A Banner Year for Fruit Growing in Utah.

Young Orchard of Dr Gleason Haysville.

Fruit Gathering Time in a Big Apple Orchard

Apple Tree's First Year of Heavy Bearing

THOUGH statistics of this year's fruit crop are not yet available, sufficient data are at hand to show that this has been by far the best fruit season in the history of Utah. Except in a few remote sections, where late spring frosts affected the fruit crop, all records of the industry were broken. The canneries of Weber, Boxelder, Davis, Morgan and Utah counties, as well as the shipping houses in the principal fruit centers, have handled more fruit than at any time in their history, and fruit has been cheaper and more plentiful in the larger markets of the state than ever before. For the first time in the history of Salt Lake county its orchardists have sent fruit out of the state in carload lots. Heretofore Salt Lake City has supplied a market for all the fruit grown in this county, and much of that grown in the south end of Davis county and the north end of Utah county. But this year the city markets were over supplied, and a few of the county fruit growers joined together in shipping out of the state three car loads of fine peaches, which brought the growers twice the returns they were offered in the local market. A little more of such enterprise would dispose of all the surplus fruit in the state and better prices could be had at home.

Boxelder, Weber and Utah counties, have for some years exported large quantities of fruit, but this year eclipsed all previous records. Grand county has kept up its export record, while Davis, Sanpete, Cache and Salt Lake have entered the export list, and prospects are that shipments will increase very rapidly, as many young orchards will come into bearing in the near future in all parts of the state.

Nurserymen report greater sales of trees and more extensive planting of young orchards than in any other year, and if indications do not fail, fruit growing will soon become one of the big industries of the state, ranking with beet growing as a wealth producing proposition, as indeed it should.

When the greater profitableness of fruit growing over most other farm pursuits is taken into consideration, with the fact that the soil, climatic and other conditions of Utah are specially favorable to fruit production, there is no apparent reason why this industry should not become of as much importance relatively as it is in the Golden state, where the products of its orchards and vineyards enrich its farmers to the tune of millions every year.

FRUIT GROWERS ASSOCIATIONS.

With the great increase of orchards in the state, the need of fruit growers' organizations is becoming more urgent every year. Until growers unite together in packing, shipping and selling the product of their orchards they will be at the mercy of shippers and middlemen who will naturally absorb the greater part of the profits. The local market conditions during the past season emphasize the need of better marketing conditions to make fruit growing the success its importance justifies. Fine peaches were sold in Salt Lake as low as 15 cents a case. A number of growers, dissatisfied with this condition, got together and sent out a few car loads to the eastern market and realized from 40 to 60 cents a case net. In the Hood river country, Oregon, where the best apples in America are grown, three years ago, growers were getting 75 to 80 cents for a bushel box of their choicest apples. Fruit growers were induced to organize a union or association for the uniform packing of their fruit and selling direct to the eastern market in carload lots. In three years the price rose to over $3 a box, paid at the nearest railroad station. The association has a manager and assistant manager, who employ packers to put up all the fruit grown by the association members in uniform style, and nothing but first class fruit is shipped. The growers do not pack their own fruit, the union does it for them. Eastern buyers prefer to purchase from the association, as the whole output is guaranteed to be uniform and up to sample. The same fruit is sold in New York at from $3.50 to $4 per box, and the people cannot get enough at these prices.

The Hood River Fruit Growers' union not only raised the price of choice Spitzenberg apples from 85 cents per box to the magnificent figure secured this year, but it saved its members last year $7,500 in boxes, paper and spray materials.

Buyers prefer to deal through unions, and are willing to pay better prices, for the reason that they are sure of a uniform pack, and feel that they are doing business with a business concern that will make good, a feeling not generally entertained toward the individual fruit grower. The union has a great advantage over the individual fruit grower, as it can get in touch with the principal buyers in all the leading cities of the United States, and can thus place the fruit where it is in most demand. It has also the further advantage of learning the reliability of buyers, information the individual growers cannot obtain.

Only those fruit growers who have had business training and adaptability to market their fruit to the best advantage are making a thorough success of this industry. Other growers are handicapped and lose 25 to 50 per cent of the possibe returns from their orchards every season. Co-operative selling, under efficient management, as practised both in the east and west, would enable all growers to realize 90 to 95 per cent of the proceeds from the products of their orchards. With better and more certain marketing facilities, Utah orchardists would be encouraged to take better care of their fruit plantations, and better fruit in much greater quantities would be produced.

When growers are thoroughly organized into co-operative shipping associations, they can control the situation; they can ship in carload lots and take advantage of different markets. Much can be saved by this method. Small shippers are hampered in having to pay high express rates which reduce their profits, as they are usually obliged to send their products to small markets, which are often glutted and over supplied.

NUT GROWING IN UTAH.

On every highway in the state, bordering every irrigating ditch, and marking the division between neighboring farms, also in nearly every farmyard in the state, will be found cottonwood, poplar and other practically useless trees, cumbering the ground and occupying valuable space without returning any profit to the owner. It is safe to figure that were all the poplars and cottonwoods grown in this state supplanted by nut bearing trees, the annual returns therefrom would enrich the state by tens of thousands of dollars. The soil and climate of this state are well adapted to the growing of nuts of various kinds. Walnuts, chestnuts, almonds, filberts and pecans can be grown very successfully. Walnuts and almonds, especially, thrive in nearly every section of the state. The yields from a well grown nut tree are enormous, and will increase for many years after it begins to bear. An instance is given by Thomas Judd, president of the state board of horticulture, in its last biennial report, of a Santa Clara farmer planting an English walnut 13 years ago in his dooryard. The tree which grew therefrom is now a fine specimen of its kind, and this year yielded $24 worth of marketable nuts. The owner remarked that if he had 100 such trees, they would be more profitable to him than 100 good cows. As the returns quoted are practically all profit, the claim of comparative value is not altogether an idle one, as it takes a pretty good cow to make an annual net return of $24 above cost of feed and care. There is much farm land in Weber, Davis, Boxelder, Salt Lake and Utah counties, worth from $200 to $500 an acre, which is encumbered with useless trees and which, if planted to walnuts or almonds, would pay good interest on this high priced land. The chief drawback in planting nut trees is the comparatively long wait between planting and harvest returns. A peach tree or a grapevine begins to make returns in three years, but a nut tree will not do much under eight to ten years, but will make good very soon after coming into fruitfulness for all the years of waiting.

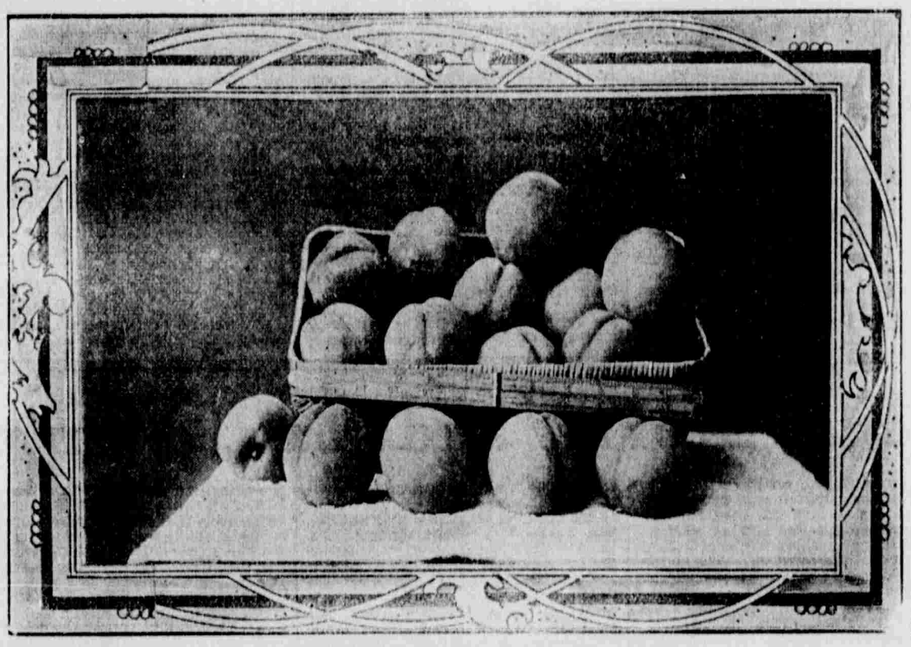
There is but one good reason for planting poplars, cottonwoods, boxelders and other useless trees about the farm house or bordering the roadways, and that is for shade. For this, however, they do not excel the walnut, which makes a stately shade tree, while its beautiful and symmetrical form is an ornament to the landscape, far surpassing in beauty the other trees referred to. It is therefore a waste of effort to continue the planting of these useless and less ornamental trees upon the farm, or around the farmhouse, if one has suitable soil for growing nut trees. The more valuable nut trees can now be had very cheaply, and, in fact, if the farmer is in no hurry he can plant the nuts where he wants the trees to grow and in due time, if his soil and location are right, he will have trees which will yield him handsome profits as long as he lives, and greatly increase the value of his farm.

UNDEVELOPED FIELDS.

Besides nutgrowing, among other less developed horticultural fields in this state, is grape culture. Despite the fact that many localities in this state are specially adapted to the growing of grapes to perfection, carloads of this popular fruit are imported every week into this market from California during the entire grape season. Eastern hardy grapes are also imported in large quantities every season, many coming from Iowa, Indiana and New York. The supply of Utah grown grapes is so infinitesimal that it cuts little figure in the market. This condition cannot be accounted for, except upon the theory that grape culture is thought to involve more labor and care than other lines of horticulture. This is certainly a mistaken notion, as a vineyard does not at any time require so much attention as a field of strawberries or raspberries, while the returns from the same area of ground more nearly approach those from a berry plantation than any other crop. Except in Dixie, the season in Utah is too short to grow all the California varieties, and those which do thrive will have to be covered for winter protection in the greater part of the state. But as this protection is supplied by a light layer of earth, this little extra labor need not be a bar to the extensive growing of choice grapes in all but the extremely cold counties of the state.

The hardy grapes flourish without this winter protection.

This branch of the fruit industry is not only very profitable, but is one of the most pleasant to follow. The returns are sure every year, and the work of caring for a vineyard is not so arduous as many other lines of husbandry. It has many advantages over growing large fruits. Once planted in congenial surroundings and properly cared for, a vine will live a lifetime, being comparatively free from disease and insect pests in this state; returns may be had two or three years from planting, and a full crop after the third or fourth year may be looked for; harvesting is easy work, a basket is gathered in little time with little handling, while in harvesting berries every one must be handled separately. Another great advantage which attaches to grape growing, especially significant in arid Utah, is that half the water other farm crops require is sufficient to mature grapes. This consideration alone ought to be sufficient incentive to more extensive vineyard planting. Grapes have been grown on some of Utah's hillsides without any irrigation and with very little cultivation. In some of the old world countries grapes are grown on the steep and barren hillsides, where there is so little soil that a hole is scooped out and soil carried in baskets and a place made to plant the vine. With a little added moisture the hillsides of Utah could be covered with vineyards, adding thousands to Utah's wealth.



A NEW PEACH PROPAGATED IN UTAH.

NEEDED AGRICULTURAL REVIVAL

Intelligent Methods of Husbandry Augment Earning Power *and* Prosperity of the Farmer

THE desirability of maintaining a prosperous and intelligent rural population in this country is generally recognized. The condition of the nation would be neither politically nor economicaly sound, the New York Tribune editor holds, if the population were so congested in the cities as to destroy the reasonable balance of conservatism and radicalism, put our government at the mercy of the restless, unrooted native and foreign elements which congregate in industrial centers, and leave these centers without the adequate agricultural background on which their healthy life must depend. The Tribune editor seems to think with many other strong thinkers that the nation needs strong recruits from the farm to carry on the great work of the day in all lines of political and economic activity. There is much misplaced sorrow, he continues, over the drift from the farm. We want a drift from the farm in just the measure that the farm overflows with men and women needed elsewhere. But we also want the farm to continue to develop strong, intelligent people and to hold its own as an attractive field for a fair proportion of them. How it can be made to do this is the problem. Some have thought to do it by rural free delivery, telephones and other appliances to make the farmer contented with an approach to the convenience of life in cities. The true solution is not, however, palliation. It does not consist in making young men and women think they are having as good a time as people in the city, but in making it possible for them to earn more than they could in the city. Prof. Knapp, who has done so much to convert the boll weevil from a curse to a blessing in some southern states, put the point squarely in his address the other day before the Southern Educational conference at Lexington, Ky., when he said that rural depopulation would continue as long as the mechanic's productive power was five times that of the farm laborer.

There is the problem. The old fashioned farmer may think the solution hopeless, but Prof. Knapp shows that it is perfectly easy if our people will only wake up to the possibilities of intelligent and progressive cultivation of the soil. He declares that agriculture yields each farm laborer in Vermont $417, in Iowa, $1,088, in South Carolina $147, in North Carolina $159, in Alabama $150. Only in Iowa is the farm laborer's productive power equal to that of the mechanic, and that is not because of superior natural productiveness of the soil—for, in spite of its richness, great care must be given to drainage in Iowa—but because of more intelligent cultivation. In Iowa there are four horses to one man working on the farm; in South Carolina one mule to every two workers. The Iowan's livestock is worth $1,214 and his farm implements $253. The Carolinian's livestock is worth $134 and his implements $43. The profit of farming is in the large crop secured by the extra labor beyond what will produce an average crop. It is the first bale of cotton or the first 20 bushels of wheat to the acre which costs, just as it is the first chair from the factory. Statistics show that with cotton at 7 cents the man who raises half a bale actually losses while he makes an increasing profit as he pushes his crop from one to two bales, as he can easily do by getting good seed and giving good tillage. The Iowa farmer puts five times as much power on his plough as the Carolinian, and he gets, not five, but eight times the result.

Dr. Knapp says that, with due allowance for short crops and failures, "the south can "make a gain of 500 per cent in productiveness "in the next ten years." What is true of the south is true in only a less degree of the whole country. Good seed, more power and less hand work, more thorough culture, more care to meet markets in the selection of crops and the packing of products—in short, the bringing to the farm of the spirit and intelligence of the alert manufacturer—would at least double the returns from farming, even in our most advanced states. Denmark in Europe and Canada on this side of the water have set us an example in revolutionizing their agriculture and substituting prosperity for depression. We can do as much, and the educational conferences and the education boards can perform no more worthy service than to promote a campaign for better farming in every state of the Union. It would be an educational and patriotic, as well as an economic, campaign, for a fat land with a wealthy agricultural population means an intelligent community, able and willing to support good schools, conservative and faithful to the duties of citizenship, because it has much to lose from bad government.

Utah, with its educational forces, should be a leader in this movement for better and more intelligent husbandry. It has too many half tilled fields and too many farmers who wonder if farming is worth while, simply because they do not really know how to farm.

With the educational impetus given agriculture in some of the higher schools of the state, the business of farming should become the most prosperous vocation in Utah. As shown above, the most potent reason for young men of ability leaving the farm is that other lines of endeavor offer better remuneration, with better opportunities for mental growth and advancement, which this affords. Given plenty of employment on the farm, with hours of labor regulated on business principles, and the opportunity to earn as much on the farm as elsewhere, few boys and men would leave the farm for the store, mine, workshop or railroad. With the attractions of good pay and less drudgery, the movement would rather be from the city to the farm.

The Utah agricultural college and the Brigham Young college at Logan, also the Brigham Young university at Provo, have large classes in agriculture, and are doing much a exalt farming to a higher plane, and to augment the earning power of the farmer. Such instruction is given the students as will enable them to do better in farming than can be done in any other legitimate line of business. With the opportunities now offered in many advanced agricultural lines, such as dry farming, fruit growing, animal husbandry and sugar beet raising, few businesses offer more alluring inducements.

HOME CANNERIES.

Canneries in the fruit growing centers of the state are doing much to advance the fruit interests of Utah. They have provided a ready market for surplus fruit, as well as vegetables, such as peas, beans, corn, tomatoes and asparagus. Wherever located these commercial canneries have brought prosperity to the people, very materially increased the value of farm holdings and furnished remunerative employment for all surplus labor.

A cannery is projected for Salt Lake county, and a number were established in Utah county this year. All have every promise of success.

In many sections of the state, too remote from the railroad to think of marketing the fresh fruit, as in San Juan, Kane, Wayne, Garfield, Uintah and Grand counties, small home canneries could be established to take care of the surplus fruit, that which is not consumed by the farmers' families. Outfits costing from $10 up to $100 can be put in by individual farmers and they can be manipulated to take care of an immense quantity of fruit and vegetables. A few such domestic canneries would supply the home market and that of the nearby mining camps with the finest products of the orchard and garden. The farmers would have the advantage of the freight rates and could make the business a success from the start, if they put up a good article. The safer way would, of course, be to start on a small scale and build up the business, as experience was gained. The grower could import the cans, and labels, and with the cheap outfits now to be had, he could put up, with a little extra care, a better article than that put up by the large commercial canneries. In a few years, by painstaking care, the farmer could work up such a reputation that his products would be in demand.

Where much fruit and garden truck, such as tomatoes, corn, asparagus, beans, etc., are grown it would pay to establish a larger canning factory. Not counting the boiler and the building for the plant, an output will cost from $75 to $1,000, according to the capacity desired. The $75 plant has a capacity of 2,000 three-pound cans per day. The $1,000 outfit has a capacity of 25,000 cans per day. These figures are prices at eastern factory and do not, as before stated, include steam boiler or the factory building, nor the freight from the manufactory.

FRUIT DRYING AND CURING.

Where fruit cannot be profitably marketed in its fresh state, owing to distance to markets, it can be sun dried or evaporated, and handled at a profit in this manner, the freight then will not cut much of a figure. For sun drying little in the way of an outfit is needed, but for evaporating suitable outfits must be had. A family evaporator can be had for $3.50 and up.

That there is a ready market for first class dried fruit is evidenced by the fact that all the grocery stores of the state carry loads of imported dried fruits. Apricots, peaches, raisins and prunes from California, and apples from the east are retailed in Utah at from 12½ to 15 cents a pound, while the cured products of Utah orchards are seldom seen. It has been demonstrated times without number that dried fruit can be put up in Utah of as good a quality as the imported, and if it pays California and eastern growers to ship the product here and pay middlemen's profits on their dried fruits, Utah growers can do it, and by supplying their own market can obtain better prices, as they will have the freight margin in their favor. Utah is adapted to the growing of the choicest fruits, and with intelligent effort in growing the best varieties, drying, curing and packing the same, this state should be an exporter of dry fruits, not the heavy importer it now is.

Dried and evaporated fruits could be made a source of great profit in the warm, sunny counties of San Juan, Kane, Garfield, Wayne and Washington. Dixie raisins, especially could be made to return to Washington county alone the neat sum of $100,000 a year, to say nothing of other fruits for which that section is particularly fitted for growing.

Like beet growing in the sugar factory sections of this and neighboring states, the growing and evaporating of fruit in a commercial way will furnish employment for all the members of the family, in a time too, for the most part, when the children are not in school. This industry can be made as profitable in the remote sections of the state already named as is the beet growing industry in the northern section.

So great has been the season's fruit crop in some sections of the state that thousands of bushels of the choicest product of the orchard was allowed to go to waste for want of some means to care for it. This is nearly becoming an annual occurrence, and something should certainly be done in every community to care for this fruit and stop its wanton waste. This can be done by the farmers putting in home canning outfits or by drying the fruit and putting it up in the style demanded by the trade.

In New York state the best apples are barreled and sold direct from the orchard, windfalls, culls and wormy fruit are sold to the large evaporating plants, which put up everything which will pass inspection in dried fruits, while the trimmings, worms, parings, etc., are sent to the cider mills and jelly factories.

CULTIVATION VS. IRRIGATION.

Dr. Sumner Gleason of Kaysville, Davis county, has made a study of Utah horticultural conditions, with a view to determine the relative importance of irrigation and cultivation as they relate to fruit production. He has tried all methods from intensive cultivation without irrigation to copious irrigations without cultivation, and has come to the conclusion that fruit trees do better with no water whatever (other than the natural rainfall) when cultivated thoroughly, than they do when watered freely with little or no cultivation. Mr. Gleason is at present conducting a four acre intensely cultivated orchard and nursery combined, growing nursery stock between the orchard rows. His 6-year-old orchard, intensely cultivated, but grown with little irrigation water, a part of which is illustrated on this page, is in a most thrifty condition, comparing favorably with orchards irrigated every week or 10 days. He is experimenting with 125 varieties of fruits. His orchard is irrigated but two or three times annually. The first water is applied about the middle of July, by which time the winter moisture is about exhausted. He waters again a month later, with a third irrigation for late fruit. As soon as possible after watering the irrigating furrows are filled in with the cultivator to prevent evaporation. Cultivation in the spring begins as soon as the ground can be handled without puddling, and is continued every 10 days until the fruit weighs the branches down to the ground. This treatment causes the roots to penetrate deeper in their search for moisture, finding also more plant food. When frequent surface irrigation is practised the roots form a network near the surface and soon dry out in times of drouth, whereas the deep rooted trees will pull through an ordinary drouth.

As shown in the illustration, Dr. Gleason believes in starting his orchard close to the ground and keeping the trees low. The head is started at about 18 inches, and the trees are kept under eight feet high by careful pruning. This greatly lessens the labor of gathering the fruit, all of which can be picked without the use of ladders. Another equally or perhaps more important advantage is that the winds will have very little effect upon a low tree, properly pruned. The recent gale that visited Davis county did little or no damage in Dr. Gleason's orchard, except to one tree, which had been allowed to grow tall, without much pruning, it was literally torn to pieces by the wind.

Dr. Gleason is also interested in the propagation of new fruits. He has now under trial a very promising new peach, the "Early Elberta," it is a seedling of the famous "queen of the market," but one week earlier in ripening. It is similar in form of tree and size of fruit to its parent, but has a finer grain, higher color, smoother skin and better flavor. Specimens were sent to J. H. Hale, the noted peach grower of Connecticut and Georgia, who pronounced its quality the very best.