ARIZONA

This folder is published for the purpose of presenting briefly some facts which may be of interest to homeseekers and other investors whose attention has been drawn to Arizona.

AREA

Arizona is an area of plain and mountain, containing approximately 132,000 square miles. It is bounded on the north by Utah; the east, by New Mexico; the south, by the Republic of Mexico, and the west, by California and Nevada. The state is 390 miles long by 340 miles wide.

This area is divided into two distinct climatic regions. In the north and east there are comparatively level plateaus lying at altitudes of from 5,000 to 8,000 feet above the sea, and broken by isolated buttes and short mountain chains, and by deep canyons. The altitudes of the southwestern half of the state are not so great. The greatest altitude is San Francisco Peaks, 12,794 feet high, in the north-central part; and the least, eighty-three feet, at low water in the bed of the Colorado River, on the Mexican border.

IMPORTANT STREAMS

The Colorado River enters Arizona from Utah through the famous Grand Canyon National Park. The upper tributaries of the Little Colorado take their rise on the western slope of the Continental Divide. The Gila and its tributaries drain the southwestern, middle, and southeastern sections of the state. The flow of these streams is taken for irrigation.

The Salt River is the greatest tributary of the Gila. The more important streams flowing into the Salt River are Black River, flowing out of the Apache National Forest; White River, flowing out of the White Mountains; Tonto Creek, whose waters are impounded in Tonto Basin; Verde River, rising in
Yavapai County, whose flow is caught at Granite Reef, in Maricopa County, by a barrage of the Salt River Valley Reclamation Project, and diverted into canals; and the Agua Fria and the Hassayampa, which, flowing out of the Prescott National Forest in Yavapai County, empty into Gila River in Maricopa County. The Agua Fria and the Hassayampa are not included in the Salt River Valley Reclamation Project, but their waters have been conserved by other enterprises and used for irrigation.

RAILWAY TRANSPORTATION
The Railways of Arizona are the Santa Fe and Southern Pacific. The Santa Fe operates 870 miles of track in the state. The northern part is traversed from east to west by the Company's Coast lines. A line, with branches, extends from Ash Fork, through Prescott, to Phoenix. Another line runs from Wickenburg, a mining center, to Parker, thence to Cadiz, California. Still another line is from Williams, 64 miles north to Grand Canyon National Park.

RAINFALL
The annual precipitation of moisture over Arizona varies. At Yuma on the Colorado River in the southwest, altitude 141 feet, the precipitation is 3.13 inches; at Phoenix in the Salt River Valley, altitude 1,108 feet, 8.05; at Prescott in Yavapai County, altitude 5,320 feet, 17.40; at Flagstaff, county seat of Coconino County, altitude 6,907 feet, 23.87; at Holbrook, county seat of Navajo County, altitude 5,069 feet, 8.99; at Fort Defiance, Apache County, altitude 6,500 feet, 14.01; at Fort Mohave, Mohave County, altitude 604 feet, 5.07; at Bisbee, Cochise County, on the Mexican border in the southeast, altitudes 5,500 feet, 17.46. In the Salt River Valley the winter rains exceed those of summer, thus favoring the indigenous winter growing annuals.
POPULATION

The population of Arizona is given as 421,000 in preliminary reports from the 1930 Census. This compares with 334,000 in 1920, 204,000 in 1910 and 122,000 in 1900. During the past two decades Arizona has shown one of the largest percentages of increase in population in the country. During the past ten years the growth in population has been especially pronounced in agricultural districts and Central Arizona, the spread of agriculture and development of new lands contributing both to urban and rural growth and to commercial and cultural progress. For example, Phoenix, the state capital and county seat of Maricopa County, had a population of 44,000 in 1910 Census, 204,000 in 1920, and 48,000 in preliminary figures of the 1930 Census. The population of the Phoenix metropolitan area is given as more than 90,000.

PROPERTY VALUES

Following is a summary of the assessed valuation of all property in Arizona, as reported by the State Tax Commission for 1929:

<table>
<thead>
<tr>
<th>Description of Property</th>
<th>Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mines</td>
<td>$233,704,782</td>
</tr>
<tr>
<td>Railroads</td>
<td>109,896,764</td>
</tr>
<tr>
<td>Lands</td>
<td>71,548,604</td>
</tr>
<tr>
<td>Smelters, Concentrators, etc</td>
<td>56,749,584</td>
</tr>
<tr>
<td>Improvements on lots</td>
<td>68,980,153</td>
</tr>
<tr>
<td>City lots</td>
<td>48,027,472</td>
</tr>
<tr>
<td>Live stock</td>
<td>13,369,852</td>
</tr>
<tr>
<td>Merchandise</td>
<td>22,757,861</td>
</tr>
</tbody>
</table>

Total values: $706,342,080

MINES

Mining is Arizona's greatest industry. The mineral production of Arizona for the ten-year period, 1920 to 1929, had a value of $1,008,674,000.

Besides ores now mined, there are coal areas within the Navajo and Hopi Indian reservations, which lie in the northeastern part of the state.

LIVESTOCK

According to estimates of the United States Bureau of Markets, the number and value of livestock in Arizona January 1st, 1930, were as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horses</td>
<td>20,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Mules</td>
<td>12,000</td>
<td>926,000</td>
</tr>
<tr>
<td>Range beef and cattle</td>
<td>1,189,000</td>
<td>39,418,000</td>
</tr>
<tr>
<td>Dairy cows</td>
<td>42,000</td>
<td>3,225,000</td>
</tr>
<tr>
<td>Sheep and lambs</td>
<td>1,189,000</td>
<td>9,493,000</td>
</tr>
<tr>
<td>Goats</td>
<td>185,000</td>
<td>680,000</td>
</tr>
<tr>
<td>Swine</td>
<td>19,000</td>
<td>256,000</td>
</tr>
<tr>
<td>Chickens</td>
<td>600,000</td>
<td>600,000</td>
</tr>
<tr>
<td>Hives and bees</td>
<td>30,000</td>
<td>150,000</td>
</tr>
</tbody>
</table>

Arizona livestock suffers few of the ills to which stock is heir in other states. This is attributed largely to the climate. Arizona is the natural livestock country.
SHEEP INDUSTRY

Arizona sheep owners ship 6,000,000 pounds of wool annually. More than half the sheep of the state are owned in Coconino County.

In the Salt River Valley the plan is to cut and stack the alfalfa through the summer, buying sheep in the fall. Usually old ewes are purchased. These sheep are pastured on the alfalfa in the winter and in addition are fed alfalfa hay. The early lambs grow rapidly and fatten quickly. These lambs reach the Kansas City markets early and bring a price almost equal to the price paid for hothouse lambs. The old sheep are shorn. They also take on flesh easily and in the spring or early summer are shipped to Kansas City markets and find a ready sale at good prices.

LUMBER FORESTS

There are nine National Forests in Arizona, covering an area of more than 12,000,000 acres and bearing a total stand of 14,676,000,000 feet B.M. of timber and about 11,500,000 cords of wood. In addition there are large areas of forested land on Indian Reservations, state and private lands bringing the total estimated stand of saw timber for the state to 20,474,000,000 feet B.M.

The Northern Arizona mills produce annually about 130,000,000 feet B.M. of lumber, worth at going prices about three and one-quarter million dollars.

The United States Forest Service calculates that the National Forests of the state will produce annually well over 100,000,000 feet of timber which can be sold to the mills of the state, thus assuring a permanent lumber industry to the state.

MARKETS

Excepting livestock, hides, wool, cotton, citrus and other orchard fruits, olives and olive oil, figs, cantaloupes and lettuce, all staple products are consumed within the state. Besides local population in the irrigated valleys and uplands, the mining districts are great buyers of all farm products. Indeed, the mines buy more than all other customers. The surplus livestock and livestock products, fruits, vegetables and olive oil are in great demand from outside.

COMMERCIAL ORGANIZATIONS

The several cities and larger towns have chambers of commerce, as Phoenix, Glendale, and other cities of Maricopa County; Prescott and Jerome, of Yavapai; Parker, of Yuma; Kingman, of Mohave; Flagstaff and Williams, of Coconino; Winslow, Holbrook and Snowflake, of Navajo; and St. Johns, of Apache. Their several secretaries will reply to inquiries.

CHARITABLE INSTITUTIONS

The state maintains a hospital for insane at Phoenix; an industrial school at Bisbee; and a home for pioneers at Prescott.
STATE LANDS

Arizona has nearly 11,000,000 acres in National grants. Of this, 2,500,000 acres are ready for lease or sale. Purchasers have 38 years in which to pay for their land. The minimum price of grazing and dry-farming lands not under an established irrigation project is $3 per acre. Owners and lessees are not required to live on the lands. The term "dry farming" means farming with the least possible moisture. Further information regarding these lands may be obtained by addressing the State Land Commissioner, Phoenix, Arizona.

SCHOOLS

The State University at Tucson, the State Normal schools at Flagstaff and Tempe, an excellent system of High Schools and Grammar Schools, and the common school in every neighborhood, afford ample educational facilities.

MARICOPA COUNTY—THE SALT RIVER VALLEY

The Salt River Valley is in Maricopa County, the south-central part of the state. The valley is about forty miles long—east and west—and from fifteen to thirty miles wide. There are 240,000 acres of land included in what is known as the Salt River Irrigation Project, which obtains its water supply from the Roosevelt Reservoir, constructed by the United States Government. In addition there are about 160,000 acres in other irrigation projects.

The main things that readers who have become interested in the Salt River Valley want to know are what can be produced, how much can be produced, and what is the value of stuff after it is produced.

Maricopa County, Arizona, is rated among the leading agricultural counties of the United States. The following table shows the acreage and valuations of the principal crops in Maricopa County for 1929.

### Maricopa County Crop Report

<table>
<thead>
<tr>
<th>Description</th>
<th>Acreage</th>
<th>Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>102,600</td>
<td>$8,310,600</td>
</tr>
<tr>
<td>Alfalfa seed (pounds)</td>
<td>2,470,000</td>
<td>413,000</td>
</tr>
<tr>
<td>Winter grain</td>
<td>26,400</td>
<td>844,000</td>
</tr>
<tr>
<td>Cantaloupes</td>
<td>10,000</td>
<td>2,450,000</td>
</tr>
<tr>
<td>Cotton</td>
<td>146,300</td>
<td>12,435,500</td>
</tr>
<tr>
<td>Citrus (bearing)</td>
<td>3,438</td>
<td>1,804,950</td>
</tr>
<tr>
<td>Grain sorghums</td>
<td>9,200</td>
<td>322,000</td>
</tr>
<tr>
<td>Lettuce</td>
<td>17,550</td>
<td>4,387,500</td>
</tr>
<tr>
<td>Pasture</td>
<td>20,000</td>
<td>450,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>42,027</td>
<td>5,253,375</td>
</tr>
<tr>
<td>Winter pasture, alfalfa, grain, etc., duplicated above</td>
<td>1,500,000</td>
<td></td>
</tr>
</tbody>
</table>

$38,170,925
Cotton  Cotton has proved a most successful crop in the Salt River Valley. About one-half of the cotton acreage is devoted to long staple cotton, which has here attained a strength and quality fully equal to the best Egyptian cotton. Most of the cotton grown, other than long staple, is a high grade upland variety known as Acala.

Dairying  In the Salt River Valley the mild winters and sunny climate attract those seeking a change from the ice and snow of the north to pastures that are green all the year.

Dairying is most profitable where protein can be produced cheapest. Alfalfa grows luxuriantly and produces splendid crops. Here liming of the soil is unnecessary; no necessity for inoculating the seed, for the bacteria which favor the growth of alfalfa are found in our desert soil.

Another factor is the low cost of equipment. Many dairymen have no stables, milking in the open fields or in corrals the year 'round. Those who have sheds use them only for stabling the cows during milking or feeding.

Alfalfa is the principal feed, both as pasture and hay. A practice of many dairymen is to disc the alfalfa fields in October and sow barley at the rate of about 100 pounds to the acre. This helps the alfalfa by a thorough cultivation, destroying any weeds or grass which might have obtained a start, and produces a superior quality and an increased quantity of winter and spring pasture. Cattle are removed about February 20th; the grain and alfalfa will then be ready for hay in April. This mixed grain and alfalfa hay makes an ideal dry roughage for dairy cattle.

Many fine dairy animals are in the Valley, located on pure-bred stock farms. The principal breed is the Holstein Friesian.

There are creameries and condensed milk factories. A considerable number of dairymen manufacture butter, which is in great demand. The creameries use large auto trucks for hauling milk and cream from farm to factory.

Alfalfa  Under the sunny skies of Arizona, in the rich soil of the Valley, with water for irrigation from the Roosevelt reservoir and other systems, alfalfa finds a natural home. Maximum crops may be assured, and there is a market either as hay or for feeding to dairy cattle or range steers.

Alfalfa yields five to six cuttings of hay, or, if preferred, produces seed crops; affords two to three months' pasturage, which can be turned into beef, mutton, or dairy products. It stands well extremes of temperatures, it enriches the soil for other crops, and is perfectly adapted to this region.
To prepare and seed the land to alfalfa will cost about $20 to $25 an acre, varying somewhat according to soil conditions, and whether teams or tractors are used.

One has a right to expect, if he has kept his fields up to the maximum, a yield of six to eight tons an acre. Alfalfa hay brings good prices.

Grains Grains are grown with success and profit. The variety is barley, oats or wheat, which is mostly used locally. Grain may be followed the same season with milo maize or corn. The returns from two-crops-a-year farming run into good figures.

Cantaloupes Cantaloupes and melons are grown and shipped in large quantities. Prices are good. Salt River Valley cantaloupes are well known for their excellent quality. They are early and reach eastern markets in fine condition. The returns average over $200.00 an acre. Salt River Valley cantaloupes are shipped to more than 250 cities of the United States.

More than 5,000 carloads were shipped out the season of 1930.

Truck Truck growing is increasingly important. All varieties of vegetables are raised. Most of the common garden crops are planted in the fall and winter and mature through the winter and early spring. Lettuce is grown on a large scale and is shipped out in car lots from November to April. It is of fine quality and growers receive good prices. About nine thousand carloads were shipped out the past season. Arizona is second among the states in production of lettuce.

Fruits In the long list of crops maturing by months are to be noted many fruits. Citrus and deciduous fruits seem to be especially adapted to the climatic and soil conditions of the Salt River Valley. Oranges ripen early and reach the eastern markets before the holidays. The quality is superb. Grape fruit attains here a flavor that is unexcelled. This fruit yields splendidly and car lot shipments this year have equalled the car lot shipments of oranges.

Deciduous fruits, such as apricots, plums and peaches, do fine. Apricots and plums ripen early and are excellent for shipping, reaching the distant markets at a time when there is no similar fruit available. Grapes are especially favorable for shipment. They ripen about ten days in advance of the early grapes of the Fresno district, yield well and good prices have been received. The acreage of grapes in the Salt River Valley is constantly increasing.

Stock Cattle come from the ranges over all Arizona and from other states into this Valley to be fitted for market, as many as 50,000 head being “turned off” in prime condition in a single year. They are put on the alfalfa fields, or
fed alfalfa hay. These range cattle are fattened at all seasons, grazing chiefly on alfalfa, but during the winter months the grain fields are fed off to prevent a too rank growth. Some farmers own ranges in the mountains, but the general practice is to buy stock cattle for feeding. Two steers can here be fattened on one acre—three steers on two acres is conservative. Cattle feeding is good business where the bulk of food consumed is devoted to growth.

Modern methods of fattening are quickly being adopted by the up-to-date farmers. Here is alfalfa, the ideal feed, right at hand, and along with it cotton seed meal from the gin. There are also milo maize, kafir corn, feterita, and an endless variety of crops which are especially destined to suit the needs of the stock grower and farmer who want to fatten cattle. The rule in the Salt River Valley will soon be a few head of stock on every farm.

**Hogs**

Hogs are raised with little trouble and danger from disease. Here again the natural conditions are found to be the farmer's best friends. The dry air, and warm, sunshiny days are the best of disease destroyers. Thousands of hogs are in the Valley.

**Poultry**

Chickens are kept by pretty nearly every farmer, and there are also many commercial poultry farms. The demand for poultry and eggs within the state is much greater than the supply. Poultry keepers here have many advantages, such as a continuous growing season that permits of a constant supply of green feed, and also the mild climate which obviates the necessity of expensive houses. Turkeys also are profitable, many being raised for shipment. There are a number of high class hatcheries and an Accredited Hatchery Association. The United States Department of Agriculture maintains a Poultry Experiment Station at Glendale. There is an Experiment Station located at the State University at Tucson.

**Phoenix**

This is the capital of Arizona and the state's largest and most important city. It has a population according to the 1930 census of 47,967 within the corporate limits, and including numerous subdivisions adjacent a population of 75,000. It is thoroughly modern, having beautiful homes, superior schools, many churches, substantial business blocks, paved streets connected with a paved road system of 400 miles serving all parts of the Valley, adequate hotel accommodations, satisfactory transportation facilities, a fine system of parks, live newspapers, a strong Chamber of Commerce and an enterprising people.

Phoenix is in high favor as a winter resort. In
fact, the climate is ideal nine months of the year. The weather is hot in mid-summer, but the heat is not the kind which carries sunstroke. Tourists from all parts of the country go there.

The health of Phoenix and the community round about is excellent. Sick folks who go there get well, and well folks who live there seldom have anything the matter with them.

The Arizona State Fair is held each year in Phoenix in November. Palms, cottonwoods and purple hills surround the mile track which is fringed with green the year round. All conditions are ideal for the training of fast horses, and each winter there are many noted animals in training. The mile track is the fastest in the West.

Other Towns in Valley

Other towns in the Salt River Valley are Mesa, with a population of 3,675; Tempe, 2,495; Glendale, 3,663, and Chandler, 1,377. Glendale, on the Santa Fe Railway, has a wide-awake Chamber of Commerce, as has each of the other towns named. The organizations invite correspondence. Peoria, on the Santa Fe, is the northern gateway of the Valley.

THE ROOSEVELT PROJECT

Irrigation and power works of the Roosevelt project, including both completed works and those under construction, represent an investment of over $29,000,000. The irrigation water supply is from the Salt and Verde rivers, supplemented by pumping from underground sources. Power is developed on the Salt River and at points on the canal system in the Valley. The irrigable area of the project comprises 240,000 acres. The major project works comprise seven important dams, one of which is under construction; seven hydro-electric power plants, two of which are under construction with transmission lines and other appurtenances; over 1,300 miles of canals and laterals and 150 pumping plants for irrigation and drainage. The income from the sale of surplus power makes it possible to deliver water to the farms without charge. The farmers under the project are only paying assessments to cover the repayment to the Government. Upon completion of the new power development now under construction, the income from power will be sufficient to meet this charge also, with a substantial surplus for improvements to the system.

The Roosevelt reservoir was begun by the United States Reclamation Service in 1906. It has a total capacity of 1,637,000 acre feet to the top of the 15 foot Tainter gates installed by the Salt River Valley Water Users' Association in 1923. The Roosevelt power plant develops 21,300 horse power, having a maximum head of 228 feet.

Horse Mesa and Mormon Flat Dams

The Horse Mesa Dam is about sixteen miles downstream from Roosevelt Dam and is the project's principal power dam, generating 40,000 H. P. with a head of 266 feet. Ten miles farther down Salt River is Mormon Flat Dam, with a 10,000 H. P. generating plant and a head of 147 feet, and ten miles farther is the Stewart Mountain Dam, recently completed, with 12,000 H. P. capacity and a head of 116 feet. This serves largely as a regulating reservoir, so that water released from higher dams for power purposes can be held until needed for irrigation. These three dams, with Roosevelt, form a chain of four lakes 60 miles in length which are popular scenic attractions.

Canal System

Water from the reservoirs above described is run down the bed of the Salt river to Granite Reef, 32 miles east of Phoenix. Here it is diverted with the water of the Verde river, which drains an area approximately equal to that drained by the Salt river and enters the latter just above Granite Reef, into the Arizona canal on the North and the South canal on the South side of the river. The combined capacity of the two main canals is nearly 4,000 second feet.

A second diversion dam is located at Joint Head, six miles east of Phoenix, that supplies lower level canals by diverting water developed in the river from return flow below Granite Reef.

Another dam included among the Project works is the Cave Creek Flood Control dam about 23 miles North of Phoenix.

Power

The Association operates four hydro-electric plants having an aggregate actual capacity of 9,900 horse power located at points where fall was available on the canal system in the Valley. The total actual capacity of all plants now operating is 31,000 horse power. The Horse Mesa plant is rated at 40,000, the Mormon Flat at 10,000, and the Stewart Mountain at 12,000, making a total capacity of plants in operation and under construction of 93,000 horse power.

The project is co-operating with adjacent projects being developed by combined pumped and river water. The irrigable area of the project proper is limited to that for which the developed water supply will be ample.

YAVAPAII COUNTY

Yavapai County, situated almost in the geographical center of Arizona, has an area of 8,136 square miles, or 5,219,840 acres. Within this vast area are some of the richest mines in the world. Its broad, fertile valleys contain large areas of soil of great depth, which produce the finest quality of grains, vegetables, and deciduous and small fruits.
The citizenship of Yavapai County is gathered largely from the southern and western states, but represents every state and province in the Union and in Canada. Prescott, the county seat, has a foreign born population of but eight per cent, the lowest in the Southwest.

Yavapai County consists very largely of mountains, tablelands and fertile valleys, at altitudes from 2,400 to 6,000 feet above sea level. The principal industries of this vast domain are mining, stock raising and farming and to a large extent its climate and scenic attractions are considered valuable assets.

Climate The climate of Yavapai County is one of its chief lures. It is claimed that there are more absolutely clear days during the year here than in any geographical subdivision of like altitude in U. S. A. In a word, Yavapai County is a distinct entity, climatically, differing radically from the lower region of the state. Here is found a desirable all-the-year-round climate; cool in summer and varying from mild to cold in winter, according to the elevation.

Mining Mining is Yavapai County’s principal industry. Since 1888 its mines have produced over $500,000,000 in mineral wealth.

Stock Stock raising forms the second industry in importance. Sheep raising is perhaps the most important branch of this industry. Many large bands graze on the mountains during the spring and summer months and gradually make their way to the lower valleys in fall and winter. The oak brush, which is an evergreen, and the grasses of the mountain sides supply forage for the summer months, and the brush and catsclaw also supply excellent browsing. Cattle in this locality are free from disease. The average increase is estimated at 85 per cent. Considerable attention has been given to the raising of goats during the past few years. These hardy animals thrive among the hills.

Agriculture Farming occupies the third position in importance with respect to Yavapai’s industries. The principal valleys are Big Chino, Little Chino, Ferguson, Lonesome, Peoples, Santa Maria, Skull, Thompson, Williamson and Verde. Large areas in these mountain-girt valleys, only a portion of which are under cultivation, contain fertile, arable soils, in depth from two to fifty feet, at altitudes averaging 4,000 feet. Water for domestic and stock purposes has been developed with very rare exceptions from wells at depths from 35 to 200 feet. There is no alkali and the water is uniformly clear and pure. At present there are 10,106 acres of land under irrigation from the Verde River and other streams. These irrigated lands have an assessed valuation of $727,128.00, with improvements thereon assessed at $395,050.00. Subject to dry farming and grazing, there are 312,430 acres assessed at $1,125,628.00. Yavapai County bids fair
Phoenix is the capital of Arizona and chief city of Salt River Valley.

Roosevelt Dam—Eighty miles from Phoenix—is an engineering marvel.
1—Looking down Central Avenue.  
2—A public school.  
3—New Union Station.  
4—Calisthenics on lawn of private school.  
5—First Christian Church.  
6—State Capitol.
to equal any other deciduous fruit district in the United States for the quality, flavor, size and texture of her apples, plums, pears, peaches, apricots and small fruits. Over fifty varieties of apples alone are grown. The Haskell orchard, in the Upper Verde Valley, took the silver medal for apples against the world at the St. Louis Exposition. Pears and peaches grown on mountain uplands without irrigation have won gold medals and blue ribbons at all places where exhibited.

Most of the alfalfa produced in Yavapai County comes from the Little Chino and Verde Valleys. The cuttings average three to four per annum, with one and one-quarter tons to the cutting, making a yield for the season of over four tons. While a good deal of the product is used for home stock, considerable tonnage is shipped.

Potatoes furnish good crops especially under irrigation. Other root crops do well where water is available and bring top prices in Prescott, Jerome and other county markets. Cabbage grown in Yavapai County, especially that from Skull Valley, is highly esteemed. Beets, carrots, parsnips and onions make splendid crops. Berries and all deciduous fruits do well here.

Dairying has made remarkable strides in recent years. Most of the dairymen in the county make butter for local markets.

There are about 30,000 head of poultry in Yavapai County. It is estimated that eighty per cent of the poultry and eggs consumed are imported and poultry farming therefore promises to be one of the surest and most profitable industries.

**Railways** The main line of the Santa Fe Railway runs through the northern part of Yavapai County for a distance of sixty-three miles. Ash Fork is the junction point for the branch line to Prescott and Phoenix. Other branches of the Santa Fe, penetrate the rich Crown King and other famous mining districts. Prescott, Jerome, Cottonwood, Clarkdale, Clemenceau, Humboldt, Mayer, Congress, Copper, Seligman, Kirkland and Skull Valley, with an aggregate population of 25,000 are the principal local markets.

**Prescott** Perhaps no other section of the Southwest has made such rapid strides in development. Its splendid highway system is completed. Its mining industry is constantly improving. The cattle industry is expanding. Prescott, the county seat, has made numerous improvements during the past three years, including paved streets and the erection of one of the finest commercial and tourist hotels in the Southwest. All conveniences of a large city are found at Prescott, including modern schools and churches, beautiful homes, clubs and benevolent societies, which in membership, equipment and excellence would do credit to the most advanced and densely populated sections of the Eastern States.

Those desiring to acquaint themselves more particularly with respect to the agricultural and indus-
trial resources of Yavapai County are invited to address the Secretary of the Chamber of Commerce at Prescott.

**COCONINO COUNTY**

Coconino County, traversed by the main line of the Santa Fe Railway, is the second county in area in the United States, being larger than Vermont, Massachusetts and Rhode Island combined. Its population is approximately 18,000. The Old Trails National Highway, with 115 miles of good roads, crosses it.

This county first became famous because it held within its borders the Grand Canyon of Arizona, which is reached from Williams over the Santa Fe, a trip of 65 miles. John L. Stoddard, the noted lecturer, described the Grand Canyon as, "nature wounded unto death, and lying stiff and ghastly with a gash 200 miles in length and a mile in depth in her bare breast, from which is flowing fast a stream of live blood called the Colorado river."

People from all over the world who travel through Coconino County to behold Grand Canyon National Park see a country full of mystery and fascination. To quote Stoddard again: "It is a land where rivers frequently run underground, or cut their way through gorges of such depth that the bewildered tourist, peering over their precipitous cliffs can hardly gain a glimpse of the streams flowing half a mile below; a land of colored landscapes such as elsewhere would be deemed impossible, with painted deserts, red and yellow rocks, petrified forests, brown grass and purple grazing grounds; a land where from a sea of tawny sand one gazes upon mountains glistening with snow; and where at times the intervals are so brief between aridity and flood that one might choose, like Alaric, a river bed for his sepulchre, yet see a host like that of Pharaoh drowned in it before dawn."

**Coconino Potatoes**

Now the humble potato has added to Coconino County's fame. Judges of good potatoes all over the country have given the Coconino variety a favorable verdict. Heavy showers fall frequently in the potato country; in the summer, almost daily. These rains, besides nourishing the soil for growing crops, keep the pastures green for livestock. The potato growers are organized for the purpose of securing efficient grading and sorting—United States standards—which is assurance that the product will bring a satisfactory price. Flagstaff is the county seat of Coconino County and also the "capital" of the potato district.

Oats, wheat, hay and market truck are grown in the vicinity of Flagstaff and Williams more extensively every year, as the population steadily increases. Open land is fertile and abundant and sells at reasonable prices.

**Livestock**

The county is recognized as one of the leading livestock districts of the Southwest, cattle and sheep on ranch and range being valued at $12,000,000. All kinds of stock do well in the vicinity of Flagstaff and Williams.
this locality. There always is plenty of nourishing feed; also good water.

More than half the sheep in the state are owned in Coconino County—about 900,000. The others are about equally divided between Yavapai, Apache, Navajo and Mohave counties. From the ranges of these northern counties, in October and early November, the annual drive of the sheep from the pine clad pastures of Coconino, the rocky slopes of the hills and mountains of Yavapai and the verdant valleys of Apache and Navajo is made. Over a trail, the borders of which are prescribed by the Government, the sheep are slowly driven. Nearly one-third of all the sheep in the state are finally driven to the lower elevations in and surrounding the Salt River Valley.

**Lumber**

There is a heavy output of yellow pine lumber from the mills in the heart of the Coconino forest, north of Flagstaff. Many of the giant pine trees in the forest are 500 years old. The average age is 350 years. A large force of lumbermen have employment the year around.

**Water**

The melting snows of the mountains filter through the immense cinder beds on the slopes of the San Francisco range, to reappear in springs, and be piped into two great reservoirs. The water system cost $165,000. It furnishes ample supply for Flagstaff and the lumber mills.

Flagstaff is a model little city of 4,000, with a $60,000 sewer system, paved streets, electric lights, good schools, including the Northern Arizona State Teachers College, and adequate church facilities. Here is the Lowell Observatory, founded by Professor Percival Lowell.

North of Flagstaff the San Francisco Peaks rise to a height of nearly 13,000 feet. Sunset Mountain, which is an extinct volcano, and the noted Ice Caves, are in this vicinity. Walnut Canyon, with its prehistoric Cliff dwellings, is ten miles south of town. The Navajo and Hopi Indian reservations are reached from here. There is good fishing and camping on Oak Creek, not far away, with hotel accommodations at Lolomai Lodge. Tourists never are at a loss for interesting trips from Flagstaff.

Williams is the second city of Coconino County, population 2,164. Here is the home of the Saginaw and Manistee Lumber Company, which has one of the largest mills in the Southwest. The city is thoroughly up-to-date. Southwest of town is Bill Williams mountain, 9,000 feet high. A Fred Harvey hotel—the Fray Marcos—is at Williams, and another at the Grand Canyon—El Tovar.

**APACHE COUNTY**

Apache County occupies the northeastern portion of the state. In elevation the range is from 5,800 feet at the lower elevations to nearly 12,000 feet at the tops of the White Mountains. There is a white
population of 7,000 people and a goodly number of Indians on the Navajo Reservation, which is in the northern part of the county.

**Railroads and Roads** The Santa Fe Railway crosses the county, east and west, about on center, following the Rio Puerco and traversing lengthwise the attendant fertile valley. The Apache Railroad from Holbrook traverses the richest agricultural district in Navajo County and enters Apache County in the southwestern part, thus opening a new agricultural district, and the vast yellow pine timber resources of the southern part of the county.

The Continental Highway is a graded road surfaced with good wearing material. It traverses the county between the Petrified Forest and the Arizona-New Mexico line, about a hundred miles, connecting up the more important towns and settlements on the Little Colorado River. Other graded roads amounting to about sixty-five miles lead out from the Highway to outlying settlements, and the Ocean to Ocean Highway leads from the Continental Highway at Springerville and crosses the White Mountains, making easy access to various camping, fishing and hunting localities in these wooded mountains.

**Towns and Settlements** The chief towns are St. Johns, the county seat; Springerville and Eagar, all located on the Little Colorado. These are the commercial centers and the merchants carry large, complete stocks. At Springerville and St. Johns are fully equipped garages. Smaller towns and settlements are located at favorable points on the numerous streams that feed the Little Colorado.

Good hotels are maintained in the larger towns, while the auto stage takes care of passengers.

Up-to-date schools under state and county supervision are conducted in every district, while at St. Johns, Springerville, and McNary there are excellent Union High Schools which serve practically every community in Apache County. Good churches and social conditions obtain. Telegraph and telephone lines make communication easy.

**Soil and Products** The country north of and to a considerable distance south of the Santa Fe is largely an upland plain of sandy to sandy loam soil, covered with grama and bunch grass, with an occasional clay flat carrying sacaton grass and certain species of grease-wood which make excellent winter forage. Throughout this section there are areas of woodland consisting mostly of cedar, which may serve for fence posts and fuel. Favorable localities that are suitable for homesteads are found on these plains. The whole region is well adapted to cattle and sheep raising.

Along the river and stream courses the soil is a rich alluvial clay which under irrigation annually yields splendid crops of alfalfa, small grain, corn, fruit and garden products.

The retaining dam of the Lyman Reservoir, twelve miles south of St. Johns, has been rebuilt.
The project will impound 38,000 acre-feet of water to be used on about 6,000 acres of fertile soil near St. Johns. In purchasing the land a sufficient permanent water right is also secured. The soil is sandy loam to clay loam in texture and will produce in abundance all of the crops common to similar soil and climatic conditions.

Dry farm methods are being employed successfully in the forest and woodland belts, which are on the north slope of the White Mountains. The favorite crops are oats, wheat, corn and potatoes.

Apache National Forest The Apache National Forest occupies the southern portion of the county, comprising more than a million and a quarter acres, as follows: Timber, 60,000 acres; woodland, 419,000 acres; brushland, 25,000 acres; open grass and meadow, 209,000 acres. Several species of grass and wild peas grow in the timber and woodland, making excellent range for livestock. Numerous bands of sheep and herds of cattle range in the forest during the summer and fall. Grazing and lumbering are under federal control. Local saw mills prepare materials for building and construction purposes.

Petrified Forests The Petrified Forests are one of the wonders of the West. There are two in Apache County, covering 21,000 acres. One lies near the Santa Fe, south of Adamana station and the other is east of St. Johns. These forests consist of pine and cedar trees that in past ages were turned to solid stone by the action of mineral laden water.

NAVAJO COUNTY

Navajo County, where for many years livestock has been, and still is, the industry of greatest importance and profit, is coming into crop cultivation by irrigation from the streams. The county contains an area of 9,826 square miles, and over its mountains and plains many thousand cattle and sheep are pastured. Annually, 15,000 head of cattle, 35,000 to 60,000 head of sheep, and 1,500,000 pounds of wool are shipped from the county. From the Santa Fe Railway, which follows the Little Colorado through the county, travelers see many stock farms, with their windmills and water tanks, herds feeding on the range. Approximately 20,000 acres are irrigated in the county. At Snowflake, Taylor and Showlow on the lower mountain slopes, and at Holbrook, Woodruff, Joseph City and Winslow on the Little Colorado, areas of from 1,000 to 3,000 acres are under the ditch. During the summer much of the land is short of water, but the settlers are enterprising and the several communities are building reservoirs, in which flood water will be stored. It is contemplated, also, to use pumps, especially where there are no reservoir sites. This water is the underflow and lies at from ten to thirty feet beneath the surface.
Below the junction of the Rio Puerco of the West and the Little Colorado, beginning immediately above Holbrook, lies a valley of from one to five miles wide. Below Winslow this valley spreads to a width of eight miles. Within this valley lie, approximately, 175,000 acres of arable land, which may be subjected to irrigation from the river. There are irrigable lands, and some irrigation, also, in the valleys of the tributaries of the Rio Puerco and Little Colorado, as Le Roux Wash, Silver Creek, Cottonwood Wash, Showlow Creek, Clear Creek and Chevelon Fork. They are fed by springs, winter snows, and spring, summer and autumn rains. The annual snowfall is from four to six feet.

The principal crop is alfalfa. It is cut three times annually and the yield is from three to four tons per acre. By the storage of water in reservoirs the production of this hay is increasing. Since livestock is a great industry here, alfalfa hay is in great demand, and commands good prices. Other products of the soil here are oats, sorghum, barley, wheat, Indian corn, apples, plums, cantaloupes, watermelons and berries. Sugar-beets grown at Winslow contain eighteen to twenty per cent saccharine, but are not planted extensively. On the mountain slopes, especially around Snowflake and above, great crops of Irish potatoes are grown. Potatoes grown in the Heber district have taken first prize at the Arizona State Fair.

Holbrook, the county seat, is an ambitious settlement of 1,500 population, with good schools, churches, two banks, wholesale and retail stores, a newspaper, four hotels, chamber of commerce, the usual fraternal lodges, and other accessories of civilization. The irrigable land lies west of Holbrook, but large shipments of field products are made from this station, and the banking and trading are done here.

Joseph City, a settlement of 400 population on the Santa Fe, sits in the midst of good farms which cover 1,500 acres. Two dams divert water into fifteen miles of canals.

Winslow has a population of 4,000. It is the end of a passenger division on the Santa Fe and the headquarters of a freight division. A new Harvey station hotel is located here. The town has excellent water for municipal and domestic use furnished by the railway company under contract. The source of this water is Clear Creek, a mountain stream. The city has a high school and grammar schools, churches, fraternal societies, two banks, newspaper, volunteer fire department, wholesale and retail stores, comfortable homes, gas, electric light, sewers and all the other comforts of civilization.

Woodruff, twelve miles south of Holbrook, possesses a dam which has stood against floods for many years; irrigating hundreds of acres of farms and gardens. The community has good schools, churches, stores and comfortable homes.
Snowflake, thirty miles south of Holbrook, has a population of 800 and is the third town of importance in the county. The townsite is washed by Silver Creek from which water is obtained for irrigation. It is a prosperous community, and the local demand takes the product of the surrounding farms. It is on the new lumber railroad from Holbrook. The community has a good public school housed in a handsome edifice. At the Union High School the higher branches of education and trades are taught. The town has stores, churches and all the comforts of life.

Other good towns on Clear Creek are Taylor and Shumway, where irrigation has made prosperity. At Shumway is a flour mill driven by water power. The wheat for this mill is grown in Clear Creek Valley. The apple is an important product of these settlements.

Showlow, on a creek of that name, sits in the midst of a pine forest at an altitude of 6,000 feet.

Lakeside, Pinedale and Clay Springs are prosperous communities made by “dry-farming.” About 6,000 acres are cultivated, and the annual precipitation of rain and snow is sufficient. Many sheep and cattle ranches are near by.

There are in round numbers 2,800 children of school age in the county instructed by 130 teachers. The annual expense of the schools is about $350,000. The school property of the county is valued at $750,000.

MOHAVE COUNTY

Mohave County, which is rich in minerals, has been exploited less than any other mineralized zone. With its immensely valuable deposits of the precious as well as the baser metals are found some of the rarest mineral substances known. Yet it is a fact that with all the millions that have been taken from the ground within its borders mining here is still in its infancy. Its area is so great, 13,000 square miles, and the mineral contents so diversified that there still remains a field for the prospector as well as the investor. The turquoise quarries of this county have produced over $300,000 worth of gems and still have large quantities in sight. One mine alone has blocked out about $2,000,000 worth of molybdenite, and some of the best deposits of tungsten known are found here, as well as gold, silver, copper, zinc, lead, etc., in large and paying quantities.

Along the Big Sandy River and in the northwestern part of the county are good ranches yielding bountiful crops and supplying a livelihood for a large number of happy and contented people—a people, no longer satisfied with the old methods of travel, who step into their automobiles when they “go to town” to trade, attend a social event or make their bank deposits.

The varied scenery of the county, including some of the most beautiful parts of the Grand Canyon, should satisfy the most exacting. Here we have the wild, rugged mountains, and the flat plain, the desert...
and the garden spot. The drive, first over the plain and then over the scenic, winding mountain road from Kingman to Oatman, the famous gold camp, presents to the traveler a series of delightful and wonderfully pleasing sensations.

Of all the locations in Mohave County that of Kingman is most ideal. It is a town of nearly two thousand inhabitants, in the center of the mining and agricultural district, and the cattle and sheep raising. On the trans-continental line of the Santa Fe Railway and the Old Trails National Highway, it is the county seat and the distributing point for the greater part of the county.

With a high, dry climate, where the sun shines practically every day in the year, it is a fine place for the healthseeker as well as the investor. The town is laid out with broad streets, many of them curbed and with cement sidewalks.

The $65,000 County Court House, with its furnishings, rivals any such building in the state. A new $60,000 High School building fully equipped with the latest appliances and conveniences is a community pride, while the religious population is well provided for by the Catholic, Methodist Episcopal and Christian Scientist organizations, the first two having commodious church buildings. The Methodist Episcopal church cost $20,000. Many fraternal orders are represented. The Elks and Odd Fellows have buildings of their own.

Among the many business houses, Kingman boasts one of the best equipped department stores in Arizona. An up-to-the-minute banking house, in its own building, affords adequate financial facilities. Electric light and power, the telephone, a new water system, and a newspaper give the inhabitants satisfactory public service.

**YUMA COUNTY**

Cotton is a new crop in the Parker district of Yuma County. After making satisfactory experiments, the Connecticut Mills have planted a considerable acreage in the long staple variety. There was a good yield of high quality with the result that the growers arranged to greatly increase their acreage. Parker with a population of 700 is the main trading point in the district. It is where the Santa Fe's short line from the Salt River Valley to Los Angeles crosses the Colorado River.

South of Parker lies the agricultural land of the Colorado Indian Reservation, and below this is a large area in private ownership. The Reservation lies mainly on the Arizona side of the stream and the other mainly on the California side. The Reservation contains, approximately, 180,000 acres, and the other approximately, 120,000 acres. On the California side crops have been grown by irrigation from the river for many years. The soil, proved by results on the California side, produces the same crops as are grown in the Salt River Valley and in equal abundance.
COLONIZATION DEPARTMENT

If you are not certain just where you wish to locate, I will be glad to offer you every facility of this department to secure information about any section of the Southwest served by the Santa Fe. This will cost you nothing.

C. L. SEAGRAVES, General Colonization Agent,
A. T. & S. F. Ry.
900 Railway Exchange, Chicago

FREIGHT DEPARTMENT

The term "Emigrant Movable" will apply to property of an intending settler only and will include Second-Hand (used) Household Goods or personal effects, such as Clothing, Furniture or Furnishings for residences, with not to exceed one Piano; Tools and other Hand Implements of calling; Second-Hand (used) Agricultural Implements or Traction Engines; Second-Hand (used) Vehicles, other than Motor Vehicles; Fence Posts, Wire Fencing, Lumber, Shingles or one Knocked Down Portable House; Grain, Seeds, Shrubbery or Seeds for planting; Feed for Live Stock and Poultry not exceeding 500 pounds in weight or ordinary Live Stock (that is, Cattle, Swine, Sheep, Goats, Horses or Mules, except such as are chiefly valuable for breeding, racing, show purposes or other special uses), not to exceed ten head. Rates will not permit inclusion of Matches or other inflammable or explosive articles, Boats, Drugs, Paintings, Silverware or other articles of extraordinary value, nor any articles intended for sale or speculation.

One man will be passed free one way with one or more carloads of Emigrant Movable provided the car contains Horses, Mules, Cattle, Calves, Sheep or Hogs and is covered by Live Stock Contract. No return pass will be given. The minimum carload weight is 20,000 pounds for cars not exceeding 36 feet 6 inches in length. On cars over 36 feet 6 inches in length greater minimum weights will apply, based on a graduated scale.

Prospective settlers and others can get full information as to rates, service, etc., by addressing

PASSENGER DEPARTMENT

Arizona is amply served by several main-line passenger trains of the Santa Fe. These trains carry Pullman standard and tourist sleepers, chair cars and coaches. Travelers easily can reach this section from Chicago, St. Louis, Kansas City, Wichita, Houston, Ft. Worth, Amarillo, Los Angeles, San Francisco and other cities.

Fred Harvey meals served at station dining rooms and lunch counters.

For train service and fares to Arizona, apply to your home ticket agent, or write
1. Castle Hot Springs.
2. The Escalante, Ash Fork.
4. San Francisco Peaks, Flagstaff.
5. Point of Rocks, Near Prescott.