

THE NEW ARIZONA:



PUBLICATIONS ISSUED

BY THE

SOUTHERN PACIFIC

Big Tree Primer.
Big Tree Folder.
Big Tree Book, 10 cents.
Big Tree Pictures (22x26), 50 cents.
California in Miniature.
California Climatic Map Folder.
California South of Tehachapi, 76 pages.
California for the Settler.
Coast Country of California, 128 pages (in press).
Coast Line Resort Folder.
Giant Forest Folder.
Kings River Canyon Folder.
Lake Tahoe Resorts.
Orange Primer.
Oregon Map Folder.
Paso Robles Hot Springs.
Prune Primer.
Luther Burbank, "An Appreciation," 10 cts.
Sacramento Valley, 112 pages.
San Joaquin Valley, 96 pages.
Santa Barbara Mission Picture, 50 cents.
Shasta Resorts.
The New Arizona.
The New Nevada.
Wayside Notes along the Sunset Route, 80 pages.
Yosemite Booklet, 10 cents.
Yosemite Folder.
Sunset Magazine, the Magazine of California and the West, richly illustrated; monthly, 10 cts; annual subscription, \$1.00.

CHAS. S. FEE,

PASS. TRAFFIC MGR.

T. H. GOODMAN,

GEN. PASS. AGENT

SAN FRANCISCO, CAL

THE NEW ARIZONA:

A BRIEF REVIEW

OF ITS

RESOURCES, DEVELOPMENT
INDUSTRIES, SOIL
CLIMATE

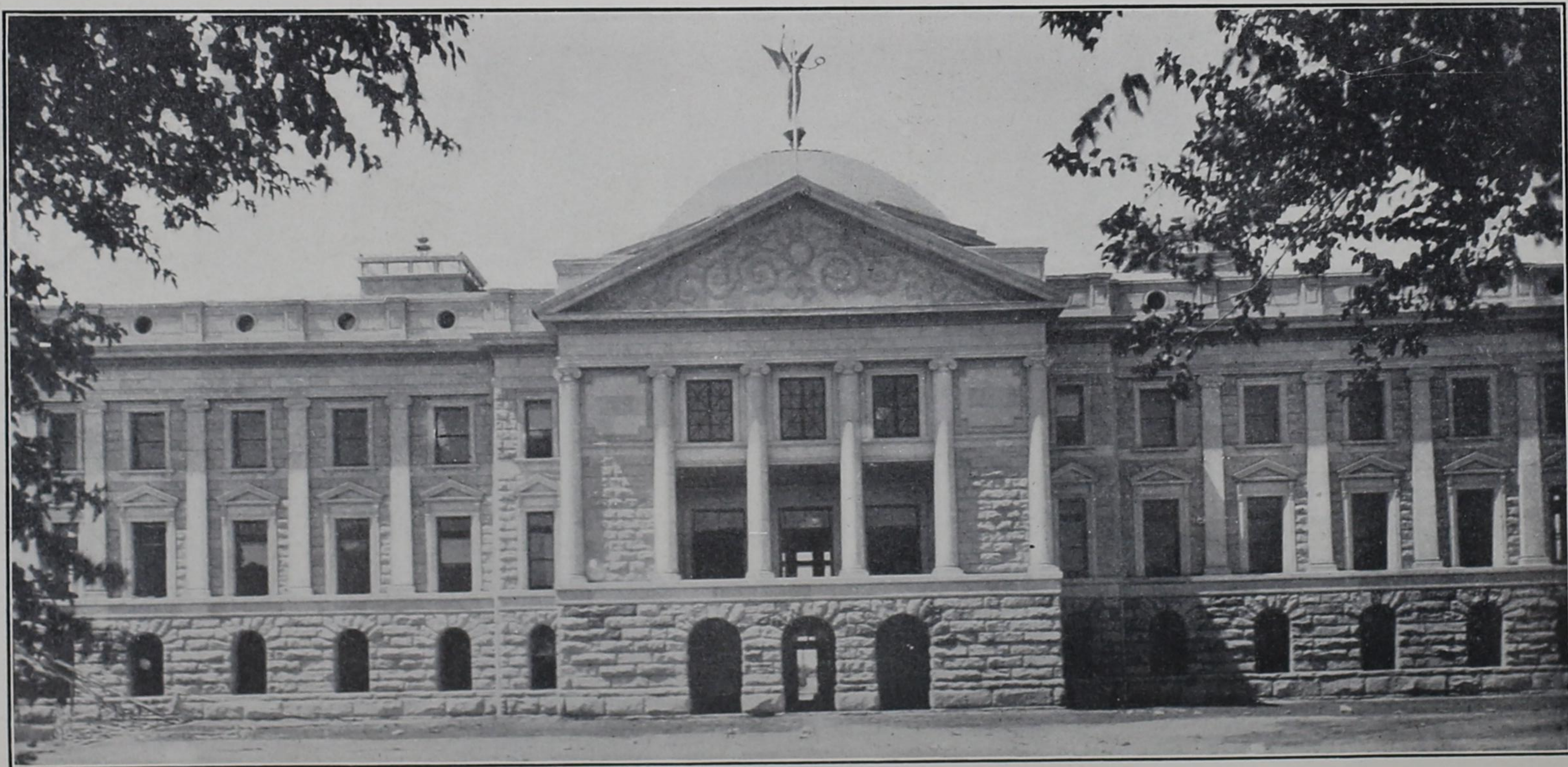
AND ESPECIALLY ITS

Advantages for Homemaking



PUBLISHED BY THE
PASSENGER DEPARTMENT
SOUTHERN PACIFIC COMPANY
SAN FRANCISCO, CAL.

1904



TERRITORIAL CAPITAL BUILDING—PHOENIX.

THE NEW ARIZONA.

The Territory of Arizona, soon to become a State, is situated between latitude 31 degrees and 37 degrees N., and longitude 109 degrees and 114 degrees 40 minutes W. On the north is Nevada and Utah, on the east New Mexico, on the south the Mexican State of Sonora, and on the west California and Nevada.

The face of the country may be generally described as a vast elevated plateau, having its greatest height (from 5,000 to 6,000 feet) in the north and east, whence it descends in successive slopes to the sea-level in the southwest. In the region of the north this plateau is sundered by tremendous fissures, dark cañons and narrow valleys, while from the general surface rise pine-clad mountain ranges and isolated peaks.

The most extended of these divisions is the Great Colorado Plateau—which stretches from the Tonto Basin and Mogollon Mesa in Central Arizona—northward to the line of Utah; yielding unwilling right of way to the Colorado River but including on the north side of that stream the Plateaus of Sanup, Winkaret, Buckskin and Paria, at an elevation of 8,000 feet.

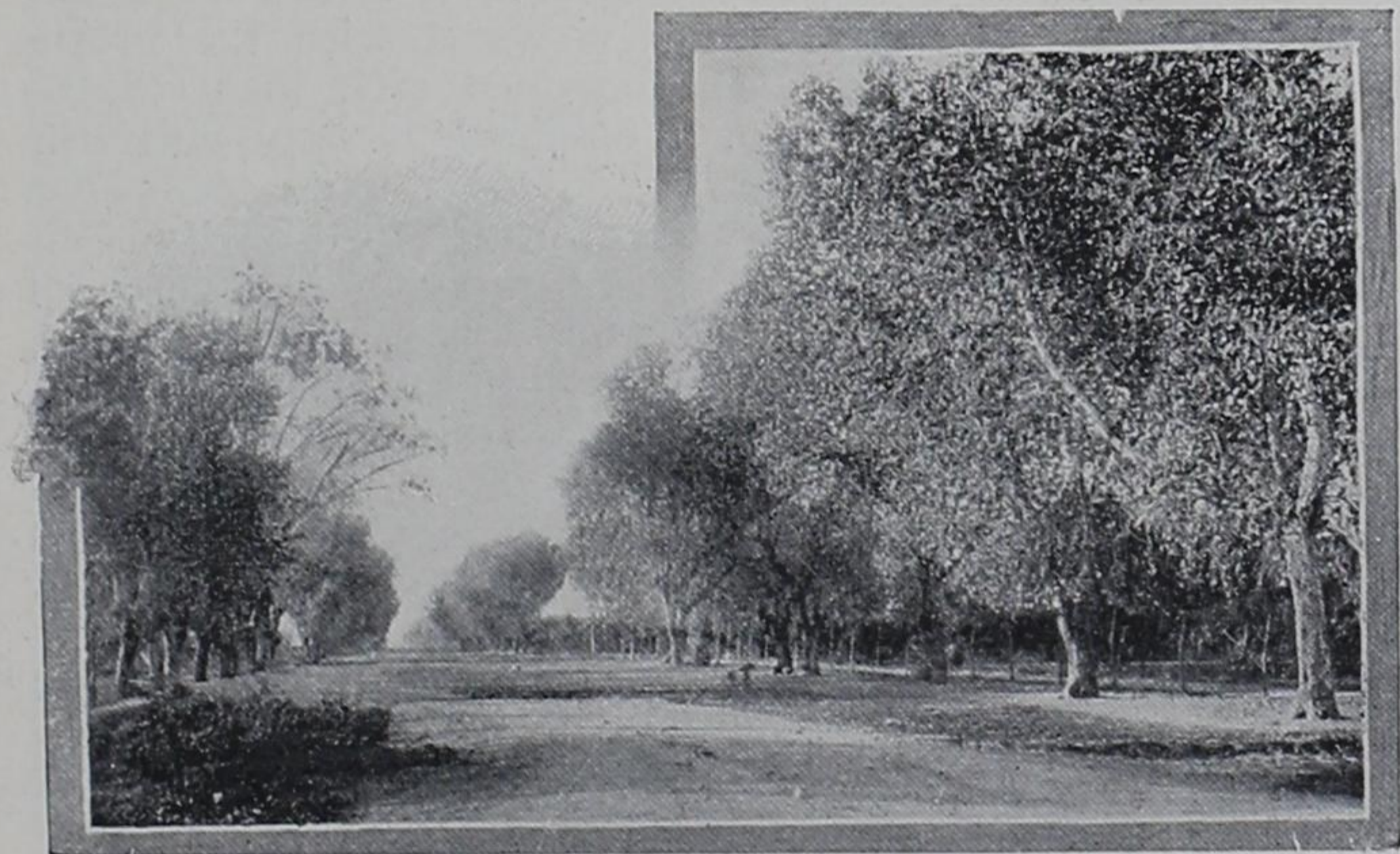
The general level is broken by isolated mountain peaks; and by ranges, chief of which are the San Francisco, Bradshaw and Mogollon—their rugged and sometime wooded slopes and cañons draining into the Colorado, Verde, Salt and Gila rivers.

Throughout this region are many mountain parks, sheltered valleys and beautiful glens—with generous soil, and a climate above the reach of adverse criticism.

South of the thirty-fourth parallel is a sudden descent of 3,000 feet in the general level of the plateau followed by as great a change in the aspect and nature of the country. From here to the southern boundary are large plains and valleys, crossed by detached mountain ranges and single peaks. The streams that have their birth in the high lands of the north flow through these valleys on their way to the sea, enriching them with the soil they have gathered in their turbulent careers.

In this southward journey, the traveler is shown a great transformation. Three short hours by rail, will exchange snow-capped mountains and dense forests of pine, for a

ARIZ
20.5
\$827
N532



AVENUE SCENE, TEMPE

climate that is semi-tropical, with highly cultivated fields of grain, clover and fruit.

The extreme southwestern part of the Territory adjacent to the gulf, is a land of gravelly plains and disjointed mountains with a ragged covering of coarse grass and dry shrubs.

Of its future, how can we write, since irrigation has changed surrounding deserts into gardens; and year by year, in similar fields, the miner's search meets satisfactory reward.

In the southeast, the mighty ranges of the north reappear, but shorn of much of their ruggedness. The White Mountains, Peloncillos, Santa Catalinas, Santa Ritas, Huachucas, the Dragoons, and Chi-ri-cahuis are not only rich depositories of mineral wealth, but afford considerable timber, and enclose many promising valleys.

WHAT SPECIAL FIELD OF ENDEAVOR DOES ARIZONA OFFER TO YOU?

This pamphlet is not written with the purpose of inducing any and everybody to come to Arizona. On the contrary, it is a thoughtful message addressed to thoughtful men. If poor, with only your two hands to serve you, there are many other places that will repay manual labor better than Arizona. But if you have a little money, or, a great deal, there are few countries that have within themselves the power to respond more quickly, and generously to well-directed efforts.

Arizona is not a "Tom Tiddler's ground," where you can get rich doing nothing. But help to develop its natural resources, and it will repay your labor ten, maybe a hundred, possibly a thousand fold. Much depends upon yourself.

The first question to be considered is: What can you do in Arizona? What opportunities does it offer of which you, personally, can avail yourself.

ARE YOU A FARMER?

Then it offers you a great deal for a comparatively small outlay. The chief signal officer, in a report on the climate of Arizona, with particular reference to the question of irrigation (1891), says of Gila and Salt River Valleys: "Rich as is the Arizona soil, it is always a disappointment to the farmer who views it with the prejudices born of familiarity with the deep, rich loam of the prairies. At first sight he can compare it only with the sand of the sea beach; that it could be made to bear a scanty crop of some hardy grass is almost beyond his comprehension; that it does bear enormous harvests of grain; that it is the equal of any vine-growing section, that its orchards seek comparison with the best, are facts which have to conquer belief in his unwilling mind."

The special committee of the United States Senate, report 298, part 1, May 5, 1890, page 60, says: "Within our borders there cannot be found a soil so uniformly fertile and so capable of varied production, under irrigation, as that of the Gila, Salt and Santa Cruz rivers in central and southern Arizona. Analysis of this soil shows its fertile qualities to be superior to that of the Nile earth."

And so the secret of the marvel is the artificial applica-

tion of water to a wonderful soil under clear skies and bounteous warmth.

ARE YOU A MINING MAN?

Arizona's reputation for mineral wealth is well established. So high an authority as Baron Von Humboldt predicted that the wealth of the world would yet be found in this region. And was not the largest silver "nugget" ever taken from the earth brought to light in Arizona? It weighed 2,700 pounds.

SILVER.

Silver is as plentiful to-day in Arizona as it was then, being unearthed in its pure state and in combination with many base metals. In both conditions it has provided more beautiful cabinet specimens than any other country. The mints report \$1,932,115 for the year 1903.

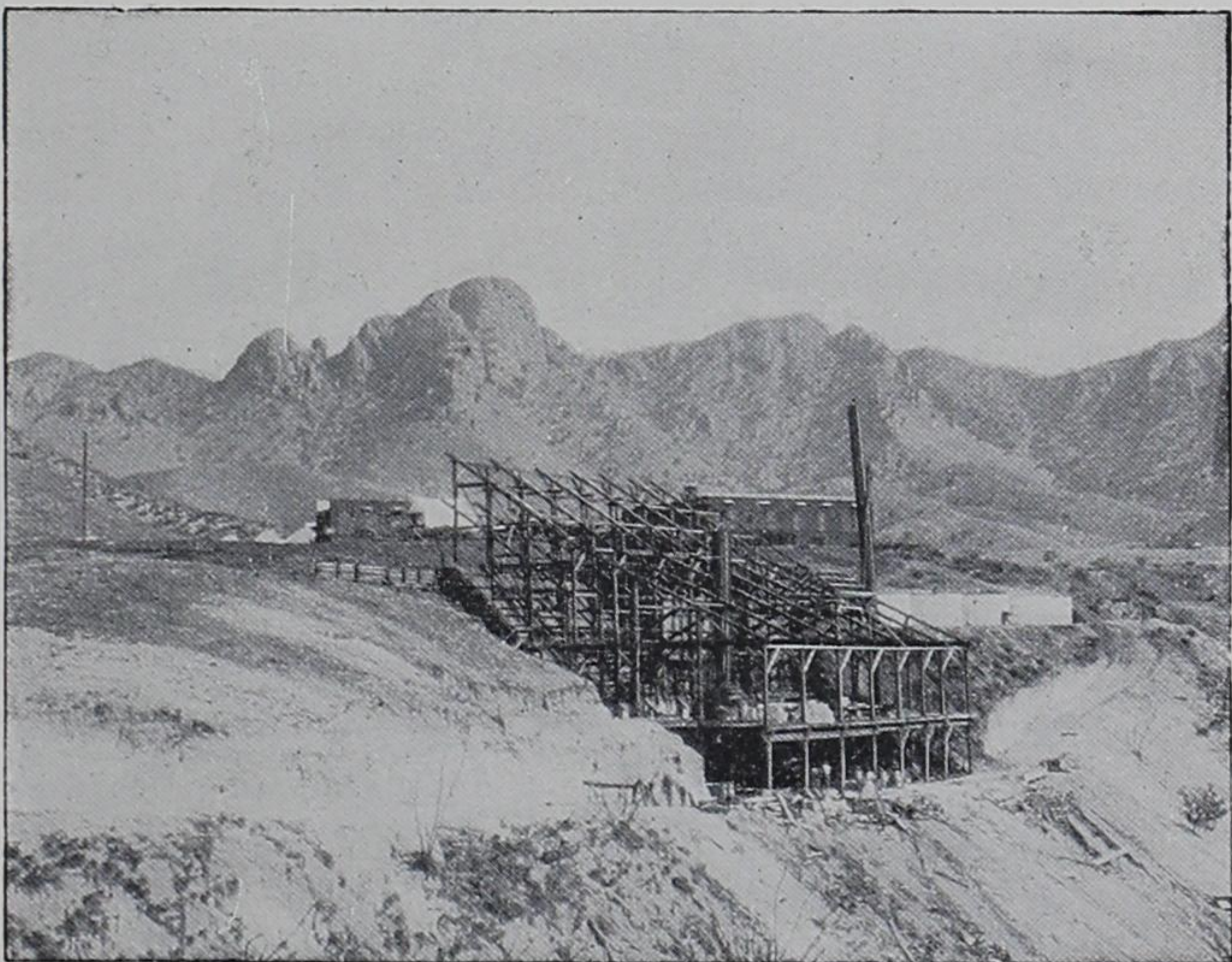
GOLD.

As for the more valuable gold, while not so plentiful as silver, it has been revealed in great quantities, both in its free state and in its matrix of quartz, and in combination with sulphur, lead, antimony, copper and other minerals. The discoverers of the placer deposits of Antelope Peak took one-half million dollars in gold from less than one acre of ground; the while, the quartz mines are paying more steadily, if not so royally. The mints report \$4,784,000 for the year 1903.

COPPER.

Copper of very high grade is found in deposits that seem inexhaustible—it is already apparent that in this metal, the manufacturing world must reckon with Arizona first of all. Of the three principal metals, gold, silver and copper, up to the present date, Arizona has added \$225,000,000 to the wealth of the world.

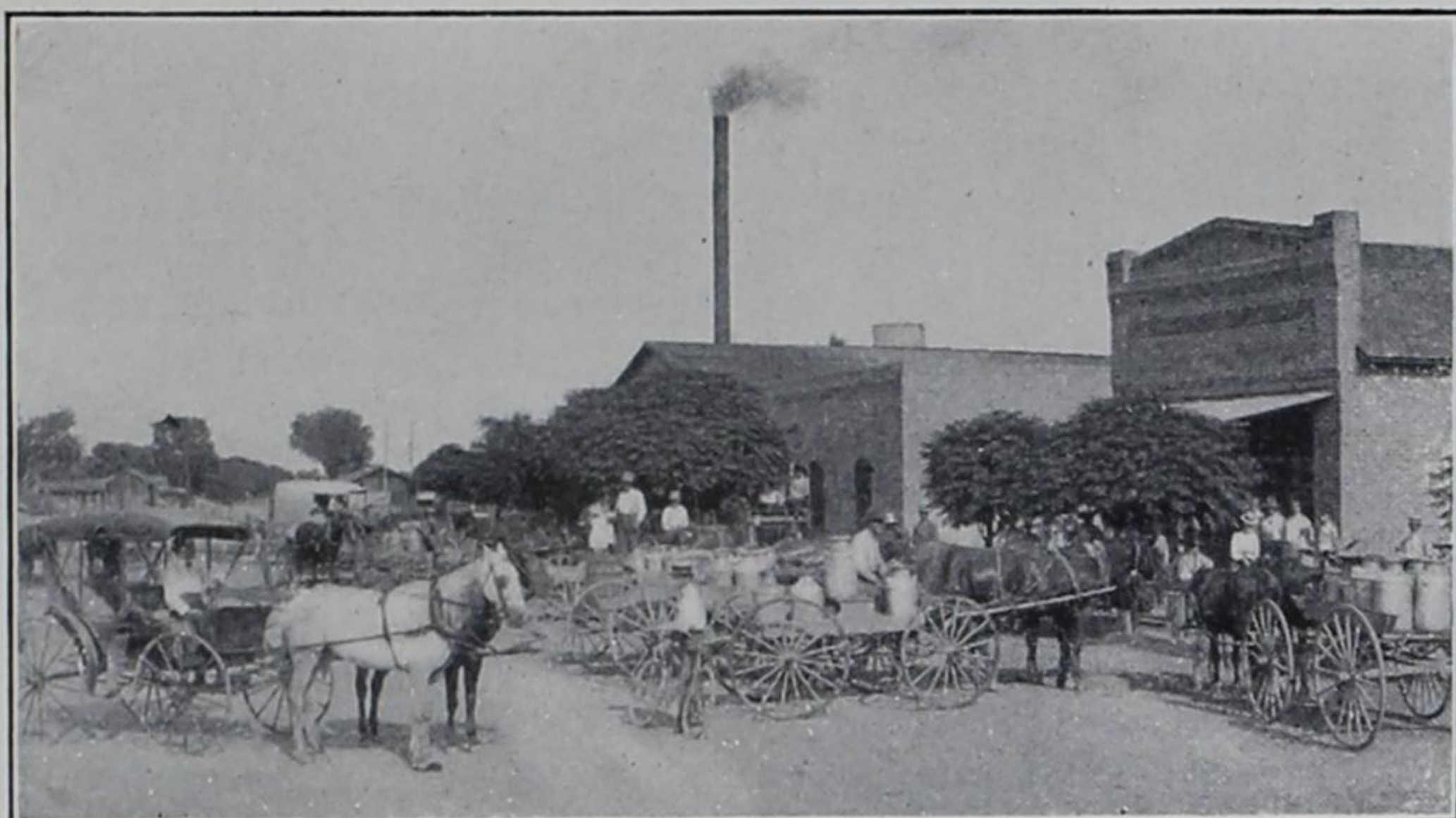
From the geological formation of Arizona and a part of New Mexico, it would appear that some seismic upheaval had thrown many minerals together in a heap, for they do not follow the usual well-established methods of such deposits in other States and Territories, and until you



HALVERTON MINE.



ON THE GRAZING LANDS OF PIMA COUNTY.



A CREAMERY AT TEMPE, ARIZONA.

strike your pick in the ground you scarcely know what kind of a mine you are going to have.

ARE YOU A STOCKRAISER?

The stockman's ideal range consists of broad tracts of grass land, which may be pastured twelve months in the year, with the adjuncts of mild climate, and unfailing water. Owners who obtain only the more important of these advantages congratulate themselves. Certain portions of Arizona offered all, and stockmen have not been slow in entering upon possession. Free from extreme cold and violent storms, rarely is a day lost from inclemency of the weather, while the summer's only danger is an occasional drought. In the rainy season, plains and foothills turn green with surprising readiness, and the cattle crop the juicy grasses, grow fat, and happy; when the long season of cloudless sky follows, and green things die, the uncut grass turns to hay upon the ground, so that the breeder is saved the trouble of cutting, curing and storing his hay, and has all out doors for a barn.

In addition to the range grasses, which in places cover the ground luxuriantly after the first rain, there are several kinds of perennial grasses which remain more or less green throughout the year. Ranchmen call these "spear grass," "deer grass," "gietta," and black and white "grama." Then there are certain small trees, such as the mesquite, palo verde, and others upon which cattle are fond of browsing. This great variety of feed and the mild weather insures a rapid increase in the herd. Indeed, when feed and water are plentiful, an increase of eight-five per cent is not unusual.

POSSIBILITIES FOR MANUFACTURERS.

Arizona offers considerable water power for electrical generation, and much raw material capable of being wrought into useful shape. It is roughly estimated that there are 20,000 square miles of timbered land in Arizona. The Mogollon forest alone is about 200 miles long and 60 miles broad, forming a belt of magnificent pine timber nearly as large as the State of Maryland. There are many million feet of marketable lumber, accessible to railroads.

Thousands of hides are annually shipped from Arizona and brought back again in the form of saddlery, boots and shoes. The Territory is rich in tanning material in the

shape of barks, shrubs and cañaigre, the latter growing wild, and also under cultivation. Why should not this wealth of material be manufactured at home?

Millions of pounds of a superior quality of wool are also sent out of the country every year, to be made into textile fabrics.

Paper, rope and mats can be made from the agave and the amole—native Arizona plants. Indeed, the texture and finish of papers made from these fibres are excellent. They ought, and no doubt will, some day, supplant wood pulp and other cheap substitutes for rags. These shrubs are found growing in every valley and on every mesa and hillside, so that there is quite enough for all the paper manufactureres who read these lines.

The making of soaps, candles, matches and straw goods, beef and pork packing, fruit and vegetable canning, and a dozen other industries are practicable. In Phœnix, a town of 14,000 inhabitants, there are ice-factories, planing-mills, iron-foundries, machine-shops, cigar-factories, beehive and fruit box factories and canneries in operation.

SALT RIVER VALLEY.

This lovely valley has already been referred to. Indeed, the temptation to tell about it has been so great that it required considerable self-denial not to begin with it. Like the good village schoolmaster who, when he "shows off" his school before visitors, proudly calls upon his best and favorite pupils, so the chronicler of Arizona finds himself constantly referring to Salt River Valley. Perhaps it is because this region appeals to the heart as well as to the purse. For if "all the world loves a lover," all the world loves a home, and Salt River Valley is the land of pleasant homes.

ITS LOCATION AND SURROUNDINGS.

It is in Maricopa County, in Southern Arizona, covering the land lying on both sides of Salt River, from its junction with the Gila, and extending upward for sixty miles to Fort McDowell, at which point it receives the affluent waters of the Rio Verde.

Excluding valuable foothills, the valley proper is fifty miles long and will average fifteen miles in width; giving 750 square miles, or 480,000 acres of irrigable land. Given two of its dimensions it may be well to say it has a third, a depth of soil varying from 10 to 100 feet, replete with all the elements requisite for successful husbandry. For wind breaks to the east and north it has the lofty Bradshaws, Superstition and Mogollon mountains, the White Tank Mountains in the west, and Estrella Range in the south.

THE SOIL AND HOW IT GOT THERE.

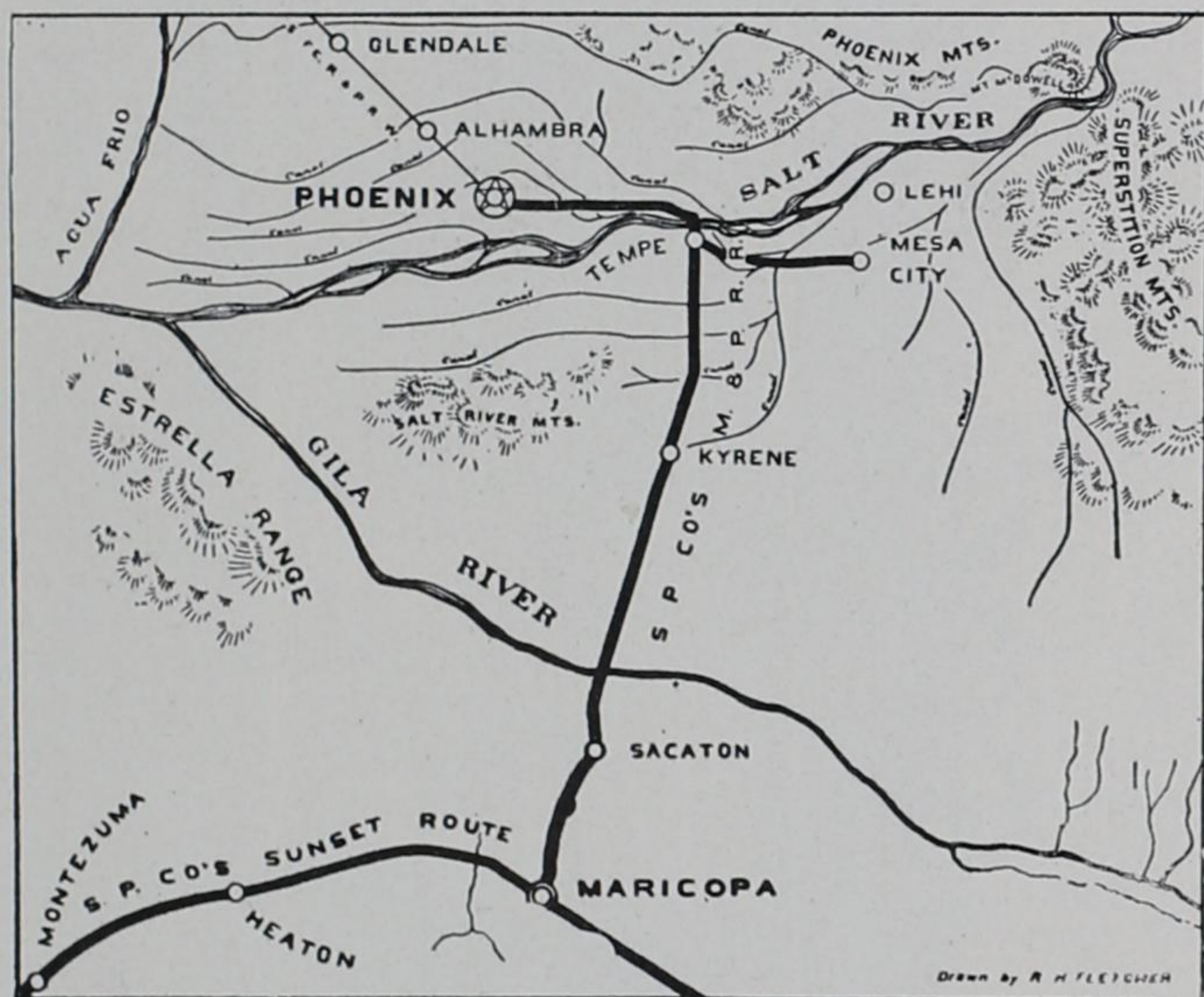
In regions like the Gila and Salt River Valleys it may be said that the soil is not indigenous. It being one of the features of this remarkable country, and one which it shares with the valley of the Egyptian Nile, that its soil has been, and is being, brought to it from other regions.

General Greely, in his report previously referred to, says of this matter: "This is a land of inland seas in recent geologic times. Their beaches and shoals have been laid down at several altitudes to serve as foundation for later effects of soil-making.

"The Salt and Gila flow down through the mountains with a fall of 4,000 feet in 500 miles; when they reach the plain they fall but six inches to the mile, their suspended material is deposited along this portion of their course * * The worth of such soil is a matter dependent on the characteristics of mountain districts hundreds of miles away, and in this case no fault can be found, for the mountains are rich in desirable soil constituents, and this wealth is brought to the plain in the most finely subdivided form, and thus in the best shape for the purposes of agriculture."

ITS CLIMATE.

Statistics, under torture, may be made to prove almost anything; nevertheless, one can always gain some sort of information from them. The United States Signal Service reports from 1877 to 1887 show the average temperature of spring to be 70.5 degrees, of summer, 89.3 degrees, of autumn, 73.1 degrees, and of winter, 56.1



MAP OF SALT AND GILA VALLEYS, SHOWING SOUTHERN PACIFIC COMPANY'S CONNECTIONS.

degrees. The highest reached in that period was 115.5 and the lowest 22.5 degrees. While the registering of 115 degrees of heat may seem alarming to a person east of the Mississippi River, it must be remembered that the figures do not carry the same meaning as in New York or St. Louis. The atmosphere in Arizona is so entirely devoid of moisture that 115 degrees is more endurable than 85 degrees in either of those cities.

In fact the heat is never oppressive here, the sweltering "muggy" days of the Eastern summer being unknown. In the sun's rays, of course, it is very hot, but the air, being so clear, does not get over-heated, and if one stays in the shade, even 115 degrees is quite endurable. The nights are always pleasant, winter and summer. The winter climate is simply delightful. In fact, taken altogether, the climate is about as good as the most exacting person could ask.



AN ARIZONA ALFALFA PASTURE, SALT RIVER VALLEY.

THE RAINFALL.

The rainy season is, of course, the winter of Arizona, and usually begins in August. The average rainfall is 6.27 inches. The rain generally falls for a day or two at a time, and then the sky is clear perhaps for a week or more, and these intervals, when Nature is washed and dressed in her gayest colors, are charming. Thunder storms are unusual, being less common than in the Eastern States.

SALIENT CLIMATIC FEATURES.

Meteorologists recognize a path of storm movements and frequency, along which there are pronounced changes in the weather conditions every few days. This path of atmospheric activity is better defined in some sections than others. Southern Arizona, in which Salt River Valley lies, is without this region of disturbance. Violent storms are infrequent and cold waves unknown.

The climate has certain marked characteristics belonging to the arid Southwest, and chief of these, its bright sunshiny weather. It may justly lay claim to the title of the "Sun-kissed Land," as a day of total obscuration seldom occurs.

The official records show a higher percentage of sunshine for this region than is recorded at any other place in the United States.

The wind movement is gentle and regular, averaging about four miles an hour for the year. Humidity, both absolute and relative, a most important factor in sensible temperature, is measured in the lowest figures. As low as three per cent relative humidity has been measured, and the average for the year 1900 was thirty-three per cent.

The transition of the seasons is slow and gradual. The summers are hot, but the heat is not comparable with that of other sections that have lower registrations and higher relative humidity. The season from October to May has an enchantment that is not forgotten by the visitor, as almost continuous outdoor life is possible under the brightest sunshine.

A NATURAL SANITARIUM.

Surrounded by ranges of mountains, which form a thorough protection against the cold winds, the entire Salt River Valley becomes a vast natural sanitarium. The coldest days of the winter are as mild as those of September in Eastern States, and it is a matter of much note that there has never been a day known when the sun did not shine in some part of the valley.

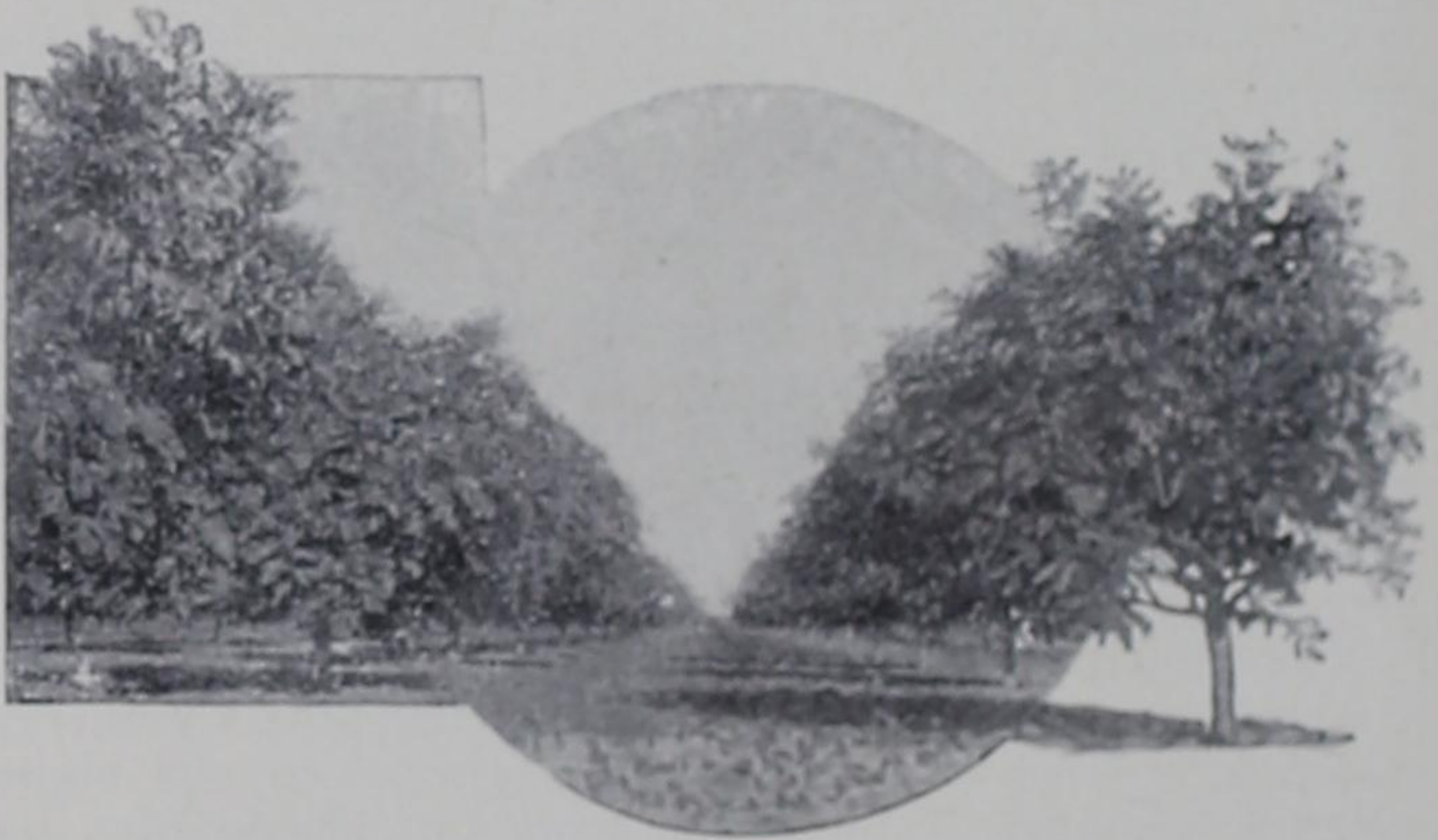
DOES ALL ARIZONA SOIL REQUIRE IRRIGATION?

Yes; not because the soil is hot and dry, but for the reason that the rainfall is insufficient and too capricious to be relied upon. Moreover the soil, as already explained, is very porous and water sinks through it rapidly, therefore it requires frequent renewal. This very porosity is one of the reasons of its extraordinary fertility, for the capillary structure acts like myriad little canals, which carry the enriching chemical constituents of the soil to the roots of the plant.

METHODS OF IRRIGATION.

It is not too extravagant to say that in Arizona man harvests and stores his rainfall, as he does his crops, and uses it when he needs it. After all, this seems more rational than to leave one's crops to chance, to walk the floor at night for fear it will rain, or for fear it won't; to have your neighbor longing for rain on his vegetable garden, while your hay is yet lying in the field. In Arizona each man, as it were, lets the rain come on his farm when he wants it, and turns it off when he has had enough. Certain other men have made a business of storing and selling water to the farmers, such corporations being known as canal companies.

In most countries the land requires preparation for irrigation, by working and leveling. In Salt River Valley there is no natural sod to break up, and the ground is already nearly level, having only a slight inclination to the west and south, just enough to carry the water, so that no preparatory expenditure is requisite. This important



TWO-YEAR-OLD FIG ORCHARD.

advantage will be better appreciated when it is understood that in some less favored places it costs as much as forty dollars an acre to fit the land for irrigation. The only treatment the soil or the crop requires is thorough and frequent tilling. No fertilizing is necessary.

The canal company obtains the water for irrigating by diverting the flow from Salt River below the junction of the Verde by means of dams. Thence it is conveyed to the cultivated tracts by canals and distributed by small ditches, or "laterals." When a farmer wants to conduct water to a certain field he simply lifts the head gate of his ditch. All distributing or lateral canals run upon section or quarter section lines. By this plan stock has the benefit of a living stream of water, while the custom of planting trees along the water way make these canals serve as ornamental boundaries. Water rights cost about fifteen dollars per acre, and the yearly tax for use after the right has been purchased is one dollar and twenty-five cents per acre. Out of this latter tax the canal companies bear all expenses for repairs. Water for domestic use is obtained from the canals and from artesian wells.

RESERVOIRS FOR IRRIGATION WATER CREATED BY ACT OF CONGRESS.

Congress recently passed an Act, that was promptly signed by the President, providing for surveys, and the location and construction of Irrigation Water Reservoirs in places that are approved, the original cost in each case being paid out of moneys in the United States Treasury accruing from sales of public land. The funds so used, to be reimbursed by assessments upon the lands benefited, to extent of one-tenth each year for ten years—without interest.

In due course, no doubt several such reservoirs will be created in Arizona. One, however, has been already determined upon, and contracts for portions of the work have been let. From its location, it is called the Tonto Basin.

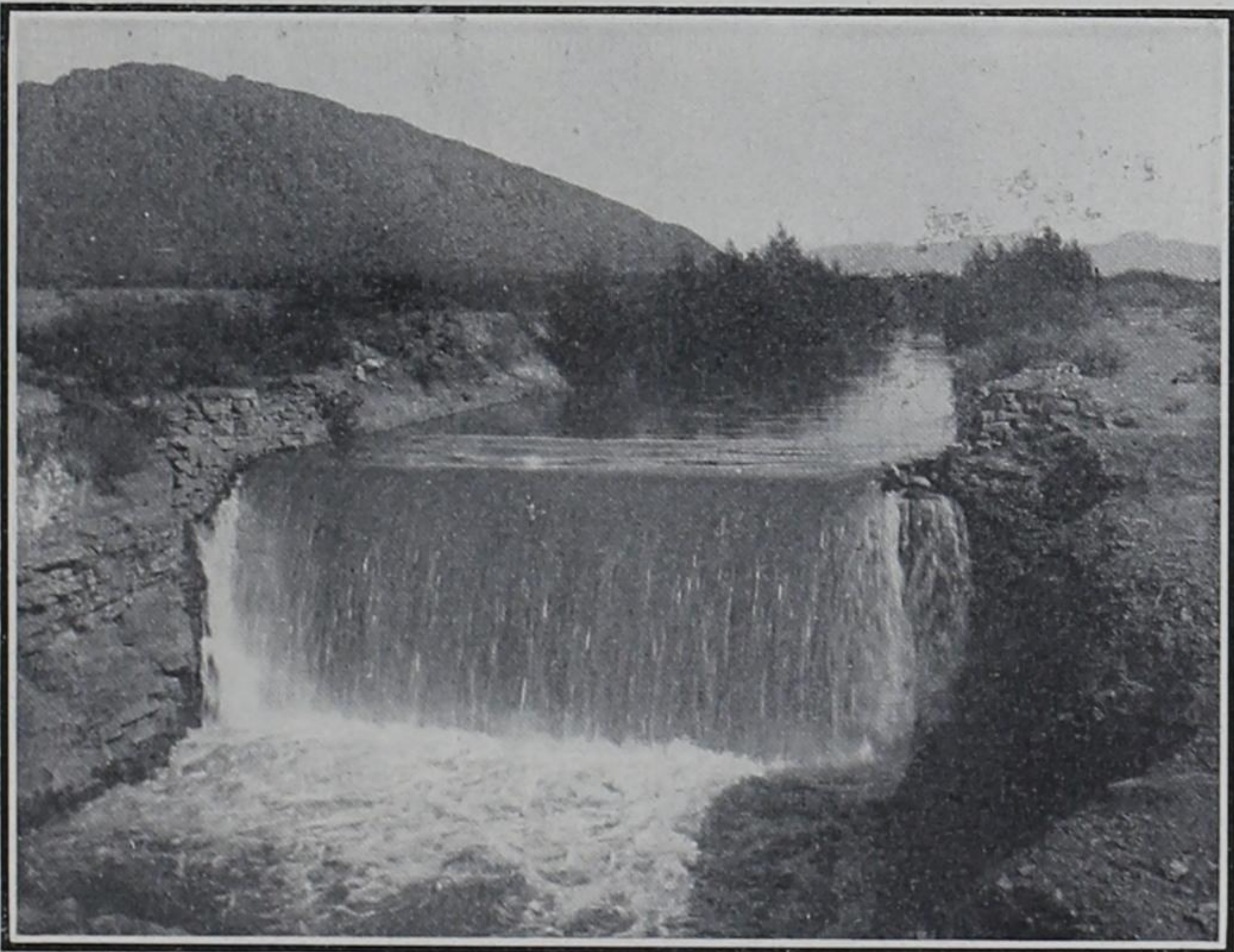
TONTO BASIN RESERVOIR.

The site is admirable in all respects. It is in Gila County 75 miles north-easterly from Phoenix. It is well named Basin, for it is enclosed by mountains, with openings only for entrance of waters of Salt River and the drainage of Mogollon mountains, and the eastern versant of the Mazatzol Range, and for the exit of their combined outflow through the narrow granite-walled pass where the retaining wall will be built.

This dam will stand without a rival in the world—if elevation only is considered—for it will be 270 feet high. The gorge at water level in the river is 210 feet, and at the surface of the reservoir 600 feet wide. It will store 1,300,000 acre feet of water—an amount sufficient to cover those large acres one foot in depth.

The entire cost, including electric power development, and pumping machinery to reach subterranean waters in the valley, will be about three million dollars.

These waters, supplementing those of the Verde, already enlisted, and the large artesian well and pump reaching subterranean of the Salt River Valley, will make a garden of Maricopa County, and best of all—when the cost has been repaid to the Government—the property belongs to the land that has paid for it, and is inalienable forever—each acre having its pendent water right.



AN IRRIGATING DITCH, SALT RIVER VALLEY.



A BUNCH OF ARIZONA DATES

WHAT THE SOIL PRODUCES.

Salt River Valley boasts that its soil produces everything, and a great deal of it. Of some things it produces two or more crops in a year, and when a man produces two crops in a space of time in which farmers elsewhere are glad to safely garner one, he should be congratulated as a benefactor to his kind.

SOME FRUIT.

The following statement taken from an Arizona paper of recent date gives a list of fresh fruits to be had in the valley from March to December:

Almonds, December.

Apples, June to November, inclusive.

Apricots, May to July, inclusive.

Blackberries, May to August, inclusive.

Crab Apples, July to October, inclusive.

Dates, November to December, inclusive.

Figs, May to October, inclusive.

Grapes, June to December, inclusive.

Lemons, November to December, inclusive.

Nectarines, June to August, inclusive.

Oranges, November to December, inclusive.

Peaches, May to September, inclusive.

Pears (Winter Nellis), June to December, inclusive.

Plums, June to November, inclusive.

Pomegranates, August to September, inclusive.

Strawberries, March to December, inclusive.

Watermelons, June to December, inclusive.

COST AND PROFIT.

While all this sounds tempting enough, the practical question immediately arises: What money is there in it? This is a rather difficult question to answer conscientiously, because the cost of production differs with different men—some managing better than others—and the market price varies from season to season. The price of land is low, considering its advantages. Unimproved tracts of 20, 40, or 60 acres, with water right that costs \$15 an acre, and frequently with roads or avenues around them, can be had from \$30 to \$75 per acre. The difference in price is due, as a general thing, to the distance the land is located from a town center, or shipping point, and not to the quality of the soil. Improved farm property with water can be bought for \$50 an acre and upwards.

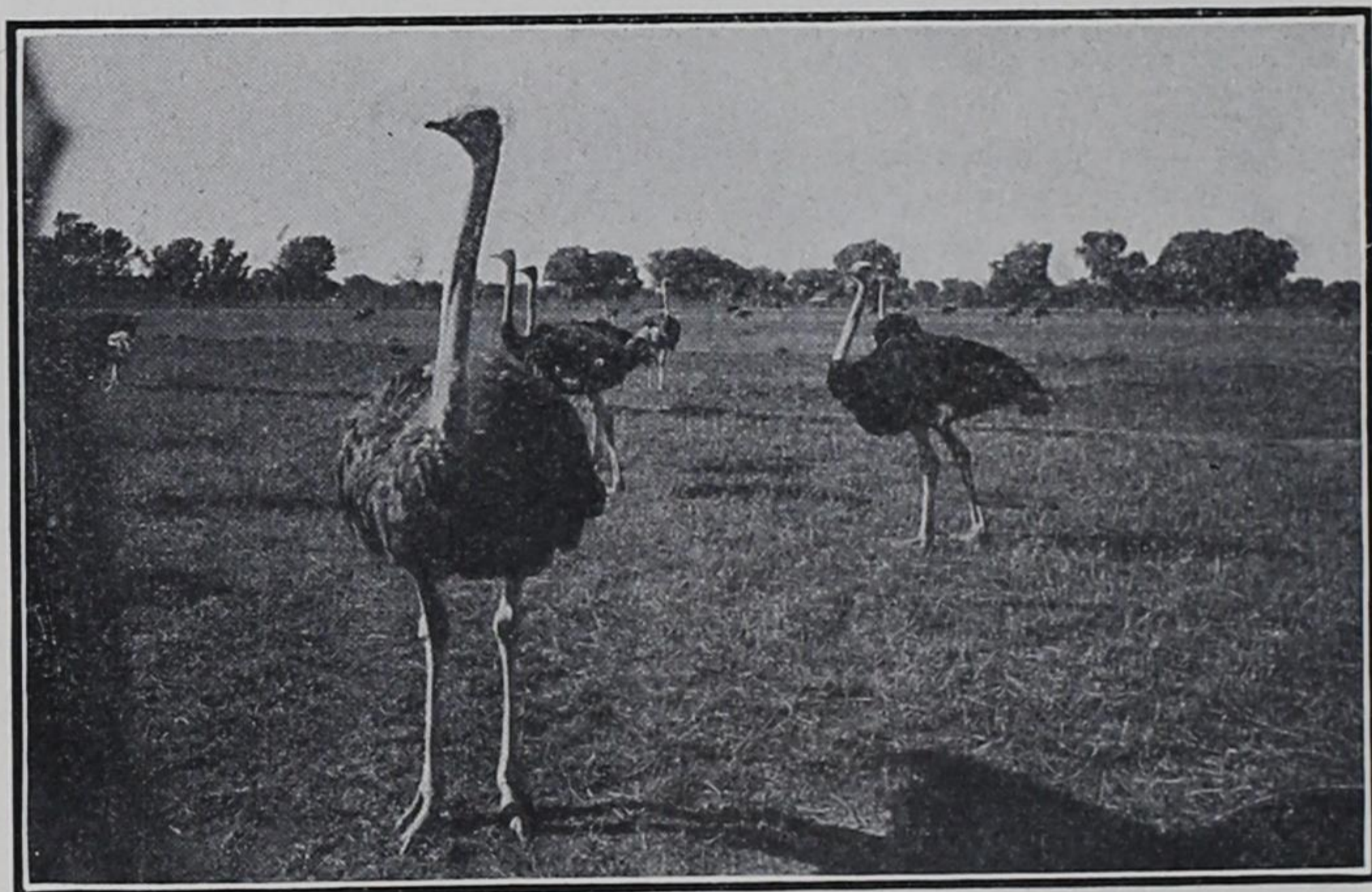
THE MARKET.

Fruits raised in the valley are partly consumed at home and partly exported. The home market is good, as there are many mining camps and stock ranches, besides the towns and villages, which depend on the Salt River vicinity for their supplies. The surplus is shipped by rail to all parts of the Territory, and is also packed in refrigerator cars and sent as far East as Maine where it successfully competes with California fruit; much fruit is also dried and canned for the local and Eastern trade.

A TWENTY-ACRE TRACT.

The following estimate of the cost of purchasing and planting a twenty-acre tract is quoted from a pamphlet issued by a well-informed firm of Tempe, a picturesque and prosperous little town in the Valley: "Cost of twenty acres of land at, say, \$30 per acre,

\$600; preparing twenty acres of fruit land for fruit—plowing, harrowing, ditching, laying off land for planting, digging holes, purchase of trees and vines for tract, planting same, care thereof, and cultivation in a thorough manner for first year, total \$500. Cash required for first payment on land, about \$200; setting out and caring for land first year, say, \$500—making \$700, leaving a balance due of \$400, bearing eight per cent payable in, say, three years. In the above calculation is included about eleven acres of raisin and table grapes, six acres assorted fruits, one-half acre oranges, lemons, limes, etc., one-half acre almonds and nuts, one-half acre assorted tropical fruits, and one and one-half acres reserved for alfalfa, garden patch, and home grounds. The cost of cultivation for second year and onward is from \$5 to \$15 per acre—whether \$5 or more is left entirely to the owner, it having been proven, however, by experience, that the more constant the cultivation the greater the growth and yield per tree, and consequently higher in proportion is the income to the investment each year.”



BIRDS AT OSTRICH FARM, PHOENIX.

YIELD AND INCOME.

“In making the estimates,” continues the authority quoted, in his discussion of the probable yield and income per acre, “we have, in each and every instance, taken the lowest figures, desiring rather to under than overrate the returns—for one can easily take in unexpected profits, while he is at times seriously embarrassed by having his income fall short of his expectations.”

CALCULATIONS BASED UPON TWENTY-ACRE TRACT—SEVENTY-EIGHT BEARING TREES PER ACRE.

APRICOTS.

Third year in orchard, 25 pounds per tree equals 1,950 pounds, at $1\frac{1}{2}$ cents, \$28.25.

Fourth year in orchard, 50 pounds per tree equals 3,900 pounds, at $1\frac{1}{2}$ cents, \$58.50.

Fifth year in orchard, 80 pounds per tree equals 6,240 pounds, at $1\frac{1}{2}$ cents, \$93.60.

Sixth year in orchard, 125 pounds per tree equals 10,750 pounds, at $1\frac{1}{2}$ cents, \$161.25.

PEACHES.

Third year in orchard, 40 pounds per tree equals 3,120 pounds, at $1\frac{1}{4}$ cents, \$39.

Fourth year in orchard, 75 pounds per tree equals 5,850 pounds, at $1\frac{1}{4}$ cents, \$73.12.

Fifth year in orchard, 130 pounds per tree equals 10,140 pounds, at $1\frac{1}{4}$ cents, \$126.75.

Sixth year in orchard, 200 pounds per tree equals 15,600 pounds, at $1\frac{1}{4}$ cents, \$195.

PEARS.

Third year in orchard, 30 pounds per tree equals 2,340 pounds, at 2 cents, \$46.80.

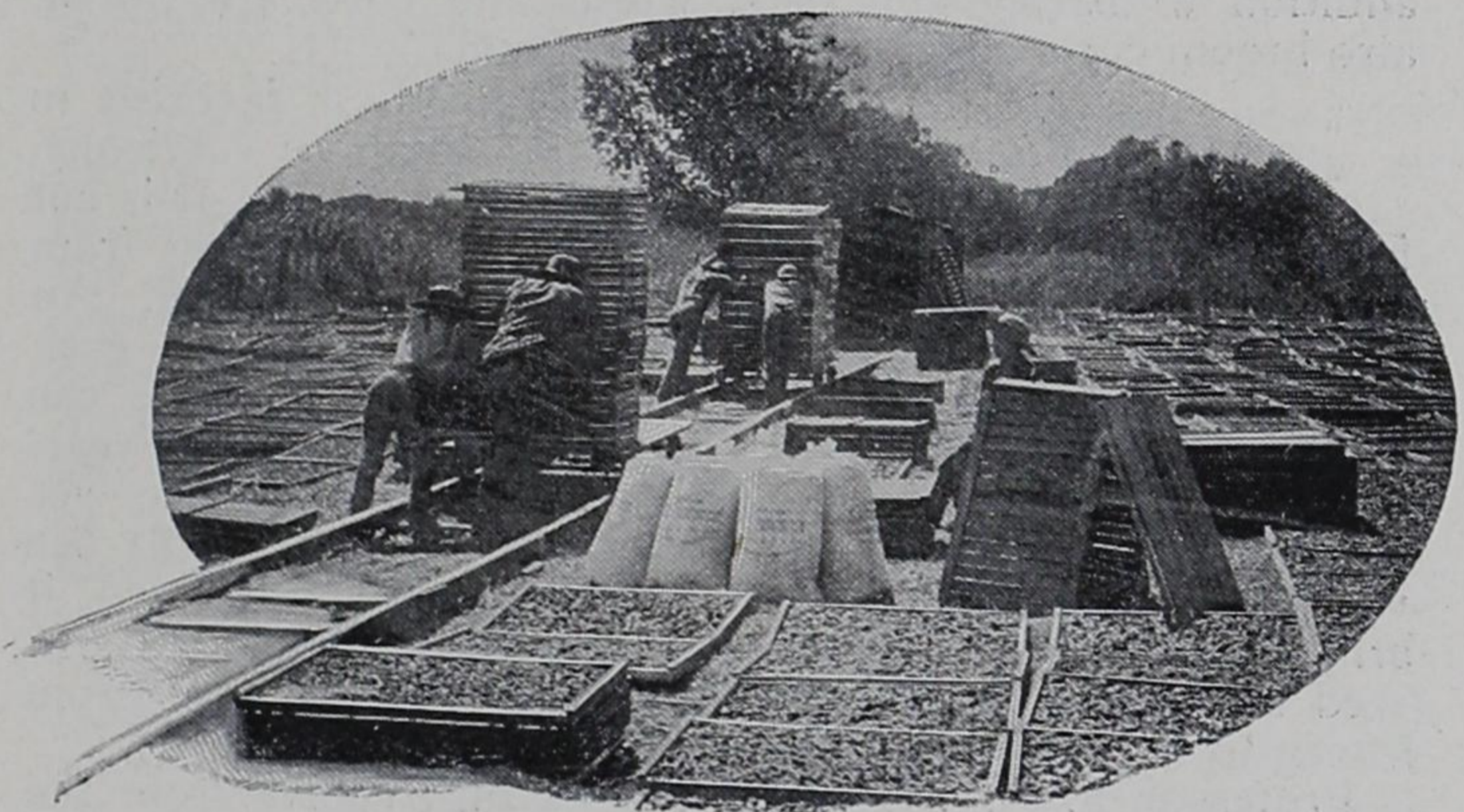
Fourth year in orchard, 60 pounds per tree equals 4,680 pounds, at 2 cents, \$93.60.

Fifth year in orchard, 100 pounds per tree equals 7,800 pounds, at 2 cents, \$156.

Sixth year in orchard, 150 pounds per tree equals 11,700 pounds, at 2 cents, \$234.

ALMONDS—PAPER SHELL.

Third year in orchard, 5 pounds per tree equals 390 pounds, at 15 cents, \$58.50.



FRUIT PACKING NEAR PHOENIX.

Fourth year in orchard, 10 pounds per tree equals 760 pounds, at 15 cents, \$117.

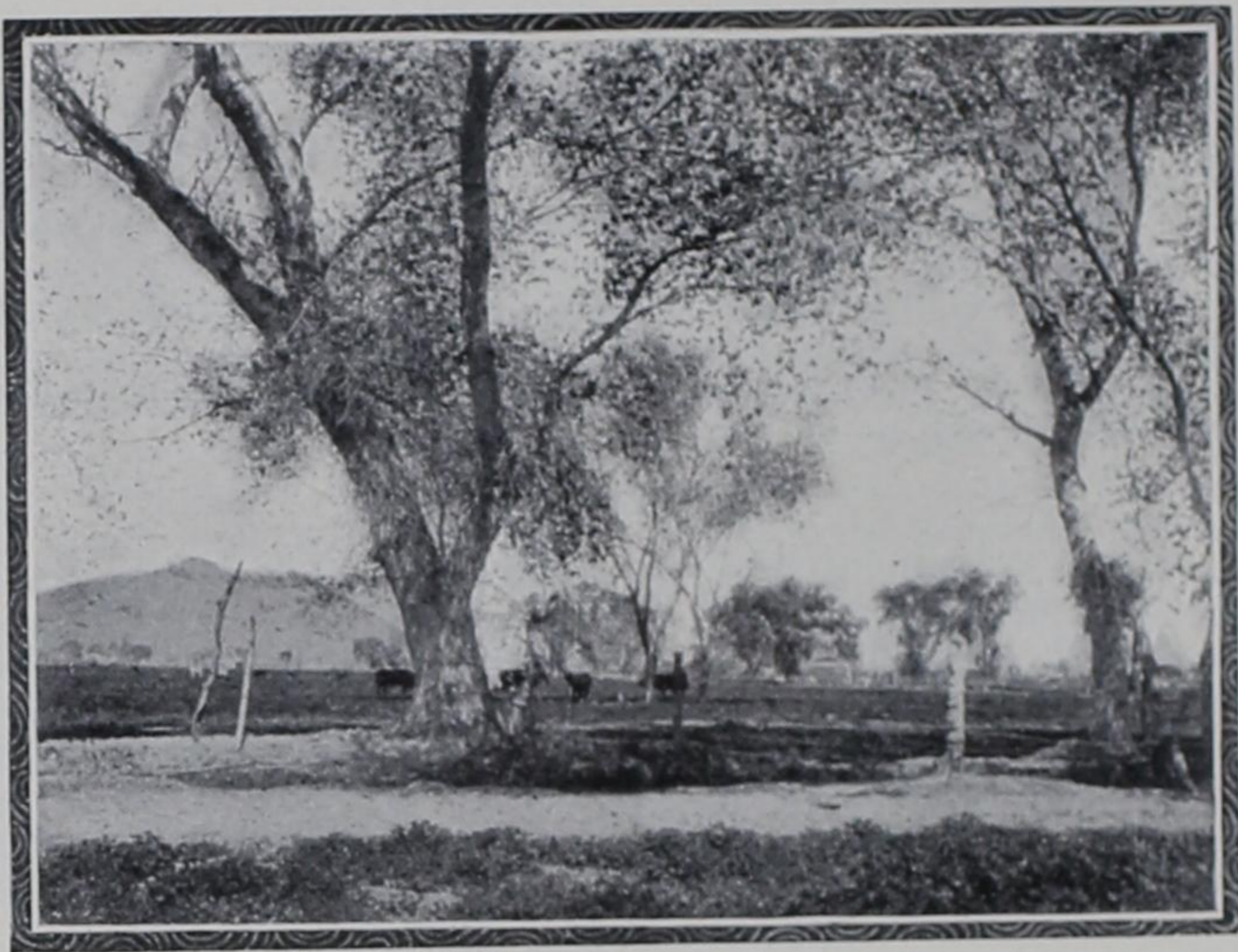
Fifth year in orchard, 20 pounds per tree equals 1,560 pounds, at 15 cents, \$234.

Sixth year in orchard, 30 pounds per tree equals 2,340 pounds, at 15 cents, \$351.10.

In the above calculation net figures only are given, so that no deduction is to be made other than the cost of care and cultivation per acre—the cost of picking and packing being taken into consideration by lowering the yield per acre, as also the price per pound.

CEREALS.

Of course grain thrives in such a region as we have described, but in some localities fruit pays better. This is a matter that is regulated somewhat by the nature of the land and the farmer. Barley and oats produce from thirty-five to forty-five bushels to the acre, and sell at from sixty cents to ninety-five cents per bushel. These grains are largely grown for hay and are cut in the



RANCH SCENE NEAR TEMPE.

milk. Alfalfa, however, is the principal hay in use. In addition to barley and oats, wheat and corn are raised, also broom corn, sugar cane and sorghum.

ALFALFA.

This forage plant, a favorite in central and southern Arizona, grows all the year round. It is cut for hay from four to six times annually. It produces from one and one-half to two tons per acre each cutting. An average crop is from seven to eight tons per acre, each year. Twenty head of swine or two head of cattle can pasture well on an acre of alfalfa throughout the year. Taking into consideration the lowest market price yet touched by alfalfa hay upon the farm, it will bring \$3 per ton, an acre giving a return of \$21 per annum. Baled, it brings from \$5 to \$12 according to the season. Alfalfa seed sells at seven cents to nine cents per pound. From fifteen to twenty pounds are required to seed one acre.

Professor F. A. Gulley, in one of his reports from the Arizona Agricultural Experiment Station, says, in speaking of alfalfa as found in Salt River Valley:

"It grows here in the greatest perfection. In the vicinity of Phoenix are some thousands of acres of alfalfa fields, and on these fields, grazing, or feeding on alfalfa hay, thousands of range cattle are now being fattened. Fed nothing but alfalfa, green or cured, a thousand-pound range steer will gain from two to three pounds per day until well fattened, and this gain is equal to that made on good hay and corn in the Mississippi Valley States."

AN EXPERIENCE IN ALFALFA.

Mr. E. G. Frankenberg, of Tempe, writing to the Board of Agriculture of Kansas says: "Since 1889 I have been growing alfalfa, and now have 360 acres. * * *

"In this valley the second year's yield is as good as any later, and five cuttings have been made, with about seven tons to the acre. The second or third cutting is used for seed, and not watered, cut with a self-raking reaper, stacked, and threshed with a clover huller. Hay is cut when in full bloom, raked as soon as possible, cured in

windrows, and stacked like clover. We never stack in barns, as we have no rains except as before noted, and unless hay is put up too wet, there is no trouble from moulding or heating. The hays keeps well in any size bales, but handles best in 100 pounds, and the baling costs about \$2.25 per ton. The ordinary yield of seed is about 250 pounds to the acre, and the expense of threshing and cleaning is about 2½ cents per pound.

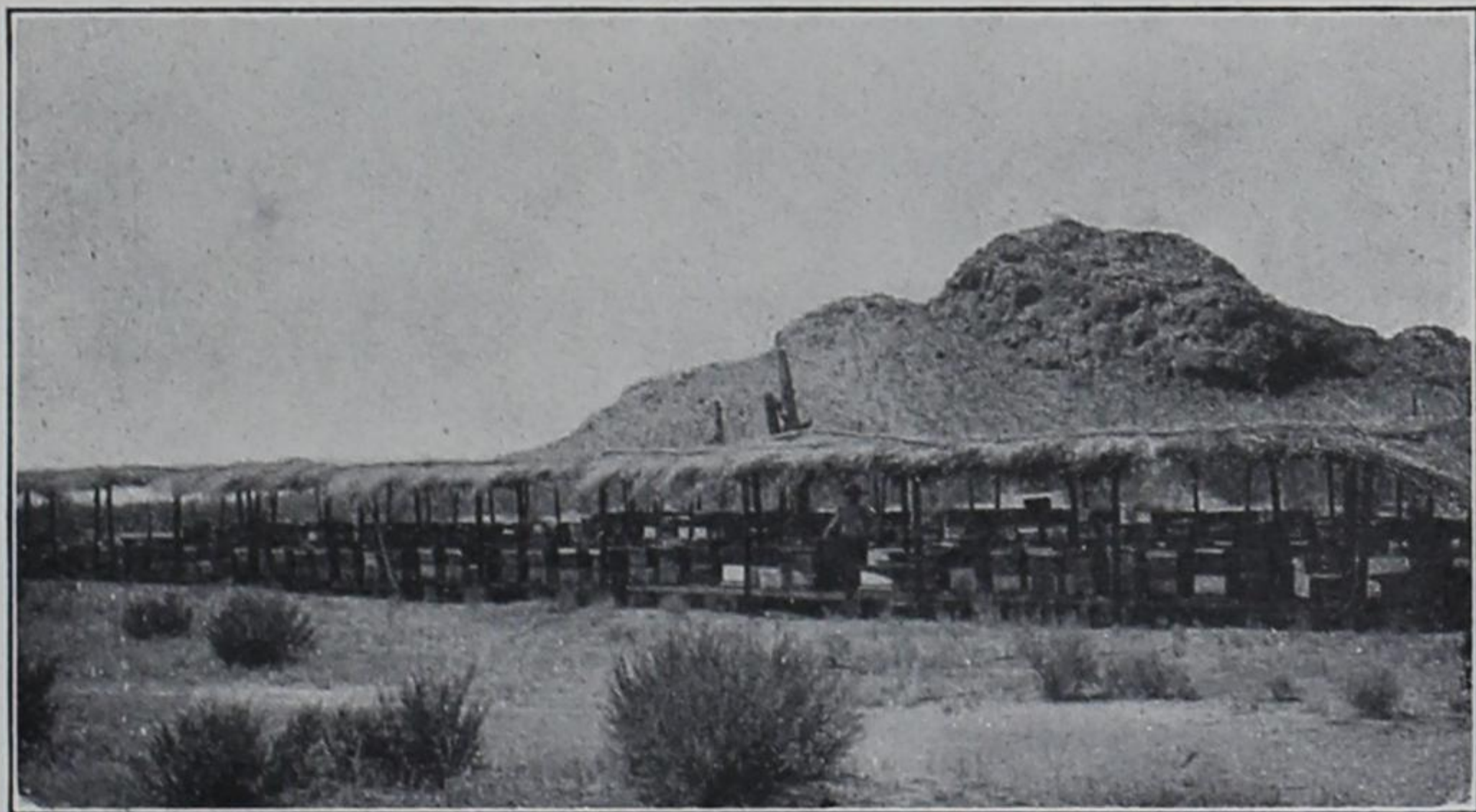
"Hay has been sold in the stack, measured, for from \$3.50 to \$9 per ton, and seed has brought from 6 cents to 15 cents per pound. Alfalfa land is hard to buy, as the man who has it wants to keep it, and I would say it is worth from \$50 to \$100 per acre. In 1892 one of my neighbors had, as gross returns for his hay and pasture, \$27.72 per acre. The next year I cut over 3 tons of hay per acre, sold at an average of \$5 a ton, and rented the pasture after that for six months at \$7.50 per acre."

HORNED CATTLE.

PUTTING FAT ON A BEEF FRAME.

In a previous paragraph it was said that the problem of raising cattle profitably, in spite of crowded ranges or "off seasons," had been solved in the valleys of Southern Arizona, and more particularly in Salt River Valley. The solution has been found in the alfalfa field.

Somewhat has been said of the generous provision nature has made for the immense herds of cattle all through the hills and plains of Arizona: as, for instance, the great variety of feed for stock, including under the popular name of "grasses," seed and root, browse and cacti, the mild climate, free from ice and snow and the dreaded blizzard; and finally, exemption from the necessity of storing great quantities of feed for the maintenance of the cattle during inclement seasons. Furthermore, no disease has ever made its appearance among the stock in the Territory. The frame and constitution of cattle bred upon the range is excellent, the only trouble being the over-crowding of ranges, and occasional droughts, which may render the herds unfit for market. Now, each year, the herds are brought in to fatten on the alfalfa fields, before marketing. Sixty days will recruit a poor herd into fine condition, while from three to four months will transform a live "beef frame" into prime merchantable beef.



APIARY IN SALT RIVER VALLEY, ARIZONA.

THE PROFIT OF IT.

As to common range stock that runs among the hills and plains getting its own living in its own wild way, and receiving from the owner no other yearly attention than the branding iron, it is readily sold at remunerative prices.

Transfer these steers to an alfalfa field, at a cost of 75 cents to \$1 per head per month, and the gain in weight will be 40 to 50 pounds during each thirty days, and the quality will advance to a value of 4 to 6 cents. In other words a range steer of 1,000 pounds, and valued at from 20 to 25 dollars, at the end of four months' pasturage, costing 4 dollars, will weigh 1,200 pounds, and is marketable at a price ranging from 60 to 80 dollars.

HIGH-BRED CATTLE AND THE DAIRY.

In Arizona, stock raising and agriculture are as yet interdependent. Unlike some of the great cattle countries of the West, where the farm has invaded grass lands and expelled or exterminated the cattle business, the cattle here have some 60,000 square miles to range over, and are then brought into the agricultural lands to be made fit for the market, to the mutual profit of the farmer and the cattle man. Furthermore, some of the owners of alfalfa land breed registered and high-grade Hereford bulls to turn out on the range. A uniformly colored herd sells better than a motley one, and Herefords, which are essentially grass cattle, bred to the hardy Mexican cow, produces a cross remarkable for its sturdiness and vigor, as well as for the markings of its blooded sire.

In addition to the Herefords, some ranchmen have imported Durham, Holstein and Galloway stock, and by annual culling the herds have greatly improved. Indeed, several years ago quite an interest was taken in the rearing of high-bred cattle, and, although the universal business



HOTEL ADAMS, PHOENIX.



CARNEGIE FREE LIBRARY, TUCSON.

depression affected the enterprise temporarily, it has recently been resumed with considerable enthusiasm, especially by dairymen.

The dairy business is generally conducted in connection with the ice-making and cold storage plant. There is this to be said about it also, that the cows yield most plentifully in the summer months when, because of the hot weather and long distance to large cities, the risk and expense of shipment is greatest and the profits proportionately small.

GROWING SWINE.

This industry has met with such success that it is rapidly increasing. The principal breeds are Poland-China and Berkshire, raised from stock originally brought from the Eastern States and California. Most breeders prefer the black, as best suited to the climate. There has been no sickness among swine in the country, probably because they are almost altogether raised on alfalfa and not pen fed. Young pigs, especially, thrive on alfalfa. For fattening matured stock for the market, barley, wheat and sorghum are frequently used. The increasing number of swine has built up a good trade with dealers in Mexico, Texas and California. As much as \$7,000 worth of hogs was raised on a half section of land last year, besides over one hundred head of cattle.

BEE RANCHES.

There are so many shining hours in Arizona the busy little bee is kept very busy indeed. In Salt River Valley there are about 4,000 colonies of bees. The sources of the honey crop are wild flowers, which are most abundant in the spring and fall, the mesquite trees and the ever serviceable alfalfa plant. The honey made from the two latter is of excellent quality. The product is shipped in car lots to Eastern markets and fair prices are obtained. The traffic is nearly altogether in extracted honey, put up in five-gallon cans, two in a case. Comb honey is put up in sufficient quantities to supply the local market,

OSTRICH FARMING. In 1891, Josiah Harbert of Salt River Valley, purchased a pair of California raised ostriches and brought them to his ranch. Although inexperienced in breeding and handling the birds, he has succeeded so well, that he now has 1200 of them on his farm. The business has proven most satisfactory, yielding a large and rapidly increasing income from sale of plumage, eggs and birds. He now has men in charge of the farm who have been trained to the business in Africa, and they declare Salt River Valley an ideal place for the industry. U. S. Custom House records show the importation of ostrich feathers during the past year amounted to a value of \$1,900,000, and the production of this country was \$208,000. Phoenix, Arizona, contributed very largely to this latter portion. The birds are said to be singularly hardy, seldom "off their feed" and never dying. Many are known to be centenarians.

THE TOWNS OF SALT RIVER VALLEY.

PHCENIX, WHAT IT LOOKS LIKE.

It is an attractive city! Maybe there are hard-headed, so-called practical men who do not care to hear about Phoenix's comeliness, preferring to hear about its resources. But the beauty of Phoenix is one of its resources, and is worth hearing about. Perhaps its fairness is all the more noticeable and pleasing because of the fact that to get to it, one travels over dusty miles of monotonous plains not yet painted green by water, that great artist of Arizona.

There are plenty of trees about the town, the name of any one of which is a romance—the olive, the pepper, the cypress, pomegranate and fig.

Then there are flowers, only the word does not convey its Arizona meaning to an Eastern mind, accustomed to potted plants, or carefully nourished gardens. Here is a very riot of flowers growing in season and out of season, and all the time out of reason. You will see hedges of geraniums, and adventurous fuchsias and heliotropes that



A TYPICAL VALLEY DRIVE.

will climb as high as they are permitted, and acres of beautiful lilies.

All of the dwellings around Phoenix are picturesque; those that were not made so by the builder have been by the shrubbery. The inhabitants have mostly come from the older civilization of the East and South, and are refined and cultivated, so that there is no lack of those graces which mean so much to the stranger in a strange land.

ITS POPULATION AND BUSINESS.

Phoenix is the capital of Arizona Territory and the seat of Maricopa County. Its population is about 14,000, although the presence of a large transient population, composed of tourists, health seekers, farmers, miners and cattlemen from all parts of the Territory, give the streets the busy aspect of a town its size.

It is well furnished with all the modern appliances of comfort, including gas-works, ice factories and electric light plants, 27 miles of electric street railway, and a telephone exchange; there is also a sewerage system, water-works and a fire department. There are rows of substantial business blocks, a theater and several public halls. A number of handsome state and county buildings are already erected, including the Territorial Insane Asylum, costing \$100,000, and Territorial capitol of fine proportions and built of enduring material. The Adams, a \$200,000 hotel has been added to the attractions of Phoenix. It is modern in every way—electric lights, elevators, baths, etc.,—and luxurious throughout. There are several other well-equipped hotels.

When it is remembered that Phoenix is not only the capital of the Territory but the trade center of Maricopa County, embracing an area of 9,354 square miles, a great deal of which is productive, it will be readily understood that there is considerable business done in the town.

Twenty years ago, the assessment rolls showed the value of real estate to have been \$1,857,437, but at the present time, 1904, it stands at \$17,191,853.27, personal property being included. Taxes are levied on about 60% of this amount.

SCHOOLS.

Phoenix has a complete system of public schools, covering eight years in the grades, and four years in the High Schools. Graduates from the latter are admitted to the University of California, and Leland Stanford, Jr., University and other leading universities with full credit.

In the remote districts, good schools are maintained for seven to nine months each year; and the course of study and text books are uniform throughout the Territory.

EDUCATION IN ARIZONA.

On the higher educational lines, at an early day Arizona established the "Arizona University," and gave it a desirable location at Tucson, and there being pressing need of it, as nursery for teachers for common schools, it also established the "Territorial Normal School," at Tempe.

During the year 1903, 25,951 children of school age were enrolled in public and private schools. Teachers were paid \$234,682.40, averaging \$80.33 per month for each male teacher, and \$67.53 for each female teacher. This gives Arizona the rank of third among the States and Territories of the United States.





ARIZONA UNIVERSITY, TUCSON.

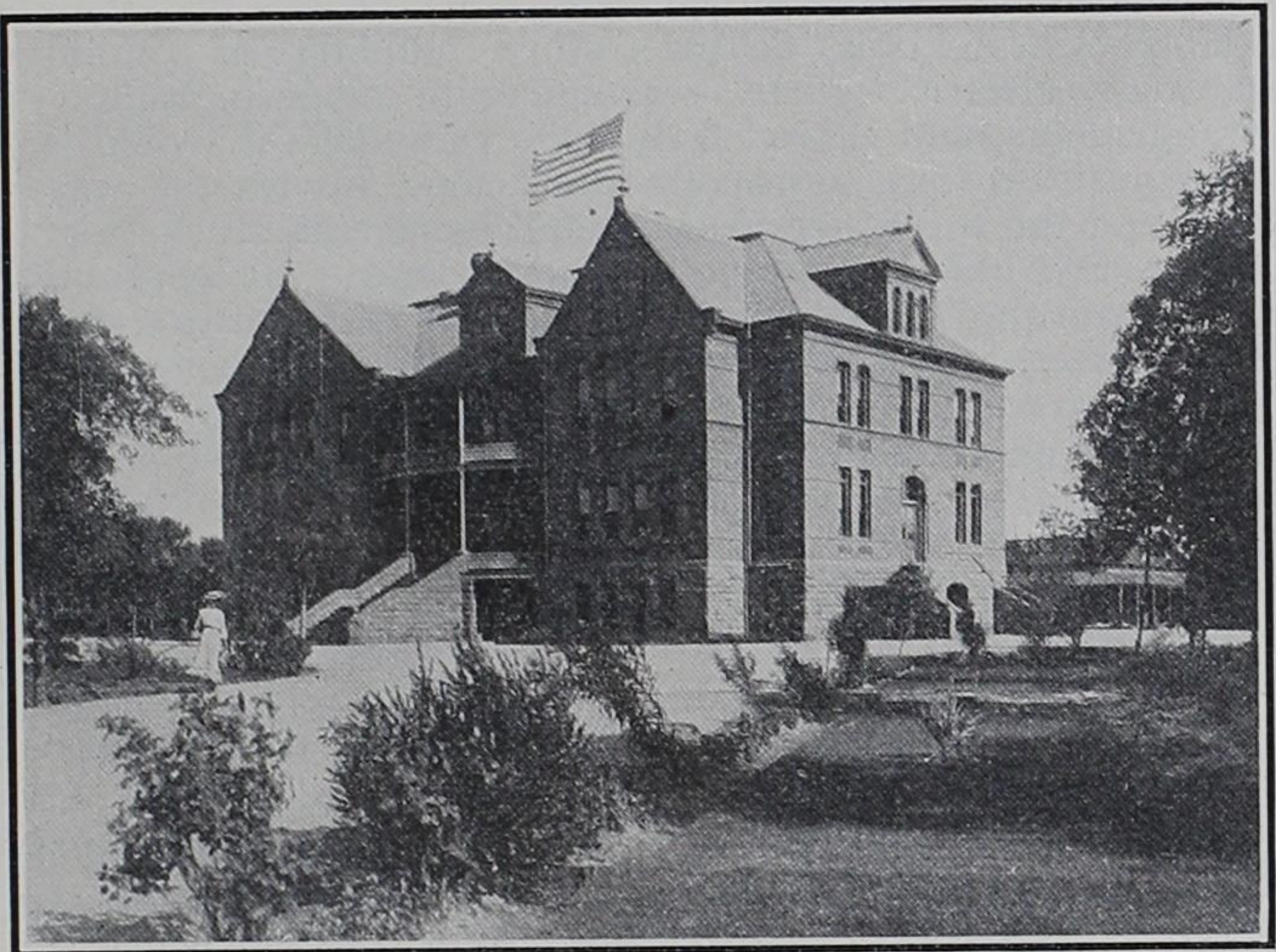
Of special humanitarian and romantic interest, are the Indian schools of Southern Arizona.

At Yuma, for benefit of its tribe, is a notable school located in the verandah'd buildings on elevated grounds across the Colorado; its site, in July, 1781, made historic by destruction of Mission Concepcion.

At Phoenix, three miles north of the city, is an exceptional institution, educating pupils selected from many of the Pacific Coast tribes, and including large numbers from those of Arizona and New Mexico. The attendance ranges from 600 to 800.

At Sacaton, on the Gila, a few miles distant from Casa Grande, is another fine school, with liberal accommodations, including five dormitories and class-room building that cost twenty thousand dollars.

At San Carlos, on the Gila, and at Rice, eleven miles distant, both on the Gila Valley, Globe & Northern Railway, are Indian Schools for education of Apache children; hun-



NORMAL SCHOOL, TEMPE, ARIZONA.

dreds of them in attendance. These schools are on the celebrated White Mountain Indian Reservation.

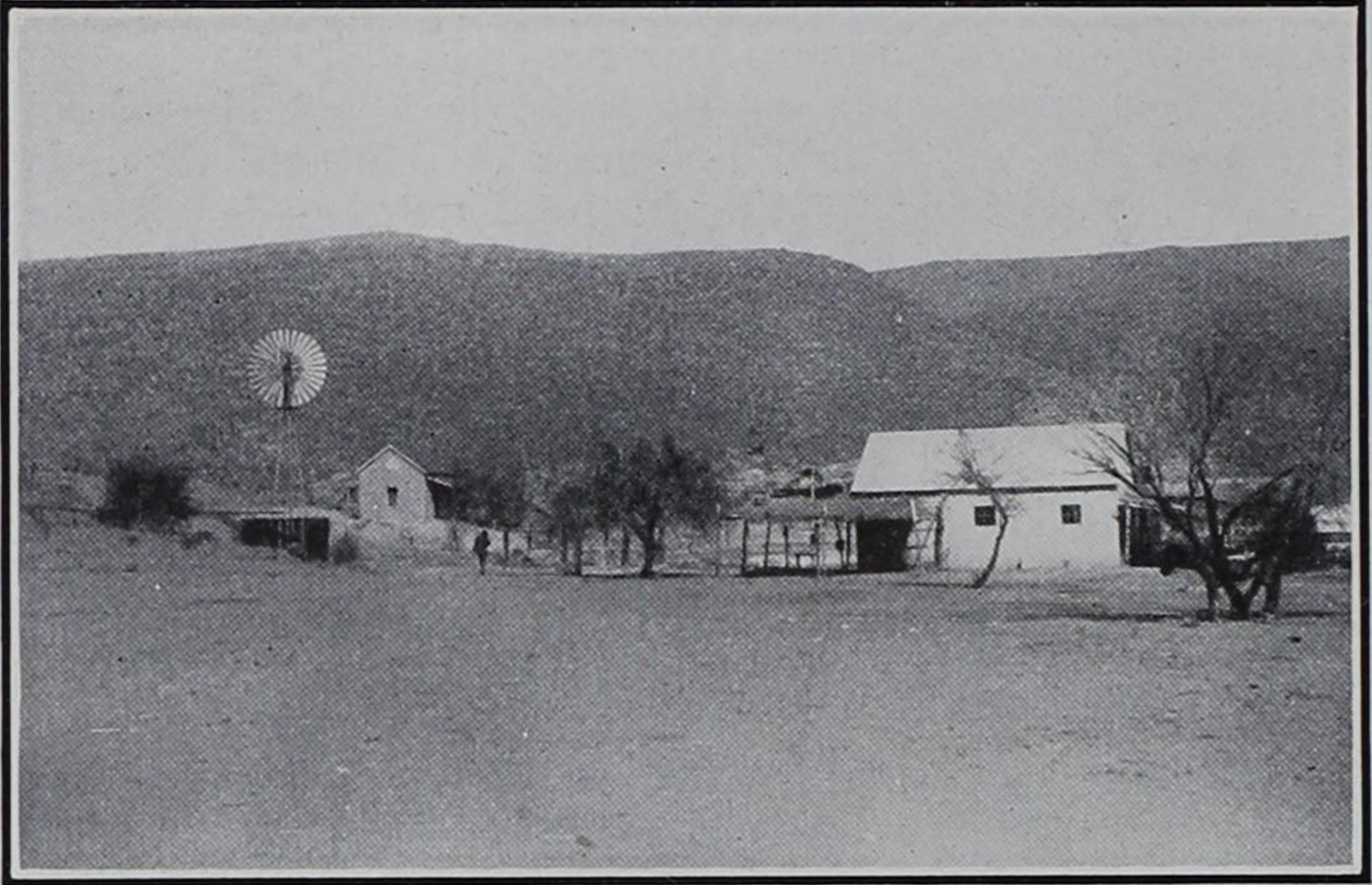
To see the children, singly, and in picturesque groups, and witness the intercourse between them and their visiting parents in savage attire, awakens deep sensibilities. To the Indian mother it is no light affair to tear from her arms and home the child she loves and surrender it to a civilization that will separate them forever.

TEMPE.

The Butte City of Arizona is on the south bank of Salt River, distant nine miles from Phoenix.

It has streets that are tree-lined, broad and charming; is electric lighted, and electric watered.

No better water supply for beverage and domestic uses can be imagined, for it offers no possibility of contamination, being drawn from wells 180 feet in depth, and by electric force sent to capacious reservoirs 200 feet above the city streets.



AGUA CALIENTE SPRINGS.

Hotel Casa Loma, a three-story building of durable materials, electric lighted, supplied with modern, sanitary arrangements, and encircled by wide verandas—it would be an acquisition to a metropolis—in Tempe, invites the wayfarer and the sojourner to enter and be at rest.

The city has a flour mill, known and well approved throughout the Territory, and a creamery of superior excellence, butter, fresh and aromatic from fields of clover.

There are two banks, and a daily and weekly paper; churches and fraternal societies; an excellent public school system, and, as a crowning glory, the Territorial Normal School.

MESA CITY.

Is situated on a plateau near the eastern end of the county. The vicinity is especially favorable to vines and fruit. The population is about 2,000. There are two trains daily to Phoenix and Tempe.

AGUA CALIENTE SPRINGS.

A notable collection of thermal springs, called Agua Caliente, is near the south-western corner of Maricopa County, and reached by eleven miles of staging from Sentinel, a station on Southern Pacific railway.

The springs are eight in number, gushing forth, instinct with life. They vary in chemical constituents, and in temperature from 80° to 104° Fahrenheit. The waters are palatable, and the internal and external use of them achieves cures that border upon the miraculous. Good hotel accommodations are in supply, and charges reasonable.

GILA BEND

Is fifty-five miles southwest of Phoenix, and is the center of a fertile farming district that extends for miles along the Gila River. While it has not yet the elaborate irrigating system that surrounds Tempe and Phoenix, its alluvial soil is similar to that of the Valley of the Salt, and it is only a question of time when canals will place it in the same prosperous category. Gila Bend is also a promising station on the Southern Pacific Company's Sunset line.

MARICOPA.

To the eastward of Gila Bend is Maricopa, an important station of the Southern Pacific Company, and the junction of the Maricopa and Phoenix & Salt River Valley Railroad with the Southern Pacific. From this station there is railway connection with Tempe, Phoenix, and other points of general supply and exchange in the Valley.

PERSONAL EXPERIENCE—THE TESTIMONY OF A FEW.

From the "Phoenix Daily Herald" of January 26th, we take the following "experiences" at random:

A BEGINNER.

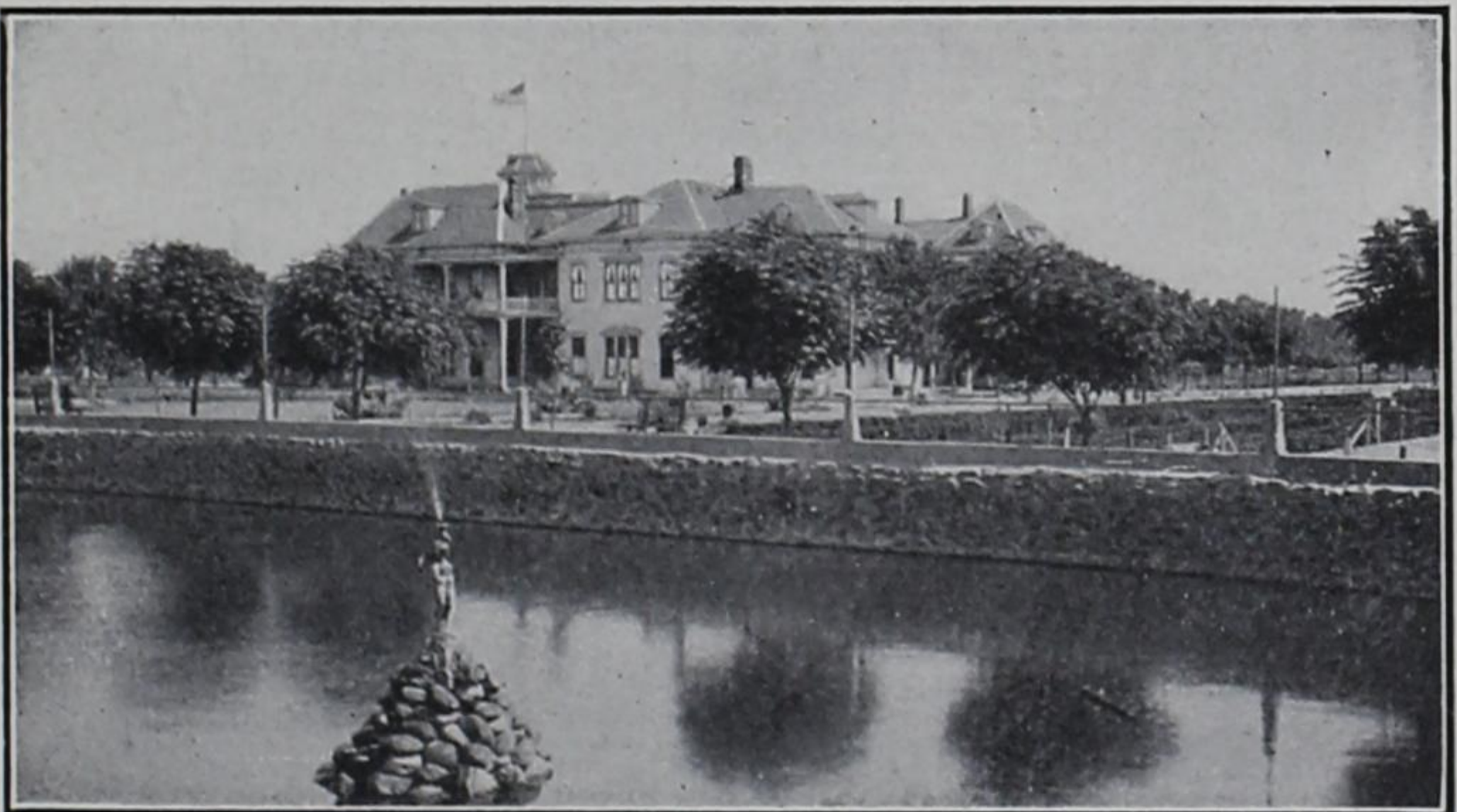
Mr. Frank Baum, a recent settler in Salt Valley, in a letter to a friend dated August 19th, published in the Sidell (Ill.) "Reporter," says: "I want you to call and see me on your way out or back. You will never regret it. I will take you around and show you our Valley. I can show you 1,000,000 acres of the finest valley land on earth."

**A FLYER
IN PEANUTS.**

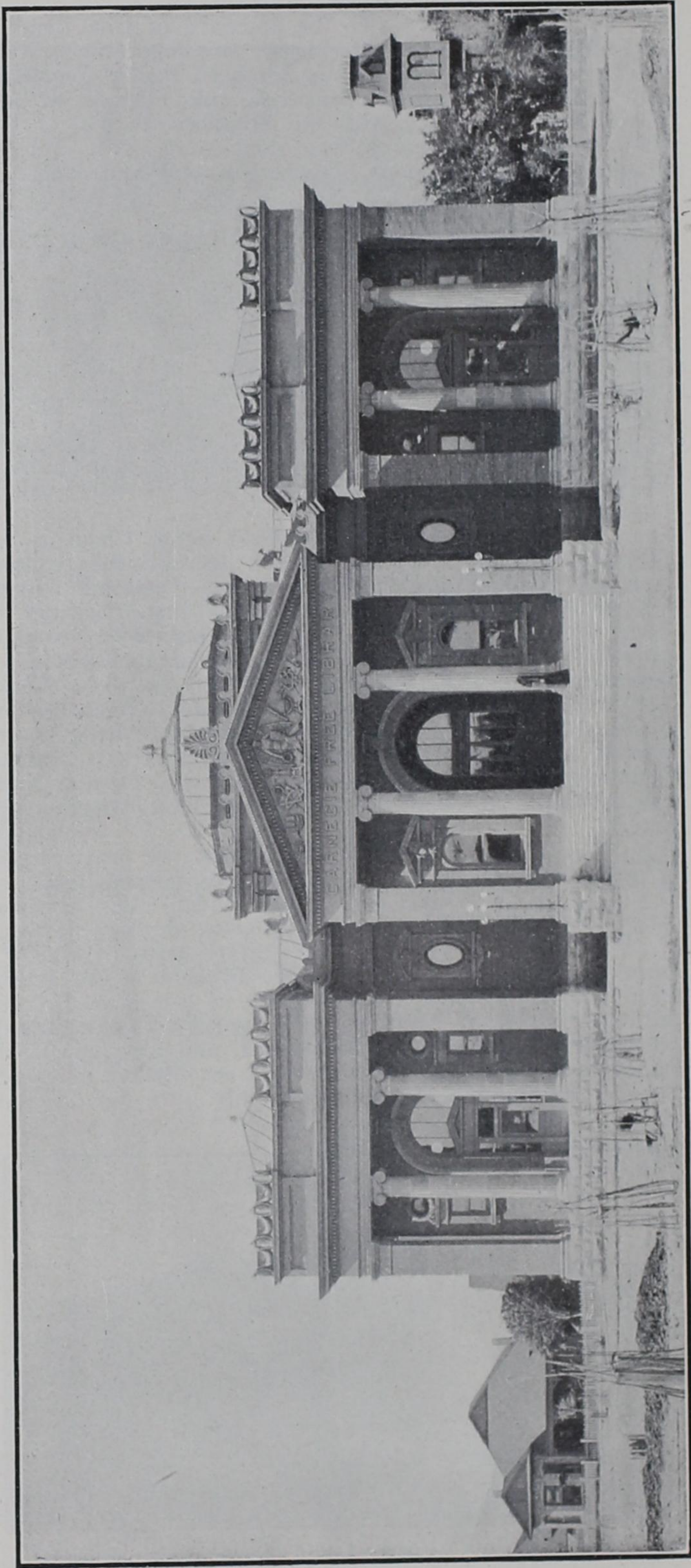
Mr. Winfield Scott, Chaplain on the retired list of the United States Army, writing from Phoenix, states that, desiring to pay the expenses of an orange grove while the young trees were growing, it occurred to him to plant peanuts between the rows. He did so, and with such success that "the present year I extended my planting," he says, "and have obtained equally good results. My crop will yield me about 250 sacks of large, first-class nuts of superior quality. * * * As near as I can estimate, they will pay a revenue of at least \$75 per acre."

**A MISCELLANEOUS
FARM.**

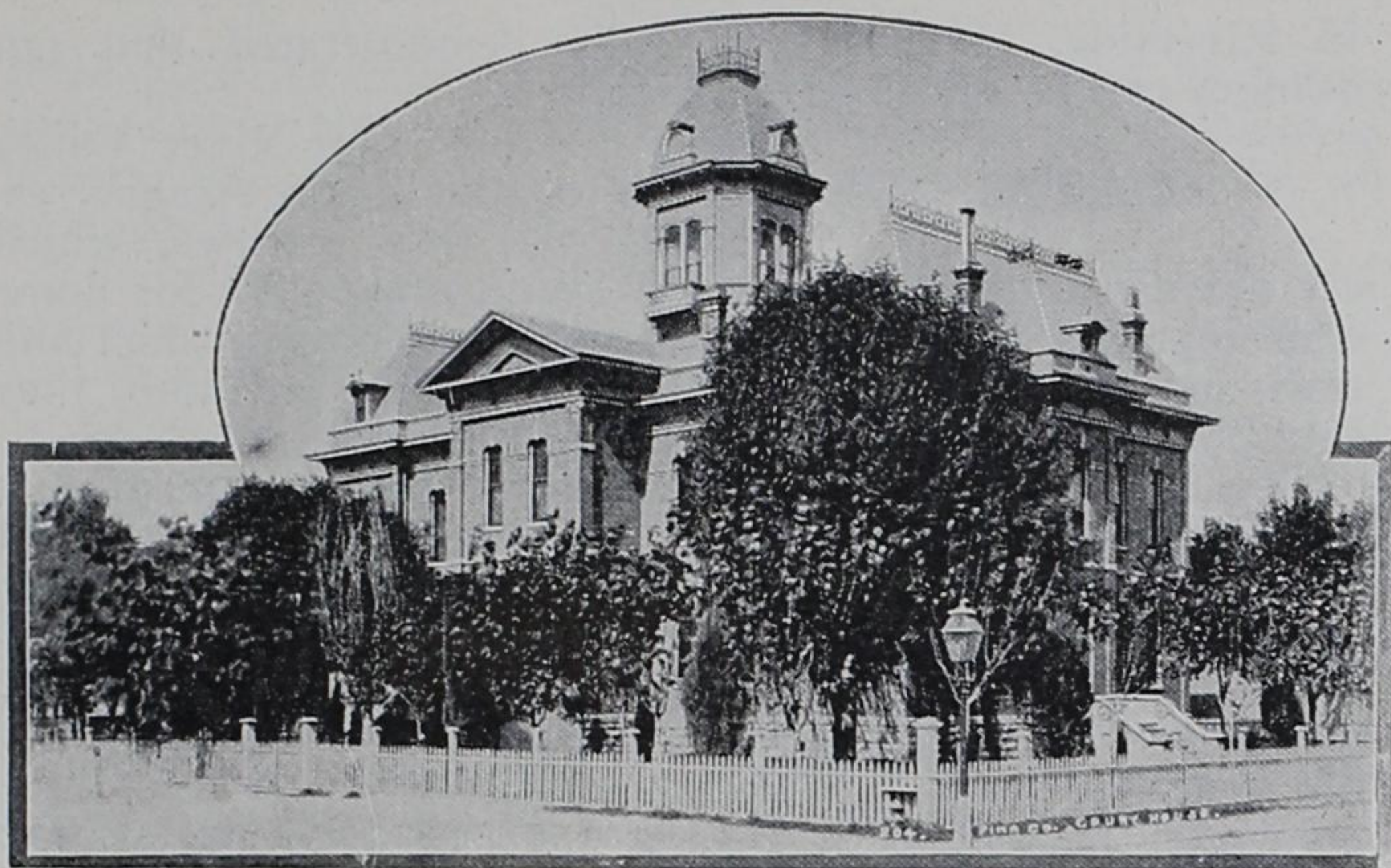
Mr. M. Baugh, we learn from another source, farmed seventy-five acres under the Arizona Canal Company, during the past season. "Sixty acres of which," he says, "I put in barley, and the balance, fifteen acres, in alfalfa. From this, since the first of last May, I have sold \$50 worth of Chickens, \$250 worth of eggs, \$2,300 worth of hogs, \$50 worth of turkeys, and \$400 worth of honey, making a gross income from seventy-five acres of \$3,050. In addition to this, I not only have the original



A CORNER OF THE CAMPUS AT THE INDIAN SCHOOL, PHOENIX.



PUBLIC LIBRARY, TUCSON, ARIZONA.



COURTHOUSE, TUCSON.

stock with which I started, but they have increased in value at least \$500, so that really the seventy-five acres have produced \$3,550.

AN ORANGE ORCHARD.

Mr. W. D. Fulwiler, in a pamphlet issued by the Arizona Improvement Company of Phoenix, says, in regard to oranges: “* *

* * as you are aware, we have 85 acres which will come into bearing next year, but have only four or five acres now in bearing. I had Mr. Tait count the oranges on some of the trees from which he was certain no oranges had been picked, and found that they ran from 146 to 264 per tree. Taking the average at a box and a half per tree, at \$2 per box equals \$3 per tree, and at 69 trees per acre gives \$212 per acre, exclusive of boxes and dealer's profits. The yield will increase from year to year until, at full bearing, they will produce from 6 to 8 boxes per tree. The trees in bearing are now five years old.”

Mr. L. H. Hamilton, Secretary of Phoenix and Maricopa County Board of Trade, in a recent communication says: “We have ample evidence that oranges can be grown in highest perfection in Salt River Valley, and made a commercial success. The critical markets of Chicago and New York have welcomed them in competition with the most favored. Years ago—in San Francisco Mechanic's Institute Fair—the first prize medal was awarded to oranges of Salt River Valley. This favorable climate ripens its fruit in November, and reaches the Eastern markets in advance of the general harvest. In the valley at this time (1904) about 1,000 acres are planted to Washington Navels. They are of large size, with thin, high colored skin and delicious flavor and fragrance. The entire crop is sold before Christmas. Last season, after supplying home demands, many carloads were sent abroad.” In confirmation of Mr. Hamilton's report this item from “Press” of Riverside, Cal., will have interest: “Q. T. Brown returned from the Gila Bend Country, Arizona, last night. He brought back with him a box of navel oranges, grown about eleven miles from Phoenix, in Salt River Valley. These oranges are magnificent specimens—good size, rich color, very sweet and finely flavored. They ripen in November, a couple of months earlier than here

in Riverside. It has been fully demonstrated that fine oranges can be raised in Arizona."

DATES.

Dates thrive in Salt River Valley as well as they do in Arabia; especially the finer varieties, which are not usually exported to this country, but kept for home consumption. At first, planted as ornaments to ranch and town houses, it was found, that by a little attention, they could be made a profitable source of revenue.

The U. S. Government has taken up the question of date growing, and has an experimental grove of ten acres of imported and native-grown trees a few miles from Tempe. Individual growers are adding to their trees, so that within a few years the shipping of fresh and dried dates will be commenced at Phoenix, and Southern Arizona will name the date as one of its important products.

SUGAR BEETS.

A series of practical tests have been made, showing beyond a doubt, that sugar beets may be profitably cultivated in Salt River Valley.

The yield was an average of 25 tons per acre, with 16 per cent of saccharine matter and 80 per cent purity.

Preliminary steps have been taken to establish a beet sugar manufactory, but the fruition is not in sight.

EGYPTIAN COTTON.

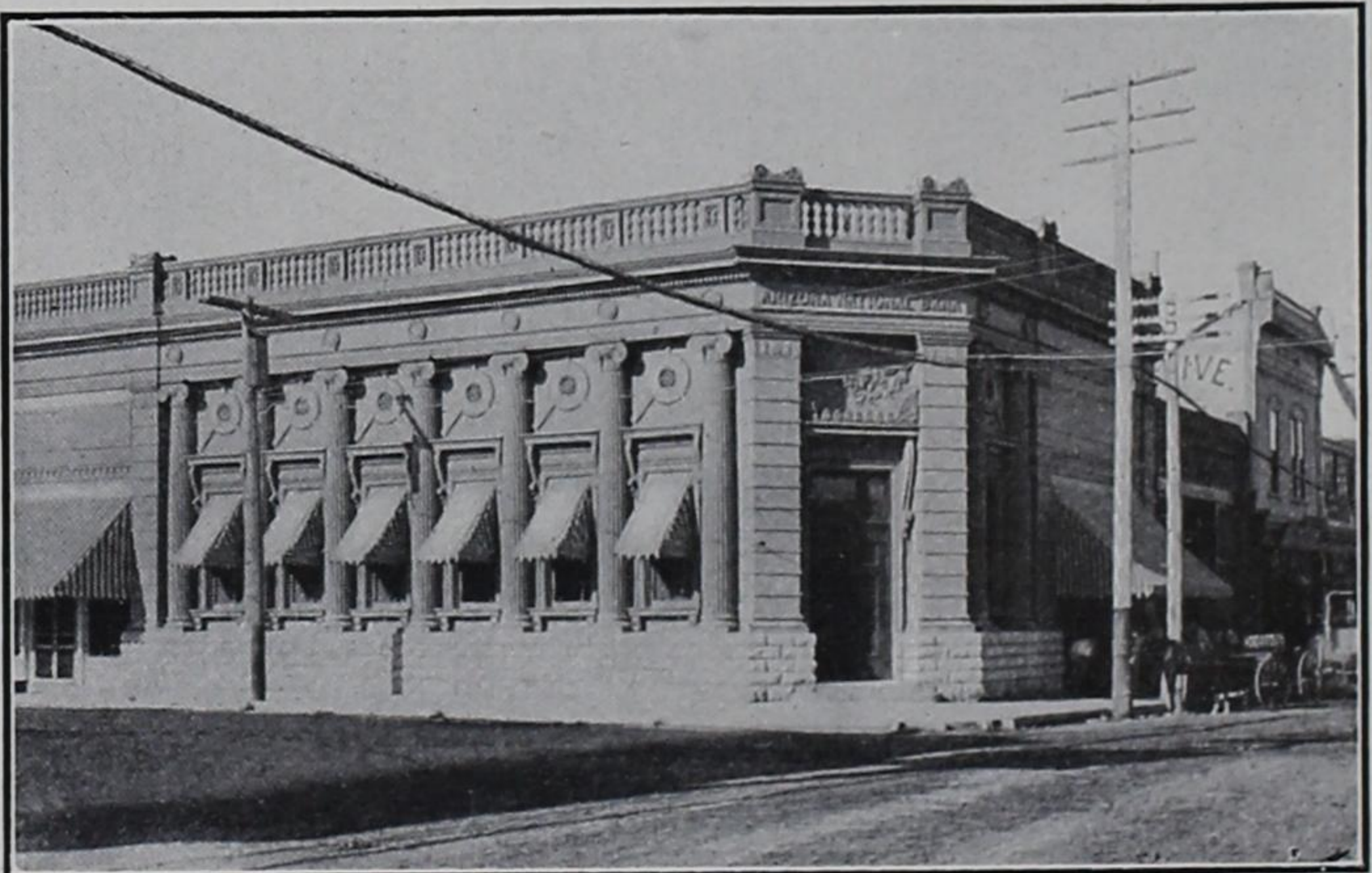
The experimental farm near Phoenix is showing fine results with Egyptian cotton. The fibre is of excellent texture, of satisfactory length, strong and silken.

Samples are now under examination by Department of Agriculture in Washington, and the soil of Salt River Valley being similar to that of the Nile, it may be expected these tests will give good results.

The Pima Indians of Arizona manufactured fabrics from cotton raised in these valleys long before European settlers cultivated it on the Atlantic seaboard, or in the Mississippi Valley. In recent years the plant has been grown in Salt River Valley, but not in sufficient quantities to create a market.

CANAIGRE.

Professor W. Eitner, of Vienna, an authority on all matters pertaining to the manufacture of leather, recommends the use of this root in tanning on

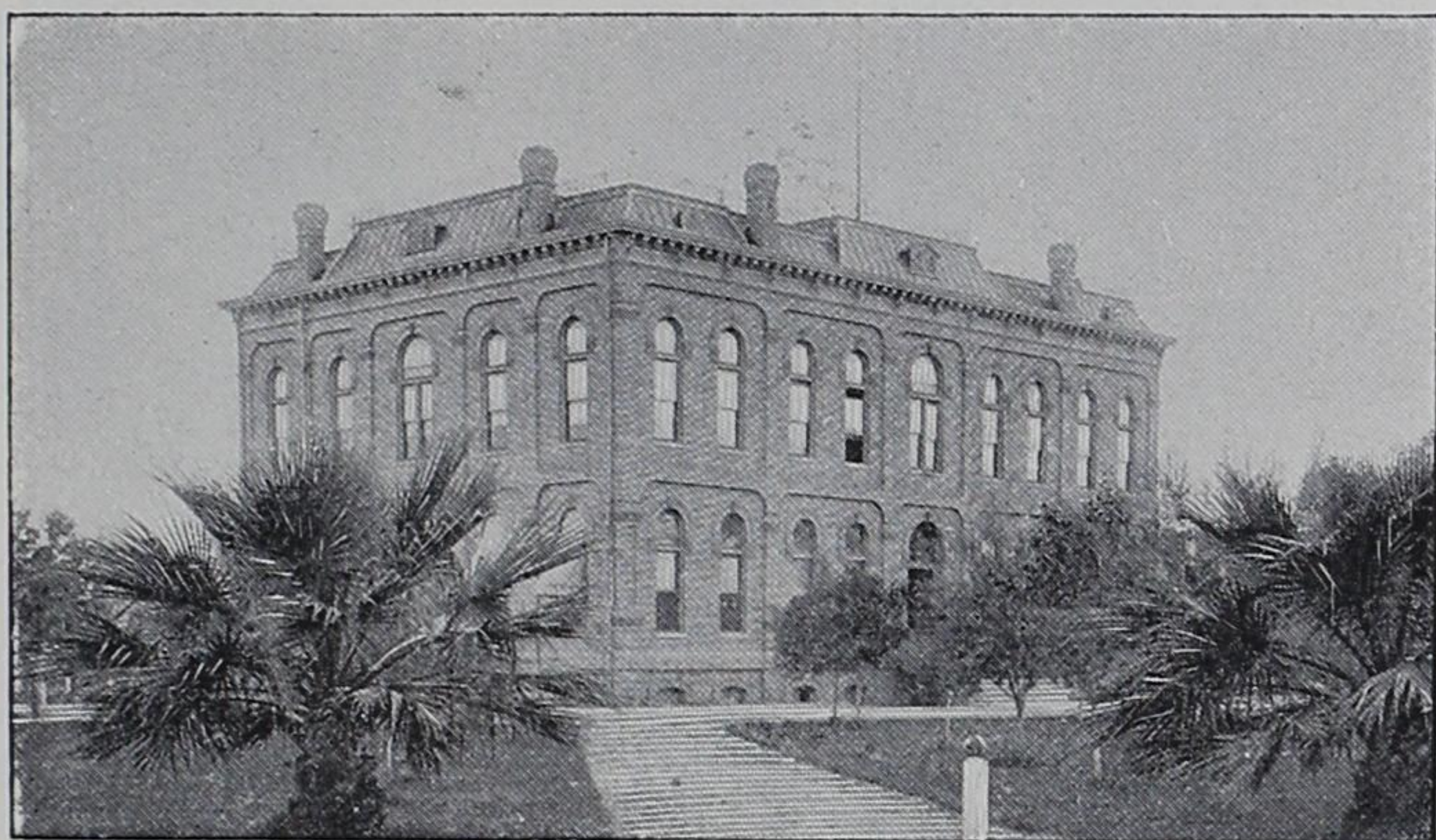


TUCSON BANK.

account of its quickness, its filling qualities, and its beautiful colors. He considers it especially adapted for tanning uppers, fine saddlery, and fancy leathers, either alone or in combination with other materials.

The cañaigre root is found growing wild in Arizona and has long been used by the Mexicans as a tanning material and as a medicine, but only in recent years has it attracted attention as an article of commerce. An analysis by Mr. Vaelcker, of Galveston, gives 23.16 per cent of tannic acid. Cañaigre has been gathered in its wild state and shipped abroad by various individuals and companies, until the supply near lines of transportation became exhausted and it no longer paid to gather it.

The Arizona Agricultural Experiment Station, a department of the University at Tucson, has investigated its habits with the possibility of cultivating it, and has issued an exhaustive bulletin on the subject. Mr. C. B. Allaire,



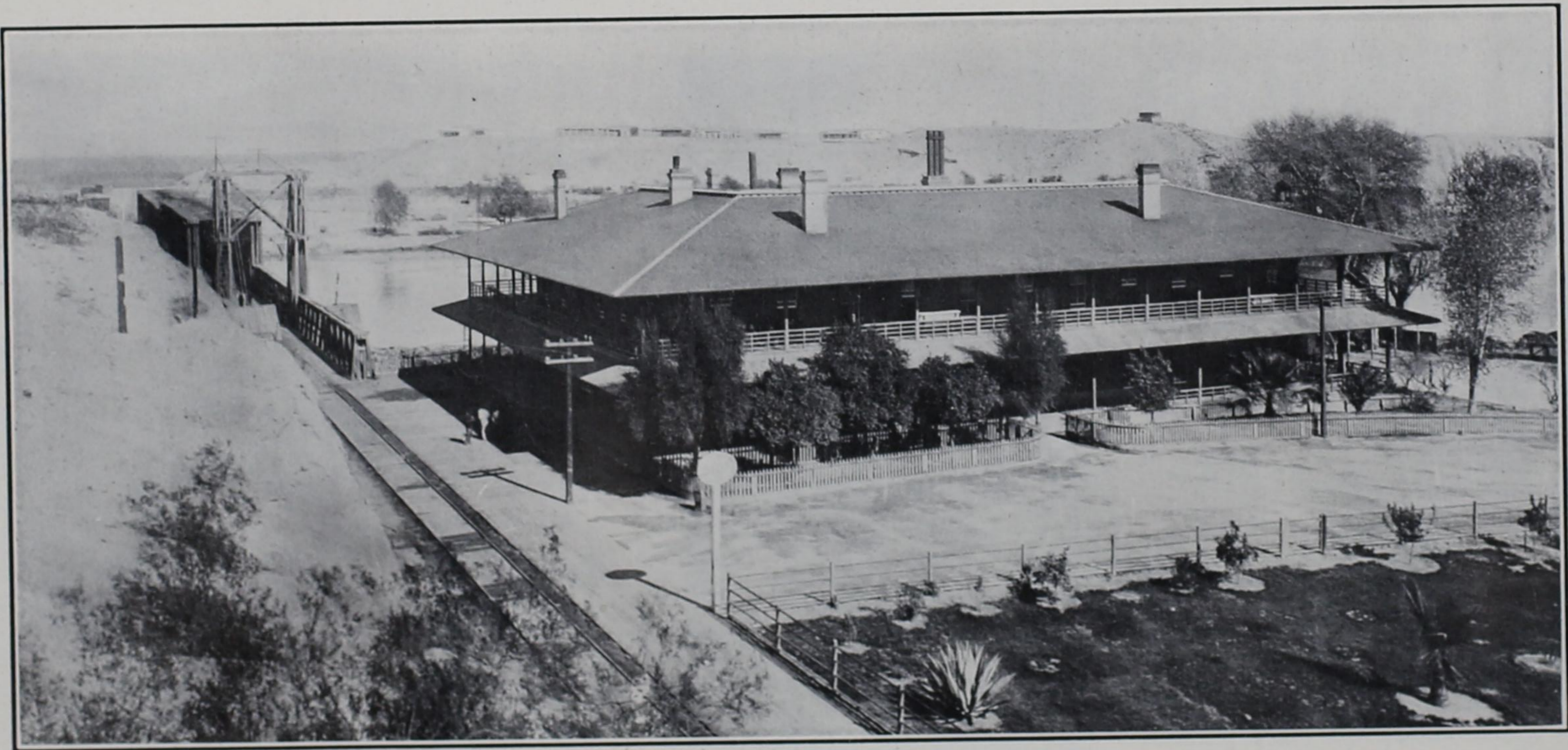
CITY HALL, PHOENIX.

in an article in the "Irrigation Age," of November, 1894, says: "Cañaigre makes an excellent substitute for gambier, having all the desirable qualities that it has, and others that it does not supply, and it is as a substitute for it and as a modifier of the tannic barks that will justify a liberal demand for it, when its merits are more generally understood.

"As a crop on irrigated lands it has advantages that make it very valuable in the economy of agriculture, not so much on account of any enormous profits that it will yield, as from the fact that with a limited water and labor supply, the tillable acreage can be nearly doubled."

SUGAR CANE. The sugar cane thrives in Southern Arizona, yielding 1,000 pounds of sugar to the acre. The product is generally turned into syrup which is of good quality and sells at the usual market price.

BANKS AND BANKING. Deposits of National Banks in Arizona for 1903 were \$3,730,784.89; capital stock \$602,500.00; total deposits of Territorial banks, June 30, 1903, were \$4,750,569.98. capital stock \$773,310.00; deposits aggregate \$8,481,354.87, aggregate capital stock \$1,375,810.



THE SOUTHERN PACIFIC DEPOT AT YUMA.



CULTIVATING PEACH ORCHARD, SALT RIVER VALLEY.

TAXATION.

Arizona is setting an example of wise statesmanship. Assessments are made on a valuation of about 60% of market worth, and the average tax is indicated by that of 1900, when it was 1.14 per cent, and 1901, 1.17 per cent. The levy for 1903 per \$100 valuation was only \$1.05.

TAXABLE PROPERTY.

The final equalized valuation of all the taxable property in Arizona for the year 1903, was \$43,088,040.62—showing a net gain over 1902 of \$4,004,863.05.

PIMA COUNTY.**ITS MINES.**

Extending along the southern border, with the Mexican State of Sonora for a neighbor, Pima County covers an area of 9,500 square miles. It is the oldest mining region in the United States. Who first discovered silver in Pima County, and when, no one knows. The Jesuit priests found evidence of the mines having been worked, when they first began operations in this region, as early as the seventeenth century. The world-famed *bolas de plata* discoveries of 1736-41 were in the Arizona mountain range, near the Sonoran border of Pima County; balls and plates of native silver were abundantly found; one of these, by weight, in friendly relation to a ton avoirdupois. They were claimed by the Government as treasure-trove silver (*criadero de plata*) and thereupon the miners ceased to find them. Bolas are yet found—not alone *de plata*, but *de oro* as well.

GOVERNMENT LANDS.

There are 6,714,000 acres of land in Pima County, of which 1,058,210 have been surveyed, and only 157,560 acres of this amount have been filed upon in the Land Office; 256,630 acres consist of Indian reservation and private land grants. The remaining 5,241,600 acres are unsurveyed. Here is a large opportunity for colonization and irrigation enterprises.

TUCSON.

Perhaps it is not generally known that the "ancient and honorable pueblo of Tucson" is the oldest town in the United States, despite the claims of St. Augustine, as set forth in our youthful geographies. The Arizona "Citizen," in its New Year's number, calls attention to this fact, and how Friar Marcos Ziza, who accompanied General Coronado when he founded the town in

1540, chronicled the event and its date on vellum in a fair clerkly hand. We wonder what Father Ziza would say if he saw his honorable pueblo at the present day, its adobe walls, or what is left of them, shrinking in the glare of electric light, and crumbling to pieces with the jar of railroad trains. Being a decorous man and a scholar he would probably veil his remarks in Latin.

Tucson has a population of about 10,000. It is the county seat, and is also the site of the Territorial University, whose excellent work and handsome buildings add to the intellectual and architectural reputation of the city. It is the business center of a large mining, cattle and agricultural region. It has ample hotel accommodation for all who come.

HYGIENE.

Tucson's elevation (2,390 feet), and freedom from fogs and miasmatic exhalations, invite an invalid world to come and be healed.

Out-door life is an essential factor in the cure of many forms of disease; especially so, of those fostered by



A STREET SCENE IN TUCSON.

modern hyper-refinement. The patient must leave the crest of artificial living's rainbow, and get down to mother earth; this he can safely do, in Pima County, Arizona. Let his days (365 of them in the year) be spent in judicious equitation—following the herds, or following his brooding fancies; and the restful nights, in view of the stars.

Tucson boasts a fine building with which to house its public library, and the quarters of the Consolidated National Bank are very creditable to Arizona enterprise.

SANTA CRUZ COUNTY.

This County, of which Nogales is seat of justice, was created out of Pima County, by recent act of the Legislature. It is smallest as well as youngest of the Arizonan family, but is able to maintain independent government, having great wealth in flocks and herds, in arable lands and paying mines. Its principal town is Nogales



WASHINGTON STREET, PHOENIX.

(Spanish for walnut grove) an attractive place to visit, bright in the variety of pigments with which its homes are painted. It has several excellent hotels.

YUMA COUNTY.

Yuma County covers the southwestern corner of Arizona. The Gila River flows through the county for one hundred miles, in its course creating a rich and fertile valley. On the western side it is bounded by the Colorado for two hundred miles, and this water proximity also carries with it conditions favorable to successful husbandry. A short distance below the town site the Irrigation Land and Improvement Company of Yuma has opened a canal for diversion of water from the Colorado, and now has the ability to irrigate 50,000 acres of Arizona land tributary to Yuma. Interested persons, passing through that city, should stop over and make personal inspection of this transformation of desert to garden. At the south it is bounded by Sonora in Mexico. Yuma is county seat, and is also the location of the Territorial prison. The city contains a number of fine buildings, and to the traveler, most important of them, Southern Pacific Hotel, an airy, pleasant caravansary on the very bank of the Colorado, and in close touch with the trains of Southern Pacific, and of its ponderous bridge of massive steel and granite that spans the river.

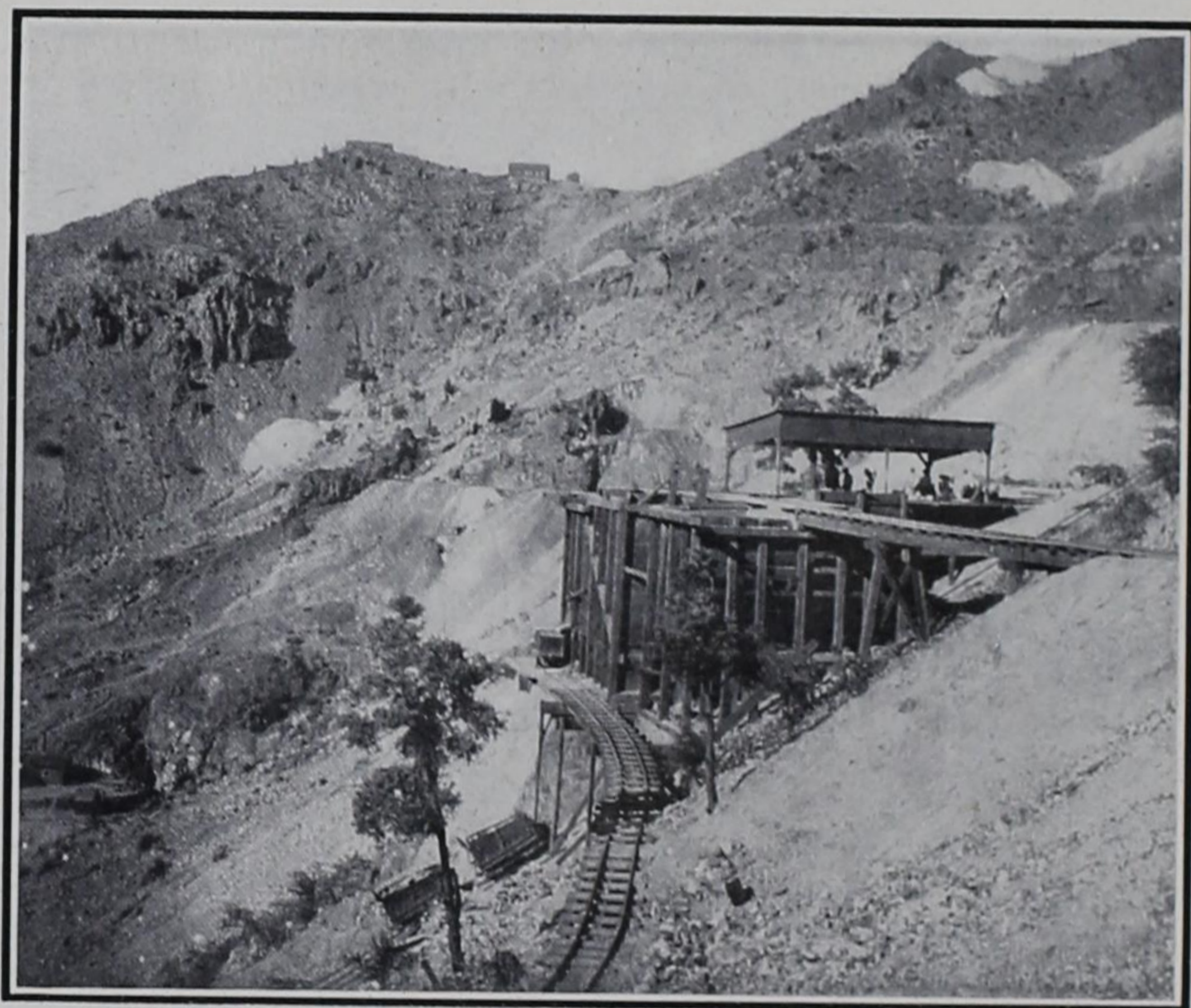
PINAL COUNTY.

Is a country of open, grassy plains dotted with clumps of barren mountains. The Gila flows through it from east to west and its southeastern end is watered by the San Pedro. The total area is 5,210 square miles. It possesses large and rich tracts of agricultural land, excellent grazing grounds, and some of the most valuable mines yet discovered in Arizona. Besides ledges of gold, silver and copper, large deposits of coal have been found within its border, which will, no doubt, yet prove valuable. Florence, the principal town of Pinal, stands in the valley of the Gila and about half a mile from the stream. It is twenty-five miles northeast of Casa Grande station on the Southern Pacific and eighty miles north of Tucson. The place has a delightful situation, and, with its pleasant homes, surrounded by trees and shrubbery, its pure water and healthy climate, is one of

the most attractive spots in the Territory. At Casa Grande station on the line of Southern Pacific, and also at Arizola on same railway line three miles east, large tracts are under irrigation by water from the Gila twenty miles away. Orchards and vines, and clover and fattening herds in the midst of cacti afford refreshing views to the passing traveler. In Pinal County, a drive of a few hours from Casa Grande station will reach the celebrated Casa Grande ruins.

COCHISE COUNTY.

Mr. Hamilton, in his excellent work on the resources of Arizona, says: "This county occupies the extreme southeastern corner of the Territory. Its area is 5,925 square miles, and its topography is made up of lofty mountains, wide valleys and grassy plains. The Chiricahui Range crosses the eastern part of the county, while the Huachuca, the Whetstone, the Mule, and the Dragoon Ranges run through it on the west. The moun-



AN INCLINE AT METCALF, CLIFTON DISTRICT.

tains are well timbered, while the valleys and foothills are covered with fine grasses. The San Pedro is the only running stream in Cochise. It flows through the county from the line of Sonora to the boundary of Pinal. Recent discoveries in the Dragoon range and elsewhere of gold, silver and copper have proved very valuable. The wonderful mineral wealth of its mountains and mesas have given Cochise a national reputation, while the nutritious character of its grasses have drawn within its borders many herds of cattle. One of the smallest, it is one of the richest counties in the Territory, and there are few regions that can show so many varied natural resources. Tombstone is the county seat and Bisbee the principal city; Naco, near the Sonora line, a few miles southerly from Bisbee, is of growing importance. Benson is an important station on Southern Pacific line, near the western border of the county; is point of divergence of branch

line to Nogales and to Guaymas, and also of A. & S. E. Ry. line to Bisbee.

GILA AND GRAHAM COUNTIES.

These are now traversed by the Gila Valley, Globe & Northern Railway from its initial point at Bowie, on the Southern Pacific to Globe, a distance of 124 miles, bringing wide grazing and agricultural districts into contact with markets—and also opening valuable coal deposits to commercial uses, and giving development to scores of rich deposits of the precious metals,—gold, silver and copper; of the latter, the output at Globe is phenomenal.

Graham County has immense deposits of copper ore, the Clifton District being one of the richest in the Territory. Clifton is reached from Lordsburg via the Arizona and New Mexico Railway owned and operated by the Arizona Copper Company.

A SUGGESTION TO TOURISTS.

Arizona is rich in natural scenery of great variety, grand, weird, grotesque, and awe-inspiring; it is rich in the relics of American pioneers, Spanish adventurers, Aztecs and races so ancient that a few handfuls of dust is all that is left of them; it is rich in the singular colonies of strange people, who still cherish the Sacred Fire and patiently await the coming of Montezuma, and in the remnants of tribes, once savage marauders but now reduced to the necessity of working for a living on a government reservation.

A QUIET WORD TO INVALIDS.

It is not the least part of an invalid's suffering that he has to submit to being told by every one he meets just what will cure him and where he should go to get well. Now it is not imagined that an invalid has waded or will wade through the pages of this pamphlet addressed to one annoyingly healthy home-seeker, unless, indeed, he be stranded in some remote railway station, and altogether out of literature. But, if the gentle invalid *has* read the foregoing pages, we would recall to his mind the statistics that we have quoted showing Arizona to have the driest climate in the United States, as well as the most equable. It has been humorously said of Salt River Valley that everything grows there, even lungs.

The notion seems to prevail with a certain class of good people that all an invalid requires is climate and "roughing it," as though sitting on the desert like a Yuma squaw, or an Egyptian sphinx, should make a sick person well, when a healthy man would find such an existence altogether unendurable. But in Arizona the people know that a sick person away from home requires unusual comforts, pleasant surroundings, and some rational amusements. Therefore there are places, notably such towns as Tucson and Phoenix, where an exiled invalid may find requisities for his condition other than climate merely.



FIRST METHODIST CHURCH AT PHOENIX.

A NEW HOME—HOW TO REACH AND MAKE IT.

The country of Arizona, its resources and possibilities, having been faithfully described, it remains to say how you can best reach it and at what cost; and what, under ordinary circumstances, you will have to overcome before arriving at a period when you may claim to be self-supporting.

The prime requisite is energy; without that, stay where you are, stay anywhere, and make it a feature of your religion to give Arizona a wide berth—neither it nor its people will make you welcome. But if you are industrious, frugal and temperate, and added to this trinity of virtues, have what the New Englanders call "faculty" (another name for horse sense), you will find yourself quite able to hold your own.

Wherever you may reside, to the northward or northeasterly from New Orleans, you will consult your interests by purchasing a through ticket to your destination via that city, because New Orleans is the Eastern terminal of the Southern Pacific's lines; and there you can take a car that will land you at your chosen home; or, you can reach points in Arizona, via El Paso, by through cars from Chicago and Kansas City via Rock Island route, and from St. Louis, Fort Worth, etc., via Iron Mountain-Texas Pacific route.

The cost for transportation will be about as follows, and to this must be added the charge for sleeping car, which for a double berth accommodating two persons will be from four to six dollars, according to distance.

TO PHOENIX, ARIZONA, VIA SOUTHERN PACIFIC COMPANY'S
LINES VIA NEW ORLEANS OR EL PASO.

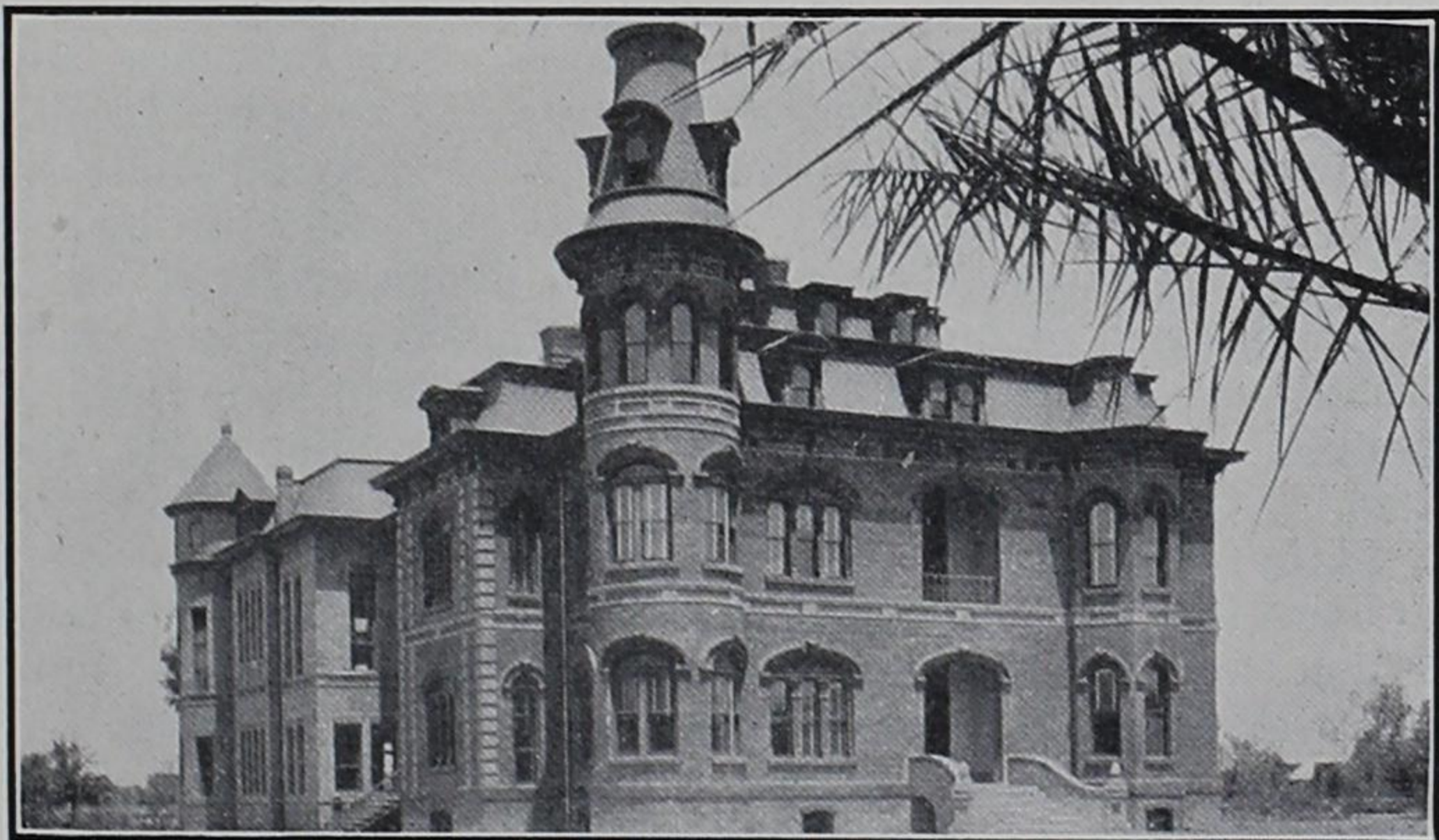
FROM	
Chicago	\$54.60
Detroit	60.60
Indianapolis	56.10
Cincinnati	58.60
Pittsburg	62.10
Buffalo	64.10
Boston	69.50
New York	70.85
Philadelphia	70.85
Baltimore	70.30

If you have effects that you wish to retain, beyond the weight of 150 pounds to each passenger, which will be carried free (if baggage), pack securely and ship by freight over the same lines recommended to you for your own routing, understanding that the freight will probably reach you in ten days or two weeks after your own arrival. Some prudent persons, who want their effects as soon as they arrive, ship them in advance. As to season for starting, you have learned that in a climate like Arizona, and on land that is irrigated, you practically make your own season; there is no day in the year that forbids garden-making or steps leading to home comforts. If you are not wealthy, you had best select your home in the vicinity of others, so as to have neighborly society, and on irrigated lands. The wealthy man can increase his wealth by locating desert government land, bringing from some source that is available, (if there be such) sufficient water to irrigate it permanently; and under the laws of the United States he and each member of his family can obtain 360 acres of this desert reclaimed land on payment to the Government of \$1.25 per acre. Such lands, in desirable situations, can yet be had.

But for the man who has but little money, and wants to put himself on an independent basis as soon as possible, the best way will be to purchase *land with water right*, and you will find many advantages in being near to others similarly situated. You can be mutually helpful. Obtain twenty or forty acres—a family can make a good living on twenty acres, since you must not forget that one acre of irrigated land in Arizona is equal to four or more acres in any average country that has a frozen, snowy winter.

Your land will cost from \$25 to \$40 an acre with its right to water, and can be paid for by reasonable installments after the first payment of twenty or twenty-five per cent. When the land is purchased, you will obtain a water *use* right for the year which will cost about \$1.25 per acre. Then prepare a garden, and within thirty days you will begin to eat of the fruit of your industry. Three acres or more of alfalfa, as food for your team, your cow, and half a dozen swine and two or three dozen chickens.

Your stock will cost you less than the same would in the East. You will want a pair of horses or mules and at least one good cow. The harness will be a trifle dearer than you have been accustomed to, and the farm imple-



THE PHOENIX HIGH SCHOOL.



A. O. U. W. BUILDING, TUCSON.

ments, wagon, plow, etc., at least as dear as in the East. with added freight. Your cow, poultry, swine and garden will do much toward feeding you, and a crop of strawberries can be soon placed in the market to obtain flour, meat, sugar, coffee, tea and other necessities and luxuries. Strawberries are easily raised and pay largely *for months*. Nothing has been said of your house. At slight expense for carpenter work, doing much yourself, you can put up a cheap balloon frame house to shelter you and yours from the sun and possible rain that will come *only* during the autumn months. Lumber is not much dearer than you are accustomed to, and the climate respects a cloth and paper house. The balloon frame is safe, for there are no blizzards or cyclones in Arizona. Your stock will need no shelter, but when affluence comes to you your well-housed stock can share it.

Wages can be earned by those desiring such an aid to early efforts, and many new settlers use this method to assist the means enumerated by me. If you are industrious and frugal, very soon your land will be paid for and additional purchases made. Schools and churches and cultivated society will be easily accessible to you. It may be supposed you understand that the irrigated lands are none of them timbered. Before water was artificially brought to them, they were level plains covered by a scanty growth of bushes with intermingled cacti and grass, usually much cacti and little grass. You will start lines of poplars along your water ditches to provide shade and fuel.

Many settlers refrain from house-building when they arrive after the autumn rains, living for several months in a tent, and building the house at their leisure. The summers are hot—June, July and August,—but, however hot, you can work safely out in the open field, for sunstroke is unknown; and the nights induce refreshing sleep, and good health is the rule—sickness the rare exception.

There are no epidemics of bilious fevers or dysentery, or ague. Inflammatory diseases and typhoid fevers are rarely heard of. Your doctor's bills will be less than your butcher's. If you have any inherited taint of lung disease, expect a cure.

If such conditions as I have described will suit you, you had best come and enjoy them. You will scarcely find a discontented family in a day's search in agricultural Arizona. It is a place where, to the industrious, a living is certain, a competence attainable, and independent wealth possible.





A PUBLIC SCHOOL AT MESA, ARIZONA.

WHITELAW REID ON ARIZONA.

We are glad to be able to present the unsolicited testimony of the Hon. Whitelaw Reid, Editor of the New York "Tribune." His impartial judgment of Arizona will be read with more than passing interest.

"So many questions are asked about Arizona as a place for winter residence, and there appears to be such a dearth of precise information among many who are vitally interested, that it seems almost a public duty to set down, in the simplest form, a few facts of personal observation.

WEATHER.

During a five months' residence in Southern Arizona in winter, there was but one day when the weather made it actually unpleasant for me to take exercise in the open air at some time or other during the day. Of course, there were a good many days which a weather observer would describe as "cloudy," and some that were "showery;" but during these five months there were only four days when we did not have brilliant sunshine at some time during the day. Even more than Egypt, anywhere north of Luxor, Arizona is the land of sunshine. As to details:

TEMPERATURE.

The Government reports show a mean temperature for fourteen years at the present Territorial capital of $57\frac{1}{2}$ degrees in November, 53 degrees in December, 49 degrees in January, 54 degrees in February, 61 degrees in March, and 66 degrees in April. The same report shows the highest and lowest temperatures, averaged for eight years, at the same place, as follows: For November, $78\frac{1}{2}$ and 42 degrees; December, $73\frac{1}{2}$ and $36\frac{1}{2}$ degrees; January, $65\frac{1}{2}$ and 32 degrees; February, $71\frac{1}{2}$ and $35\frac{1}{2}$ degrees; March, $81\frac{1}{2}$ and 41 degrees; and April, $86\frac{1}{2}$ and 46 degrees. The nights throughout the winters are

apt to be cool enough for open wood fires and for blankets. Half the time an overcoat is not needed during the day, but it is never prudent for a stranger to be without one at hand.

AIR.

The atmosphere is singularly clear, tonic and dry. I have never seen it clearer anywhere in the world. It seems to have about the same bracing and exhilarating qualities as the air of the Great Sahara in Northern Africa, or of the deserts about Mount Sinai, in Arabia Petræa. It is much drier than in the parts of Morocco, Algiers or Tunis usually visited, and drier than any part of the Valley of the Nile north of the First Cataract. It seems to me about the same in quality as the air on the Nile between Assouan and Wady-Halfa, but somewhat cooler.



DATE PALMS AT EXPERIMENT STATION, NEAR PHOENIX.

ACTUAL HUMIDITY.

This is extremely slight everywhere in Arizona, as compared with any Eastern climate in the United States. The air is driest on the high mesas, remote from snow-clad mountains or forests, and in the desert valleys, where no considerable irrigation has been begun. Wherever irrigation is carried on, on a large scale, the percentage of humidity in the atmosphere must be somewhat increased, although to an Eastern visitor it is scarcely perceptible. The same Government observations already cited show relative humidity, at Phoenix or Tucson, averaged for weeks, from morning and evening readings, as less than half the usual humidity on dry days in New York.

RAIN.

Showers, and indeed heavy rains, are liable to occur in every month of the year; but the actual number of rains seem to an Eastern visitor strangely small. The average rainfall in Southern Arizona, as shown by the Government observations, is but $8\frac{1}{2}$ inches per year.

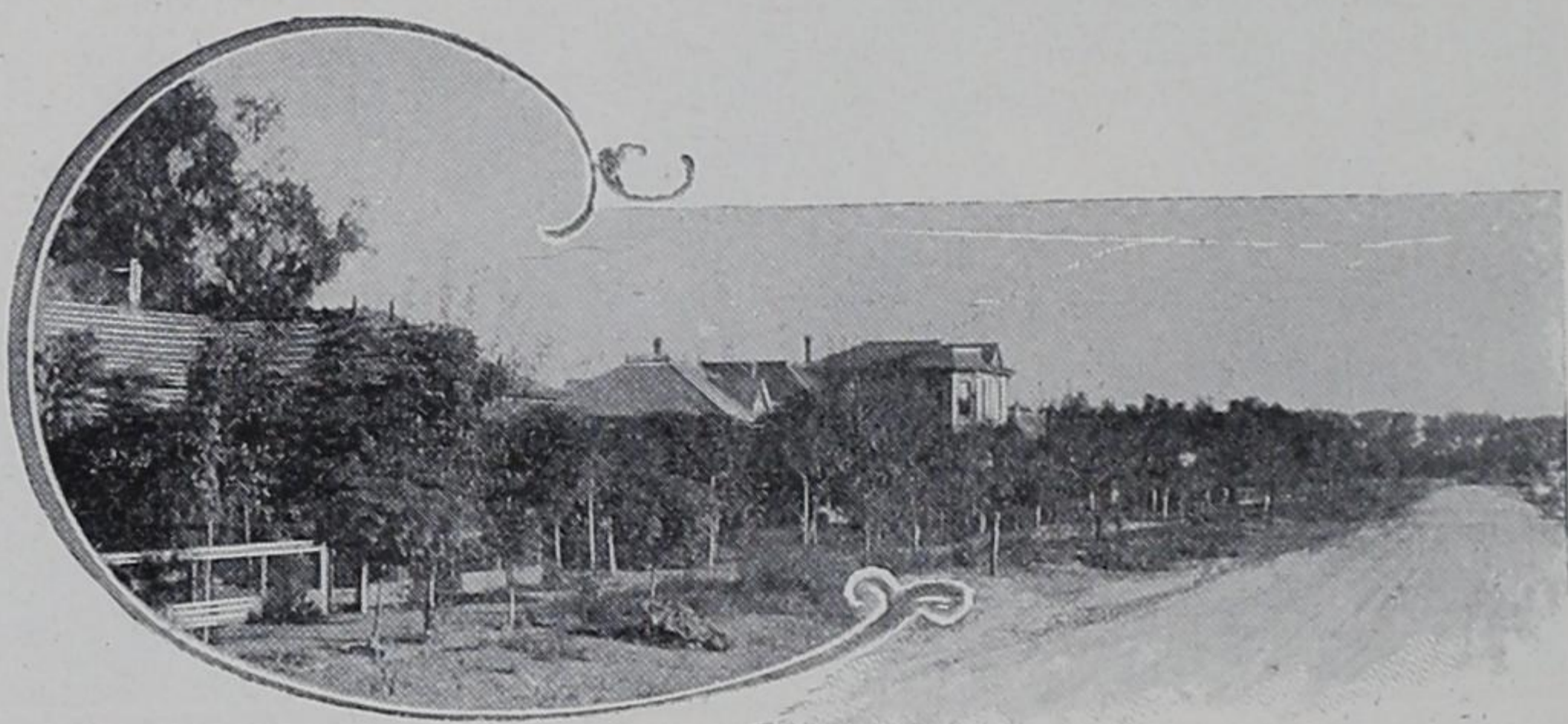
ALTITUDES.

It is a striking advantage offered by Arizona that, with the same general conditions as to temperature and dryness of air, the physician is able to select nearly any altitude he may desire. Thus, asthmatic suf-

ferers can find almost the sea-level at Yuma, or at altitude of only a thousand feet at Phoenix, or of only 2,400 at Tucson. Others, who find no objection to greater elevations, can choose between Prescott and Fort Whipple, 5,400; Flagstaff, 6,800; the Sulphur Spring Valley, or Fort Grant, 4,200; Fort Huachuca, 4,800, or Oracle, about 4,000.

IS IT A PLACE FIT TO LIVE IN?

The people of Arizona are still chiefly busy in the pioneer work of subduing it to the residence and uses of civilized man. But it has two transcontinental lines of railway, with numerous feeders; it has fast mails and rival telegraph lines, and is throbbing with the intense life of the splendid West. The two principal towns in the southern portion chiefly sought for their climatic advantages are Phoenix and Tucson. They have the electric light, telephones, trolley-cars, plenty of hotels, banks, book stores, always easy. The unbroken desert itself is often as easy to drive over as an Eastern highway, and the whole valley is a paradise for bicycles or equestrians.



AN AVENUE OF HOMES.

CAN ONE LIVE COMFORTABLY?

That, again, depends on what you expect. You cannot have the luxuries of our New York houses out there, unless you build one; or the variety of our New York markets, unless you charter a refrigerator car. But there are hotels with almost as much frontage as the Waldorf; and, like everything else in the Territory, excepting the mountains and the deserts, they are new. There are boarding-houses of more kinds than one; and brick cottages of eight or ten rooms can be rented. Better than any of them, for the man with the energy and the pluck to take it, is a tent on the desert; and he who knows how to "camp out" with comfort through September in the Adirondacks, can camp out in Arizona through the winter. As to food, there is plenty, and it is good—if you can get it well cooked. The alfalfa fields of the Salt River Valley are the fattening grounds for the great cattle ranges of the Territory. From there the markets of Los Angeles and even of Denver, are largely supplied. Good beef, mutton and poultry are plenty and cheap. Quail, duck and venison from the vicinity can also be had. Vegetables and fruits are abundant in their season, and sometimes the season is a long one. It is the

one country I have lived in where strawberries ripen in the open air ten months in the year. I have had them on my table, fresh picked from the open gardens, at Christmas.

IS IT A LAWLESS COUNTRY?

The man who goes to any considerable Arizona town with the ideas of the Southwest derived from novels, or from "The Arizona Kicker," will be greatly mystified. He will find as many churches as in towns of corresponding size in Pennsylvania or Ohio; and probably more schoolhouses. He will find plenty of liquor shops, too, and gambling-houses, and dance-houses, and yet he will see little disorder unless he hunts late at night for it, and he will be apt to find—as at Phoenix—a community of ten thousand people employing in the daytime only one policeman, and hardly requiring him. During my winter there I did not see a single disturbance on the streets, or half a dozen drunken men all told. Mining men and an occasional cowboy certainly had quarrels sometimes, in the disorderly quarters at night; and there were stories of the use of the knife among Mexicans; but the visitor who went about his own business had as little trouble as on Broadway or Chestnut street. The Pima and Maricopa Indians, who are encountered everywhere, have been friendly with the whites for generations, and there isn't an Apache within some hundreds of miles.

WHICH TOWN IS THE BEST?

Primarily that is a question for the physician, if there is a physician in the case; if not, try them all. If a mountain region, considerable altitude, and a comparatively low temperature are desired, Prescott is in a picturesque region near a great mining district, and has the social advantage of an army post, Whipple Barracks. Flagstaff is still higher; is in a region of dense pine forests, and is within a day's hard journey of one of the wonders of the world, the Colorado Canyon. Oracle is a pretty mountain nook, embowered in splendid live oaks, like those of California, and is also near an important mining district. If lower altitude and a distinctly semi-tropical climate are desired, the three places most likely to be considered are Yuma, Tucson and Phoenix. The first is near the sea-level; is the warmest and probably the driest of



COURTHOUSE, PHOENIX, ARIZONA.



IRRIGATING CANAL NEAR PHOENIX.

the three; has the least population, and the smallest provision for visitors. Tucson is the oldest town in the Territory, and, after Santa Fe, perhaps the oldest in the Southwest. Its adobe houses give it a Mexican look, and are thoroughly comfortable. Its newer houses are of a handsome building stone, found in the vicinity. The Territorial University is here, and it was formerly the capital. The elevation being more than double that of Phoenix, it is somewhat cooler, and, as there is next to no irrigation near it, the air is a little drier. Phoenix is in the center of the greatest irrigation in the Territory. The country for miles around smiles with green fields, covered with almost countless herds of cattle, and it is everywhere shut in by low mountains. It is the Territorial capital with a fine capitol building now nearing completion, and has the Government Indian School, the Territorial Lunatic Asylum, and other institutions, and is the general focus for the Territory. Like Tucson, it has its occasional wind and sand storm—perhaps not quite so often. At either place visitors who know how to adapt themselves to circumstances can be entirely comfortable, and in each they will find an intelligent, orderly, enterprising and most hospitable community. They will find a country full of mines, full of rich agricultural lands, abounding in cattle and horses, in vineyards and orchards, and the beginnings of very successful orange groves—a country, in fact, as full of promise for hardy and adventurous men now as California was in the fifties. Above all, if it has been their lot to search for health in far-off countries, they will revel in the luxury of being in their own land, among their own countrymen, within easy reach of their friends by telegraph or rail, and in a climate as good of its kind as any in the world.—N. Y. "Tribune," December 2, 1896.

SOUTHERN PACIFIC COMPANY

PASSENGER REPRESENTATIVES

Chas. S. Fee, Passenger Traffic Manager, San Francisco, Cal.
 T. H. Goodman, General Passenger Agent, " "
 R. A. Donaldson, Assistant General Pass. Agent, " "
 Jas. Horsburgh, Jr., Assistant General Pass. Agent, " "
 H. R. Judah, Assistant General Passenger Agent, " "
 G. A. Parkyns, Assistant General Passenger Agent, Los Angeles, Cal.
 W. E. Coman, General Passenger Agent (Oregon Lines), Portland, Or.
 T. J. Anderson, General Passenger Agent, G. H. & S. A. Ry., Houston, Tex.
 Jos. Hellen, Asst. General Passenger Agent, G. H. & S. A. Ry., Houston, Tex.
 F. E. Batturs, Asst. General Passenger Agent, M. L. & T. R. R., New Orleans, La.

Bakersfield, Cal.—W. V. Matlack, Agent
 Benson, Ariz.—Carl Bock, Agent
 Bowie, Ariz.—F. A. Stone, Agent
 Carlin, Nev.—W. C. Owens, Agent
 Deming, N. M.—C. B. Bosworth, Agent
 El Paso, Tex.—Gentry Waldo, General Agent, G. H. & S. A. Ry.
 Fresno, Cal.—J. F. Hixson, Division Passenger Agent, 1013 J St.
 Hanford, Cal.—G. W. Armstead, Agent
 Lordsburg, N. M.—E. W. Clapp, Agent
 Marysville, Cal.—R. F. Watson, Agent
 Maricopa, Ariz.—C. W. Wardwell, Agent
 Nogales, Ariz.—H. Jordan, Agent
 Oakland, Cal.—G. T. Forsyth, Div. Pass. and Freight Agent, 12 San Pablo Ave.
 Ogden, Utah—C. A. Henry, Agent
 Pasadena, Cal.—I. N. Todd, Commercial Agent
 Paso Robles—F. O. Bumfield, Agent
 Phoenix, Ariz.—M. O. Bicknell, Agent
 Pomona, Cal.—J. C. O'Connor, Commercial Agent
 Redding, Cal.—R. A. Martin, Agent
 Redlands, Cal.—J. R. Downs, Agent
 Reno, Nev.—J. M. Fulton, Division Freight and Passenger Agent
 Riverside, Cal.—O. B. Goodwin, Commercial Agent
 Sacramento, Cal.—J. R. Gray, Division Passenger Agent; Jas. O'Gara, Agent;
 W. H. Wood, Traveling Passenger Agent
 San Bernardino, Cal.—D. A. Bruce, Agent
 San Diego, Cal.—F. M. Frye, Commercial Agent
 San Francisco, Cal.—G. W. Fletcher, General Agent; E. B. McCord, City
 Passenger Agent; P. R. Lund, Agent Information Bureau
 San Jose, Cal.—Paul Shoup, Division Passenger Agent, 16 South First St.
 San Luis Obispo, Cal.—B. F. Whitmer, Agent
 Santa Barbara, Cal.—E. Shillingsburg, Commercial Agent
 Santa Cruz, Cal.—J. W. Lewis, Agent
 Santa Monica—J. E. Guy, Agent
 Stockton, Cal.—J. D. Fish, Agent
 Tucson, Ariz.—C. M. Burkhalter, Division Pass. & Freight Agent
 Willcox, Ariz.—J. N. Lean, Agent
 Yuma, Ariz.—W. H. Dresser, Agent

Atlanta, Ga.—J. F. Van Rensselaer, General Agent, 13 Peachtree St.
 Baltimore, Md.—B. B. Barber, Agent, 109 East Baltimore St.
 Boston, Mass.—E. E. Currier, New England Agent, 170 Washington St.
 Butte, Mont.—H. O. Wilson, General Agent, O. R. & N. Co.
 Chicago, Ill.—W. G. Nelmyer, General Agent, 193 Clark St.
 Cincinnati, Ohio—W. H. Connor, General Agent, 53 East 4th St.
 City of Mexico—W. K. MacDougald, General Agent
 Denver, Colo.—W. K. McAllister, General Agent, 1112 17th St.
 Detroit, Mich.—F. B. Choate, General Agent, 126 Woodward Ave.
 Galveston, Texas—J. H. Miller, Division Passenger Agent, G. H. & S. A. Ry.
 Guaymas, Sonora—J. A. Naugle, General Passenger Agent, Sonora Railway
 Kansas City, Mo.—H. G. Kaill, General Agent, 901 Walnut St.
 New York, N. Y.—L. H. Nutting, Gen. Eastern Passenger Agent, 349 Broadway
 Philadelphia, Pa.—R. J. Smith, Agent, 109 South Third St.
 Pittsburg, Pa.—G. G. Herring, General Agent, 514-516 Park Building
 San Antonio, Texas—C. Fahey, Division Passenger Agent, G. H. & S. A. Ry.
 Seattle, Wash.—E. E. Ellis, Division Passenger & Freight Agent
 St. Louis, Mo.—J. H. Lothrop, General Agent, 903 Olive St.
 Salt Lake City, Utah—D. R. Gray, General Agent, 201 Main St.
 Syracuse, N. Y.—F. T. Brooks, New York State Agent, 129 S. Franklin St.
 Tacoma, Wash.—Robert Lee, Agent, 1203 Pacific Avenue
 Washington, D. C.—A. J. Poston, General Agent, Sunset Excursions

Rudolph Falck, General European Passenger Agent, Amerikahaus, 25, 27 Ferdinandstrasse, Hamburg, Germany; 49 Leadenhall St., London, E. C., England; 18 Cockspur St., London, W. E., England; 25 Water St., Liverpool, England; 118 Wynhaven, S. S. Rotterdam, Netherlands; 11 Rue Chapelle de Grace, Antwerp, Belgium.

