CALIFORNIA PRODUCTS

==== AND HOW TO ====
GROW THEM

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By
MACK COLVIN COATS

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To the Reader The author of "California Products and How to Grow Them,"

Mr. Mack Colvin Coats, was born in California in 1868 and has lived in the State ever since. His early life, and until he was twenty-one, was spent on a wheat and alfalfa farm, planting, harvesting and marketing the crops.

When he reached his majority he entered into the business of planting, cultivating and harvesting California products. This business took him through the farming sections, giving him the opportunity to study the fruits, vegetables, berries, nuts, etc., from a practical standpoint.

Later he engaged in the dried fruit business, where he acquired the knowledge of curing, packing and marketing dried fruits and nuts, and then he took up the cannery work.

Here he was in close touch with the producer, studying the best kinds of products for canning and how to handle, process and market them.

These years spent in growing, buying and marketing California products has given Mr. Coats the actual knowledge, gained by experience; besides much reliable data has been gathered from the most successful growers in the State.

During the last few years Mr. Coats has spent his entire time gathering reliable information on California products, and giving illustrated lec-

tures in Los Angeles and San Francisco on farming districts, products, etc.

THE PUBLISHER.

Notice.—This book will be mailed to any address in the United States for 50 cents. Send stamps or money order to,

MACK COLVIN COATS,

789 Market St.

San Francisco, Cal.

Explanation "California Products and How
By the Author to Grow Them," is a very interesting study, but one that no man can master completely in a lifetime, as conditions are constantly changing.

After fifteen years of close application to the study, as a planter and a grower, a buyer and a seller of California products, traveling through the farming districts, studying soil, climatic conditions, irrigation and actual results obtained, talking to successful and unsuccessful growers, gathering data on their methods, studying the market problems and future possibilities for profits for the grower of California products, the writer has given to the public this book.

With the data at hand volumes could have been written, but the result would have remained the same. This book is intended to cover only the products of California suitable for the grower to plant who intends to farm only a limited area, that is from one to one hundred acres.

Each of these products are taken up separately. First the best varieties are given, then the best districts for future planting, best soil to use and distance apart to plant, while planting, cultivating, pruning, harvesting, marketing and other essentials are explained briefly.

No book has ever before been published giving all this information. Large expensive volumes have been printed on "Fruits of California," but these books contain much matter that is of little importance to the ordinary grower.

After meeting numerous people who were entirely unacquainted with the farming districts of California, and the many different kinds of products grown in these districts, people who intended to live in California, and become growers of California products, on small tracts, the writer concluded that a book, giving in as short form as possible, all the instructions and information pertaining to these districts and products, would be a guide to the beginner, offering the experience of the writer, as well as that of the most successful growers of the State.

First, the writer has endeavored to give all information necessary on the farming districts and the best products to plant.

Second, it has been his aim to give this information in as short space as possible, so this book would be within the reach of all.

Third, the entire book has been written so the reader can get a perfect understanding of the essential parts of farming in California without reading great volumes or spending much time and money traveling over the State.

Every statement and all information given in this book about the farming districts, the products and the method of handling them, can be verified by any person who will take the time to carefully investigate.

For the beginner to make a start it is first necessary to buy a piece of land, which generally means that some real estate man or firm must be consulted, and right here the first trouble is

met. In California, like all other States, there are unreliable real estate firms and there are also reliable real estate firms, and to the stranger it is always a serious undertaking to attempt to do business, not knowing the difference.

In traveling over the State the writer has become personally acquainted with a number of reliable real estate men in each district; men who make a specialty of selling farm lands in small tracts. These men are perfectly familiar with the land and the products in their respective districts, and have built up their business by honorable methods and square dealings, and can not afford to swindle a buyer in any way.

On the last pages of this book is given the names and addresses of one or more of the most reliable real estate firms in each district. A letter addressed to any of these firms recommended will bring a quick reply, giving all details regarding lands, prices and products.

The names of some of the best nursery firms doing business in California is also given, and these firms will, on request, supply catalogues, showing prices of young trees, vines and other stock for planting.

California The State of California has an area of 153,650 square miles, or almost one hundred million acres of land.

This exceeds, by over one thousand square miles, the combined area of the States of Massachusetts, Delaware, Maine, New Jersey, Con-

necticut, Rhode Island, New York, Vermont, New Hampshire and Ohio.

The entire western boundary of California is washed by the Pacific ocean, the great Sierra Nevada mountain range extends along the entire eastern boundary, and the Coast Range mountains parallel the Pacific ocean.

These mountain ranges form a junction in the north at Mount Shasta, and the Tehachapi mountain range extends across the State east and west about three hundred miles north of the southern boundary.

These mountain ranges completely shut in on all sides the vast level farming districts and tend to shut out all disagreeable weather.

These mountains are covered with a heavy growth of excellent timber, and here are located the great mineral belts and stock ranges. Flowing down into the level lands are numerous streams of mountain water, watering the valleys thoroughly.

Located almost in the center of the coast line is San Francisco Bay, one of the finest harbors in the world, while other good harbors are numerous.

With millions of acres of good level farming lands, well watered, fine harbors, splendid railroad transportation and a year-around climate that pleases all, the future possibilities for the small farmer in California is excellent.

Climate It is not the purpose of this book to favor any particular section of the State in any way whatever, therefore, the records of the weather man, showing results as they are, must be used.

The farming districts of California have but two seasons, the wet and the dry. The wet or rainy season, winter, begins in October, with warm rains, and continues until April. It does not rain all the time during this season, but during these six months rain comes only at intervals, and between rains the sun shines bright and warm, flowers bloom, crops of all kinds are planted, orchards are cultivated, and the orange and lemon crop is picked and marketed.

People labor out of doors in shirt sleeves and stock run without shelter, as the thermometer seldom touches freezing point. Snow and ice is practically unknown, and frost is seldom seen.

The dry season, summer, begins in April and continues until October. During this period there is no rain, no clouds or fog, and the sun shines brightly. This is the great harvest time. At rare intervals the thermometer goes above 100 degrees, but the dryness of the atmosphere is such that the heat is not unbearable. Sunstrokes are unknown and no one quits work on account of the heat.

For six hundred miles north and south in the farming districts the thermometer shows almost the same results winter and summer. For illustration: In 1907 Los Angeles showed hottest

point reached, 103 degrees; coldest, 35 degrees; while Sacramento, five hundred miles north, showed hottest 99 degrees, coldest 31 degrees.

The most rain falls in the north and gradually diminishes going south. For 1907 records show rainfall as follows: Sacramento, 17 inches; Fresno, 9 inches; San Diego, 7 inches, while each place showed over 225 sunny days in the year. Hurricanes, blizzards and severe storms are unknown and plenty of sunshine everywhere. In fact, the splendid climate of California has made it the greatest fruit and alfalfa district in the world.

Soil and Irrigation The soils of California range from the light gravelly to the deep, rich loamy. Along the mountains, bordering all the level valleys, generally with a steep slope, are great stretches of the light gravelly and sandy soils. This is a very strong soil, and especially adapted to the growing of oranges, lemons, olives, figs and grapes.

Bordering this foothill or sloping land comes the immense areas of smooth level lands, deeper, richer and easier cultivated, including sandy loam and finer soil. These lands have all been cultivated for grain for years, and with irrigation, immense crops of fruit, vegetables, nuts, berries and alfalfa can be grown.

Along the rivers and smaller streams are the deep sedimentary loam lands, made up from the wash from the mountains for ages. These lands

are the very richest and produce fruits and vegetables to perfection without irrigation. Along these streams many of the finest orchards in the State have been producing fine crops for years, and here the splendid vegetables are grown.

As all the farming districts are partly surrounded by mountains, with many streams flowing into the larger rivers, from the mountains, it is readily seen that all the farming districts contain all the grades of soil, from the light gravelly to the rich loam. Therefore, most of the districts produce all the fruits, nuts, vegetables, berries and alfalfa.

Some of the districts depend entirely upon irrigation. Other sections produce large quantities of fruit without irrigation, but alfalfa, in all districts, requires at least some irrigation.

Most irrigated districts get water from the mountain streams, some sections pump water from wells, and a few sections are supplied from artesian wells.

For all details on irrigation in California, send to State Board of Trade, Ferry Building, S. F., for Farmers' Bulletin No. 4.

Fruitful California CALIFORNIA the FRUITFUL, where all the fruits of the world are grown. It is not so surprising that all the fruits of the world grow in California to perfection, but that in many of the districts all the fruits of the world can be produced on the

same farm, with alfalfa, nuts, berries and vegetables besides.

California has long since passed the experimental stage. It is no longer a country of experiments, but a country where everything is grown in large quantities—with markets to handle the same.

The fruits, nuts, alfalfa, berries and vegetables produced in California amount to millions of dollars annually, yet the soil that produces these wonderful crops was, only a few years ago, producing large crops of grain, and the thousands of acres of land still producing grain is capable of growing these products. These lands are fast being divided up into small tracts. These tracts are being planted to trees, vines and alfalfa, increasing the output of these products and decreasing the tonnage of wheat.

As the output of these crops increase, the market facilities increase likewise, and by the time all these fertile lands are planted and producing the markets of the world will be capable of handling and paying good prices for the products.

Already most of the fine California products are grown by farmers, living on small tracts—from ten to one hundred acres—and the future grower of California will be the man who puts all his time and energy on a small farm, growing and handling fancy California products in a scientific way.

Few people are familiar with the immensity of the fruit business in California, and still fewer

are in any way whatever familiar with the different sections of the State, where the fancy fruits are grown and the heavy crops are harvested. Only the very few who have watched the developments for years, who have traveled over the State gathering data, investigating the soil, inspecting the markets, and actually seeing results, can comprehend the extent of the business, and see in the future the great possibilities for those who will engage in growing California products.

Each season the rich soil of California, with the help of gentle rains and bright sunshine, produces about two hundred and twenty-five million dollars worth of farm products, including the following:

Orchard products	\$64,000,000
Vineyard products.....	25,000,000
Vegetable products.....	20,000,000
Dairy products	25,000,000

The growing of fancy California products means millions of income and there is a good healthy outlook for the future. Fine California fruits are grown in all parts of the State, but with the numerous kinds produced it is necessary to know what particular part of the State produces each kind best, and where the best markets are located for handling each and every kind.

For convenience, and a quick and ready understanding for the reader the State has been divided into five great districts. Each of these

districts excels in the production of some one or more kinds of fruits, and each section has the factories, or the markets, for buying and handling these products. Therefore, before planting any kind of fruit look well to the district and the markets for handling this fruit. Then look to the soil, later to the planting, cultivating and harvesting.

California California fruits may be put into
Fruits two classes, deciduous and citrus.

Deciduous fruits are those that bloom in the early spring and summer and drop their leaves in the fall or winter, including such as peaches, pears, cherries, apricots, etc.

Citrus fruits retain their green foliage the entire year and ripen in the winter. Oranges and lemons come under this head.

Then the many varieties of grapes, the nuts, vegetables and alfalfa, all of which will be taken up by varieties in the following pages.

Planting Costly mistakes are made in planting
Trees young trees, and many failures can be traced to this, especially where the planter is inexperienced or a stranger in the district. Great care should be used in selecting the kind and variety of fruit to be planted, in preparing the soil and caring for the young orchard.

After deciding on the section of the State in which you wish to live, investigate carefully and learn what fruits are being grown there profit-

ably, and if the markets are there for buying these fruits, then select your land. Or if you have decided to grow some particular kind of fruit, or several kinds, then locate in the district where these fruits are grown successfully and where the markets are near by.

In selecting your land, be it one or one hundred acres, look well to the quality, and endeavor to get as near as possible to a railroad shipping point.

Most of the land that will be on the market for sale in the future will be land that has been farmed for grain and will be easily worked and cultivated. Because this land has been growing grain do not think it is worn out or exhausted, as some people who have raw land for sale will tell you. All the grain land in California has been producing good crops of wheat and barley for years, without irrigation, therefore must be good, and most of it runs from six to thirty feet deep and only a few inches on top has been farmed. Furthermore, most of the finest orchards and alfalfa fields are now growing on old wheat land. Raw land, or soil that has never been plowed, if deep and strong, is equally as good and will produce fine crops.

After selecting your land have it plowed deep, deeper the better. Then let it rest a few weeks, so the air will penetrate it.

Then harrow it down smooth, being careful that all clods and rough places are broken up. After putting ground in good shape holes for the

trees can be dug. Distance apart should be governed by the kind of fruit trees planted, but most trees should be no less than twenty feet apart. Holes should be dug deep and wide, according to the size of the trees and roots. For the smaller trees holes should be no less than two feet deep and two feet wide.

Proper time for planting is January, February and March, but latter part of February and March, when the sun begins to warm the soil, is best.

Long before this, arrangements should have been made with some reliable nursery for supplying the young trees, and very reliable people can be found in each district who make this a business.

When everything is ready get your trees. The nursery people will tie them in bunches and these can be taken to your place and "heeled in," that is, trenches dug in the loose soil and the roots of the trees covered. Buy a few more trees than will fill all the holes.

A few at a time should be taken out, the tops cut back, and all long-hanging, or broken roots cut off.

In planting see that a good amount of loose soil is placed in bottom of hole, also that the roots have plenty of room. Tamp the earth in around roots and plant tree about as deep as it was in nursery.

Soon after planting the trees will begin to put forth green leaves. Look them over carefully and

take out any dead ones and replace from reserve stock.

Cultivating The strong soil of California, with the warm sunshine, grows young trees rapidly, and grass and weeds grow equally as fast, therefore careful cultivation should be practiced. Keep the soil around the trees entirely free from growing vegetation, and keep the ground loose.

Vegetables, such as potatoes, tomatoes, onions, corn, etc., can be grown between the rows, but if this is done weeds should be kept down, and as soon as the vegetables are harvested all refuse should be removed.

After the first year one good deep plowing is sufficient each year. This will turn under all vegetation, then cultivator or rolling cutter is sufficient to keep down the weeds and keep the ground loose.

If irrigation is used ditches should be built, not to interfere with cultivation, and water put on as needed, but care should be used in this, as too much water is worse than not enough.

Thorough cultivating is one of the roads to successful farming.

Pruning and Spraying After an orchard is planted and properly cultivated, the next important thing is pruning. All trees require more or less. The heavy bearing trees, like peaches, pears and apricots, demand very

careful pruning. It is an easy matter to prune a young tree the way it should grow, but it is hard to change an old one. Therefore, begin right and keep in mind these few points: That when the tree is older it will bear heavy loads of fruit, and heavier the loads more money for the grower; that this fruit must be picked and it costs money to pick fruit from a twenty-foot ladder; that the trees must be cultivated and low limbs interfere with this work.

Prune so the limbs will grow upward and outward, making a symmetrical tree, shaped like a half closed umbrella, inverted.

Begin to form the body when the tree is young and gradually work it up to the required shape. When the orchard is one year old go over each tree, cut away all crossed and dead limbs, and cut back the top slightly. When two years old begin to shape the frame. Work for a stout straight body. Select the first three good limbs for the main branches, these limbs to form the shape of the tree. Should extend outward and upward, and from each of these should extend three other limbs, and so on out. Cut back the top so the tree will not grow too tall, cut out limbs so the tree will get sunshine and air inside, work to make a tree that will carry a good load of fruit, without breaking limbs, and grow the fruit on the outside of the tree, within easy reach of the pickers. Each limb should be evenly balanced and not crossed by other limbs. After the

tree is properly formed it is then easy, each fall, to cut away the surplus brush and top it back.

Spraying Spraying is very necessary with most trees. It kills insect pests and fungus growth and keeps the tree healthy and vigorous. Deciduous trees, peaches, pears, apples and apricots should be sprayed at least once each season. Citrus trees should be sprayed and fumigated. There are many kinds of spray material, and different ways of applying, and is a matter that should be left entirely with the grower, who should study his particular needs and act accordingly. Each kind of tree requires special treatment. Some growers do not spray at all. It is advisable to spray and fumigate and no grower should slight it.

Harvesting and Marketing Long before the fruit is ready to pick arrangements should be made to market it. Most growers of canning and shipping fruits have it sold before it is ripe. Some who grow drying fruits follow the same plan, which is the most satisfactory.

If canning fruits are grown arrangements should be made with some canning firm to handle it. Sufficient boxes should be on hand to hold it. These boxes hold about fifty pounds and are returned as fast as emptied. As fast as picked it should be hauled to cannery or nearest shipping point. If shipping fruits are grown the same ar-

rangements should be made with some shipping firm. In either case, try to please the firm who is paying you for your fruit.

Before it is ready for picking learn from the proper person just how they want it delivered. Some firms may want it rather green, while others may want it riper, but let them be the judges. When you begin picking, see that the fruit is not bruised or handled roughly. Try to get the reputation for good delivery. This will assist you in selling your crop the next season. Have enough pickers in your orchard to keep up with the fruit, so it won't get too ripe, and deliver with promptness.

If you have drying fruit get everything ready in advance. All fruits are dried in the sun on wooden trays. See that you have enough trays handy. Let the fruit get ripe; this will mean heavier dried fruit and better quality. If it is fruit that must be cut open have enough help on hand to do the work. Spread the fruit on the trays and when it has dried sufficiently either dump it into large boxes or into a pile, in a dry place. If it is sold have some one look it over and give you directions for sacking and hauling. If it is not sold, submit samples to buyers for an offer. Do not figure on waiting too long for the market to get better. Take the market price, deliver the fruit, get your money, place boxes and trays under cover and your work for the season is over.

Markets Fancy California products will never want for good markets. The markets of the world will take it, and with increasing reputation of these products the possibilities for overdoing the business is very remote. During the last few years many new markets have been opened, and with the increasing population in all the civilized countries the demand for California products are sure to increase from year to year.

The great possibilities for marketing California products and the wide range of markets assures the farmer who enters into the growing of these products good prices from year to year, and as the acreage planted increases so will the capacity of the markets.

Although millions of dollars worth of California products are shipped to all points of the earth, yet within the State of California itself is located the markets that handle these products for the farmer.

These markets are the canning concerns, dried fruit firms, shipping houses, shipping associations, produce houses, wineries, sugar factories, creameries and other large establishments that buy the raw product, pay cash for same, and then ship to all points. Home consumption also amounts to considerable.

The canning industry of California is one of the largest in the State. Most every city or town of any size in the agricultural districts has one or more canneries for canning fruits, vegetables and berries. In San Francisco many very

fine canneries continue operations for months each season, buying products in carload lots all through the farming districts and shipping it in.

In some districts where some particular kind of product is grown extensively canneries are located and work on this product alone, while in other districts canneries handle all kinds of products. Most of the canneries throughout the State are independent, buying where they can, and no combination of interests are made, giving the farmer an open market for disposing of his crops.

When a farmer has good canning products to sell he can generally receive bids from a number of canneries for his entire output.

When his crop is ready to deliver he can either haul or ship it to the cannery and receive cash as fast as he makes delivery. Here it is canned and shipped out in carload lots to all parts of the world, "Fancy California Canned Products."

California canned products are very pure. Only the fine ripe fruit is used, with granulated white sugar. No preservatives or coloring matter whatever is allowed, making these canned products very wholesome, which means an ever increasing consumption.

Dried products, like fruit, raisins and nuts, are generally handled by the packing houses or associations. In some cases these products are shipped direct to the Eastern wholesaler by the grower, under his own brand.

Many large dried fruit packing houses are located over the State, where fruit can be had. These are private concerns that buy dried fruit, nuts and raisins from the grower, paying cash on delivery. These products are placed in the large warehouses, and as fast as possible they are given a careful cleaning and grading, packed into cartons, small and large boxes, and shipped out to all the markets of the world under the label of the firm. In some sections the growers have built their own factories and market their own goods.

California dried fruits, nuts and raisins are pronounced by high authorities to be the most healthful of foods. As no harmful preservatives or coloring matter is used, and as all these products are carefully cleaned before shipping, the consumption has increased to great proportions and the future outlook for continued good prices is very flattering.

Each season over fifty million dollars worth of fresh fruit and vegetables are shipped from California to the Eastern markets, including oranges, lemons, grapes, peaches, pears, cherries, plums and other fruits and vegetables of different kinds.

Like dried fruits, these products are handled mostly by large firms who buy the fruit and pack it, or by associations made up of growers themselves.

These fruits and vegetables are shipped during the entire year, the citrus fruits during the win-

ter months, the deciduous fruits during summer, and vegetables at most all times.

If the grower has products to ship, he finds in the shipping districts large concerns that will either buy his crop outright, or ship it for him on commission. Most of these products are shipped to the large Eastern cities for distribution.

With the improved handling and shipping facilities now in operation, the unexcelled reputation for fresh California products, and the ever increasing demand, the future opportunities for the producer of these products is very encouraging.

The wineries of California have during the last few years built up a reputation for pure wines that cannot be overlooked.

Many fine wineries are located in the districts where good wine grapes are grown, giving the grower markets right at home to dispose of his crops. These wineries buy the grapes in bulk, paying cash, and as fast as the grapes are delivered they are crushed, the wines are stored and aged, and then shipped out in bottles and barrels.

California wines are light and wholesome and the consumer can be found in all parts of the world.

Sugar In the sugar beet districts are fac-
Factories tories for handling the output, and
to these factories the farmer delivers
his crop, which is then manufactured into sugar.
Great quantities of sugar are used in California
by the canneries, which makes sugar beet grow-
ing a very profitable business.

Olive Oil For the olive grower who produces
Plants olives in large quantities the olive oil
plants, that take the olives, furnish
good open markets. Olives are picked in the fall
and delivered to these plants, and fine olive oil
and ripe pickled olives are made.

Creameries The dairyman in the alfalfa districts
of California no longer follow the
old system of making butter and selling it. This
is left entirely with the creameries.

Good creameries are located all through the
alfalfa districts and buy the cream or butter fat,
manufacture it into first-class butter, and then
ship it to all the market centers.

These creameries are equipped with modern
machinery and are arranged so that the farmer
can ship or haul in his cream each day and receive
cash for it. In some districts the creameries send
wagons through the country each day, gathering
up the cream and returning the cans. Most of
the dairymen own their own milk separator,
which cost but little compared with the benefits
received from it.

With this system the farmer can keep his skimmed milk at home for the calves, pigs and chickens. Cream delivered to the creameries brings from twenty to thirty-five cents per pound, and the butter made by the creameries finds ready sale.

Thus you see the home markets of California can not be excelled. Millions of dollars worth of property is tied up in factories and machinery, and millions more is expended each year for raw products, material and labor, giving the farmer the greatest and best open markets in the world.

The prospects for future enlargements along these lines is now assured. Each season new factories are built, new companies enter the field and competition is steadily growing stronger, all of which assures the farmer, the planter and the grower good prices for his products.

Farming Districts The State is divided, geographically, into five great agricultural districts, as follows:

Southern California, San Joaquin Valley, Sacramento Valley, north of San Francisco Bay, and south of San Francisco Bay.

Each one of the districts is an empire within itself. Each district is surrounded, or bordered by mountain ranges, from which flows numerous streams of mountain water. Each district contains thousands of acres of rich level land, and each district is well supplied with good cities,

towns, schools and churches, fine country roads and good railroad transportation.

All of these great districts are blessed with fine California weather, abundance of sunshine and many clear days each year. Although each district does produce all the products peculiar to California, yet each district is particularly adapted to the growing of some one or more kinds of products.

It is contended, and is a fact, that each of these districts can produce, and does produce, all the varieties of fruits, vegetables, nuts and berries grown in the State, and all these products can be grown by any farmer. This is true, and every farmer in each of these districts can have on his table, from his own soil, all these products in season, yet, from a commercial standpoint, from a money making view of the matter, the growing of each variety of product, in large quantities, must be confined to certain districts which are peculiarly adapted to the growing of these products, and which will supply these products to the markets of the world in large quantities. For illustration: Southern California is producing most of the oranges shipped from California. South of San Francisco Bay district is growing each season the bulk of the prunes and apples. San Joaquin Valley furnishes the raisins, Sacramento Valley the peaches and pears, and north of San Francisco Bay district the fine wine grapes.

It is true that all these districts grow all these products, but not in large quantities. Where a

certain product has been tested and found to grow to perfection and bear in abundance in a certain district, there large acreage has been planted.

Here good markets have been established for handling this product, and this district becomes the center of this industry. Other districts, with an inferior product and poor markets, can not compete. Thus we see, the future grower who intends to plant a certain kind of product, must locate in the district adapted to his needs.

By segregating the state into five districts it is an easy matter to then show after the heading of each product what district is best adapted for it. To arrive at this conclusion many things have been taken in consideration. The district that has always shown the greatest tonnage, or quantity produced, quality of product, markets, railroad transportation, future possibilities in land values, irrigation and other features has been carefully studied, and even then, in some cases, it has been hard to decide.

For illustration, under the heading of peaches the best districts given, in order named, are: Sacramento Valley, San Joaquin Valley, south of San Francisco Bay, north of San Francisco Bay and Southern California, meaning that the future possibilities for peach growing is best in the Sacramento Valley, with the San Joaquin Valley a close second. And why? The Sacramento Valley is and always has produced the most fine peaches; with good canneries, shipping and pack-

ing houses for markets, and with much good peach land for sale at reasonable prices, it gives the planter opportunities not to be overlooked.

Thus we have these five great agricultural districts, each one producing and supplying the world with its own particular kind of product and each one offering splendid inducements to the farmer.

Each of these districts is described as a whole, taking all the level lands and territory adjoining.

Southern California District Lying south of the Tehachapi Mountains, bordering the Pacific Ocean clear to the Mexico line and bounded by mountain ranges on the east, is located the district known the world over as "sunny" Southern California. This entire district is cut up by low mountain ranges, making it a country of mountains and valleys. Most of these valleys are very fertile and are producing large crops of California products under a very complete system of irrigation.

The Southern California district excels in oranges, lemons and grape fruit, also in English walnuts, cabbage and celery. Millions of dollars worth of these products are shipped each season.

The entire district is well served with railroad transportation, the Southern Pacific, Santa Fe and Salt Lake systems, with their many branch lines, reaching all points. Many good cities and towns are scattered over the entire district, Los

Angeles, San Diego, Riverside, Redlands, San Bernardino, Pomona, Santa Ana and Long Beach being some of the principal places. Good country roads, a fine public school system and much good land makes this district very attractive to the farmer.

San Joaquin Valley District Directly north from Southern California and just across the Tehachapi mountain range, begins the largest agricultural district in California—the great San Joaquin Valley, containing over four million acres of rich farming land. This valley extends from the Tehachapi Mountains north for two hundred miles to San Francisco Bay, with an average width of about forty miles, from the Sierra Nevada Mountains running along the eastern boundary to the Coast Range mountains on the west. The San Joaquin River flows northward through the center of the valley, emptying into San Francisco Bay, with numerous streams of more or less importance flowing into it from the Sierra Nevada Range.

This entire valley is very level, with abundance of water, and thousands of acres of rich farming land capable of producing splendid crops of alfalfa, fruits and vegetables. Much of this valley is now producing grain, but with the advent of much irrigation, and the cutting up of large tracts, this old wheat land is fast being turned over to the smaller farmer. This valley already excels in alfalfa and raisin grapes and

produces large crops of fruits and vegetables as well.

The Southern Pacific and Santa Fe Railroads pass through the valley and these roads, with many branch lines, reach all the best cities and pass through all the highly cultivated sections. Fresno, Stockton, Visalia, Hanford, Modesto, Porterville, Merced and Bakersfield are all thrifty market places and growing centers.

Opportunities for fruit and alfalfa farming in many sections of this district is good and wonderful developments can be looked for in the near future.

Sacramento Valley District The Sacramento Valley is next in size to the San Joaquin Valley district and extends north from San Francisco Bay two hundred miles, almost to Mt. Shasta, with an average width of about thirty miles. The Sierra Nevada Mountains form the eastern boundary for the entire length, and the Coast Range Mountains parallel the western side. These two mountain ranges form a junction at the head of the valley, shutting the level lands in on three sides. Over three million acres of farming lands lie in this great district.

These lands are very deep and rich, sloping to the south and center, with the Sacramento River flowing south through the valley into San Francisco Bay. Many smaller streams that flow from the mountains from both sides find their way into

the Sacramento River, making it the largest stream in the state.

For years this valley was noted for its immense crops of wheat, and even yet much of the land is still producing wheat, but time has made many changes, and now the valley has a reputation for producing large crops of deciduous fruits, and excels in peaches, pears, figs and other fruit crops, and also produces great quantities of vegetables, while alfalfa does exceedingly well, under irrigation.

Two lines of the Southern Pacific Railroad, the Western Pacific Railroad steamers on the river, and several electric railroad lines furnish splendid transportation. With thousands of acres of rich soil, abundance of water for irrigation, good markets, a fine country road and school system, makes this district a very attractive one for the small farmer. The larger cities are Sacramento, Chico, Redding, Marysville, Woodland, Red Bluff, Colusa, Oroville, Vacaville, Gridley, Auburn and Corning. All of these cities are surrounded by a very highly cultivated country and handle millions of dollars worth of products. This district is capable of supporting a very dense population, and the future will find it one of small farms.

North of San Francisco Bay District North of San Francisco Bay and west of the Sacramento Valley, lying close to the coast, is located the district known as north of San Francisco Bay. This district is made up of several valleys, the Napa and Sonoma being the two largest, with several smaller valleys, either wholly or partly surrounded by mountains. This entire district is more or less mountainous and broken, but the valleys where the level lands lie are very productive and beautifully located. Being so close to San Francisco, where the markets take everything produced, makes this one of the favored districts for berries, small fruits and poultry. This district also produces the most wine grapes, with many fine wineries for handling the output from the vineyards.

The leading cities here are Santa Rosa, Petaluma, Napa, Healdsburg, Vallejo and many smaller places all offering good opportunities in the country surrounding them. With fine country roads, a splendid school system and steam and electric railroads connecting all points, and the beautiful San Francisco Bay close by, offers inducements to the small farmer that are unexcelled.

South of San Francisco Bay District The district known as South of San Francisco Bay begins on the southern and eastern shores of the bay, with the Santa Clara Valley, embraces this valley and takes in the

Pajaro and Salinas Valleys further south. The mountain range that parallels the western side of the San Joaquin District forms a natural boundary between these two districts. South of San Francisco Bay District is made up of a series of long valleys, running south for many miles, and almost or quite touching the Pacific Ocean on the west. These valleys contain thousands of acres of fertile level lands and much of it is planted to orchards of prunes and apples, making this district the largest producer of these fruits.

Yet thousands of acres of this fine land is yet unplanted, which makes it a place where good opportunities for future planting can be had. With good railroad transportation, fine market centers, and a steady growing population in the country and cities, assures the farmer a good future income from his lands.

Many splendid cities and towns are scattered over this entire district, and the school system is first class. San Jose, Santa Clara, Watsonville and Salinas are the larger places, and each of these cities are surrounded by a very productive country, producing a great variety of fancy California fruits, berries, etc.

Products The following pages are devoted
by Varieties to California products that are
 profitably grown in commercial
quantities, on small tracts. Each product, be it
fruit, vegetable, nut or berry, has two or more

distinct varieties. The best variety of each product for the grower to plant is shown first, other varieties following in order. The best districts for growing each product is also shown in order as well as the best soil to select. Distance apart to plant is given, and it is also shown to what use each variety is best adapted, whether for canning, shipping or drying.

Much study and great care has been exercised in making these segregations in order that the beginner may receive reliable instructions in selecting the best districts for growing each product, past results and future possibilities have been studied, and then only the best varieties are given.

A careful study of these segregations will be of great benefit to the person who wishes to farm in California.

Deciduous Fruits Deciduous fruits are produced in all the farming districts of the state, but the great bulk of these fruits are grown in central and northern California in the great valleys and along the mountain ranges.

The harvest season begins about May 1st, and continues until November. During these six months, immense tonnage is handled, thousands of cars are loaded and shipped East fresh, the numerous canneries are working and paying out millions of dollars for fruit labor and material, while all the help available is busy picking fruit, and drying it in the sun. Later this dried fruit

is hauled to the packing houses, where it is cleaned, packed and shipped.

Young Trees Most of the best fruits of California are grown on "budded trees," that is, trees that have been budded when young, from some well-known variety.

"Seedling" trees are trees that have grown up direct from seed, without "budding," and seldom produce first-class fruit. For illustration: suppose a farmer wants to plant twenty acres to Phillip cling peaches, one of the best canning varieties, and desires to grow the young trees himself. He should proceed like this: in the fall of the year he should procure several sacks of peach pits, preferably from seedling trees, because the young trees, grown from pits, produced from seedling trees, are hardy and very rapid growers.

These pits should be spread upon a bed of sand, and covered over with a light layer of sand. Soon the pits begin to soften and the kernels begin to swell, bursting open the pits and sending out tiny roots. Then the sand should be removed, the sprouted kernels taken from the pits and planted in nursery rows. These rows should be made in loose, rich, warm soil, about three feet apart, and the kernels planted shallow, about eight inches apart in rows. Soon the kernels begin to grow and take root, and send up shoots through the surface, and by the middle of June they are ready to bud, the young trees being

from eight to twelve inches tall, and as large as a lead pencil. An orchard of good thrifty young peach trees should be selected, of the Phillip cling variety, that has shown fine fruit, and before budding time, small limbs should be cut from the trees, being careful that these limbs are covered with healthy buds.

These limbs should be put in a handy place, and in June a budder should be employed who understands the business. The budder makes a small slit in the young tree near the ground, takes a bud from a limb and inserts it into the slit, wrapping the wound above and below the bud with string. As soon as the bud begins to grow well into the slit, the young tree is cut off just above the bud, and all twigs, except the bud removed, giving to the bud all the nourishment from the roots of the young tree. This causes the bud to grow rapidly, and by the coming March, the farmer has a tree, ready to plant, known as a "June bud," with a good strong root, and a bud that has grown to eight to twenty inches tall. Many farmers prefer to take the tree up at this time and plant it in the orchard, but by leaving it in the nursery row one year longer, it makes a much more vigorous tree, known as a "yearling," with heavy roots and a strong body from three to four feet tall.

A "June bud" is about one year old from the time of planting the seed until time to plant in orchard, while a "yearling tree" is two years old. It is generally customary to buy trees from a re-

liable nursery firm, and they generally supply "yearlings." The nursery people follow the planting and budding on a large scale, and have thousands of fine trees of all varieties for sale, ready to plant, which gives the planter two years start.

Some trees like figs and olives are started from cuttings, like grapes; that is, small branches are cut from old trees, and planted in the nursery rows, where they sprout and are soon ready for the orchard without budding. In planting young trees, especially "June buds," care should be taken, not to break off the bud, while handling.

Budded trees always "reproduce" or bring forth fruit like that produced by the tree from which the bud was taken.

Apples Grown in all districts of the state. Does best along the coast and in high altitudes and mountainous sections.

Soil—Requires deep, loose, warm, sedimentary or sandy loam, well drained on surface.

Best Districts—In order named: South of San Francisco Bay, North of San Francisco Bay, Southern California, Sacramento Valley, San Joaquin Valley.

Plant—February or March, 30 to 40 feet apart.

Best Varieties—Newton Pippin, best winter variety, and best for grower to plant, fine shipper and keeper. Bellflower, good keeper and shipper. Langford, grown quite successfully. White Pearmain, good seller. White Astrachan, early summer kind, good seller, grows fine in the Sac-

ramento Valley. Skinner seedling, good early fall kind, heavy bearer, and good seller, does best in Pajaro Valley. Gravenstein, does well in the mountain districts, good bearer and seller.

Apricots Soil—Sedimentary loam, sandy loam and light, coarse soils with moisture from beneath soil, or from surface irrigation.

Best Districts—South of San Francisco Bay, Sacramento Valley, North of San Francisco Bay, San Joaquin Valley, Southern California.

Plant—February or March, 20 to 24 feet apart.

Best Varieties—For Canning, Blenheim, Moorpark, Royal; for drying, Blenheim, Moorpark, Royal; for shipping—Blenheim, Moorpark, Alexander, Royal.

Cherries Soil—Loose loam, sandy loam, and deep warm soils, well drained and exposed to sun.

Best Districts—South of San Francisco Bay, north of San Francisco Bay, Sacramento Valley, San Joaquin Valley, Southern California.

Plant—February or March, 24 to 30 feet apart.

Best Varieties—For canning, Royal Ann, Black Tartarian, White Centennial; for shipping, White Royal Ann, Black Tartarian, White Centennial, Black Bing, White Gov. Wood.

Figs Soil—Warm, dry sandy loam and light soils, sub-irrigated, and well drained, well exposed to sun.

Best Districts—Sacramento Valley, San Joaquin Valley, south of San Francisco Bay, north of San Francisco Bay, Southern California.

Plant—February or March, 40 to 50 feet apart.

Best Varieties—For drying and shipping, White Adriatic, Black Mission, Calimyrna.

Nectarines Soil—Moist sedimentary loam, sandy loam.

Best Districts—Sacramento Valley, San Joaquin Valley, south of San Francisco Bay, north of San Francisco Bay, Southern California.

Plant—February or March, 20 to 24 feet apart.

Best Varieties—For canning, shipping and drying, Stanwick, Lord Napier, New White.

Peaches Grown in all districts; does best along the streams in the large valleys, where the soil is deep and moist.

Soil—Rich sedimentary loam, or sandy loam, well drained and with abundance of sub-irrigation.

Best Distances—Sacramento Valley, San Joaquin Valley, south of San Francisco Bay, north of San Francisco bay, Southern California.

Best Varieties: For canning—Phillip cling, probably the best canning variety, and the best seller and keeper of all the canning varieties; Tuscan cling—Fine canner, good bearer and seller; Levi cling—Good canner, hardy, late bearer, good seller; McDevitt—Mid-summer canner, good variety; Lovell freestone—Best freestone peach for

canning; Muir freestone—Good canner, heavy bearer, best all round peach. For drying—Best drying peaches are all freestones, yellow in color, and generally heavy bearers (Muir, Crawford, Foster, Lovell, Salway. For shipping—Free-stones (Elberta, Crawford, Foster, Muir). Cling-stones—(McDevitt, Seller).

Pears Along the streams where the soil is deep and moist are the best pear orchards. Pears stand more water than any other fruit.

Best Districts—Sacramento Valley, north of San Francisco Bay, San Joaquin Valley, south of San Francisco Bay, Southern California.

Plant—February or March, 24 to 30 feet apart.

Best Varieties—For canning, drying and shipping, the Bartlett pear is by far the great leader, in fact it is the only pear to handle. Other varieties that are used to some extent are the Kieffer and Winter Nelis.

Plums Soil—Sedimentary loam, sandy loam and coarse light soil.

Best Districts—Sacramento Valley, north of San Francisco Bay, San Joaquin Valley, south of San Francisco Bay, Southern California.

Plant—February or March, 20 to 24 feet apart.

Best Varieties—For canning: Yellow Egg, Green Gage, Reine Claude, Damson. For drying: Yellow Egg, Green Gage, Gros (all varieties are dried). For shipping: Tragedy, Clyman, Gros,

Kelsey, Wickson, Egg, Green Gage, and many other varieties.

Prunes Soil—Deep rich soil and sandy loam, well drained.

Best Districts—South of San Francisco Bay, Sacramento Valley, San Joaquin Valley, north of San Francisco Bay, Southern California.

Plant—February or March, 20 to 24 feet apart.

Best Varieties—All prunes are dried in the sun, and the French (Petite) is by far the best to plant, being a good bearer, and coming in early in the fall, before rains start. Other good varieties are Imperial and Silver.

Grapes Each season the production of grapes in California amounts to more than twenty million dollars, including raisin, table and wine grapes. Every farming district in the state produces grapes, and even high up the mountain slopes splendid vineyards are growing, and it is estimated that there is over ten million acres of land in the state that will produce them first-class.

As the future outlook for vineyard products is good, and as much good grape land can be had at very low prices, the increase in acreage planted will continue rapidly, with good income for the grower. Three distinct kinds of grapes are grown in large quantities, namely, for dried raisins, for table use and for wine.

Raisin Grapes The three best varieties of raisin grapes are, in order named, Muscat, Thompson Seedless and Seedless Sultana.

The San Joaquin Valley offers the best inducements for growing the Muscat, while the Thompson Seedless and Seedless Sultana does best in the Sacramento Valley.

Soil—Best soil for raisin grapes is the light, loose, warm, sandy soils, and the drier, coarser soils along the mountains. All raisin grapes are dried in the sun, and generally sold to the large packing houses, in the "sweat box," or before they are stemmed.

Plant—8 by 8 or 10 by 10 feet, according to variety and soil. For planting some growers prefer to use the cuttings. That is, the branches from old vines are cut off about 8 inches long, and planted in the vineyard direct.

But the most successful plan, is to take the cuttings, and plant them in nursery rows, a few inches apart. This planting is done in January, February or March. Soon these cuttings begin to grow, and send out young leaves. One year from this time they are taken up and planted in vineyard.

Vines are pruned each fall or winter, and most of the varieties require close pruning, cutting off all branches within a few inches of body. Some few varieties do better by leaving long branches which are trained on stake, wire or arbor.

Table Grapes Table, or fresh grapes, are used extensively in home markets, and shipped in refrigerator cars to all the large cities of the United States.

The most essential part in growing table grapes for the market is to get the rich color, and this seems to be obtained to perfection in the Sacramento and San Joaquin Valley Districts, while other districts are in order named, north of San Francisco Bay, south of San Francisco Bay, and Southern California.

Soil—Warm, strong soil along the mountains, exposed to the sun, and without much dampness.

Plant—January, February and March, 8 by 8 or 10 by 10 feet apart.

Best Varieties—Flame Tokay, Black Hamburg, Cornichon, Emperor, Rose of Peru, Malaga.

Wine Grapes The most successful wine grape district, and without doubt the district that offers the best advantages is north of San Francisco Bay. This section now produces great quantities of fine wine grapes, and the soil seems especially adapted to growing grapes.

Southern California also grows splendid wine grapes, and comes second in production. Other districts where they can be grown successfully are San Joaquin Valley, Sacramento Valley and South of San Francisco Bay.

Soil—Light, warm, well drained soil.

Plant—January, February or March, 8 by 8, or 10 by 10 feet apart.

Best Varieties—Red Zinfandel, White Burger, Red Petit Syrhas, White Golden Chasselas, Black Mission.

Citrus Fruits Oranges, lemons and pomelos (grape fruit), are the citrus fruits produced in California in commercial quantities. Each season California produces and markets at good prices about thirty million dollars worth of citrus fruits.

Nine-tenths of all this fruit is grown in the Southern California District. The San Joaquin Valley District comes second and the Sacramento Valley third, in opportunities for the citrus fruit producer.

Citrus fruit growing, as followed in California, is a very pleasant and profitable business, and one that will never be overdone, as only a few countries in the world are capable of producing such fancy products. Already in each citrus fruit center the growers are combined, and own their own packing houses for handling the crops, and many private concerns are also in the field, paying cash for the fruit, delivered to their houses, or on the trees. Thousands of acres of good soil for citrus fruits is still unplanted, which gives the beginner a good opportunity to enter the business.

Oranges The Washington navel, a seedless orange, is the best variety to plant. This orange begins to ripen early, about December 1st, in some districts, and the harvest con-

tinues throughout the months of December, January and February and March.

Millions of dollars worth of these oranges are shipped to the markets annually, and few people in the United States have missed the treat of eating of this luscious fruit. Being an orange of high color, fine flavor, and a good keeper and shipper, it has found its way into every market in the United States.

The navel orange tree begins to bear profitably when five years old, and improves with age. Being a hardy variety and a sure bearer, the returns to the grower increases from year to year. When the oranges begin to ripen they are cut from the branches and delivered in bulk to the packing houses, where they are graded for size, packed in fancy boxes, loaded into cars and shipped to the large distributing points.

The Valencia orange comes next in importance, and begins to ripen about April 1st, and are all harvested by June 30th. They are handled the same as the navel, the only difference being in the ripening season.

Mediterranean Sweets is another popular orange and is grown quite successfully in some sections.

The orange is one fruit that is always in the market every month in the year; furthermore, oranges hang on the trees in good condition the entire year if not picked.

Oranges are grown at least for home use in every farming section of the state; they are prob-

ably the most common fruit in California. Every farmer, if he so desires, can have his own orange trees, loaded with the golden fruit every month in the year.

Soil—Oranges, unlike most California fruit, must have surface irrigation. A light warm soil, well drained, on surface and also beneath the surface, produces the best results. Some of the best orange groves are growing on steep hill sides.

Plant—January, February or March, 20 to 24 feet apart. Careful cultivation, irrigation and fertilization is required, as well as spraying and fumigating for insect pests.

Lemons The future grower of fancy California lemons will have the world for a market. Lemons are fast coming into general use by the masses, and the consumption of this fruit even at the present time is enormous.

Most physicians recommend the free use of lemons in many cases of sickness, and the fruit is now recognized as one of the best for family use. Lemons are picked and packed during the winter and spring months, and are handled by the large shipping concerns, the same as oranges.

Irrigation, fertilization and spraying are required. Southern California offers the best field for the grower, where most of the best groves are located.

Soil—Soil similar to orange land can be used, and some of the best sections for lemons lie near the Coast.

Best Varieties—Eureka, Lisbon.

Plant—January, February or March, 20 to 24 feet apart.

Pomelos Pomelos, or grape fruit, furnishes one of the most delicious breakfast dishes, and are fast finding a good market all over the United States. Like the orange and lemon, Southern California offers the best advantages for the grower, and the same instructions can be followed for planting, harvesting and marketing.

Olives Fine olive orchards are now producing in every farming district in California, and olive plants for making oil and pickled olives are turning out first-class goods.

These plants buy the olive, either on the tree or in bulk, from the grower, paying cash, and are very reliable concerns in every way.

Fancy California olive oil is very clean and absolutely pure, and no other country can compete with it in this respect, while the ripe pickled olives made by these concerns are purity itself, and a very healthy and wholesome food.

The life of an olive tree is forever, a slow but steady grower and a good bearer, ripening in the early winter.

Soil—Light gravel and sandy loam is best adapted for good results.

Plant—January, February or March, 24 to 34 feet apart.

Best Varieties—Mission, Manzanilla, Nava-dillo.

Nuts The two best kinds of nuts to plant in California are the walnut and the almond. The rich soil and perfect climate combined seem to be especially adapted to the growing of these splendid nuts.

Walnuts and almonds are used extensively by confectioners, and are sold in every market in the world for table use. As they are not perishable, and can be handled and shipped without fear of damage, the future outlook for increased planting and profitable production can be readily seen.

These nuts are grown successfully in all the farming districts of the State, and any section will produce them, at least for home use.

Large concerns and growers' associations handle the output, shipping to all distributing points in the United States in carload lots. The harvest time begins in the late summer, when the nuts begin to dry on the trees. Long sticks are used for knocking them off, after which they are gathered up, the shucks removed, and they are sacked and delivered for shipment.

Walnuts Each season about eight thousand tons of walnuts are grown in California, which represents about one and a half million dollars, gross proceeds. The United States each season consumes over five million dollars

worth of these nuts. As California produces most of the walnuts grown in the United States, it can be seen that over one-half of all the walnuts consumed must be shipped in from foreign countries. This leaves a splendid field in California for the grower, as fear of over-production is not considered.

Soil—Deep, rich loam, or sandy loam, well drained on surface and below, with either a good sub-irrigated soil or surface irrigation.

Plant—January, February or March, 30 to 50 feet apart, according to variety and soil.

Best Districts—In order named, Southern California, north of San Francisco Bay, south of San Francisco Bay, Sacramento Valley, San Joaquin Valley.

Best Varieties—Franquette, Santa Barbara soft-shell, Maynette, Parisienne, Concord.

Almonds The average annual output of almonds from California amounts to about twenty-five hundred tons, valued at about five hundred thousand dollars, and as the consumption of almonds in the United States each season amounts to much more than this, foreign countries must supply the balance, leaving a very profitable field for the future producer.

Almond trees bear well when four or five years old, and with increasing age the crop becomes heavier. This assures the grower quick returns and increased profit from year to year.

Soil—Sandy loam and lighter soils, well drained, and with sufficient moisture.

Plant—February or March, 24 to 30 feet apart.

Best Districts—In order named, Sacramento Valley, San Joaquin Valley, north of San Francisco Bay, south of San Francisco Bay, Southern California.

Best Varieties—IXL, Nonpareil, Ne Plus Ultra, Drake Seedling, Jordan.

Berries The population of California consumes large quantities of berries, especially so in the large cities. The canneries use them extensively for preserves, jellies and jams.

This makes the berry business a good one, as berries are ready for the market during April, May and June, when few of the other products are yet ripe, giving abundance of labor for handling the crop. Each grower farming a small tract can greatly increase his income by planting a patch of berries.

Berries of all kinds do well in all the farming districts, and good markets for the grower are found at home. The most profitable locations for growing berries are those near the large cities or in the districts where canneries are located.

Soil—Select loose, warm soil, sediment loam or sandy loam that can be irrigated. See that it is well drained on surface and well exposed to sun. Slightly sloping hillsides or rolling land, where a good underground drainage can be had, does well. Pulverize the soil into a fine, loose

body before planting, and plant after the sun has begun to warm the soil.

Plant—February, March or April, according to soil and weather conditions. Young plants can be obtained from nursery or some other grower, and these plants should be planted immediately after removing from nursery row.

Best Districts—We can not recommend any particular district, but the best markets are found in the thickly settled sections.

North of San Francisco Bay and south of San Francisco Bay have always been favored places on account of the nearness to San Francisco, while Southern California, near Los Angeles, produces large quantities.

The Sacramento Valley and San Joaquin Valley produce berries well, and they are used there in wholesale lots in the canneries.

Best Varieties—Each kind of berry has several varieties, but only the best is used, which should be left to the grower's own judgment.

Strawberries—Begin to appear on the markets in March, and continue for several months. Plant one foot apart in rows two feet apart.

Blackberries—On the market two or three months during early summer. Plant three feet apart in rows five feet apart.

Raspberries—On market in early summer. Plant three feet apart in rows five feet apart.

Loganberries—On market in early summer, and are very heavy bearers. Plant three feet apart in rows five feet apart.

Gooseberries—On market in early summer. Plant four feet apart in rows five feet apart.

Currants—Ripen in early summer. Plant four feet apart in rows five feet apart.

Sugar Beets The culture of sugar beets in California is becoming one of vast importance, and there are no less than ten large sugar factories located in different parts of the State, manufacturing annually over five million dollars worth of sugar from the beet.

Any farming district in the state where a factory is located, offers good inducements to the beet grower.

Soil—Rich sediment or loam soil, with much moisture or abundance of surface irrigation, where drainage is good.

Plant—January, February or March. Sow in rows about eighteen inches apart, and after young plants begin to grow they should be thinned out in rows to about eight inches apart.

Harvest—Harvest begins late in the summer and is done by running a plow, especially made for the work, between the rows, which splits the soil, after which the beets are easily pulled out by hand. Then they are topped and delivered to the factory in bulk.

Sugar Beets, Circular No. 13, College of Agriculture, Berkeley, Cal.

Vegetables The vegetable output of California amounts to over eighteen million dollars annually, including those that are shipped fresh and those that are canned.

All the vegetables of the United States are produced in every farming district of California, and every farmer can have on his own table fresh vegetables from his own garden every day in the year.

The best vegetables to grow for profit are those that can be shipped to outside districts, either canned or fresh, including asparagus, rhubarb, cabbage, celery, melons, tomatoes, peas, beans, onions, and Irish and sweet potatoes.

The rich, moist, loamy soils along the streams in the Sacramento and San Joaquin Valleys produce large quantities of asparagus, melons, tomatoes, peas, beans, onions, and potatoes, while Southern California ships most of the celery, rhubarb and cabbage.

Every month in the year, carloads of some kind of vegetables are shipped from some district.

Each kind of vegetable has several varieties, and the best of these varieties should be planted by the grower after a careful study of the soil and markets.

Soil—Good, rich soil should be selected, either the deep sedimentary loam soil along the streams, that contain sufficient moisture to grow vegetables without surface irrigation, or the sandy loam, well drained, and located so surface irriga-

tion can be used. Careful cultivation should be practiced for best results.

Asparagus Can be grown for home use and local market anywhere in California. Grown extensively for canning along the Sacramento and San Joaquin Rivers, where large canneries are located that handle the output. Begins to appear on the market early in March, and continues for several months.

Planting—Select loose, rich, warm soil with plenty of moisture. Soil with considerable sand well mixed is best. Plow deep and pulverize well. Young plants one or two years old should be planted. Plant in February, March or April, twenty to thirty inches apart in rows three or four feet apart. Plants grow rapidly and take root and spread out, and in two years begin to give enough to pay well, and increases as the plant grows. Each spring the bed should be covered over with loose sandy soil, and when the shoots grow up above surface four to eight inches, they are ready to cut. Use sharp tool and cut shoots just beneath surface.

Best Varieties—Mammoth White, Colossal, Palmetto.

Rhubarb Grown in all sections for home use, and also shipped out. Soil should be rich and warm and well cultivated.

Planting—Use young plants, and plant in rows three to four feet apart, leaving space enough

between rows for cultivation. Young plants should be placed in rows 16 to 24 inches apart. When plant grows from six to twelve inches high, cut off near ground with sharp instrument.

Best Varieties—Burbank's Crimson, Monarch, Dodge Prolific.

Celery Grown all over the State for home use and local markets, and produced in large quantities, especially in some sections of Southern California and shipped out in carload lots.

The main feature in growing celery is to get a tender, crisp article, white in color. The peat lands of Southern California seem to be especially adapted for producing these results.

Plant—Eight to sixteen inches apart, in rows three to four feet apart.

Best Varieties—White Plume, Golden Self-Bleaching.

Cabbage Grown in all farming districts for home use, and shipped out in carload lots from some of the favored sections.

Rich loam soil should be used. Seed should be planted early in hotbeds, and when plant has put forth four leaves they should be transplanted into garden. Plant 24 inches apart in rows three to four feet apart.

Best Varieties—Early Winningatadt, Late Drum Head, Late Dutch.

Tomatoes Can be grown well in all districts for home use, local markets, and for the large canning concerns. Soil should be loose loam or sandy loam, with abundance of moisture or surface irrigation. Seed should be planted in boxes or hotbed, early. Later young plants should be transplanted to garden or field. Plant 24 inches apart in rows three to four feet apart. In picking for the market, care should be used not to bruise the tomatoes. Where delivered to cannery in large quantities, they should be picked and placed in boxes holding from thirty to fifty pounds each, and hauled or shipped immediately after picking.

Best Varieties—Trophy, Livingston Beauty, and many other good varieties.

Beans Extensively grown, especially for dried beans. Fresh green beans can be grown for home use or local markets in all sections.

Most beans grown for drying are produced without irrigation and are planted in the districts where the soil is moist and rich.

Seed can be planted any time from March to May. Plant in rows 12 to 24 inches apart, rows 3 to 4 feet apart. Cover lightly with loose, warm soil, and cultivate carefully. Beans for table use can be had as early as June, with continuous crop all summer. Where grown for drying, they are harvested in late summer after the vines begin to dry up. The vines are cut off near ground and stacked and then threshed out either by machine

or hand; the beans are sacked and sold by the hundred pounds.

Best Varieties — Bayos, Small White. Red Kidney.

Peas Early peas are ready for the table about March, and continue during summer. Canneries begin to consume them about May and finish the pack in June.

Soil with moisture should be selected. Plant the seed 4 to 12 inches apart in rows 2 to 4 feet apart.

Best Varieties—Champion, Pride Market.

Onions Fresh onions for home use can be had from gardens practically the year around in any farming district. Onions for the market, that is, dry product, are harvested in late summer.

Plant 8 to 12 inches apart in rows 2 to 4 feet apart, and keep the soil loose and well cultivated.

Best Varieties—Spanish King, Yellow Globe, Red Withersfield.

Irish Potatoes Select loamy or sandy loam soil, with moisture from beneath surface or with surface irrigation. Plow deep and well, and pulverize fine. Plow shallow rows 3 to 4 feet apart. Select good, sound potatoes, cut in quarters and drop in rows 2 to 3 feet apart. Cover 3 to 6 inches deep, keep well cultivated.

When ready to harvest either use hand fork for digging or plow for turning over hills.

Plant any time from February to May, according to soil, kind of potato desired, etc.

Best Varieties—Burbank, Early Rose, River Red.

Sweet Potatoes Sandy loam is the best soil to use, with enough irrigation to guard against drying out. Plow well and harrow down smooth. Young plants can be obtained in any farming district, or they can be grown by the farmer by making a bed of sand in a warm spot and placing potatoes, either whole or halved, on sand and covering over with light layer of sand. Soon the sprouts begin to shoot up through sand, and when four or six leaves show they should be pulled out and transplanted into garden or field. Plant 24 to 36 inches apart in rows 3 to 4 feet apart. Place young plant in soil and pour some water around it, and keep well cultivated. Late in summer, when ready to harvest, use fork or plow for uncovering.

Melons For both watermelons and cantaloupes the same system of handling is used; loamy or sandy loam soil, well watered and drained. Seed can be planted in April or May, direct in the field, putting a dozen seed in each hill, and when the young plant begins to grow, thin out, leaving four only.

Or, seed can be planted in boxes or hotbed, and when plant is of sufficient size, transplant into garden or field, in hills 4 by 4 feet, or even as much as 8 by 8 feet. Distance must be judged by soil, variety of melon, etc.

There are many good varieties, and selection should be made after locating, as some varieties do well in some districts and not so well in others.

Cucumbers Cucumbers are grown for home markets and are shipped to outside points in crates. Same kind of soil as that used for melons. Plant 4 by 4 feet apart. Either plant seed direct into garden or field or use hotbed or boxes until plants are ready to transplant. Cucumbers begin to bear in short time after planting, and they turn off large quantities from each vine.

Best Varieties—Cumberland, Everbearing.

Lettuce Can be grown all over the State, and can be had most any month from the garden. Use loose, warm soil. Plant seed in rows or bed, and thin out to 4 to 8 inches apart.

Best Varieties—California Cream Butter, Big Boston, Immensity.

Artichokes Plant in warm, rich soil. Start seeds under glass or in hotbed. Re-plant in March or April to garden, in rows 3 feet apart. Set plants 12 to 16 inches apart in rows.

Best Varieties—Green Globe, Jerusalem.

Egg Plant Start under glass, and replant to garden in April or May, from 12 to 18 inches apart in rows 3 feet apart.

Best Varieties—Black Beauty, New York improved.

Cauliflower Use same kind of soil and same system of planting as cabbage. Cauliflower is a fine early winter vegetable, and can be produced in all sections.

Best Varieties—California Wonder, Autumn Giant, Early Snowball.

Pumpkins and Squash Both pumpkins and squash are grown by all farmers for home use, and also used extensively by the farmer who has dairy cows and hogs. Plant seed early in spring, 8 by 8 feet. Many varieties are used, and all do well.

Alfalfa Alfalfa or lucern, the best forage plant grown, makes splendid feed for milk cows, hogs and young growing stock.

California does, without doubt, furnish the best inducements, everything considered, of any State in the Union, for the profitable growing of alfalfa.

For best results, three separate features must be combined:

First—Deep, rich, warm soil.

Second—Continuous sunshine for at least five months, without rain or damp weather.

Third—Abundance of irrigation for surface, or land that is sub-irrigated, that is, water beneath the surface within twenty feet.

The lack of any one of these three features means poor results, but the combination of all of these three features means success.

California, and especially through the San Joaquin and Sacramento Valley districts, these three features are combined perfectly, and here the splendid results are obtained. Southern California district also offers a good field for alfalfa growing, while the districts north and south of San Francisco Bay, especially along the streams, have quite an area of alfalfa land.

The stranger, or the person unacquainted with the great alfalfa districts and their immense production of this plant, can not comprehend the immensity of the business or the opportunities for making money in these districts for the person who will buy land, plant it to alfalfa, and use it in connection with dairying and stock-raising, or for making it into hay for the markets.

Soil The best soil to select for growing alfalfa is the deep sedimentary loam, or sandy loam soil that is loose and mellow, with a slope or pitch of three to twenty feet to the mile, but perfectly smooth. Uneven land hinders irrigation. Soil should be underlaid with sub-soil of gravel or sand, to assure good underground drainage. Much of the land now producing grain will, with proper surface irrigation, grow first-

class alfalfa, and most of the best alfalfa fields are now growing on land that was a few years ago growing wheat and barley.

Planting Plow the soil deep, right after the first good rain in the winter, and let it rest for several weeks, then run over it thoroughly with cultivator or harrow and pulverize it down to a fine, smooth surface.

Where surface irrigation is used, and it is used in all the farming sections, and water is to be taken from a nearby canal, or from a well, extend main ditch along highest part of land to be planted, then "check" the land; that is, throw up small dykes about two feet high, so that each dyke will surround about one acre and join each other.

Build the dykes with a slope, so that when the earth settles and the alfalfa is ready to cut, machinery can be run over the dykes without trouble. The idea is this: In irrigating, the water can be let into each small area surrounded by dyke, and also let into one area from another. No ground is lost by using the dykes, as the alfalfa grows all over them.

After the ditches are built and the land checked, it should be rolled or harrowed over, and then it is ready for planting. Seed can be bought at any point, and will come in sacks, ready for planting. The proper time for planting is February, March or April, but the latter part

of February and the month of March is the best seeding time.

Figure on using about fifteen to twenty pounds of seed to the acre, and sow with a hand machine for best results and cover with a very light harrow. Some prefer to sow a light crop of barley, for a "nurse crop" with the alfalfa, claiming that the barley will help to choke out the weeds and protect the young alfalfa plants. Where this is done the barley should be cut for hay in May or June.

The young alfalfa plants begin to grow rapidly about June, and should be irrigated at least twice the first summer. The first crop is ready to cut about August or September, and under favorable conditions two or three crops are cut the first season. The second season the field will turn off four or five cuttings of one to two tons of hay to the acre, for each cutting. The third or fourth summer the field is supposed to be in its prime, and will cut four to seven cuttings, running from eight to twelve tons to the acre for the summer.

Under very excellent conditions, as much as fourteen tons of good dry hay has been cut to each acre, in one summer, from four-year-old alfalfa.

With proper care a field is good for many years, without the necessity of re-seeding; in fact, cases are known where fields fourteen years old have produced, without additional seed, twelve tons to acre.

Irrigating With checks properly built, irrigation should not be a hard task. Generally one cutting is taken from the field without irrigation, and in some instances two or three crops are cut before the water is applied. But, with warm weather and plenty of water, a good soaking should be given the field a few days after each cutting.

Cover each "check" two to four inches deep with water, leaving it stand long enough to soak into the soil. Do not over-irrigate, but study the soil and the results. Some soil requires much water, especially the deep sandy loam, where the underlying stratum of sub-soil is quite a distance below the surface.

If the land is sub-irrigated, with surface water only a few feet below, very little surface irrigation is required. This is a matter that should be left wholly with the grower, as many things must be determined, and the person on the ground must study the situation and act accordingly.

Harvesting Most of the growers cut their alfalfa for hay and feed it dry. In this state it makes splendid feed for milk cows, stock cattle and sheep, and horses that are not working do well on it. With a small portion of grain it does very well for work horses. Some use it for pasture, especially for milk cows and hogs, and excellent results are obtained.

The proper time to cut it for hay is when the first blue blossoms begin to show on the tops.

The plant is then, generally, about thirty inches high. A two-horse mower can be used, cutting the alfalfa near the ground. As the plant grows thick on the ground, the stems shoot up tall and fine, making very good hay.

A few hours after it is cut it is ready to rake into windrows, and after standing in windrows half a day it can be put into "cocks" and then hauled and stacked or put into barns and sheds. In the San Joaquin and Sacramento Valleys, alfalfa can be cut in the morning and stacked the next day, without fear of "heating."

Feeding Alfalfa hay can be fed to all stock with perfect freedom, without any serious results. When it is fed to beef or stock cattle it is generally hauled from stack and put into racks, where the cattle can get to it without wasting it.

Milk cows are generally fed night and morning, under cover, in stalls. Very good results are had by feeding milk cows a light ration night and morning, with also one hour pasture in the field during afternoon. Too much green alfalfa, especially if there is dew or dampness, is liable to cause "bloat" with cattle, sheep and horses, but hogs are not affected.

Young hogs live on alfalfa pasture and grow rapidly without any other feed, but to fatten old hogs some grain is required.

Some dairymen own "choppers." These are turned by steam or electric power, chopping the

alfalfa hay very fine. This chopped hay is then either fed direct or placed in silos, to be fed out later.

Markets Many growers feed their hay to their own stock, and where this method is followed, especially in the dairy business, it has been shown that the hay is worth \$15 per ton.

Much hay is stacked and sold in bulk to the cattle and sheep men, who feed it to fatten their stock for the market.

It is also delivered, loose, direct from the field to the barns of the fruit grower, who generally does not grow hay, and to the people living in the towns located in the fruit and alfalfa districts. Thousands of tons are baled and shipped by boat and rail to the lumbering and mining districts and to the large commercial centers of the State.

The price of alfalfa hay varies, according to the amount of hay on the market and the manner in which it is handled. Where it is delivered loose into barns and where it is stacked and sold in bulk, the price runs from \$5 to \$10 per ton, with an average of about \$7.50. For baled hay, prices range from \$8 to \$14 per ton, delivered on board boat or cars. The grower who will feed his hay to his own dairy cows will get the best returns from year to year.

Alfalfa and Dairying The saying that "alfalfa, dairy cows and hogs are the money makers" is indeed a true one, that has been demonstrated in California over and over again. To begin this business, either on a large or small scale, the very best land should be selected, where an abundance of irrigation water can be had, and where good creameries are located near by.

Commence right, by preparing and seeding the ground properly, and work to get a good, vigorous stand.

One acre will supply enough feed to keep one dairy cow and one hog the year through. A dairy barn with a good hay capacity and enough room for all the cows should be erected. Cement floors, with good drainage, should be put in, and arranged with an eye to cleanliness.

Select the right kind of cows. This is one of the essentials. A cow that will produce \$10 worth of cream each month will cost more than one that will bring in \$5, but she eats no more hay. Therefore, work into a herd that will be cream producers. With the right kind of a herd properly fed and cared for, \$10 per month for cream from each cow can be expected.

Own your own cream separator, and after each milking run the milk through, take the cream to the creamery, and keep the skimmed milk at home for the calves and pigs. At the creamery your cream is tested and paid for by the pound.

With a good strain of brood sows bringing in pigs at intervals, plenty of skimmed milk and

green alfalfa, no other feed is required for the growing hogs. With a calf from each cow once a year, and the monthly checks from the creamery, profits on the money invested are large and sure.

A case is on record where twenty acres of alfalfa fed to dairy cows and hogs brought an average income of \$200 per month, the year around, all the work being done by the owner and his family.

The original cost of this place was for land, seeding, buildings, cows and hogs, about \$6000, all accomplished in four years.

The cash value of the place, improvements and stock, at the end of four years was \$10,000, showing an increase in value in four years of \$4000, with a good income each year besides.

Future Profits The future outlook for good profits in the alfalfa business, especially where dairy cows and hogs are used, is very bright.

The population of California is increasing by leaps and bounds, and already the dairymen of California can not supply the demand for dairy products, to say nothing of beef, pork and mutton.

The alfalfa business in California is a very substantial one. No crop failures, no glutted markets, and plenty of good alfalfa land at reasonable prices, offers to the person who will enter this field a self-supporting home in California,

increased valuation on property values, and a snug sum put aside each year for a rainy day.

For further details on alfalfa growing, send to U. S. Department of Agriculture, Washington, D. C., for Farmers' Bulletin No. 215.

Suggestions It is advisable for the small grower, or beginner, to not plant too many kinds of products, except for home use.

Select two or three kinds only, study these with care, and strive to produce something that will bring a fancy price. Certain combinations of products can be grown to perfection, in each of the farming districts, and the following products may be grown successfully, either singly or any two or more in combination in the districts shown:

Southern California.—Oranges, lemons, grape fruit, all vegetables, all berries, grapes, walnuts, olives, sugar beets, alfalfa, apricots, apples.

San Joaquin Valley.—Alfalfa, grapes, all vegetables, all berries, peaches, prunes, apricots, figs, plums, pears, apples, olives, sugar beets, oranges, almonds.

Sacramento Valley.—Alfalfa, grapes, all vegetables, all berries, peaches, prunes, apricots, figs, pears, plums, cherries, olives, sugar beets, oranges, almonds.

North of San Francisco Bay.—Grapes, all vegetables, all berries, peaches, pears, apples, prunes, cherries, apricots, figs, olives, oranges, sugar beets, plums, walnuts, almonds.

South of San Francisco Bay.—Apples, prunes, all vegetables, all berries, grapes, plums, peaches, pears, figs, cherries, apricots, olives, oranges, sugar beets, walnuts, almonds.

Buy good land, well located. It pays in the long run.

Investigate carefully before planting, and plant only the products that are doing well in that district. Don't experiment, unless you have plenty of money and time and want to be a public benefactor.

Don't plant anything unless you are convinced that the markets are near by for handling it, or the freight rates to the nearest market centers are reasonable. If you locate a distance from the markets, plant something that will ship cheaply in bulk, without fear of damage.

When you buy land deal with reliable real estate firms, who have land to sell or who are agents for land. You can do better with them than the owner. Selling land is their business, and they will always give you a "square deal." Land owners of California are not easy people to deal with.

And remember this: California is destined to become a very thickly settled state, especially in the farming districts, and good land in any of the farming districts will never be worth less, but will gradually increase in value from year to year.

“OUR MODEL TWENTY-ACRE FARM”

When I say **we**, I mean myself, my wife and our children—one boy eighteen years old, with not a lazy bone in his body, one girl sixteen years old, just like her mother, and one young “hopeful,” a son thirteen years old.

We decided to own a small country home in California, where we could not only make a living, but **live** during the meantime.

We moved to California and began to investigate, looking over all the best farming districts. We asked many questions, for everything was new to us. The soil and how to work it, fruits, vegetables and alfalfa were all like a book still unread.

Finally we decided on the district we wanted to live in, and moved into a furnished house, located in a good little country town, where schools, churches and good markets were in evidence.

Then began a careful search for land. A reliable man, who owned a fine orchard about two miles out, gave us much good advice that assisted us greatly. We only had \$3500 cash, but with plenty of energy and a determination to do something, we finally made a start by selecting twenty acres about a mile out from the town.

This tract was part of a large wheat ranch that had just been put on the market in twenty and

forty-acre pieces, with irrigation on each piece. The twenty acres we selected was located beautifully, fronting on the main graveled road and running back to one of the laterals built in from the main irrigation canal.

The land sloped about eight feet to the mile from the lateral down to the road, with a good surface drainage, and underlying the tract about twenty feet was a fine sub-stratum of gravel. The soil was a dark brown chocolate loam, with just enough sand to work well. The price to be paid was \$3000, in four annual installments of \$750 each, with six per cent interest on deferred payments. We made our first payment and took possession November 1st, just after a good rain had soaked the ground well. We hired a farmer who owned eight mules and a big plow, to come in and plow up the entire place, and he plowed it deep and well. Then we fenced the entire place with three boards and two barbed wires, although we found later that this was not necessary, as the stock laws of California prohibit loose stock to run at large.

Three acres in one corner and next to the road was laid out with room for house, yard, family orchard, barn, chicken houses, berry patch, etc. A well was put down and splendid, soft, cold water was reached at forty feet, and water arose within fifteen feet of surface. A carpenter was hired, lumber hauled and a three-room cottage was built. This was arranged so an addition could be built on in front when the proper time

came. Next we erected a large barn with eighty-ton hay capacity, and sheds on three sides for horses, cows, hogs, and farming implements.

Chicken and hog houses were also made, most of this work being done by ourselves. Then the cottage was furnished, and we moved into our own castle in time to eat Christmas dinner. Up to this time we had been busy making walks around the house and fixing up other conveniences, and had paid no attention to the balance of the land.

The gentle rain and warm sun had started the vegetation growing, and we began to prepare for the planting. All arrangements were made with a good nursery firm to supply trees, vines, plants, etc., and a span of young, well-broken horses were bought, as well as a farm wagon, a two-horse plow, a disk harrow and a light harrow.

Then we harrowed the entire place down smooth, breaking up all clods, then it was plowed shallow and harrowed again, until it was just like an "ash bank."

Seven acres along the lateral was selected for alfalfa, and with a borrowed scraper we soon had ditches built and the entire seven acres "checked." We let it stand until February 8th and harrowed it all over again, and rolled it down with a light roller. We bought 140 pounds of alfalfa seed and a few sacks of barley and sowed it together and run over it with a light harrow. What else could mortal man now do but wait

and trust to Providence, and we found later that Providence was indeed good to the California farmer.

Then we went to work on the other ten acres and put it in shape for trees. Holes were dug deep and wide into the loose, rich soil, and by March 4th we had it all planted, seven acres in peaches and three acres in cherries. During this time we had not been idle around the house. Walnut trees had been placed along the road forty feet apart, six navel orange trees were growing in the yard in front, two lemon and two olive trees on one side and grape vines on the other, while flowers and shrubbery were planted along the walks. Three fig trees back of the barn, and other ornamental and fruit trees found root in every odd corner. One acre was set to loganberries, and early potatoes were planted between the rows of young trees over the entire place.

Three dozen young hens had been added to the barnyard, and five stands of bees had been placed far back in the orchard, out of firing range. Lettuce, cucumbers, onions, tomatoes, asparagus, celery, peas and other vegetables were planted at the proper time, and by May 1st we were all through planting and cultivating, and the oldest boy hired out to our neighbor, with the team and farming implements, at \$3.50 per day, our first income.

But we were all kept busy at home, irrigating, hoeing and pulling weeds. By this time the youngest boy had developed into a regular gardener, and had never put on his coat, only when he went to school or church, since we moved in.

Although we had passed through one winter in California, we had all worked out-doors most every day, and enjoyed it, and now, June 15th, with fresh eggs every day, and over two hundred young chicks doing well, with fresh vegetables from our own garden and some to sell, and \$3.50 coming in each day from the boy and team, we felt after all that success and independence were almost within our reach.

By this time our barley crop was ready to cut for hay, and this meant a new mower, rake and forks. The young alfalfa was very thick on the ground, and all weeds were completely choked out. We went to work on that seven-acre field, and in four days it was mowed, dried and placed in barn, and we estimated that it gave us about twenty tons of fine hay.

In a few days we irrigated the alfalfa, and how it did grow! Two more cuttings of fine hay were taken off that summer, making about sixteen tons.

Then we bought a good thoroughbred young milk cow, the best investment we ever made, for all summer she gave us plenty of fresh milk and butter and about two pounds to sell each week. In August the potatoes were dug and sold, and by January 1st, just one year from the date we

started, we prepared our statement, showing income and expenses for the year as follows:

INCOME.

Capital on hand.....	\$3,500
Butter, vegetables and eggs sold.....	180
Potatoes, between trees.....	714
Boy and team.....	530
Total.....	<u>\$4,924</u>

EXPENSES.

First payment on land.....	\$750
Interest.....	135
Taxes and insurance.....	83
Improvements, stock, etc.....	1,855
Trees, vines, etc.....	190
Provisions, clothing, etc.....	530
Total.....	<u>\$3,543</u>

Balance on hand.....\$1,381

Then we bought another cow, for we had plenty of hay, and in March we again planted vegetables in the garden and potatoes between the rows of young trees. Everything was looking first class, trees growing nicely, chickens, now two hundred laying hens, turning out eggs regularly, and the cows supplying milk and butter, with hardly a day lost with the team when not busy at home.

Right after cutting the first crop of alfalfa we bought four more good cows and two fine brood sows. We also bought a cream separator and began to deliver cream to the creamery, near by. What vegetables we could not use at home were bought by the groceryman at good prices, and in June we began to pick and sell berries. That summer we cut five crops of alfalfa and placed it

in the barn, potatoes were dug and sold, and everything looked very satisfactory.

January 1st, end of second year, showed our income and expenses in detail:

INCOME.

Capital	\$1,381
Cream	520
Three calves sold.....	32
Boy and team.....	632
Berries and vegetables.....	211
Eggs and poultry.....	372
Potatoes	612
<hr/>	
Total.....	\$3,760

EXPENSES.

Second payment on land.....	\$750
Interest and taxes.....	148
Four cows.....	320
Two sows.....	36
Groceries and clothing.....	478
Incidentals	120
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Total.....	\$1,852

Balance.....	\$1,908
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The end of the third year showed better results than either of the two years before. We paid off all the remaining indebtedness, namely, \$1500, and had a balance of \$1142 left.

The summer of the fourth year was a busy one, and although we planted nothing between the rows of trees, on account of the shade, still we had a fine crop of peaches, and the berries produced well. That season we cut five crops of alfalfa, with considerable pasture besides, and estimated our hay yield at sixty tons.

The chicken business had grown to a regular income producer, and we were raising some very

fine hogs. In fact, not a week passed, winter or summer, without an income of cash for something.

At the end of the fourth year our statement showed:

INCOME.

Cash on hand.....	\$1,142
Cream.....	607
Calves.....	44
Hogs.....	232
Peaches	1,080
Cherries.....	152
Berries.....	371
Poultry and eggs.....	627
Vegetables.....	197
Team.....	372
Incidentals.....	121
Total.....	<u>\$4,945</u>

EXPENSES.

Taxes and insurance.....	\$133
Barley.....	31
Boxes.....	30
Chicken feed.....	151
Addition to house.....	780
Other improvements.....	320
Clothing and groceries.....	560
Incidentals.....	230
Total.....	<u>\$2,235</u>
Balance cash on hand.....	\$2,710

January 1st, end of fifth year, our accounts showed balance cash on hand, \$4872, place all paid for, a nice seven-room cottage, fine barn with cement floors, good chicken and hog houses, and many other nice improvements; seven acres of alfalfa, bringing in an income of over \$700 each year, seven acres of fine peaches, good for over \$1000 each year, three acres of cherries just com-

ing into bearing and capable of \$150 worth to the acre, one acre of loganberries giving us about \$300 per season; walnuts, oranges, figs, olives and grapes for home use and some to sell; six fine cows, twenty-two thoroughbred hogs, three horses and four hundred chickens; farming implements, surrey and tools, all accumulated in five years, on a capital of \$3500 and plenty of good muscle and energy. We had all enjoyed every day during the entire five years. We had worked, yes, and saved, but we had also played. We had hunted and fished, drove all over the country for miles, attended good schools and churches, went to picnics and theaters, and above all, we had **lived**.

But this was not all; we had been offered ten thousand dollars cash for our place, stock and implements, but had refused it with thanks.

In these five years much land had been sold in small tracts further out, and we were then in the center of a very highly improved district, with property values increasing each year.

Other people near us had done well also, but no place showed the beautiful flowers, walks, arbors, and the handy conveniences.

This was because we had located to live and improve, and we took opportunity to make everything count.

And now, each year we are adding something, rare flowers or plants in the yard, or some labor-saving device about the house or barn.

Electric lights and telephone have been installed, electric motor now runs the pump, separator and grind-stone. The cream man and the produce man now call each morning for cream, vegetables, poultry and eggs, and our crops are always sold before they are ready, because we produce only a fancy article that everybody wants and is willing to pay for.

To-day we have a home, a self-supporting, a money-making home, a place where we can live and enjoy life; a home where in our declining years we can live without labor or worry, and rest beneath our own tree and vine.

We have visited many such homes in California, and many more will be built from time to time. Here in California we have the soil, the weather and the markets. All that is required is a little capital, plenty of energy, and just a little "horse sense" to make a

"MODEL TWENTY-ACRE FARM" like
"ours."

A FARMER.

Information For the benefit of persons who want reliable and detailed information on lands, prices, terms and products in any of the farming districts, or any particular section in any farming district, we give on the following pages, under the head of each district, the names and addresses of reliable real estate firms located in these districts, who will, on application, supply all information.

Also nursery firms who will supply information and catalogues on nursery stock for planting.

We beg the reader to mention "California Products" when writing.

For general information and literature on California write to the California State Board of Trade, Ferry Building, San Francisco.

Southern California District

Reliable real estate firms who have farm lands for sale:

Service Bros., Los Angeles.—302 Frost Building.

Edw. D. Silent Co., Los Angeles.—410 South Hill Street.

W. C. Prather, Los Angeles.—603 Union Trust Building.

Jacob Stern, Los Angeles.—404 Pacific Electric Building.

Nurseries

San Dimas Citrus Nursery Co.—San Dimas, California.

For general information on Southern California write to Los Angeles Chamber of Commerce, Los Angeles, Cal.

San Joaquin Valley District

Fresno Land Co., Fresno.—2044 Mariposa Street, Fresno County.

Pierce & Anderson, Fresno.—1152 J Street, Fresno County.

Maze & Wren, Modesto.—Stanislaus County.

P. M. Nelson, Hanford.—Kings County.

Crocker Land Co., Merced.—Merced County.

Williamson & Twitchings, Stockton.—San Joaquin County.

Nurseries

California Nursery Co.—Niles, Cal.

Modesto-Turlock Irrigation District

In the productive San Joaquin Valley. Sandy Loam Lands, with abundance of irrigation water, in a very highly improved district, with good cities, markets and schools.

ALFALFA, DAIRYING, FRUITS, VEGETABLES

Prices of land, with free water right, \$75.00 to \$150.00 per acre. Easy terms. Write us for particulars.

MAZE & WREN

MODESTO, STANISLAUS COUNTY, CALIFORNIA

Sacramento Valley District

Irrigated Land Co. of California, San Francisco.
—324 Crocker Building.

C. M. Wooster Co., San Francisco.—702 Market Street.

Brooke Realty Co., Sacramento.—618 J Street.

W. F. Sperry, Marysville.—Yuba County.

Frank C. Mitchell, Gridley.—Butte County.

Cussick & Burdon, Chico.—Butte County.

Los Molinos Land Co., Los Molinos.—Tehama County.

W. N. Woodson, Corning.—Tehama County.

Simmons & Webb, Woodland.—Yolo County.

Nursery Firms

Chico Nursery, Chico—Butte County.

Herbert Sampson Nursery, Corning.—Tehama County.

For general information and literature on the Sacramento Valley, write to the Sacramento Valley Development Association, Sacramento, Cal.

“The Sacramento Valley”
“The Land of Opportunity”

We are large sellers of Sacramento Valley lands, on easy terms, for

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