# INDUSTRIAL OREGON PRODUCES QUALITY PRODUCTS

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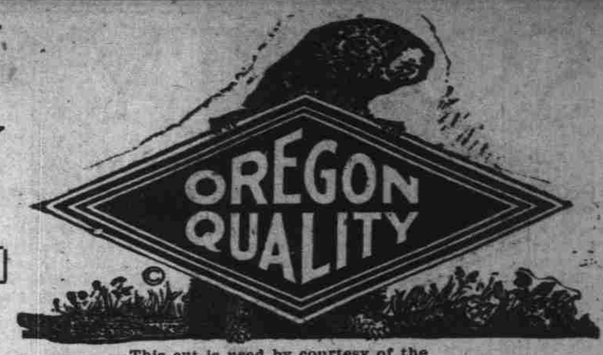
"OREGON QUALITY" products are establishing themselves in world markets; they make our pay rolls they build our cities; they attract new capital and new people; they provide a market for the products of our farms. Oregon farms produce a wider variety of profitable crops of "Oregon Quality" food than any other spot on earth.

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## Dates of Slogans in Daily Statesman

(In Twice-a-Week Statesman Following Day)

(With a few possible changes)
Loganberries, October 2
Prunes, October 9
Dairying, October 16
Flax, October 23
Filberts, October 30
Walnuts, November 6
Strawberries, November 13
Apples, November 20
Raspberries, November 27
Mint, December 4
Great Cows, Etc., December 11
Blackberries, December 18
Cherries, December 25
Pears, January 1, 1925
Gooseberries, January 8
Corn, January 15
Celery, January 22
Spinach, Etc., January 29
Onions, Etc., February 5
Potatoes, Etc., February 12
Bees, February 19
Poultry and Pet Stock, Feb. 26
City Beautiful, etc., March 5.
Beans, Etc., March 12
Paved Highways, March 19
Head Lettuce, March 26
Silos, Etc., April 2
Legumes, April 9
Asparagus, Etc., April 16
Grapes, Etc., April 23
Drug Garden, April 30
Sugar Beets, Sorghum, Etc., May 7
Water Powers, May 14
Irrigation, May 21
Mining, May 28
Land, Irrigation, Etc., June 4
Floriculture, June 11
Hops, Cabbage, Etc., June 18
Wholesaling and Jobbing, June 25
Cucumbers, Etc., July 2
Hogs, July 9
Goats, July 16.
Schools, Etc., July 23
Sheep, July 30
National Advertising, August 6
Seeds, Etc., August 13
Livestock, August 20
Grain and Grain Products, August 27
Manufacturing, September 3.
Automotive Industries, September 10
Woodworking, Etc., Sept. 17
Paper Mills, Etc., Sept. 24.

(Back copies of the Thursday editions of The Daily Oregon Statesman are on hand. They are for sale at 10 cents each, mailed to any address. Current copies 5c.)

## WITH AMPLE LATE BEE PASTURE SALEM DISTRICT WOULD BE A BEE PARADISE

### Give Them Plenty of White, Alsike and Sweet Clover, and Other Well Known Nectar Bearing Growths in Proper Seasons, and We Can Beat the World in the Production of Honey Here

Frank M. Alley, an employee in the freight office of the Southern Pacific, is the best posted man in Salem on bees. He could write a book about bees. He has contributed to the last five annual Slogan numbers of The Statesman, and he told the Slogan editor yesterday that the main requirement is what it has been all along, late bee pasture here, in order to make this section a bee paradise. The growers here, and especially the fruit growers, must realize more and more fully the necessity of providing bees with late bee pasture, with white, alsike and sweet clover, and the other well known nectar bearing growths. Where there is plenty of late bee pasture, this will be the best bee country in the world—it will be a veritable bee paradise.

**Difference in Wintering**

Mr. Alley accentuates the difference in favor of the Willamette valley over the east, and most other bee sections, in getting bees through the winter. This is a very easy matter here, comparatively.

Also the abundance of spring flowering plants and shrubs, many of them producers of the finest honey. Our numerous small streams are lined with willows of different varieties producing an abundance of early pollen available many times in mid-winter, so that the feeding of artificial pollen in this section is an unheard of thing. Next in order of its importance in the spring is the blossoming of the maples, and there is no finer honey than that produced by the scrub trees known as vine maple. Closely following the maples we have an abundance of shrubs and plants; one of the most valuable from a bee keepers' standpoint being the shrub known as Scotch broom. While it is a worthless pest, it is generally found in unused land and along road sides and waste places. This plant is a legume, and, like all members of that valuable family of plants, is a source of much pollen and honey at a time when it is most needed to build up the colony. It will produce both nectar and pollen for several weeks and is a never failing supply year after year.

**Feeding Problem**

The greatest problem here, confronting the keeper of bees in this section is the summer drought, and until such time as additional nectar producing plants such as the white and yellow sweet clover get a start, it will be necessary to adopt a system of looking after your bees that will carry them over this period. It, therefore, resolves itself into a question of leaving them stores to carry them over the winter or providing them with a substitute in the form of a syrup made from white granulated sugar in the proportion of two sugar to one of water by measure. This is best fed to the bees in October and should be given within the hive preferably at night.

In certain favored localities, there is no summer problem for the reason of the accessibility of the mountains and the burned-over waste lands, which is covered with an abundance of fire weed (also called Elk weed and Indian Pink, etc.,) which is a producer of what is considered one of the finest honeys in the world. It is a pure almost white honey of the most delicious flavor and brings the highest price in the markets of the cities where it is offered for sale. This plant grows wild wherever timber land has been burned over, hence its name of fireweed, and all efforts to cultivate it or propagate it have so far failed.

**May Move the Bees**

Fortunately, it is an ill wind that blows nobody good, and while we deplore the loss of the fine timber by fire, it is possible for the bee keeper to reap some benefit from the calamity, and there are but few locations in the Willamette valley where a bee keeper cannot successfully winter his bees, harvest the early crop of honey and incidentally build up his bees, then move them by auto truck a comparatively short distance to where he can pasture the mountain sides from July 1st till frost puts an end to the flow.

It is the practice of many California bee keepers to move their bees many miles to the orange groves and when that flow stops, move them a long distance to the sages on the mountains and deserts. If they can successfully do it, so can we, now that we have so many hard surfaced market roads leading in all directions in many cases to the mountains themselves.

**A Bee Paradise**

The following were among the conclusions of Mr. Alley's article of last year: "The question naturally comes up—if such a bee paradise exists, why has it not been taken up before? This is a

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## WESTERN OREGON FINDS IRRIGATION BOTH PRACTICABLE AND PROFITABLE

### Experiments Covering a Seven Year Period Demonstrate That Irrigation Adds an Average of 65 Per Cent to All Crops in Western Oregon—Already Six Districts Covering 50,000 Acres, and Many Smaller Units Are in Operation—Diversified Farming Demands Irrigation Methods

(By EDWARD T. BARBER)

Irrigation methods are being adopted in western Oregon on a rapidly increasing scale.

This is due to the transformation which has taken place from grain growing to a more intensified and diversified form of agriculture.

The rainfall for the Willamette valley averages 44 inches, for the Umpqua 35 inches and for the Rogue river valley 26 inches.

This is sufficient moisture to mature any of the crops grown in those valleys if it were evenly distributed during the growing season. But such is not the case. The average at Salem for the past 25 years for the growing crop months, April to October, inclusive, is as follows:

| | |
|---|---|
| April | 2.63 inches |
| May | 2.20 inches |
| June | 1.30 inches |
| July | 0.48 inches |
| August | 0.41 inches |
| September | 1.84 inches |
| October | 2.85 inches |

This distribution of rainfall is not favorable to most crops, and the use of irrigation water as a supplemental factor is rapidly gaining favor among the large number of farmers engaged in the intensified farming, such as berry and fruit growing, vegetable and truck farming.

A better understanding of the value of irrigation and the methods of applying it will still further increase the employment of this system of farming.

The irrigation farmer becomes a manufacturer, rather than a grower of food products. He must know certain facts, relative to the habits of growth and development of each different product, which the farmer depending upon rainfall does not know, or if he does know it, the knowledge is of small value to him.

Every plant passes through certain stages of growth, just as every animal on the farm passes through different stages of development and requires feeding and care adapted to each stage, if a maximum development is secured.

Moisture is the solvent of the chemical elements of the soil and the medium through which these elements is carried to the parts of the plant.

All plants are greedy feeders. By supplying or withholding the plant food at the proper time, determined by the stage of development then in progress, the irrigation farmer determines the quality and amount of his product, within certain limits, at his will.

A field of wheat has reached the stage where it should begin to head. A rain falls and supplies the plants with a super-abundance of fresh feed with the result that the plant continues growing straw. Later it heads but the heads are smaller than they should be and the grain is of inferior quality. It was all "luck." The rain came at the wrong time for that particular field. A delay of a week or ten days would have made a wonderful difference in the value of the crop. The irrigation farmer produces the right conditions at will. He withholds the water until needed and then applies it in just the right amount and at just the right time to produce maximum crops.

Potatoes are especially susceptible to control by irrigation methods. At any time after the potatoes set on the plant a lack of moisture sufficient to check the growth of the plant results in a mass of second growth, rough and knotty potatoes.

July and August are the important months in potato growing, and these are the two months of least rainfall in western Oregon.

Experiments by the Oregon Agricultural college at Corvallis, carried on over a 7-year-period show that irrigation increased the yield of potatoes 100 bushels to the acre; carrots increased 10 tons; beans 6.94 bushels; beets 4.636 tons; clover 5.3 tons.

From other sources it is learned that irrigation increased the yield of strawberries 4 tons per acre and other berries in a like proportion.

The experiment station concludes that general irrigation in the Willamette valley is not desirable or practicable, but that wherever water is available irrigation will be profitable for intense diversified farming operations.

The numerous streams in the valley present exceptionally fine opportunity for securing irrigation water, either by direct pumping from the streams or by reservoir dams from which the water may be conveyed by gravity to the fields.

A number of such systems are now in working order. In the Rogue River and Umpqua valley six different irrigation districts

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Beginning about January 1, 1925, The Statesman will supplement its slogan articles on this page with a series of stories of Industrial Oregon from the pen of Mr. Edward T. Barber who is one of the most accomplished writers along these lines in the Pacific Northwest. Mr. Barber is a painstaking and careful investigator. His articles will be based upon the most reliable information obtainable and written from a constructive optimistic viewpoint. The following subjects will be included in these articles:

The Willamette Valley,—Its Physical, Historical, Geographical and General Features.
Lumbering and Forest Products.
Manufacturing Industries and Opportunities.
Market at Home and Abroad.
Fruit Growing—Conditions and Opportunities.
Commercial Nut Growing.
Poultry and Its Opportunities.
General Agricultural Conditions and Opportunities.
Labor Conditions.
Irrigation.
Educational and Religious Resources.
Tourist Trails and Scenic Attractions.
Taxation and Financial Conditions.
General Living Conditions.
Dairying, Milk, and Milk Products.
Mineral Resources.
Commerce.
Hydro-Electric Development and Possibilities.

## YOU SHOULD EAT HONEY EVERY DAY IN YEAR, SAYS O. A. C. SPECIALIST

### The Family Should Come Naturally to Use it as a Partial and Very Desirable Substitute for Sugar, and All Will Be the Heathier and Happier for it

(The following is a special article by H. A. Scullen, assistant professor of entomology and specialist in bee culture of the Oregon Agricultural college. It contains matter that is of value to every one who has a regard for his or her health, as well as being interested in the development of Oregon, and especially of the Salem district:)

Strange as it may seem, many people do not fully understand the source of honey or just what honey is. Yet the time is not far in the past when man knew no other sweet. At the present time the average individual consumes about 60 pounds of sugar in a year with a relative decrease in the amount of honey eaten.

Honey is first collected from various flora by the bee in the form of a thin nectar. This nectar consists of about 60 per cent of water and 40 per cent of sugar. The sugar is chemically similar to cane sugar. Two changes, however, take place in nectar to form honey. In the first place the bees evaporate the bulk of the water, thus concentrating the solution and incidentally improving the flavor. Secondly, a chemical change takes place similar to the process which goes on in the human stomach after eating cane sugar. As a result the sugar is in a form which can be readily absorbed by the most particular digestive system.

**Why Honey Is a Superior Food**

Honey is a food of superior value not only because it is so readily absorbed by the digestive system but for several other reasons. Not the least of these is the natural flavor brought from the flower itself which no other artificial sweet can ever have.

Furthermore we find in honey some of those little known but extremely important elements known as vitamines, which are entirely lacking in sugar and the common syrups, due to the high temperatures to which they are subjected. Also we find honey contains most of the valuable minerals which modern processes have so frequently eliminated from many forms of food, and especially is this true in regard to sugar and the syrups made from sugar.

**Why Honey Differs in Color and Flavor**

The color and flavor of honey depends on the plant from which the bees collect the nectar. Fortunately the bees prefer to work on flowers which produce the better grades of honey when such flowers are available and are secreting nectar. The leading honey producing plants of Oregon all furnish honey of superior color and flavor. They are: clover, alfalfa, sweet clover and willowherb. As a rule the darker honeys have a slightly stronger flavor.

**Honey Not Adulterated**

Honey is so rarely adulterated that one might almost say it never is. This is due to the fact that beekeepers recognize the practice would only curtail their market and furthermore that the pure food law forbids it. The consumer often fears there is adulteration because the honey granulates or is almost white. Yet if one could secure honey from any one of the above named honey plants with no nectar from any other plant the result would be practically water white honey in each case.

Honey contains two sugars (dex

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## THIS WEEK'S SLOGAN

**DID YOU KNOW that Salem is the center of a potentially great beekeeping industry; that the early honey flow here EXCEEDS THAT OF ANY OTHER SECTION; that, with intelligent and industrious care, this can be made a veritable bee paradise, by providing bee pasture for the late summer, which can be done, and which must be done, in order to make fruit growing more stable by being rendered more certain of pollination; that fruit growers can thus harvest three sure crops by providing bee pasture and keeping bees—the sweet clovers and Hungarian vetch, the fruit and the honey; besides building up the fertility of the soil with the legumes mentioned?**

## IRRIGATION HAS DEMONSTRATED ITS ABILITY TO SERVE OREGON FARMS

### Irrigation Has Spread its Magic Wand Over a Million Acres of Productive Oregon Lands and They Blossom as a Rose—Willamette Valley Lands Yield 62 Per Cent Increase Under Irrigation

(By EDWARD T. BARBER)

The process of irrigation is older than recorded history. All the great nations of the ancient world, Assyria, Babylon, Ninevah and the valleys of the Nile based their prosperity on irrigation.

The prehistoric races of America left records of enormous irrigation systems in the very sections of the continent where we are today building irrigation dams and ditches.

Irrigation farming is scientific production. It applies science to securing maximum production of the land.

The arid sections of our continent, wherever a sufficient water supply is to be found, offer the most ideal conditions for irrigation and the production of super crops.

The irrigator controls the factors which enter into the growth and development of the plant at each stage of its life cycle.

The arid lands retain the necessary chemical elements which in a rainy section are washed out by excessive rain and carried to the sea. Arid lands are the original virgin soils of Oregon.

Irrigation laws and practices are practically the same in all our western states.

A few irrigation terms defined here may be worth while.

All of the old time irrigators measured their water by the "miner's inch." While this term admits of some variations in its meaning it generally means a constant stream of water having a cross section of a square inch, a fall of 4 inches in 16 feet, under a head of 4 inches. Under the general custom of the old time irrigation a miner's inch was considered the right amount for an acre of land. This was supposed to flow for use from April to October, inclusive, as the irrigation season.

The amount of water actually necessary to produce a maximum crop is termed the "duty of water."

Determining the "duty of water" is the cause of much litigation where large corporations, or the United States reclamation service construct the works and the time comes for the operation of the system to be turned over to the water users. The courts use as a basis of fixing the "duty of water" the amount that can be beneficially used on that particular tract. The amount of water necessary for maximum crops varies considerably with the different soils and conditions. Hence the "duty of water" fixed by the court for one system may not apply, in equity, to any other system. The construction company is interested in spreading the water over as much land as possible, for their profits are all from selling water rights on the lands within reach of their system.

The flow of streams is measured by the "second foot." This means a cubic foot of water passing a given point in a second of time. A stream recorded as having 1000 second feet means that 1000 cubic feet pass a given point in each second of time.

The contents of reservoirs is measured by "acre foot" units. This means enough water to cover an acre of land a foot deep.

From 2½ to 3 acre feet are considered necessary for an irriga-

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