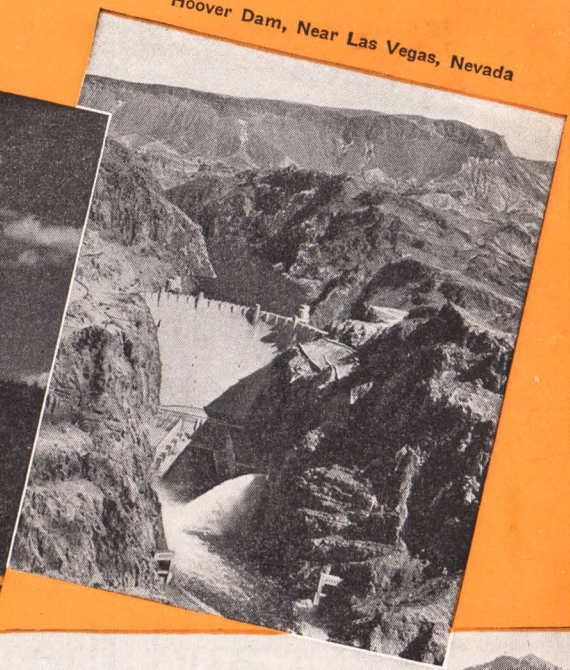


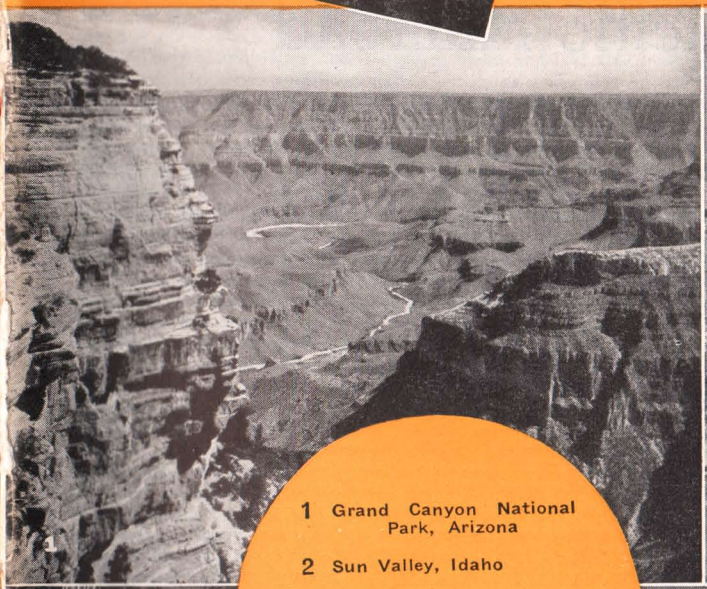
Majestic Mount Rainier, Mount Rainier National Park



Old Faithful Geyser, Yellowstone National Park



Hoover Dam, Near Las Vegas, Nevada



1

2

1 Grand Canyon National Park, Arizona

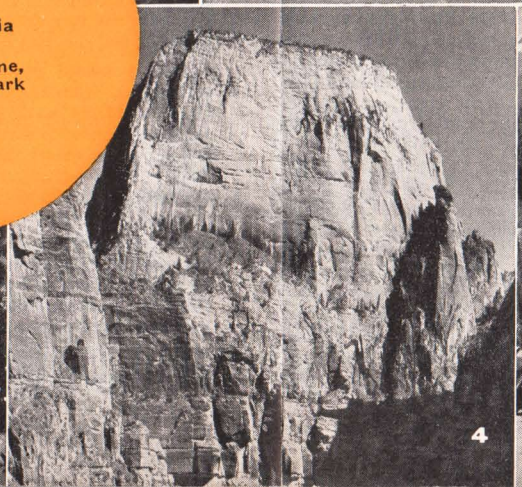
2 Sun Valley, Idaho

3 Southern California

4 Great White Throne, Zion National Park

5 In the Colorado Rockies

3

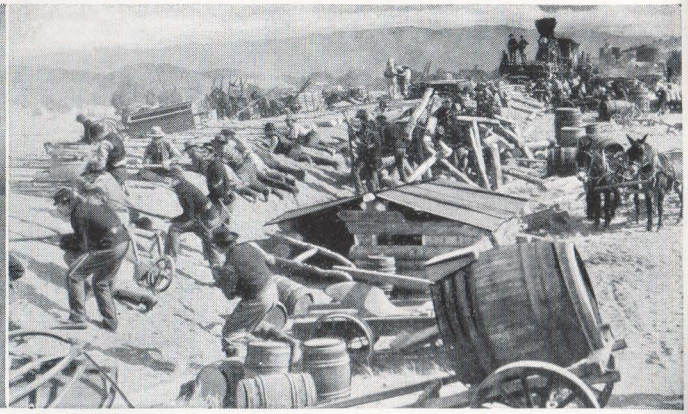


4

5

UNION PACIFIC RAILROAD PHOTO

"The Buffalo meant food, clothing and shelter to the Indian."



SCENE FROM PARAMOUNT'S "UNION PACIFIC"

"Workers had to drop picks and shovels and take up rifles to defend themselves."

The Overland Trail and the Union Pacific Railroad

The Overland Route of the Union Pacific Railroad from Omaha to Ogden is a natural thoroughfare which was followed by immense herds of buffalo and other big game, by the Indians, fur traders, explorers, Mormons, goldseekers, the Overland stage coach, and the Pony Express; nine-tenths of the early emigration to California is estimated to have passed along the valley of the Platte River.

The Oregon Trail (its early name) was one of the most remarkable natural highways known to history. No engineer charted its course, determined its grades and curves, marked its fords, built bridges, or surveyed its mountain passes. Selected originally by the instinct that guides wild animals in their choice of easy grades, it developed naturally from a trappers pathway into an emigrant road, and later into a trade route. Father DeSmet, the Belgian priest, traversed it in 1851 and pronounced it, although unimproved by man, one of the finest highways in the world.

EARLY EXPLORATION

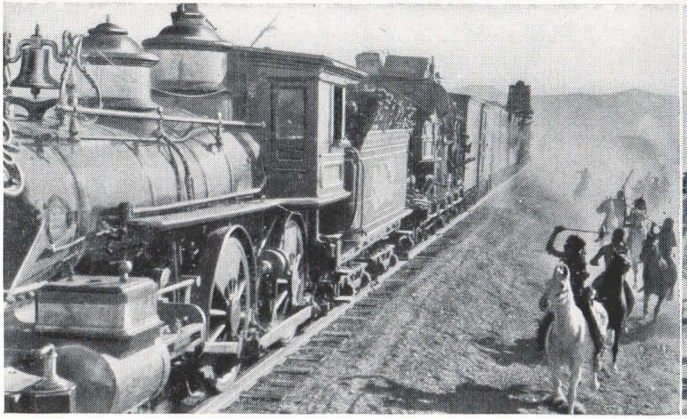
W. P. Hunt, leader of the Astor Expedition of 1811, was the first to mark a portion of the route, that from the mouth of the Port Neuf River near Pocatello, Idaho, to the mouth of the Columbia. The returning Astor Expedition, under Stuart and Crooks, in 1811-12, followed even more closely the course of the future trail in Oregon, Idaho, and from the Canyon of the Platte, to Grand Island and the mouth of the Platte. Gen. Ashley, founder of the Rocky Mountain Fur Company, beginning in 1823, was the next path-maker, and one of his men, Etienne Provost, with Jim Bridger, made the most important discovery in the history of the trail—that of the South Pass, about 65 miles north of Rock Springs, Wyoming. Capt. Bonneville in 1832 followed the trail from Independence, Mo., to the Green River, and subsequently to the Columbia. Fremont began his explorations in 1842; Capt. Stansbury made an official report on the thoroughfare in 1849. Fort Laramie was built in 1833; Fort Hall, near the present site of Pocatello, Idaho, in 1834; and Fort Bridger in 1843. For many years, these posts with Fort Boise, were the only stations between the Missouri River and Fort Vancouver, near the mouth of the Columbia.

Lewis and Clark

The Overland Trail was more than 2,000 miles in length. In the early days of its use, beginning about 1820, its starting point was St. Louis; then Franklin, Mo., Independence, Mo., and Kansas City. It was a river route, following the Kansas, the Big Blue, the Little Blue, the Platte, the Sweetwater, the Big Sandy, the Green, the Bear, the Snake, the Boise, the Grande Ronde, the Umatilla, and the Columbia; near the western boundary of Wyoming the California trail began. The first wagons used on a considerable part of the trail were those of Milton Sublette, of the Rocky Mountain Fur Co., which left St. Louis in 1830. The northern branches of the great pathway began to be traveled about 1840, when connections were established from Leavenworth, St. Joseph, Nebraska City, Plattsmouth, and Omaha. As traffic increased, short cuts were discovered and used, and thus minor changes and parallel lines of passage were created. Travel increased gradually from year to year, due largely to the lure of the Oregon Country and to the Mormon Colonists in the Salt Lake Valley—but it received a real impetus when on January 24, 1848, while building a sawmill for John Sutter on the South Fork of the American River near Coloma, Calif., James Marshall picked up from the mill-race a shapeless rusty yellow mass not much larger than a lima bean. Interested by its color and weight he took the specimen to Sutter's Fort at Sacramento for analysis. It was gold!—worth nearly five dollars! A few days later Sam Brannan of the Sutter colony rode into the tiny settlement of San Francisco holding aloft a bottle of gold dust and shouting "Gold! Gold! Gold from the Rio Americano."

The cry echoed 'round the world. It drew to California thousands of goldseekers. From every walk of life they came, from every state in the Union, and from nearly every country on the globe. By every imaginable route men hurried to the goldfields—by ship around the "Horn", to Panama and across, by oxcart and horseback over the western mountains and deserts. It was a hazardous journey at best, and many never arrived at all—but still the tide of adventurous humanity flowed Californiaward. Some deserted the beaten paths and were lost—others found shortcuts. The Forty-Niners furnished their own transportation which usually consisted of several yokes of oxen, or teams of horses, and a Conestoga wagon. They traveled in trains of twenty or more wagons each for mutual safety and protection against hostile Indians. From four to six months time was required for the trip.

In 1860 the volume of traffic had grown to immense proportions; 500 freight wagons frequently passed Fort Kearney in a day, and 888 west-



SCENE FROM PARAMOUNT'S "UNION PACIFIC"
"Indian attacks continued sporadically for some years after the road was in operation."

SCENE FROM PARAMOUNT'S "UNION PACIFIC"
"In 1867 a band of Cheyennes wrecked a freight train."

bound wagons drawn by 10,600 oxen were counted between that post and Julesburg within 24 hours. One transportation company alone employed 75,000 oxen. These ox-wagon trains consumed an entire summer in making a round trip to Fort Hall or Salt Lake City.

It was considered a great step forward in western transportation when in 1861 Ben Holladay established the Overland Stage Line. His outfit consisted of 100 Concord coaches and 2700 horses and mules. The journey of 1900 miles required 18 days at breakneck speed and cost the passenger $225, with safe arrival none too certain.

The demand for quicker time, particularly for the mails, led to the organization of the Pony Express, which carried letters to California in 10 days. Eighty expert riders and 500 fast ponies were continuously engaged; the daring mail carriers rode light, bearing only mail pouch, bowie knife, and revolver, and they traveled 250 miles a day. Although subject to frequent Indian attacks, the riders lost only one bag of mail during the entire history of the service.

These transportation facilities, however, were inefficient and expensive. The far-seeing men of the day realized that a railroad must be built to provide quick and dependable transportation between the East and the Pacific Coast. Opposition sprang up on every hand, due to political jealousies and general skepticism. Daniel Webster's words, spoken in the United States Senate a decade previously, were still ringing: "What do we want of that vast and worthless area—that region of savages and wild beasts, of deserts, of shifting sands and whirling winds, of dust, of cactus, of prairie dogs? To what use could we even put those endless mountain ranges? What could we do with the western coast of three thousand miles, rockbound, cheerless and uninviting?" In another speech Webster "thanked God that the Great Stony Mountains would ever be an impenetrable barrier between the East and California!"

But—as always—after the discovery of gold in California, that newly adopted commonwealth was no longer considered a step-child of the Union—in fact it had many fine qualities hitherto unsuspected. First better wagon roads leading to it were blazed across the wilderness, and on July 1, 1862, when California had produced more than five hundred millions in gold, Congress passed the Pacific Railroad bill.

THE UNION PACIFIC RAILROAD

President Lincoln established the eastern terminus at Council Bluffs, and on December 2, 1863, the citizens of Omaha broke ground on the river bank to celebrate the commencement of this great project.

The story of the building of the Union Pacific is one of the greatest epics of American history. No one can read it without a thrill. The obstacles were legion. Ties, steel rail, equipment and other materials had to be shipped up the Missouri River to Omaha or hauled across Iowa in wagons, Financing the construction, even with liberal government aid, was a serious problem, because few believed that the road would ever be finished, owing to the difficulties of penetrating what Webster termed "the Great Stony Mountains," and fewer still believed that the road would ever pay.

INDIAN OPPOSITION

Though every obstacle put in the way of building the Union Pacific by political reactionaries had been overcome, there were still other reactionaries on the western plains determined to block the path of progress—Indians.

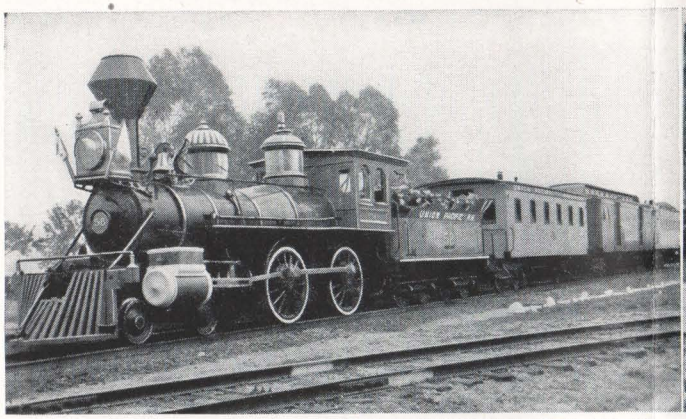
From the very beginning Union Pacific construction gangs were in danger of attack, while surveying parties, working well in advance, were in constant peril. Frequently workers, many of them veterans of the Civil War, had to drop picks and shovels and hurriedly pick up rifles to defend themselves.

Nebraska, Kansas, Wyoming, and Eastern Colorado comprised the range of the Sioux, Cheyennes, Arapahoes, Crows, Blackfeet, Shoshones and lesser tribes. Unlike the pastoral tribes of the southwest these Indians were nomads and hunters and lived largely on the results of the chase. Also it might here be said that these Indians were creatures of an innate intelligence not inferior to the white man's. As soon as the Indian saw the magic of the white man he learned to play with it himself; he knew and used fire arms long before there was any considerable migration to the west. Traders and trappers had found it profitable and expedient to exchange guns and ammunition for furs. They had little to fear from the Indians. They did not threaten the Indian's security. They were friends and cooperators in the fur business. Those Indians not fortunate enough to obtain guns were armed with bows and arrows and here again their native intelligence was apparent: their hunting arrows were nocked parallel to the head to pass easily between the ribs of the buffalo; war arrows were nocked at right angles to the head to pass easily between the ribs of a man.

While the traders were welcomed by the Indians, it was not so with the farmer and settler. The reason, the buffalo. The buffalo, grazing in countless millions over the western prairies, meant abundant food, clothing and shelter to the Indian. The farmer's plow was the mortal enemy of the buffalo, therefore the encroachment of the farmer and settler must be sternly and stubbornly resisted. Born fighters, anyway, all they needed from their medicine men was the threat: "When buffalo plowed under, Indian starve!"

Between Ft. Kearney, Nebraska, and Bitter Creek, Wyoming, encounters were most frequent and sanguinary. At Lexington, formerly called Plum Creek, numerous raids occurred during the construction of the Union Pacific. In one of these a freight train and crew were captured but promptly retaken by the railroad forces. In 1867 a band of Cheyennes wrecked a train, killed the engineer and fireman, plundered the cars, and rode off with bolts of bright cloth tied to their horses' tails. Major North and a company of

Oregon Trail Marker



SCENE FROM PARAMOUNT'S "UNION PACIFIC"

"Crude affairs they were then, bearing no resemblance to the comfortable air-conditioned train you are riding today."

SCENE FROM PARAMOUNT'S "UNION PACIFIC"

"On May 10, 1869, a golden spike was driven as the last rail was laid."

Pawnees which he had recruited overtook the marauders, killed fifteen and captured the nephew of the leader. Near Ogalalla a band of Indians attempted to wreck a train by driving their ponies in front of it. Twenty ponies were killed. At Sidney Indian attacks were common and several section hands were killed by arrows. At Hillsdale a Union Pacific surveyor became a victim. Several attacks were made at Cheyenne, and local tradition has it that the first two burials in that metropolis were Union Pacific graders killed by Cheyennes.

Finally Generals Sherman and Sheridan were sent out to mend the manners of these war-whooping iconoclasts, and the right of eminent domain eventually prevailed. While attacks continued sporadically all through the construction of the Union Pacific and for some years after the road was in full operation, the Indians were gradually subdued in battle and mollified in diplomatic powwows, and serious warfare diminished to the vanishing point. Some of the old die-hard chiefs of the tribes were given passes permitting them to ride free, and it wasn't long before the passless young pagans learned to hop freights and "ride the rods" just as skilfully as Christians.

New towns sprang up along the way as the road nosed itself into the wilderness. Saloons, gambling hells and dance halls flourished under the patronage of construction gangs and soldiers. All through it was a hard crowd of rugged individualists, and the right to individualism was frequently backed up with the six-gun. Sometimes the criminal element gained control, but not for long. The West, wild and woolly as it was pictured by many novelists who never saw it, had its code. This code was liberal and concerned itself with hardly more than three or four of the Ten Commandments, but it was as immutable as the laws of the Medes and Persians. Flagrant violations brought a few grim, quiet Vigilantes who administered quick justice with a firm hand and stout rope.

President Lincoln and General Dodge, Council Bluffs, 1859

The Central Pacific Railroad, building eastward from Sacramento to meet the Union Pacific, had its difficulties, too. Rails had to be shipped 'round the "Horn" or across Panama at tremendous cost. The Sierras were an even more difficult barrier than the Rockies. Two-score miles of snow-sheds had to be built, and financing was even more difficult.

As the roads grew rapidly in 1867-1868 and began to near each other it became an exciting race. Daily reports published in newspapers were watched with all the interest of a big league pennant race today. On May 10, 1869, the two roads met at Promontory, Utah. The score was 1,086 miles laid by the Union Pacific and 689 by the Central Pacific. With great

ceremony a golden spike was driven as the last rail was laid. The road was finished some seven years ahead of the time set by Congress! Five months after the driving of the last spike trains were in regular service to the Pacific Coast. Crude affairs they were then, bearing no resemblance to the comfortable air-conditioned train you are riding today. They were little more than box cars with windows and benches and heated by stoves. A few Pullman sleeping cars were in service but no dining cars ran west of Omaha for another five years. Passengers carried lunch baskets or depended on such provisions as might be obtainable at wayside stations.

Great progress has been made since those days and the Union Pacific has always been a pioneer in introducing innovations, including the modern Diesel-powered Streamliners and the new comforts and economies of coach and sleeping car travel. A trans-continental journey today is one of the most enjoyable things in modern living and the Union Pacific has spared no effort to make it so.

COUNCIL BLUFFS AND OMAHA TO SALT LAKE CITY

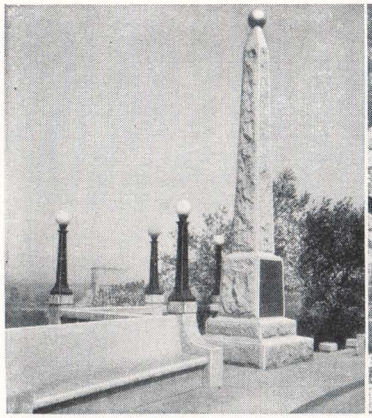
Places are described in the order in which they are reached by westbound trains. Passengers eastbound may reverse the order of reading.

COUNCIL BLUFFS, IOWA—Elevation, 980; population, 41,439. The eastern terminus of the Union Pacific was definitely established here by a second decree of President Lincoln, March 7, 1864, and this required the railroad company to bridge the Missouri River, in those days an engineering achievement of first magnitude. The first bridge was completed in 1872; a double-track structure replaced it in 1886; in December, 1916, during the course of an hour and without disturbance to traffic, the present million-dollar steel bridge was transferred from the temporary support, where it was built, to the permanent piers.

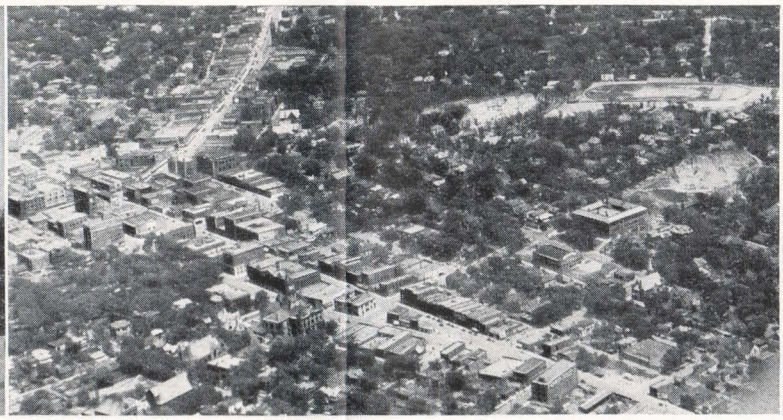
According to tradition the bluffs upon which the town is situated were used during several centuries for Indian powwows; Lewis and Clark held their historic council with the Otoe tribe, in 1804, upon similar bluffs some twenty miles to the north. Trading posts were established in the vicinity in 1807, and in 1819 the first steamboat, the "Western Engineer," carrying a part of Major Long's exploring expedition, ascended the Missouri to Council Bluffs. The Mormons came in 1846 and created a settlement called Kanesville, which was gradually abandoned for Salt Lake City. During the rush to the California gold field in 1849-50, Council Bluffs was an important outfitting point.

Chiefly a railroad town, it has large repair shops and an ice manufacturing plant where more than 75,000 refrigerator cars are iced each year; among its manufactures are passenger and freight elevators and car wheels. It is a large distributing center for agricultural implements. It has eight big grain elevators, a fine public library, and a school for the deaf. The surrounding territory is an important grape-producing area.

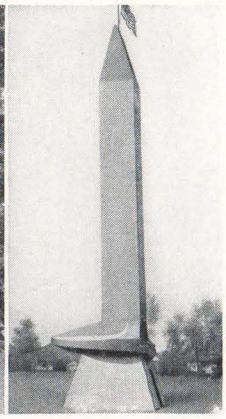
From Council Bluffs to Omaha, the Union Pacific crosses the Missouri



Lincoln Monument—high up on the bluff—at Council Bluffs, Iowa.



Airplane View of Council Bluffs—eastern terminus of the Union Pacific Railroad.



Golden Spike Memorial Monument at Council Bluffs.

River, there a stream about 900 feet wide at low water, with a flow at Omaha of 374,000 gallons per second of the heavily silt-laden water. The Missouri-Mississippi is the longest river in the world: length, 3,700 miles.

NEBRASKA—Area, 77,520 square miles of which 712 miles are water surface; population, 1,315,834. Primarily an agricultural state, Nebraska lies mainly on the Great Plains which rise within her borders, at an average of 10 feet to the mile, from 842 feet along the Missouri River in the southeast to 5,430 feet in the northwest. In recent years, Nebraska has built up a reputation as the "white spot of the nation," and is particularly famed for its balanced budget, and its freedom from sales taxes, income taxes and a bonded debt. The state is also noted for its unicameral legislature, which is limited to 100 members. The dominant character of three-fourths of the state's area is that of an undulating prairie whose soil is a black or brown alluvium underlain by a thick stratum of loess clay. This subsoil is one of the state's greatest assets. More native grasses grow in Nebraska than in any other state and most of them are valuable for forage; her prairies support sixty-four species of native trees and a rich flora including many beautiful wild flowers. Clay, limestone, and potash are the principal minerals, with sand and gravel the most important commercially of the state's mineral resources. More than 75 large sand and gravel pits are in operation.

Farming, with the exception of a million acres in the western part of the state, is carried on without irrigation, with projects under way to irrigate to a much greater extent. Corn is the chief crop, with wheat bringing the readiest cash income. Corn in normal years averages over 100 million bushels. The average annual precipitation is 23.84 inches and there is an abundance of underground water except during periods of prolonged drought; 46 per cent of the rainfall occurs in the growing months. Nebraska ranks second among the states in hog raising and third in cattle; ranking with Iowa and Illinois in corn; in beet sugar production next to Colorado; and ships more wild hay than any other state. Dairying, poultry and egg production are also important.

The principal manufacturing industry is meat packing; milling grain products is second in importance, and butter and cheese making, third.

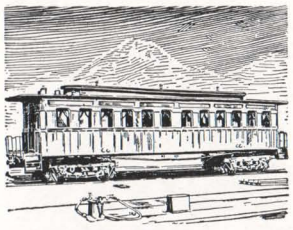
Coronado searching for Gran Quivera in 1541, is reputed to have been the first white man to enter Nebraska. French traders came in 1700; the first authentic exploration was made by the brothers Mallet in 1739, and French influence continued to dominate even after the region was ceded to Spain in 1762. The Louisiana Purchase in 1803 brought Nebraska into the American Republic, first as part of the territory of Indiana, then of Louisiana, and later of Missouri; government exploring parties under Lewis and Clark, Major Long, and Gen. Fremont visited the region in 1804, 1819, and 1842, respectively. Manuel Lisa, a Spaniard, was the foremost trader and the leading personality from 1807 to 1820, and until 1854 the annals of the fur traders were the history of Nebraska. On Lisa's first voyage up the Missouri in 1807, he met John Colter descending the Platte alone in a small boat after his discovery of Yellowstone Park, and attached him to his party. During the War of 1812, because of his profound understanding of Indian character, Lisa was commissioned to hold the trans-Missouri tribes loyal to the Republic, a task which he performed with conspicuous success. In 1820, Ft. Atkinson, then the westernmost U. S. Army post, was established sixteen

miles north of Omaha; in 1832 the American Fur Company maintained regular steamboat navigation on the Missouri. The Oregon, California, and Denver trails which crossed the state began, in 1844, to bring a growing tide of immigration to the valley of the Platte.

Early explorers found eastern Nebraska occupied by the Otoe, Omaha, and Ponca tribes; the central part of the state was claimed by the Pawnees, who displayed the greatest advance in cultural arts, music, and folklore; the Cheyennes and Arapahoes ranged the southwest; the Brule and Ogallala Sioux, the west. Nebraska became a territory in 1854, a state in 1867.

OMAHA, NEB.—Elevation, 1,033; population, 240,000. Omaha was named for the Omaha Indians, one of the tribes with which Lewis and Clark held conference in August, 1804. The first trading post was probably erected during 1805 at Bellevue by Crooks and McLellan. A trading post was established in 1807, where Ft. Calhoun now stands, and in 1820 a U. S. Army post, Ft. Atkinson, was erected at the same place; Ft. Lisa was built in 1812 and Cabanne's post about 1822, by fur-trading companies, and many other trading posts were erected in the vicinity during the next decade. The vanguard of the Mormon exodus crossed the Missouri in 1846, and those pioneers continued to pass westward while the heavy immigration to California was in progress, in 1849-50. In 1854 land was ceded by the Indians, permanent settlers arrived, and the first buildings were erected. Ground was broken at Omaha on December 2, 1863, for the construction of the Union Pacific Railroad, and, on May 10, 1869, at Promontory, Utah, the completion of the first transcontinental railroad was proclaimed.

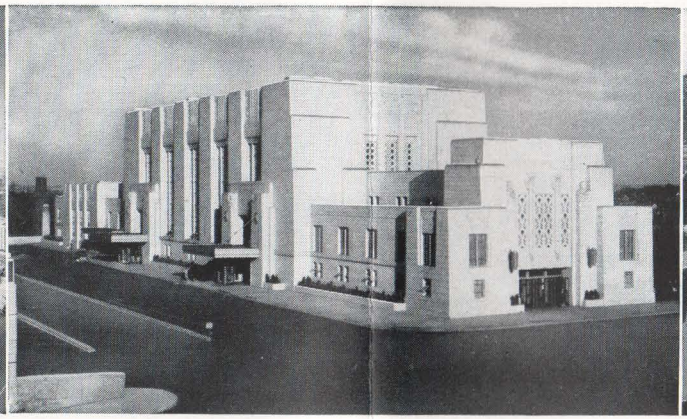
Omaha has an area of 39 square miles. It has 30 public parks connected by a boulevard system 50 miles long; a municipal water system valued at $15,000,000; a public library; 78 hotels; 4 imposing cathedrals and 180 churches; 57 public grade schools and 5 high schools, including one of the finest high school buildings in America; 2 universities, and the medical college of the State University of Nebraska. The offices of the Nebraska Military District of the Fifth Army Area, and several other departments of the United States Army, are housed in the handsome Federal Building at Omaha. Notable among other buildings in the business district are the Douglas County Court House, the City Hall, the Municipal Auditorium, the First National, Omaha National and City National Bank Buildings, the Aquila Court Building, the Woodmen of the World Building, the Telephone Building, the Medical Arts Building, and the Union Pacific Building.



The Lincoln Car
-built for President Lincoln in 1864 - ironclad and bullet-proof -contained his study and bed.

In addition to the Union Pacific, which maintains shops and general offices in the city, nine railroads enter Omaha. The most important industries are meat packing, smelting and refining, milling grain, and manufacturing

Union Pacific Building—general offices of the Union Pacific in Omaha.



Modern Union Station in Omaha, Nebraska

A portion of Omaha's retail section.

dairy products. Omaha ranks first in butter production and the smelting of lead ores; second as a live stock market and first primary grain center; second as a meat packing, live stock, agricultural and implement center; sixth in receipt of oats and wheat. The carnival, called the "Festival of Ak-Sar-Ben" is held in Omaha every autumn. Ak-Sar-Ben also sponsors a live stock show each fall.

From the undulating terrain roundabout Omaha your train passes into the broad level valley of the Platte, one of the richest agricultural regions in America—and rich in historical associations of the Old Oregon Trail, the Mormon exodus of 1847 and the Argonauts of 1849. Through part of this valley also passed the Pony Express and Ben Holladay's Overland Stage line.

Many of the towns you see from your car window were frontier posts at one time or another when the pioneers chose the far-away places of the West to clear forests and laboriously dig irrigation ditches through rock and gravel to make sustaining farm homes for themselves, and passed up as worthless the lush, green meadows of the Platte Valley with thirty inches of annual rainfall and a rich alluvial soil which required only the breaking of the original sod to be highly productive.

MAIN LINE—OMAHA TO OGDEN

ELKHORN, NEB.—Elevation, 1,164; population, 429. Prior to 1908, all Union Pacific trains made a circuitous detour through South Omaha and along the valley of Papillion Creek to Elkhorn. The present double-track main line, built directly westward from Omaha by cutting long channels through the hills and piling up immense embankments across the valleys, was completed in that year at a cost of $3,000,000. The longest excavation is a mile in length and the greatest of the fills, that across Big Pappio Valley, is 1⅛ miles in length and 65 feet in average height. This gigantic piece of railroad construction, known as the Lane Cut-off, has practically eliminated grades and curves and has shortened the line 9 miles.

Building U. P. Under Fire

WATERLOO, NEB.—Elevation, 1,124; population, 381. Here the Union Pacific crosses the Elkhorn River, which flows along the bottom lands of the Platte, where large quantities of garden seeds are produced.

VALLEY, NEB. — Elevation, 1,139; population, 1,200. Valley is a shipping center for grain, sand and gravel; a fine modern stock-feeding yard is located here. Three miles west of the station the traveler obtains a clear view of the Platte River, to the south.

LINCOLN, NEB.—Elevation, 1,167; population, 95,000. Lincoln (50 miles from the Missouri River, on the Omaha-Kansas City Line of the

Union Pacific) is the capital of the state and a modern city served by 5 railroads. It has 1,338 acres of parks, and is an important manufacturing and jobbing center. There are 107 churches, 26 elementary and 4 public high schools and 10 parochial schools. State institutions at Lincoln are: The Capitol, State Fair Grounds, State Agricultural College, University of Nebraska, Orthopedic Hospital, Hospital for Insane, Penitentiary and Men's Reformatory. Other notable public buildings are: Public Library, City Hall, County Court House, Federal Building, U. S. Veterans Hospital, and nine other hospitals and sanitariums. There are a number of fine air-conditioned business buildings and theatres, and several strictly modern hotels. The city ranks high as an educational center, having 7 universities and technical schools, and for the school year 1947-48 had a college population of approximately 15,000.

BEATRICE, NEB.—Elevation, 1,252; population, 10,883. Situated 64 miles from the Missouri River on the Omaha-Kansas City Line of the Union Pacific within a rich agricultural territory. It is served by 3 railroads, has 24 churches, 8 ward schools, a modern high school, and a Junior high school. One of the largest distributing implement houses in the West is located there, also one of the largest stove fixture manufacturers. It is the home, also, of the State Institution for Feeble-Minded.

FREMONT, NEB.—Elevation 1,203 feet, population 16,000. A red granite marker beside the station at Fremont indicates the course of the Overland Trail. The town was named for General Fremont "The Pathfinder". It is a modern city. Municipal auditorium seats 3,000. There are seven fine parks and state recreation grounds with 20 lakes. Also agricultural processing plants and thriving businesses handling poultry, butter, flour and meat packing. A hybrid seed corn center, and important wholesale and retail seed market. Active market for cattle, hogs, horses and sheep. Large hatchery and nursery center. Home of co-educational Midland College, (United Lutheran). At **North Bend** (population 1,003), 15 miles west of Fremont, the tracks run close to the wooded shores of the Platte River. The thriving county seat city of **Schuyler** (population 2,808) lies 15 miles west of North Bend.

COLUMBUS, NEB.—Elevation, 1,444; population 9,100. Historically Columbus was the most important Nebraska town west of Omaha before the Union Pacific was built; it marked the frontier, beyond which were few settlers, and its commercial life depended upon trade with overland wagon trains. Today, Columbus is a prosperous city in a fruitful trade area, with a good public school system and a large Roman Catholic Academy. Two modern hospitals serve the people of this area. It is an important industrial center, with creameries, elevators, de-hydrators, farm machinery and equipment and a unique wooden-sole shoe factory. Poultry, butter, eggs, livestock and grain are shipped. Consumers Public Power District, providing electrical energy to more than 100 towns in Nebraska, has headquarters in Columbus. The Union Pacific here crosses the Loup River just above its confluence with the Platte. The Loup River Public Power hydro-electric plant, located here, produces 50,000 horsepower of electric energy distributed through Nebraska and connecting with the other two hydro-electric plants in the State, forming a statewide power grid. A ninety-three acre tract of land has been developed for industrial purposes.

New Nebraska State Capitol at Lincoln, Nebr.

A view of the business district, Fremont, Nebr.

The main street of Grand Island, Nebr.

GRAND ISLAND, NEB.—Elevation, 1,864; population, 25.000. The city was named after an island in the Platte River, where, in 1856, Col. Steuart and a detachment of cavalry attacked and killed ten of a band of Cheyenne Indians in reprisal for firing on a mail carrier. The first settlement was made in 1857 by a party of Germans from Davenport, Iowa. It is situated on a typical stretch of the Great Plains, which rise so gradually to the westward that they seem perfectly level; herds of buffalo roamed the vicinity until 1873. Grand Island is a Union Pacific division point, where extensive shops are maintained, and is an important commercial center, with large jobbing houses, grain elevators, flour mills, creameries, factories making ice, bricks, brooms, candy, wire fences, windmills, machinery, chemicals, cement, and stock food; one of the most important industries is the production of beet sugar. A Government air mail landing field is maintained here; also the United States Monitoring Radio Station which polices the use of the air and protects authorized stations and keeps all broadcasters within their assigned channels. Grand Island is one of the great horse and mule markets of the world and the stock yards ship many thousands of cattle each year. The surrounding country produces hay, grains, and sugar beets.

WOOD RIVER, NEB.—Elevation, 1,966; population, 1,000. The chief industries are general farming, potato and sugar beet culture, and stock raising. Here the Union Pacific tracks pass through the middle of the Platte River Valley, which is 22 miles wide, and run for long distances in lines that are nearly straight; one of these curveless stretches is 40 miles long. Following the development of cheap hydro-electric power in the Platte Valley "pump irrigation" is rapidly transforming agricultural crops and methods in this vicinity and farther west.

KEARNEY, NEB.—Elevation, 2,146; population, 12,000. Historic Ft. Kearney. established in 1848 for the protection of the Overland Route, was situated south of the Platte, about four miles east of the present townsite. It was named for Gen. Kearny, a commander in the war with Mexico. Before the Union Pacific was built, it became one of the most important stations on the Oregon Trail, as all routes from Missouri River towns between Kansas City and Omaha converged there. During the construction of the railroad, Kearney was the point at which serious Indian warfare began; every mile of road westward was surveyed and built under military protection furnished by Generals Grant and Sherman. Desperate encounters and daring exploits were frequent. Ft. Kearney was the headquarters of Major North, who mustered four companies of Pawnees into the service of the United States, and used them effectively against their hereditary enemies, the Cheyennes and the Sioux.

Kearney is now an attractive modern city, with extensive canal and pump irrigation in the farm area. An important retail center, the city has an outstanding park system, is the location of the largest of Nebraska's four State Teachers Colleges, the State Hospital for the Tuberculous and the State Boys Training School. Its industries consist of foundries, grain elevators, creameries, bottling works, produce and meat processing plants. The Kearney Army Air Base, a permanent installation, is located just east of the city. The fertile soil of the Platte Valley, all of which is irrigable, lends itself to diversified farming.

Elm Creek (population 730) beyond Kearney, in 1868 was the scene of the massacre of five section men by Sioux Indians under Chief Two Strikes.

LEXINGTON, NEB.—Elevation, 2,387; population, 5,225. Between Kearney and Lexington the land produces corn, wheat, rye, oats, barley, potatoes, sugar beets, and alfalfa. Lexington has a handsome courthouse, a public library, two grain elevators, flour mills and an alfalfa mill. Extensive hydro-electric development in this region is now distributing its benefits alike to townspeople and farmers. Lexington was formerly called Plum Creek, the scene of numerous Indian attacks during the construction of the Union Pacific; in one of these, a freight train and its crew were captured, and promptly retaken by the railroad forces. In 1867 a band of Cheyenne Indians under Chief Turkey Leg wrecked a freight train, and killed the engineer and fireman. Other members of the train crew escaped into the surrounding grass, where they hid until nightfall. The Indians leisurely looted the cars, tied bolts of bright cloth to their horses' tails and galloped away. The surviving members of the crew notified authorities. A punitive expedition of Pawnee Indian scouts under Major North overtook the marauders, killing 15 and capturing the nephew of Turkey Leg. This incident served as the basis for a dramatic scene in the popular motion picture, "Union Pacific." The Indians soon overcame their awe of locomotives, but it was some time before they molested the telegraph wires, which they reverently regarded as "talking medicine of the Great Spirit."

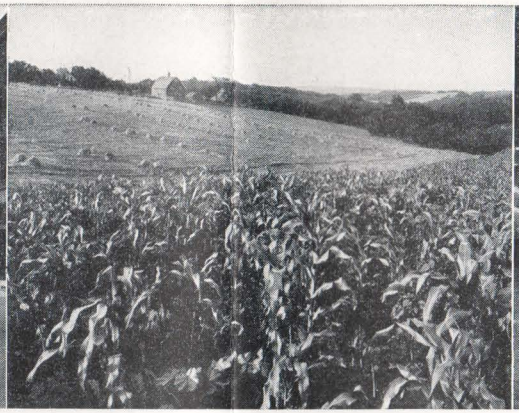
GOTHENBURG, NEB.—Elevation, 2,559; population, 2,330. Gothenburg is an enterprising, modern town, with grain elevators and a public library, and is a shipping point for grain, hay, and live stock. Just before reaching the station the train crosses a large irrigation canal, one of many that may be observed farther west; hereabouts the sand-hill region begins, and the broken character of the land may be noted to the south.

At **Willow Island**, in January, 1872, Grand Duke Alexis of Russia, escorted by Generals Sheridan and Custer and "Buffalo Bill" started on a buffalo hunt during which the Russian displayed marked skill and daring.

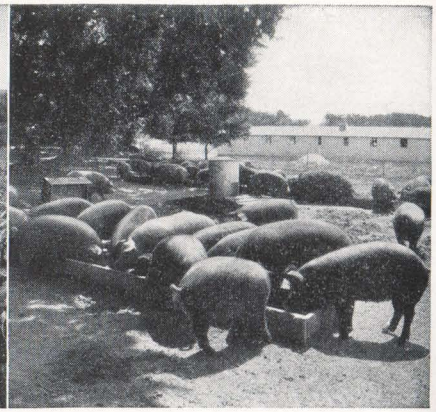
NORTH PLATTE, NEB.—Elevation, 2,800; population, 17,000. Located just west of the confluence of the North Platte and South Platte Rivers. From this point the Union Pacific main line follows the South Platte River and a branch line serves the North Platte Valley into Wyoming. During the winter of 1866-67, when the terminus of the Union Pacific was at North Platte, the town had 1,000 buildings and a temporary population of 5,000. For a short time it was "wide open" until a Vigilance Committee restored order by the swift, relentless method of capturing desperadoes red-handed and allowing them a few minutes for repentance at the end of a rope. Two companies of soldiers were maintained there, although no serious Indian attack was ever made on the town. For many years North Platte was the home of "Buffalo Bill" Cody.

Death of L.L. Hills

The retail section of North Platte, Nebr.



Nebraska corn normally averages 100 million bushels a year.



Pure bred live stock is the rule throughout Nebraska.

The city is now modern, has a Carnegie Library, grain elevators, flour mills, bottling works, a United States Air Mail Station and Landing Field, Weather Bureau, and a State Experiment Farm. It is a Union Pacific division point, where extensive shops and one of the largest icing plants in the United States are maintained; more than 75,000 cars are iced annually at this plant, which may be seen as the west-bound train leaves the station.

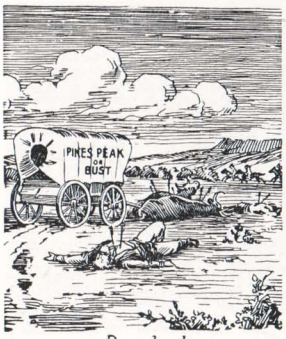
North Platte is the shipping point for a spacious irrigated district, the oldest in Nebraska, which produces vast quantities of wheat, sugar beets, and alfalfa. Much live stock is raised and fattened in the vicinity.

The Platte Valley Public Power & Irrigation District is a system of canals, reservoirs and a power plant located 3 miles south of North Platte town. Water for the regulating reservoir is taken from a diversion dam in North Platte River 45 miles west of town and 9 miles north of Ogallala. This water after operating the turbines and electric generators at the power plant is diverted to the South Platte River and used for irrigating about 100,000 acres of farm lands lying eastward as far as Kearney.

OGALLALA, NEB.—Elevation, 3,213; population, 3,159. Ogallala is the name of a tribe of Sioux Indians. The town is situated beside the South Platte River, at the foot of bluffs of sand and gravel which contain fossil bones of extinct mammals. Near Ogallala, in 1870, a band of Indians attempted to wreck a train by driving their ponies in front of the locomotive; a score of ponies were killed and the savages acquired a new respect for the "smoke wagon."

Ogallala was at one time a terminus of the great Texas cattle trail. In 1875, sixty thousand cattle were driven to Ogallala for distribution.

Like most of the old towns of the Texas Trail Ogallala has gone modern; city water system; electric power; fire department; 30 miles of paved streets; sewage disposal plant; air-conditioned theatre; and everything else that goes to make an up-to-date town.



Busted

Eight miles north of Ogallala on the North Platte River is the site of Kingsley Dam, second largest earth dam in the world, completed late in 1940, at a cost of approximately $25,000,000. Kingsley Lake, formed by the dam, is 23 miles long and 140 feet deep at the dam. Its purpose is to control flood waters, to provide for irrigation and to produce electric power.

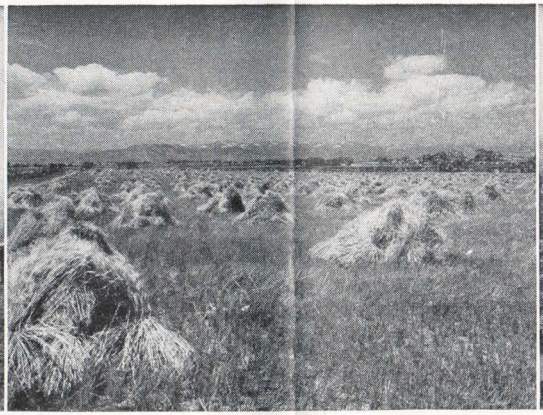
BRULE, NEB. — Elevation, 3,286; population, 374. Brule was named for a Sioux tribe to whom the French fur traders applied the term "brule" (burnt) because their painted faces produced that impression. Spotted Tail was chief of the tribe, and he, with Red Cloud, chief of the Ogallala Sioux, was at one time able to muster 10,000 warriors. Four miles west of the town is California Hill, where a branch of the Overland Trail crossed from the South Platte to the North Platte at Ash Hollow. Brule is a shipping point for sugar beets, wheat, hogs, and cattle.

Big Springs, Neb. (elevation, 3,367; population, 569) is named for the large springs that issue from the bluffs north of the station. It ships wheat, corn, barley, and millet. About eight miles west of the station the Union Pacific turns southward into Colorado, where it runs for ten miles before returning to Nebraska.

JULESBURG, COLO.—Elevation, 3,465; population, 1,860. Julesburg, named after an agent of the Overland Stage Line killed by J. A. Slade, a notorious desperado whose career is described by Mark Twain in "Roughing It," has as thrilling a history as any town on the plains. Its site has been changed four times; the original town, sacked and burned by Indians in 1865, was opposite the mouth of Lodgepole Creek, south of the Platte. The Julesburg of 1867, where the village of **Weir** now stands, was a terminus of the Union Pacific Railroad, with a population of 7,000. During this period desperadoes were temporarily in power, the saloon, dance hall, and gambling den flourished without restraint, and only the man quick with his gun was respected. Early immigrants to California and Oregon usually crossed the South Platte at Julesburg, whence several routes led across the mountains, and the town became an important supply depot on the Overland Stage Line. In 1875 an attack was made upon the fort by 1,000 Sioux and Cheyennes, when Capt. O'Brien, with but one company of cavalry and two pieces of artillery, after suffering heavy losses, repulsed the savages. In those early days this region was a part of the range of immense herds of buffalo. Julesburg is now a modern town and serves a large territory; the chief products shipped are sugar beets, potatoes, onions, grain, and live stock. The new Library contains a fine collection of relics of the days of old Fort Sedgwick, Indians, Pony Express and Overland Stage.

SIDNEY, NEB.—Elevation, 4,090; population, 3,388. In 1868 Fort Sidney was established at this point, and continued until 1894; Indian attacks were frequent during the early operation of the Union Pacific, and several section hands were killed by arrows. The stream valley is bounded by prominent bluffs of limestone in which the fossil bones of camels and mastodons have been found; the adjacent table-lands were favorite hunting grounds of the Sioux and the Pawnees. In 1867 Sidney was the terminus of the Union Pacific, and the lawless element from North Platte moved in for a brief domination. During the gold-mining rush it was the starting point of a stage line to the Black Hills. The town has a Carnegie Library, flour mill, bottling works, grain elevators, a court house, and a city hall; the chief products shipped are wheat, potatoes, and live stock. Just before entering Pine Bluffs, a stone monument marking the boundary between Nebraska and Wyoming may be seen to the north of the track.

Fat Hereford cattle in a midwest feeding pen.



A Colorado wheat field.

For America's sweet tooth. Irrigating a field of sugar beets.

WYOMING—Area, 97,914 square miles; population, 250,742. Most of the state lies in the Great Plains region, which consists of flat or gently rolling uplands, from 4,000 to 7,000 feet in elevation, with occasional, eroded buttes and mesas rising in picturesque prominence. The Rocky Mountain System crosses Wyoming from southeast to northwest, with a distinct break in the form of a broad, relatively low pass, near the southern boundary, through which the tracks of the Union Pacific are laid. In the west and northwest, in Grand Teton National Park and in the wonderland of Yellowstone National Park, the finest mountain scenery is to be found.

Sagebrush is the characteristic growth of the plains, although much of their area is covered with nutritious native grasses, which have made the state one of the foremost stock ranges in the United States. While cattle raising is exceeded in magnitude only by sheep raising, the former industry continues one of greatest importance. The wool clip approximates 30,000,000 pounds annually.

Since the average annual precipitation is but 14 inches, agriculture is carried on by irrigation and by dry-farming. The principal crops are hay, oats, wheat, potatoes, and barley; the growing of sugar beets is increasing and there are now 4 sugar factories in the state.

Oil is chief of the rich store of minerals in Wyoming, and the value of a recent year's production exceeded $24,000,000. Coal is second. The fields cover more than 41,000 square miles and contain approximately 670 billion tons which, at the present rate of mining, will not be exhausted for 80 thousand years. Other products of the mines and quarries are iron, with an output of a million tons yearly; bentonite, with largest deposits known and the largest output in the United States; vermiculite, used extensively for roofing and insulation; gold, gypsum, limestone and marble; and there are enormous deposits of phosphate now being developed in the southwestern corner of the state.

In Wyoming may be found more big game than in any other section of the United States; the Jackson Lake region south of Yellowstone Park is a famous hunting ground. Antelope, deer, coyotes, and wolves inhabit the plains; in the mountains are elk, moose, blacktail deer, antelope, mountain sheep, bears, pumas, lynxes, wolverenes, and many smaller animals. There is a great variety of game birds in the state, and the lakes and streams are well stocked with rainbow and native trout. Dude ranch vacations in Wyoming's mountain air and sunshine attract thousands from all parts of America.

The first white man in Wyoming was the Sieur de la Verendrye, in 1743. John Colter, in 1807, discovered the Yellowstone region. In 1811 the Pacific Fur Company's party crossed the state and in 1824, Ashley explored and trapped within its boundaries. Bonneville came in 1832, and Fremont, guided by Kit Carson, in '42. When the Union Pacific started building through Wyoming in 1867, it was not even a name on the map, and only a handful of people lived within its present boundaries. The Jackson Hole country in the Grand Tetons served as a trading rendezvous for agents of St. Louis fur companies during the early decades of the Nineteenth Century, but otherwise the history of the region before the coming of the Union Pacific almost exclusively involved travel over the Overland Trail, along which a few tiny settlements existed. Large areas of the state were closed to white

settlement by Indian warfare for more than a decade after the completion of the Union Pacific, and for many years there was strife between sheep men and cattlemen over the free range, which cattlemen asserted was permanently ruined by the close cropping of sheep. Later the hostility of both these groups was directed against homesteaders when they began to fence the range.

An epoch-marking forward step in modern political history was taken by Wyoming's stockmen pioneers when the state entered the Union in 1890. For the first time in western civilization suffrage and equal rights were granted to women.

PINE BLUFFS, WYO.—Elevation, 5,047; population, 771. Pine Bluffs, the first town on the Union Pacific in Wyoming, was named from the stunted pines on the limestone bluffs bordering Lodgepole Creek. A much-traveled Indian trail used to pass this point, and there were a number of attacks during the building of the railroad. There is considerable shallow well irrigation in this vicinity. The chief products shipped are wheat, sugar beets, potatoes and live stock. At **Hillsdale,** named after L. L. Hills, a Union Pacific surveyor killed by Indians, the Rocky Mountains first come into view; the dark crests of the Laramie Range are visible in the west, and to the south some 60 miles, the snowy summits of Longs and other lofty peaks of the Front Range may be seen in clear weather.

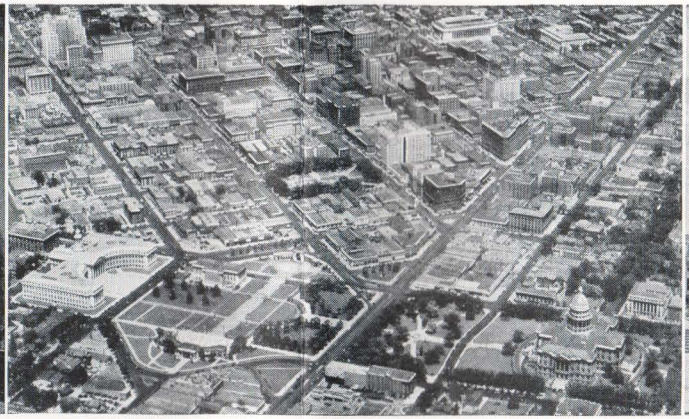
JULESBURG TO DENVER

At Julesburg the Denver line of the Union Pacific diverges, and from Denver another line extends through Greeley to Cheyenne (see map on pages 47-50). Tickets reading via the Union Pacific from Omaha or St. Joseph, Mo., to certain western destinations are good via the main line or via Julesburg, Denver and Cheyenne.

COLORADO— Area, 104,247 square miles; population, 1,165,000 Colorado has a higher average altitude than any other state; approximately two-thirds of its area ranges from 6,000 to 14,000 feet in elevation. It lies in the east-central part of the Rocky Mountain system and includes the loftiest eminences of the range within the United States. The main chain, in two parallel lines, extends north and south, with numerous secondary ranges and spurs stretching in every direction, and thrusts up 54 peaks exceeding 14,000 feet in elevation. Between these parallel ranges are 4 great natural park-like areas, and many smaller ones. In extent and variety the mountain scenery of Colorado surpasses that of any other state.

Attack on Prairie Schooner

Colorado State Capitol, Denver.



Denver from the air—Civic Center and Capitol in the foreground.

City and County Building, Denver.

Nearly every useful mineral produced in the United States is found in Colorado, and most of them have been mined to some extent; they number approximately 250.

Despite its rank as a mining state, the annual value of the farm products of Colorado is more than four times that of its mines and quarries; and it is the second state in irrigated acreage. The principal crops are hay, wheat, corn, potatoes, oats, barley, sugar beets, beans, grain sorghums, rye, broom corn, apples, peaches, and pears. Wheat ranks first in value; sugar beets, second; and alfalfa, third. Colorado raises vast herds of sheep, cattle, horses, mules, and hogs, named in the order of importance. The total value of all Colorado crops and livestock exceeds $500,000,000. Other important industries are packing plants and flour mills, iron and steel mills, and plants making chemicals and explosives. The normal industrial output exceeds $660,000,000 a year in value.

Colorado enjoys wide and merited celebrity as a summer playground for the nation; its sunny, invigorating climate, its majestic, snowy peaks and gleaming glaciers, its excellent roads, its hundreds of lakes and streams, well stocked with trout, and its wonderful wild flower gardens attract many thousands of visitors. There are 2 national parks, 8 national monuments, and 11 national forests in Colorado. One of them, Rocky Mountain National Park, is the most popular national playground in America.

There are numerous resort communities, with fine hotels and all facilities for summer recreation, throughout the mountain regions. Some of Colorado's resort areas are popular centers for skiing and other snow sports during the winter months.

Followers of Coronado and DeSoto are believed to have visited Colorado in 1540-41; Escalante explored the southwestern part in 1776. The eastern plains and mountains were visited by Lt. Pike in 1806, and by Col. Long in 1820. Small deposits of gold were discovered frequently between 1806 and 1857, but its discovery, in 1858, at the confluence of Cherry Creek and the South Platte River, first brought large numbers of prospectors; the subsequent finds at Idaho Springs by George A. Jackson, and at Central City by John H. Gregory, early in 1859, attracted immigrants by the thousands. Colorado became a territory in 1861. In 1876, just 100 years after the signing of the Declaration of Independence, it was admitted to the Union, and for that reason has become popularly known as the "Centennial State."

Attacking a Stage Coach

Colorado's mountainous area is six times greater than that of Switzerland. There are more than 8,000 miles of fishing streams in Colorado, and more than 2,000 lakes.

Colorado has the highest highways in the nation. The highest suspension bridge in the world spans the Arkansas River over the Royal Gorge.

Mineral hot springs are found throughout Colorado—the largest group at Steamboat Springs. Delightful swimming pools and facilities for steam baths are located at all these points.

Mining is the oldest industry and the total value of all minerals mined in 1948 totalled $52,174,050. Colorado leads the world in production of molybdenum with a value of $11,500,000 in 1948. Coal valued at $22,719,504 was mined in 1948. Production of other metals includes $5,355,000 in gold; $2,287,850 in silver; $8,750,000 in lead; $11,597,600 in zinc; $963,600 in copper; $2,220,000 in vanadium and tungsten. Non-metallic minerals total $9,500,000. Petroleum products for 1948 totalled $45,264,824.

STERLING, COLO.—Elevation, 3,939; population, 9,500. Sterling is the distributing point for 35 wholesalers. Twenty-three firms employ from 500 to 1,000 workers according to season, in the manufacture of food products, building materials and metals. The principal exports are sugar, live stock, wheat, barley and beans, produced on the 130,000 acres of irrigated farms in the surrounding territory. In Cedar Canyon, 12 miles northwest of Sterling, a force of cavalry under Capt. Downing defeated a band of Arapahoe Indians in 1864. **Merino** (population, 259) ships sugar beets, barley, wheat, beans and live stock; a station on the Overland Stage Route was once located near the site of Merino, and the agent, H. Godfrey, so well defended his post that the Indians named the place "Fort Wicked."

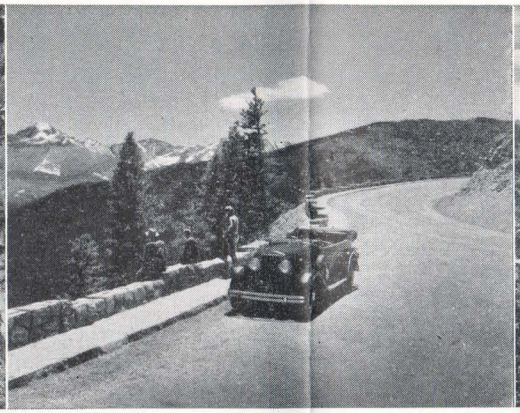
FORT MORGAN, COLO.—Elevation, 4,500; population, 5,500. Fort Morgan was founded in 1884 on the site of an old military post. The city has a Carnegie Library, Federal Building, Municipal light and power plant, a flour mill, and a large beet sugar factory. Sugar beets, hay and live stock are the chief products of the irrigated farms in the vicinity.

DENVER, COLO.—Elevation, 5,280; population, 420,000. Denver, the capital and commercial center of Colorado, widely known as the "Gateway to 14 National Parks," is situated on both sides of the South Platte, at its junction with Cherry Creek, a stream usually dry, but carrying at times a great volume of water. The city is 14 miles from the eastern base of the Rocky Mountains and commands a superb view of the Continental Divide from Pikes Peak to Longs Peak. The first settlement was made in 1858, upon the discovery of gold in the vicinity; originally there were 2 villages—that on the west bank of the stream called Auraria, the other named Denver.

The present area of Denver is 58.75 square miles. Within it there are 42 parks and playgrounds, 1,635 acres in extent; 630 miles of paved streets, 63 miles of boulevards and parkways, and 205 miles of street car lines. City Park contains a natural history museum, a zoological garden, and an electric fountain. In the mountains, within 15 miles of the corporate limits, Denver owns 45 parks comprising about 20,000 acres, connected with the city by fine roadways. This system of parks has a wild animal preserve, shelter houses, camp sites, open-air fireplaces, and other accommodations for visitors.

Among the notable buildings are the State Capitol, of Colorado granite; the Federal Building, of white marble, in classic style; the U. S. Mint; Public Library; Union Station; City Hall: County Court House; 2 museum buildings; the stock-show stadium; the Municipal Auditorium; the Civic Center Group; and the Federal Reserve Building.

Big Thompson Canyon, Rocky Mountain National Park.



Longs Peak from "Many Parks" point, Rocky Mountain National Park.

Hallet Peak and Bear Lake, Rocky Mountain National Park.

Sugar production ranks first, meat-packing second, in value of manufactured output; foundry products, railway and mining machinery, third; flour and grist-mill products, fourth. The manufacture of paints ranks high. Denver is the principal jobbing center in the Rocky Mountain region and an important railroad center.

The summer climate of Denver is delightful; sunny days, the dry, sparkling air of mile-high altitudes, and cool, restful nights. The city is well provided with hotels, from those of the best metropolitan standards to those that are merely comfortable. It is the principal gateway to Rocky Mountain National Park and to all the scenic regions of the state. Among them are: Mesa Verde National Park; Colorado Springs; Manitou, with its celebrated curative springs; the Pikes Peak region; Cripple Creek, with its famous mines; the picturesque resorts in Platte and Clear Creek Canyons—Golden, Idaho Springs, Georgetown, Silver Plume; Evergreen, Morrison, and the Park of the Red Rocks in Bear Creek Canyon; Eldorado Springs; Boulder, state university and chautauqua town; Greeley and Ft. Collins, gateways to many mountain fishing resorts. From Denver many of the 14 National Forests of Colorado may be reached most conveniently.

ROCKY MOUNTAIN NATIONAL PARK—Rocky Mountain Park comprises 401 square miles of the finest Alpine scenery of the Colorado Rockies. It is a region of rugged grandeur, tempered by the formal beauty of green, open valleys and splendid wild flower gardens. The profound canyons hold scores of beautiful lakes upon their terraced floors, and some of them bear living glaciers in their upper recesses. Foremost among the mountain summits of the Park is Longs Peak, the most impressive and one of the loftiest peaks of the Rockies. All but the highest slopes of the Snowy Range are covered with stately evergreen forests, diversified by frequent park-like open spaces where wild flowers grow in amazing variety and profusion. The climate is sunny, sparkling and genial by day; cool, dry and dewless by night. Practically all of the lakes and streams are stocked with trout. Birds and beasts find sanctuary there and may be observed in fearless enjoyment of their domain. The Park is strikingly easy of access and its hotel accommodations are ample and varied. The chief forms of recreation are motoring, camping, horseback riding, mountain climbing, fishing, golf and tennis. Trips may be made from hotel or resort to many principal attractions between breakfast and dinner. This great playground is perhaps the most popular of our National Parks. It may be reached by auto-stage from Denver in a 250-mile circle tour through Estes Park, across the Continental Divide via the Trail Ridge Road to Grand Lake and back to Denver through Denver Mountain Parks, by way of Lookout Mountain and Golden.

BRIGHTON, COLO.—Elevation, 4,978; population, 5,000. Brighton is the commercial center of a rich, irrigated-farming district; its principal exports are wheat, cabbage, celery, head lettuce, tomatoes, canned goods, dairy products, and live stock. The city has a beet sugar factory, canning factory, and a butter and cheese factory.

LUPTON, COLO.—Elevation, 4,909; population, 2,000. Lupton has a city park, grain elevator, 2 canning factories, a sugar factory, and a milk-condensing plant; the principal products exported are sugar beets, truck garden vegetables, hay, grain, live stock, and dairy products. Much of the surrounding land is under irrigation. **La Salle** (elevation 4,673; population, 755) ships sugar beets, potatoes, wheat, and live stock.

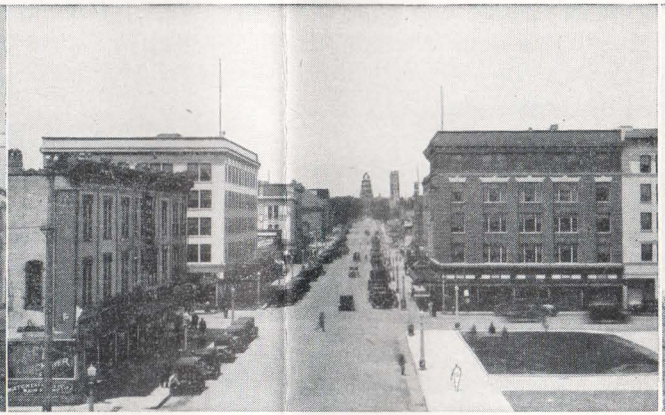
GREELEY, COLO.—Elevation, 4,637; population, 21,105. Greeley, on the Cache la Poudre River, was settled in 1870 by New England colonists, under the patronage of Horace Greeley, of the New York *Tribune*, author of the famous phrase, "Go West, young man." The surrounding territory is devoted to irrigated farming and sheep and cattle raising. Greeley has a flour mill, a beet sugar factory, a canning factory, and lesser factories, also large seed houses and poultry processing plants; the principal exports are sugar, canned goods, potatoes, and flour. The city has 35 miles of paving, several fine public buildings and other civic improvements. It is the seat of the Colorado State College of Education and is a gateway to Rocky Mountain National Park. **Eaton** (elevation, 4,826; population, 1,322) was named after a former governor of Colorado; it has a public library, flour mills and a sugar factory; the principal shipments are potatoes, flour, sugar, and live stock.

CHEYENNE, WYO.—Elevation, 6,058; population, 35,500. Cheyenne, named by Gen. Dodge after the Indian tribe, sprang into prominence when it became the terminus of the Union Pacific, during the winter of 1867-8; within a few months it had a population of 6,000. When the town was 6 months old, the favorite pastimes of drinking whiskey, gambling, robbery, and shooting men as an appetizer for the next meal were but slightly restrained. Then the patience of the law-abiding citizens became exhausted, and "Judge Lynch" was invoked to restore order. There were no delays to the trials, no demurrers, no admission of pleas of insanity, and the juries never disagreed; after a year, the Vigilantes were no longer needed. Several Indian attacks were made on the parties surveying and constructing the Union Pacific. Local tradition has it that the first burials in the graveyard of the future city were those of two members of a Mormon grading outfit killed by the Cheyennes.

Cheyenne, now a handsome, modern city, was among the first cities in the United States to be lighted by electricity. The State Capitol is there; among other notable public buildings are the Federal Building, State Supreme Court, Elks' Home, Carnegie Library, and the Masonic Temple. The Union Pacific maintains large shops and there are creameries, packing and ice plants, planing mills, and a grain elevator. One of the principal air mail landing fields is maintained here. Stock raising is the principal industry in the surrounding country, and large numbers of beef cattle and sheep are shipped to eastern markets. Three miles northwest of the city (visible from the train) is Fort F. E. Warren, established in 1867, an important army post, with buildings and equipment valued at more than $9,000,000; during the war the post was greatly expanded and improved. Many of the picturesque features of Cheyenne's early history, and that of the old frontier "cow-country," are reproduced annually at the "Frontier Days" celebration

Dancehall in oldtime Cheyenne

"Ride 'em Cowboy." Cheyenne Frontier Days Annual Rodeo.



Downtown Cheyenne—Wyoming State Capitol in the distance.

Ames Monument, near Sherman, Wyo. (See Sherman article, this page.)

held during the month of July. Horse racing, broncho "busting," steer "bulldogging," roping, and all the thrilling feats of horsemanship of which the cowboy is master, together with Indian dances and tribal ceremonials, make up the program.

Imposing views of the Front Range of the Rockies, directly south of the foothills of the Laramie Range, may be seen near Otto, Granite Canyon and Ozone. The train is now close to the mountains and since leaving Omaha, has ascended more than a mile.

GRANITE CANYON, WYO.—Elevation 7,312; population 35. There are quarries, lime kilns, and springs of pure water; there is fine trout fishing in the streams near by. A granite crushing plant provides resilient rock ballast for Union Pacific roadbeds and for highway construction. At **Buford** (elevation 7,862) there was quarried for many years the famous Sherman granite which was used as ballast upon the roadbed of the Union Pacific. The character of this granite may be observed in the deep cuts and on the immense embankments across the valleys.

SHERMAN, WYO.—Elevation, 8,013. Sherman, named in honor of Gen. W. T. Sherman, is the highest point on the Union Pacific; striking views of the Rockies may be obtained to the south; the original line across this relatively flat summit of the Laramie Mountains lay two miles to the north, and was 237 feet higher than the route now used; on the old line stands an impressive stone monument to Oakes and Oliver Ames, the two financiers whose energy and foresight contributed so much to the speedy construction of the Union Pacific. The scene hereabouts, a high and rugged upland with bold rock masses often eroded into fantastic shapes, is primitive and picturesque.

HERMOSA, WYO.—Elevation, 7,899; population, 90. Just before reaching Hermosa the train passes through a tunnel 1,800 feet long. Fine panoramas of the distant mountains continue in view. There the road enters the Laramie Basin, a hollow, mountain-rimmed upland between the Laramie and Medicine Bow ranges. In the vicinity are many bizarre monuments eroded from the red sandstone into shapes that generally suggest mushrooms, parasols, or hour-glasses. There is excellent trout fishing in the streams, and the hunter of big game may find wolves, mountain lions, deer, and bears. Two cavalrymen, while guarding an Overland Stage station that once stood near Hermosa, were killed by Indians in 1865. From a point about a mile west of Hermosa the Union Pacific has two lines to Laramie; westbound trains run via Red Buttes; eastbound, via Forelle and Colores. Red Buttes takes its name from the grotesque sandstone columns in the vicinity, and similar formations may be observed in the vicinity of Colores, on the eastbound track. Stock raising is the chief industry of Hermosa and vicinity; a vermiculate mine is being developed two miles to the south.

Wagon Train Encampment

LARAMIE, WYO.—Elevation, 7,151; population, 14,000. Laramie, on the Laramie River and sheltered by the Laramie mountains on the east and the Medicine Bow range on the west, was named for Jacques La Ramie, early trapper for the American Fur Company. The city is cool all summer and is within easy driving distance of the Medicine Bow National Forest in which one may fish, hunt, and vacation from comfortable lodges and resorts.

In 1866 Fort Saunders was built to protect railroad workers, early settlers and the stage lines. In 1868 the site of Laramie was selected for a Union Pacific terminal. When the railroad went on, the city remained, for the Laramie Plains already had become valuable as an "open range" for cattle grazing.

Wyoming's open range has given way to ranches; 40,000 cattle and 100,000 sheep graze on the Laramie Plains. North of Laramie is the King Brothers Sheep Ranch, famed the world over for its Corriedale and Rambouillet sheep. Laramie is shopping and shipping headquarters for ranchers.

Here the first women jury of the world was called in 1870. Women's suffrage was first granted in Wyoming in 1869 when the territorial constitution was framed. Bill Nye, the famous humorist, ran the Laramie Post Office, organized his "den of forty liars" and established the first newspaper. Tom Horn, Wild Bill Hickok, Calamity Jane, Butch Cassidy, Buffalo Bill and other colorful characters of the old west were occasional visitors.

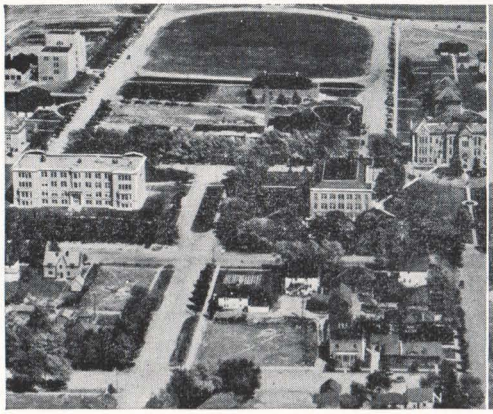
Never a boom town, Laramie's development is due to the steady growth of staple industries. The Union Pacific employs over 1,000 people. The company has there the largest stock yards on the system, for the feeding of livestock in transit. South of town is the Pacific Fruit Express re-icing plant, largest on the Union Pacific. Laramie also has a large cement manufacturing plant, and the United States Bureau of Mines has there an oil shale laboratory costing in excess of one-half million dollars.

Lumber is a major industry at Laramie, and in normal times employs about 800 men, producing over 325 million feet of railroad ties and two million feet of lumber as well as a considerable number of mine props.

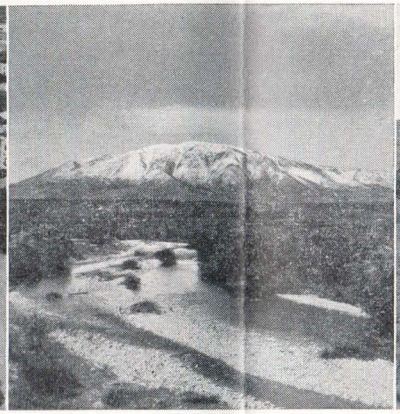
Home of the University of Wyoming, the city is often referred to as the Athens of Wyoming because in the State's single institution of higher learning are combined five standard colleges. Since its founding in 1887, the enrollment has grown to over 3,000.

Laramie has a fine modern school system, and among its fine churches practically every Christian denomination is represented. The Council-Manager form of city government is in effect.

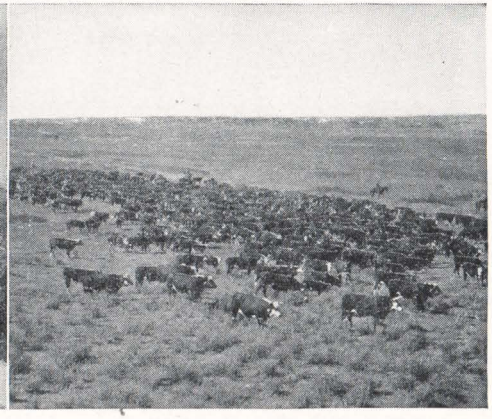
ROCK RIVER, WYO.—Elevation, 6,904; population, 349. It is the center of a prosperous stock-raising region; good hunting and fishing may be found in the vicinity. Twelve miles south is the Rock Creek Oil Field, one of the important oil fields of Wyoming, with a daily production of approximately 4,000 barrels. It is piped to tank cars at Rock River and hauled by rail to refineries at Salt Lake City and Parco, Wyo. Near **Ridge** (elevation, 6,692), occurs the Morrison formation, which contains the fossil bones of reptilian monsters, some of which were more than 70 feet long and 20 tons in weight; Como Bluff, where the bones of the largest dinosaurs



Air view of University of Wyoming, Laramie.



Elk Mountain (11,162 feet) Northern sentinel of the Medicine Bow Range.



Large herds of cattle now roam the former range of the buffalo in Wyoming.

have been found, may be seen directly north of Ridge. **Medicine Bow** (elevation, 6,560; population, 338) is a stock-raising and wool-producing community. Ten miles south lie the Medicine Bow Oil Fields. The surrounding region was a favored rendezvous for the Indians. Medicine Bow is the scene of some of the incidents in Wister's novel, "The Virginian." There is good hunting and fishing in the vicinity. At **Como** (elevation, 6,706) the road is built across a small lake fed by warm springs, where are found large numbers of salamanders.

HANNA, WYO.—Elevation, 6,775; population, 1,127. Hanna is a coal-mining town with a daily output of 2,500 tons; it has a gravity water system, electric lights and fair hotels. The Simpson Ridge Oil Field lies 10 miles to the southeast. The coal formations, which contain many fossil bones of dinosaurs and fresh-water shells, were first observed by Fremont in 1843. Extensive reconstruction work on the Union Pacific has been done near Hanna. **Percy** (elevation, 6,927) was named after a Union Pacific construction engineer, Col. Percy, killed by Indians after he had held them at bay with his rifle for 3 days. Here the train traverses a cut 65 feet deep and 1½ miles long, through beds of coal, shale, and sandstone. Elk Mountain, a famous landmark, at whose foot Fort Halleck stood during the Indian wars, may be seen about 15 miles southward. A vast mass of granite, 7 miles in diameter at the base and 11,162 feet in height, it is the northern sentinel of the Medicine Bow Range, and its summit is usually draped with snow. It was upon the rocky shoulder of Elk Mountain that one of the tragedies of the first transcontinental air race occurred. The country hereabouts is extremely wild and rugged, and coal may be seen jutting from the side of nearly every hill.

WALCOTT, SARATOGA AND ENCAMPMENT—From Walcott (elevation, 6,624), a railroad runs southward to Saratoga (population, 810) and Encampment (331), a distance of 45 miles. The principal feature of interest on this line is at Saratoga, 24 miles from Walcott, where there are hot and cold mineral springs possessing curative properties. The first chemical analysis was made in 1911, and invalids in increasing numbers have made use of the water since that time. The State of Wyoming has purchased about 420 acres of land surrounding the springs as a site for a State medical institution.

Along the Saratoga Valley the scenery is very picturesque, the town itself is well-known as a summer resort. The population is only a little over 800, but there are two good hotels and several rooming houses. The fishing is excellent, not only along the North Platte River, but also in all the branch streams, of which there are about a dozen within a radius of 15 miles of Saratoga, and almost as many within the same radius of Encampment. These streams are usually open from the first of May until the latter part of November, and are regularly stocked from the Federal Fish Hatchery, located in the valley.

FORT STEELE, WYO.—Elevation, 6,506; population, 139. Fort Steele is the site of old Fort Steele, established to protect the builders of the Union Pacific; it was from that army post that the ill-fated force under Maj. Thornburg was sent to quell the Ute Indian uprising at Meeker, Colo., in September, 1879. The command was ambushed in the Colorado mountains,

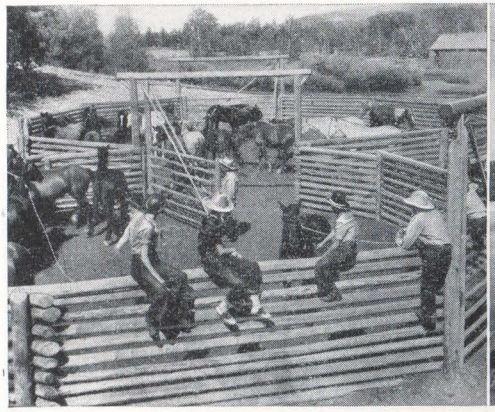
where 13 men were killed and 43 wounded. About 3 miles west of Fort Steele there may still be found a few relics of one of those turbulent western towns that sprang up like mushrooms, and faded as quickly. Benton, Wyoming, now but a name, was once the terminus of the Union Pacific, with a population of 5,000; it earned wide notoriety as the most incandescent of "red-hot" towns, and started a cemetery that soon displayed a hundred graves. Benton being 3 miles from the Platte, water cost 10 cents a pail, but since very potent "tangle-foot" whiskey could be had for 25 cents a drink, water was purchased chiefly for horses. At Fort Steele the train again crosses the North Platte River, from which it parted at North Platte, Nebraska, 384 miles to the east, and more than two-thirds of a mile lower in elevation. Fort Steele ships sheep, oil, a superior quality of building sand, and timber cut from trees floated down the Platte from the mountains. North of the town may be seen the Rattlesnake Hills.

SINCLAIR, WYO.—Elevation, 6,592; population, 604. This town was built in 1923, primarily to care for the employes of an oil company, which purchased land adjoining the Union Pacific station formerly known as Grenville, and upon a sagebrush plain built one of the most up-to-date oil refineries in the West. Producing oil and natural gas fields with pipe lines to Sinclair and Hanna lie to the northwest and southwest. Sinclair is a rapidly growing city of modern design and construction, equipped with every convenience. In the distant north the Seminoe and Ferris mountains are visible.

RAWLINS, WYO.—Elevation, 6,741; population, 8,000. The town was named for Gen. Rawlins, Secretary of War under President Grant. It is the headquarters of extensive sheep, cattle, and mining interests and a railroad division point. Seminoe Dam, a new government hydro-electric project is located on the North Platte River 35 miles from Rawlins. Oil fields are being developed 45 miles north of Rawlins, while a fine quality of sandstone, which may be seen in the State Capitol and the Federal Building at Cheyenne, is quarried near by. The State Penitentiary is located here and there are a number of fine public buildings in the city.

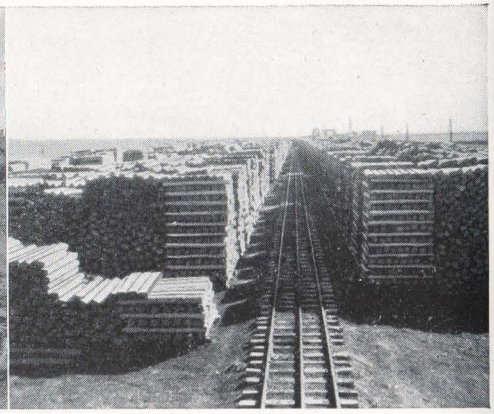
CONTINENTAL DIVIDE—At **Creston** (elevation, 7,102), south of the tracks, is a sign which reads: "Divide of the Continent." The Continental Divide at this point does not conform with one's conception of the backbone of the Rocky Mountain System. There are no lofty peaks in the vicinity — only rolling uplands, wild and barren; yet this is the great water shed that separates the streams flowing to the Atlantic from those flowing to the Pacific. Looking eastward and to the southeast, the Laramie and Medicine Bow ranges may be seen, while in the north the Wind River Mountains are visible.

Indian Hunting Buffalo



Corral on a Wyoming dude ranch.

Castle Rock and Green River Buttes, Wyoming.



Millions of railroad ties are hewn annually in Wyoming.

RED DESERT, WYO.—Views of the Red Desert, a basin floor of wonderful coloring—russet, Pompeian red, vermilion, all the tones of gray and brown, and occasional splashes of green, purple, and yellow—begin to appear just west of Creston. A few miles north of the Union Pacific tracks is a stretch of shifting sand dunes one hundred miles in length, where the mirage adds mystery to the charm of the plain. The Red Desert was once a favored hunting and battle ground of the Indians; now, despite the scant herbage, it is the winter range for thousands of sheep.

POINT OF ROCKS, WYO.—Elevation, 6,503; population, 32. Point of Rocks was named from the light-colored sandstone cliffs, eroded in bizarre shapes and containing fossil oyster shells, that rise above the tracks, to the south. The chief industries are sheep and cattle raising. The stone house seen south of the track, opposite the depot, is one of the stations formerly used by the Pony Express riders. Herds of antelope are frequently seen along the railroad. About 65 miles to the north is the South Pass, a famous crossing on the old Overland Trail.

ROCK SPRINGS, WYO.—Elevation, 6,263; population, 10,444. At Rock Springs, named for large springs of saline water in the vicinity first discovered by a Pony Express rider who was detouring to escape a band of Indians, is one of the most important groups of coal mines in the West. These mines have been worked since 1868, and their present production approximates four million tons yearly. The coal is a high grade of bituminous and occurs in upper cretaceous strata in a series of beds ranging from 2 to 10 feet in thickness. Some of the mine openings may be seen to the north of the railroad as it approaches from the east. Large natural gas fields yielding approximately 200,000,000 cubic feet a day lie 16 miles southeast of Rock Springs. Rock Springs is also the center of an important cattle and sheep-raising region. The city has substantial business buildings and all of the conveniences of the modern town; the Sweetwater County Memorial Hospital is situated there. Excellent fishing and big-game hunting may be found 75 miles to the north, and several dude ranches. There are good roads from Rock Springs to the south entrance of Yellowstone Park, a distance of 230 miles, via scenic Hoback Canyon and Grand Teton National Park.

Mormons arriving in Utah

GREEN RIVER, WYO.—Elevation, 6,077; population, 3,500. Sheep and cattle are the principal products of the surrounding territory. Trona mines and mill are 20 miles west. Rocky Mountain region's deepest gas wells are 25 miles southwest. In the vicinity are important oil shale deposits. The town has a Carnegie Library. The Union Pacific maintains shops and other activities. Green River is situated on the river of the same name, beside bluffs eroded into striking forms resembling turrets, towers, fortresses, and castles, colored dark brown, dull yellow, and light green. Among the many striking formations visible from the car window are "Man's Face," which is directly southwest of the station and "Castle Rock" which is due north. The river derives its name from the fact that its bed is cut for some distance in the green shales, whose reflected color appears to tinge the water. The rocks that form the impressive monuments in the vicinity are rich in fossil fish, insects and plants. In Fish Cut, west of Green River station, rocks containing numbers of fossil fishes are exposed. The fantastically carved buttes continue in view for some distance. Green River is also the gateway to the Uintah Mountain area and the Firehole Basin. The splendid Uintahs are visible between mile posts 826 and 829.

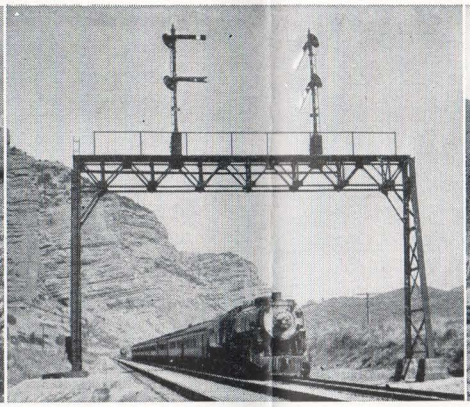
From **Peru** and **Bryan**, some of the high peaks of the Uintah Mountains may be seen in the southwest; chief among them is Gilbert Peak, 13,422 feet high. Bryan, on Blacks Fork, has a history similar to that of Benton; it was once a terminus of the Union Pacific with a population of 3,000.

GRANGER, WYO.—From Granger (elevation 6,271; population, 163) a line of the Union Pacific runs northwestward to Pocatello, Idaho, whence it extends to Yellowstone National Park, Butte, Spokane, Portland, Tacoma, and Seattle. Before the Union Pacific was constructed, Granger was an important station on the Overland Trail. From points just west of the station the Uintah Mountains may be seen in the south. **Church Buttes** station was named from a peculiar eroded mass ten miles south, on the route of the Overland Trail; it stands in a region of fantastic domes, pinnacles, and fluted columns, where scientific exploring parties have found remarkable fossils. **Bridger** station was named for Jim Bridger, the noted trapper and guide; the historic fort of the same name, situated about twelve miles to the east on Blacks Fork, was erected by the Mormons on land where Bridger had established a trading post in 1843. There Bridger lived for several years with his Shoshone Indian wife. In 1858 the fort became a United States army post.

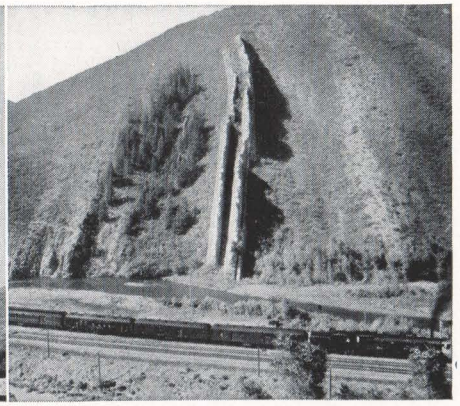
Originally the tracks of the Union Pacific westward from **Leroy** continued along Muddy Creek and crossed to the valley of Sulphur Creek. Sharp curves and heavy grades led to the driving of Aspen tunnel through the ridge between the stations, **Aspen** and **Altamont**; 5,900 feet in length and lined with cement, this tunnel is the longest on the Union Pacific Railroad. Recently a second tunnel was cut through to complete double trackage between Omaha and Ogden. On the old line stood the notorious town of Bear River City, which in 1868 had 2,000 inhabitants. In that year the lawless element became so bold that several pitched battles occurred between the desperadoes and the citizens; the jail was burned and its prisoners liberated. Thirty "bad" men were killed, however, and one hundred were wounded by the forces of order, who drove the survivors to other fields. The plant of "The Frontier Index," a newspaper which followed the building of the Union Pacific, was destroyed in one of these battles, and old type is still found at times in the soil. The settlement faded and disappeared when the Union Pacific pushed westward.

The Uintahs may be seen to the south, although their real grandeur is not apparent. Penetrating the Aspen tunnel, the train passes from the drainage area of the Colorado River into that of the Great Basin, which has

A field of Utah celery, famous for its richness and crispness.



The Los Angeles Limited in Echo Canyon, Utah.



Devil's Slide, Utah, may be seen from the train window.

no outlet. West of Altamont the train enters a narrow gorge from which it emerges, beyond **Knight,** into the open valley of Bear River.

EVANSTON, WYO.—Elevation, 6,745; population, 3,605. Evanston, founded in 1869, owes its importance to the growing farm acreage, the extensive live stock interests in the vicinity, and to its coal mines; about 500 carloads each of coal and live stock are shipped annually. The city has good hotels, large mercantile establishments, a theater, a public library, a handsome Federal building, a creamery, lumber yards, an ice factory and bottling works. The Wyoming Insane Asylum is situated here. Excellent hunting and fishing may be found in the adjacent mountains.

Entering Evanston the Union Pacific tracks cross the Bear River. Six miles west they cross from Wyoming into Utah.

UTAH—Area 84,990 square miles; population, 675,000; extends 345 miles north and south and an average of 275 miles east and west; a land of wide and varied character, from lofty snow-capped peaks to the abysmal chasm of the Colorado River; from endless, sweeping, painted plateaus to forbidding wastelands of salt desert. Its more than half a million people include almost every race and color. Utah culture is a reflection of the struggle against the harshness of its physical features by an indomitable human spirit more unrelenting than the hostile land itself. Utah is strewn with color, splashed brilliantly on unique and grotesque formations of sand and stone and held in the foliage of mountain valleys. First seen in Utah by the traveler from the east are the high Uintah mountains with peaks reaching 13,498 ft. The only mountain range in the western hemisphere running east and west, it is paralleled by the Union Pacific Railroad between Granger and Evanston. The road then crosses the Bear River and soon follows the dashing Weber River through the beautifully rugged Wasatch Mountains into fertile Salt Lake Valley.

To the southeast Utah's rugged mountains break and fan out into a great system of sweeping, two-mile-high plateaus, carved like mesas of pink, white and vermilion, a magnificent scenic effect. The Western part of Utah lies within the Great Basin and consists of rugged mountain ranges trending north and south, principal of which is the Wasatch extending from the extreme north boundary south 150 miles, including Mt. Nebo. Rounded foothills and wide fertile valleys await sufficient moisture to aid plant growth. At the mouths of canyons and in natural basins are found many areas reclaimed for agriculture. Climatic conditions in the state produce every type of plant to be found between Mexico and Alaska. More than 4,000 species have been classified.

Utah has many natural wonders: Great Salt Lake, the briny residue of ancient Lake Bonneville, whose waters were once 850 ft. deep where the Mormon Temple in Salt Lake City now stands: the three colossal natural bridges and the superb Rainbow arch in the southeastern National Monuments; the magnificent painted gorge of Zion Canyon in Zion National Park; and the glorious prismatic chasms of Bryce Canyon National Park and Cedar Breaks National Monument. These, as well as Kaibab National Forest and Grand Canyon National Park, may be reached during the season, June 10 to September 14, by regular motor bus tours daily from Cedar City, Utah on the Union Pacific.

Wild animal life consists of elk, mule deer, wolves, coyotes, cougars (mountain lions), black and grizzly bears, mountain sheep, antelope, buffalo,

beaver, martin, bobcats, otter, mink, muskrats, red fox, skunks, weasels and many other small animals and rodents. Pheasants, geese and many species of wild ducks abound. At the north end of Great Salt Lake is an exceedingly large water fowl refuge. There are approximately 2,000 miles of streams and 2,500 lakes within the state containing 58 varieties of fish, more than half of which have been imported.

Utah's thirteen skiing resort wonderlands are first class tourist attractions. At Alta, Snow Basin and Echer Hill national ski events have recently been held.

Principal wealth of Utah is in her 200 known minerals, metallic and non-metallic. Practically all of the useful metals are found in this state, tin being the chief exception. Grand total value of minerals produced in Utah from 1865 to 1946 was $3,505,000,000.00.

The soil of Utah, composed of limestone from the mountains is deep and fertile. The annual precipitation in the north central part of the state is approximately 15 inches; in other parts it varies from 5 to 10 inches. The climate and soil are ideal for a wide variety of irrigated crops. Large new tracts on Milford Flats and the Escalante Desert are producing excellent crops by the use of surface and underground water.

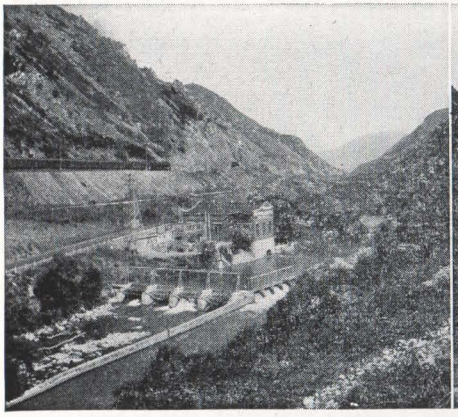
In order of their value, the leading crops of the state are: hay, (chiefly alfalfa and alfalfa seed), wheat, barley, oats, corn, fruits and vegetables. The growing of sugar beets which yield an average of 15.7 tons per acre, is steadily increasing in importance. The fame of Utah celery is nationwide.

The latest figures available credit Utah with livestock as follows: sheep 1,792,000; cattle 572,000; swine 92,000; horses and mules 75,000; milk cows 122,000; chickens 3,264,000; turkeys 360,000. The annual production of wool approximates 15,000,000 pounds.

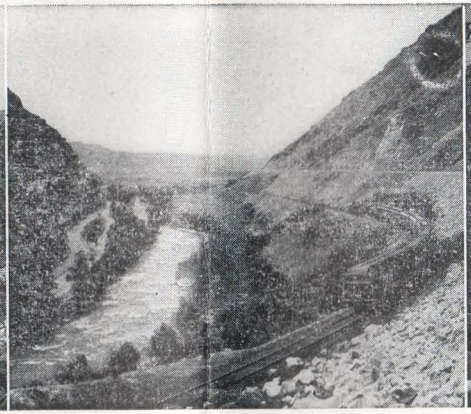
The most important manufactured products are: beet sugar, flour and steel (the Geneva plant of the U. S. Steel Company located on the Provo branch of the Union Pacific about 28 miles south of Salt Lake City, is one of the largest and most modern plants in the world).

Utah was first explored by two Franciscan friars, Dominguez and Escalante in 1776. In the winter of 1824-5, Jim Bridger, while seeking the source of Bear River, discovered Great Salt Lake. Ashley established a fort at Utah Lake in 1825. Gen. Fremont and Kit Carson visited Great Salt Lake in 1843, and explored its waters in a rubber boat. The most important event in the history of Utah was the arrival of Brigham Young in July, 1847, with 143 Mormon pioneers, upon the site of Salt Lake City; before the end of 1848, 5,000 Latter-Day Saints had settled in the valley and in the following year the community was organized into the State of Deseret. The first crops threatened by swarms of black crickets, were saved by flocks of gulls which devoured the insects. Indian outbreaks were frequent between 1857 and 1862; in 1865

Seagulls and Mormons



Hydro-electric plant in Weber Canyon, Utah.



Weber Canyon where the Weber River plunges and foams in a boulder-strewn channel.

A view of downtown Ogden, Utah, with the Wasatch Mountains in the distance.

occurred the Blackhawk Indian war. Utah became a territory in 1850 and a state in 1896.

WAHSATCH, UTAH — Elevation, 6,800; population, 25. Stock raising is the principal industry in the vicinity. A short distance westward the train passes through a tunnel and enters Echo Canyon, cut through outlying ridges of the Wasatch Mountains.

ECHO CANYON — Near **Castle Rock** the walls on the north side of the gorge have the form of a castellated tower. As the train descends, the red and yellow cliffs of shale, sandstone and conglomerate (twisted, split or eroded into vague semblances of many familiar objects and often indented by small holes where swallows make their nests) grow higher and higher. West of **Emory** (population 618), where the eroded walls rise more than a thousand feet above the tracks, the canyon has a high degree of picturesque grandeur; spires, domes, pyramids, great wedges, isolated turrets and columns, stand out from the narrowing masses on both sides. These formations have local names, such as Steamboat Rock, the Teakettle, the Sentinel, the Cathedral. Just before the train enters the village of **Echo** (population 145) Echo Dam may be seen one-half mile to the south. This dam has a storage capacity of 74,000 acre feet of water used for irrigation in the Salt Lake Valley. About two miles west of Echo, on a hillside to the north of the tracks, is a group of fantastic monuments of conglomerate called "The Witches."

HENEFER, UTAH— Elevation, 5,337; population, 335. Henefer is the point on the Overland Trail where the Mormon pioneers under Brigham Young turned westward and crossed the Wasatch Mountains into Emigration Canyon. The chief products of the community are a high quality red fire clay, live stock, wool, and grain; good hunting and fishing may be had in the vicinity. Beyond Henefer the valley narrows and the Weber River plunges and foams in the constricted boulder-strewn channel. Long, steep slopes ascend to jagged cones and pyramids fringed with pines, and vistas are disclosed of more distant peaks of greater height and majesty.

DEVIL'S SLIDE, UTAH—Elevation, 5,241; population, 500. Devil's Slide is situated at the juncture of Lost Creek Valley, within which on the right, may be seen a large mill manufacturing Portland cement; more than two thousand carloads are shipped annually. On the left stands the remarkable formation called the Devil's Slide, two parallel, upturned reefs of limestone 20 feet apart and thrusting serrate edges 40 feet above the mountain side. These peculiar vertical reefs are composed of the rock from which cement is made. From Devil's Slide westward to **Morgan** (population, 1,200), a great gorge penetrates the Bear River Mountains, part of the Wasatch Range, and is cut through gray limestone, salmon-colored sandstone, and red shales; the walls of the canyon attain a depth of 4,000 feet below the enclosing peaks. Near **Strawberry,** Observation Peak (10,000 feet) is the most prominent mountain to the north of the tracks.

Kit Carson

WEBER CANYON—Just west of **Gateway,** the tracks enter a narrow canyon cut by the rushing Weber River through the main range of the lofty Wasatch Mountains; this is the most impressive of the series of gorges through which the Union Pacific enters the valley of Great Salt Lake. The dark precipitous escarpments rise to dizzy heights on both sides of the railroad. forming portals so profound and magnificent that it is difficult to believe the churning stream capable of their creation. A large diversion dam may be seen on the left; two miles downstream the power of the captured water is converted into electricity and transmitted to Salt Lake City. Near the western end of the canyon stands Devil's Gate, flanked by rugged rock walls and towering peaks; but the railroad, as if avoiding a portal with so sinister a name, passes through a cut driven into the gravel of the old river bed, and emerges upon a broad, fertile valley, patterned with farms.

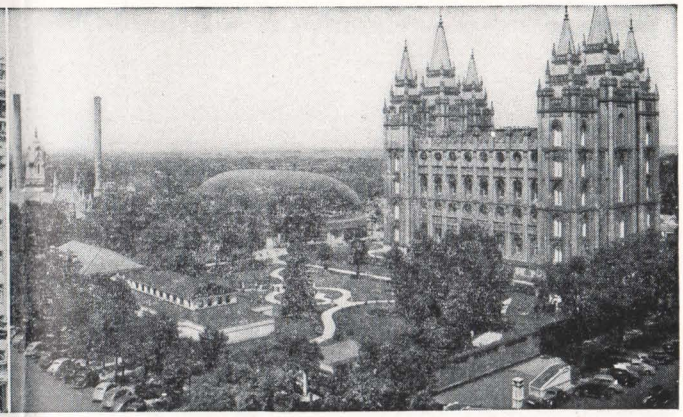
The first station west of the Wasatch is **Uintah** (elevation, 4,500; population, 264), in a district growing potatoes, apples, and peaches. Just west of the station, on the opposite side of the track, a silver-black fox farm may be seen. West, north, and south spreads out a delightful panorama of the river valley, whose extent, however, is but a small part of the valley of Great Salt Lake. After the grim grandeur of the mountains, with their thousands of obstacles to the passage of man, it is not to be wondered that the Mormon pioneers welcomed the soft contours of the valley, even though uncultivated, as the promised land of Zion; for its geography includes a Dead Sea, a River Jordan, a Lake of Galilee, and many other physical features resembling those in the Holy Land.

OGDEN, UTAH—Elevation, 4,301; 1949 population, 56,000. At Ogden, Utah the Union Pacific diverges for Los Angeles and the Pacific Northwest, and connects with Southern Pacific lines for San Francisco. Through trains of sleeping cars and chair cars continue westward without change to San Francisco and southwestward to Los Angeles by way of Salt Lake City and Lund, main line terminus of the branch line to Cedar City, gateway to Zion National Park. Change may be made at Ogden to Union Pacific trains for Yellowstone National Park (service in summer season only), Butte, Spokane, Portland, Tacoma, and Seattle. Through cars from the East for the Pacific Northwest diverge at Granger, Wyo.

Ogden, at the juncture of Ogden and Weber Rivers, near the western base of the lofty Wasatch Range, was founded in 1848 and laid out in 1850 under the direction of Brigham Young. Great Salt Lake lies 10 miles westward. The second largest city in Utah, Ogden has excellent utilities, modern hotels, a Carnegie library and a city and county building which houses the official families of the two political sub-divisions—Weber County and Ogden City. The State Industrial School, State Institution for the Deaf and Blind, and the Tuberculosis Sanatorium are located there.

Ogden is an important livestock and manufacturing center; grain and flour mills, a can factory, sugar refineries, canning factories, and meat packing plants ranking first in the value of their products; there are also knitting mills, steel fabrication plants, brick and tile production yards, iron foundries, clothing production plants, candy manufacturing establishments, leather goods production and sheet metal works. The major portion of the city's

Salt Lake City—The Heart of Deseret. Utah State Capitol in the distance.



Famous Mormon Temple and Tabernacle, Salt Lake City, Utah.

water supply comes from 43 deep flowing wells, providing unusually cold and clear water. The Union Pacific maintains at Ogden one of its large ice manufacturing plants for the icing of refrigerator cars.

Ogden Canyon, about two miles east of the city, and reached by a modern highway, is one of the most picturesque gorges in the West. In its upper reaches the canyon is extremely narrow and precipitous and the surrounding peaks rise to lofty heights. Through it flows the Ogden River, a sparkling trout stream whose ceaseless action cut the stupendous passageway.

SNOW BASIN—This winter and summer recreational area of six thousand acres has been set apart for public use under the control of the U.S. Forest Service. A mechanical chair lift more than a mile long is in operation. Skiing and tobogganing slopes and many summer picnic areas are provided. Adequate clear, pure, culinary water is available. Snow Basin is reached from Ogden by an 18-mile paved highway.

OGDEN TO SALT LAKE CITY

Southward from Ogden on the Union Pacific, the train traverses the eastern edge of the Valley of Great Salt Lake; the steep ramparts of the majestic Wasatch Mountains rise near at hand in the east, and to the west the gleaming waters of the famous "Dead Sea of America" may occasionally be seen. Soon after leaving Ogden, on the left may be seen Ogden Arsenal. Bordering the Arsenal and extending farther east lies the Ogden Air Service Command's "Hill Field." Close on the right is **Clearfield,** elevation 4473, population 7185, center of tomato producing, home of the largest inland Naval Supply Depot in the world, area 900 acres. The route continues south through a number of prosperous farming communities where truck gardening, fruit farming and floriculture are in evidence. The Wasatch Oil refining plant at Woods Cross, the Utah Oil Company's refinery and the Salt Lake Refining Company at the north edge of Salt Lake City, are prominent landmarks.

SALT LAKE CITY, UTAH—Elevation, 4,260; population, 190,000. On the slopes beneath the granite peaks of the Wasatch stands Salt Lake City, the metropolis of the Inter-Mountain West, with wide, clean streets, handsome public buildings, and business blocks, excellent hotels, and beautiful residence districts. This picturesque and highly individual city overlooks the great lake of salt waters and its charming valley, bounded on the southwest by the stately Oquirrh Mountains and on the east by the beautiful Wasatch Range.

Salt Lake City is the state capital and headquarters of the Church of Jesus Christ of Latter-Day Saints (Mormons). The principal buildings of the Mormons, always of interest to the visitor, are the splendid Temple, the Tabernacle (seating capacity 8,000), which contains one of the finest pipe organs in America, the historic Lion and Beehive Houses, the L. D. S. University, and the imposing Administration Building. The Deseret Museum contains interesting relics of pioneer days and of the cliff dwellers. Other notable public buildings are the State Capitol, the City and County Building, the University of Utah, the $400,000 U. S. Veterans Hospital, Post Office, and Art Center Building. The Roman Catholic Cathedral of the Madeleine is a gem; St. Mary of the Wasatch School for girls occupies an impressive location against the mountains. Fort Douglas, a military post, is 3 miles east, on a "bench" below the foothills. A Mormon Pioneers Monument stands at the mouth of Emigrant Canyon.

Salt Lake City is an important trade market and is the center of a rich mining district; the principal mines, producing silver, zinc, lead and copper, are those at **Park City, Alta, Tintic,** and **Bingham.** The immense surface mine at Bingham, where a mountain of copper ore is being reduced with dynamite and steam shovels, deserves a visit. There are a number of great smelters, steel mills and a blast furnace in the vicinity of Salt Lake City. Its manufactures include salt, shoes, foundry and machine shop products, harness, lumber, railway cars, cigars, and confectionery. A large oil refinery produces and ships a considerable volume of petroleum products each year.

New Saltair Beach, the noted bathing resort on Great Salt Lake, is 14 miles west, reached by fast electric cars. A swim in the amazingly buoyant water (one cannot sink) is an experience not to be duplicated elsewhere in the United States (also see page 46).

SALT LAKE CITY TO LOS ANGELES

From Salt Lake City to southern California the Union Pacific is the short and picturesque route and follows the old Mormon trail to Los Angeles. The line was built in 1905, shortening the route between Salt Lake City and Los Angeles by 500 miles.

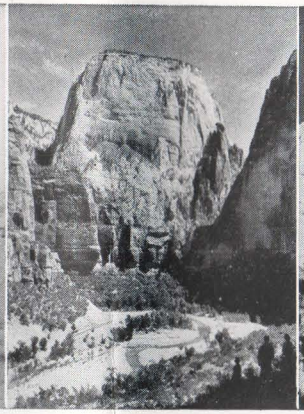
In traversing the 784 miles from Salt Lake City to Los Angeles, the Union Pacific passes through a wide variety of most interesting scenery, which embraces majestic mountains, wide, fertile valleys, and fascinating canyons till it enters the heart of semi-tropical southern California's beautiful orange belt, with its flowers and sunshine the year round.

GREAT SALT LAKE—Elevation, 4,200. Leaving Salt Lake City, with its numerous places of interest, the Union Pacific skirts the shores of Great Salt Lake—the largest inland body of salt water in the world. As the spires of the great Mormon Temple fade away in the distance, this mysterious lake with its noted Saltair resort appears on the right; adjacent is the solar evaporating plant of the Inland Crystal Salt Co.; and on the left are seen the smelters of the Utah copper industries presenting a most impressive panorama. For a distance of several miles the line runs along the shore, the view being especially gorgeous at sunset. Great Salt Lake is 70 miles long and 30 miles wide, and its waters are so impregnated with salt that it is impossible for bathers to sink, even though they cannot swim.

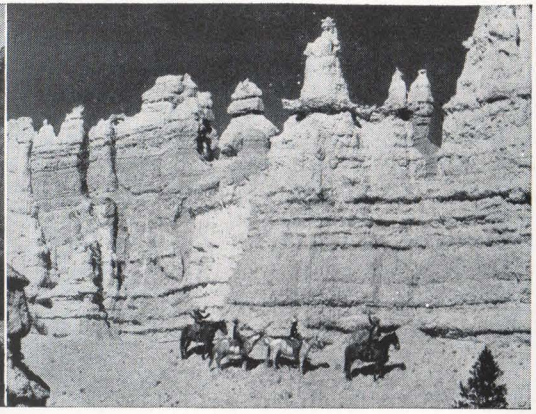
OQUIRRH MOUNTAINS—At a point 27 miles from Salt Lake City the line leaves the shores of Great Salt Lake and begins to climb the slopes of the stately Oquirrh Mountains, revealing long vistas of beautiful cultivated valleys and of the distant crests of the lofty canyon-riven Stansbury Range to the north and west. Thirty-five miles from Salt Lake City is **Warner,** the junction point for **Tooele** (population, 5,001) where stand the great smelters of the In-

Brigham Young

Union Pacific Station, Cedar City, Utah.



The Great White Throne in Zion National Park, Utah, towers 3,000 feet above the river.



"Queen Victoria", one of thousands of strange and colorful rock formations in Bryce Canyon National Park, Utah.

ternational Smelting and Refining Co. Seventy-nine miles from Salt Lake City the line passes over a mountain divide at **Boulter**, the highest point on the Union Pacific between Salt Lake City and Los Angeles; the elevation here is 6,060 feet.

GREAT PAHVANT VALLEY—Descending, the line passes into great Pahvant Valley, which covers an area of 5,000 square miles, hundreds of thousands of acres being under irrigation and producing principally alfalfa and sugar beets. **Lynndyl** (elevation, 4,796; population 360), the first station passed in the valley, is the junction point with the Provo line of the Union Pacific, which runs to Salt Lake City by way of the eastern side of Bear Lake. It is in a good farming and cattle raising district. Union Pacific shops are maintained here.

DELTA, UTAH—Elevation, 4,649; population, 1,304. This is the largest town in the Pahvant Valley. Delta is one of the largest alfalfa seed markets in America, practically one-fourth of all the alfalfa seed produced in the United States being raised and marketed in the Delta district. From Delta a branch line of the Union Pacific extends 35 miles to **Fillmore** (population, 1,785), in an agricultural empire of 300,000 acres of rich, irrigated lands.

Oasis (elevation, 4,607; population, 415) also is surrounded by very fertile agricultural areas which produce alfalfa, alfalfa seed, and sugar beets.

ESCALANTE VALLEY—This immense valley, sometimes called the Escalante Plains, is over 100 miles long and 30 to 50 miles wide. Almost, as straight as an arrow, the Union Pacific runs for 100 miles through its center, flanked on both sides by picturesque ranges of mountains. Escalante Valley is rich of soil, and is producing good crops of potatoes, sugar beets, grain and alfalfa. A campaign of development work is in progress which is bringing more of this rich valley under irrigation.

MILFORD—Elevation, 4,968; population, 1,393. Lying in the heart of the Escalante Valley, Milford is a division point on the Union Pacific where many men are employed in the railroad shops. It is an important agricultural shipping point. The livestock enterprise also is important in this area. More than 40,000 head of sheep are shorn at Milford each spring.

Milford is the Utah gateway to **Lehman Cave National Monument** which is about 90 miles to the Northwest, near Baker, Nevada. The caves are very extensive, spotlessly clean and highly ornamented with fantastic formations through chemical action and erosion.

LUND, UTAH—Elevation, 5,091; population, 160. Lund is only a hamlet, but it is the junction point whence the Union Pacific branch line runs to Cedar City and adjacent iron mines. Lund is also the main line

gateway to the scenic wonderlands of southwestern Utah and northern Arizona—America's greatest combination scenic tour (see below).

CEDAR CITY, UTAH—Elevation, 5,805; population, 4,695; gateway to Zion-Grand Canyon-Bryce Canyon National Parks. From Cedar City motor-bus tours start for Zion National Park, Bryce Canyon National Park, Cedar Breaks, Kaibab Forest and Grand Canyon National Park. A 75-room modern hotel, El Escalante, erected by the Union Pacific at Cedar City, modern lodges at Zion National Park (net capacity 319), Bryce Canyon National Park (net capacity 350), at Bright Angel Point in Grand Canyon National Park, North Rim (net capacity 436), and at Cedar Breaks (capacity 40), have made Utah-Arizona tours thoroughly comfortable and attractive.

In **Zion National Park** the principal canyon, Zion, is a profound gorge, flaming red and creamy white, a matchless carving by the greatest of all sculptors, erosion. It has immense, vividly colored walls, and unscaled, precipitous buttes that rise several thousand feet above the canyon floor. It is 14 miles long and varies in width from a mile to scarcely more than a few yards in the upper narrows. Among the park's many attractions are the East and West Temples, the Three Patriarchs, the Mountain of Mystery, Angels Landing, the Narrows, Temple of Sinawava, and the Great White Throne. The latter is a colossal pile of sandstone merging from the red of the base formation to a white blending into a delicate purple and buff in its upper reaches. Its flat, table-like summit towers nearly 3,000 feet above the stream and is covered with a virgin forest. Spectacular trails lead to the Canyon's rims.

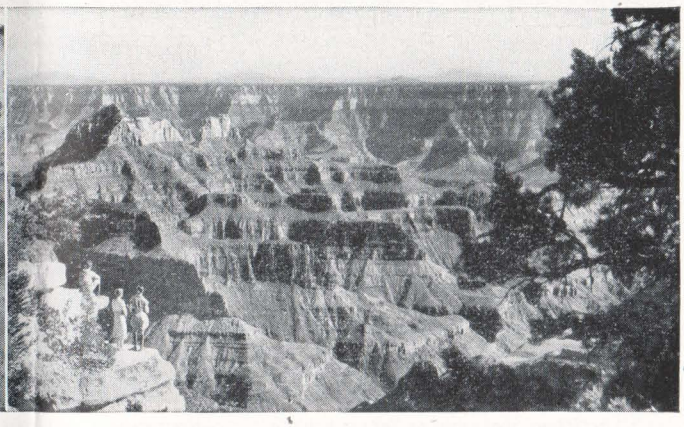
Bryce Canyon National Park has probably the most astonishing blend of exquisite beauty and grotesque grandeur that the forces of erosion have ever produced. The Canyon is a giant amphitheater, from one to two miles wide, about three miles long and 1,000 feet deep. The softer parts have been etched away leaving an endless array of towers, spires, minarets, fortresses, and steeples strongly resembling some ruined Oriental city, all a mass of gorgeous color. The eye is fairly staggered by the weird and imposing monuments that adorn the sides and bottom of the canyon.

Cedar Breaks covers about 60 square miles and lies directly north from Zion National Park. It is a series of vast amphitheaters eroded to a depth of 2,000 feet and is, perhaps, even more colorful than Bryce Canyon. Within its labyrinths are countless architectural forms mingled with the green of spruces, firs, and pines. The elevation at the rim is 10,400 feet.

The beautiful **Kaibab National Forest** with its thousands of deer, and sublime **Grand Canyon,** seen from the lofty North Rim, are included in one-day to five-day motor-bus tours from Cedar City. Grand Canyon is probably the most sublime of all earthly spectacles. It is a colossal chasm, 220 miles in length, a mile deep and some 12 miles wide, with an infinite array of gorgeously magnificent architectural forms upthrust from its depths.

UTAH-NEVADA STATE LINE—Elevation, 5,663; 283 miles from Salt Lake City. The Escalante Valley ends at **Modena,** 274 miles from Salt Lake City, and at that point the route enters the broken foothills. Nine miles beyond, the Utah-Nevada State line is crossed at **Uvada, Utah.**

Cedar Breaks National Monument, where nature grinds the pigments for her most colorful sunsets.



"O why should the spirit of mortal be proud?" Grand Canyon from the North Rim.

NEVADA—Area, 110,690 square miles; population, 150,000. Nevada lies principally within the Great Basin, a broad plateau about 4,000 feet above the sea level, extending from the Sierra Nevada to the Wasatch Range. At fairly regular intervals the level character of the country is broken by lofty mountain chains crossing the country in parallel lines. The soils are mostly sand and gravel loams; in old lake basins extensive clay deposits occur and there are many alkaline soils found on the desert. The valleys, however, are very fertile and with sufficient irrigation produce excellent crops. Generally, however, the soil is extremely rocky and shows formations representing many geological periods. Extreme range characterizes the temperatures of nearly all parts of the state, summer temperatures being relatively high and winter temperatures low, except in the southern portion of the state. Much of the country's scenery is unusually beautiful, and ranges from the vivid colorings of the desert to that of towering, rugged, snow-capped mountains. Rivers and streams are scarce in many large areas, and all but a very few find their outlet in inland lakes, or are eventually absorbed in the sand. As a result, irrigation projects are becoming more and more of economic importance, the greatest of these, of course, being the Hoover Dam in the southern part on the Arizona-Nevada line.

As might be inferred from its geological character, the soil of Nevada is extraordinarily rich in minerals, and has produced an abundance of gold, silver, copper, lead, tungsten, antimony, manganese, iron, and salt. Coal has never been mined with success, and although the output of gold was at one time proverbial, the yield is not as heavy as formerly. However, the volume of Nevada's traffic in mineral makes this the second of her industries.

The first is agriculture and stock raising. The natural grasses and forage plants of the country support an average of 480,000 beef cattle, and 1,500,000 sheep from 9 to 12 months of the year. In any estimate of the state's agricultural resources it is necessary to include the 50,000,000 acres which compose the public range lands, 6,000,000 acres of range lands being listed in the National Forest Reserve. In the north and center of the state, alfalfa, grass hay, wheat and other grains are raised, also potatoes and sugar beets. Vegetable crops of many kinds yield a substantial profit, and there is an abundant yield of orchard and small fruits, and in the semi-tropical region in the southern part of the state, almonds, figs, dates, and pomegranates are plentiful. Forage crops are among the principal staples, and among exports, potatoes, onions, and cantaloupes hold an important place. Many millions of field grown tomato plants are shipped annually, and the production of beet and cotton seed are growing commercial industries.

Manufactures rank lower in volume than in many other states, but in character they show a wide variety, including lumber and timber products, flour and grist, packing-house products, beet sugar, confectionery, machinery, and dairy products. With power now being made available from Hoover Dam there is a wide field for other manufacturing plants, and for the handling of ores and allied mining activities.

History names Francisco Garces as the first white man to enter Nevada. He was a Franciscan priest, and passed through the state on his way to California in 1775. Peter Ogden, of the Hudson's Bay Company, explored a portion of the Humboldt River in 1825, and Capt. Bonneville's expedition arrived about the same time. In 1843, and in the two following years. Fremont conducted explorations in different parts of this region. The first

settlement was made by the Mormons in 1849 at Genoa, where they established a small trading post, and the same year gold was discovered by William Prouse at Dayton, near Virginia City. Prospectors soon arrived in great numbers, both from California and from the east, and when ten years later, the Comstock Lode was discovered—the richest ever found in the world—Virginia City was filled with fortune hunters from every land. The lode was practically worked out by 1879, and the mining boom ended about 1908. Since then, agriculture has been Nevada's foremost industry.

A petition for Territorial Government was made in 1857, Isaac Roop being installed as provisional governor at Carson City, which is now the capital. Nevada became a state in 1864.

NEVADA CANYONS—At **Crestline** (elevation, 5,992), the line begins to descend into a series of beautiful canyons, known as the Nevada Canyons. Winding down through the mountains the road forms a horseshoe curve which presents some striking car-window views. This series of gray, buff, brown and pink rock walls begins at **Brown** (elevation, 5,857), and continues for 21 miles to **Minto** (elevation, 4,733).

CALIENTE, NEV.—Elevation, 4,390; population, 1,500. Caliente is a shipping point for the Delamar and Chief mining districts, and extensive cattle and sheep ranches. A branch line runs 33 miles to **Pioche,** one of Nevada's mining centers. There are hot springs in the vicinity from which the town derives its Spanish name. Cathedral Gorge near Panac, 14 miles up the Pioche branch, is very similar to Cedar Breaks National Monument.

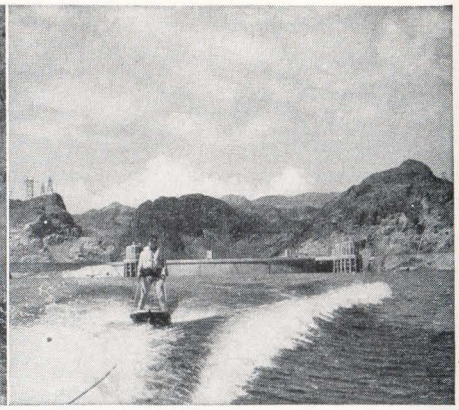
RAINBOW CANYON—At **Etna** (elevation, 4,227) the line enters the famous Rainbow Canyon, so named because of the ever-changing coloring of its rugged rock walls. For 26 miles it follows the floor of this canyon, to **Leith** (elevation, 2,910). Not only is the coloring of the surfaces extremely striking, varying from pure white to ochre, vermilion, and shades of green, but the rock formations of the walls are quite individual in character, presenting many fantastic shapes, such as castles and Indian heads.

General John C Fremont

MOAPA, NEV. — Elevation, 1,664; population, 25. Junction point for Union Pacific branch line which until recently ran 21 miles to the small town of St. Thomas, Nevada, now covered by Lake Mead. Present terminus of the branch is Mead Lake, 17 miles. Near Mead Lake are located many scenic places of interest, including the Valley of Fire, ancient salt mines, Indian picture writings, and the recently discovered "Lost City of Nevada" where archaeologists have un-

Night Street Scene in Las Vegas, Nevada.

Hoover Dam—mightiest engineering feat ever attempted by man.



A variety of water sports is enjoyed at Lake Mead formed by Hoover Dam.

earthed remains of a prehistoric city which had an estimated population of 20,000. Moapa's principal crops are tomato and celery plants which are shipped to several other states for transplanting. Immense quantities of silica and moulding sand for glass factories and foundries of California are shipped yearly.

LAS VEGAS, NEV.—Elevation, 2,027; population, 25,000. Las Vegas is a division point of the Union Pacific. The town is surrounded by a rich artesian belt which produces large crops of fruits, vegetables, and melons. It is the supply point for a large area of mining territory. Las Vegas is a fascinating blend of the old and the new, a delightful desert playground where the gay, free-living spirit of the Old West continues with little change. It is the stop-off point for visitors to Hoover Dam and Lake Mead, as well as the gateway to many scenic and recreational points of interest, including famous Death Valley.

HENDERSON, NEV.—Elevation 1,811; population 5,800. This little community is on the Boulder City Branch about 17 miles from Las Vegas and is the third largest city in Nevada. The huge wartime Basic Magnesium Plant was purchased by the State of Nevada and converted to peacetime production on lease to private industry. Several chemical plants and other industries now operate there and are rapidly making it the chemical center of the west.

BOULDER CITY, NEV.—Elevation, 2,427; population, 5,000. Located on the Union Pacific branch line not far from Las Vegas, this charming community was originally constructed by the government to house the thousands of construction workers on the dam. Boulder City is truly a model town, clean, peaceful and sparkling as the desert air.

HOOVER DAM AND LAKE MEAD—Hoover Dam is the most spectacular structure of its kind ever built. It rises more than 700 feet from the surface of the Colorado River, its massive shoulders of steel and concrete being keyed into towering canyon walls to hold back the watershed of one-quarter of a continent. In bulk the dam is greater than a half dozen of our largest skyscrapers. Enough concrete was used in its construction to build a broad highway across the United States. Behind the dam stretch the deep waters of Lake Mead, the world's largest man-made lake and now a pleasure resort. Giant fjords of startling beauty are formed by the lake waters in the deep canyons of this mountainous region. The lake has a shoreline more than 500 miles long. Hoover Dam and Lake Mead can be visited on a one-day stopover en route on the Union Pacific to or from Southern California.

Father De Smet

JEAN, NEV.—Elevation, 2,867; population, 50. Shipping point for the Good Springs Mining District, large producer of various metals.

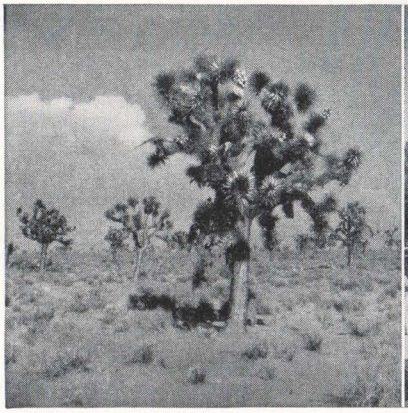
CALIFORNIA—Area, 158,693 square miles; population 10,031,000. The astounding variety of the physical and climatic characteristics of California make it a perfect vacationland. Visitors of widely different tastes and preferences can easily discover the surroundings and recreations that suit them best. The eastern boundary of the state is distinctly mountainous with 120 peaks over 8,000 feet high, 41 over 10,000, and 11 over 13,000. California's coast line is over 1,000 miles in length, while the average width is approximately 200 miles. Thus, the short distance between the high mountains and the sea affords visitors the novel experience of engaging in mile-high snow sports on a crisp winter's morn, lunching at noon in a flower scented sub-tropical garden, and sun or surf bathing in the afternoon in the blue Pacific, all in the same day. While the climate inland varies from mild to extremely rigorous, along the southern shore warm ocean currents prevent the temperature from varying more than 10 degrees in a year, the water maintaining a winter temperature of about 60 degrees. The "rainy season" occurs between November and April, with about 15 to 25 rainy days. Golfing, tennis, motoring, fishing, in fact nearly all sports may be enjoyed in June or January, without distinction between seasons.

The composition of the soil is varied, granite formations being much in evidence in certain parts and sandstone in others. A distinctly bituminous character is also observed in many places, particularly near the coast, in areas where petroleum is abundant. California, in 1948, produced 340,074,480 barrels of crude oil. In higher altitudes the soil is exceptionally favorable to the growth of coniferous trees, which cover a total area of about 44,700 square miles, a lumber producing territory of vast importance. The state is known throughout the world for its "big trees," many of which may be seen in Sequoia and Yosemite National Parks. These huge trees reach an average height of 275 feet, with a diameter of about 20 feet. Some of the tallest are over 320 feet in height and nearly 40 feet in diameter. Many of them are more than 5,000 years of age.

Originally the immense acreage of California "ranchos" gave an individual character to agricultural conditions, but due to the unpopularity of the foreign labor which was necessary, the size of the holdings gradually diminished. Later the orange industry sprang into importance, and the adoption of comparatively small holdings became practical. Orange culture is now on a vast scale in the south, and fruit farming of nearly every kind is one of the state's chief industries. Forage plants, wheat, barley, rice and even cotton are also raised extensively, but bean crops are perhaps of equal importance, and sugar beets rank high. More than 350,000 acres are covered by vineyards, and California's wine industry ranks high in importance.

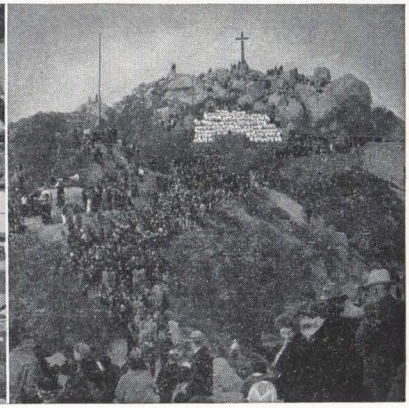
Numerous minerals are to be found in California, among which are gold, copper, petroleum in great quantity, quicksilver, potash and silver. Fishing is an important industry, as is meat packing, sugar refining, foundry and machine work, steel, automotive and aviation manufacture, and dairying.

It is probable that the first white man to enter California was Alarcon, who followed the Colorado River for several hundred miles in 1540. In 1579, the explorer Cabrillo visited the seaboard and Vizcaino's expedition arrived in 1602. Actual settlement did not begin, however, until 1759, when Father Junipero Serra, leading a group of Franciscan missionaries



Adding to the fascination of the desert are the Joshua Trees and other strange flora.

Death Valley now boasts a modern resort hotel with swimming pool.



Easter sunrise services are held on the summit of Mt. Rubidoux near Riverside, California.

penetrated the rugged wilderness and after almost unbelievable hardships established settlements of Indian neophytes and began construction of the famous missions which remain today as an interesting reminder of California's glamorous past.

Placer gold mining was observed here in 1690, and in 1786 Antonio Alcedo's account mentioned nuggets of gold. James W. Marshall found traces of gold in a mill race near Coloma in 1843. At that time the population was estimated at less than 5,000, and the total national gold output was only $12,000,000. The activity of the "forty-niners," however, resulted in a yield worth $258,000,000 in the next five years.

California was ceded to this country in 1848, at the close of the Mexican War. Admission to the Union was granted in 1850.

AFTON CANYON, CALIF.—Elevation, 1,403. Afton Canyon is a beautiful and rugged canyon traversed by the railroad.

YERMO, CALIF.—Elevation, 1,929; population, 600. Yermo is a division point of the Union Pacific. Side trips may be made from Yermo into mysterious Death Valley during the winter months. This is one of the strangest regions on earth. From the depths of the valley, 276 feet below sea level, the lowest point in the United States, you can see the snow-crowned peak of Mt. Whitney, the highest point in the United States. In summer there is probably no hotter place on earth. But in winter and in early spring, when much of the valley is a vast carpet of rare desert flowers, Death Valley has a delightful climate and attracts many visitors. There is a splendid resort hotel as well as good cabin accommodations.

Death Valley was named as a result of the tragic expedition of the Jayhawkers, a wagon train party of men, women and children who became lost in its waterless wastes. Only a few survived.

Noxious springs, weird scenery and prospectors' tales of unusual happenings and secret gold mines combine in endowing Death Valley with a singular sense of mystery. Ghost towns fringe the Panamint range to the east of the Valley, the relics of a fevered gold boom that occurred early in this century. Death Valley was established as a National Monument in 1933.

BARSTOW, CALIF.—Elevation, 2,105; population, 6,500. Barstow is a railroad town of considerable importance, the largest Diesel locomotive service shops in the west are located here.

Once the outfitting point for Death Valley and a market for the adjacent mining territory, Barstow is now the center of a considerable agricultural district, being located on the Mojave River, which supplies plenty of water for the raising of alfalfa, fruit, poultry and dairy cattle.

VICTORVILLE, CALIF.—Elevation, 2,718; population, 7,000. Situated on the Mojave River, which is often referred to as the "Up-Side-Down-River" because it flows away from the sea, Victorville is an enterprising community deriving its living from farming, dairying, fruit, poultry,

quarrying and mining. Victorville is gateway to many fine Dude Ranches, and numerous motion pictures have been made here against the fine scenic background. A permanent Air Force Base is now located at Victorville. Five miles distant is the new resort town of Apple Valley, modern in all respects, with permanent ranch type homes and a luxurious resort hotel, in an equable year around desert climate. From Victorville to Cajon Pass you will enjoy seeing the strange, queerly shaped Joshua Trees growing profusely along the way.

CAJON PASS, CALIF.—Elevation, 3,825. Cajon Pass is the rugged barrier between the east and semi-tropical Southern California. At **Summit,** its highest point, your train passes over the crest of the San Bernardino Range and makes a rapid and spectacular descent into the orange groves and flowers of the southern regions. In the 25 miles from Summit to San Bernardino the line descends 2,749 feet and a marvelous transformation takes place. In winter the train often encounters snow at Summit, and a few minutes later enters the blossoming orange groves and flower gardens of San Bernardino.

Four miles north of San Bernardino, as the line emerges from Cajon Pass, there may be seen the natural arrowhead emblazoned on the mountain on the east side of the track. This immense natural formation was revered by the roaming Indian of years ago as a manifestation of the Great Spirit. It points to Arrowhead Hot Springs directly below.

SAN BERNARDINO, CALIF.—Elevation, 1,076; population, 73,000. San Bernardino is known as the "gateway to Southern California" because it is the first city reached in the semi-tropical part of the state. It is a railroad center and a large shipping point for citrus fruit. San Bernardino oranges are among the finest grown. The National Orange Show, the greatest event of its kind in the world, and of world-wide renown, is held there every spring in conjunction with the Spring Flower Show.

San Bernardino is the starting point of the famous 101-mile "Rim of the World" trip through the San Bernardino mountains. This famous route traverses the crest of the high mountains, passing many noted resorts such as Pinecrest, Arrowhead Lake, Big Bear Lake (elevation 7,000 feet), Pine Knot Resort and Forest Home. This is a circle tour with "no scene twice seen."

COLTON, CALIF. — Elevation, 979; population, 15,000. Colton is both railroad center and a large producer of citrus fruits. Near by, visible from the train, is the largest cement plant in Southern California.

Through the Sierra Nevada - 1865

Snow-capped peaks and ripening oranges in Southern California.

Railroad Union Passenger Station, Los Angeles, California

A picturesque palm-bordered drive in Southern California.

RIVERSIDE, CALIF.—Elevation, 868; population, 60,000. Riverside is a blend of the beauty and romance of early California, with the energy and briskness of modern America. Rambling over an entire city block is famous Mission Inn, long a favorite spot for conventions. Picture a castle in Spain, its gray walls, courtyards, fountains and gardens; its grilled balconies and carved doorways, its halls filled with treasures from far countries and you have some idea of Mission Inn. Its architecture and impressive cloisters make of it a veritable shrine of California's historic past.

Riverside boasts of a mother with 9,000,000 living offspring. The matriarch is the parent Washington Navel Orange Tree. From it, brought to Riverside in 1873, have stemmed the forest of orange trees which now cover more than 100,000 acres in the orange empire of California.

Overlooking the city is Mt. Rubidoux, on the summit of which the first of all Easter Sunrise Services was held in 1909. Twenty thousand persons attend the annual services. March Air Force Base is located here, also the University of California's Citrus Experiment Station and School of Sub-Tropical Horticulture. Five miles out of Riverside the Union Pacific crosses the Santa Ana River over a concrete railroad bridge whose ten arches span 1,000 feet and are 60 feet above the river bed. Between Riverside and Ontario, at Mira Loma, the railroad runs directly through the largest vineyard in the world; 4,000 acres of sun-ripened grapes.

ONTARIO, CALIF.—Elevation, 981; population, 25,000. Situated at the foot of Mt. San Antonio, Ontario lies in a region of orange groves and flower gardens. Miles of pepper and eucalyptus trees line the streets of famous Euclid Avenue.

POMONA, CALIF.—Elevation, 863; population, 38,000. Pomona is in the heart of the famous Southern California citrus belt. It is a typical home city, containing many beautiful residences, parks and flower gardens. Pomona College, Claremont Graduate School, Scripps College, Claremont Men's College and LaVerne College are situated in the suburbs. Pomona is the home of the huge Los Angeles County Fair.

The Pony Express

ALHAMBRA, CALIF.—Elevation 371; population 50,800. This city is seven miles east of Los Angeles city hall and five miles south of Pasadena, at the gateway to the fertile San Gabriel Valley. It is a large retail center and has 150 industries. It is on the East Los Angeles branch of the Union Pacific bus line which meets all transcontinental Union Pacific trains at the East Los Angeles station.

WHITTIER, CALIF.—Elevation, 600; population, 22,546. Located only 13 miles from Los Angeles on the Orange County Branch of the Union Pacific, Whittier is a beautiful city in a rich citrus, walnut and avocado district. It is also the center of

a large oil producing field, and is the home of Whittier College, a Quaker institution.

FULLERTON, CALIF.—Elevation, 160; population, 14,000. Fullerton, situated 29 miles from Los Angeles on the Orange County Branch of the Union Pacific, is a center of the Valencia orange packing industry. Here, too, are large food processing plants and refrigeration and air conditioning manufacturing plants, a large glass factory, oil tool fabrication plant, and a metal furniture factory.

ANAHEIM, CALIF.—Elevation, 158; population, 14,000. 31 miles from Los Angeles; terminus of the Orange County Branch of the Union Pacific. Originally planted in grapes, Anaheim became renowned for its excellent wines. It is now the center of Valencia Orange growing. Principal industries are builders hardware, furniture, orange packing, citrus processing, canning and by-products, copper wire, resin, motors and meat packing.

LOS ANGELES, CALIF.—Elevation, 270; population, 2,039,623. The metropolis of western America and the Southern California terminus of the Union Pacific Railroad. Founded September 4, 1781, by a small band of immigrants from Mexico, Los Angeles remained for nearly a hundred years a small pueblo. As late as 1847, its population was only 1,500. . . in 1880 it was 11,093, and in 1920 but 576,000. Its metropolitan area is now 450 square miles.

As a winter and summer resort Los Angeles stands alone among the larger cities of America, but it is equally a city of home-owners, so many vacationists and sight-seers having remained as permanent residents. It is a city of out of doors enjoyment. It has dozens of public parks, among which Griffith Park, with its 31,761 beautiful acres, is the largest. There are many golf clubs, tennis courts, swimming pools, riding stables, several yacht clubs and facilities for almost every known sport.

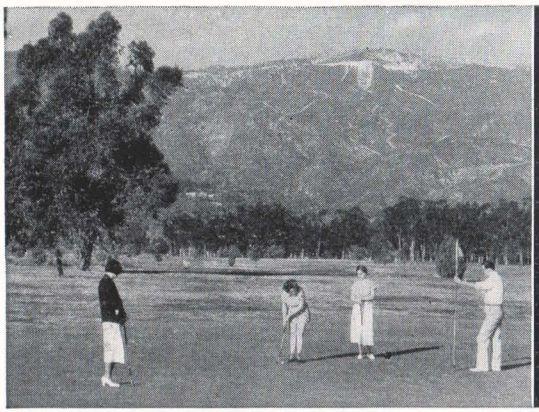
One of the best known industries of Los Angeles is the manufacture of motion pictures, most of which are made in the Hollywood section of the city and in Culver City, a near-by suburb. Staggering sums are spent each year in production and the annual value of the finished product is estimated at more than $250,000,000. About 90 percent of the nation's output is made here, and most of the noted personages of the screen reside near by. Radio, and television, too, have made Hollywood and Los Angeles its home.

Added to Hollywood's numerous attractions are famous Hollywood Bowl, scene of the summer "Symphonies Under the Stars" and other events, the adjacent "Pilgrimage Play," presented in its own natural amphitheatre.

Chiefly and primarily, however, the city will ever be known and well loved for its climate, its beautiful homes and hotels, its excellent schools. Among the latter are the University of California in Los Angeles and the University of Southern California.

Some of the larger beach cities near Los Angeles are Santa Monica, Ocean Park, Venice, Redondo, Long Beach and Seal Beach. In the mountains are dozens of inviting resorts such as Arrowhead and Big Bear Lakes and dozens of others. Hundreds of motor trips may be made from Los Angeles through the orange groves to historic Spanish Missions or to near-by cities and resorts.

Gem-like Santa Catalina Island, famed for its marine gardens and



Golf course at Arrowhead Hot Springs—high in the San Bernardino Mountains.

New City Hall, Los Angeles.

Long Beach, fronting on the blue Pacific, is a thriving, metropolitan city.

big game fishing, is 25 miles from Los Angeles Harbor, reached by luxurious passenger steamers.

LONG BEACH, CALIF. — Population, 270,683. Located at the Ocean, 21 miles from Los Angeles on the Union Pacific, Long Beach combines unexcelled industrial, commercial and resort opportunities.

Possessing great civic beauty and an ideal all year climate, Long Beach boasts a 500 foot wide beach extending seven miles—almost the entire length of the city along the ocean. By providing practically all popular forms of recreation, Long Beach is a mecca for pleasure seekers the world over.

Located in the heart of California's richest oil fields, the city itself owns large oil pools whose revenues have made possible many magnificent improvements, such as Long Beach Harbor which provides 12,500 acres of quiet water anchorage. Immediately adjacent to it is a huge Naval Base, including the Long Beach Naval Shipyard—the permanent home of the Pacific Fleet.

Long Beach has achieved a balanced and diversified industrial economy which includes automobile manufacturing, canning, chemicals, oil well equipment, petroleum production and refining, rubber goods, shipbuilding and repair, soap making as well as numerous consumers' goods.

LOS ANGELES HARBOR (SAN PEDRO), CALIF.—Population, 65,000. 27 miles from Los Angeles on the Union Pacific. San Pedro, an integral part of the City of Los Angeles since 1909, is the port for the great metropolis and the whole southwest. Although shipbuilding has been the biggest industry, fish canning, oil refining and exporting, shipping and lumber have reached peaks heretofore unknown.

San Pedro continues as a yachting center, a fisherman's paradise, a community of homes, churches, schools, parks and playgrounds. Cabrillo Beach offers both clean, still water and surf bathing. Fishing, from the Government breakwater and deep sea angling are always in vogue. Point Fermin Park, with its old lighthouse and its palisades overlooking the sea are popular with visitors.

San Pedro is the base of the Pacific battle fleet, and here is located the U. S. Navy Air Base, Reeves Field and Fort MacArthur.

PASADENA, CALIF.—Elevation, 848; population, 110,770. Located 10 miles from Los Angeles on the Union Pacific and electric lines, Pasadena has many beautiful residential districts and is situated at the base of the majestic Sierra Madre mountains.

The annual New Years' Day Rose Parade in Pasadena is a thrilling floral spectacle, and each year is witnessed by nearly a million and a half people. In the afternoon the famous Rose Bowl game is held, the climax to the nation's football season.

Pasadena has a very scientific and skilled industry producing such as optical instruments, electrical and radio equipment and many other precision instruments. Recreational facilities are many and varied in the city.

GLENDALE, CALIF.—Elevation, 400 to 1,200; population, 104,940. Eight miles from the business center of Los Angeles, Glendale is situated at the entrance to fertile San Fernando Valley. It is here that you will find the famous "Little Church of the Flowers", "Wee Kirk o' the Heather" and the famous re-creation in stained glass of Leonardo da Vinci's painting, "The Last Supper," in Forest Lawn Memorial Park. Many industrial firms have established plants here because of low operating costs.

OGDEN TO SAN FRANCISCO

From Ogden westward across the Great Salt Lake the direct journey to San Francisco is over the Overland route of the Southern Pacific. For 15 miles after leaving Ogden the train runs over a level and fertile country before reaching the lake. The actual crossing is an experience in many ways without parallel in railroad travel.

SALT LAKE CUT-OFF—From Ogden to **Lucin,** 103 miles, extends the famous Salt Lake Cut-Off, crossing the northern arms of Great Salt Lake. It was constructed to avoid the curves and grades of the original line around the northern end of the lake. It saves 43.8 miles of distance, 1,515 feet of grade, and curvature equal to 11 complete circles.

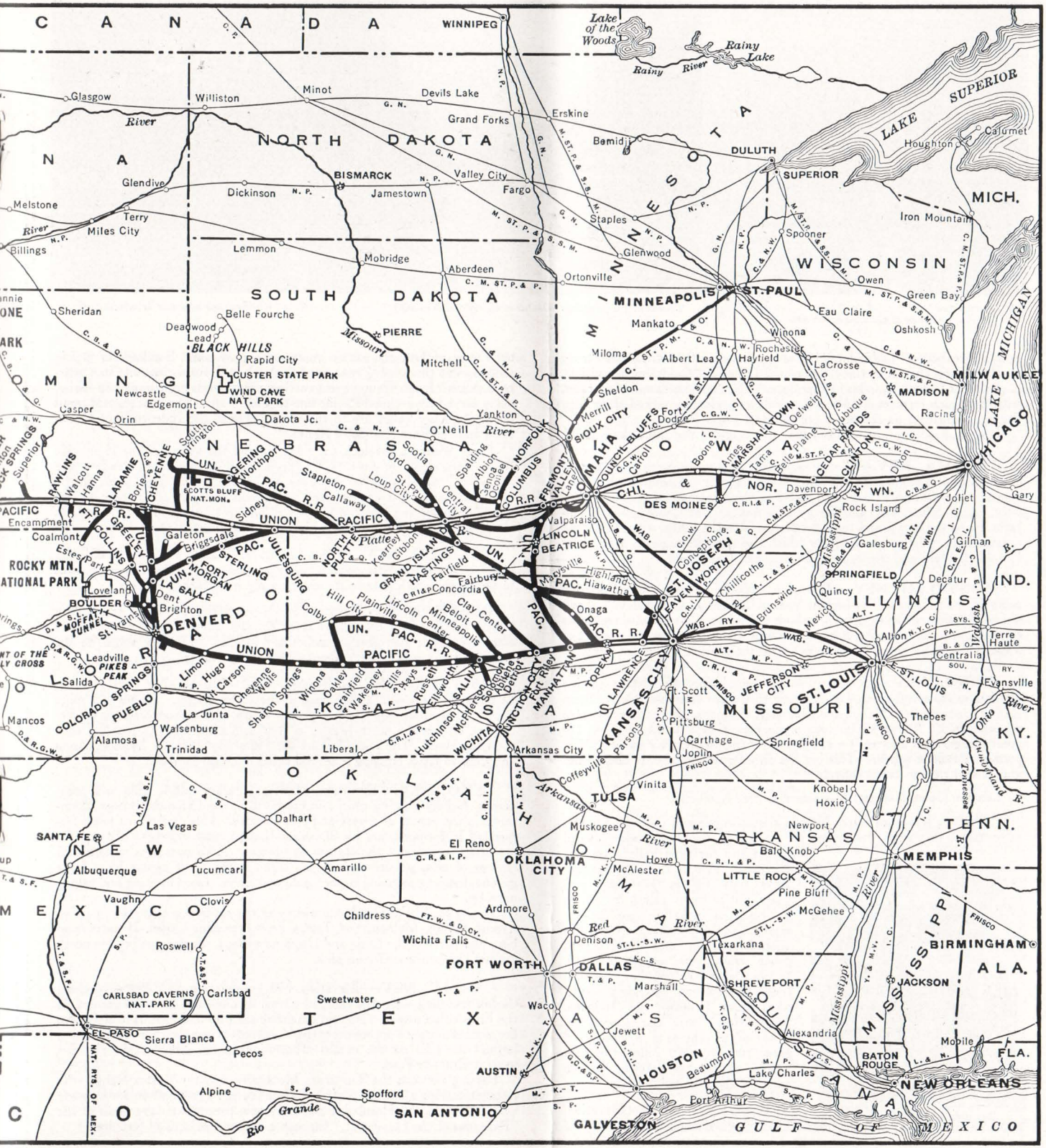
The Salt Lake Cut-Off runs for 72 miles on land, and 31 miles on rock-fills and heavy trestle work. **Promontory Point** separates the east and west arms of the lake. The railroad extends on filled ground 7 miles across the east arm, then 4 miles across the point, passing through a cut 3,000 feet long. West of Promontory Point the line is carried across the west arm on a 20-mile causeway, of which 12 miles are trestle and 8 miles are filled ground. The lake's southern shore is 35 miles away, beyond the islands seen in the distance. The trip across Great Salt Lake is a most novel journey; it is, literally, "going to sea by rail."

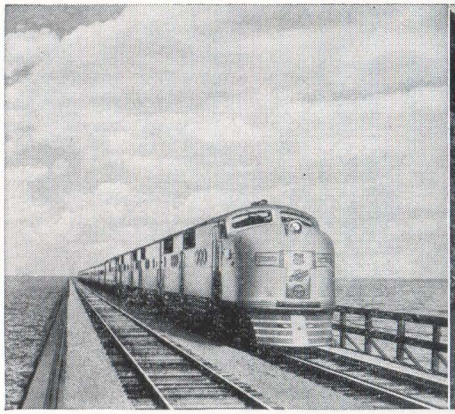
The lake is one of the most remarkable bodies of water in the world. In every 4 pounds of water is one pound of solid matter, of which 13 ounces are common salt. There are no fish in the lake, the only life being a tiny shrimp not exceeding one-third of an inch in length. This entire region, with its wide expanse of waters—now gray and still, now blue and sparkling—and with its weird mountain peaks, exercises a strange fascination upon the traveler. Great Salt Lake covers an area of 2,000 square miles; yet, large as it is, it is but a small remnant of an ancient inland sea which once occupied a large part of the Great Basin. Scientists have given the name Lake Bonneville to this ancient sea, in honor of Captain Bonneville, who explored the region in 1831. Twenty-three thousand years ago this body of water was 346 miles long and 145 miles wide—nearly twice as large as Lake Michigan, and much deeper. In time, the surface of the lake sank below its outlet, and the water became salty through evaporation, the area gradually shrinking. The Overland route crosses the old bed of Lake Bonneville from Ogden to Montello, 130 miles, and the former shore lines are observed in many places high on the mountain sides.

Fur Traders

LAKESIDE, UTAH — Elevation, 4,218. This station marks the western shore of Great Salt Lake. Fossil fishes have been found at several


DOMINION OF
VANCOUVER ISLAND
VANCOUVER
VICTORIA
WATERTON LAKES NAT. PARK
GLACIER NAT. PARK
SEATTLE
TACOMA
OLYMPIA
OLYMPIC NAT. PARK
MT. RAINIER NAT. PARK
MT. BAKER
SPOKANE
PORTLAND
MT. HOOD
SALEM
EUGENE
BEND
CORVALLIS
ROSEBURG
GRANTS PASS
MEDFORD
ASHLAND
CRATER LAKE NAT. PARK
KLAMATH FALLS
LASSEN VOLCANIC NAT. PARK
MT. SHASTA
EUREKA
SACRAMENTO
SAN FRANCISCO
OAKLAND
SAN JOSE
SANTA CRUZ
YOSEMITE NAT. PARK
KINGS CANYON NAT. PARK
SEQUOIA NAT. PARK
DEATH VALLEY NAT. MON.
LOS ANGELES
SAN DIEGO
SAN BERNARDINO
RIVERSIDE
PASADENA
BAKERSFIELD
FRESNO
STOCKTON
LAS VEGAS
HOOVER DAM
GRAND CANYON NATIONAL PARK
GRAND CANYON NAT. MON.
ZION NAT. PARK
BRYCE CANYON NAT. PARK
CEDAR BREAKS NAT. MON.
MESA VERDE NAT. PARK
YELLOWSTONE NATIONAL PARK
GRAND TETON NAT. PARK
SALT LAKE CITY
OGDEN
PHOENIX
TUCSON
YUMA
EL PASO
MEXICO
MONTANA
IDAHO
NEVADA
UTAH
ARIZONA
OREGON
CALIFORNIA
UNION PACIFIC RAILROAD
UNION PACIFIC RAILROAD
AND CONNECTIONS
7038-B
1-1-'50
POOLE BROS. INC., CHICAGO


CANADA
WINNIPEG
Lake of the Woods
Rainy Lake
Rainy River
LAKE SUPERIOR
Houghton
Calumet
MICH.
DULUTH
SUPERIOR
Bemidji
Grand Forks
Erskine
Devils Lake
Minot
Williston
Glasgow
NORTH DAKOTA
BISMARCK
Valley City
Fargo
Jamestown
Dickinson
Glendive
Melstone
Terry
Miles City
Billings
Lemmon
Mobridge
Aberdeen
Ortonville
Staples
Glenwood
Spooner
Iron Mountain
WISCONSIN
Owen
Green Bay
Eau Claire
Oshkosh
MINNEAPOLIS
ST. PAUL
Mankato
Winona
Rochester
Hayfield
Albert Lea
Miloma
LaCrosse
MILWAUKEE
MADISON
Racine
LAKE MICHIGAN
CHICAGO
SOUTH DAKOTA
PIERRE
Missouri
Mitchell
Belle Fourche
Deadwood
Lead
BLACK HILLS
Rapid City
CUSTER STATE PARK
WIND CAVE NAT. PARK
Sheridan
Newcastle
Edgemont
Casper
Orin
Dakota Jc.
Yankton
O'Neill
River
Sheldon
Merrill
Fort Dodge
NEBRASKA
Scotia
Ord
Spalding
Albion
Genoa
Columbus
Stapleton
Callaway
Loup City
Central City
Sidney
Valparaiso
Lincoln
Beatrice
Davenport
Rock Island
Joliet
Gary
DES MOINES
Galesburg
Quincy
Decatur
SPRINGFIELD
ILLINOIS
IND.
Terre Haute
Evansville
Alton
Centralia
ST. LOUIS
MISSOURI
Thebes
Cairo
KY.
Ohio River
Cumberland R.
Tennessee R.
TENN.
MEMPHIS
Knobel
Hoxie
Newport
Bald Knob
LITTLE ROCK
Pine Bluff
McGehee
ARKANSAS
Muskogee
Howe
McAlester
Vinita
TULSA
Coffeyville
Arkansas City
Arkansas River
Ft. Scott
Pittsburg
Carthage
Joplin
Springfield
Parsons
KANSAS CITY
Liberal
Hutchinson
WICHITA
JUNCTION CITY
Fort Riley
Manhattan
Topeka
Lawrence
Salina
McPherson
Solomon
Abilene
Detroit
Ellsworth
Russell
Hays
Ellis
Wakeeney
Grainfield
Oakley
Winona
Sharon Springs
Wells
Cheyenne
Colby
Hill City
Plainville
Lincoln Center
Minneapolis
Beloit
Clay Center
Concordia
Onaga
Fairbury
Fairfield
Macksville
Highland
Hiawatha
Chillicothe
Brunswick
Mexico
Conneaut
Galesburg
Gilman
Davenport
Dubuque
Clinton
Dixon
Aurora
Elgin
Joliet
Gary
Ames
Boone
Marshalltown
Tama
Belle Plaine
Oelwein
Cedar Rapids
Iowa City
Carroll
Council Bluffs
Fort Dodge
Sioux City
Norfolk
Fremont
Valley
Lincoln
Omaha
Nebraska City
Atchison
Leavenworth
St. Joseph
Kearney
Gibbon
Grand Island
Hastings
North Platte
Platte
Julesburg
Sterling
Fort Morgan
La Salle
Dent
Brighton
Denver
Boulder
Longmont
Loveland
Estes Park
Lyons
Ft. Collins
Greeley
Cheyenne
Laramie
Rawlins
Walcott
Hanna
Superior
Rock Springs
Bonne Terre
Encampment
Coalmont
Galeton
Briggsdale
Sidney
Scotts Bluff Nat. Mon.
Gering
Northport
Bridgeport
Chadron
Crawford
Hot Springs
Oelrichs
Edgemont
Newcastle
Sheridan
Moffat Tunnel
Leadville
Pikes Peak
Salida
Colorado Springs
Pueblo
Mancos
Alamosa
La Junta
Walsenburg
Trinidad
Las Vegas
Dalhart
Amarillo
Tucumcari
Albuquerque
Santa Fe
Vaughn
Clovis
Roswell
Carlsbad
Carlsbad Caverns Nat. Park
El Paso
Sierra Blanca
Pecos
Alpine
Spofford
Sweetwater
Childress
Wichita Falls
Ardmore
Denison
Red River
Texarkana
Marshall
Shreveport
Alexandria
Jackson
Birmingham
ALA.
Mobile
FLA.
Baton Rouge
New Orleans
Lake Charles
Beaumont
Port Arthur
Galveston
Houston
Jewett
Waco
Dallas
Fort Worth
Austin
San Antonio
Rio Grande
Mexico
Gulf of Mexico
Rocky Mtn. National Park
Pikes Peak
Colorado
Oklahoma
Oklahoma City
Texas
Louisiana
Mississippi
Arkansas
Missouri
Kansas
Nebraska
Dakota
Minnesota
Wisconsin
Michigan
Iowa
Illinois
Indiana
Ohio
Kentucky
Tennessee
Alabama
Florida
Mexico
Canada
Chicago & Northwestern
Chicago, Rock Island & Pacific
Chicago, Burlington & Quincy
Chicago, Milwaukee, St. Paul & Pacific
Great Northern
Northern Pacific
Union Pacific
Atchison, Topeka & Santa Fe
Missouri Pacific
Kansas City Southern
Frisco
Illinois Central
Southern Pacific
Texas & Pacific
Nat. Rys. of Mex.



Streamliner "City of San Francisco" crossing Great Salt Lake, Utah.

The Gold Coast in Palisades Canyon, Nevada.

The picture speaks for itself.

points hereabouts. The isolated hill seen on the north is known as Strong Knob, and on the south the crests of the Lakeside Mountains are visible.

South of **Lemay,** 35 miles farther on, are the Newfoundland Mountains, with the beach-terraces of Lake Bonneville very clearly marked along their flanks. The ridges on the north are the Raft River Range.

Umbria Junction, just west of Lucin, is the end of the Salt Lake Cut-Off.

TECOMA, NEV.—Elevation, 4,808. The range country of Nevada commences at Tecoma. This is also the nearest railroad point to the silver, copper and lead mines discovered in 1874, which include the Tecoma, Buel City, Lucin, Silver Islet, and Deep Creek mines. The Goose Creek Mountains are to the north, and the Pilot Range is to the south, with Pilot Peak outstanding—a lofty landmark by which the early immigrants steered for Humboldt Wells and the water and verdure of that region.

MONTELLO, NEV.—Elevation, 4,880; population, 300. A division point of the railroad. The highest level of ancient Lake Bonneville shows above Montello, at an elevation of about 5,000 feet. The railroad continues to climb westward, passing **Loray** and **Omar** to Cobre, near the summit of Valley Pass. The Toano Range appears on the south.

COBRE, NEV.—Elevation, 5,922; population, 45. Many mining districts in eastern Nevada are tributary to Cobre. The Nevada Northern Railway runs south to **McGill** and **Kimberly,** 150 miles, where there are noted copper mines. About 48,000 tons of copper ore are hauled daily to the great concentrator and smelter at McGill, producing each day about 750,000 pounds of refined copper. This ore lies on an open plateau, is blasted out and picked up by steam shovels.

Lehman Caves National Monument is near Kimberly.

Proceeding westward across Nevada the train passes a succession of serrated mountain ranges, many marked by lofty, snow-clad peaks. Broad basins and sheltered valleys are also traversed. Some of these valleys now serve only for stock-grazing purposes, but in many places the effects of regulated irrigation may be observed. South of **Pequop** are the Pequop Mountains, and the Independence Mountains appear beyond. Independence Valley lies between these two ranges, extending southward from **Fenelon** and **Holborn.** From **Moor,** near the summit of Cedar Pass, there is a downward grade for over 300 miles, the pass forming a natural gateway to the valley of the Humboldt River.

Driving the Golden Spike Promontory, Utah, May 10, 1869

WELLS, NEV.—Elevation, 5,633; population, 830. In the days of the Emigrant Trail this was an important supply point, hundreds of prairie schooners at times being encamped there. Numerous springs rise in a nearby meadow. From Wells a great cattle range extends northward into Idaho, being served by a Union Pacific line to Twin Falls. The ranches and small farms of Clover Valley are to the south between the Independence Mountains and the East Humboldt Range.

From Wells to **Lovelock** the route follows the valley of the Humboldt River, often along the river itself. This is the chief stream of Nevada—over 300 miles long. Long after its discovery in 1825, by Peter Ogden of the Hudson's Bay Co., it was explored by General Fremont, and named by him after Alexander von Humboldt, the well-known traveler. The river ends at Humboldt Lake, which overflows in time of flood into Carson Sink.

TULASCO, NEV.—Elevation, 5,515. Tulasco, 9 miles west of Wells is the junction for **Metropolis,** a newly settled agricultural district 8 miles to the north, which obtains its water supply from Bishop's Creek.

DEETH, NEV.—Elevation, 5,343; population, 50. From this station a stage line is operated to **Charleston,** 50 miles, where some gold mines and extensive cattle and sheep ranches are located. Directly south lie the irrigated ranches of Starr Valley and the Ruby Range.

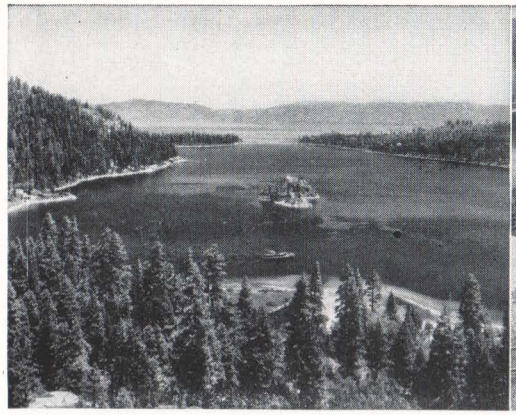
HALLECK, NEV.—Elevation, 5,230. Named after Fort Halleck, 12 miles to the south, at the base of the Ruby Range. **Elburz** is 4 miles west. A fine stock ranch is seen on the south, and a short distance farther the line crosses the north branch of the Humboldt, near its junction with the main river. The route follows the Humboldt through **Ryndon, Osino** and **Coin** to Elko, crossing it several times in Osino Canyon.

ELKO, NEV.—Elevation, 5,063; population, 4,094. Elko is a prosperous, rapidly-growing town and lies north of the Diamond Range Mountains, in the center of a vast and rich country. This region was much frequented in former times by Shoshone Indians, and members of the tribe are often seen about the station at present. Elko possesses mineral hot springs of unusual size and depth. Elko is the trade center for a large mining district producing copper, gold and silver. Good hunting and fishing near by.

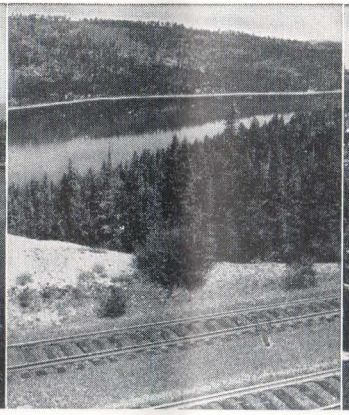
The valley of the Humboldt widens as the route proceeds west, passing **Avenel, Vivian, Moleen,** and **Tonka,** before reaching Carlin, 21 miles from Elko and north of the Dixie and Diamond valleys. Farther still to the north are the Independence Mountains.

CARLIN, NEV.—Elevation, 4,901; population, 832. Before reaching Carlin, traveling west, the railroad passes through some rugged scenery in the Five-Mile Canyon. The old emigrant road divided just east of Carlin, the southern branch approaching the Humboldt River, and the other passing beyond the hills on the north. The two branches joined again 35 miles west at **Gravelly Ford.**

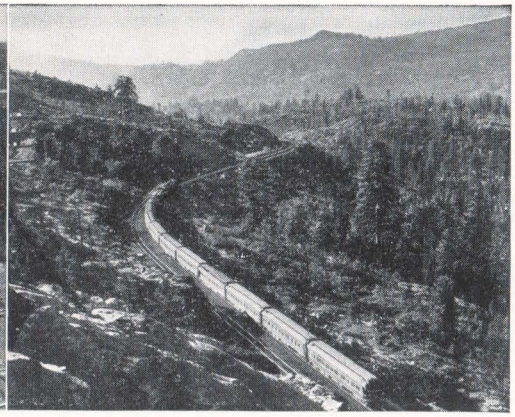
Passing between the Tuscarora Mountains and the Cortez Range (the latter stretching along the south), the line reaches **Tyrol** and enters Palisade Canyon, where the Humboldt flows between precipitous lava walls of the "Palisades of the Humboldt," through a chasm hundreds of feet deep.



Beautiful Emerald Bay on Lake Tahoe, California.



Donner Lake, high in the Sierras, is seen from the train window.



An Overland Route train wends its way through scenes of unsurpassed beauty in the Sierra Nevada Mountains.

PALISADE, NEV. — Elevation, 4,846; population, 75. From Palisade the line passes Devil's Peak, a perpendicular rock rising 500 feet from the river's edge, and follows the Humboldt through **Gerald, Barth,** and **Harney.**

BATTLE MOUNTAIN, NEV.—Elevation, 4,513; population, 767. Battle Mountain, which takes its name from the Battle Mountain Range, lying to the south, is the distributing point for a number of gold-mining districts. The surrounding country has many herds of cattle, and large tracts of land are in use and available for agriculture, good results being obtained from dry-farming. 27 miles farther west, beyond **Iron Point,** the canyon widens into a valley and then closes in, at the entrance of Emigrant Canyon, through which the old wagon trail passed. Many conflicts took place in this region between emigrants and the Piute Indians.

GOLCONDA, NEV.—Elevation, 4,391; population, 430. Fine cattle ranges lie to the north, and also deposits of copper and gold. There are hot springs in the vicinity of Golconda. The Hot Springs Range is visible on the north, near the wells after which they are named, and the conspicuous crest on the south is Sonoma Peak, highest of the Sonoma Range.

WINNEMUCCA, NEV.—Elevation, 4,336; population, 2,485. Winnemucca is a fast-growing city in the center of a large trading area; has large court house, and good hotels and stores. Much land is being cultivated, and water is found in abundance at about 40 feet. Winnemucca Peak is seen on the northwest and, as the train approaches **Mill City,** it passes south of Eugene Mountains (where the largest tungsten mine in the United States is located) and north of the East Range. At **Imlay,** a railroad division point, the West Humboldt Range appears ahead on the south, culminating in Star Peak. The route then passes southward through the Humboldt valley, with the Trinity Mountains on the west, the Stillwater Mountains 30 miles south, and the Clan Alpine Range lying beyond.

LOVELOCK, NEV.—Elevation, 3,982; population, 1,294. Lovelock is the center of a large sheep and cattle raising district, and the rich mining districts of **Mazuma** and **Seven Troughs,** about 30 miles to the north, are again coming to life due to new rich strikes. Irrigation is responsible for the wide fields of alfalfa and sugar beets seen in this region. The new government dam in the Humboldt River at Rye Patch to conserve water for Lovelock Valley will contain 180,000 acre feet of water when filled.

HAZEN, NEV.—Elevation, 4,014; population, 100. Southeast of this point is a large area of land under cultivation, forming part of the Newlands Irrigation Project. Over 40,000 acres are being tilled, the entire project comprising about 240,000 acres of irrigable land. To the south is a mining district producing gold, silver, lead and quicksilver.

North of **Fernley** is Pyramid Lake in the heart of the Pyramid Lake Indian Reservation. Beyond Fernley the railroad passes the concrete diversion dam of the United States Reclamation Service in the Truckee River, whose waters bring many acres of fertile soil into productivity. Here the agricultural development of the country becomes very noticeable, particularly along Steamboat Valley, as the town of **Sparks** (elevation, 4,427; population, 7,500) is approached.

RENO, NEV.—Elevation, 4,499; population, 35,000. Reno, the metropolis of Nevada, was named in honor of General Reno who was killed at the battle of South Mountain. The city, which lies on the Truckee River, near the eastern base of the Sierra Nevada, has several blocks of office buildings, good hotels, a public library, churches, and excellent public schools. Reno is at the same time a part of our last frontier and a wealthy, sophisticated, modern city. Liberal state laws permit the diversions of an open town, while its cultural standards are high. Its night life is cosmopolitan and mature. The University of Nevada, north of the city, offers special courses in agriculture and mining.

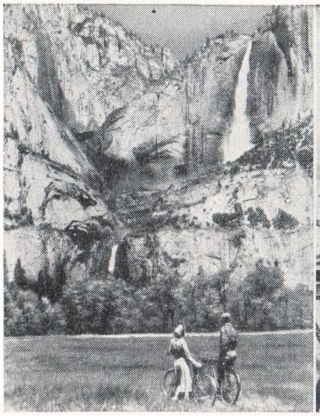
Leaving Reno, the route runs west, among the foothills of the Sierra Nevada, and at **Verdi** it enters the picturesque canyon of the Truckee River, ascending 2,114 feet to the summit in 39 miles. At **Calvada,** 4 miles west of Verdi, it crosses the Nevada-California line and runs parallel to it for 3 miles as far as **Mystic.**

TRUCKEE, CALIF. — Elevation, 5,819; population, 696. At Truckee, on the river of the same name, the principal industries are lumbering, ice-cutting and dairying. During the snow season there are ample facilities for all kinds of winter sports. It is famous as a location for motion-picture settings of winter scenes. From this point beautiful, mountain-rimmed Lake Tahoe, only 15 miles distant, is reached by bus. Boca Dam, 9 miles east, stores an immense volume of water chiefly for use in Nevada.

LAKE TAHOE—Elevation, 6,280. This is one of the largest and most beautiful mountain lakes in the world. It is 23 miles long, and has a sounded depth of over 1,800 feet. It is completely hemmed in by snow-capped mountains, and along its shores are many excellent summer resorts, with comfortable hotels and cottages.

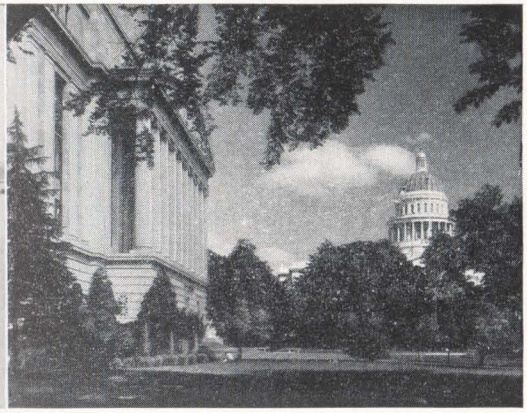
DONNER LAKE—Elevation, 6,000. West of Truckee the grade steepens among the crests of the Sierra. Eight miles farther a remarkable car-window view of Donner Lake is obtained, lying directly beneath, on the north. It is one of the most picturesque mountain lakes in California, and is named after the ill-fated Donner party of emigrants who were snowbound on its shores in the winter of 1846, when 36 out of a total of about 90 perished of starvation. An outing resort here is open during the summer. The altitude of the pass at **Summit** is 7,018 feet, but surrounding peaks rise 3,000 feet higher, with deep gorges and mountain lakes between. The southern branch of the Yuba River flows beneath, north of the track, with the headwaters of the American River visible on the south, 2,000 feet below. This picturesque mountain region is very popular with anglers, and hotel

Encampment of the Donner party



Yosemite Falls—its silvery spray drops from a sheer height of 2,565 feet.

Martinez—Benicia Bridge over the Carquinez Straits.



Grounds of the California State Capitol at Sacramento.

accommodations are good. **Norden** (The Sugar Bowl), **Soda Springs** and **Cisco** are centers for winter sports, with ski jumps, lifts and magnificent skiing terrain. Attractive inns and lodges provide accommodations for visitors. Farther on, at **Emigrant Gap,** the old emigrant road from the east descended the Sierra from a height of 5,219 feet to the valley of the Sacramento River.

AMERICAN CANYON—Elevation, 4,016. In this region for miles the line traverses the ridge above the American River, sometimes at the very brink of the Canyon, affording everywhere magnificent views across a hundred miles of mountains. The declivities here are in many cases precipitous, and the Sierra rises beyond like a wall.

At **Dutch Flat** and **Gold Run,** names associated with the romantic days of '49, the view from the car window to the north shows a vast area which was once the scene of the most active placer mining in the world. All placer mining which may result in sluicing deposits upon valley lands, destroying their agricultural value, is now forbidden by law.

COLFAX, CALIF.—Elevation, 2,418; population, 794. Here the orchards begin, the fruits including prunes, pears, and grapes. The sudden transition from snow-crowned peaks to vineyards and gardens is very noticeable. At **Auburn,** 18 miles farther, the hills are blanketed with orchards bearing apples, peaches, pears, plums, and cherries. Near **Loomis** is the Government Experimental Station for fig raising. To the west spreads the Sacramento Valley, and past **Rocklin** orange groves come into view. At **Roseville** is the largest fruit-icing station in the west.

SACRAMENTO, CALIF.—Elevation, 35; population, 120,000. Area, 14 square miles. Sacramento, the capital of California, is one of its principal manufacturing cities, and the shipping and distribution center for the vast agricultural, horticultural, mining and lumber activities of the surrounding area. The city is situated on the east bank of the Sacramento River, one of the nation's most important inland waterways, which is navigable for 75 miles above this point. The impressive Capitol Buildings are situated in a park of 40 acres, which contains exotic trees from all over the world. There are many fine public buildings and modern hotels, and the residence section is adorned with a luxuriant growth of semi-tropical trees, municipally protected. Here also is located the $7,000,000 Sacramento Air Depot, Pacific Coast assembly, repair and supply base for the air force. Leaving the city, the train crosses the Sacramento River on a great steel bridge.

Cradle Rocking

At **Davis** is the State Agricultural College Farm of 780 acres. Beyond it the train runs southwest through an agricultural area extending into the

marsh lands bordering Suisun Bay; this district is rich in alfalfa, fruits, and nuts, and there is considerable dairying. Nineteen miles across the marshes, which are now being transformed into alfalfa fields and truck gardening lands, lies **Army Point,** headquarters of the United States Army Signal Corps and Ordnance. Across the bay Mount Diablo, 3,896 feet high, is visible beyond the Contra Costa Hills on the opposite shore.

Trains cross Suisun Bay over the Martinez-Benicia Bridge, which is 5,603 feet in length, the longest and heaviest two-track railroad bridge west of the Mississippi. It is 70 feet above water and has a 328-foot lift span which can be raised in 90 seconds by electric or gasoline motor power to a height of 135 feet above water.

MARTINEZ, CALIF.—Elevation, 10; population, 11,000; county seat of Contra Costa County, and home of the Shell Oil Co. employing more than 600 men. From Martinez the railroad skirts the shore line of San Francisco Bay as far as Oakland Pier, a distance of 31 miles, affording splendid views of the Marin County Hills across the water, with the bold outline of Mount Tamalpais over all. From Martinez there is ferry service to **Benicia** (population, 8,500) which was the capital of California in 1853-54. The old brick building which served as the Hall of Legislature is still standing.

From **Crockett,** there is motor coach service to **Vallejo,** a prosperous city of 44,941 inhabitants. Across the Channel is **Mare Island** Navy Yard, our chief naval station on the Pacific Coast, and beyond **Crockett** lie **Selby, Oleum,** and other towns containing smelters, oil refineries, and powder works.

RICHMOND, CALIF.—Population, 90,000. Located on the east shore of San Francisco Bay, its port ranks second on the Pacific Coast in point of tonnage handled. The city has fifteen recreation centers and city parks. Essentially an industrial city, with nearly a hundred important manufacturing plants, among which are a Ford assembly plant, Standard Oil Company refinery, Hercules Powder Company and the Pullman Company car shops.

BERKELEY, CALIF.—Population, 103,315. Berkeley is the seat of the University of California, and is an attractive residential city. Its handsome dwellings extend from the gently sloping coastal plain far up into the tree-clad hills. The University is one of the largest in the country in attendance. Its newer buildings are of granite and its campus contains five groves of ancient oaks and eucalyptus trees. The Greek Theater, where open-air performances and concerts are held, is a graceful example of classical architecture. A concrete stadium of handsome design seats 100,000 people. Another impressive structure is the campanile, or bell-tower, 307 feet high. Berkeley faces the Golden Gate, commanding a superb view of the bay. The timbered ridges of Berkeley hills rise on the east, with Grizzly Peak the outstanding landmark.

OAKLAND, CALIF.—Population, 425,000. In size, Oakland is the third city of California. It contains many handsome residences and busi-

Looking across beautiful Lake Merritt in Oakland.

Downtown San Francisco from Twin Peaks—famed Market Street in the center.

A street in San Francisco's Chinatown—a city in itself.

ness buildings, has extensive manufacturing and shipbuilding interests and an excellent harbor. The massive tower of the City Hall is a striking landmark, and the city's flower gardens and trees are famous. Lake Merritt, in a fine park near the Civic Center, is skirted by modern apartment buildings, and on its calm surface thousands of wild ducks make their winter home. Also on the shore of the lake is the 3 million dollar Alameda County Court House and the Municipal Auditorium, with seating capacity for 12,000 people; this building which represents an outlay of amost $1,000,000, also includes the municipal theater and one of the finest art collections on the Pacific Coast. The well-kept roads that lead through the picturesque regions of Alameda and Contra Costa counties attract thousands of motorists.

ALAMEDA, CALIF.— Population, 89,906; directly south of Oakland, separated from the larger city by a wide estuary, and reached via a $5,000,000 tube, over a mile long. Alameda's tree-shaded homes stand in gardens noted for a profusion of roses. Its bathing beaches have many amusement features. A naval air base is located on land donated by the city to the government. Shipbuilding activities at Oakland and Alameda add greatly to the business of these East Bay cities.

BAY OF SAN FRANCISCO—From Sixteenth Street Station, Oakland, the line runs to Oakland Pier Station. The pier extends a mile into the bay, and on each side has been filled in, providing for the extensive yards here located. At Oakland Pier, passengers for San Francisco board one of the ferry steamers of the trans-bay service. The trip of 4 miles is made in 18 minutes, the landing being at the foot of Market Street. The ferry trip is a picturesque approach to one of the most interesting cities in America. To the right, dwarfing the largest ships in the bay, is the colossal Bay Bridge connecting Oakland and San Francisco, and to the northwest is the soaring roadway of the Golden Gate Bridge. The east and west portions of the Bay Bridge are connected by a tunnel through Yerba Buena Island. North of Yerba Buena Island, and connected to it by a causeway, is the world's largest man-made island and the site of the 1939 Golden Gate International Exposition, Treasure Island. Farther to the north, Alcatraz Island, with its lighthouse and famous prison, rises from the bay like an immense dreadnought facing the Golden Gate. Beyond Alcatraz, and forming the northern shore of the Golden Gate, are the Marin County Hills, with Mount Tamalpais high in the background. Angel Island lies near this shore. The Bay of San Francisco is one of the largest landlocked harbors in the world; it is from 5 to 15 miles in width, the water area covering over 450 square miles and providing 117 square miles of good anchorage. The two arms of the bay are respectively 30 and 35 miles in length.

Regular steamship service connects San Francisco with ports in Hawaii, the Orient, Australia, New Zealand, Oceania, Africa, and the east and west coasts of North and South America.

There is also regular air service to Hawaii, the Philippines, Oceania and Australia.

SAN FRANCISCO, CALIF.—Population, 814,500. Across the bay San Francisco rises impressively on its hills, the foreground bristling with the tall buildings of the business section. Telegraph Hill, comprising the Italian quarter, is the first eminence on the right; beyond it, is Russian Hill, an artistic residence district, and Nob Hill appears in the center, over the clock tower of the Ferry Building. The two cones on the southwestern sky line to the left are the Twin Peaks, and the auto drive around these hill summits affords fine views of the city and surroundings.

San Francisco has many noted restaurants and excellent theaters, and the shopping district is sumptuous. Chinatown, with its quaint oriental community and gorgeous bazaars, is full of interest. The modern business section, Golden Gate Park and other parks and boulevards, picturesque Fisherman's Wharf, the Ocean Beach, the Civic Center and Auditorium, the stately public buildings, libraries, museums, art galleries, monuments, the Presidio with its cantonments of regular troops—all these and many others contribute their share to that individuality which gives San Francisco her irresistible charm for the traveler from near and far.

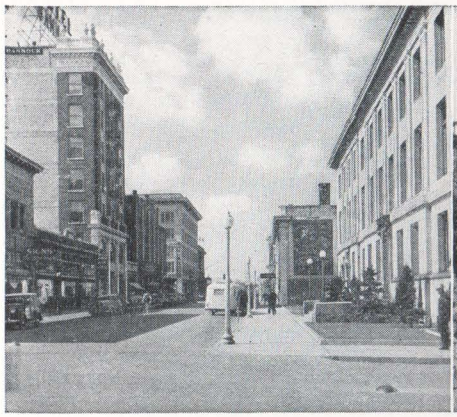
GRANGER TO SEATTLE

DIAMONDVILLE, WYO.—Elevation, 6,885; population, 586. Diamondville is an important coal-mining town with an annual production of 1,500 cars. To the northeast are the Big Piney and Pinedale regions, among the best game haunts of the West. The country between Granger and Diamondville supports large herds of live stock.

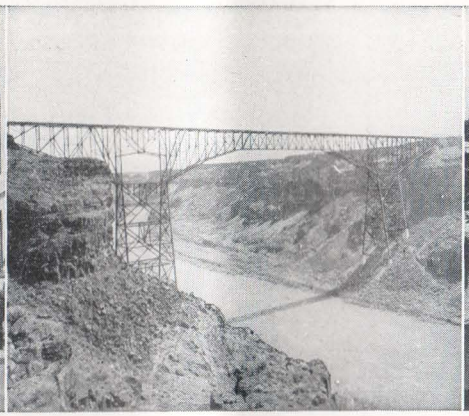
KEMMERER, WYO.—Elevation, 6,913; population, 2,500. Kemmerer is one of the important coal-mining towns in western Wyoming, its annual production approximating a million tons. Before the railroad came, Kemmerer was a junction point for the various ramifications of the Oregon Trail; today it is an important live stock center and an outfitting headquarters for the fishing and big game regions to the north. Two miles west the train enters Hodges Pass tunnel, 1,300 feet long (7,029 feet). **Fossil** (elevation, 6,638) derives its name from near-by Fossil Hill, where many petrified fish have been found; about 40 miles to the north lie the La Barge-Big Piney oil fields, producing several hundred barrels daily.

San Francisco - 1847

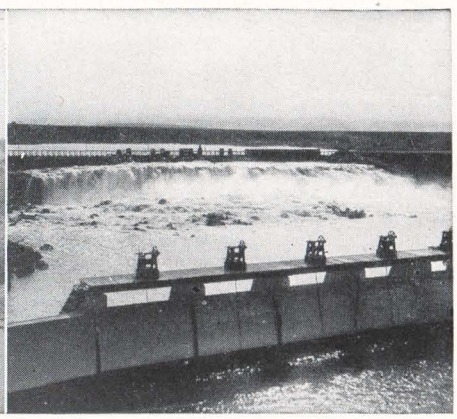
At **Beckwith,** after traversing a region once subject to terrific volcanic action, the train enters the fertile Bear River Valley, in Idaho.



A portion of downtown Pocatello, Idaho.



Highway Bridge across Snake River Gorge near Jerome, Idaho.



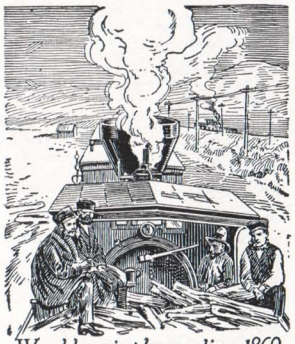
Milner Dam on Snake River which supplies water for irrigating the big Idaho potatoes.

COKEVILLE, WYO.—Elevation, 6,191; population, 452. Cokeville is the center of a rich sheep and cattle country. It is one of the oldest towns in Southwestern Wyoming. Located as it is at the junction of the Bear River and Smith's Fork, the soil is very fertile, and in the days before the Union Pacific was a favorite camping ground for Indians and a rendezvous for trappers and traders. Here the Oregon Trail stopped to refresh man and beast after traveling many miles of wilderness from the east. The town of Cokeville has an excellent water supply system; the water is piped about five miles from springs; pure spring water is thus available for every residence. Yellowstone Park may be reached from Cokeville through beautiful Star Valley and the Canyon of the Snake River. It is a fisherman's paradise, the various streams abounding in trout. Hereabout also is the richest deposit of phosphate in the world.

Shortly after leaving Cokeville, the train enters Idaho, and a glimpse may be had of beautiful Bear Lake, to the south.

IDAHO—Area, 83,888 square miles; population, 537,000. Idaho is widely diversified topographically, having many hills and high mountains interspersed with gorges, valleys, wide upland meadows, and wooded parks, broad plateaus, rolling prairies, beautiful lakes, and great rivers. From the Cabinet, Coeur d'Alene, and Bitter Root Mountains along the eastern boundary, spurs penetrate to the west and southwest through nearly all of the state to the great plains of the Snake River Basin which extends in crescent shape across the southern part. Excepting those along the Columbia, the lava plains of the Snake River Basin are the largest in the United States. In the northern and central parts there are many charming lakes, and picturesque Bear Lake, in the southern part, lies half in Utah. In altitude Idaho ranges from 700 to 12,000 feet. The great river of Idaho is the Snake. Its tortuous course is enlivened by many splendid cataracts including Shoshone Falls, one of the finest in the United States, 46 feet higher than Niagara. The stream provides electricity for many towns and irrigation for nearly 4,000,000 acres.

In south central Idaho is the largest primitive area remaining in America, an immense, unspoiled wilderness of forests, lakes, rivers and mountains where deer, moose, elk, bears, mountain goats, puma and mountain sheep are still found in large numbers. Idaho's Sawtooth Mountains are among the most magnificent in the world. The state's Craters of the Moon National Monument, sand "Himalayas," and ice caves are becoming nationally famous attractions.



Wood-burning locomotive - 1869

During winter the prevailing movement of air from the warm Pacific keeps the climate mild even in regions where heavy snows fall, resulting in ideal conditions for winter sports. At high elevations, and with many feet of snow covering the ground, winter days are generally warm and calm. The Sawtooth Mountains, where America's winter sports capital, Sun Valley, is located, are in the heart of this favored area.

The soil of central and southern Idaho is formed of disintegrated lava (basalt), a fine silty loam of remarkable fertility; in northern Idaho the soil is a sandy-clay loam. Humid, dry, and irrigated farming is practiced. In the Snake River Valley there are vast irrigation systems with more than 10,000 miles of canals; the Jackson Lake reservoir, on the south fork of the Snake, is the largest in the United States; and the great Arrowrock Dam, near Boise, impounds water sufficient for 240,000 acres. The new American Falls reservoir provides irrigation for 750,000 acres of land and has a storage capacity of 1,740,000 acre feet.

The important crops are alfalfa, wheat, oats, sugar beets, apples, prunes, dry beans, garden and clover seed, and potatoes. Stock raising, particularly sheep, is an important industry; the production of wool is large.

The chief manufactured products are lumber, beet sugar, concrete, packed meats, and flour. Thirty-seven per cent of the state is forested and the lumber mills rank high among the large mills of the world.

Idaho has vast mineral riches. It ranks first in the production of lead, and a close second in silver; other important metals are gold and zinc. It is estimated that the production of placer gold since its first discovery totals $200,000,000. The state also has vast deposits of phosphate.

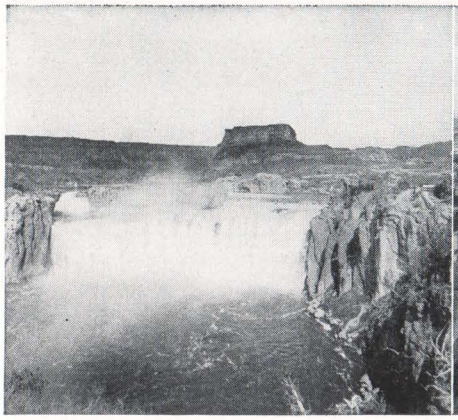
The first white men to enter the state were Lewis and Clark, in 1805-6; Ft. Henry was established by fur traders in 1810; Ft. Hall, near Pocatello, was founded in 1830. The first home-makers and agriculturists were the Mormons. A mission was established by Catholic Fathers among the Coeur d'Alene Indians in 1843. The discovery of gold in Boise Basin by Capt. Pierce, in 1860, brought many white men into Idaho. In 1864, Ben Holladay established a stage line from Salt Lake City by way of Ft. Hall and Boise, to Walla Walla, Wash. The first railroad in Idaho was the Utah Northern, commenced by Brigham Young, and completed in 1879; it became a part of the Oregon Short Line, now Union Pacific, in 1887.

Idaho became a territory in 1863, and a state in 1890.

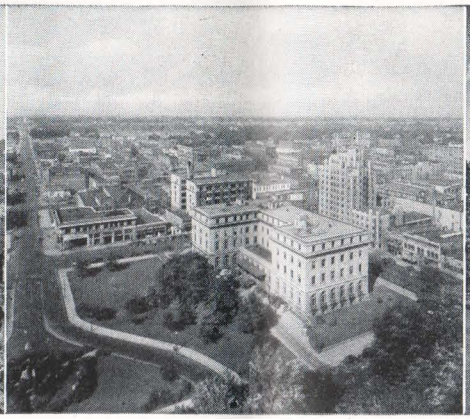
MONTPELIER, IDAHO—Elevation, 5,942; population, 2,824. Montpelier, on Bear River, one of the oldest towns in Idaho, was settled by the Mormons in 1863. The world's largest phosphate deposits are within a 60-mile radius of Montpelier. Hay, grain, potatoes, and small fruits thrive and turkey raising is fast becoming a major industry.

Bear Lake, Idaho, with numerous summer resorts and splendid bathing beaches is a fresh water lake 20 miles long and 5 to 7 miles wide. It may be reached from Montpelier by auto; or from Logan, Utah, on the south. The altitude is 5,924 feet,and the summer climate is ideal; the fishing is good. The States of Idaho and Utah and Federal Bureau of Fisheries have under way an extensive program of restocking to make Bear Lake a fishermen's paradise.

Leaving Montpelier, through lava cuts and diversified farm areas, **Soda Springs** is reached (elevation, 5,779; population, 1,500). This is an old health resort, known to the pioneer trappers, and famous for its 30 mineral springs, similar in formation to the non-erupting springs in Yellowstone. Also there are huge phosphate deposits in the locality.



Shoshone Falls—Mightiest of the cataracts of the Snake River, near Twin Falls, Idaho.



Aerial view of the business section of Boise, Idaho.

Idaho State Capitol at Boise.

BANCROFT, IDAHO—Elevation, 5,423; population, 406. Bancroft, at the head of Gentile Valley, distributes the products of a territory approximating 60,000 acres, irrigated with water conveyed from the Bear River through canals. Much dry-farming is also done here.

At **Pebble,** 9 miles beyond, the Dolbeer lime kilns appear on the right.

LAVA HOT SPRINGS, IDAHO—Elevation, 5,062; population 647. The tracks now follow the Portneuf River through a canyon where the town is situated. It is destined to become Idaho's foremost health resort, as the famous curative springs are owned by the State. The resort provides three large hot-water natatoriums, a $40,000 community building and a 30-bed city owned sanitarium.

McCammon, Idaho (elevation, 4,752; population, 489), on the Portneuf River, is the intersection point of the north-south, east-west trunks of the Union Pacific. Cattle and sheep raising are the chief industries.

POCATELLO, IDAHO — Elevation, 4,463; population, 31,000. Pocatello—Air, Rail and Trail Center, is the second largest city in the state. The original townsite, comprising 1,840 acres, was purchased from the Fort Hall Indian tribes in accordance with an Act of Congress dated September 1, 1888. The townsite survey was completed August 24, 1889, and a government auction sale of lots was conducted in July, 1891.

Although it was not officially incorporated as a village until April 29, 1889, the city really had its beginning in 1882 with the completion of the Granger-Pocatello unit of the Oregon Short Line. It was named at that time by railroad officials for "Chief Pokatello"—a friendly Indian leader who helped negotiate the treaty for lands, then within the Reservation boundaries, that were needed for railroad right-of-way, shops and terminals.

Approximately 3,500 persons are now employed by the Union Pacific here. Included are a number of the supervisory officials for the South-Central District of the Union Pacific, for here it is that the Omaha-Portland transcontinental line intersects with the Los Angeles-Butte service. All passenger, mail and freight transfers are made here for points east, west, south and north.

Within 150 miles of the city will be found approximately 50% of the combined resources of the state. This includes 73% of the irrigated lands.

The city has a Carnegie library, a large Y. M. C. A., fine schools, including a million dollar high school, and the Idaho State College. It has good municipal buildings and beautiful parks and playgrounds. Its retail section is as modern as any city of like size in the United States and its wholesale and manufacturing sections do a huge volume of business, of which the production of phosphate fertilizer is the most important.

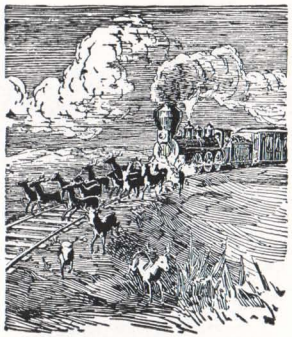
Pocatello is a tourist and vacation center and a gateway to Yellowstone National Park, Sun Valley and the Craters of the Moon National Monument.

AMERICAN FALLS, IDAHO—Elevation, 4,337; population, 2,300. American Falls, "the Power City," is the center of a great dry-farm wheat valley which produced more than 3 millions of bushels of wheat in 1947. The storage reservoir of the American Falls Irrigation Project, has a capacity of 1,700,000 acre feet of water, and generates 27,000 k. w. h. of electric energy.

THE SNAKE RIVER was named for the Snake Indian tribe and not because of the sinuosity of its course. The train crosses it soon after leaving American Falls. It has two sources, the lower fork rising in western Wyoming near the Salt River Mountains, the upper fork heading in northeastern Idaho, at Henry's Lake, west of Yellowstone Park. They come to a confluence north of Rigby. With its tributaries, it drains the Jackson Hole and Teton basins. Following a tortuous course, it flows southwestward, thence northwestward through Idaho and Washington for 800 miles to the Columbia River, forming 200 miles of the western boundary of Idaho. Its principal cataracts are the Upper and Lower Falls, American Falls, Twin Falls, Shoshone Falls, Augur Falls, and Salmon Falls. It is the greatest single natural, commercial, and agricultural asset of the state, creating power for many towns and providing irrigation for nearly 4,000,000 acres.

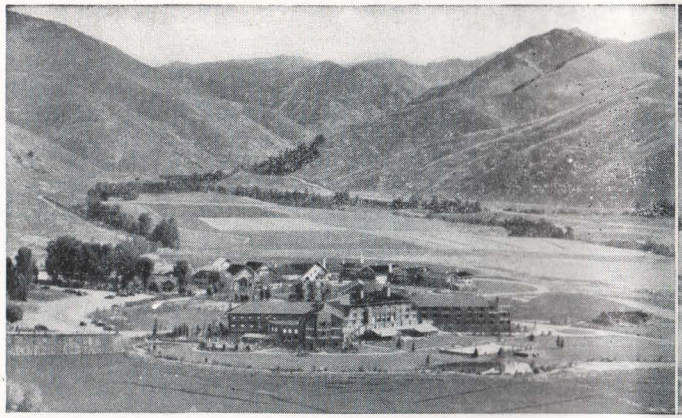
MINIDOKA, IDAHO—Elevation, 4,282; population, 174. Minidoka is the junction of the Twin Falls Branch which operates 74 miles through the agricultural towns of **Rupert, Heyburn, Burley, Milner, Hansen, Kimberly, Twin Falls,** and **Filer,** to **Buhl,** with intermediate branches from Twin Falls to **Wells,** Nevada; Burley to **Oakley;** Burley to **Declo;** and Rupert to **Bliss.** The latter branch traverses a fine irrigated section, a portion of which is identified with the Government's Minidoka project, the remainder being a part of the privately owned Twin Falls North Side project. Several thriving, prosperous towns are located on the branch including **Jerome** (population 3,537), **Paul, Eden, Hazelton** and **Wendell.**

TWIN FALLS, IDAHO—Elevation, 3,747; population, 17,000. Twenty-five years ago the "Twin Falls Country" was a sagebrush waste; today it is one of the richest agricultural and commercial sections of the West, comprising three-fifths of a million irrigated acres. Fruits, sugar beets, dry beans and garden seed, alfalfa, potatoes, grains and peas, clover and alfalfa seeds of prize-winning quality are produced, while dairying and hay-growing are highly profitable. The famous Blue Lakes Ranch of I. B. Perrine is near by. A short distance above this Ranch is the new Twin Falls-Jerome cantilever vehicular bridge, 502 feet above the Snake River bed. Shoshone Falls, "The Niagara of the West," is but a few miles distant. Near **Hansen** is a suspension bridge 345 feet above the river.



Deer Racing with Union Pacific Train

SHOSHONE, IDAHO—Elevation 3,970; population 1,750. The "Mother" of all other towns in lower "Magic Valley," Shoshone is the gateway to the "Valley of the Moon" and to the rugged and beautiful Sawtooth Range, with its lakes and streams for salmon and trout and its high mountains criss-crossed with game trails of elk and deer. Shoshone is the closest approach on the Union



Sun Valley, Idaho, nestled in the heart of the Sawtooth Mountains, is enchanting in summer.

When the snows come, the King of winter sports proclaims his rule over Sun Valley.

Pacific main line to the world-famous Sun Valley playground. A branch line takes the visitor through **Richfield, Bellevue** and **Hailey** to **Ketchum**, another branch line connects with **Fairfield** and **Hill City.**

SUN VALLEY, IDAHO—Situated at an elevation of more than 6,000 feet amid the towering peaks of the Sawtooths, Sun Valley is an all-year vacation center that is winning a world-wide reputation as a sports wonderland. In winter and spring, it offers matchless conditions for winter sports. The deep, powdery snow is ideal for skiing; slopes are treeless, and even in mid-winter, skiing stripped to the waist is possible in the summer-like warmth of the Sun Valley sun. Skiers are whisked to the top of the four most popular ski runs by electrically powered ski lifts. The more inaccessible summits are reached by snow tractors. Tobogganing, dog sledging, ski-joring, ice skating, riding in reindeer-drawn sleighs, and swimming in the famous outdoor, warm-water pools are other popular winter sports.

With near-by streams and lakes teeming with leaping trout and the mountain air fragrant with the scent of pines, Sun Valley in summer presents a combination of vacation attractions probably found nowhere else on earth. There are dancing and ice skating on open-air plazas, pack trips through little-explored wilderness areas, rodeo contests, some of the finest game fishing in the world, swimming, golf, tennis, horseback riding, and many other thrilling activities. Life at Sun Valley at all seasons is glamorously gay with the easy informality of the West.

The variety and the abundance of big game near Sun Valley make this region one of the finest hunting grounds in North America during autumn.

Sun Valley's Challenger Inn, which is open all year, is built in picturesque resemblance to an old-world mountain village. It has a motion picture theater, where first-run films are presented, shops, a post office, night club, restaurants, game rooms and its own open-air swimming pool. The Inn features double rooms at popular prices and moderately priced meals.

Sun Valley Lodge, one of America's finest resort hotels is open during the winter, early spring and mid-summer seasons. It, too, has an adjoining outdoor swimming pool.

Fort Boise, Idaho, 1849

Sun Valley was established as a vacation center following a report by Count Felix Schaffgotsch, Austrian sportsman. Count Schaffgotsch toured Western America for the Union Pacific Railroad on a search for the most suitable region for sports. It is now open as indicated above.

GOODING, IDAHO — Elevation, 3,576; population, 3,500. Gooding is the center of 75,000 acres of rich irrigated farm area and is an important stock marketing center. It is the site of the Idaho State School for the Deaf and Blind, and the Idaho State Tuberculosis Hospital.

BLISS, IDAHO—Elevation, 3,265; population, 400. Bliss is situated on a plateau crossed by the old Oregon Trail and once a camping place for the Indians. Hagerman Valley, to the south, is noted for its belt of irrigation springs. Malad River, Canyon, and Falls, are 5½ miles to the southeast. **King Hill** (population, 490), the site of an Indian "medicine" camp in early days, is now the center of the King Hill irrigation project, comprising 15,000 acres. There are four large hydro-electric plants in the vicinity.

GLENNS FERRY, IDAHO—Elevation, 2,562; population, 1,290. Glenns Ferry is a division point of the Union Pacific, and the site of railroad shops, club house and branch hospital. The Snake River is ½ mile distant. **Mountain Home** (population, 1,193) is an older town, originally a station on the Salt Lake-Boise stage route, now the center of a rich agricultural district, and an outfitting point for the mining districts of **Rocky Bar** and **Atlanta.** Huge Mountain Home Air Base, and earth-filled Anderson Ranch Dam (550 feet high) are both reached from Mountain Home.

BOISE, IDAHO—Elevation, 2,692; population, 55,000. Boise, capital of Idaho, is beautifully situated and is one of the most attractive of western cities. In the early days much of its heat was obtained from natural hot springs which also supply the Natatorium, one of the finest bathing pools in the west. Boise has a great diversification of establishments such as fabricating, lumber manufacturing, dairying, and all the interests of a western metropolis. The Idaho State Capitol, which is clearly visible from the Union Pacific Depot, is an imposing structure. In the early days the U.S. Army maintained a military post here. This is now the headquarters for the Veterans Administration in Idaho. Twenty-two miles distant is the Arrowrock Dam on the Boise River which is used entirely for irrigation purposes. This dam rises 348 feet above the stream and is 240 feet long. A short distance from this dam is an area famous for its mining history. Over fifty millions of dollars in gold dust and bullion were taken from that region and at one time the basin had a population of 50,000.

Between Boise and Nampa, the Boise Valley displays a checkerboard of beautiful, well-kept fruit orchards and dairy farming.

MERIDIAN, IDAHO—Elevation, 2,605; population, 2,500. This important little city between Boise and Nampa is in an irrigated region where much fruit is grown and where dairy farming is carried on intensively.

NAMPA, IDAHO—Elevation 2,489; population 20,000. Nampa is in the Boise Valley, a two-crop area comprising about 700,000 acres of remarkably fertile irrigated land. As a freight division point of the Union Pacific, in 1949—a typical year—Nampa handled 73,834 carloads of products originating in the area, nearly one-half of southern Idaho's total carloadings.

Nampa has the second largest milk condensary west of the Mississippi,a huge sugar factory, the Terminal Ice and Cold Storage plant for icing refrigerator cars and providing cold storage facilities, and the Pacific Fruit Express shops which manufacture Union Pacific refrigerator cars. The Northwest Nazarene College is located there, an accredited liberal arts school of 800 students.

Nampa is not only one of the most progressive cities of the state, but received the title of "Capital of Main Street America" for its progressive retail merchandising. It is the gateway to perhaps the most outstanding ghost mining towns remaining in the nation—**Silver City** and **DeLamar,** high in the Owyhee Mountains.

A horseback party leaves picturesque Challenger Inn at Sun Valley.

Electric Ski lifts whisk skiers to mountain tops for exhilarating downhill runs.

McCALL, IDAHO—Elevation, 5,022; population, 1,200. McCall has developed into one of the state's leading resort centers. With Payette Lake, on which it is situated, as the principal attraction, the town offers boating, lake and stream fishing, golf and water sports. Shore Lodge is one of the West's newest all-around-the-year recreation centers. The Payette Lakes Ski Club has a tow in operation for skiing during the winter. The town has modern hotels, tourist cabins, and camping grounds. It is a lumbering center and stock shipping point.

CALDWELL, IDAHO—Elevation, 2,375; population, 13,000. Caldwell, one of the most enterprising of the older and larger towns, is situated in the irrigated fruit belt of western Idaho, and is a large shipping point for live stock and other agricultural and horticultural products. It was settled shortly after the railroad was completed.

NYSSA, ORE.—Elevation, 2,186; population, 2,800. This city is also in the fruit belt, and ships potatoes, onions, lettuce and sugar. Just east of the town the Snake River is crossed, from Idaho into Oregon. From Nyssa, the Homedale Branch operates in a half circle south and east along the Snake River, through a rich agricultural and horticultural country, 25 miles to **Homedale** (elevation, 2,238; population, 1,000) and terminating at **Marsing**, 8 miles beyond. This is a much favored agricultural and stock-raising section.

NOTUS, IDAHO—Elevation, 2,326; population, 450. Notus is the home of the U.S. Bureau of Reclamation and the Black Canyon Irrigation District. It is in a farming community of nearly 60,000 acres of irrigated land. The principal crops are sugar beets, potatoes, onions and lettuce. An extensive dairying industry is carried on.

PARMA, IDAHO—Elevation, 2,300; population, 1,503. This community is the center of a large fruit growing and poultry producing district. Parma is widely known for the quality of its lettuce and early potatoes.

ONTARIO, ORE.—Elevation, 2,160; population, 6,000. Between Ontario and Payette, the train recrosses the Snake River into Idaho. Apples and other fruits are produced on the irrigated farms, and dairying, hog raising, and grain growing are important industries. Ontario is the gateway to the great cattle country of central Oregon, served by the Oregon Eastern Branch, extending 127 miles southwestward to **Burns** (population, 3,100).

PAYETTE, IDAHO—Elevation, 2,154; population, 5,023. Payette was named for Francis Payette, an early Hudson's Bay trapper, for whom the river and lake were also named. It is surrounded by a rich fruit section, noted for its fine apples, cherries, and prunes. The Payette Valley has 15,000 acres of orchards in the largest fruit raising district of Idaho.

The Payette Branch forms a 30-mile link between Payette on the main line and **Emmett** (population, 4,986) on the Idaho Northern Branch, which operates through the fertile Payette Valley. Black Canyon Dam, a few miles from Emmett, distributes the irrigation water over the valley.

WEISER, IDAHO—Elevation, 2,121; population, 5,274. Weiser was named for Jacob Weiser, another Hudson's Bay Company trapper, and associate of Payette. Weiser produces fine fruits, and the cultivation of sugar beets has become important. It is in an area where a semi-precious gem industry is carried on extensively.

OREGON—Area, 96,699 square miles; population, 1,450,000. Oregon is a mountain state, traversed from north to south by two great ranges, the Coast Range and the Cascade Range. In the northeast are the Blue Mountains, rich in minerals. By the lofty Cascades, Oregon is divided geographically and industrially into two distinct sections. The Japan Stream gives to the western part a mild, delightful winter climate, and the northwest winds keep the summer temperatures moderate; there is abundant rainfall. The genial climate and arresting scenery of this region make it a glorious summer playground. Eastern Oregon is a high table-land of much less rainfall and greater fluctuations of temperature.

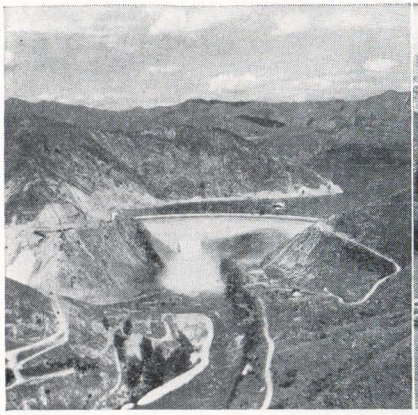
The great river of Oregon is the Columbia, with a drainage area of 259,000 square miles. Its principal affluents in Oregon are the Snake, Umatilla, John Day, Deschutes, and the Willamette. The Columbia is navigable for ocean-going ships to Portland, 108 miles inland; thence, for river steamers to Bonneville Dam, and by ocean-going vessels on the deep lake created by the dam as far as The Dalles. The Columbia is noted for the beauty of its scenery and for the vast numbers of salmon taken from its waters. The Columbia River Highway parallels the river and the Union Pacific.

There are several majestic peaks in the Cascades of Oregon, the most notable being Mt. Hood, 11,245 feet high. The state also contains many lakes, most famous of which is exquisite Crater Lake, in the National Park of that name; it lies 6,000 feet high, in the picturesque crater of an extinct volcano, and is the deepest body of fresh water in America.

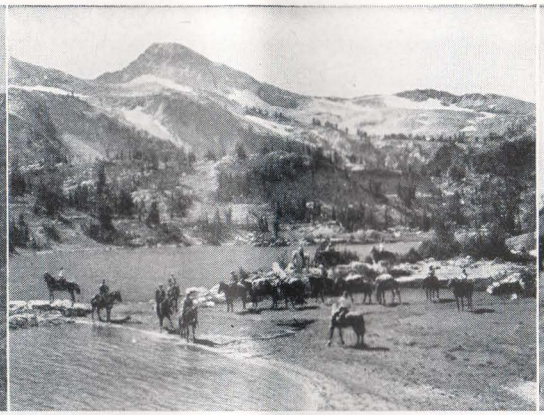
Oregon is the richest lumber state in the Union and one of the great producers of wheat, live stock, and wool. The principal agricultural products are wheat, hay, barley, oats, corn, and rye; and the chief fruits are apples, prunes, cherries, loganberries, pears, peaches, blackberries, strawberries, and raspberries. Thirty-six thousand square miles of the state were originally forested, and a considerable part of this area remains untouched. There are 75 varieties of trees, of which 32 are conifers and furnish the commercial timber. The Douglas fir is the principal tree west of the Cascades. Near the ocean is a strip of forest in which Sitka spruce and Port Orford cedar, the chief sources of aircraft lumber, are found in greatest perfection. Oregon abounds in minerals found largely in the Blue Mountain region. Gold is mined extensively; other minerals are silver, coal, zinc, platinum, lead, iron, copper, and nickel.

Oregon is growing rapidly in importance as a manufacturing state. Bonneville Dam on the Columbia River alone has a generating capacity of 518,400 kilowatts. Next to agriculture, lumbering is the most important industry; the canning of fish ranks high in importance. Other important manufactured products are steel and wooden ships, furniture, cordage, flour, rubber products, packed meats, leather, woolen goods, and pulp and paper. The paper mills of Oregon supply most of the newspapers west of the Rockies.

Chief Red Cloud



Arrowrock Dam rises 348 feet above the bed of the Boise River.



Moccasin Lake and Eagle Cap Mountain, Wallowa Primitive Area, Eastern Oregon.

The Pendleton Roundup is always a thrilling and exciting event.

The public schools of the state are well endowed and the educational system highly organized. Eight universities and colleges include the University of Oregon at Eugene, and Oregon State Agricultural College at Corvallis.

Spanish and English navigators saw the Oregon coast in the 17th century, but left no record. Capt. Cook landed at Nootka Sound in 1778, and Laperouse coasted the region in 1786. In 1791, Robert Gray, in the employ of Boston fur merchants, named the Columbia. The Lewis and Clark expedition explored a part of the state in 1805-06, and in 1811 members of Astor's American Fur Company erected trading posts at Astoria. Indian missions were founded in 1834-36 and immigration commenced about 1839.

Oregon became a territory in 1849 and was admitted as a state in 1859.

HUNTINGTON, ORE.—Elevation, 2,108; population, 953. Huntington is the gateway of the Union Pacific to the Pacific northwest where time changes from Mountain Time to Pacific Time, and was named for the two Huntingtons who owned the greater part of the site in 1883 when the O. S. L. and O.-W. R. & N. railroads, now the Union Pacific, approaching respectively from the east and west agreed to make their common terminal there. Here the Oregon Trail is again touched and the Snake River is crossed for the last time. An extensive irrigated-farming, wool-growing, lumbering, and mining territory is tributary to Huntington, which is situated on the foothills of the Burnt River Mountains. From **Blakes Junction,** a branch diverges 35 miles northward to **Robinette.** This branch follows the Snake River through a region of kaleidoscopic mountain scenery.

BAKER, ORE. — Elevation, 3,440; population, 11,500. Baker is the commercial center of an extensive agricultural, horticultural, lumbering, stock-raising, dairying, and mining region. The town is in the great mineral section of Oregon, the Blue Mountain district, rich in gold, silver, copper, and with large deposits of gypsum, clay, and building stones. It was named after Col. E. D. Baker, a friend of Abraham Lincoln. Baker lies in the Powder River Valley, with the beautiful Blue Mountains for a background. The town is progressive and modern with excellent schools and practically every denomination represented by churches. Baker has large lumber mills, lumber processing plants, foundries, machine shops, fine hotels, newspapers and theatres, and in addition a modern, attractive shopping district. Its city park is a restful and welcome spot for visitors, with playground facilities for the children. Baker was settled in 1862 with the discovery of gold. It is now the center of a sportsmen's paradise for migratory birds and big game hunting. There are recreational facilities at Anthony Lakes, 35 miles distant.

Buffalo Bill and Spotted Tail

From Baker, the railroad crosses the mountains and drops down to **Union,** at the southeastern end of Grande Ronde Valley, a thrifty community noted for its excellent fruit and live stock. This region is not only exceedingly picturesque but also of rare historic interest because of its close relation to the old Oregon Trail

HOT LAKE, ORE.—Elevation, 2,701. At the southern end of the fertile Grande Ronde Valley, fed by a great spring discharging daily one million gallons of the hottest curative waters known, is Hot Lake. The remedial quality of the water is due to radio-activity. Although the lake has been known only since 1812, the Indians used it for many generations, and its healing properties are celebrated in tribal tradition.

LA GRANDE, ORE.—Elevation, 2,784; population, 10,000. La Grande is the home of the Eastern Oregon College of Education and the shipping center of the Grande Ronde Valley, noted for the richness of its agricultural, horticultural, lumber, and mineral resources. Products of the rich Wallowa Valleys also move through La Grande to market. The city is located on the Grande Ronde River at the base of the Blue Mountains, whose stately peaks are bathed in an exquisite blue haze.

The Union Pacific maintains shops at La Grande.

Wallowa Lake, a beautiful body of water in the Wallowa Mountains, is reached from the Joseph Branch, extending 84 miles eastward from La Grande. It was visited by Captain Bonneville in 1834 and was the hunting ground of Chief Joseph, a noted Indian leader. The main line tracks cross the Blue Mountains at **Kamela** (elevation, 4,203) and descend to the Umatilla Valley. **Meacham** was a stage station on the Oregon Trail. West of **Conway,** the train passes through the Umatilla Reservation, where glimpses may be had of Indians—not the savage red men of old, but a progressive, wealthy tribe which farms areas of wheat land.

PENDLETON, ORE.—Elevation, 1,067; population, 13,500. Pendleton is on the Umatilla River, which furnishes water for irrigation. Umatilla is one of the largest wheat growing counties in the land, producing annually more than 5,000,000 bushels of superior wheat.

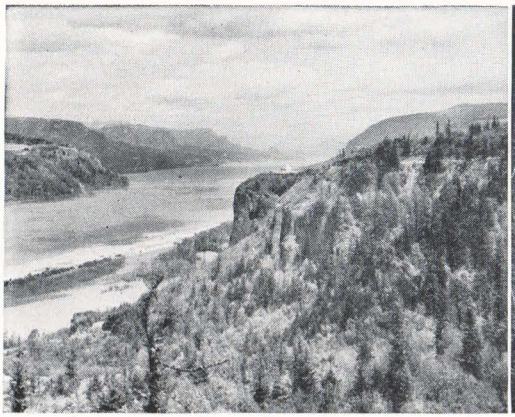
Umatilla county is also one of the largest producers of green peas for canning and freezing. Furthermore it is a large producer of hay, fruits, lumber, cattle, sheep, horses, hogs, wool, poultry and dairy products.

The city of Pendleton is modern and has flour mills, grain elevators, woolen mills, saw mills, furniture factories, two canneries and freezing plants. It is the seat of St. Joseph's Academy, and a State Hospital for the Insane.

The Pendleton Roundup, a noted frontier festival held annually in August, consists of races and other contests illustrating the work and play of the cowboy in the days when the West was raw; roping, riding outlaw "buckers," "bulldogging" steers, and many other equestrian feats of thrilling interest make up the program. Some fifty thousand persons visit this historical spectacle each year.

Pendleton is a division headquarters and the junction point for two Union Pacific branch lines, one extending northward through **Walla Walla** to **Spokane,** the other southward to **Pilot Rock.** Leaving Pendleton, the train follows the Umatilla River, which it crosses four times. Ft. Henrietta stood near **Echo** (population, 500) during the Yakima war of 1855. Near **Stanfield** (population, 400), surrounded by irrigated farms, the train crosses a part of the Umatilla Irrigation Project.

Before the "Cut-Off" was built, the main line of the Union Pacific ran northward from **Hinkle,** across the original Umatilla Irrigation



Crown Point overlooks the Columbia River Gorge from 700 feet above the river.

Multnomah—the most beautiful and celebrated of the many waterfalls of the Pacific Northwest.

From the Pacific Northwest comes much of our canned salmon.

Project, the principal town of which is **Hermiston** (population, 3,500). One of the foremost agricultural experiment stations in the West is maintained at Hermiston.

THE COLUMBIA RIVER—At **Messner,** the first glimpse of the mighty Columbia River is obtained. This river is 1,400 miles long, 7 miles wide at its mouth, and is navigable for 200 miles. Two and one-half miles east of Umatilla the huge new McNary Dam and Pool is being built across the Columbia River, in the interest of navigation, power, irrigation, and other water uses. The Columbia River Route of the Union Pacific follows the majestic stream for 200 miles, through the rugged, spectacular gorge it has been uncounted ages in carving. From time to time, the icy grandeur of Mt. Hood and other towering white sentinels of the Cascades may be seen. As the enclosing hills draw nearer, the gorge deepens and multiplies its spectacular features, displaying the great palisades of basalt (a molten volcanic rock that split into dark, five- and six-sided columns as it cooled) and which constitute the distinctive geologic phenomenon of the Columbia River course.

From **Heppner Junction, Arlington,** and **Biggs,** Union Pacific branch lines extend southward to **Heppner** (population, 1,705), **Condon** (1,050), **Moro** (300) and **Kent** (100), among the vast wheat fields, and live-stock ranges of central Oregon.

CELILO—Twelve miles east of The Dalles are Celilo Falls, where the entire river drops over basaltic ledges in fantastic fashion before reaching the Grand Dalles of the Columbia. Here in the early days the Indians took from the waters the great Chinook Salmon. In a treaty with the Indians, made in 1855, it was stipulated that the Indian should have the right to fish at this point in his accustomed manner and for his own use. Today it is a great fishing ground for the Indians, who fish with dip net and other instruments for their own use and for commercial purposes. The annual migration of Columbia River Salmon occurs usually in the latter part of April and early part of May and at intervals thereafter until late September, the fish moving in great schools to the spawning grounds on the upper reaches of the river and its tributaries. Generally the Indians can be seen fishing at various points in this vicinity from April 15 to October 1.

DESCHUTES VALLEY—The Dalles is the junction of the branch that serves the fertile Deschutes Valley now being developed as one of the principal farming areas of the west. The beautiful Deschutes River, famous as a fishing stream, cuts its way through a gorge often 1000 to 1500 feet deep. Water from this river is used for irrigation and power. A trip up this branch from The Dalles by motor stage, on which rail tickets are honored, affords the traveler splendid panoramas, including Mt. Hood, the Three Sisters and other snow peaks of the Cascades.

At **Bend** (population 12,500) there are many activities for the pleasure seeking vacationist. Within easy reach of Bend one may visit lava caves, the largest lava cast forests in the world, Newberry Crater, climb a snow-capped mountain, or fish from some of the 200 lakes and streams in this area. Bend is at the edge of pine forests and lumbering is the principal industry.

THE DALLES, ORE.—Elevation, 102; population, 7,200. Located on the south bank of the Columbia River, 200 miles from the Pacific Ocean.

The Columbia River is navigable to ocean carriers as far as The Dalles

through use of the ship lock at Bonneville Dam and to inland water carriers above The Dalles to Pasco, Washington.

The city is a modern one and a trade center for an extensive area producing livestock, poultry, wool, grain and fruits. Among its industries are large railroad shops, a large wood treating plant, fruit and salmon canneries. The city has two general hospitals and a State Tuberculosis Hospital. A modern high school system and St. Mary's Academy, together with Carnegie Library round out its educational system.

The name The Dalles is derived from the French word "dalle" meaning flag-stone and was applied to the narrows of the Columbia River, above the present city of The Dalles, by French-Canadian employees of the fur companies. Among other things, "dalle" meant a stone used to flag gutters, and the peculiar basalt formation along the narrows doubtless suggested gutters. The word "dalles" signified, to the voyageurs, the river rapids flowing swiftly through a narrow channel over flat, basaltic rocks. These flagstones were called "les dalles." Anglicized they became The Dalles.

Lewis and Clark camped near the city in 1805-06. The first settlement was made by fur traders in 1820. Old Fort Dalles was an early military post. The residence of the Army Surgeon still stands and is now occupied by a museum of the Old Fort Dalles Historical Society, in which a collection of antiques and specimens of Indian artcraft is one of the best in the northwest.

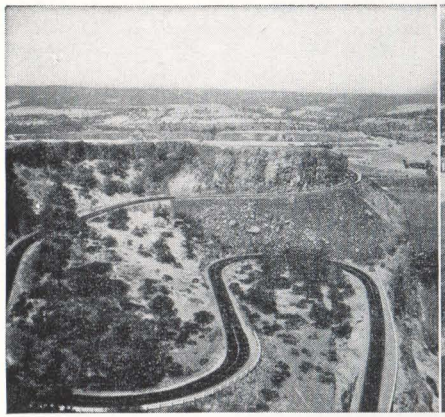
Cryptic writings found on basaltic bluffs near the city have attracted internationally known scientists. Their origin and their true meaning are still a mystery.

The Dalles has been a crossroads of travel from the days of the Indians. Today it is served by the Union Pacific Railroad and an east and west motor highway known as the Oregon Trail and a north and south highway from Canada to Mexico.

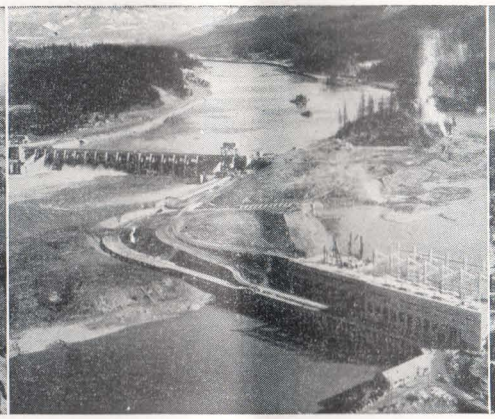
HOOD RIVER, ORE.—Elevation, 100; population, 3,500. The Hood River Valley, cradled by mountains, and extending south from the Columbia to Mt. Hood, some 20 miles, is celebrated internationally as an area growing the finest of apples, pears and cherries.

The charming and enterprising town of Hood River, surrounded by fine orchards, berry fields, and flower gardens, is the commercial center of the remarkable valley. The city is famed for its beauty and cleanliness, its ideal climate, rarely extremely warm or cold, and always having cool nights. It has an excellent school system. Chief among industries are the canning and evaporating plants, lumber mills and allied factories. From the eminences of the town fine views may be obtained of Mt. Hood, perhaps the most accessible of America's perpetually ice-capped peaks, and of Mt. Adams (altitude, 12,307), 40 miles northward.

Indian Village



The Rowena Loops exemplify some of the engineering problems in the building of the Columbia River Highway.



Bonneville Dam on the Columbia River is seen from Union Pacific trains.

Looking across Portland from Kings Heights to Mt. Hood's snowy cone.

The Alpine scenery of the Hood River region is of high rank; moreover the genial climate makes it attractive all the year. Within an hour's ride of the town are lofty mountains, vast forests and rushing streams; trout fishing, big game hunting, and winter sports may be enjoyed in season.

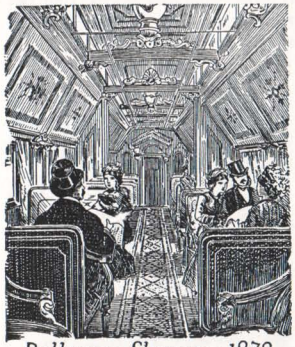
Mt. Hood, sheathed by glaciers and with all the icy grandeur of a peak of Switzerland can be ascended with comparative ease. Cloud Cap Inn, at the snow-line, a two hours' automobile ride from Hood River, is the chief starting point; the summit is four miles distant from the Inn. Many far-away peaks of the Cascades, and even the Pacific Ocean, 100 miles westward, may be seen from the summit.

Wyeth, 17 miles west of Hood River, was named after a Boston merchant who in 1832 and 1834 led American expeditions into the Oregon Country and established Fort Hall and Fort William.

THE COLUMBIA RIVER HIGHWAY—Now the Union Pacific Railroad parallels the most wonderful scenic highway in America, perhaps in the world. The Columbia River Highway parallels the Columbia River for 337 miles. It is a wide roadway with a bitulithic surface, and its steepest grade does not exceed five per cent. Following the majestic river that determined its course, the highway winds to and fro at the base and upon the sides of sculptured cliffs, crosses dashing streams on magnificent bridges of steel and cement, passes many waterfalls of matchless beauty, and occasionally disappears momentarily in a short tunnel. Travelers to Portland on Union Pacific trains have many views of the famous roadway.

Just west of the city of Hood River one may view Mitchell Point tunnel on the Columbia River Highway, hewn out of solid rock with five "windows" looking down upon the river; a few more miles and the "Bridge of the Gods" spans the Columbia at Cascade Locks where the fabled natural bridge of Indian lore was supposed to have arched the waters ages ago. Soon one comes in view of the great Bonneville Dam.

The giant Bonneville project for navigation and hydro-electric development has been constructed by the Federal Government at a cost exceeding $50,000,000. It is located at the head of tidewater on the Columbia River. The Bonneville Dam project proper was completed with the installation of 125,000 horsepower in 1938. Two more units, under construction, will produce 148,000 horsepower and the plan for the dam's final development includes the construction of six more units to bring the total capacity to 717,000 horsepower. The dam with its spillways and the great lake behind it, is an impressive sight.



Pullman Sleeper - 1872

A very interesting feature is the fishway, which was built to enable the mighty hordes of Columbia River salmon to swim to upstream spawning waters, and alone cost nearly one million dollars. The fishway is a series of small waterfalls, or, more precisely, a staircase of water that takes advantage

of the ability of salmon to hurl themselves over obstructions in their drive to upstream waters. It is a unique structure. Without it, the salmon industry, which is worth millions of dollars annually to Oregon, would have been ruined in the state. Just beyond **Bonneville,** Beacon Rock, a great basalt column on the northern bank, rises nearly 900 feet skyward; its summit was used for signaling by the Indians. Next, 1,500 feet above the tracks, towers St. Peter's Dome. Then appear Horsetail Falls, plunging 208 feet; Oneonta Gorge, a remarkable cleft in the canyon wall; and the Winnema Pinnacles, sharp obelisks extending 1,200 feet above the track. Presently, train passengers obtain a good view of the finest waterfall in the Columbia Gorge—Multnomah. This beautiful column of falling water first leaps 541 feet down a sheer cliff, pauses momentarily upon a terrace, cascades 10 feet and plunges another 69 feet. A short distance farther are the graceful Bridal Veil and Latourell Falls. A mile beyond is Crown Point, where the highway circles the crest of a high promontory. A few suburban towns are passed, and the train reaches Portland.

Passengers who prefer may transfer to motor coaches, operated over the Highway by the Union Pacific Stages, Inc., for the trip through the gorge, reboarding a train at convenient point, or continuing by bus to Portland.

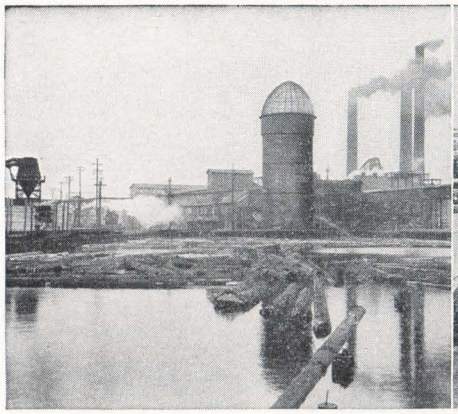
PORTLAND, ORE.—Elevation, 30 to 1,260; Population 424,000. Portland, the nation's 24th largest city, located on the Willamette River just above its confluence with the Columbia River, is the metropolis of the state and the chief city of the Columbia River Basin.

It is called "The Rose City," because from spring until late autumn its yards and gardens are veritable conservatories of roses; even during the winter many sheltered gardens produce beautiful blooms. Portland's success with "the queen of flowers" and her favorable soil and climate have led the American Rose Society to establish its principal test gardens there. The renowned "Rose Festival" is held there in June each year.

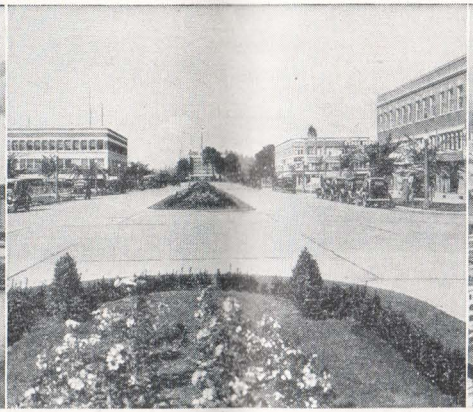
Portland is famous for civic beauty, which is enhanced by the magnificent background of the Cascade Range, with Mts. Hood, Adams, and St. Helens, outstanding. The city has handsome public buildings, churches, hotels, theatres, business blocks, fine schools and colleges, Public Libraries, the Municipal Auditorium, Civic Stadium, more than 2500 acres of parks and public playgrounds, 17 golf courses, excellent street car, bus and interurban service. Summers are pleasantly cool and winters are mild. Scores of short excursions may be made from the city to snow capped mountains and their fishing streams, along the great river, and to the charming beaches near the mouth of the Columbia and along the Pacific Ocean Oregon coast line. Timberline Lodge, a million-dollar all-year sports center on Mt. Hood, is only 60 miles from Portland.

Portland is a busy seaport city with many steamship lines serving world ports. One may see ships being loaded with cargoes of lumber, wood pulp, paper, wool, wheat, flour, fruit, chrome ore and Oregon manufactured goods, worth millions of dollars annually, or discharging imports of coffee, sugar, copra, iron and steel, bananas, linseed, gunny bags, toys and other products brought from the far corners of the world.

Visitors to Portland are frequently unaware that it is the agricultural and livestock marketing center for the entire Columbia Basin area. It is the leading wheat exporting city in the United States; it is second only to



One of the large sawmills of the Pacific Northwest. More than 4½ billion feet of lumber are produced annually.



A street in Longview, Washington, lumber capital of the Northwest.

A section of downtown Tacoma—Mt. Rainier seems to rise in its eastern suburbs.

Boston as a wool center; and its livestock market is the largest in the Pacific Northwest. The great diversity of field, fruit and vegetable crops—over 100 in all—provide an even flow of commodities for processing and marketing.

Situated 96 nautical miles from the sea, Portland is the only major fresh water harbor on the Pacific Coast located inland on a great river. Strictly modern terminal and dock facilities line the 27 miles of deep water frontage.

Portland is a city of diversified manufacturing, with products ranging from swimming suits to machinery, flour to kitchen ranges, and chemicals to furniture. Portland is justly proud of the record she made in shipbuilding and other production during the war, and is continuing her preeminence in the manufacturing field in the post-war era. Every day sees new advances in the way of diversification of products, additional utilization of resources and increased production until the number of industries now amount to over 1,500 and the manufacturing employment is close to 60,000.

Leaving Portland and traveling northward, the train crosses the Willamette River, passes great mills, elevators and docks, and the car shops of the Union Pacific; then over the Columbia River into Washington on one of the finest steel bridges in America.

WASHINGTON—Area, 69,127 square miles; population, 2,254,098. Washington, the "Evergreen State," is divided by the Cascade Range, as is Oregon, into two distinct sections, the western part having a mild, moist climate, the eastern, hotter summers and colder winters. The state is characterized by great topographical diversity, ranging from low plains to such lofty peaks as Mt. Rainier (14,408 feet), together with broad, rolling prairies, elevated plateaus, deep canyons, and fertile valleys. Puget Sound, a great inland sea with many arms and bays, extends southward 200 miles from the Canadian boundary to Olympia, the capital city of the state.

On the lower lands along the coast and Puget Sound are vast forests. Diversified farming, fruit-growing, and dairying are the principal agricultural pursuits. In eastern Washington is some of the most fertile wheatland on earth; there are also the great cattle and sheep ranges, and fine irrigated farms producing fruit, vegetables, hay, hops, grain, potatoes, and berries.

The principal crops, in the order of their value, are wheat, hay, potatoes, oats, barley, and corn. Coal is first in importance among minerals; in the Puget Sound Basin are practically inexhaustible beds of bituminous coal. The state also contains lead, zinc, tungsten, platinum, and large deposits of iron ore. The greatest industry of Washington is the manufacture of lumber and shingles. About 4½ billion feet of timber are cut annually and the untouched stand approximates 400 billion feet; the most valuable tree is the Douglas fir. Another industry of foremost importance is the salmon fisheries; there are more than 70 canneries, and Washington brands are known throughout the world. With an abundance of water power, there are extensive and varied manufacturing interests—among them flour and paper mills, airplane factories, shipyards, iron and steel works, smelters, beet sugar, condensed milk, fertilizer and furniture factories, fruit and vegetable canneries, pottery works, and creameries. A vast maritime commerce is carried on.

There is an excellent public school system throughout the state, with 133 private institutions, the University of Washington at Seattle, and the State Agricultural College at Pullman.

Fishing of first excellence is abundant and there are scenic regions of the utmost grandeur. Mt. Rainier ranks among the famous peaks of the earth; it is enclosed in a National Park, and may be reached from Tacoma, Seattle or Yakima.

Across Puget Sound from Seattle and Tacoma lies the Olympic Peninsula and the highly scenic **Olympic National Park.** Scores of rugged peaks rise to snow-capped grandeur in a vast system of forest, lakes and mountain playgrounds culminating in Mount Olympus, 8,470 feet high. In the upper elevations are more than 50 glaciers and permanent ice fields. In the valleys giant spruce trees soar to 300 feet in height, and trunks measure 10 feet in diameter. Innumerable lakes and streams provide good fishing and the forests abound in game of all kinds, and there are primitive Indian villages where Indians carry on their age-old ways of life little influenced by modern civilization.

The Straits of Juan de Fuca were discovered in 1592 by a Greek captain of that name in the service of Spain. In 1792 Captain Gray explored the mouth of the Columbia and Captain Vancouver explored Puget Sound. Lewis and Clark came in 1805. Traders of the Northwest Fur Co. established posts in 1811; Dr. Marcus Whitman founded a settlement near Walla Walla in 1836. There were Indian wars in 1855-6. Washington became a territory in 1848 and a state in 1889.

VANCOUVER, WASH.—Elevation, 75; population, 53,000. Vancouver, on the Columbia, is the oldest town in the state, established as a fort in 1825 by the Hudson's Bay Co. It is an enterprising, modern city. Farming, poultry and stock-raising, fruit-growing and lumbering are the principal industries of the surrounding region. Among its manufactories are aluminum, chemicals, carborundum, paper bags, paper mills, lumber and plywood mills, canneries, brick plants, machine shops and many others.

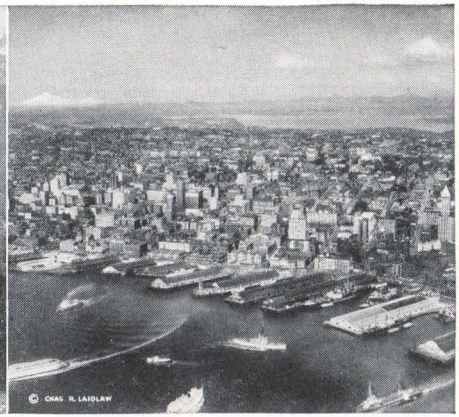
After passing a number of small towns, the train reaches **Kelso** (population, 8,250), which, in addition to dairy and forest products, ships annually several million pounds of smelt taken from the Cowlitz River, on the banks of which it is situated.

LONGVIEW, WASH.—Population, 18,500; is directly adjacent to Kelso, Wash., on the west. It is the new, model industrial city founded by the Long-Bell Lumber Co., which has here established one of the largest lumber manufacturing plants in the world, with guide service provided for visitors giving safe opportunity to witness the converting of huge Douglas Fir logs into lumber. Other industries include the mills of the Weyerhaeuser Timber Company. The Columbia River Bridge at this point cost six million dollars to build.

Fort Vancouver, Wash., 1854

Alpine meadows and wildflower gardens on Mt. Rainier.

Mt. Olympus from the High Divide above Seattle Creek, Olympic National Park.



Seattle's waterfront where the argosies of the world contribute to her commerce.

At **Chehalis** (population, 5,600), the principal industries are food processing, poultry, general agriculture, dairying, and lumbering. The industries of **Centralia** (population, 10,120) four miles beyond, are lumbering, dairying, coal mining and diversified manufactories.

ABERDEEN AND HOQUIAM—The trip down Chehalis River is a succession of charming landscapes and fertile farms. The population of the two cities, which stand close together and have the same interests, is 32,000. They are modern communities with paved streets, libraries, excellent schools, and a fine harbor. The principal industries are large lumber and shingle mills, pulp and paper mills, plywood plants, chair factory, sea food processing and canning. Agriculture includes dairying, poultry raising, vegetable seed production, cranberries. These cities are also the southern gateways to Olympic National Park.

OLYMPIA, WASH.—At sea level; population, 15,500. Olympia, the capital of the state, is on the southernmost inlet of Puget Sound. The city has a number of fine structures, including the handsome State Capitol, Temple of Justice, City Library, Federal Building, and County Court House. It is an important commercial center, the port of an extensive area rich in timber, agricultural, and mineral resources. The oyster industry is outstanding, and other important industries include lumber and plywood mills, fruit and vegetable canneries and breweries.

TACOMA, WASH.—At sea level; population, 139,000. It is situated on a series of terraced hills surrounding Commencement Bay, one of the finest harbors in the world. Steamship lines plying to all parts of the world connect with transcontinental railroads. City owned hydro-electric power is supplied at very low rates. There are 156 churches in Tacoma, public and parochial schools, two colleges, an exclusive seminary and a military academy.

Outstanding among the city's industrial products are lumber, pulp, furniture, doors, plywood, flour, chemicals, meats, candy, clothing, iron and steel products and canned foods. Shipbuilding and pleasure boat building are important industries. Tacoma Smelter reduces copper, gold and silver ores from all parts of the world. Two large railroad shops are located in the city. Near by is 110,000 acre Fort Lewis, headquarters of the Second Division, one of the nation's great army posts. McChord field, and Rainier Ordnance Depot, are 10 miles from the city center.

Squaw and papoose

The tourist finds special interest in Point Defiance Park, a 640 acre reserve of primitive forest and miles of woodland roads and trails. Here is found the first fort built on the North Pacific coast, expansive rose gardens, excellent salt water fishing and an unusual deep sea aquarium. The state historical museum, world's largest totem pole, Wright Park and the vegetable markets are among points of tourist lure. Near by are wooded lakes attractive for fishing, boating and bathing, where many of Tacoma's most beautiful homes are found. Puget Sound's scenic islands and thousand miles of winding waterways extend for miles on either side of Tacoma.

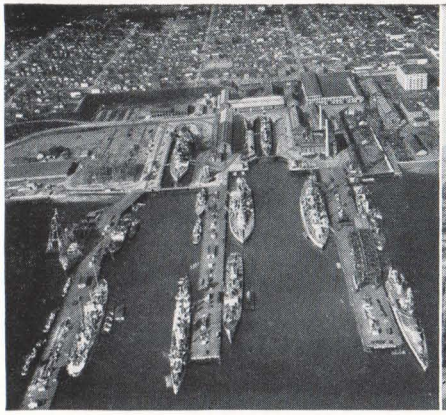
Hood Canal, 40 miles from Tacoma, is a 50 mile inland salt waterway, one of Washington's most popular summer resort areas. This forms the eastern border of Olympic National Park, a vast wilderness of glacial peaks, giant trees, roaring streams and wild animals outstanding among which is the Roosevelt Elk.

Within one and a half hours' drive from Tacoma, over an excellent paved highway, is Rainier National Park with its glorious peak, the premier attraction of the Pacific Northwest. The automobile highway passes through dense forests and fields of brilliant mountain flowers in alpine meadows to reach the summer snowline about 5,400 feet above sea level. Hotel and camp accommodations in the Park are excellent. The summer season extends from June 25 to September 5, although the Park is open all year, winter sports being exceedingly popular.

Nine miles from Tacoma is **Puyallup** (population, 10,000), headquarters of an extensive berry, truck garden, bulb, dairy and agricultural area. In this same valley to the north are **Sumner** (population, 2,300) with a huge bulb growing business, **Auburn** (5,500), and **Kent** (2,950), also centers of agricultural interest and the breadbasket of both Tacoma and Seattle.

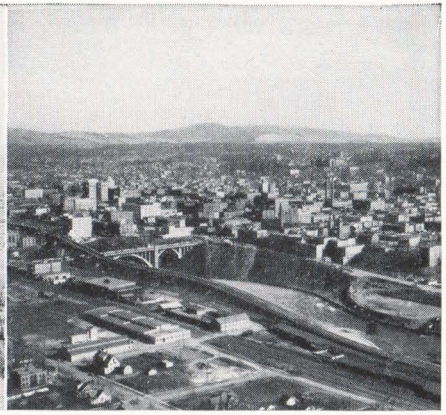
SEATTLE, WASH.—Elevation, 10 to 123; population, 625,000. Seattle, the largest city of the Pacific Northwest and a seaport of great importance, is situated on Elliott Bay, between Lake Washington and Puget Sound. Its area, including water surface, is about 74 square miles. It has a hilly site of marked beauty, with the snow-capped Olympics in the west, and the lofty Cascades in the east. Lake Washington, 26 miles long and 4 miles wide, is connected with the Sound by an 8-mile ship canal, and with Lake Union (2 miles long) in the heart of the city. This canal has extended Seattle's water front to 193 miles, and has added a non-tidal, fresh-water harbor. With such facilities, Seattle has a vast maritime commerce with Pacific Coast ports, British Columbia, Alaska, South America, Australia, and all the Orient, as well as with Atlantic ports through the Panama Canal. Practically all the gold from Alaska and the Yukon comes to Seattle. The chief exports are wheat, flour, lumber, fish, coal, hay, fruits, live stock, dairy products; the leading imports are silks, rice, tea, coffee, sugar, spices, indigo. Cheap, abundant hydro-electric power has made Seattle the most important manufacturing city in the Pacific Northwest; the principal manufactured goods are lumber, iron and steel products, machinery, transportation equipment, textiles, airplanes, and automobile bodies.

The municipality owns the water system, an electric light and power plant, and the major portion of its street transit system; has established municipal markets and beaches, and is brilliantly lighted, as it is the center of a large hydro-electric development which serves 160 communities in the Puget Sound District, including all of the cities and towns, large and small, between Sumas, on the Canadian boundary, and Olympia, at the head of the Sound. It has many stately public buildings, fine churches, and tall



U.S. Naval Shipyard on Puget Sound, Bremerton, Wash.

A garden spot in a land of plenty—the fertile Yakima Valley, Washington.



Spokane, Washington, metropolis of the rich Inland Empire.

business structures; among the latter is the 42-story Smith Tower Building, and the 27-story Northern Life Tower, both of which have observatories from which visitors may view the entire city. The Lake Washington floating bridge is more than a mile in length, the largest floating structure ever built by man. There are 44 parks and an extensive boulevard system; excellent grade and high schools; a number of denominational colleges, and the University of Washington. Fort Lawton is adjacent to Seattle, and a U.S. Naval Shipyard is maintained at **Bremerton** (population, 30,000), across the bay.

Seattle has a mild climate, due to the Japan Stream, and ranks among the most healthful cities in the world. There is a multitude of scenic attractions in the vicinity, reached by land or water. It was settled in 1851, and named after a Siwash Indian chief.

GATEWAY TO ALASKA—Seattle is the chief gateway to Alaska —the last American frontier, noted for its gold production, the midnight sun, the Northern lights, giant mountains, entrancing fiords, mighty rivers, roaring rapids, tumultuous waterfalls, alpine lakes, and glaciers of stupendous size. It claims the "Valley of Ten Thousand Smokes" and Mt. McKinley, in its National Park, the highest peak in North America (20,300 feet). It is the home of big game, fighting fish, the seal, the walrus, the totem, and the Eskimo. Strangely enough, it is also a land of beautiful flowers and ideal summer weather.

The voyage through the Inside Passage to Skagway is one of great charm for practically the entire thousand miles is sheltered by the long archipelago that stretches from Puget Sound to the Lynn Canal; stops en route are made at **Ketchikan, Wrangell, Juneau,** and by some steamers at **Sitka.** Other steamers ply from Seattle to **Nome** and **St. Michael,** near the Arctic Circle, others to **Seward, Columbia Glacier, Valdez,** and **Cordova.**

PENDLETON TO SPOKANE

This route lies northward through the highly productive grain and orchard districts of the Inland Empire. Wheat, oats, and barley are the principal grains; the apple is the leading fruit; large quantities of alfalfa is grown, and the berries are celebrated for size and quality. Large canneries and frozen food plants are in operation in the area.

WALLA WALLA, WASH.—Elevation, 906; population, 24,500. Walla Walla, near the Walla Walla River, 15 miles west of the Blue Mountains, is the trade center of a fertile valley producing large crops of wheat, vegetables, and fruits; the dairy and livestock industries are important. The name is an Indian one, meaning "Many Waters." In 1857 a United States army post, which had a thrilling history, was established on the site, and the settlement grew up around it. Walla Walla is a prosperous modern city, with a public library and two colleges. Two canneries and two frozen food plants are located within the city limits of Walla Walla. Fort Walla Walla, now used as a U. S. Veterans' Hospital, is in the city. Near Walla Walla is Whitman National Memorial Park where, in 1847, Marcus Whitman the noted pioneer and missionary, together with his wife and 12 companions, was murdered by Cayuse Indians.

YAKIMA, WASH.—Elevation, 1,075; population, 39,480. From Walla Walla, a branch extends northwestward to Yakima, through the

fertile, irrigated districts (the largest in the state) of Yakima Valley. Yakima County ranks first in the United States in the production of apples, pears and hops. Leading crops are alfalfa, fruit, grains, sugar beets, and potatoes; there is a large and growing dairy and poultry industry.There are 60,000 beef cattle and 30,000 dairy cows in Yakima Valley. Dry-farming is practiced in the highlands.

Yakima is the metropolis of the valley and the home of the Central Washington Fair. It has modern city equipment, handsome public buildings and business blocks, charming parks, and attractive homes. It is the eastern gateway to Rainier National Park which is reached by a fine 67-mile scenic highway through Yakima Valley and over Chinook Pass to Sunrise Lodge in the northeast corner of the Park, 90 miles from Yakima.

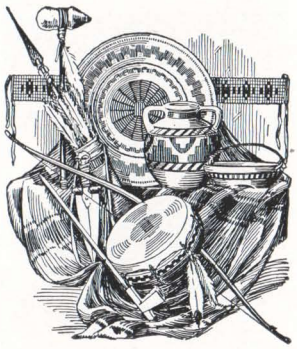
From **Riparia,** 31 miles farther north, a branch follows the Snake River to **Lewiston,** Idaho, a prosperous city of 17,223 population, situated at the confluence of the Snake and Clearwater Rivers, 125 miles south of Spokane.

Clarkston, Washington (population 4,000) is across the river from Lewiston. The region surrounding Lewiston is highly productive agriculturally; besides hay, grain and other products it produces fine fruit in variety and abundance. Live stock raising is one of the major industries. **Lewiston** is a modern municipality with attractive schools and churches. It is the home of the North Idaho Teachers College. One of the world's largest white pine saw mills, manufacturing lumber and a new fuel which is made from waste material pressed into heavy compact "logs." Mining is also carried on profitably.

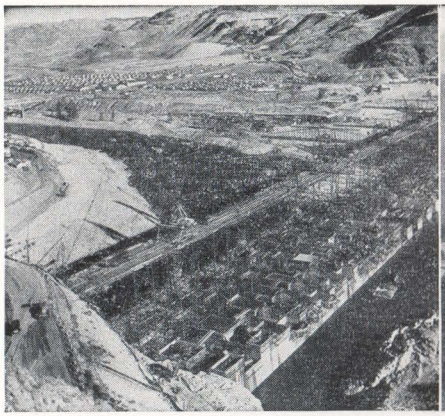
COLFAX, WASH.—Elevation, 1,949; population, 3,805. Colfax on the Palouse River, is the trade center of the noted Palouse region, and is also the County seat of Whitman County; wheat is the chief product, and fruit growing, stock-raising and dairying thrive. Colfax has a growing manufacturing industry. From Colfax a branch line extends eastward 28 miles to Pullman and Moscow.

PULLMAN, WASH.—Population, 5,813. Located 17 miles from the County seat and 85 miles south of Spokane. In a large wheat and dry pea producing area. Home of the State College of Washington. Has a modern public school system.

MOSCOW, IDAHO—Population, 8,300, or 13,000 including the University of Idaho. It is the center of the seed pea industry of the nation. Has an annual production of two million bushels of wheat, supporting a flour mill and three elevators. Besides a public library and other public buildings, it has churches, hospitals, a daily and weekly paper. It has a meat packing plant and seven pea processing plants. It is served by three railroads.



Indian Weapons and Utensils



Grand Coulee Dam will provide power and water for a vast area in the Pacific Northwest.

Wallace, a busy place in the great mining regions of the Coeur d'Alenes, in Idaho.

View of the business district of St. Joseph, Missouri.

TEKOA, WASH.—Elevation, 2,474; population, 1,383. Tekoa is surrounded by grain fields bordered by extensive tracts of white and yellow pine; it is a shipping point for the Coeur d'Alene mining district and is a railroad division point. **Farmington** (population, 341) and **Garfield** (674) are prosperous agricultural communities. Directly west from Farmington may be seen Steptoe Butte, notorious during the Indian wars. **Waverly** (131) and **Fairfield** (364), in the grain region, have many fine orchards.

SPOKANE, WASH.—Elevation, 1,893; population, 160,000. Spokane is the metropolis and commercial and railway center of the rich "Inland Empire," comprising eastern Washington, northern Idaho, and western Montana, immensely rich in wheat, minerals, lumber, live stock, dairy products, and fruits. The city has a charming site on the Spokane River, at its chief falls, with a background of mountains on the north and east. Its name is that of an Indian tribe, and means "Children of the Sun." The river, flowing through the heart of Spokane, develops 183,000 horsepower, which is utilized for street cars, lighting, and manufactories. On the north is Mount Spokane which has recently been made a State Park. From its summit one may obtain fine views of the surrounding territory with its many lovely lakes and excellent fishing streams.

Spokane has handsome public buildings and business blocks, excellent local and interurban bus and transportation service, splendid boulevards, and a large park area. Its manufactured products include lumber, water pipe, brick, terra cotta, cement, aluminum sheet and a wide variety of remanufactured lumber products. Large quantities of wheat, fruits, vegetables, and berries are exported. Spokane has a fine public school system, and Gonzaga University, Whitworth College and Holy Name College. Fort Wright, a large U.S. Military Post, is near by. It is on the site of the last battle with Indians in Washington which occurred in 1858.

Geiger Field, formerly base of the U.S. Aviation Engineers, is in process of transfer to the City of Spokane for operation of a municipal airport.

Spokane was settled in 1872, near the site of the first permanent settlement in the Oregon country, established by fur traders in 1810.

A Bullwhacker

In the vicinity are a large number of highly interesting scenic regions; the adjacent mountain lakes are especially noted for beauty. Among those readily reached from Spokane are Spirit, Medical, Hayden, Priest, Liberty, Pend Oreille, and Coeur d'Alene. Ninety-two miles west is the gigantic Grand Coulee Dam project which is adding tremendously to the wealth and importance of the Spokane District.

From Spokane, a branch of the Union Pacific penetrates the near-by Coeur d'Alene mining district to **Wallace** (population, 3,839), **Burke** (997), and **Prichard,** Idaho. The region is famous for its marvelously productive mines of silver, lead, zinc and copper, and for its picturesque scenery. **Grand Coulee Dam,** now nearing completion, is 4,300 feet long and 550 feet high, the largest structure ever built with the exception of the Great Wall of China. The dam will have a hydro-electric capacity of 2,500,000 horsepower, and will make possible the reclamation of 1,029,000 acres of semi-arid land, providing homes for 17,000 families. The dam attracts more than 300,000 visitors a year, and has taken its place with Hoover Dam as one of the wonders of the world.

THE KANSAS DIVISION OF THE UNION PACIFIC RAILROAD

The Pacific Railroad Bill of 1863 read: "The Leavenworth, Pawnee and Western R. R. Company of Kansas are hereby authorized to construct a railroad from the Missouri River at the mouth of the Kansas . . . to the one hundredth meridian of longitude upon the same terms and conditions as applied to the construction of the Pacific Railroad, which it is to meet and connect with at the meridian point named."

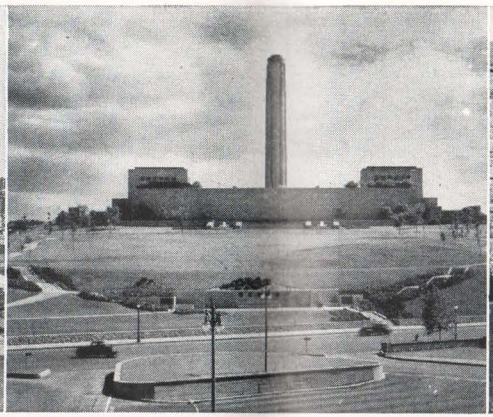
Ground was broken at Wyandotte, Kansas, near Kansas City, in August, 1863; grading commenced in September. Meanwhile the name of the corporation had been altered to Union Pacific Railway, Eastern Division, and this subsequently became the Kansas Pacific. After one year, about 37 miles of track were completed to a point near Lawrence; Manhattan was reached in August, 1866; the line was completed into Denver, August 15, 1870. Part of the construction was done by firms with which Generals Fremont and Palmer were connected. W. F. Cody ("Buffalo Bill") was at one time employed at a salary of $500 a month to provide buffalo meat for the construction gangs. It is said that Cody killed more than 4,000 buffaloes for this purpose with his breech-loading rifle, "Lucretia Borgia." This rifle may still be seen in the Cody Museum on the summit of Lookout Mountain, in Denver Mountain parks.

Indian attacks were frequent and caused much delay in the work. Surveyors and graders were furnished arms by the Government, and military escorts were provided. Nevertheless, the boldness of the savages made it necessary to establish four military posts: Fort Riley, Fort Harker (near Ellsworth), Fort Hays, and Fort Wallace. The hostile tribes were the Sioux, Cheyennes, Arapahoes, and Utes. Chief Roman Nose, of the Cheyennes, delivered a formal ultimatum to the builders of the Kansas Pacific that they must abandon their project or incur his implacable enmity.

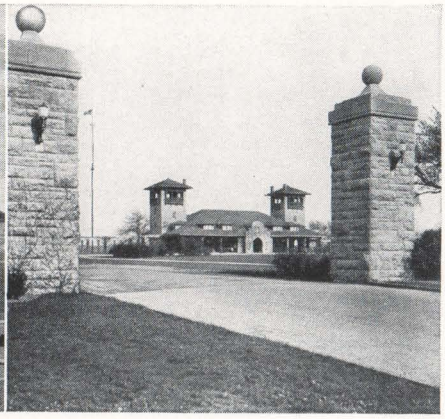
Temporary terminus towns, such as Ellsworth and Phil Sheridan (the latter now vanished), flashed into ephemeral existence with an orchestration of oaths, pistol shots, and rattling poker chips; in their beginnings, 80 per cent of the houses in many towns of this character were saloons, gambling dens, or dance halls.

The Denver Pacific Railroad from Denver to Cheyenne was commenced in May, 1868, and, after some financial vicissitudes, was completed in June, 1870. In January, 1880, the Kansas Pacific and the Denver Pacific were merged with the Union Pacific Railroad.

All railways entering Kansas City, Missouri use this modern Union Station.



Liberty Memorial, Kansas City, Mo., as seen from Union Station Plaza.



Swope Park in Kansas City is one of the largest municipal parks in the country.

ST. JOSEPH, MO.—Elevation 967, population, 84,177. Third largest city in Missouri, lies on the east bank of the Missouri River. A trading post was established there in 1826 by Joseph Robidoux, and the community was incorporated as a city in 1851. It was the eastern terminus of the Pony Express Route during the brief period of that venturesome and romantic undertaking. It is a major terminal market for the handling of agricultural products and livestock. It is also an important distributing center having over 200 distributors of hardware, chemicals, dry goods, groceries, etc. Its manufactures include milling and packing house products, cereals, chemicals, machinery and mechanical appliances of many kinds. It has a boulevard system that is second to none, extending over 28 miles through the city. St. Joseph is in the center of the Missouri Valley apple-growing district. From the city the Union Pacific runs in a northwesternly direction across northeastern Kansas, enters the State of Nebraska south of Fairbury and joins the main line at both Grand Island and Gibbon, Nebraska.

KANSAS CITY TO CHEYENNE

KANSAS CITY, MO.—Elevation, 844; population, 452,600. Kansas City, situated at the confluence of the Kansas (or "Kaw") and Missouri Rivers, is the third largest city on the Union Pacific. The original site was rugged, precipitous, and covered with dense forests; it has been reduced by vast grading operations to its present aspect, and the city has spread over the bottom lands adjoining the mouth of the Kansas. Its area now exceeds 62 square miles. The first permanent settlement was made by the French fur traders in 1821; Jesuit Fathers established a mission in 1825. The original settlement, called Westport Landing, had a large steamboat traffic, and became the most important gateway for the immense trade of the Southwest. The city was laid out in 1833.

Kansas City is the manufacturing and trade center of a rich agricultural region. It has more than 12 factories and an annual output exceeding $600,000,000 in value. The principal manufactured products are automobiles, flour, iron and steel products, crude and refined oil, packing-house products, and soap. There are 13 meat packing plants producing commodities exceeding $500,000,000 in annual value. Other basic products are oil, lumber, and minerals.

Among the cities of the United States, Kansas City ranks first in the distribution of agricultural implements. It is a major live-stock market, and meat packing center, ranks first as a horse and mule market. It ranks high in flour-milling production, as a grain market, and in the distribution of poultry, eggs, and butter.

Kansas City has more than 3,500 acres of public parks and boulevards. It is also the last resting place of the noted frontiersman of the old Oregon Trail—Jim Bridger. Three great railway bridges span the Missouri River.

KANSAS—Area, 82,158 square miles; population, 1,801,028. Kansas, the twenty-first state to enter the Union, was an important pivot in the struggle that resulted in the Civil War. The name is derived from a Sioux Indian word, "Kanza," meaning "smoky wind," a term, originating no doubt, when prairie fires raged over the plains. Agriculture is the pre-

dominating industry in Kansas, which ranks first in the production of wheat, with a record crop of 251,885,000 bushels.

Kansas lies on the Great Plains, and the greater part of its area is rolling prairie, devoid of mountains or swamps. The elevation rises gradually from 750 feet in the eastern part to 4,000 feet in the western. Most of the land is tillable. The soil of the upland prairies is a deep, rich, clay loam, dark in color; on the bottom lands near the streams, a black, sandy loam prevails. The state is without forests.

Kansas ranks first in production of wheat, both in quantity and quality; although second in value, corn usually ranks first in the quantity produced. The principal crops are wheat, corn, oats, barley, rye, potatoes, hay, sorghum sorghum hay, sorghum seed, sugar beets, and flax. The total value of all farm products approximates $300,000,000.

Kansas ranks fourth in cattle raising, and is among the leading states in the production of horses and mules.

The mineral wealth of Kansas is large and varied; the state ranks second in the production of lead and zinc ores, and fourth in the production of oil; there are immense beds of bituminous coal in the eastern counties. Other mineral products of importance are salt, cement, building stone, and natural gas.

The principal manufactures are flour-milling and meat-packing.

Kansas was first visited by Coronado during his search for Gran Quivera, in 1541. French fur traders from Louisiana penetrated the region in 1700, but Kansas remained in undisputed possession of the Indian tribes until 1803, when the Louisiana Purchase added it to the territory of the Republic; shortly afterwards, the beginnings of the immense trade with the Southwest were established. Lewis and Clark entered the region in 1804; Lieut. Pike, in 1806; Maj. Long, 1819; and in 1842 Gen. Fremont blazed a trail to California and Oregon. Settlement on the prairies was fraught with hardship and peril, because of the Indians; these tribes were the Osage, Shawnee, Pawnee, Delaware, Kickapoo, and Kansas. A military post was established at Ft. Leavenworth in 1827; at Ft. Scott in 1842, and at Ft. Riley in 1853. The territorial history of Kansas, from 1854 to 1861, is a chronicle of contention, pillage, and bloodshed, due to the great controversy about slavery. The territory was admitted as a "free" state in 1861, and upon its soil was fought the first battle for the emancipation of the negro.

Jim Bridger

KANSAS CITY, KAN.—Elevation, 750; population, 147,103. Kansas City, second largest city in the state, occupies lands at the junc-

State University, Lawrence, Kansas. Lawrence is also the home of America's largest Indian School, Haskell Institute.

Kansas State Capitol, Topeka.

Nichols Gymnasium, Kansas State College of Agriculture, Manhattan.

tion of the Kansas with the Missouri River. While it has a separate municipal existence, it forms, with Kansas City, Mo., a continuous community. The settlement was originally known as Wyandotte, the site having been purchased from the Wyandotte Indians.

Kansas City is noted for its live-stock and meat-packing industries. It has important railroad car and machine shops, grain elevators, smelters, iron and steel works, flour mills, furniture factories, wood-working plants, soap and candle factories, chemical laboratories, foundries, and brick and lumber yards. Included in the industrial activities of the city are some 300 companies, and of this number 225 are engaged in the actual manufacture and processing of their products. Large machine and repair shops are maintained by the Union Pacific at Armstrong.

Kansas City, Kansas, is the seat of the Kansas City Conservatory of Music, Kansas University Medical Center, Kansas State School for the Blind, and Baptist Theological School. It has a Carnegie Library, a fine system of public parks, and excellent public schools, including the Wyandotte High School.

A substantial addition to the city's Civic center is the million-dollar Court House, a Federal building.

Recreational facilities consist of 330 acres of parks and playgrounds within the city limits. In addition to this, 1,400 acres have been developed in Wyandotte County Lake and Park located within a few minutes drive from Kansas City. This park "has everything" for the recreation of visitors and citizens.

The Union Pacific has, through the Kansas City Industrial Land Co., developed approximately 2,000 acres of land, known as the Fairfax Industrial District, which are available for industrial purposes.

LAWRENCE, KAN.—Elevation, 825; population, 18,017. Lawrence was settled in 1854 by anti-slavery pioneers from Massachusetts. It became an important station on the "underground railroad system" for aiding the escape of negroes from slavery states. When the town was attacked in 1856 by a band of "border ruffians," it was defended by John Brown and his sons. In 1863, Quantrell's raiders pillaged Lawrence and killed 125 citizens.

Surrounded by rich farming and live-stock districts, the city today occupies both sides of the Kansas River, which furnishes excellent water power. Its manufacturing industries include flour and paper mills, foundries, machine shops, a cannery, and factories making ice and pipe-organs. Lawrence is the seat of the University of Kansas, and of Haskell Institute, which, since Carlisle's abandonment, is the largest Indian school in the United States. The State University has a stadium of 38,000 capacity.

Leavenworth (population 20,608) is reached from Lawrence by the Union Pacific Railroad, the first railroad to enter the city. Leavenworth is the site of Fort Leavenworth, a historic army post, and is one of the leading industrial cities of Kansas.

TOPEKA, KAN.—Elevation, 987; population, 100,272. Topeka is a thoroughly metropolitan city and the capital of Kansas. A trading post was established on the site in 1828; the city was organized in 1854. Before the Civil War it was a turbulent center of controversy concerning slavery.

Situated in the fertile Kaw Valley, Topeka is the central market and shipping point for a rich agricultural and live-stock region. Retail stores and wholesale and jobbing houses do an immense business annually. Grain and potatoes are the principal agricultural products. The more important manufactures are flour and butter; there are also foundries, machine shops, and factories making mattresses, trunks, boilers, and trusses; a large chicken and egg-packing plant, two meat-packing plants, two important creameries, and a branch of the Goodyear Tire and Rubber Company.

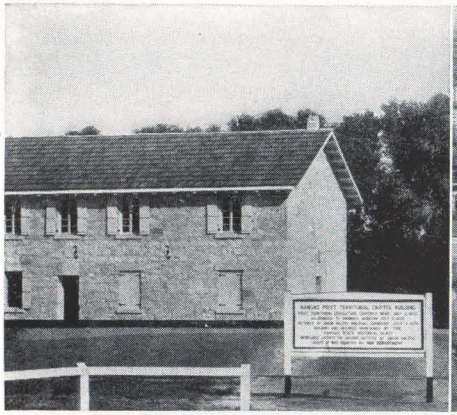
The city is attractively laid out with wide streets and boulevards, beautiful public parks and gardens, and imposing public buildings and commercial structures. 60 per cent of the homes are owned by their tenants, and more than 50 per cent are free from mortgages. Among the notable buildings are the State Capitol and the County Court House (both visible from the train), the Federal Building, Public Library, City Hall, State Printing Plant, State Museum, all modern Union Pacific passenger station and the Auditorium. Topeka is the seat of Washburn College and the Industrial Institute for Negroes.

ST. MARYS, KAN.—Elevation, 956; population, 1,185. St. Marys is the prosperous center of a fertile agricultural district. It is noted for its educational advantages and as the home of St. Marys Theological College. There are several thriving industries and it is the home of the Kansas Farmers Union.

MANHATTAN, KAN.—Elevation, 1,011; population, 19,000. Manhattan, at the juncture of the Big Blue and the Kansas Rivers, was settled in 1854 by colonists from Ohio, who, in a small steamboat, voyaged all the way from Cincinnati. The city has a Carnegie Library, grain elevators, flour and alfalfa mills, packing plant, foundry, machine shops, a limestone quarry, and 68 miles of paving. Manhattan is a shipping point for grain, lumber, live stock, eggs, and dressed poultry. It is the seat of the Kansas State College with an enrollment of 7,200 students, and a stadium seating 18,000 people.

FORT RILEY, KAN.—Elevation, 1,062; population, 12,825; established in 1852 near the junction of the Republican, Smoky Hill, and Kansas Rivers to protect trappers. It is now a large United States Army Post, known as the Ground General School Center, beautifully situated on the Kansas River. Marshall Flying Field is just across the river, south. The original Territorial Capitol Building of Kansas, one and one-half miles east of the station, has been restored by the Union Pacific.

JUNCTION CITY, KAN.—Elevation, 1,075; population, 10,924. Junction City, at the confluence of the Republican and Smoky Hill Rivers, is an important commercial center, shipping grain, flour, live stock, and limestone. It has grain elevators, flour mills, a large stone quarry, and creamery products. Among its public buildings are the Library, the City Hall, Municipal Auditorium, Elks' Home, and the Court House. The site of Junction City was visited by Coronado in 1542, and in 1719 by the French explorer, Dutisne, who found a populous Pawnee village there.



Kansas' first Territorial Capitol Building, Junction City.

Air view of the bustling city of Salina, Kansas.

Kansas is one of the largest wheat producing states in the country.

ABILENE, KAN.—Elevation, 1,152; population, 6,050. Abilene was settled in 1856. As one of the termini of the Texas cattle trail, its yearly cattle shipments in the late '60s often totaled 150,000 head; it was a gathering place for cowboys, gamblers, and picturesque ruffians, whose lurid escapades now provide excitement in the pages of a novel or on the screen. Abilene remains one of the great agricultural markets and live-stock centers of the state; the principal crops are corn, wheat and alfalfa, and there are large shipments of butter and eggs. The city is modern, has a City Hall, County Court House, Federal Building and Carnegie Library. Its manufacturing interests include flour mills, creameries, and an ice plant. Abilene is the boyhood home of General "Ike" Eisenhower and his four well-known brothers.

SALINA, KAN.—Population, 26,222. Salina, on the Smoky Hill River and the commercial center of a fertile, agricultural and stock raising region, was founded in 1858. The principal products are flour, wheat, alfalfa, livestock, poultry, and eggs. It has five large flour mills, rating fourth in the United States in flour production, a meat packing plant, and factories making farm implements, brick, brooms, silos, sheet metal products, ice and processed dairy products. Smoky Hill Air Force Base, one of the largest bomber bases, is located at Salina, and an Indian burial ground dated from the 10th to the 15th centuries is near by. Salina is the seat of St. John's Military School, Marymount Academy, and the Kansas Wesleyan University.

KANOPOLIS, KAN.—Population, 868. Kanopolis Dam and Reservoir on the Smoky Hill River, a government controlled project, is located near this point. This has a reservoir pool 12 miles in length, with a shore line of 30 miles. The dam is 3 miles long and rises 130 feet above the stream bed. Plans are completed for a recreation program at the dam, and various facilities are open to the public. Kanopolis is the home of the Morton Salt Co. and the Independent Salt Co.

ELLSWORTH, KAN.—Elevation, 1,534; population, 2,227. Ellsworth, on the Smoky Hill River, was once a great shipping point for cattle driven from Texas, and a noted gathering place for cowboys; founded in 1867, it established a record as a "boom" town. Ellsworth has a large trade in grain, live stock, and poultry. The town is modern and has elevators, flour mills, a modern hospital, a swimming pool, an airport, and golf links.

HAYS, KAN.—Elevation, 1,994; population, 8,500. Hays was founded in 1867, on Big Creek, near the site of historic Fort Hays, where many stirring events occurred during the Indian wars and the great cattle drives. Among the celebrated names associated with Fort Hays are those of Generals Sheridan, Hancock, Custer and Miles, and "Buffalo Bill" Cody. During the days when the dance halls and gambling dens were never closed, J. B. Hickok, better known as "Wild Bill," was chosen marshal. Once, when attacked by a band of desperadoes who entered his room while he was in bed, he was so quick with his revolver that he killed five of them single-handed. It was to Fort Hays that General Custer brought the Indians captured by the famous 7th Regiment in the battle on the Washita, in 1868. During his hunting trip in America, Grand Duke Alexis visited Fort Hays; for the entertainment of the royal Russian, Two Lance, a noted Kiowa chief, displayed his skill with the bow by shooting arrows from horseback entirely

through the bodies of buffaloes.

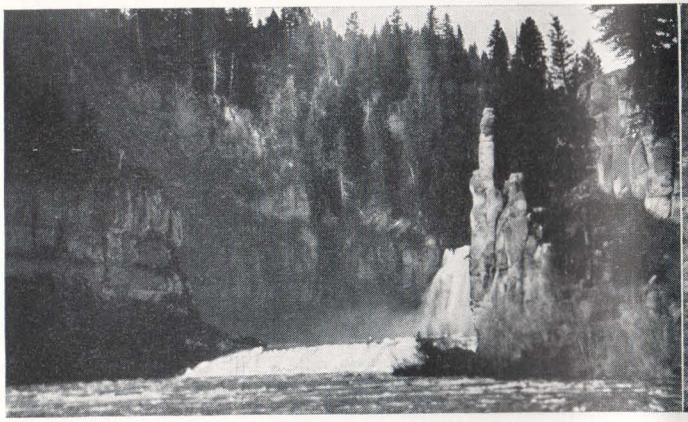
Hays stands in a rich agricultural region that produces live stock and immense quantities of wheat; the chief manufactures are flour, dairy products, and machinery. Many oil fields have been developed about Hays, with about 980 producing wells. It is the seat of the Fort Hays Kansas State College, and the Fort Hays branch of the Kansas Experiment Station, containing 3,600 acres, one of the largest experiment farms in the world.

ELLIS, KAN.—Population, 2,500. Ellis has a heavy production of livestock, poultry and turkeys, with dairying, sheep and wool receiving increased attention. In addition to oil, the Ellis area has abundant deposits, particularly developed of chalk, volcanic ash, limerock, sandstone, and shale. The city is attractively laid out and has several parks, besides an abundance of large shade trees throughout the residential area. There are three grain elevators located here, with a storage capacity of 500,000 bushels, lumber yard, three accredited schools, YMCA, and a municipally owned Light and Power Plant. The automobile manufacturer, the late Walter Chrysler, was born in Ellis and learned his trade as a machinist in the local Union Pacific shops.

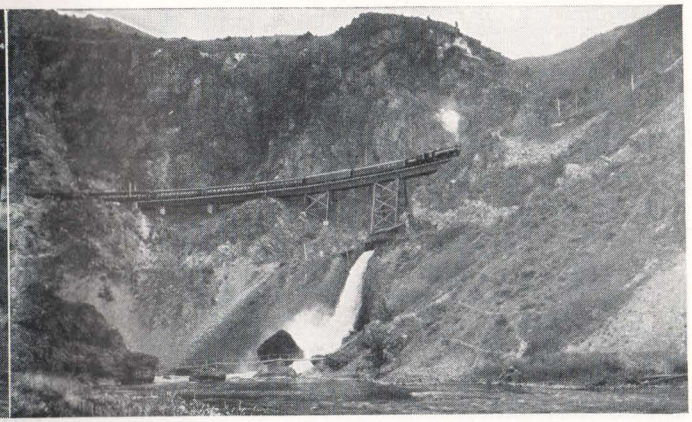
OAKLEY, KAN.—Elevation, 3,051; population, 1,800. Oakley is the commercial center of a fertile wheat-growing district; wheat, live stock, and cream are the principal shipments; the town has grain elevators, lumber yards, an ice plant, and marble works. About 25 miles to the south, along the Smoky Hill River, are the chalk pits so well known to fossil hunters. **Winona** (population, 317) ships grain and live stock.

WALLACE, KAN.—Elevation, 3,310; population, 108. Wallace makes large shipments of live stock. Two miles southeast, on the Smoky Hill River, is the site of old Fort Wallace, established in 1866 for the protection of the builders of the railroad and of the settlers. During the year Col. Forsyth's company of hunters and trappers was besieged for 8 days on an island in the Arickaree River by Cheyennes under Roman Nose. Two volunteers carried the news to Fort Wallace, and when assistance arrived 21 of the defenders had been killed or disabled and the last horse had been eaten. In 1867-8 the Cheyennes, Arapahoes, and Sioux raided the settlements along the Saline and Smoky Hill Rivers, killing, burning, and ravishing. General Custer, after many skirmishes and several pitched battles, overtook a large war party under Black Kettle, on the Washita River, killed 103 warriors and captured 53 squaws and children, 875 ponies and a great quantity of arms. Near the present site of Wallace once stood the town of Sheridan, with a population of several thousand. For a year and a half it was the terminus of the Kansas Pacific Railroad, and a place temporarily dominated by desperadoes.

It was at Sheridan that young Will Cody, just 20, won the sobriquet of "Buffalo Bill" in a buffalo shooting match with another noted buffalo hunter named Billy Comstock. Referees kept tally of the animals slain and at the close of the contest, which was sponsored by friends of the young men, the score was Cody 69, Comstock 48, and Cody became "champion buffalo hunter of the plains—Buffalo Bill!" The heads of the buffaloes that fell in this hunt were mounted by the Union Pacific and distributed as advertisements of the region opened by the railroad.



The picturesque Upper Falls of the Snake River in the Targhee National Forest.



Bear River Canyon, Utah. An irrigation canal spills its water back into the river.

SHARON SPRINGS, KAN.—Elevation, 3,442; population, 760. Sharon Springs is a railroad division point originally named Eagle Tail, was the end of Kansas Pacific in 1870 and stage coaches for Denver were dispatched from this point. Traces of the old stage trail can still be seen. **Weskan** (population, 108) is reached 12 miles farther west and is the last station in Kansas, the Kansas-Colorado state line being about 4 miles beyond.

CHEYENNE WELLS, COLO.—Elevation, 4,279; population, 1,200. It has three grain elevators, a high school and a parochial school; the chief exports are sorghum seed, live stock, and winter wheat. At **Firstview,** 10 miles west of Cheyenne Wells, if the day is clear, the Rocky Mountains may be seen; the highest summit visible, directly in the west, is Pikes Peak.

KIT CARSON, COLO.— Elevation, 4,286; population, 333. Fine seed corn is raised in the neighborhood. Kit Carson, named for the famous plainsman and guide, ships cattle, hogs, sheep and corn. Herds of wild antelope may still be seen grazing west of Kit Carson. West of **Wild Horse** overland immigrants of the '60s were frequently deluded by mirages which produced pictures of green meadows and running streams where only the arid plains existed.

HUGO, COLO.— Elevation, 5,034; population, 852. Hugo, situated on a high, rolling prairie, is a shipping center for dairy products and live stock. The surrounding territory was formerly part of a great range pasture for Texas Longhorn cattle. Stock raising remains the most important industry today, and purer breeds of Hereford, Durham, and Shorthorn have supplanted the picturesque, half-wild bovine of the '70s.

An account of the principal stations on the Union Pacific Railroad from Denver to Cheyenne has been given on pages 16, 17 and 18.

OGDEN TO YELLOWSTONE PARK AND BUTTE, MONTANA

HOT SPRINGS, UTAH—Elevation, 4,274. Population, 7. Nine miles north of Ogden is Hot Springs. Formerly an enterprising health resort with natural hot mineral springs providing medicinal baths. Now a ghost town with but a few foundations remaining.

WILLARD, UTAH—Elevation, 4,265; population, 541. Here the valley narrows to a two-mile width, with the Great Salt Lake on the west and the mountains (showing plainly the water lines of ancient Lake Bonneville) on the east. Well known for its fine watermelons and apricots and cherries. Willard hugs the base of Mt. Baldy from whose 10,128-foot peak one may see into four states—Utah, Idaho, Wyoming and Nevada. New Pine View Dam supplying additional irrigation through a canal which can be seen from the car window high upon the mountain, will bring into productivity several thousand acres of new orchards.

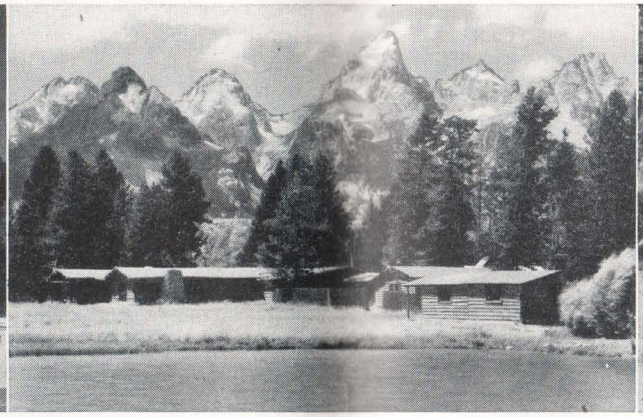
BRIGHAM, UTAH—Elevation, 4,306; population, 6,000. Brigham is the shipping center of a famous peach-growing district. Principal manufactures are sugar, cement, flour, blankets and mattresses. About 15 miles due west is one of the world's large bird refuges—6,400 acres with 54,000 acres under water. Four miles north of Brigham the train crosses Box Elder Lake.

The Malad Branch extends 52 miles northwestward from Brigham to Malad, Idaho, through rich irrigated and dry-farming sections of the Bear River Valley. **Corinne** (elevation, 4,432; population, 411), an old Utah town, on the main line of the Southern Pacific Railroad before the Great Salt Lake Cut-Off was constructed, is on this branch. Thence wagon teams hauled freight to the Montana mines in early days. Other important towns on the branch are **Tremonton** (elevation, 4,322; population, 1,443), **Garland** (elevation, 4,344; population, 926), and **Malad** (elevation, 4,520; population, 2,731). The West Cache Sugar Factory, with an annual production of five million pounds, is at Garland.

North from Brigham, Bear River Canyon furnishes one of the most impressive and thrilling short canyon trips (by rail) of the West. For three miles Nature has rent the hills, leaving tortuous, varicolored cliffs, along whose eastern edge trains pass through short tunnels, over trestles, around abrupt juts of rock, while below rushes Bear River, with the canal above. At **Wheelon** is an electric power plant. Several agricultural towns are passed before reaching Cache Junction, diverging point for the Cache Valley Branch.

CACHE JUNCTION, UTAH—Elevation, 4,445; population, 105. Cache Junction, and other towns in the marvelously rich Cache Valley are passed en route to **Logan,** third largest city in Utah (elevation, 4,498; population, 14,000), established by the Mormons under Brigham Young in 1859. Utah Agricultural College is situated there. Logan Canyon, near by, is the favorite scenic route from the south to beautiful Bear Lake. The Cache Valley Branch was originally the main line of the Utah Northern Railway, connecting with the present main line at **Swan Lake.** The prosperous communities it reaches are devoted to general farming, fruit raising, dairying, milk condensing, and cheese making. From Cache Junction, a diversified agricultural section is traversed to **Dayton** (elevation, 4,746; population, 364). Near Battle Creek Butte, the scene of Indian conflicts, and a prehistoric island of Lake Bonneville, the waters once stood 400 feet deep. Beyond Swan Lake is **Downey** (elevation, 4,954; population, 731), where Oxford Peak, 9,386 feet high, overlooks Red Rock Pass, the outlet of ancient Lake Bonneville. Before reaching **McCammon** (population, 489), a defile (cut by the Portneuf River through the mountains) may be seen in the east; adjacent lava cliffs indicate the volcanic origin of the landscape.

Old Faithful Geyser in Yellowstone National Park never fails to perform on schedule.



The sharp, glacier-bearing crests of the Tetons present one of the most thrilling sights in America.

The Lower Fall of the Yellowstone takes on new charm with each new point of view.

MAIN LINE TO BUTTE

FORT HALL, IDAHO—Elevation, 4,447; population, 190. Fort Hall, 12 miles north of Pocatello, was first a trading post built in 1830 by Nathaniel Wyeth, the intrepid pathfinder and organizer of the Columbia Fishing & Trading Co. One of the first permanent settlements in Idaho, it was later sold to the Hudson's Bay Company, and became a military post in 1849. It is now a United States Indian Reservation and Industrial School. The Indian population approximates two thousand Shoshones and Bannocks, who are industrious farmers, as may be witnessed by the well-kept farms visible from the train. A few miles west is the site of the Indian sun dance which takes place during July of each year for the purpose of curing bodily ills and discomforts of those who participate.

BLACKFOOT, IDAHO—Elevation, 4,497; population, 5,113. Blackfoot, between the Blackfoot and Snake Rivers, is the center of a great potato and wheat district; 50,148,000 pounds of potatoes were produced and 52,000,000 pounds of wheat flour milled in one year. The Utah-Idaho Sugar Company's annual sugar production here is 37,000,000 pounds.

The 85-mile branch from Blackfoot to Mackay for most of the distance follows Lost River, famed for excellent trout fishing. From **Arco** (population 548), 59 miles beyond Blackfoot, the newly created Craters of the Moon National Monument, one of the most interesting attractions of the state, 24 miles distant, is conveniently reached by highway. **Mackay** (elevation, 5,323; population, 1,000) is one of the main entry towns to the central Idaho and Sawtooth Reservation country, which has been proposed as a new national park.

Northward from Blackfoot on the main line, **Shelley** (elevation, 4,627; population, 1,751) is a shipping point for live stock, general agricultural products, sugar, flour, potatoes, and wheat. Beyond the first low range of lava hills, to the northward, may be seen the crest of Caribou Peak. In very clear weather one may see over this range the snowy top of the Grand Teton Peak, 70 miles distant and 13,747 feet high.

IDAHO FALLS, IDAHO—Elevation, 4,708; population, 26,000. Idaho Falls is a modern city with up-to-date hotels, hospitals, transportation facilities, a library, and a debt free municipal government. Prior to 1890, Idaho Falls had the picturesque name of Eagle Rock and aside from Fort Hall (above) was the first town in Eastern Idaho to gain any notice. In the early days, freighters crossed the Snake River here enroute from Salt Lake City to the Montana mines.

Idaho Falls is located on the Snake River in the midst of the largest contiguous body of irrigated land in the world and the surrounding valley contains more than 1,000,000 acres of this land. Nationally known as a heavy shipping point for the famed Idaho Russet potato, it is also a point of origin for shipments of dairy products, feeds, pumice, potato products, sugar, livestock, grain, and other items. The sugar beet industry in this area is of great importance.

A major branch line of the Union Pacific leaves the Butte line at Idaho Falls and extends north to Yellowstone Park.

THE WEST YELLOWSTONE BRANCH extends northeast-

ward from Idaho Falls through **Rigby** (elevation, 4,856; population, 2,200), auto service daily to **Heise Hot Springs**, 14 miles distant. Heavy shipments of hogs, wheat, potatoes, hay, flour, honey, peas, and sugar beets originate here. Beyond is **Thornton** (elevation, 4,858; population, 400). **Rexburg** (elevation, 4,864; population, 4,200) is the center of one of the largest dry and irrigated wheat sections in the United States, one farm alone comprising 5,000 acres. Beyond Rexburg the Teton River is crossed, and 4 miles farther is **Sugar City** (elevation, 4,891; population, 900), named from its principal industry, the manufacture of beet sugar.

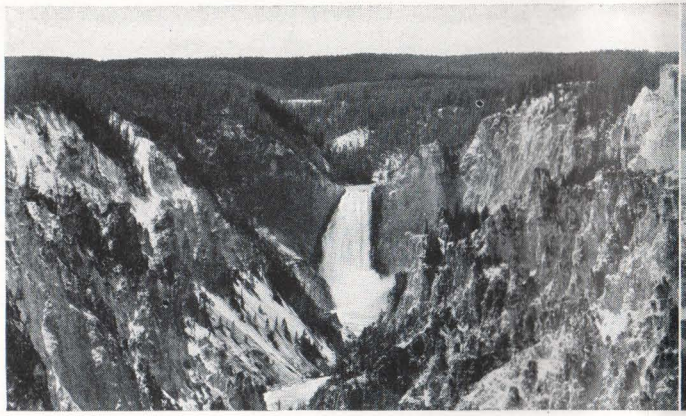
ST. ANTHONY, IDAHO—Elevation, 4,978; population, 3,750. St. Anthony is situated picturesquely on the north fork of Snake River in the heart of one of the largest sub-irrigated sections in the world. The principal crops of the area are seed peas, the famous Idaho Russet potatoes, wheat, barley, oats and other small grain. Cattle and sheep, lumbering and dairy farming are important industries of this section. An immense seed pea sorting plant is located here.

St. Anthony is becoming more and more popular for the summer and winter sports that may be enjoyed in that vicinity. The headquarters of the Targhee National forest, famous for its hunting and fishing, is also located there.

ASHTON, IDAHO—Elevation, 5,255; population, 1,203. Ashton is an important farming and stock-raising center, on the Snake River, about 15 miles from its upper and lower falls. The town has a beautiful site in an extensive valley, with high mountain ranges in the distance. Here one may outfit for the Jackson Lake country and the Teton Mountains which afford the best fishing and big game hunting in the United States. During recent years Ashton has become renowned through the National Dog Derby held there annually on Washington's Birthday.

From Ashton to West Yellowstone oil-burning locomotives are operated through the National Forest Reserve and the pine-clad course of Warm River Canyon. Completed in 1939 and expected to be in full operation in 1940, is a new Federal fish hatchery on Warm River, 20 miles northeast of Ashton; there is also an important State fish hatchery just west of Ashton. At Island **Park** is a new half-million dollar government reclamation dam in north fork of Snake River, storing 130,000 acre feet of water; another at Grassy Lake, 30 miles east of Ashton is under construction with a capacity of 100,000 feet. **Trude** and **Big Springs** follow, then **Reas Pass** (6,935 feet), where the Continental Divide is crossed. Most of these points offer fine camping and fishing.

VICTOR, IDAHO—(elevation, 6,198; population, 400), charmingly situated in a mountain basin, is the main entrance to Grand Teton National Park, established in February, 1929. The Teton Range is one of the most picturesque in America, lofty, rugged and extensively glaciated. The loftiest peak, Grand Teton, is 13,747 feet high. The region abounds in big game, is heavily forested, and contains several beautiful mountain lakes. A number of fine dude ranches are located in the vicinity of the Park. Combination tours of Yellowstone and Grand Teton Parks require little more expenditure of time and money than a tour of Yellowstone alone, and the surpassing scenery of Grand Teton is well worth visiting.



The Grand Canyon of the Yellowstone is one of Nature's supreme masterpieces.

Butte, Montana, the world's Copper Capital and the Continental Divide. The "butte" from which the city takes its name is seen at right.

WEST YELLOWSTONE, MONT.—(elevation, 6,665), with a regular population of about forty and a transient population during the Park season of several hundred daily, is the terminus of the Yellowstone Branch, the western and favorite entrance to Yellowstone Park. The Union Pacific has a fine modern station on the Park boundary, and a handsome dining lodge. Accommodations and complete outfits are provided for fishing parties. At Henry's Lake, 15 miles westward, rustic lodges may be rented and outfits obtained for hunting and fishing.

YELLOWSTONE NATIONAL PARK—Yellowstone is the largest and most famous of our national parks. In it there are more geysers than in all the rest of the world. In the principal geyser basins the very earth labors, puffs, and steams like a great industrial factory district, while the great geysers, Old Faithful, the Grand, the Beehive, the Giant, and the Giantess send their graceful, steaming columns hundreds of feet into the air. There are boiling springs innumerable, cold springs of Apollinaris water, and prismatic pools with the exquisite beauty of flawless gems and flowers. There is a mud volcano, a cliff of glass, petrified forests, a mountain that roars, and seething multi-colored "paint pots." There are tinted terraces, resembling the fancied architecture of fairyland. The region contains immense lakes, noble rivers, majestic peaks, and one of the finest waterfalls on the globe. The Grand Canyon of the Yellowstone is gorgeously colored and a spectacle of transcendent beauty.

This vast forested wilderness is the greatest of wild animal sanctuaries: bears, deer, elk, bison, moose, and mountain sheep may be seen and photographed. It is noted for the beauty and profusion of its wild flowers, the variety of its bird life, and its excellent fishing.

Outside the Park, to the northeast, is the Grasshopper Glacier, surrounded by spectacular, serrate mountains. To the south, almost adjoining is Grand Teton National Park comprising the celebrated Jackson Hole region, where the sublime Teton Mountains, as unreal in appearance as the pictured peaks of fairy tales, rise into the clouds from Jackson, Leigh, and Jenny lakes. Grand Teton National Park is reached via Victor, Idaho, and also from Rock Springs, Wyo.; through the spectacular Hoback Canyon.

Two and a half day motor bus tours, with accommodations at hotels in the Park, include the principal attractions. But Yellowstone is a place to linger for a month or a summer. During the season, approximately June 20th to September 15th, the Union Pacific operates daily the noted Yellowstone Special from Salt Lake City and Pocatello to West Yellowstone, whence direct connections are made with the excellent automobile service of the Yellowstone Park Co.—Yellowstone Park Lines, Inc. Through sleeping cars are operated also between Chicago and West Yellowstone during the summer season. West Yellowstone is the favorite rail gateway of the Park.

MAIN LINE TO BUTTE (Continued)

Northward from Idaho Falls, a farming and stock-raising territory is entered, with irrigated areas adjacent to the streams and lakes, and dry farms in the highlands. Near **Hamer** are Camas Creek and three lakes providing excellent fishing and duck hunting in season. **Camas** has planned

an irrigation project adequate to water 20,000 acres of dry-farm land.

MONTANA—Area, 146,997 square miles; population, 559,456. The Rocky Mountains cross Montana from northwest to southeast, throwing off many spurs and outlying ranges, which occupy nearly one-third of the area in the west and southwest. The remainder of the state lies chiefly on the Great Plains.

Both dry and irrigated farming is practiced. The chief crops are hay, wheat, oats, barley, flax, corn, potatoes, and sugar beets. Montana leads in the number of sheep and in the production of wool, and raises vast herds of cattle and horses. Twenty-nine per cent of the state is forested.

Montana ranks second in the production of silver, copper, and zinc, and fifth in the production of gold. Lead and manganese are also extensively mined. Montana's deposits of coal are among the richest in the West. The chief manufacturing industries are the smelting of ores, and the production of lumber, flour, beet sugar, and flax fiber.

Montana was first explored by Verendrye, in 1743. The Lewis and Clark expedition entered the state in 1805-06. The first trading post was erected by Manuel Lisa, in 1807, on the Big Horn River; and many other trading posts arose in the following years. McKenzie, of the American Fur Co., built Ft. Union in 1829 at the mouth of the Yellowstone River. Father DeSmet established a mission among the Indians in 1845. Gold was discovered in paying quantities in 1862 on Grasshopper Creek, where the town of Bannock afterwards arose and became the territorial headquarters in 1864. Montana became a state, the third largest in area of the Union, in 1889.

LIMA, MONT.—Elevation, 6,250; population, 600. Lima is a division point of the Union Pacific and an important shipping point for wool, sheep, cattle, and grain. **Armstead,** with a population of about 100, is rich in historical background. Lewis and Clark cached some of their supplies there before continuing to the Pacific Coast. **Dillon** (elevation, 5,096; population, 4,000) is a heavy shipping point for live stock, grain, and wool; there are a number of mines in the vicinity. **Bond** is the gateway to the Tory Mountain and Mountain Lakes District, 35 miles northwest, where there is good fishing and big game hunting in season.

BUTTE, MONT.—Elevation, 5,800; population, 37,081. Butte, the metropolis of Montana, a city on a high plateau between the Rocky and Bitter Root Mountains, is the largest mining town in the world. The surrounding hills are honeycombed with shafts and tunnels totaling 2,700 miles, and some are in the very heart of the city. Copper is the chief mineral produced, although there are valuable deposits of gold, silver, lead, and zinc. The Butte mines produce 25 per cent of all the copper mined in the United States and 13 per cent of the world's output, and the total annual mineral production exceeds $55,000,000.

Butte has 42 churches, 19 public schools, 11 parochial schools, a business college and the Montana State School of Mines; also excellent hotels, clubs, theatres, hospitals and department stores and recreational centers. Butte is the trade and jobbing center of Western Montana, served by five railroads, and 2 air lines. It was settled as a gold-placer camp in 1863, and laid out as a town in 1866. The Continental Divide is 2 miles east of the city.

UNION PACIFIC RAILROAD

TRAFFIC DEPARTMENT OFFICES

Aberdeen, Wash. ..... 3 Union Pass. Sta., K and River Streets
Astoria, Ore. ..... 438 Commercial Street
Atlanta 3, Ga. ..... 1432 Healey Building
Bend, Ore. ..... 112 Oregon Avenue
Birmingham 3, Ala. ..... 701 Brown-Marx Building
Boise, Idaho ..... City Ticket Office, Idaho Bldg., 212 North 8th Street
Boston 8, Mass. ..... 294 Washington Street
Butte, Mont. ..... 609 Metals Bank Bldg., 8 West Park Street
Cheyenne, Wyo. ..... City Ticket Office, 120 West 16th Street
Chicago 3, Ill. ..... City Ticket Office, One South La Salle Street
Cincinnati 2, Ohio ..... 303 Dixie Terminal Building
Cleveland 13, Ohio ..... 1407 Terminal Tower Building
Council Bluffs, Ia. ..... Union Pacific Transfer Depot
Dallas 1, Texas ..... 2108 Mercantile Bank Building
Denver 2, Colo. ..... City Ticket Office, 535 Seventeenth Street
Des Moines 9, Iowa ..... 407 Equitable Bldg., Sixth and Locust Streets
Detroit 26, Mich. ..... 612 Book Building, 1249 Washington Boulevard
E. Los Angeles, Calif. ..... 5454 Ferguson Drive
Eugene, Ore. ..... 201 Ardel Offices, 33 East 10th Ave.
Fresno 1, Calif. ..... 207 Rowell Building
Glendale 3, Calif. ..... City Ticket Office, 404½ North Brand Boulevard
Hollywood 28, Calif. ..... City Ticket Office, 6702 Hollywood Boulevard
Kansas City 6, Mo. ..... City Ticket Office, 2 East 11th Street
Las Vegas, Nev. ..... Union Pacific Passenger Station
Lewiston, Idaho ..... Room 7, Union Depot
Lincoln 8, Nebr. ..... City Ticket Office, 130 So. 13th Street
Long Beach 2, Calif. ..... City Ticket Office, 144 Pine Avenue
Longview, Wash. ..... Ticket Office, 1225 Broadway
Los Angeles 14, Calif. City Tkt. Off., Union Pacific Bldg., 434 West 6th Street
Memphis 3, Tenn. ..... 1720 Sterick Bldg., 8 North Third Street
Milwaukee 3, Wis. ..... 814 Warner Bldg., 212 W. Wisconsin Avenue
Minneapolis 2, Minn. ..... 890 Northwestern Bank Bldg., 620 Marquette Avenue
New Orleans 12, La. ..... 504 Canal Bldg., 210 Baronne Street
New York 20, N. Y. ..... 626 5th Ave., Suite 350, Rockefeller Center
Oakland 12, Calif. ..... 215 Central Bank Bldg., 436 Fourteenth Street
Ogden, Utah ..... City Ticket Office, Ben Lomond Hotel Building
Omaha 2, Nebr. ..... City Ticket Office, Union Pacific Bldg., 15th & Dodge Sts.
..... City Ticket Office, 1614 Farnam Street
Pasadena 1, Calif. ..... City Ticket Office, 205 West Colorado Street
Philadelphia 2, Pa. ..... 904 Girard Trust Building
Pittsburgh 22, Pa. ..... 1419 Oliver Building
Pocatello, Idaho ..... Union Pacific Passenger Station
Pomona, Calif. ..... Union Pacific Passenger Station
Portland 5, Ore. ..... City Ticket Office, 701 S. W. Washington Street
Reno, Nev. ..... 209 American Building, 131 West Second Street
Riverside, Calif. ..... Union Pacific Passenger Station, 7th and Vine Streets
St. Joseph 2, Mo. ..... City Ticket Office, 516 Francis Street
St. Louis 1, Mo. ..... 1223 Ambassador Bldg., 411 N. 7th Street
Sacramento 14, Calif. ..... 217 Forum Bldg., 1107 Ninth Street
Salt Lake City 1, Utah ..... City Ticket Office, Hotel Utah Building
San Diego 1, Calif. ..... City Ticket Office, 320 Broadway
San Francisco 2, Calif. ..... City Ticket Office, Geary at Powell Street
San Jose 7, Calif. ..... 206 First National Bank Building
San Pedro, Calif. ..... City Ticket Office, 805 South Pacific Avenue
Santa Ana, Calif. ..... City Ticket Office, 305 North Main Street
Santa Monica, Calif. ..... City Ticket Office, 307 Santa Monica Boulevard
Seattle 4, Wash. ..... 204 Union Station and 1300 Fourth Avenue
Spokane 8, Wash. ..... City Ticket Office, 727 Sprague Avenue
Stockton 6, Calif. ..... 207 California Building, 11 So. San Joaquin Street
Tacoma 2, Wash. ..... City Ticket Office, 114 South Ninth Street
Toronto, Ontario ..... 201 Canadian Pacific Bldg., 69 Yonge Street
Tulsa 3, Okla. ..... 823 Kennedy Bldg., 321 South Boston Street
Walla Walla, Wash. ..... 1st Nat'l Bank Bldg., 2nd & Alder Streets
Washington 5, D. C. ..... 600 Shoreham Bldg., H & 15th Sts., N. W.
Winston-Salem 3, N. C. ..... 632 Reynolds Building
Yakima, Wash. ..... Union Pacific Bldg., 104 West Yakima Avenue

POOLE BROS. INC., CHICAGO 4-1-50—75M

PRINTED IN U.S.A.

Along the UNION PACIFIC RAILROAD

Along the UNION PACIFIC RAILROAD

UNION PACIFIC RAILROAD