

F
899
S9W3

Sunnyside
— YAKIMA COUNTY, WASHINGTON —





Class F899

Book 59113

SUNNYSIDE IRRIGATION CANAL



WASHINGTON IRRIGATION COMPANY

PROPRIETOR



OFFICERS

PRESIDENT :

W. M. LADD,
PORTLAND, ORE.

TREASURER :

R. H. DENNY,
SEATTLE, WASH.

VICE-PRESIDENT :

GEORGE DONALD,
NORTH YAKIMA, WASH.

SECRETARY :

D. P. ROBINSON,
SEATTLE, WASH.



THIRD EDITION

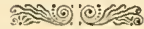
SEATTLE :

LOWMAN & HANFORD STATIONERY AND PRINTING CO.

1902.

26290
'02

SUNNYSIDE IRRIGATION CANAL



CARRYING CAPACITY, 1,000 CUBIC FEET PER SECOND OF TIME.

40,000 ACRES UNDER DITCH.

PRICE OF LAND, INCLUDING PERPETUAL WATER RIGHT, FROM \$40 TO \$60 PER ACRE

TERMS OF PAYMENT:

ONE-FIFTH DOWN AND THE BALANCE IN FOUR ANNUAL PAYMENTS, COMMENCING WITH THE SECOND YEAR.
INTEREST ON DEFERRED PAYMENTS AT THE RATE OF SIX PER CENT PER ANNUM.

FOR INFORMATION ADDRESS

WASHINGTON IRRIGATION COMPANY
ZILLAH, WASH.

History of Irrigation

SOLOMON'S saying, "There is nothing new under the sun," applies to irrigation. Close study leads to the conclusion that irrigation is as old as husbandry. In all likelihood, man, when placed upon the earth, was not given a habitation in a humid climate, but in some arid section—an oasis in a desert. Such is the contention of scientists. As primitive man outgrew nature's fertile spots, there being no rain but springs and streams, he led these from their channels to the surrounding soil, and caused it to produce abundant harvest.

We are told that husbandry was first taught, held honorable and extensively followed in Egypt. For centuries this country was the granary of the world. So great was its productiveness that it not only supplied a dense population, but accumulated vast stores to overcome famine brought on by plague, and supplied foreign nations with fruit and cereals. The great fertility of the Nile valley and vicinity was not the result, as many suppose, of the periodical overflow of the river, covering, at the most, but a small section, but the result of man's ingenuity displayed in the grandest system of irrigation ever devised.

From ancient writings recently discovered, and from recent examinations of the condition of the Nile above Cairo by scientists and explorers, the conclusion has been reached that the six cataracts from Assouan to near Kartoum in the river Nile were not the work of Nature, but of ancient and scientific engineering for the purpose of irrigation and navigation. Engineering at once bold in its conception and colossal in its execution. That it had also been most successful in its results was evident from the remains of irrigation canals still stretching over many degrees of longitude on both sides of the river, as well as by ancient records of flourishing

cities where now only barren wastes are to be found, inhabited by roving tribes of Arabs. These canals or their ruins are by no means confined to the valley of the Nile proper, but they reach to the very confines of the Great Desert.

Gordon speaks of the ancient irrigation canals as pervading the whole Soudan, as well as what is now desert, on the northern side of the Nile from the Mediterranean to latitude 15° north, if not further, and many degrees of longitude west, as well as east of the Nile valley proper. Scientists were led to the belief that the cataracts were not the work of Nature by the fact that they were nearly equidistant from each other along the course of the river. The total distance from the first cataract at Assouan to Kartoum is seven hundred and twenty miles, and the division of this space by six cataracts will give one hundred and twenty miles between each, which is almost the exact distance between any two cataracts. The fall of the river being eight inches to the mile gives a needed height to each dam of eighty feet, exactly; in short, the calculation which would now be made, primarily, by any irrigation engineer. Last, but not least, the great square granite blocks, composed of a formation that cannot be found in any other part of the Nile except at the cataracts or rapids, stretching out for over two thousand yards across the river are still visible at very low Nile. From these facts modern scientists and engineers have come to the conclusion that the cataracts or rapids were not the work of Nature, but were enormous dams constructed by man, for the purposes above described. But the proof of the dams having existed where the cataracts or rapids now are, does not rest simply on the inference of experts upon the appearance of the river. Quite recently there have been found ancient writings which speak of this fact; and among the various inscriptions found in one at Sikilis to the effect that the Nile watered vast regions above Somnah, but that the rock gave way, and that ever after the river ceased to water the region above." *

The writings of Plato are also corroborative of the vastness of the irrigation works of the Egyptians. Nowhere on the face of the earth has the work of the human race defied the ravages of time as in the valley of

* Kinney on Irrigation, Sec. 10.



PLATE 1

YAKIMA RIVER AND INTAKE, SUNNYSIDE CANAL

the Nile. Today we read inscriptions as though they were the work of yesterday and they tell us of an age centuries past when medicine, chemistry, mathematics, sculpture, astronomy and the mechanical arts in Egypt surpassed, in many respects, the skill of the present period. For boldness of conception and skill in execution, nothing exceeds the artificial waterways constructed by the early Egyptians.

Fix in mind a waterway excavated to the depth of one hundred feet, six hundred and sixty feet wide and 1250 miles long, and you will but comprehend an Egyptian enterprise built for the double purpose of watering the land and for floating vessels. Have in mind this vast canal encircling a plain with great ditches, cutting it into many parts, and then a network of smaller waterways everywhere, distributing water to the rich and thirsty soil; picture here and there upon these waterways and the Nile great cities with palaces, temples and magnificent tombs, the people arrayed in the richest of fabrics and ornamented in priceless jewels (for it should not be forgotten that there is scarcely an article of comfort or luxury now in use, but that its counterpart is shown in some of the pictures still fresh and bright, on the walls of the tombs of the ancient Egyptian kings);* add to this the pyramids, the great dams of the Nile, groves of stately palms and tall trees gently nodding in the lazy breezes of the Mediterranean coast; dot the plain with groves of citrus fruit and vineyards, (for here Bacchus had his mythical being and was worshipped,) and you have Egypt not in fancy, but as a reality centuries ago.

Radiating from Egypt the science of irrigation reached the valleys of the Ganges, Indus and Euphrates, and here wealth accumulated and opulence held sway, and large cities flourished, rich in their homes and public places. Here man conceived strange designs, tall towers and hanging gardens, and rulers built them. Take from ancient history the people who subsisted by means of irrigation and what is there left to show stability, splendor and grandeur to the far-off past? True it is that man passed out of Egypt into eastern Asia, thence to southern Europe and ultimately overran the whole of the northland. He passed into the land of humid climate, and there built up a vast civilization, which now in many places continues to flourish. What is true as to

* History of Egypt, by Clara Erskine Cement.



PLATE 2

SUNNYSIDE CANAL, A FEW MILES BELOW INTAKE

irrigation of ancient Egypt and eastern Asia is also true of the New World. Today the archaeologists bring forth mummies from caves in Arizona and New Mexico. They find pottery and implements bespeaking high art. They trace the outlines and delve in the debris of cities now in buried ruin, where once dwelt man not rude, uncouth and savage, but man cultured and artistic in his tastes with science applied to his many wants. Wherever these traces of civilization are found whether in South, Central or North America there, too, remains positive evidence of irrigation carried on upon a magnificent scale. Take, for instance, the aqueduct that traverses Condesonyos in South America. This was of the length of five hundred miles. The historian, Prescott, states that canals and aqueducts were seen crossing the lowland in all directions, and spreading over the country like a vast network, distributing fertility and beauty all around them."

" In Arizona are to be found remains of prehistoric canals, which with their laterals must have exceeded a thousand miles in length, and the ruins of many of them give evidence of the expenditure of vast labor in their construction. One of the largest of these canals took water from the south side of Salt River, about twenty-five miles from the present city of Phœnix, and after leaving the river ran for several miles through a formation of hard volcanic rock. Thus without explosives of any kind and with the simple tools of the stone age, the aboriginal constructors of the ditch excavated a canal through solid rock of the hardest formation, to a depth varying from twenty to thirty feet, and to a width of about twenty feet, and having a capacity of from ten thousand to fifteen thousand miner's inches when the river was at its ordinary stage. The evidence of the vast amount of labor expended in its construction by the chipping process, is plain upon the face of the rock, while for miles on both sides of the canal can be found vast numbers of worn out stone axes and hammers. A party of Mormons have succeeded in clearing away the accumulated debris and restoring the ditch to its original usefulness, and have thereby converted a barren waste into fertile fields, now occupied by twenty thousand people. The canal is at present known as the Mesa Canal, and supplies Mesa City and vicinity with water for irrigation and other purposes. Two miles east of the above-mentioned canal, but on the other side of the river, is the head of the great Arizona Canal, the largest in the southwest, if not on the Pacific Coast, carrying as it does nearly fifty thousand

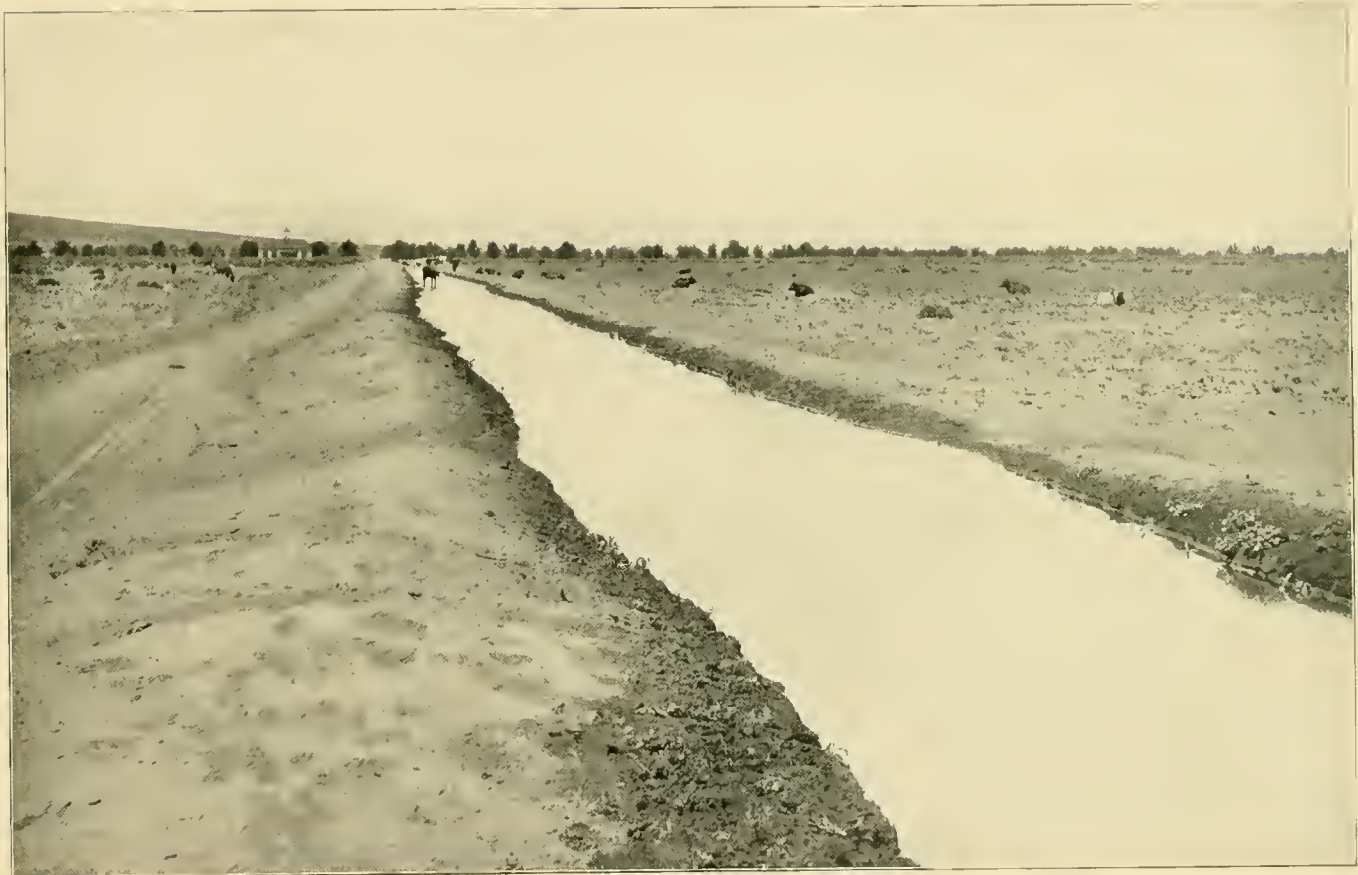


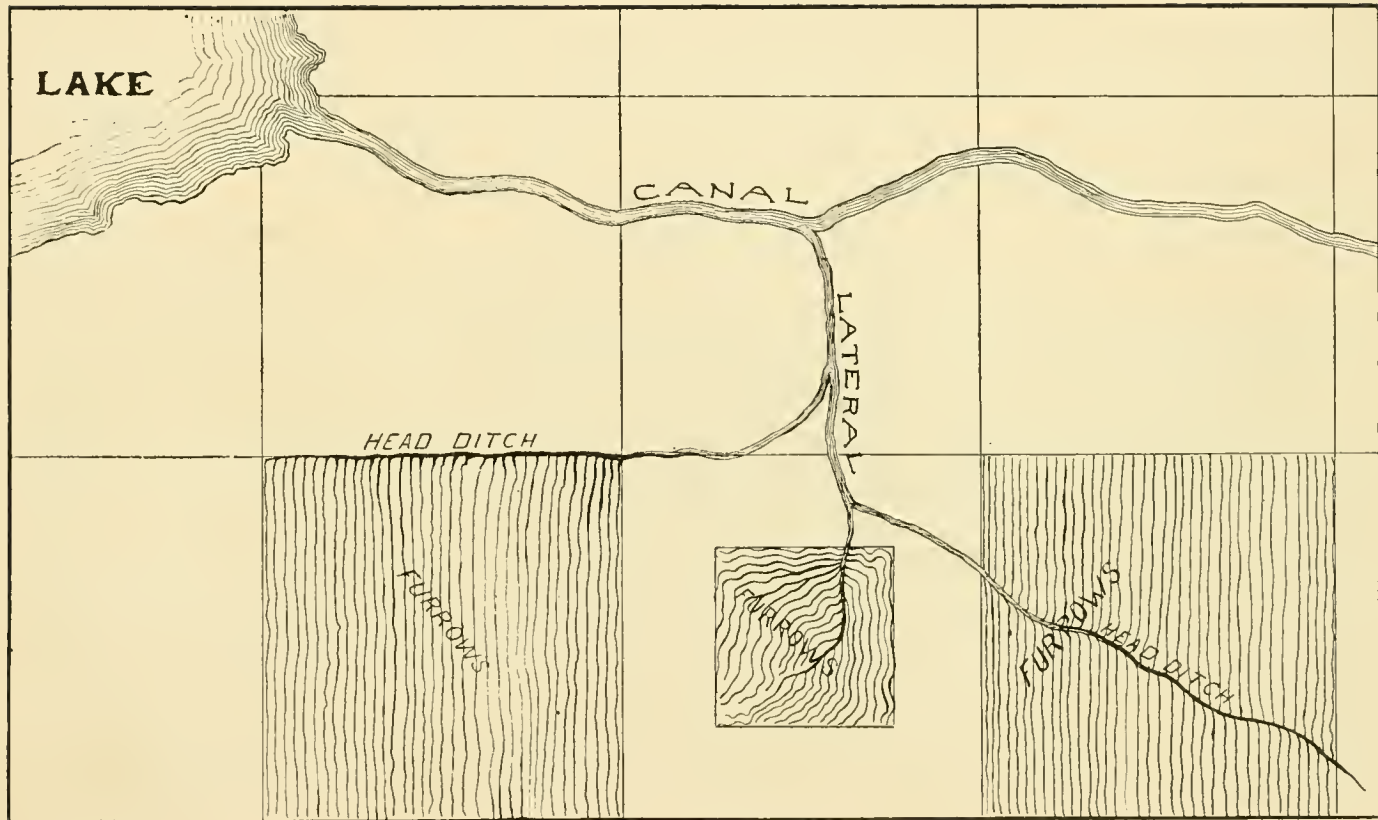
PLATE 3

A LATERAL

inches of water. Its construction was also suggested by the remains of a prehistoric canal that could be traced for many miles, and the promoter of the new enterprise, being of the firm belief that what had been done could be done again under like conditions, had the pleasure of seeing completed a waterway which reclaimed over one hundred thousand acres in and around the city of Phoenix. Forty miles west of the Arizona Canal, and a few miles below the junction of the Salt River with the Gila on the north bank of the latter river, is the head of another ditch, which from the traces of prehistoric civilization, found along its banks, is of even more interest. It is called the 'Acequa of the Painted Rocks,' and commences where it can take from the Gila not only the waters of that stream, but also the water of all the canals lying north and east of it as well. Portions of the canal have been reclaimed, but those parts which the hand of modern civilization has not touched, are still so distinct, that their remains may be traced without difficulty for fifty miles, while between it and the Gila river, in the lands which were formerly irrigated from it, can be found the relics of ancient civilization in profusion, not only in the shape of ruined buildings, but also of pottery, stone implements, weapons and ornaments. But another curious feature of this canal, and the strongest evidence of the great length of time which has elapsed since the system of irrigation was maintained, is that a few miles below the point where it crosses the Hassayamba creek, it traverses a mesa or bench for several miles, from which it falls abruptly into a valley some forty or fifty feet. Where this fall takes place the waters of the canal have cut away for several feet the walls of the mesa, which are of the hardest volcanic character. As every evidence indicates that the erosion of the rock has been accomplished by the action of the water alone, centuries must have been required for the work. Upon the face of the rock thus cut away are to be found hieroglyphics of every description, of the meaning of which the present aborigines know nothing. From these inscriptions the white man has given them the name of 'Painted Rocks'***

All this teaches the lesson that in the higher civilization of olden times, irrigation was the handmaid of the husbandman. To it he owed his prosperity. To it a teeming population looked for subsistence. From it

* Kinney on Irrigation, Sec. 15.



Kings, Monarchs and Pharaohs received revenues to carry on works of art and public utility, which are still stupendous in their ruins. These great irrigation systems, marvelous in their parts, built in instances with quarried stone and in others hewn from the solid rock, make vivid the thought that where nature does the most man does the least; and where he firmly grasps and supplements what nature has suggested, this becomes the theater of his greatest action and gives him godlike glory.

Modern Irrigation System

WE have spoken of the ancient works of irrigation. What does the present show? Famine stricken India comes to mind. There, in the last thirty years, at a cost of three hundred and sixty millions of dollars, thirty-five million acres of land have been reclaimed from the desert waste, and, this to a large extent, lies under the very shadow of the Himalaya mountains, far from the sea coast. From the ocean to these artificial cases great lines of railroads have been constructed and now carry a vast commerce. By this means not less than 50,000,000 people are free from the horrors of famine. These great enterprises redounding to the glory of Britain have not proven financial failures, but return to the British India government, by which they were constructed, an annual revenue of eighteen per cent.

Even in the great Sahara Desert, under the skill and enterprise of the Frenchman, lying as it does below the surface of the ocean, by means of artesian wells the hot sands are given place to cultivated fields and green trees.

In Australasia, the government and the people have, for a number of years past, realized that the waterless plains, which stretch for leagues and are covered with a soil containing all substances which enter into a vegetable formation, could only be made productive by irrigation, have expended vast sums of money in the construction of waterways, and since 1881 have turned 15,000,000 acres of desert into beautiful farms. Italy,



PLATE 5

AN IRRIGATED FIELD, SUNNYSIDE CANAL

Spain and France have for centuries appreciated the value of artificially watering land. In these countries the most productive portions are where irrigation is practiced. There the greatest population dwells. Take, for instance, irrigated Murcia, Spain; it has a population of 1681 to the square mile, while the province of Orihuela, where the people depend upon rain for the growing of crops, has only a population of 101. In our own country, where in 1847 existed a stretch of sagebrush, today stands the beautiful city of Salt Lake, surrounded by orchards, meadows and harvest fields. This is the result of the foresight of the Mormons, and the spreading out, by them, of the streams and rivers upon a parched soil. Montana, Idaho, Wyoming, Colorado, New Mexico, Nebraska, Kansas, Oregon, Arizona, have and are rapidly bringing into cultivation, by means of irrigation, large sections. In 1889, according to the census bulletin of the United States government, there were in the United States under irrigation 3,631,381 acres of land. In 1891, per estimate of the agricultural department, the number of acres under ditch was upwards of 18,000,000.

What is possible to be accomplished by means of irrigation is best shown in the State of California. The friars and monks, who long before the discovery of gold, settled in California, took with them from Spain and Mexico a knowledge of irrigation. This they made use of, and near the missions and monasteries established by them, they watered the land by streams from the mountains and brought into a high state of cultivation limited tracts upon which they grew grapes, lemons, oranges and all fruits of a semi-tropical country. When gold was discovered thousands rushed to the State of the "Setting Sun," and when the argonautic spirit abated the possibilities of horticulture presented themselves and many turned their attention to fruit culture. How to handle water the miner well knew, for in hydraulic mining he became master of this element. At once he brought it forth from the gulches to the land and planted vineyards and groves of oranges, limes, olives, lemons, almonds and walnuts; he laid out lanes of eucalyptus, palm and pepper trees; he planted gardens of figs, guavas, pomegranate and the smaller fruits; he transformed the desert into an Eden and lured to it the rich of the East, and they, in settling there, built beautiful homes with magnificent drives grander than those of sunny Spain, or still more charming Italy.



PLATE 6

A NEW SECTION UNDER IRRIGATION, NEAR ZILLAH

The Different Systems of Irrigation

THERE are practically but two modes of irrigation. The first is called the furrow system—the other the flooding. By the former either a rolling or flat country can be watered, by the latter only comparatively level land can be served. By means of furrows, hills sloping at an angle of 30° have been successfully watered. To prepare the ground for the furrow system all brush and large stones should be removed, small knolls and hummocks cut down, the low places filled and the ground brought to a level or even slope. To the highest point of the land to be irrigated a lateral is run from the main ditch or canal. From this lateral a head ditch is constructed, following the highest contour of the land. From the head ditch, receiving its water from the lateral, small furrows are run with an implement resembling the corn marker of the New England farmer. These furrows on level tracts are run in straight and parallel lines. Where a sidehill is to be watered, the furrows are run practically parallel and upon contours. From the head ditch the water is let into the furrows by means of square wooden pipes constructed out of lath, and with such openings as to carry in the neighborhood of one square inch of water without pressure. This inch of water will follow a furrow and oftentimes successfully irrigate a stretch half a mile long by three feet wide, or over one-third of an acre.

To irrigate by flooding, the land must be leveled and divided into squares with banks six inches or thereabouts in height, with ditches leading into and connecting the squares. Into these squares water is let and allowed to stand until the soil becomes thoroughly saturated; the surplus water of the higher tiers being allowed to pass into the lower tiers. This system can be used where the soil is extremely light and sandy, and not subject to baking and forming a crust through which vegetation will not grow. The flooding system has a tendency to



PLATE 7

SECTION ONE—ORCHARD OF P. J. FLINT, PARKER BOTTOM

cause the roots of plants and trees to grow upward toward the surface, while by the furrow system the water being let deeper into the ground all roots grow downward, and for a longer period are supplied with moisture from the surrounding earth.

Advantages of Irrigation

ONE of the characteristics of all arid sections is almost perpetual sunshine. To this can be added a remarkable fact that the soil in most arid sections is remarkably productive when supplied with water. Only lighter soils—those which will allow water to freely percolate—can be successfully irrigated. In an irrigated section each farmer is his own rain maker. In the vernacular of an irrigated country, he turns the rain on. Under irrigation there is a certainty of crop. There being no rain, harvest time is extended, as well as the period for plowing and harrowing. The soil being lighter, it is easier tilled. Sunshine being almost perpetual, and no rain, barns for storing grain and hay are not a necessity. The water that irrigates enriches the soil, carrying from the mountains, hills and swamps, during the flooding period, large quantities of the richest fertilizers, which are distributed by means of the canal, laterals and furrows, over the fields of the farmer.

Value of Irrigated Lands

ACCORDING to the United States census of 1890, the total number of acres of irrigated land in the United States in 1889, scarcely exceeded three million acres, of which over a million acres were in California, and 890,000 acres were in Colorado. The total value of the irrigated lands was \$296,850,000.00, an average of \$83.28 per acre. The average value of irrigated land in California being \$150.00 per acre and \$84.25 in Utah. The whole cost of the irrigated land was \$77,490,000, leaving a net profit to the farmer and



PLATE 8

SECTION TWO—ORCHARD OF P. J. FLINT, PARKER BOTTOM

ditch owner of \$219,370,000. The average cost of a water right in California was \$39.28 per acre, while there were fruit growing districts in that state where a water right had cost as high as \$500.00 per acre. This great cost being the result of an extensive system of underground pipes overcoming all loss of seepage and greatly economizing the use of water.*

Cost of Irrigation

THE average cost of yearly rental or maintenance tax per acre in the State of California is \$1.60. In Colorado it is claimed that one man can irrigate 25 acres of grain per day. Twelve acres per day, however, may be taken as a fair average. The cost of labor at \$1.50 per day, irrigating four times a year, would be 50 cents per acre. A crop of wheat, or alfalfa, should not be watered to exceed three or four times, and fruit trees from three to five times a season, according to the soil.

In California the duty of water is great, running from 200 to 500 acres to one second foot. In the United States the duty of water is far less than in India, where the greatest economy is practiced.

Necessity of Irrigation in the Western Portion of the United States

ABOUT one-third of the United States proper needs irrigation. The sub-humid portion of our country includes practically the whole of North and South Dakota, Nebraska, Kansas, Texas, and the Territory of Oklahoma. The arid states are Arizona, California, Colorado, Idaho, Montana, New Mexico, Oregon, Utah, Washington and Wyoming. From this great belt should be taken the country that lies between the coast range of mountains and the Pacific Ocean, and extending from British Columbia south to Santa Barbara, Cal-

* Encyclopædia Britannica, New American Supp. Title, Irrigation.



PLATE 9

SECTION THREE—ORCHARD OF P. J. FLINT, PARKER BOTTOM

ifornia; and east of this range of mountains some of the table lands, including a number of the river valleys—notably the Snake and the Columbia—lying in the southeast portion of Washington and the northeast portion of Oregon, and extending eastward to the Blue Mountains, where sufficient rain falls for the production of vegetation.

Necessity of Husbandry in the Development of the Great Northwest

THE Orient has been the objective point of the civilized and commercial nations from the days of Columbus to the present hour. That the spirit that moved nations to control the commerce of that section of the earth, where the greatest population dwells, has not waned, is made apparent by what at the present time is taking place in India, China, the Philippines and other islands of the Pacific Ocean. Europe for centuries has striven to establish short lines for commerce to the Orient. England, directed by French skill, built and now owns, the Suez canal.

On the continent of North America, leading westward, private corporations, some with and others without governmental aid, have constructed transcontinental railroads. Upon the completion of these arteries of commerce, several large steamship lines have been established between San Francisco, Portland, Tacoma, Seattle, Vancouver and the centers of population of the eastern world, and between these points already the volume of commerce is increasing by so large a per cent. as almost to stagger the imagination as to what the future has in store.

Already, to meet this growing trade, so absolutely in its infancy, vessels are being constructed which will carry 20,000 tons of merchandise each.* The Orient, not to be outdone by the Occident, has established one of the greatest lines of vessels on the Pacific; and one of the most common sights to be seen in the sea-

* Review of Reviews for June, 1900.



PLATE 10

BLACKBERRIES AND PRUNE ORCHARD. FRUIT FARM OF R. D. HEROD

board cities of the Pacific are large freighters owned and operated by the Japanese, and each year they are adding larger and more costly vessels to their fleets. That the United States has entered upon an era of great commercial development is shown by statistics, and is upon every tongue.†

The Pacific trade of the United States has advanced two-thirds in volume during the past five calendar years. American imports of the products of Asia and Oceanica have increased 40 per cent. since 1894, while American exports to the markets of Asia and Oceanica have grown 135 per cent., or multiplied nearly two and one-half times.

We are taking \$48,000,000 of goods a year to the East Indies, as compared with \$25,000,000 in 1894. We are taking \$16,000,000 of sugar a year from the Hawaiian islands, as compared with \$8,000,000 in 1895. Our annual tea bill with China and Japan now runs to near 100,000,000 pounds, and our silk bill with these countries reaches \$25,000,000 a year, comprising nearly all of our imports of unmanufactured silk.

We are shipping \$18,000,000 of American products to Japan, where we sold only \$3,300,000 in 1892, and over \$12,000,000 to China, where we shipped \$4,800,000 in 1893. Our exports to Hawaii have risen from less than \$3,000,000, in 1893, to nearly \$7,000,000 now, and our shipments of American wares to Australasia, have grown in that time from \$7,500,000 to \$17,500,000 a year. Our Pacific exports of flour have risen in a few years from practically nothing to 2,500,000 barrels, and our sales of cotton goods to the Orient have grown from \$4,000,000, in 1894, to \$15,000,000.

There is scarcely a market, foreign or domestic, but that handles our manufactured products—our flour, cotton, beef, fish, iron and steel. Our manufactured products go to the people of all countries. The Great Northwest is closer by over three thousand miles to the Orient than France, Germany or England, by way of the Suez Canal; and the time of travel between New York City and Japan, by rail and water, is several days shorter than between Liverpool and the Japanese Empire.

† Seattle and the Orient, by Alden J. Blethen, page 85. Minneapolis Times, Northwest-Orient Edition.

NOTE—Since the above was written United States commerce with the Orient has increased over 40 per cent.



PLATE II

PEACH TREE, BECKNELL FRUIT FARM, PARKER BOTTOM

Into the lap of the Northwest, Alaska is pouring a golden store. In the waters of the Pacific, its sounds, bays and gulfs, and Bering Sea, the supply of food fishes is inexhaustible. Already the salmon industry of Washington, Oregon, British Columbia and Alaska runs annually into many millions of dollars, and the governmental reports show Bering Sea to be as rich in cod as are the banks of Newfoundland. Add to this the coal, iron, copper, timber and the precious metals so lavishly placed at man's disposal in the states, provinces and territories of the North Pacific, and nothing can stay the spirit of enterprise that now possesses the handful of people who dwell in this section. For years to come this will be the theater of man's greatest activity in the establishment of trade, commerce and manufacturing.

The per cent. of growth of the Pacific Coast states is convincing proof that before another century rolls round, here will be found cities balancing in importance the great entrepôts of the Atlantic. This population will have to be fed. To supply its wants, cereals, hay, live stock, garden vegetables and fruit in great quantities will be demanded. In the west, as has already been shown, the amount of land fit for agricultural purposes, is limited. That it will be taxed to its utmost is certain. That it will increase in value as the population increases, is but logic.

Irrigation in Washington

THE Cascade Mountains divide the state into two sections, which differ as much in climatic conditions as in topographical aspects. They extend through the state from north to south, at an average elevation of about 8000 feet, and with numerous peaks rising to nearly twice that height. These mountains are paralleled by other ranges upon the eastern and western borders of the state. Generally speaking, it may be said they stand at an angle of about 45 degrees to the direction of the prevailing winds, thus forming almost a perfect rain barrier.

In Eastern Washington the Columbia River basin slopes to the south, with numerous streams, shallow lakes, a sandy soil, high mountains, bordering on either side, and broken ridges lying to the north; it is well pro-

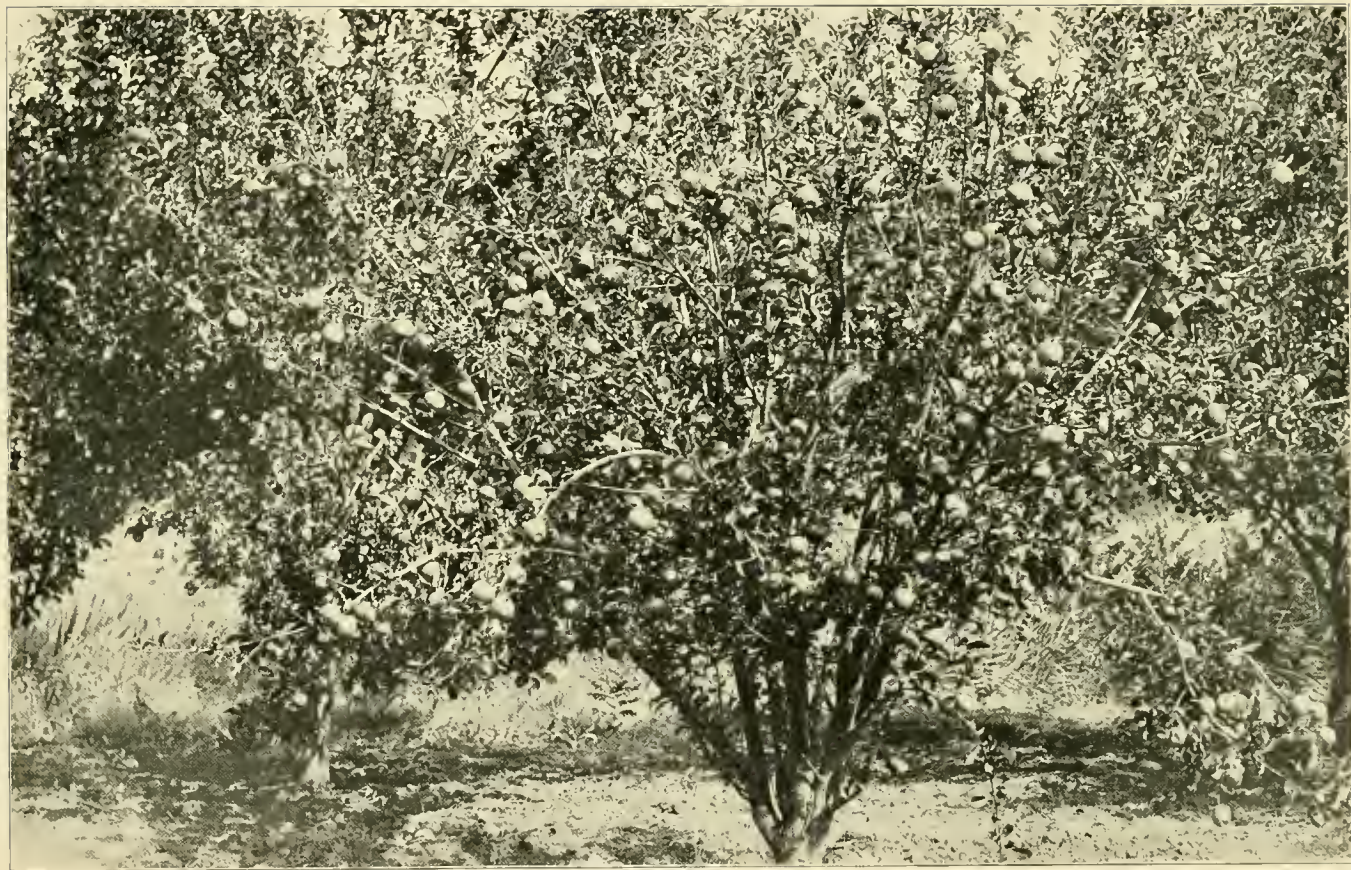


PLATE 12

APPLE TREE, BECKNELL FRUIT FARM, PARKER BOTTOM

tected from outside influences, admirably arranged, and suitably inclined to receive the solar heat, and to have a moderately equable climate. The figures of the whole of the Columbia River basin, deduced from official reports from fourteen stations, well distributed over the basin, show an average annual temperature of 48.25 degrees. The prevailing winds of the Yakima valley are from the Cascade Mountains. They are productive of clear, dry weather, so characteristic of the Yakima country in particular, and the eastern slope of the Cascades in general. The winds blowing from the mountains clear the sky and bring about fair weather. The average rainfall of the Yakima valley is seven inches. The serenity of the sky is remarkable. At Sunnyside there are 188 clear days, 83 partly cloudy, 94 cloudy, and only 33 rainy. The soil of the Yakima valley is mostly of a loose volcanic ash, which receives a large quantity of heat and moisture readily, and retains it for a comparatively long time.

From the first of June to the first of November, scarcely any rain falls, and a thunder storm is a rarity.*

The aridness of the Great Bend of the Columbia, including the valley of the Yakima and other rivers, makes irrigation absolutely essential, and for years, upon a small scale, in various parts of this section, irrigation has been practiced.

The Sunnyside Irrigation Canal

IN 1889, irrigation upon a large scale was first contemplated, and took practical form in the Yakima valley. Then it was that Walter N. Granger and associates, after carefully examining all the arid land along the line of the Northern Pacific railroad, reached the conclusion that no section presented greater advantages toward a complete irrigation system than the valley of the Yakima. Here they found a river fed by the perpetual snows, streams and lakes of the Cascade Mountains, which at the lowest stage of its water, flowed an abundant

* W. N. Allen, in Northwest Journal of Education.



PLATE 13

ORCHARD SCENE, FRUIT FARM OF MR. BAKER, PARKER BOTTOM

supply of water. They found a soil averaging some 30 feet in depth, and of a richness scarcely to be met with elsewhere in any arid section. They found a country diversified as to surface; portions of it rolling, and other parts with gentle slopes. The climate was equable; no excessive heat in summer, nor extreme cold in winter, and a nominal rainfall. Here, too, they found a small ditch, which some fifteen years prior a few farmers had constructed, and beneath it they had built beautiful homes, and had in bearing fine orchards, from which each year they were reaping rich harvests. This ditch left the Yakima river just below a gap where the river pinches itself between two high hills. Nature seemed to have designed it as a place for an intake of a great canal. At once an agreement was made with the farmers by which their ditch, known as the Konnewock, was to be owned by a new company, and enlarged and extended, so as to carry 1000 cubic feet of water per second of time, and serve 68,000,000 acres of land.

In 1890 work was commenced and continued, until the main canal was constructed to nearly the forty-second mile post. Laterals were constructed and land sales made. In 1892 water was first used by the new settlers from the main canal. In 1893 the great panic stagnated everything. Work was stopped, and the settlers lived the best they could. They had before them what the farmers had accomplished under the Konnewock ditch, and they did not lose faith. They cleared their land of the sage brush; they leveled it; they placed water upon it; they planted fields of alfalfa, clover, timothy, corn and potatoes; they set out orchards of peaches, prunes, pears, apricots, cherries and apples. Everything they planted grew; nature seemed to prosper their efforts. By degrees others came into the country. They were induced to come by reason of the letters sent them by the first settlers; they, too, prospered. To a large extent the letters of these people will be allowed to tell the story of the Sunnyside Canal; what has already been accomplished and what its future is, and correspondence with them is invited.

Already, under the Sunnyside Canal, between 4,000 and 5,000 people dwell, and 20,000 acres of land are under cultivation; it has passed out of the experimental stage. The fact has been established that in no country



PLATE 14

VINEYARD AND PEACH ORCHARD, NEAR ZILLAH

can a large ditch be more easily constructed or maintained. The amount of water appropriated is 1000 cubic feet per second of time. That potatoes, corn, alfalfa, clover and timothy can be grown in this section is made manifest by the many letters which are hereto appended. That this is an ideal country for horticulture is well known by the many settlers on the land, and the fruit merchants of Puget Sound cities, Butte, Helena, Winnipeg, Minneapolis, St. Paul, Duluth, Chicago, Milwaukee, and many other eastern cities, for from this section already large quantities of fruit have been shipped to these points. A glance at the map of the west will show that the valley of the Yakima is most fortunately situated for both farming and horticulture. Throughout its whole length runs the great Northern Pacific railway, and from Portland, Oregon, another railroad is projected, and the same is partially constructed while the navigable Columbia River is close at hand. For miles on both sides of the Yakima River, stretches the foothills of the Cascades. Here, yearly, large flocks of sheep, herds of cattle and bands of horses range. These, during the winter, must be fed, the cattle and sheep fattened for market. For the last few years large numbers of them have been fed by the farmers of the Sunnyside country. In this way, alfalfa has been disposed of at \$4.50 per ton in the stack. When one realizes that an acre of Sunnyside land produces eight tons of alfalfa, here is a profit per acre quite amazing to the farmer of New England, or even the central west.

There is no danger of an overproduction of hay in the Yakima valley. There is scarcely a year when any hay is left over in this section. The cities of Puget Sound, the logging camps of the great wooded belt west of the Cascade Mountains, and of late, Alaska, the Hawaiian and Philippine Islands, are great hay consumers.

It is, however, in the growing of fruit that the rich lands of the Sunnyside section can be best utilized. Wisconsin, Minnesota, Wyoming, the Dakotas, and a greater portion of Montana, Idaho, Iowa and Nebraska, are not suited to the growing of fruit. Neither can fruit be profitably raised in British North America or Alaska. In this vast section a large and increasing population dwells, and the amount of green, canned and dried fruit consumed by the people of this belt is enormous. Nothing is more common than fruit shipped in carload lots



PLATE 15

FOUR-YEAR-OLD PRUNE TREES. THE KLINE FRUIT CO., SUNNYSIDE

from the Yakima valley; and the day is near at hand when it will be moved in train loads. This is a consummation wished by the Northern Pacific Railway Company. That that railway company is in accord with the Sunnyside on the line of horticulture, we will quote President Mellen as follows: "Not a bushel of fruit will rot in the Yakima valley by reason of an excessive freight rate." As evidence that fruit does not rot in the Sunnyside country, over two years ago two large fruit evaporators were erected, but so great has been the demand for the green products, that these dryers have scarcely been operated. (n)

Price of Land and Terms of Payment

THE amount of land owned by the Washington Irrigation Company is in the neighborhood of 19,000 acres, and it is being sold in tracts of 20 acres or more, the company encouraging small holdings. The price of land ranges from \$40 to \$50 per acre, according to quality, and the ease in which the same can be put under cultivation. The terms of payment are one-fifth down and the balance in four annual payments, nothing being demanded at the end of the first year, except interest. Deferred payments draw interest at the rate of six per cent, per annum. A deduction of \$2.50 per acre is made for cash. An annual maintenance charge of \$1 per acre is made. This is less by 60 cents per acre than the average maintenance charge for irrigation purposes throughout the State of California. With each 160 acres of land there is sold a cubic foot of water per second of time. This is in excess of what is necessary for the perfect irrigation of so small a tract, but as there is an abundance of water, the farmers are given the advantage of it.

The irrigation season extends from the first of April to the first of November in each year. This gives the sap in the trees a chance to go down in the winter season, and the trees thereby escape all danger from frost and cold.

NOTE —In 1891 the State of Washington shipped 5000 cars of fruit of the value of \$450.00 per car, realizing the sum of \$2,250,000.00.



PLATE 16

APPLE TREES, SIX YEARS OLD, ORCHARD OF W. J. JORDAN, ZILLAH

Advantages of Farming and Having a Home in the Sunnyside

AS has already been stated, there are only 33 rainy days in a year in this section. It comes as near being perpetual sunshine as can be wished. Only during a few weeks in the winter is the soil so frozen that it cannot be ploughed. The soil is light, and easily turned by the ploughshare, and one harrowing thoroughly pulverizes it. A roller, however, is sometimes used to pack it.

The harvest season extends from early June to November. During this period scarcely any rain falls. A farmer does not hesitate to cut down a large field of alfalfa—cure, windrow, cock, and then stack it. This can be done with impunity, as there is no fear of a shower ruining his crop. The rancher's crop is entirely under his control. He has no drouth, nor too much rain to contend with. Neither are there any cyclones to destroy his crops, orchards and buildings. He has pure air to breathe, and no malignant diseases to contend with. During the whole irrigation season he has an ample supply of water for his stock, fowls, and domestic purposes. He can have flocks of sheep, and herds of cattle and horses ranging back upon the foothills of the mountains and table lands during the spring, summer and autumn—in the winter to be brought home, to be fed and fattened for the market. Not to exceed 100 miles from his dwelling place, a high grade of coal is mined, and this can be put in his bin for winter use at not to exceed \$3 50 per ton. There being no long period of cold weather, his fuel bill is light; and, on the other hand, his children and family need not wear the heavy clothing of the New England States, nor of the middle west. Here, too, his children can receive a common school education, quite as good as that furnished by the State of Massachusetts, for the Washington farmer takes pride in the district school. Already, under the Sunnyside, 12 districts are established, and school maintained therein. Neither are the people lacking in moral or religious influences. The Episcopalians have two churches, one at Zillah and the other at Sunnyside. The Presbyterians have a house of worship in Parker Bottom; the Christians have one at Zillah. The Dunkards have built a commodious place of worship at Sunnyside and the Federated church at the latter place is the largest religious edifice in Yakima County.



PLATE 17

APPLES GALORE



PLATE 18

SHIPPING APPLES

Seventy-five per cent of the people of this section are of American birth, and law and order are as strictly maintained here as in the central portion of New York State. In fact, among the 4000 or more people who dwell here, there are no saloons, and there are no hotels in which liquor is sold. The Odd Fellows and Woodmen of the World have halls of their own, and other secret orders are maintained. At Sunnyside there is a brass band, and the national game is quite as much enjoyed by the youth of this section as elsewhere. A private telephone system of 40 subscribers is maintained by a number of the farmers, and the long distance system of the Postal Telegraph Company has four stations in the Sunnyside section.

Four fine bridges span the Yakima River, and connect the Sunnyside section with the railroad stations of the Northern Pacific Railway. Numerous highways are built and maintained. Already the little town of Sunnyside has a bank and a live newspaper called "The Sunnyside Sun." On these pages are shown half-tones and photographs of actual scenes, with one exception, under the Sunnyside Irrigation Canal.

To all this might be added scenic beauty. Far below the land watered by the Sunnyside Canal, flows the Yakima River, with its waters during a greater portion of the season as clear as crystal, and across and beyond are the mountains from which rise Mount Adams and Mount Rainier, towering heavenward—the latter to a height of 14,444 feet. These mountains and peaks are, at their tops, perpetually snowclad; and in them are forests and streams abounding in game and fish. These pleasure grounds can be reached by a short journey on horseback.

Intensive vs. Extensive Farming

AS has already been stated, the Washington Irrigation Company does not encourage large farms. A man is as well off with 10 acres under the Sunnyside as he is with 40 acres in the State of New York. Forty acres is all one man ought to possess. In this way, instead of distributing his efforts broadcast upon a wide area, he concentrates them upon a small farm, and makes every rod of ground do its best. The long season, with its early spring and late fall, makes it possible for the Yakima farmer to devote his attention to the raising



PLATE 19

COMPANY HEADQUARTERS AT ZILLAH



PLATE 20

WINTERING SHEEP ON ALFALFA

of a variety of crops, selecting those which experience teaches to be the most profitable. This is known as diversified farming. A division of the Sunnyside district into small farms, insures, ultimately, a dense population. The district will become suburban in its character, and therefore most eligible for a home. The possibilities for improvement of social conditions in such communities are practically unlimited.

Cost of Preparing Land for Cultivation

THE cost, per acre, to clear, grade, and place water upon land in the Sunnyside, is \$12.50. This places the land in condition for cropping. The Sunnyside section is covered with a dense growth of sagebrush; this can be readily removed with a mattock, a good worker being able to grub an acre per day. The sagebrush can be used for summer fuel, burned in heaps, or placed upon the highway, making an excellent road. After the removal of the sagebrush, the land is ploughed, and the high knolls are cut down either with an ordinary scraper or with a so called buck scraper, to which four horses are hitched. The buck scraper is a useful invention for the leveling of ground for the purpose of irrigation, and small knolls or hummocks are cut down by means of a scraper resembling that used for scraping highways in the eastern states—a leveler is also used. This consists of six long timbers, with cross pieces, which catch the higher portions and carry them into the low places.

Building Material

THE proximity of Yakima County to the great timber belt of Western Washington, makes all building material much cheaper than in almost any other part of the United States.



PLATE 21

SUNNYSIDE HORSES

How to Reach the Sunnyside

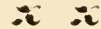
THE Northern Pacific Railway Company runs two daily trains, equipped with Pullman and Tourist sleepers, each way over its line. These pass through Toppenish and Mabton. Land seekers are met at Toppenish and taken to Zillah, four miles distant, where the company has its office, and are then shown the lands of the Sunnyside district. Mabtown is opposite the town of Sunnyside, and seven miles distant. A good road and a bridge across the Yakima River, connect these two places.

Sources of Information

THE Washington Irrigation Company earnestly requests all homeseekers to write to the settlers under the Sunnyside ditch, or if unable to do this, to write to C. W. Mott, General Emigration Agent, Northern Pacific Railway Company, St. Paul, Minnesota; Thomas Cooper, Western Land Agent, Northern Pacific Railway Company, Tacoma, Washington; H. B. Scudder, North Yakima, Washington; Denny-Blaine Land Company, Seattle, Washington; or the Washington Irrigation Company, Zillah, Washington.



WHAT OTHERS HAVE TO SAY



In the preparation of this little book, which, it is hoped, may be read by many a home seeker, we have called upon the people of the Sunnyside to bear witness, and give evidence of the productiveness of their farms, and make statements concerning the country in which they have settled, and these we append without comment.

Fruit Culture

Sunnyside, Wash., Sept. 17, 1897.

GENTLEMEN :

Washington's fine fruit exhibit at the World's Fair brought me to this State. Her fruit exhibit, in my opinion, was the finest exhibit there in point of appearance and size. I was in charge of the Michigan horticultural exhibit at Chicago, and was appointed on a committee with Professor Fowler, of New York, and Mr. Strong, of Canada, to gather fruit from various state exhibits, for purposes of comparison. In this way I had every opportunity of viewing all the fruit shown at Chicago. After seeing and handling the Washington fruit, I decided to come to this State and raise some of it myself, though I had retired from actual fruit growing in Michigan. Three years ago my wife and I moved here and bought ten acres, which I have set out to apples, pears, peaches, prunes and grapes. Next year my trees will begin bearing. I am sixty-seven years old, and think that these ten acres will give me all that I can do. I would advise the ordinary settler to take twenty acres of land, which gives enough to keep some hogs and cattle. I have made a study of fruit growing for more than forty years, and do not hesitate to say that the Sunnyside valley will be one of the great fruit growing countries of the world.

In Michigan I was vice-president of the State Horticultural Association; president for five years of the West Michigan Fruit Growers' Association, having its headquarters at Grand Rapids; and president for many years of the South Haven and Casco



PLATE 23

SPRING BROOK, NEAR ZILLAH
FARM BUILDINGS OF CAPT. DUNN

ROSE BUSH
MOWING ALFALFA

Pomological Society, with headquarters at South Haven, 65 miles across the lake from Chicago. I lived at South Haven for thirty years.

I have studied fruit conditions in Yakima County for three years, and was judge of fruit at the State Fair at North Yakima, two years ago. Regarding the kinds of fruit best adapted for this valley, I would say: It is admitted that in the markets of the world red winter apples sell for the highest price. Of these varieties, I would plant the Esopus Spitzenberg, Jonathan, Baldwin, Ben Davis and Northern Spy. The Wealthy, a native of Minnesota, is a fine red apple, and worthy of a place in every orchard. The Stark and Red Canada are good apples, and will keep until spring. For summer and fall use, the Red Astrachan and Yellow Transparents, and Summer Pippin. For late fall, the Gravenstein, a German apple, and Norton's Melon, one of the best apples for the table. The Rome Beauty is a good apple.

Of peaches, Early Charlotte, Hale's Early and Late Crawford, Elberta, Susquehanna and Salway, are among the varieties mostly cultivated for market. Other deserving varieties include Hill's Chile, Reeves' Favorite, Mixon and the Smock Freestone.

Of 1000 or more varieties of pears, the Bartlett is first in the estimation of our people, and for canning is without an equal. For market purposes, orchardists would do well to plant a portion of Clapp's Favorite. The fruit is of fairly good flavor, large, and richly colored. The d'Anjou is a fine pear of French origin, and grows several degrees larger, and is of richer flavor in this state than in its native country. It does well in this country, but is weak in its fertilizing properties, and on this account should be planted in rows alternating with Seckel or Howell. The Howel is a large pear of good quality. The Seckel stands first in quality, but is scarcely of medium size. In this country, however, fruit grows to nearly double the size it usually attains in the East. This pear commands a high price in the market. For winter markets, the Estee Beaurre, and Winter Nellis are considered the best.

Washington is justly celebrated for the size, beauty and flavor of her prunes and plums. The varieties of prunes chiefly cultivated are Hungarian, Italian, French and Silver. Of plums, the Green Gage stands first in quality. Other plums which do well here, include the Bradshaw, Coe's Golden, the Yellow Egg, and Riene Clande da Bavay.

Soil All That Can Be Desired

The three principal natural agents for the production of fine fruit are soil, sunshine and water. The soil of the Yakima country is all that can be desired—rich in all the elements necessary for the formation of a vigorous growth of timber; and, without a strong, healthy growth of timber, we cannot expect to gather first class fruit. The soil of this country is not only rich



PLATE 24

CURING ALFALFA. FARM OF W. H. CLINE, SUNNYSIDE

on its surface, but downward to a depth of thirty, or even forty feet, in many places. This fact proves that our soil is almost inexhaustible in its nature. The writer saw trees growing in this country six, seven, and eight years ago, heavily laden with fruit, and the same season they made from 15 to 24 inches of timber. This, alone, goes a long way to prove the stimulating properties of our soil.

In Michigan, trees of the same age, having a less quantity of fruit, would make little or no timber. It is well understood by practical fruit growers that a growth of from 4 to 6 inches on the apple tree, annually, is necessary for the health of the tree, and for the assurance of a fair crop. Now, when we find that trees, whether apple, peach, pear or prune, grown in this country, will bear, as they do, nearly double the quantity of superior fruit they do in the Eastern States, and make at the same time treble the growth of timber, we are forced to attribute these effects to some cause or causes. Soil is the principal cause, for, without good soil, sunshine and water will not bring forth such effects. From observations since I came to live in Yakima valley, I am led to believe that fruit can be grown profitably for 40 per cent. less than can be done in Michigan or Illinois. Sunshine is necessary for the production of fine flowers and fine colored fruit. In California the sunshine is too intense during the day, and the heat too strong during the night, to admit of long-keeping, crisp apples, or the finest flavored peaches. The apples of that state grow large, as do the peaches, but will not, in my opinion, compare in flavor with apples or peaches grown in this state, Michigan or New Jersey.

In Yakima County there is almost continual sunshine, from April 1 to November 1, while the heat ranges from 75 to 85 degrees above, with a few days when the mercury rises to 95 and 100 degrees. This degree of heat is just about right, with cool nights, to impart a rich color and fine flavor to fruit. At the World's Fair, at Chicago, in 1893, it was generally conceded that the fruit from Washington, taken as a whole, was the finest on exhibition; the fruit from California being a little too dark, caused by too much sunshine and heat, while the fruit from Eastern States was lacking in color. A certain degree of cold in winter is also necessary for the production of fine flavored fruit, such as apples and peaches. (N)

JOSEPH LANNIN.

Sunnyside, Wash., June 23rd, 1901.

R. H. Denny, Esq., Seattle, Wash.

DEAR SIR: Yours of the 20th, asking if I wish to make any modifications in a letter printed in a circular issued by the Northern Pacific Railway Company, September 17, 1897, received. No, sir. But I can say truly: I am more in love with the Sunnyside District than I was six years ago. It is all, and more than I expected it to be, for the production of all kinds of fruit

NOTE.—Washington apples took the gold medal at the Paris Exposition in 1900 and the gold medal at the Pan-American in 1901.



PLATE 25

ALFALFA FIELD, UNDER SUNNYSIDE CANAL

and vegetables. From two cherry trees planted four years ago, I sold this month \$4.00 worth of fruit, besides enough for our family. This is simply a sample of what fruit will do in the Sunnyside valley. I know of no place in our whole country where there are so many inducements for a man with limited means, as this valley. Yours respectfully,

JOSEPH LANNIN.

Grew 31 Cars of Fruit
And Made \$9,000 Profit from 70 Acres in One Year

F. E. THOMPSON TESTIFIES TO WHAT HE PRODUCED FROM AN IRRIGATED ORCHARD IN YAKIMA COUNTY.—HE CONSIDERS
THAT THE GARDEN SPOT OF THE EARTH

Toppenish, Wash., December 7, 1901.

DEAR SIRS:

I came from Tacoma in 1888 and purchased my present farm of 160 acres. My farm consists of 75 acres of orchard, 24 acres of hops, balance in alfalfa and farming land. It produced in the year 1901 thirty-one cars of fruit in round numbers, as follows: 5800 boxes Bartlett pears, 5400 crates plums and prunes, 2500 boxes apples, 7000 boxes peaches, 500 boxes cherries, 55,000 pounds dried prunes, 39,000 pounds hops, 1100 sacks potatoes and 120 tons of hay. My average net profits for the past four years have been \$5000 per annum, while this season it has reached \$9000. I might add as a side issue, I have bought and shipped from various farms of this valley 22,600 boxes of apples grown upon an aggregate of 44 acres, which have been sold f. o. b. cars at shipping station, at prices ranging from \$1.10 to \$1.50 per box.

The cost of raising hops is 7 cents per pound. I have a four year contract with New York dealers for 11 cents per pound, which leaves a net profit from 24 acres of hops of over \$1500 per year.

Potatoes are worth in our home market \$21 per ton and alfalfa hay \$4 per ton in stack. Yours very truly,

F. E. THOMPSON.

Letter of F. E. Thompson, published in the Spokesman Review, December, 1901. Mr. Thompson's farm is under the Sunnyside canal.



PLATE 26

SUNNYSIDE SHEEP READY FOR THE MARKET

A Profitable Apple Orchard

Zillah, Wash., December 25, 1901.

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: In 1889 I left Toronto, Canada, for Tacoma, Washington, where I lived several years following the business of contractor and builder. While in Tacoma I first heard of the Sunnyside valley and became impressed with its value as an agricultural district, especially after seeing the products of the Sunnyside country exhibited at a fair held in the Exposition Building, Tacoma. A number of my friends finally advised me to go to the Sunnyside valley, and in 1894, after an examination upon the ground, I purchased 30 acres of raw land about three miles from Zillah, paying for the same at the rate of \$70.00 per acre. I was not an experienced farmer, nor had I ever had any previous experience in irrigation farming; but after due consideration, decided to set out an orchard, principally of winter apples, together with 10 acres of Italian prunes. I soon learned how to handle the land and the water, and I desire to say right here from my observation, that the best irrigators we have in the valley, are those who came here without any previous knowledge of irrigation.

A portion of my apple orchard came in'o bearing at the age of 3 years from the time of planting, and from two and one-fourth acres I obtained 300 boxes of marketable apples; at the age of 4 years from the same acreage, 800 boxes; at the age of 5 years, 1300 boxes; and this year my apple trees were 7 years of age, and from two and one-half acres of Ben Davis trees I gathered 2500 boxes of choice apples, receiving an average of \$1 00 per box for same. This is the first year my trees have been in full bearing. From 45 summer apple trees of the same age, I sold 430 boxes of apples at 75 cents per box; and from 10 acres of 7 year old Italian prunes trees I secure a yield of 10,000 crates, for which I received 45 cents per crate, f. o. b. cars.

A year ago I purchased 40 acres of land additional, on which I have 14 acres of hops and the remainder in alfalfa. I intend to set out 12 acres of this land, however, in winter apples, as they are one of our most profitable crops. My hops averaged this year about 1700 pounds to the acre, but with better care and cultivation I expect to increase this yield up to 2000 pounds per acre another year.

I have always found a good market for all my produce, never having had any trouble to sell. The demand always exceeds the supply, and the buyer seeks the farmer. We ship our products east and west.

I have never regretted locating here, but on the other hand am very thankful that I have done so. Our climate is unusually healthful; our winters are short and mild, and I prefer living here to any other place that I have known.

Yours truly,

R. D. Herod

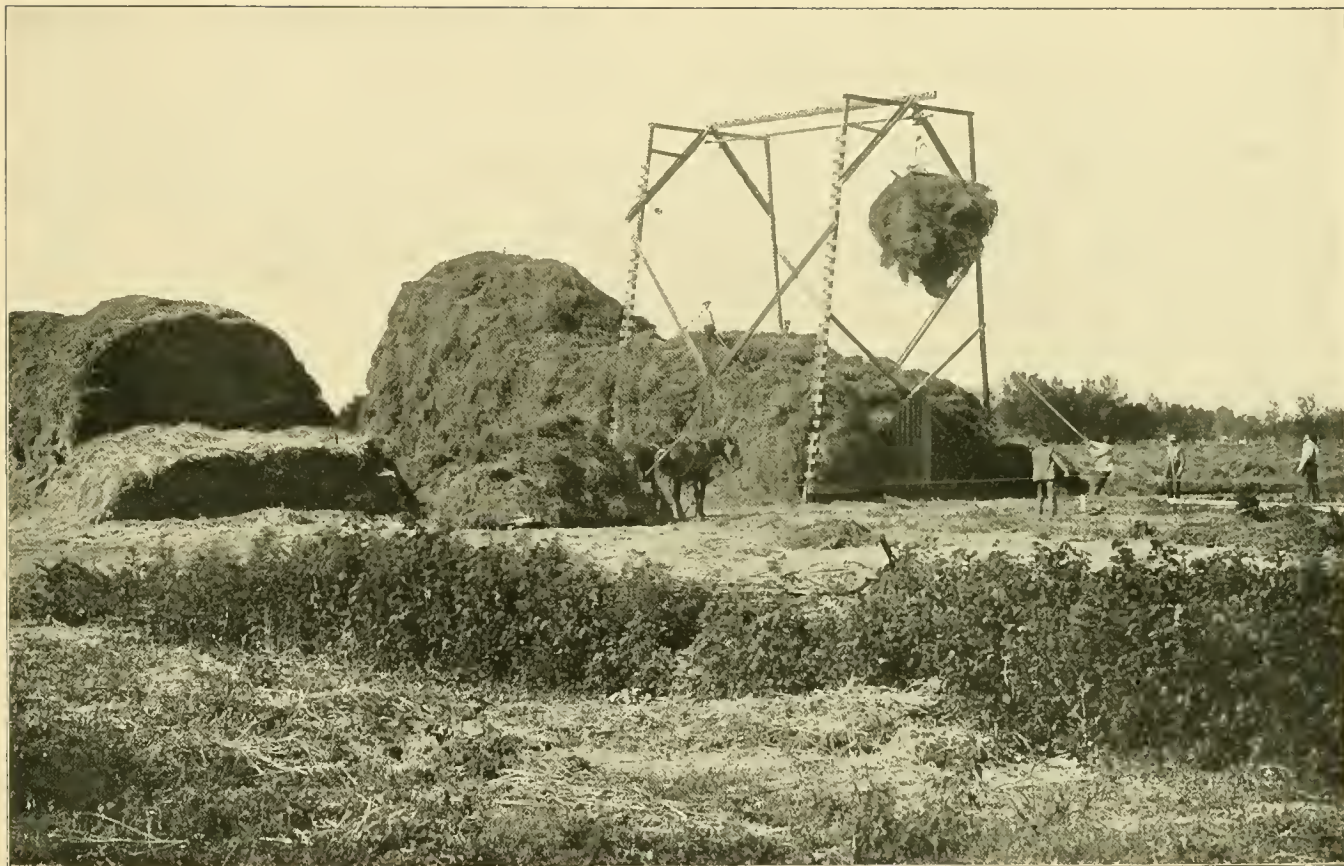


PLATE 27

STACKING ALFALFA. FARM OF CAPT. DUNN, PARKER BOTTOM

Valley View Farm

Sunnyside, Wash., February 1, 1902.

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: Complying with your request for a condensed statement of my success at dairying, will say, that in 1897 I started with five purchased cows, common stock, which herd has since been increased by purchasing and raising to 22 head of cows, 15 young stock and 1 bull. This, together with 5 horses and a variable number of hogs—anywhere from 5 to 20—are kept by hay cut from 17 acres, 15 acres of which is alfalfa and 2 of red clover. I do not pasture at all, but feed cured hay solely, cutting my alfalfa four times and clover three times.

As to results, during the year 1901 I averaged milking 15 cows. Cream was sold for a part of the year, but I made butter for the market a larger proportion of the time. After deducting cost of mill feed fed these 15 cows, I realized a net revenue of \$10.32 per ton for the hay fed them. Estimating the yield at 8 tons per acre, I actually received a net revenue of \$82.56 per acre. Excepting a daily ration of 8 pounds of mill feed, which is cheap and easily obtained, and used only when cows are in full flow of milk, my cows have had absolutely nothing but hay raised on my place. Besides the cream and butter, there was skimmed milk for pigs and calves, claimed to have a feeding valued of from 20 cents to 25 cents per cwt, added to which should be a calf from each cow, etc.

Cost of conducting dairying in this climate is light as compared with colder climates in the East. All hay is stacked out of doors, handy for feeding. Costly barns are unnecessary, and out stock requires but little shelter.

In my capacity as Local Government Weather Observer at Sunnyside, I furnish below a concise statement of the weather conditions for the past year, which may be of interest:

Coldest month, January, with a mean temperature of 31 degrees.

Warmest month, August, with a mean temperature of 73 degrees.

Lowest temperature, 6 above, January 11.

Highest temperature, 100, August 15.

Total rainfall for the year, 6.4 inches.

Total snowfall, 10½ inches, which melted in above rainfall.

Number of hours wind, 960; an average of one day of wind in 9.

Month having most wind, April, 138 hours; next, February and June, each 127 hours.

There were 197 clear days, 77 partly cloudy and 91 cloudy days.

Yours respectfully,

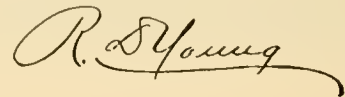




PLATE 28

ALFALFA FIELD. FARM OF CAPT. DUNN, PARKER BOTTOM

Sunnyside Statistics

Sunnyside, Wash., December 25, 1901.

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: Allow me to give you a few figures as to business matters in the town of Sunnyside, which may be of interest in showing the progress of the country during the past year:

Sales of stamps last quarter of 1900,	-	-	-	\$241.45
Same period 1901,	-	-	-	355.21
Sales of stamps month of January, 1901,	-	-	-	80.59
Sales of stamps month of January, 1902,	-	-	-	168.07
Money order business January, 1901,	-	-	-	155.00
Money order business January, 1902,	-	-	-	318.00

Our population has doubled in one year, and is now over 300 in the townsite. In its limits are 1 bank, 11 stores, 3 hotels, 1 newspaper, 2 blacksmith shops, 2 livery barns, 3 churches and a large and growing school. In the school district are enrolled 186 children, with an average attendance of about 170. The school is presided over by three teachers.

Yours truly,

George Vetter

Postmaster.

Superior Fruit

Mr. Bruce Wees, the Chicago buyer for M. Baker & Co., who bought 29 carloads of apples in the Sunnyside district, Yakima County, paying as high as \$1.45 a box, in an interview published in the Yakima Republic on November 15, 1901, said: "I came to the Yakima valley this year almost by accident. I had never heard of it. Senator Heinfeldt, of Idaho, told me that northern Idaho could furnish the apples I wanted. I went there but bought nothing, because that section does not produce the kind of apples I was looking for. They recommended that I go to Hood River; I went there but found nothing. At Hood River I heard of Yakima for the first time. * * * I have visited every apple-growing district in the United States and have never bought a better quality of fruit, or found a district where the product was more uniformly good. * * * I can state unreservedly that the Yakima valley is one of the best apple countries in the world. It is not equaled by any other section in the west, and such choice varieties as the Grimes' Golden, Jonathan and Spitzenberg are simply incomparable as grown here. The eastern orchards cannot begin to produce such fruit."



PLATE 29

HOP FIELD NEAR SUNNYSIDE, JUNE 9th. FARM OF MR. WALLACE

Returns for One Year on Twenty Acres

Zillah, Wash., February 1, 1902.

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: Coming to the Sunnyside country in 1899 I leased the place of W. J. Jordan, located about one mile east of Zillah, the owner being the Northern Pacific agent at Lewiston, Idaho, who was unable to personally look after his ranch.

The place consists of 20 acres,—6½ acres being in alfalfa, which has yielded annually from 35 to 40 tons of hay, and 13½ acres in fruit, principally fall and winter apples, peaches, prunes, pears, the apples being of the following varieties: Spitzenburg, Ben Davis, Winesap, Rhode Island Greening.

The years 1899 and 1900 produced a fruit crop of an average value of about \$1800 00 net. The 1901 fruit crop was a heavy one for young trees, but not heavier than seems to be the usual thing throughout the Sunnyside valley. Two hundred of the apple trees produced 2950 boxes of marketable apples.

The results for the past year were as follows:

Cash sales to eastern and local buyers,	-	-	-	-	\$4,753.00
Cash sales of consignments,	-	-	-	-	520.00
Add value of 200 boxes of apples still on hand,	-	-	-	-	150.00
Add value of 35 tons of hay still on hand,	-	-	-	-	140.00
Total receipts,	-	-	-	-	\$5,563.00

I think so well of the country, climate, people, produce and markets that I have just purchased a place of my own of 160 acres under the Sunnyside canal, and expect to remain the rest of my life in "God's country."

Yours very truly,

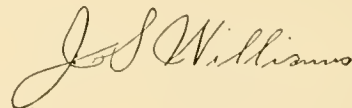




PLATE 30

FULL GROWN HOPS, SUNNYSIDE. FARM OF D. A. McDONALD

A Year's Progress

The past year has been one of unusual activity in the Sunnyside country. More lands have been sold; more actual settlers have come, and more material advancement made than during any three previous years of the country's history. Nothing in the nature of a boom has existed, but the tendency has been toward substantial and permanent improvement. A goodly number of large and well designed modern country houses, besides numerous smaller unpretentious houses have been built or are under way. On the first of March more than fifty new buildings could be counted from one spot near the town of Sunnyside, and many more have been put up since. As an indication of the rate of growth it may be said that the records at the postoffices of Zillah and Sunnyside show that the number of people who get mail at these places has more than doubled in the past year. The enterprise and public spirit shown by the people is encouraging, and the Irrigation Company, in order to keep pace with the general progress of the country, has made, and has under way, a number of desirable and permanent improvements in its property, among which may be mentioned a new and substantial dam across the Yakima River at the intake (built of steel upon a concrete foundation), for the purpose of diverting water from the river into the canal; together with a neat stone house of modern design at the headgate; two new waste ways and structures on the main canal, one at Zillah and the other at Black Rock Canyon, that will materially aid in the safe operation of the canal; about 35 miles of branch canals and laterals added to the distributory system; over 200,000 feet of lumber in new structures, besides many other smaller and less important improvements, made necessary by the rapid development of the country and to accommodate the increased demand for water by new settlers.

Marked progress has been made in the dairy and livestock industries, both of which are so well adapted to the Sunnyside country. Our farmers have discovered that more money can be realized from their hay by feeding than by selling in the stack—in the one case bringing from \$10.00 to \$15.00 per ton, and in the other from \$3.50 to \$5.00 per ton. Several hundred head of high grade milch cows have been shipped in, and agents are now in the East buying good milch stock in carload lots to fill the orders of the Sunnyside farmers. The dairy industry promises to reach large proportions in the near future. What is true of that industry holds good as to livestock in general. Large numbers of high grade beef cattle—Short Horns and Herefords—pure bred swine, mutton and wool sheep, besides fancy poultry, have been brought in during the past year. Mention should also be made of a number of fine stallions, both for road and draught purposes, especially the handsome Percheron stallions brought



PLATE 31

PICKING HOPS. FARM OF F. B. SHARDLOW

from Illinois by T. C. Williams, proprietor of the Sunnyside Hotel; and it is evident that the Sunnyside country is destined to become famous for the production of all kinds of high grade livestock.

Our school houses, which have always been the pride of the Sunnyside district, and which had become inadequate for the increased number of pupils, were supplemented, during the year, by three new buildings, all commodious, modern in design, and in keeping with the older houses. Others will be required in the near future, and will, doubtless, be built, as soon as demanded.

The enterprise and morality of the district is apparent in the churches already organized. Six large buildings have been completed. These are described as follows: A Presbyterian Church in Parker Bottom; a Christian Church in Zillah, a neat frame building, dedicated on June 2d last; an Episcopal Church in Zillah, of soft gray sandstone, which would be a credit to any community; an Episcopal Church in Sunnyside, a frame building, completed July 1st; a German Baptist Church in Sunnyside, and a Federated Church in Sunnyside, a frame building, just completed, that is the largest and of the most modern design of any in the county, and deserves more than passing mention. The organization represents the most advanced ideas in church union, and is composed of five different church societies, as follows: Baptist, Methodist, Congregational, Presbyterian and Progressive Dunkards, each having an independent organization and interest in the building.

The Sunnyside Townsite Company has shown a commendable spirit in seeding all of the vacant lots, and covering the streets with sagebrush, which makes a fine roadbed when crushed into the soil by travel. The building of sagebrush roads has been carried on, in a limited way, all over the country, but not to the extent it should be.

In conclusion, the rapid growth of the Sunnyside country by the addition of nearly five hundred new families, and several thousand acres of new hay and orchard lands, to the cultivated area, has been a surprise to even the most enthusiastic supporters, and judging from present indications, it is safe to say that the progress of the past year will be fully equalled, if not exceeded during the coming year.

Zillah, Wash., February 12, 1902.

WALTER N. GRANGER,
General Superintendent.



His Father and Brother Followed

Sunnyside, Wash., February 1, 1902.

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: Four things led me to leave Carroll County, Illinois, the very garden of the Mississippi Valley, for Sunnyside, Washington:

1. THE CLIMATE: Here we are immune from cyclones, snow blizzards and extremes of heat and cold, from conditions breeding diptheria, scarlet fever, rheumatism, la grippe, catarrh, asthma and consumption. We can plant, grow and harvest our crops without interference from the weather.

2. THE FRUIT: The best fruit in the world grows here,—apples, peaches, pears, prunes, plums and all kinds of berries. Only when you live where fruits grow do you get the best. No one can be so poor here as not to get the finest fruit grown in the world.

3. THE OPPORTUNITIES FOR GAIN: Here investments in realty pay ten to thirty per cent with more certainty than they do three to eight in the older states. On this basis there must be great enhancement in value.

4. SOCIETY: At Sunnyside we have the largest percentage of good moral people that I have ever found anywhere. There is not now a single saloon under the great Irrigating canal. The managers of the canal are with the people on this question. The vacant lots of Sunnyside are in the hands of Christian men who prohibit forever in their deeds gambling, prostitution and the manufacture or sale of intoxicants.

I arrived at Mabton, the nearest R. R. station to Sunnyside, March 8, 1899, with car of emigrant goods. I had contracted for 40 acres of raw land the previous July. The first year I built an 8 room house, a shed barn 28 by 84, graded and seeded 115 acres of land. It was my first experience in work of the kind. I was more or less nervous at first, but was so well pleased at the end of the season with the prospect that I urged my brother and parents who lived in Linn County, Iowa, to come at once and select homes, agreeing to take all they purchased off their hands at its cost to them after two years if they wished to return to Iowa. The two years are up and they are as well pleased as I am. Before the close of the first year I purchased 80 acres more; before the close of the second year 195 acres more and this year 90 acres more, all of which I have cleared, graded and seeded.

I am engaged in general farming. My wife runs the poultry and garden and has great success with each. I have three fields fenced hog tight. One acre of alfalfa, if pastured, will grow 10 hogs or 20 sheep, or maintain in best condition 3 head of cattle or horses from May 1, to Nov. 1. If the grass is cut it will do about one half more. On 140 acres of my land I maintain the year round over 100 head of cattle and horses and 100 head of three year old steers for Seattle butchers for which I receive



PLATE 33

CRATING FRUIT
HOME OF S. J. HARRISON, SUNNYSIDE

SCHOOLHOUSE, PARKER BOTTOM
VINEYARD

6 cents per pound for the weight I put on the cattle. I do this in preference to selling my hay at \$3.50 per ton in the stack. No shelter is required for the hay or for the horses or cattle. The ground is so porous that it always furnishes a clean dry bed for the stock.

Yours very truly,

A handwritten signature in cursive script, reading "J. S. Harrison". The signature is enclosed within a decorative, oval-shaped flourish.

General Information

Extract from an article on the Sunnyside section written by Almond C. Auldon, of Zillah, Washington, November, 1901.

"As actual figures tell the story more eloquently than general descriptions in illustrating the capabilities of the soil, the following cases will be cited. In the production of small fruits generally, such as raspberries, blackberries and strawberries very little data is at hand. But they can all be depended upon to give a good account of themselves, with proper care. This year Mr. I. N. McCart, living one half mile east of Zillah, sold \$140.00 worth of strawberries from a half acre of measured ground. While this would not be considered a remarkable yield by an experienced strawberry grower, it should be borne in mind that these plants were set in the summer of 1900, between the rows of a young apple orchard, and on ground that bore a crop of beans the same season. The soil had never been manured, and the plants received no special care.

The man who wants either a home orchard or a commercial one on an extensive scale can find here a combination of climate and soil conditions that produces the most perfect results, while orchardists in the older apple-growing states are accustomed to wait 8, 9 and 10 years to see whether their varieties are going to come true to name, here the apple grower begins to reap the fruits of his labor in four or five years. Mr. I. N. McCart near Zillah, this year had a four year old orchard with some of the limbs on the apple trees so heavily laden that they bent to the ground. Mr. M. Mahan, one and one-half miles east of Zillah, had trees of the Rome Beauty variety set two years ago (then yearlings) that bore from twelve to fifteen apples this season. Mr. Walter N. Granger, on his farm just east of Zillah, has an orchard that was set out in the spring of 1900 (yearling trees) and some of these trees bore a few apples this year, of course it is neither expected nor desirable that trees begin producing crops at such an age. These cases—which are not isolated ones—are cited for the purpose of showing what a wonderful combination this soil and climate and a good irrigation ditch makes. It is a promise of what the future holds in store. Results from orchards that have come into bearing are equally remarkable. The Jordan orchard, one mile east of Zillah, has only been planted nine years, and this year a block of Ben Davis, a fraction less than two acres, turned off 2950 boxes of apples. Mr. J. S. Williams, who has charge of the orchard, is packing the apples at this writing, and estimates the yield at 2500 boxes of marketable apples. Messrs.



PLATE 34

VIEW ONE. LANDSCAPE, BELOW ZILLAH, SHOWING HOME OF M. E. KANE

F. Waldon & Son, three and a quarter miles northeast of Zillah, have a 40 acre apple orchard that is eight years old. It comprises upward of 40 varieties, and it will be understood that in such a vast number of varieties there are many which will necessarily cut the average yield far below what it otherwise might be. Yet they have shipped 3000 boxes that netted them one dollar a box, and still have in storage 8000 boxes. From forty trees of Rome Beauty, six years old, they picked 260 boxes. From a six acre peach orchard, ten years old, they sold \$1450.00 worth of fruit.

Mr. R. D. Herod, living three miles northwest of Zillah, has a block of Ben Davis consisting of 210 trees from which he this year picked 2000 boxes of apples. This orchard was planted in 1874. Last year it produced 1300 boxes, and in 1899, 800 boxes. It bore 300 boxes when four years old. Mr. Herod has eleven acres of Italian prunes which he regards as one of his best money-makers. This year these will net him \$3000.00. Last year he cleared \$700.00 from them; and the year before \$2000.00. So they show a net return of \$5700.00 in three years.

The above figures are not the result of hearsay, but were obtained direct from the parties. Similar examples might be given to fill page after page. It would simply be a repetition of the same thing."

Sunnyside Churches

Sunnyside, Wash., February 1, 1902.

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: I think we are open to congratulations upon the completeness of our social development in this vicinity. The lack of harmful influence amongst our youths and daughters, and the assurance that these conditions are likely to continue.

At this writing in the town of Sunnyside are three churches, the Federated Church, comprising the interests of the Baptist, Brethren (Progressive Dunkards), Methodists, Congregationalists, Presbyterians and Christians; the Episcopalians and Conservative Dunkards.

The Federated Church includes in its activities, a Christian Endeavor Society, Sunday School and Ladies' Aid. Connected with the Episcopal Church there is a Women's Guild which finds considerable scope for its work; and the Conservative Dunkards maintain a flourishing Sunday School.

We have no saloons, and drunkenness is unknown. Many of our best young men are interested in the Sunnyside Cornet Band, which includes 18 pieces.

Yours truly,

J. E. Laird



PLATE 35

VIEW TWO. LANDSCAPE, BELOW ZILLAH, SHOWING HOME OF M. E. KANE

A Healthful Climate

Washington Irrigation Co., Zillah.

Zillah, Wash., June 9, 1900.

GENTLEMEN: In answer to your question whether the Sunnyside is a healthful section, I beg leave to state that I am a graduate of the Kentucky School of Medicine, and for the last seven years have followed my profession in Zillah and vicinity.

My primary object in coming to this section was to get relief from asthma, which for years had given me serious trouble and inconvenience. Within a few weeks after my arrival I felt greatly relieved, and within one year all traces of the disease had left me, and I am now, and ever since, have been absolutely free from it.

As the best proof that the Sunnyside district is healthful, I will say that I have been the only physician that has practiced at this place, and I have attended to the medical needs of nearly three thousand people. In other localities, every one thousand persons seem to need the services of one doctor. The reason, in my judgment, that there is so very little sickness in this section, is that the prevailing wind is from the west; there is scarcely a day that there is not a breeze stirring, and the air, moving from the mountains, and spreading out over the plain, is perfectly pure. While there are some hot days, the heat is of short duration, lasting from 10 A. M. until 4 P. M., and the nights are always cool. The climate being dry (the annual rainfall being in the neighborhood of eight inches), rheumatic, throat and lung troubles are hardly known. Of late it has been reported that there have been cases of scarletina in the lower country; but my experience is that persons thought to have scarletina, have only German measles, as no deaths result. As to pneumonia, I have had but two cases, and there have never been any other cases reported that I know of; and the country is absolutely free from smallpox. Now and then people are sick with chills and fever. This is the result of the land being newly broken, and water placed over it for irrigation purposes, and allowed to stand in low places. This can be remedied by proper drainage of the waste water. This sickness is, however, of a mild form, and a doctor's services are scarcely ever required.

I like the climate, the people and the soil, and without doubt will spend the remainder of my days at this place.

Very truly,

DR. A. McCRACKAN.



PLATE 36

SUNNYSIDE SCHOOLHOUSE AND CHILDREN

Sunnyside, Wash., June 3, 1901.

Washington Irrigation Co., Zillah, Wash.

GENTLEMEN: You have asked me for a letter concerning the Sunnyside. Willingly I accede to your wishes. To start with, let me state that I am an enthusiast. I believe there is no other section with the same prospects as this. What impels me to speak so favorably of this country is, that one with so little can do so much. Here, where a few years ago, there was nothing but sagebrush and jack rabbits, we have now beautiful farms and orchards. There are no paupers, but all are profitably employed. At the present there is more work than there are people to do it. There is work for every member of the family, from the six-year-old to the grandfather. Children are profitable in this country. They are first employed in the picking of strawberries, then the other numerous small fruits, including cherries, followed by apricots, peaches, pears, prunes, plums, apples, etc. Finally comes the jolly time of gathering hops. Whole families have been so profitably employed in this line of work that they have been able to more than live off of their earnings.

As to irrigation, boys and old men can keep the water running over large fields, and the soil is so easily cultivated that a mere boy can hold a plow.

All sorts of labor in this country is held honorable. A woman if she wishes to, can farm or sell town lots. As for myself, in the last year I have sold a number of town lots in Sunnyside and a few tracts of land.

While the Sunnyside has made wonderful progress in material development, the social side has not lagged. At Sunnyside we expect to have a reading room for the old and young; we have a guild, a Christian Endeavor Society, and literary societies. We meet and have public entertainments, in which all join.

I have lived here for six years, and during the whole of that period there has been no law breaking scarcely worthy of mention; neither has there been any social scandals. We have an excellent school and are soon to have a fine Episcopal church, and the Dunkard colony and Federated Society have commodious houses of worship.

As I ride about the country and observe the large farm houses and broad fields, so nicely leveled for irrigation, and bearing heavy growths of timothy clover and alfalfa, the orchards, with their perfect rows of trees; horses, cattle, pigs and sheep, and not a poor one among them; long lines of highway well fenced, and farmers everywhere at work, I can scarcely realize that the canvass of this scene six years ago was a sagebrush waste. I am so glad I am an enthusiast, for I feel that my enthusiasm has located a number in the Sunnyside section, who today are the possessors of fine homes, and are happy in the ownership of them; and I shall certainly do all in my power to bring the less fortunate of the east and other localities and have them settle here.

I might speak of the growing of different kinds of fruits, hay, cereals, poultry, stock and of dairying. They are all profitably followed. Should I state what wonderful things I have seen and of the things I have heard and re-heard concerning the productiveness of our farms in the growth of all sorts of produce, I am satisfied that what I should say would not be believed; for a great majority of the people cannot appreciate how much more productive land is when watered by means of irrigation, than when watered by the rainfall. Yours truly,

MARGARET J. CLINE.



Profit in Fruit Raising

Zillah, Washington, February 7, 1902 .

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: Ten years ago last August, I bought 80 acres of land under the Sunnyside canal. I paid \$25.00 per acre, for the land with the water right. My purpose was to go into the fruit growing business. Accordingly I set out 1200 peach trees in the Spring of 1892. I put my sons on the land and furnished the capital to start a small nursery, We raised our own trees, except the peach trees mentioned above. I have now 3000 apple trees some pears, cherries, plums, prunes and apricots in all about 5000 trees. I would not take \$200.00 per acre for the land now, for the amount, \$16,000.00, at ten per cent would not pay as much as the farm.

Some years are more profitable than others but the average is high. The past year was one of the most favorable in the history of the valley. If I knew I could have such a year once in five years, and make only expenses the other four years, I should consider the fruit business a profitable one; but I know from experience that I can do far better than that.

My peach crop was light the past season, but the apple crop, heavy. I keep an accurate account of all receipts for fruit sold, and find that I received in cash, so far this year, \$5070.73, I have two cars of apples sent out and not yet reported on, that will bring at the least, \$1000.00; then I have about 7000 boxes of apples on hand that will bring me about \$8000.00. The total receipts will be about \$14,000.00. All expenses can be paid with \$4000 00, leaving me net \$10,000.00. My fruit ranch is not for sale at any price.

Yours respectfully,

F. Walden.



PLATE 38

RANCH OF J. F. CRITTENDEN

Paying for a Farm in One Year

Zillah, Washington, December 25, 1901.

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: I celebrated Washington's birthday, 1901, by going to the Sunnyside country and buying the Charles Roberts place of 20 acres in section 5-10-21. I had been living in Nebraska previous to my coming here, where I had been fairly successful, although the health of our eight children had never been good. My old neighbors thought I was making a mistake in going so far away from home, but the information I had received concerning the Sunnyside country was so favorable that I concluded to risk all and go there.

I have been living here almost a year, and it may interest you to learn what the first year has brought us. Our place is one of 20 acres, for which I paid \$2100.00 cash. There are about 9 acres in orchard, 8 acres in alfalfa, and last year I had 2 acres in potatoes and garden truck, and about 1 acre unimproved. In the orchard, which is mainly winter apples, are 315 Ben Davis trees, 60 Missouri Pippins, 65 Willow Twig, 68 Jonathan, 19 Winesap and 23 mixed trees, seven years old last Spring.

What the place produced before I purchased it, I cannot say but am told that in 1900, 105 trees of Ben Davis apples produced a net result of \$560.00; the alfalfa produced nearly 90 tons.

This year's result has convinced me I have come to the right place, Fully 60 apple trees were unproductive, but from the remainder I have sold apples as follows:

One car, netting	- - - -	\$ 617.95;
One car, "	- - - -	586.90;
One car, "	- - - -	502.25;
Sales to Chicago buyer, netting,	- - - -	1,431.50;
Small cash sales,	- - - -	152.80;
Total,	- - - -	\$3,291.40

for apples alone; besides having 600 boxes of choice apples in the cellar that are now worth \$1.50 per box. The total yield of apples was upwards of 4400 boxes, not including culls,—although of the latter we did not have to exceed 50 boxes.

The figures quoted are the amounts of actual cash received for the apples,—the only offsets against these receipts being the usual expenses of picking, packing and hauling. My total outlay on the farm last year will hardly pass \$700.00.

In addition to our apples we had a large yield of alfalfa hay, besides potatoes and garden truck; and I must not forget to add that Mrs. Hardell has taken in from the produce of her four cows and chickens about \$200.00, in cash.

As to health we have never, including the twins, enjoyed such good health as since our arrival here. We have a good school about a quarter of a mile away, which, on account of the large number of new people coming in, has been doubled in size, and which our children attend,—not including the twins.

Yours truly,

R. H. Hardell



PLATE 39

YAKIMA RIVER IN FRONT OF ZILLAH

Diversified Farming Profitable

Zillah, Washington, December 25, 1901.

Washington Irrigation Company, Zillah, Wash.

GENTLEMEN: I am the owner of 40 acres of land in the Sunnyside district about two miles southeast of Zillah. I have on this land 10 acres of winter apples, 3 acres of potatoes, 1 acre of grapes, and the balance in clover and timothy, and alfalfa, with the exception of 2 acres reserved for garden and other purposes.

This year I sold \$2500.00 worth of apples, \$600.00 worth of peaches, and over \$400.00 worth of potatoes. My hay is still unsold, and I have about 100 tons, worth at least \$4.00 per ton in the stack; besides I have sold \$150.00 worth of eggs, having raised the feed on my ranch. My place has netted me this year, above all expenses and cost of living, \$3000.00.

I came here from Wayne county, Nebraska, one of the best farming districts in the United States; but I want to say this is a better country and the best I have ever lived in.

I believe the Sunnyside is in its infancy insofar as its possibilities are concerned. The methods of farming are still in an experimental stage and are crude in comparison with what they will be within the next five or ten years.

It is a fact that I raised over 15 tons of potatoes to the acre this year, and I firmly believe that by plowing under clover, I can increase the yield to from 20 to 25 tons per acre. I received \$20.00 per ton for my potatoes, sacks thrown in. Potatoes are always a good crop and of superior quality, thereby commanding a ready sale in the Sound markets where they have an established reputation. The price this year, however, was above the average which is from \$8.00 to \$12.00 per ton.

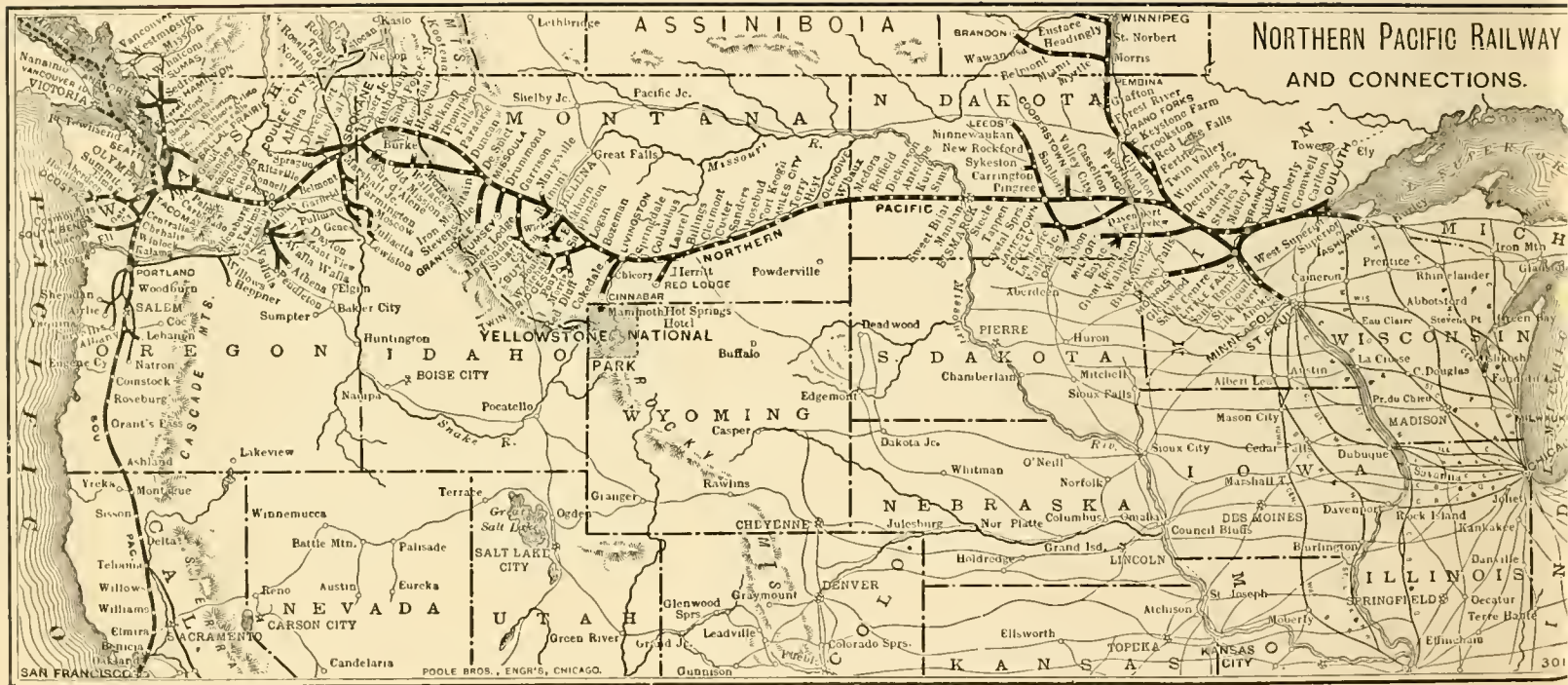
Very respectfully,

E. Chuman

Announcement

Owing to the unprecedented sale of land by the Washington Irrigation Company it has become necessary to extend the main canal from the 42nd mile post to opposite the town of Prosser, a distance of 14 miles. This extension will bring into the market the finest tract of irrigated land in the State of Washington. The lay of the land from the line of definite location of the proposed extension to the Yakima river is one of remarkable beauty. There are no gulches or deep ravines. In the main the country has a gradual slope, with just enough undulation to please and charm the eye of an artist. Here is an opportunity for the model farmer. He can lay his irrigated lands out in a most perfect manner. The dense growth of sage brush shows the land to be of remarkable fertility. This is without question excellent land for the production of fruit. It lies near the town of Prosser and close to the railroad. The town of Prosser is a live place and the Prosser Falls at this point in the Yakima river are capable of generating 2500 horse power, part of which is already used in pumping water, driving a flour mill and generating electricity for lighting the town,

Parties wishing to inspect lands in this locality will be shown the same by the agent of the Washington Irrigation Company at Prosser.



POOLE BROS., ENGR'S, CHICAGO.



THE NORTHERN PACIFIC RAILWAY



The Oldest, Shortest, Quickest and
Safest Route to the Northwest by
Its Observation Cars, Pullman and
Tourist Sleepers, Clean, Commodi-
ous and Comfortable by the
Beauty of its Route Unsurpassed

J. M. HANNAFORD,

Third Vice-President, St. Paul, Minn.

CHAS. S. FEE,

Travel Agent and Tourist Agent, St. Paul, Minn.

C. W. MOTT, Agent at Kingston, Wash. St. Paul, Minn.



LIBRARY OF CONGRESS



0 017 189 947 3

