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THE old idea of Gooseberries was to Europe they are as common now as Gooseberry pie as common there as berries are not very good for canning, but intend to cook them or where they do not in a town I would get a place where I had bushes, if I had to do without the parlor plants save me $\$ 50$ a year on my provision
use them in pies and on tarts. All ove: strawberries are with us, and you finc apple pies here. The Golden Drop Gooseare extra good for every purpose where you need to be used whole. If I were going to live enough room for two dozen Gooseberry carpet to afford it, and I would make these bill, besides giving me more delicious toor,


## Sheet. It will save both your time and ours, and will help us to prevent mistakes

Date

# YDALE EXPERIMENT GARDENS HOLLAND, MICHIGAN 

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Flora Birdie Mitting gave a party for her doll. They had strawberries, raspberries, cake and tea, out on the porch in the shade of Himalaya vines, and they had a fine time

## Some of My 1913 Ideas



HE year just past, since my 1912 catalogue came out, has been remarkable in several ways. In the first place, the winter of 1911-12 was the most severe we have had for a great many years. The thermometer went down to forty degrees below zero in many places in Michigan. This intense cold tested the hardiness of my berries to a greater extent than they ever had been tested before, and I am glad to say that all my best kinds came through with flying colors, particularly Himalaya Berry, Plum Farmer Black Raspberry, Shepard's Pride Red Raspberry, and Ancient Briton Blackberry.

My business grew nearly three hundred per cent during the past year. It did this because, during previous years, I had been building on a solid foundation of honest dealing, careful attention to supplying only the very best varieties and plants, and telling the truth about them all the time. If you use a man right, he will always "find you out," and come back year after yearthat is my experience. A patron's success is more to me than the profit I get from the plants I sell. I know just how much better it feels to succeed than to fail; and, knowing this, I do my best to bring success to all of my customers-which means to you. Some of the letters printed here are from customers who have bought plants from me for many years. Read them. They are interesting.

Right here I want to explain three of my purposes in life. They concern everyone with whom I do business. One of these purposes is to get better varieties of berries. This can be done by improving old kinds, and by developing new kinds. We think a new one is pretty fine when it first comes out, yet there always is room for improvement. In a few years the varieties we thought were
good fall behind in many qualities; which can be taken as pointing out just how far behind the present kinds will be as better ones are worked out. Market conditions are changing all the time. Cost of labor goes higher, and in many ways it is necessary for the berry-grower, as for everyone else, to get more for his product, or have more to sell from the same ground and work. His best way of doing this is to grow improved varieties.

Improved varieties are most important to the beginner selecting his plants. Think of the disappointment and money-loss that can result from choosing worthless kinds! Maybe a man has only enough money to buy plants and care for them for one year. His success depends on the first few crops, and if they do not come, or are small, the failure is a big thing to him.

In the last couple of years I have been developing surprises for my friends, in the way of new and valuable Blackberries and Raspberries. This year I recommend to your attention the Macatawa Blackberry and the Shepard's Pride Raspberry.

Another of my purposes is to give ideas. I have been in this berry work for forty-five years, and during that time a whole lot of things have come under my notice which will help many people, if they know the points at the right time. I aim to give as many valuable suggestions as possible. If you follow my ideas, you will make money, They are not misleading in any shape or form, and I know what I am talking about. I want you to ask me about planting, whether or not your soil and location are suitable for planting, what kinds to plant, and what you should do in any of a hundred points in this line. I know soils. I can tell you what kind of soil there is on a place without digging, just by seeing what is growing on it and the condition of the plants or trees. I often go and

## 2 BERRYDALE EXPERIMENT GARDENS, HOLLAND, MICH.



My first greenhouse at Morris, Ill., a $\$ 4,000$ affair
lay out the planting of both large and small places. To illustrate: Mr. Colbune, of Iron River, Wis., requested me to lay out a hundred acres for him. I went there and planted twelve acres, and told him exactly how to do the rest. A young married man who wanted to become independent faster than his salary would permit, came to me and I laid out a plan by which he planted five acres in berries. This should give him $\$ 500$ a year soon, and be a prop strong enough for him to fall back on entirely should anything happen in his other work. I can do you a lot of good. If you have any such problems as those mentioned, let us get together.

My biggest purpose of all, probably, is getting more people to grow berries. This is a bigger thing than you would think at first sight. I do not want to be regarded as a "knocker," but I cannot help thinking that there are going to be harder times during the next dozen years than during the last ten. And whenever the so-called "good" jobs begin to go back on people, the first thing they will think about will be something to eat. That will lead them naturally to berries and vegetables-if possible, to berries and vegetables that they can grow themselves. Every man in the country who can be affected by hard times, or who is not satisfied with his present rate of advancement or degree of independence, should make it a point to buy five or ten acres of ground (or even one acre will do) and plant it in berries. That will make him independent. If you own a large farm, you can plant it in berries and insure yourself a profit on
your investment, because you will be creating a necessity of life, for which there is sure market at good prices, no matter who is President. The berries will insure you a better return on your investment and for your work than grain or stock.
I set twenty-two acres more in berry plants for fruit, this year, and I intend to keep on increasing my area as much or more every year.
Prices for berries have gone up steadily almost every year for the last twenty. In 1911 all berry crops were heavy. In spite of this, dried and canned berries advanced 25 per cent, and you cannot buy some kinds on the market for love or money. The reasons are that a great many more people are learning that berries are a necessity; and that thr men who were young between 1890 and 1900, ana middle-aged now, nearly all left the farms and went to cities to work, letting the berry fields run down, and so cutting off the supply. It will take a long time to build up the berry production of the country even to the point where it was twenty years ago, let alone to what the present increasing demand calls for. You can take any berry-grower between the Atlantic and the Pacific, who has three acres or more and cares for his plants properly, and you will find him prosperous. I say every one. What other business can you find so successful?

Berry-growing is the thing for those who have, or can get, only a few acres, and for the man who owns a hundred or a thousand acres. In the following paragraphs I will explain plans for profitable plantings of both these sizes.

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My improved greenhouse at Morris, Ill., cost \$15,000. 20,000 feet of glass and modern equipment throughout

## What You Can Do on Five Acres

For $\$$ ioo you can rent five acres of ground, buy enough berry plants to set it properly, and cultivate it. This is about as cheap as it should be done, however. In two years you can get more than $\$ 500$ cash profit. The first year alone the new plants you get will be worth $\$ 250$. Let us take such a five-acre berry farm, and see how things would be fixed on it. There should be hedges of Himalaya berry at the sides and back, and maybe roses and shrubbery in front. Probably there should be a little pasture over in one corner, but all the rest of the farm, except a quarter of an acre reserved for house, barn, chicken-houses and yards, garden, etc., should be in berries.

There should be a half acre of Strawberries, which would take 7,620 plants, set $3 \times 2$ feet apart, costing $\$ 20$, and one acre of Himalaya plants, set $5 \times$ io feet apart- 900 plants, costing $\$ 18$. The Himalaya hedge, about 70 rods long, would take 500 plants more, worth $\$ 10$. Then a half acre of Superlative Red Raspberries, set $2 \times 5$ feet, 2,177 plants, would cost $\$ 52.80$; a half acre of Plum Farmer Black Raspberries, 2,177 plants, would cost $\$ 21.77$; a half acre of Perfection Red Currants, $5 \times 5$ feet, 87 I plants, $\$ 34.64$; a quarter acre of Boskoop Giant Black Currants, $5 \times 5$ feet, 435 plants, $\$ 21.75$; a quarter acre of Whinham Gooseberries, $5 \times 5$ feet, 435 plants, $\$ 43.50$; 100 rose tants, Dorothy Perkins, for the hedge fence, $\$ 5$; ansa finally fruit and other trees and shrubs for
the front yard, orchard, garden, chicken-yards, etc., $\$$ Ioo. The total of all this is $\$ 327.66$.
Where can you put this amount of money to better advantage? If you lived in a town, $\$ 300$ would keep you about three months, and is but a drop in the bucket so far as buying and maintaining a home is concerned. But such a five-acre berry farm is all you need to make a living; and the living can be compared only with the grade of living of the salaried man in a town who gets more than $\$ 1,500$ a year and spends it all as he goes. Some five-acre berry farms net $\$ 2,000$ a year. It takes work, but almost any grower can live and save $\$ 1,000$ to $\$ 1,200$ or more every year.

Land perfectly suited to berries can be bought almost anywhere for not to exceed $\$ 25$ an acre, and I know of plenty that can be had for $\$ 10$ an acre. Think of it-for $\$ 125$, plus the cost of the berry plants and planting, you can have a home and independence!

## What You Can Do on Two Hundred Acres

Now if you have money or land, and want to make profits equal to those of any business, and more than most, you can do it with berries. If you are a farmer you can make berries your main crop, if you have money you can buy land and go into the berry-growing business. B. F. Duncan, of Seattle, Washington, wrote me last winter asking how he could handle 200 acres of land in berries. I put considerable thought into my reply,

$\mathbf{2 2 , 0 0 0}$ carnations, 10,000 geraniums, 5,000 coleus, that I planted out for stock plants at Morris, Ill.
to Mr. Duncan's inquiry, and cannot explain my idea to you any better than by printing my letter here.

My Dear Mr. Duncan: Your idea of laying out 200 acres into ten-acre tracts with six acres of berries on each ten acres cannot be beat as a money-maker. I tested it myself by buying twenty-three acres of ground, at $\$ 20$ per acre, in April, 1910, clearing off ten acres at a cost of \$22 an acre, and planting seven acres to berries, all at a cost of $\$ \mathrm{I}, 000$. I sold this land last May for $\$ 2,000$ cash. There is no better proposition for a real estate firm or private owner than to lay out large tracts of land into smaller berry farms. Every berrygrower from the Atlantic to the Pacific is prosperous and making a lot of money. You cannot go into any other industry and find everybody getting along well.

Canned berries have gone up 20 to 25 per cent during the last season, in the face of a full crop in 191I, and you cannot buy a pound of dried berries on the Chicago market today for 50 cents a pound. I suggest that you leave an acre or two and put up a canning, preserving and drying plant a year from planting the berries.
I am posted on all the berries grown in the world, and would suggest that for Pacific Coast conditions you plant the true Burbank's Phenomenal Berry, the Mammoth Blackberry, Plum Farmer Black Raspberry, Shepard's Pride Red Raspberry, Boskoop Giant Black Currant (which should be a great success in the Washington climate), Perfection Red Currant, Downing Gooseberry and the Himalaya Berry. I don't think I would plant Strawberries, as that berry is more plentiful than all others combined, and the work it requires is expensive and hard compared with what other varieties demand.

To plant six acres of each ten in a 200-acre tract, would make 120 acres of berries. I would plant as follows:

## On Ten of the Six-acre Patches

2 acres Giant Himalaya, $5 \times 10$ feet apart takes.
1 acre Mammoth Blackberry, 5 x io feet
I acre Burbank's Phenomenal, 5 x io feet
1 acre Plum Farmer Black Raspberry, $5 \times 5$ feet
1 acre Shepard's Pride Red Raspberry, $2 \times 5$ feet.

Plants
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On Ten of the Six-acre Patches
Plants
I acre Boskoop Giant Black Currant, 2 yr., $6 \times 6$ feet... i,ooo I acre Perfection Red Currants, $6 \times 6$ feet. . 1,000 I acre Giant Himalaya, 5 x 10 feet. . . . . . . . . . . . . . . . . . . 900 I acre Plum Farmer Black Raspberry, $5 \times 5$ feet. . . . . . . . 1,750 I acre Downing Gooseberry, 6 x 6 feet.................... . . . , ooo I acre Shepard's Pride Red Raspberry, $2 \times 5$ feet........4, 000

The Cost of Plants for Twenty Ten-acre Places (Six Acres Planted on Each) Would be as Follows:
30 acres Giant Himalaya, 45,000 plants, @ $\$ 20$ per 1,000
$\$ 900$
Io acres Mammoth Blackberry, 9,000 plants, @ \$15 per 1,000 .
20 acres Shepard's Pride, 80,000 plants, @ \$15 per I,000.

1,200
20 acres Plum Farmer, 35,000 plants, @ \$15 per 1,000 525
Io acres Burbank's Phenomenal, 9,000 plants, @ \$25 per I,000.
Io acres Boskoop Giant Currant, 10,000 plants, @ $\$ 75$ per I,ooo.
Io acres Perfection Currant, 10,000 plants, @ $\$ 50$ per 1,000.
Io acres Downing Gooseberry, ıo,000 plants, @ $\$ 60$ per I, ooo. $\qquad$
120 acres 226,000 plants . . . . . . . . . . . . . . . . . . . . $\$ 4,835$
The plan above can be changed, but I believe that it cannot be improved upon. The first crop, I estimate, should run from $\$ 300$ to $\$ 500$ per acre. I often have taken more than 1,000 crates of sixteen quarts each from an acre in Placer and Santa Cruz Counties, California. These ten-acre places, after two years, ought to sell fast at from $\$ 500$ to $\$ 1,000$ an acre.

I haven't space to say much more here, but every farm near a town, and every piece of waste land that will grow anything, can be handled in this same way at a great profit. If you are interested write to me, and I shall be glad to go into the matter fully with you.


In this greenhouse, at Loomis, Cal., I grew 100,000 carnation cuttings every thirty days during the rooting-season in igo2

## Announcement of My Complete Book on Berry-Growing

In my forty-five years of experience growing berries I have made use of many methods of great value that are not known to any extent in this country, and I am now preparing manuscript and gathering photographs to make into a book which I expect to have ready in the early part of 1914.

In Europe the science of berry-growing is developed much more highly than it is in America. Over there growers understand how to get enough berries to bring in $\$ \mathrm{I}, 000$ or $\$ 1,500$ net profit per acre, if the fruit were sold at the prices we get in America. They grow these berries with methods as much better than ours as their crops are better than ours.

My father was head gardener for the estate of Coliner Ramsdown, Tunbridge Wells, Kent, England, and I grew up in an atmosphere of intensive berry-growing. My first lesson under my father, when I was nine years old, was in potting plants, and it lasted for two years and ten months. Under the bench at which we worked, we had all the different kinds of soils-leaf-mold, sand, peat, clays, and mosses, and we were taught to use the kind of soil best suited to each kind of plant. For instance, when a begonia was brought for potting, I used leaf-mold, because the roots like to run in the soil ; if a rose was brought, I used clay-loam that would stick together when I squeezed it in my hand, because rose-roots like to pierce the soil; if an orchid
or a pineapple was brought, I used moss. In this way I learned soils, and I learned them so thoroughly, not only in regard to flowers but as regards the preferences of other plants and of trees as well, that I could go through the fields or woods and tell what kind of soil was there simply by looking at the stuff that grew on the land. Now, when I plant a Raspberry field I select a light sandy loam; for Blackberries I want heavier sandy loam. There were more than sixty different kinds of soil under that bench, and in no country in which I have traveled have I found any kind that was not represented there.

This little incident merely illustrates the kind of material I am going to put in this new book on berry-growing. I am going to cover the subject of berries and flowers in such a manner as no one in this country has ever covered it before. There are plenty of such books written from the scientific standpoint, that give long and involved reasons, hard to understand, for each process suggested. They remind me very much of the bill-of-fare I get when I go into a restaurant in Chicago,-full of French words that no one but the waiters understand, and which I think are put there so they can charge higher prices. When I go to eat in that kind of place I just ask for ham and eggs. Now this book of mine is going to be a sort of a "ham-andeggs" book-nothing fancy about it at all, but very

$\$ 3,000$ worth of calla lily bulbs ready to pack in my shed at Santa Cruz, 1908
nourishing, very useful, and tasting good to anyone who is hungry, which, translated, means the man who is trying to make a practical success of berry-growing-trying to make a business success and become independent.

I am going to tell how to do all berry work, but am going to tell more than this-how to make money on land, how to succeed with just a few acres, and make more money than has been made before. I will give the business ideas as well as the knowledge of how to produce. It takes selling ability as well as growing ability to make a financial success of berry-growing.

There is need of better berries, if our business is to continue paying the present high profits, because the cost of growing continually is increasing, just as the cost of living is, and berry-growers should demand higher and higher returns from their labor and their land. In my book I am going to give unique ideas about money-making and success and methods of working. I will explain fully just how I have worked to improve varieties, and exactly
what I have accomplished. Berry-growers will find it a reliable guide as to what varieties to plant, and what to expect from all kinds and sorts.

I want to emphasize that it is going to be no common book. You can look in it for directions as to how to cultivate and prune and pick your berries, and you also can look for the money-making ideas. I think when you get your copy you will read it and study it, and then go out about your work and put into practice the suggestions I give you-and make more money than you ever did before.

If you want a copy of my book, I shall appreciate it if you will let me know as soon as you read this, so I may have an idea as to how many to get printed. I want to order enough to go around, but do not want to make a second edition, because it will have 150 pages or more, and will be pretty heavy and expensive. My present plan is to issue it in two styles, one with a flexible heavy paper cover that will sell for 50 cents, and the other bound in cloth and boards, the usual book style, that will sell for \$I a copy.

## History of A. Mitting and His Berry-Growing Work

To understand rightly what kind of man you are dealing with, and what the real nature of his business is, you must look over his past life and see what he has done. The following, from the official "Biographical and Genealogical Record," will give you a very good idea of my work and of the kind of berry plants you may expect to get from me. It was written from Morris, Illinois, where I lived in 1900.

## ALFRED MITTING

[^1]energy and enterprise not only bring to them individual success, but also enhances the general welfare, and thus they may be termed public benefactors. There are in all communi-


My two children at home in my Experimental Garden in Santa Cruz, Cal., 1908
ties certain business interests which are not only a credit to the town, but are also a matter of pride to its citizens, and such a one is now controlled by Mr. Mitting, the well-known secretary and business manager of the Morris Floral Company. He first came to this city in 1876, and established his permanent residence here in 1893.

He was born in Tunbridge Wells, Kent County, England, March 4, 1858, and his parents, Robert and Lydia (Piper) Mitting, were both representatives of old English families. For many years his father has been engaged in flower-culture, and at this writing, in 1900, is numbered among the leading florists of Ashurst, Kent, England. Thus in early life our subject became familiar with the business, gaining a thoroughly practical knowledge of the best methods of cultivation of plants. His ability in this direction has been the means of bringing to the Morris Floral Company the splendid success which has attended their enterprise. The school privileges which Mr. Mitting received in his youth were limited, but from reading, observation and experience he is now a well-informed man. He was trained to habits of industry, economy and perseverance, and the development of such traits in his character has made him a splendid business man, and has enabled him successfully to carry forward the business undertakings with which he has been connected.

At the age of eighteen years Mr. Mitting came to America, at which time his uncle, Moses Britt, was residing upon a farm near Morris. Making his way to Grundy County, he worked upon his uncle's farm for two years, and then entered the employ of the late Judge Hopkins as a gardener and coachman. In August, 1879, he sustained a sunstroke, and, his health being impaired thereby, he returned to England, where he remained till 1881. However, he had become greatly attached to the United States, and believing that this country afforded better opportunities than the Old World, he once more boarded a western-bound steamer that brought him to American shores. Arriving in Morris, he rented land of his uncle and engaged in gardening for one season. Through the succeeding two years he carried on general farming on rented land near Morris, and then spent four years in a flouring mill in Newton, Kansas. At the expiration of that period he returned to Morris, where he engaged in farming on rented land through several summer seasons, while in the winter months he worked in flouring mills in Independence,

Missouri; Kewatwen, Canada; Galveston, Texas; Muskegon and Holland, Michigan.

On the 4 th of March, 1893, he again became a resident of Morris, and since that year has been identified with the floral interests of this city. On the 7 th of August the Morris Floral Company was organized by Mr. Mitting, S. M. Underwood, C. D. Britt and Anna Goodenough. They began business on Canal Street, within the limits of the city, and from the first success attended their enterprise. In April, I897, six acres of land were purchased just east of the city limits, whereon a larger plant was constructed, consisting of a splendid greenhouse with 20,000 square feet under glass and well-arranged rooms for office, storage and packing purposes. On the east side is the boiler house, $28 \times 35$ feet. Over io,000 feet of pipe conveys the steam to the different departments, and a fine artesian well supplies the water for the plant, and there are two large cisterns containing the rain-water from the roofs. A fine fish-pond has been arranged on the grounds, and is supplied with water from the overflow of the well and cisterns. Graveled driveways have been constructed, and the entire plant is a model of its kind, being perfect in every department. Mr. Underwood is the president and treasurer of the company, and Mr. Mitting is secretary and manager. The latter is not only an excellent florist, but is also a practical business man, and, under his direction, the company has enjoyed a steady increase of business from the beginning. They supply the city retail demands, but outside of Morris sell only to the wholesale trade, the yearly output being about one million plants, purchased by florists throughout the United States and Canada.

Mr. Mitting's hope of benefiting his financial condition in the New World has been more than realized, for he has not only secured a good living but has also acquired a handsome competence that numbers him among the substantial citizens of Morris.
To bring the foregoing biography up to date, I have written the following, much of which touches on my experience in berry-culture:

In 1890 I married Miss Ellen Griggs, a daughter of Jacob Griggs, one of the pioneer settlers of Morris. We now have two children, Ernest DeRoo and

## 8 BERRYDALE EXPERIMENT GARDENS, HOLLAND, MICH.



A carioad of calla bulbs packed ready to ship at Santa Cruz, Cal.

Flora Birdie, the former eighteen years old and the latter nine. My son is following in my footsteps, has a berry farm of his own, and eventually will continue the business.

In June, 1900, my family and I made another trip to England, and spent three months with my parents and in going about among the nurserymen and head gardeners of large estates, gathering information on new and old plants and flowers that since has been very valuable to me in my work in the United States. In September we returned, and I took charge of the Morris Floral Company, buying out other heavy stockholders. Though doing a heavy business, I wanted to increase my knowledge of horticulture, so sold my interests in the spring of igoi, and went to Placer County, California, where I bought a twenty-acre fruit ranch for $\$ 6,000$. The trees were eight years old.

After raising one good crop of fruit, I built greenhouses and planted 22,000 carnations on an acre. From this acre I sold $\$ 6,000$ worth of rooted cuttings. The expenses were only $\$ 3,000$, leaving $\$ 3,000$ profit. This beat any record of profit from an acre in one year ever known in California. The carnation cuttings were lifted in the field by four Japs, and taken to greenhouses, where four girls trimmed them, then two Japs put them in the sand to root. It took thirty days to root them. Twenty thousand were handled daily, and a little more than 700,000 plants were rooted during that season.

In the meantime I was experimenting with all the finest berries on the coast, and selling more than 300,000 plants a season. In my travels about California I discovered that the white calla
lily could not be grown successfully anywhere in California or in the United States except around the Monterey and San Francisco Bays, so I began to grow bulbs there, and advertised calla lilies at wholesale. Orders came so fast that I sold my fruit ranch at Loomis, and bought a place near Santa Cruz. Here I bought, grew and sold bulbs in the summer months, increasing my trade from 50,000 bulbs the first year to $1,500,000$ the fourth year, and some years clearing from $\$ 4,000$ to $\$ 6,000$.

In the winters I handled all kinds of nursery stock, especially berry plants. After eight years in California, my health became so poor that I concluded to come back East, so I sold out my business there and moved to Holland, where I have been ever since. I do not expect to move again, as I like Holland and the Michigan climate. My berry business is my hobby, and it receives all my time and skill.

My success has come from knowing a good thing when I saw it, and then investing heavily when it was first introduced. For instance, when Luther Burbank first advertised the Shasta Daisy, I bought \$io worth of seed, and \$10 worth of young plants. I sowed the seeds, and as soon as the plants were up transplanted them. When the plants had four leaves I advertised them in the trade papers at \$io a hundred, and sold $\$ 396$ worth of plants inside of three months from sowing the seed. My original \$10 worth of plants were set out for seed, and inside of one year I had cleared more than $\$ 400$ from them. I did the same thing, with Lawson and Enchantress Carnations, America Gladiolus, and Giant Himalaya Berry, and a great many other


Trial patch of sweet peas back of my house at Santa Cruz. I make everything that grows on my place serve some experimental purpose
fruits and flowers that are standard now. All through my career I have made it a point to take advantage of every opportunity of making money.
In 1882, while driving to town one day (I lived near Morris, Illinois, then) I saw a lot of very large willows in a hedge or windbreak on the north side of a large orchard, belonging to a Mr. Whipple. I turned right around and went in and asked Mr. Whipple what he would take for those willows. He told me if I would cut them three feet from the ground I could have them all for $\$ 15$, so I bought them, and went right into town and sold them for props in a coal mine at $\$$ I 4 per thousand. I cleared $\$ 96$ above all expenses, before the spring work began. Another time while I was going from Kansas City to Galveston, Texas, in looking from the carwindow between Houston and Fort Worth, I saw willow bushes full of large bunches of mistletoe. On the Chicago market this was worth $\$ 10$ a barrel. I got off right there and shipped a lot of it and made money. Now carloads of it are shipped from there every year.
In 1882 I had rented thirty acres of ground just east of Morris, for vegetable-growing. Among the things we planted was an acre of early sweet corn, a splendid crop when the supply was not too great for the local market, but worthless when there was a glut, which was the case that year. One morning I had a notion to send a shipment of ten sacks, or 120 dozen ears, by express to Chicago. I shipped them to M. George \& Sons, South Water Street, and was surprised to get a net return of 50 cents a dozen. That one shipment started sweet corn raising on a large scale in that neighborhood; and
today, following out my idea, there are 3,000 acres grown each year. In 1877, I believe, I originated the idea of fall plowing for corn in that section. To get rid of an extra-large accumulation of manure I hauled it out on oat stubble in October, and then had to plow it under to keep it from wasting in the winter. The next summer this land was put into corn that went seventy-five bushels to the acre. Other corn went only thirty-five bushels to the acre. The fall-plowing idea was taken up everywhere.
At the present time men come to see me from almost all over the world to ask my advice regarding the planting of berries, and about various land projects. I have just finished an appointment with a man from the Isle of Pines. Hundreds of people come to see me when the Himalaya Berries are ripe. I began advising people a good many years ago when I lived in California. One day a real estate man came to me, and wanted me to go into a neighboring county to look over a couple of thousand acres of land that a colony of Mormons was expecting to plant peach trees on. I went over with them, and found that the land was next to worthless for peaches. That real estate man would have paid me aimost anything I asked him if I would just make a favorable report to these Mormons. But I had never fooled anyone yet, and did not want to begin it then, so I just told them what that piece of land was. They went off fifty or sixty miles in another direction, and had me pick out a good piece of land, and made a great success. Just think what disappointment and loss there would have been if they had struggled along for


Some bulbs stored, in 1909, at my Holland Michigan, plant, where I intend to stay the balance of my life
several years in the bad location before they found out what was wrong.

I went up into Wisconsin last year, and laid out and planted 120 acres of berries for another man. Nearer home I am continually going out and selecting land, arranging, planting, etc., for those who are starting on a large scale. More than just starting these people, I keep in touch with them and see that they make a financial success of their berry-growing business. I point out to them the good things that I see and try to get them to stick, up hill and down, until they win out, just the same as I have stuck to the good things I have seen and that made me money. I tell them it is Grit that talks even more than money-Grit and Honesty.

To make money in any line of business, I take up something new. In growing berry plants, or in nursery work, I aim to import valuable new plants from other countries, and hybridize to produce entirely new plants. In Europe they use the word "Improved" in relation to plants the same as we use the word "Pedigree." It means the result of continual selection of the cream of the plants you grow, just as if you would sow wheat or oats with seed selected from the bin, select the best heads of grain and keep up the selection each year. In five years you would have "pedigreed" wheat, or an "improved" quality, as it would be called in Europe, and it would produce at least ten bushels more to the acre than the common seed which you selected from the bin in the beginning.

This cannot be called a new kind of seed, for new kinds are got by hybridizing. Suppose we want a
new carnation. We select two healthy plants of different kinds, say one white and one pink. We plant them in good situations and give them the best of care, watching them closely. When we find a perfect stem and flower-bud on each plant at the same time, we put a roomy cheese cloth net over their blooms so insects cannot interfere with our work. As soon as the blooms are fully expanded, we take the nets from the flowers, and with a small camel's-hair brush take a little pollen from one flower and apply it to the stamen of the other flower. The stamens generally are long, and if we want a new plant that will produce a very large bloom we apply the pollen on the top of the stamens, if we want a stronger stem and not such a large bloom we apply the pollen to the stem of the stamens; if we want a stronger calyx on the new flower we apply the pollen on the bend of the stamens. Then we put the net back over the flowers and leave it on until the bloom goes to seed. This is the way we form new varieties. It takes time, sometimes years, before we get anything that is much superior to existing kinds, but to work with nature is one of the finest enjoyments of my life.

As I have pointed out, I have made money, but it always has been in things which I naturally like to do. I have been busy improving, or "pedigreeing," all kinds of berries and flowers, and hybridizing and originating new varieties. My constant effort is to get something better than has existed heretofore. I have succeeded in producing many such varieties, all of which I list in my catalog and offer to my customers in an accurate and reliable manner.


Corner in my yard near Holland. Himalaya plants, currant bushes, etc.

## The Giant Himalaya Berry

The year 1912 is the third year that the Himalaya Berry has been grown in the East. .During that time it is safe to say that almost a million plants have been set out east of the Rockies. The last season really was the first that heavy crops of fruit could be expected from the plants, the oldest of which we started in 1910. The bearing habits of Himalaya are such that the first and second years' fruiting does not amount to much. The berries are small and relatively few in quantity. The third year is the first crop by which Himalaya really can be judged. Blackberries and raspberries were badly frozen in the winter of 1911-12, but Himalaya was not hurt much. The crops of berries were very much shortened in 1912, but we had here in Michigan crops of Himalaya that ran two and a half tons to the acre. In Wisconsin, Ohio, Indiana, New York, Nebraska and other states there also were heavy crops.

For those who have not seen the plants or berries, a brief description is needed: Himalaya Berry is not a blackberry, although it looks something like one both in plant and in fruit. With blackberries the canes die each year after they bear fruit, and new ones produce the fruit of the next year. Himalaya does not die down, or freeze down, and the fruit and leaves are produced all along the old and new wood alike, the same as with a fruit tree or grape vine. The new growth of Himalaya begins each spring where the old growth left off the previous fall, and it is nothing remarkable to find Himalaya canes growing 20 to 30 feet in one season. Two feet of growth a week is about the average that the plants make in good soil when they are well watered. You cannot judge the growth in the
first and second years, because by the third year the canes and the whole plant are three times as big as they were the first two years.

The berries are round, and about three quarters of an inch thick, very firm, with a tough skin and no core. They are jet black and very handsome. Like blackberries, they are quite tart before they are fully ripe, but very sweet and rich when matured. They should be left on the bushes for three days after they turn black; then they will be firm and solid, and fine flavored. If you want to eat them at home, you can leave them on six days after they turn black, when the flavor will be finer, but they will be a little too soft for shipping. In both flesh and flavor they are well adapted for eating raw, canning, stewing, preserving or drying. They seem to have more pulp than blackberries or raspberries, and make more cans, or a larger bulk, when preserved. The berries do not grow stale or insipid after shipping, for their fine flavor and appearance are all there after many days, if they are given fair care.

The first blossoms come on my bearing plants about the end of June, and I begin to pick ripe berries about the first of August, continuing to get good pickings until October, long after other berries are gone. My average yield is almost eleven hundred crates an acre. A crate contains 16 quarts, and I got twenty-five cents a quart last season. An average price of fifteen cents for extensive commercial plantings should be a fair estimate.

The plants come to full bearing in three years. The first year there are a few blossoms, but no berries, and the second year a medium crop of berries. But the second-year berries are not nearly


Himalaya plants two, three and four years old, three miles from Holland, bearing very heavy crops in 1912
so large and fine as those from older plants. The berries grow in big clusters on the outside of the bushes, hanging down in plain sight toward ripening time.

Now the main points about the Himalaya are these: Its perennial habit, like a fruit tree; its enormous rate of growth; its great hardiness; its tremendous bearing, and high quality of its berries. The winter of 1911-12 was the coldest known for twenty years; but, in the worst situations, Himalaya lost less than half of its I9II growth, and last summer produced more berries than blackberry plants do in favorable seasons. I KNOW that Himalaya is a commercial leader, and that in a few years its importance all over the country will be so great as to compare with strawberries now, while in Northern States it should replace most blackberries, and be of enough commercial importance to compare with the standard tree fruits. Certainly it has money-making capabilities beyond the average.

Himalaya plants are very ornamental, and can be used as porch vines, or for covering fences, walls, etc. I use them for making hedges around fields. The leaves are pretty, and the blossoms, which are produced for two months, are as handsome as those of many ornamental vines and shrubs. If you train the plants up a post, and pinch them back when they get to the top, they will become a sort of weeping tree that makes good single specimens in a yard.

Anyone can grow Himalaya, in any soil, and in any part of the country. Michigan winters are about as cold as any in this country, and Florida summers are hot-and Himalaya plants are growing successfully under both these conditions. Plant Himalaya, and plant lots of them. Plant five acres if you can. If I were setting out ten acres, I would set eight to Himalaya and the other two to
raspberries, gooseberries and currants-that is my estimate of the importance of Himalaya. I have planted twenty-two acres more here near Holland, for my own fruit-growing, and there are several men and firms who are planting hundreds of acres.

You should by all means get some plants, if you cannot make a large planting this year, so you will have reliable, first-hand knowledge to judge from when you are ready to plant on a large scale. If you want samples of the berries in season, send me thirty cents a quart. I will gladly give you any further information I can, and tell you the names of growers who have Himalaya now. If you are willing to wait, the six-months plants are all right, but the older plants, of course, will bear more quickly.

The photographs scattered through this book show the nature of the Himalaya plants. Now I shall tell how to plant and care for them:

## How to Grow the Giant <br> Himalaya Berry

Set plants 5 by io feet apart. Keep the ground clean, and let the new canes run on the ground all summer. About the first of September put the tips of the canes 4 or 5 inches under the soil to root. (You can continue to put tips under every week up to the 15 th of October). The following spring dig the rooted tips, and cut the canes back to two feet. These second-year canes will give you some fruit, but it will be small.

One year from planting Himalaya Berry, put up a fence of some kind, and tie the second-season canes up to the top wire, then pinch off the tips. These canes will branch out with new canes that will reach the ground, where the tips can be put under as before. They will root inside of three
weeks, thus giving roots at both ends of canes. In this shape they will stand the coldest winters. If possible, plant all kinds of berries where you have a windbreak on the north and west sides, as it keeps the wind from driving sleet and snow against the canes, cutting the bark and killing the wood. Winds in this way do more damage to small fruits than does severe cold.

The second crop of Giant Himalaya Berries, in the third year, will be as large as the biggest blackberries. After you have picked the fruit each season, cut the fruiting wood away. That is all the trimming that is necessary. Keep the new canes tied up each season. Do not pick Himalaya Berrics until three days after they turn black. If you do the berries will be small and very tart. Left on three days longer, they get larger and become very sweet, without losing in solidness.

Both responsible and irresponsible persons and papers have discussed the hardiness of Himalaya and the quality of the berries. The source of the criticism lies in the fact that there are three different varieties of Himalayas, two of which are not hardy except in California and Oregon, and the berrics of which are inferior. The first plants of the true Giant Himalaya to be brought east of the Rockics I brought in the spring of i910. Many say that they have had Himalaya for three, four, five or more years, that they got the plants from California. The facts are that the very first true Giant Hima-


A true Giant Himalaya plant in my yard near Holland. No freezing; heavy crop in 1912


English Cut-leaved Himalaya plant in my yard near Holland. Requires protection, and fruit worthless
laya plants offered to the public in California were I,000 plants in the fall of 1909. It is not likely that many of these got into the Eastern States. But California is full of the other two varieties of Himalaya that are not hardy, and these are those that our misinformed friends are talking so much about.

We herewith say to every paper which has criticised the true Giant Himalaya, that it did so without knowing the facts, and that it owes us an explanation occupying as much space as its faultfinding. If the editors, or growers, want to know the facts, come to Holland, and I will show them all the true Himalaya plants they care to seeplants that have come through the last three winters with no more damage than I stated. Not only can I show my own plantings, but those of dozens of other growers who have plants in perfect condition and bearing heavily. Come and see. That should be fair for anyone.

[^2]
## Read these Letters from my Customers

I have two Himalaya plants and think that there is nothing to compare with them, and if in need of any more plants and bulbs I will surely think of A. Mitting, of Berrydale.George Dichliman, 1315 Hickory St., Louisville, Ky., July 28, 1912.

The plants I had from you a year ago this spring are fine. On one lateral branch I counted Igo buds, blossoms and fruits. -Robert Budd, Northport, Mich.

The small order for plants came today in good order and are all set in the ground and look fine. I thank you for prompt returns and a square deal.-F. C. Albee, 387 Ryerson Ave., Elgin, Ill., May 23, 1912.

Yesterday morning the mail brought us half a dozen Himalaya two-year-old plants from you. I was greatly surprised and the surprise was more than doubled when we got from the express office six more plants of the same. Certainly you have done more than any reasonable person could expect of you. I only thought you would send me what it seemed was due me, but to send that order twice over on my complaint of non-fulfillment of shipping directions is not the ordinary method of securing acknowledgement of satisfac-tion.-Herbert W. Denio, Concord, N. H., Route No. 2. May 14, I9í.

Early this spring I purchased from you three Himalaya plants, two of which have grown finely, but the third, the smallest of the three roots, was persistently attacked by cutworms and, in spite of our killing many worms, the plant died The other two have developed into splendid vines, which 1 have covered loosely with leaves and hay, thinking a little protection for the first winter would do no harm.-I. L. Meloon, 30 Pine St., New York, N. Y., December I4, I9If.

Last spring I purchased from you one two-year, two eight-teen-months and twelve six-month Himalaya plants, together with another small order. The six-month Himalaya are not growing very rapidly, and the largest are not over 3 or 4 feet long; however, the two-year and eighteen-month vines have made close to 25 feet now.-H. H. Anderson, Attorney-atLaw, 545 Society for Savings, Cleveland, Ohio, July 16, 1912.

My Himalaya Berries are doing fine. The two old ones are loaded with berries. I now have over a hundred young plants started. If they stand the winter on the trellis without any protection, I will plant quite a few of them next spring. -Ellsworth Scranton, Montrose, Minn., July 27, 1912.

The "two-year-olds" arrived all right, and really surprised us as we were not expecting such strong-looking plants.-M. K. Fleming, Box 97, Branson, Mo., April I, 1912.

I am pleased with the plants I received from you. I planted them and they are growing fast.-F. P. Kaseley, Pittman, Fla., April 14, 1912.
I got a one-year-old Himalaya plant from you in the spring of igir. The growth of the plant was amazing. I would like to see some fruit on it. Am I to prune these long vines, and how much. I also got three Black Currant bushes, "Boskoop Giant." Do they need pruning ?-Mary A. Massie, Santa Fe, New Mexico, April 17 , 1912.
I received the two Giant Himalaya plants. They were fine and I thank you very much for the same.- (Mrs.) Henry Swanson, 824 Prospect Ave., Winnetka, Ill., April 23, 1912.
The Currant and Gooseberry bushes which I ordered from you arrived some time ago, and I must say they are the finest bushes I have ever seen, particularly the single-stem Currants. -Donald Grant, Amsterdam. N. Y., May 14, 1912.


Three photos of a test Himalaya plant at Berrydale. Left, ir months old (March); middle, April growth; right 15 months old (July)


Our first row of Macatawa, the new Blackberry. Fully exposed igir-12, but did not freeze any, and bore heavily in igiz

## Blackberries and Raspberries

Blackberries and Raspberries are the old standard berries which still should form a respectable portion of most plantings. I now have several exceedingly valuable varieties, kinds that are greatly superior to those that growers had to depend on a dozen years ago.

Berry prices have been going up steadily for the last dozen years or more. Those who plant berries now put themselves in a position to profit by this continual increase in the market value of their product; an increase which much more than offsets the increased cost of production and living for the growers.

Another reason why berry prices have gone up is that people on farms and in country towns who used to put up their own berries do so no longer, but depend on buying the canned fruit at the stores. At present canned berries are proportionately higher in price than fresh berries. You make the most money by canning your entire crops.

I say at various places in this book that, when you plant berries commercially, you never should plant less than an acre of one variety, and that five acres are better. The reason is that with this quantity of berries you can bring buyers to your farm and do not need to peddle your product. There never is any money in peddling. Anything less than an acre is just a home-garden. It will supply your family, and probably a good many of your friends; but you cannot make much cash profit from it.

Black Raspberries should be planted 5 feet apart each way. This will put 1,750 on an acre. Red Raspberry bushes grow smaller, and should be set 2 by 5 feet, about 4,000 plants to an acre. Blackberries differ in their requirements. The larger-growing kinds should be planted farther apart than the smaller-growing sorts. The ordinary varieties should go about 6 feet apart each way, or from I,200 to $\mathbf{1}, 600$ plants to an acre.

## BLACKBERRIES

## Macatawa

Our front cover shows a new berry that never has been on the market before. I have named it Macatawa, as that term carries to me the idea of our cold Michigan winters and our occasional dry summers, which this berry stands without the slightest damage. It went through the winter of

1911-12 in an exposed position without freezing. The Macatawa is a cross between the Giant Himalaya Berry and Eldorado Blackberry. Himalaya is a hardy perennial which bears fruit all along its branches, on the old and new wood alike, and propagates from the tips. The cross has characteristics of both its parents. The fruit is very large and sweet-sweet even when green. It is core-


Thrifty new planting of Macatawa Blackberry. Plants are very healthy and sturdy

## MACATAWA BLACKBERRY, continued

less and almost seedless. The plants begin to bloom about the first of June and keep up a continual production of flowers all summer and until frost stops the growth.

The berries begin to ripen about the middle of July, coming along all the time until frost, when some green ones are frozen. The bloom is white, nearly 2 inches in diameter, and almost semidouble. It is a true everbearing berry, the fruit ripening as the new wood hardens, and one of the most tremendous yielders in the world today.

The young plants come from suckers, in the same way as any other Blackberry propagates, but the form is more bushy-something on the order of a red raspberry, but larger and wider. The plants begin to bear during their first year, and produce a very heavy crop the second year from planting.

I have only $\mathrm{I}, 200$ plants for sale this year, and particularly want berry plant-growers and old fruit-growers to try this coming commercial Blackberry. If you are interested, it will pay you to come to Holland and see my plants. I have 500 plants in one lot which produced, in 1912, 502 quarts, that were sold for 30 cts. a quart, or \$150.60.

## Ancient Briton

On a trip into Wisconsin, in 1910, I discovered this Blackberry growing to perfection, with branches of fruit 2 feet wide and 5 feet long. Judge Lewis, of the Supreme Court of Minnesota, was along, and when he saw this fruit he was the most surprised man you ever came across. I was so taken with the berry that I gave an order for 50,000 plants to be delivered this season.


Dewberries and Raspberries as crop between trees. This combination should net $\$ 100$ an acre from second year

## ANGIENT BRITON BLAGKBERRY, continued

Ancient Briton is an old variety, which somehow has been missed by the growers of this country. In view of its great hardiness and its heavy bearing, I consider it, from a commercial standpoint, the finest all-round, old-style Blackberry that is adapted to the Northern States. The location where I found it growing was exposed to full wind and freezing of Wisconsin winters. Its hardiness cannot be questioned. Its habit of growth is the same as that of Lawton and Eldorado. The canes are slender and grow thickly. The berries are long, black, solid and of very fine flavor. For shipping they are fully equal to Snyder, and all commission men know Snyder as the standard shipper among Blackberries. It produces an average of two and one-half to three tons an acre.

## Mammoth

Recommended strongly for planting in the South and on the Pacific Coast. It is hardy to a certain extent in Northern and Eastern States, but you cannot depend on it in those sections unless you give it protection. Although the "Rural New Yorker" has recommended it for the North, I do not do so. It is one of the best-paying berries that can be grown in California, Oregon, Washington and the Gulf States. The berries are very large, all


The way Shepard's Pride Raspberry makes new plants


Superlative Raspberry makes few plants, but strong ones
$1 \frac{1}{2}$ to 2 inches long, and jet-black. They ripen a little earlier than other Blackberries, and are quite rich and sweet.

## BLACK RASPBERRIES

## Plum Farmer

This is the best all-round Black Raspberry that will grow in the Northern States. It stood the winter of 191I-I2 and produced a heavy crop the following season, when other kinds froze badly and yielded nothing. It bears extremely large berries, often an inch in diameter, of fine shipping quality. They are so handsome that usually they bring a few cents extra per quart. The berries are not jet-black, but are a handsome, dark brownish Elack that will not fade. They ripen early and can ke picked during a period not longer than four or five days. The flavor is excellent, and is not lost during wet weather or shipping.

The plants are healthy, vigorous and sturdy. When not in leaf the canes are silvery blue, and for this reason are handsome in a garden or along a lawn. Plum Farmer is the largest, best-colored, most attractive and most productive Black Raspberry in cultivation, and one that will make money anywhere.

## Palmer

Endures extremes of cold and heat, drought and wet weather without much damage. The berries are showy and firm.

## Cumberland

An old reliable variety that is a good second to Plum Farmer in most respects. The berries are handsome, rather large and firm, and the bush is healthy and vigorous, with stout canes.

BLACK RASPBERRIES, continued Cardinal
The berries are jet-black, medium size; bushes are exceedingly vigorous.

## Greǵg

The berries are fine, and are said to give more pounds when evaporated than any other variety. Old, and favorably known everywhere.

## RED RASPBERRIES

## Shepard's Pride

A new Red Raspberry which has been grown extensively by the originator and his friends for five or six years, but which has not been on the market before. The berries are dark, velvety red, very firm and sweet. They are round instead of pointed, and are larger than any other round Red Raspberry. The flavor is all that can be desired, and the berries are firm enough to ship anywhere. The plants are sturdy, and large branched. There is no question about its hardiness. I consider it the best all-round Red Raspberry grown in the United States. Three years ago I bought 3,000 plants from the introducer, a man by the name of Shepard, in Wisconsin. The first season's fruiting in 1911 convinced me that it was extremely good, and the following crop gave further proof of its great value. It will be a commercial leader. The introducer now has a number of acres of it, and has practically discarded all other varieties. I have planted a heavy stock, for I shall need all of the young plants I can raise to fill my orders. I recommend this variety very strongly, and know that it will make money for you.

## Superlative

We consider this variety standard. It is surpassed by only one or two other varieties, and this only in one or two points. In 1907 I imported 5,000 plants for trial, and they proved so far superior to any of our home kinds available at that time that the next year I imported ro,000. These plants were sold quickly at 50 cents each. I could have sold twice as many more. That year, 1909, I grew or imported 25,000 , and every one of these was sold during the first five weeks of the shipping period. The following seasons have shown the same increase in the demand for Superlative plants. I now raise my own plants, and have a selected and superior strain.
The berries are velvety crimson, pointed, about I inch long, $3 / 4$ inch thick at the base, solid, with small core, and they stand upright on the bushes. The flesh is thick and firm and the berries keep in good condition for a long time. The flavor is delicious. Each cane bears 400 to 500 berries. As the first cane-load ripens, another cane or two of them grows a similar load which ripens a little later. In this way the bearing is continuous. I began to pick Superlative around June 20, and kept on getting heavy pickings until the first of August. I figure that Superlative yields twice as much as the old, reliable Cuthbert. Canes are upright, 5 to 6 feet high when left alone, and need no support. For heavy crops and biggest berries the cane should be pinched when 3 or 4 feet high.

## AEton

A new variety well adapted to Indiana, Ohio and Michigan. Berries large, bright crimson, very fine in appearance. Plants throw few suckers. A fine sort for the home-garden.



Raspberries and beans between trees on a ten-acre farm near Benton Harbor, Miich., which has kept its owner since he started

RED RASPBERRIES, continued

- Berrydale Scarlet

This Raspberry has the finest flavor of any berry that ever has been introduced. It is distinctly a home-table berry, and is so tender that it can not be shipped with any satisfaction. The berries are only a quarter of an inch in diameter, and if it was not for their delicious flavor they would have little value. But their flavor is something to be remembered; the perfume reminds one of the flavor of wild Raspberries. The berries grow in clusters of hundreds. The canes are red.

## Cuthbert

Sometimes called "Queen of the Market." Has been a standard red for twenty-five years or more, and is a remarkably strong and hardy variety. Berries are large, conical, rich in color and flavor.

## Thompson's

A fine early variety. Plants hardy. Berries begin to ripen before strawberries are gone.

## Miller's

A Delaware variety which throws few suckers. Berries large all through the season, round and bright red. Exceedingly good shipper.

## St. Regis

Plants of St. Regis planted in early April gave ripe berries on the 20th of June of the same year. For four weeks thereafter the yield was heavy, and the canes continued to produce ripe fruit freely without intermission until the middle of October. The berries were large and beautiful, firm and fullflavored, to the very last. St. Regis is the only Raspberry, thus far known, that will yield a crop of fruit the season planted. Awarded a certificate of merit by the American Institute of New York.

## YELLOW RASPBERRIES

## Golden Queen

This is the most desirable yellow Raspberry, a seedling of Cuthbert. The berries are a light golden color, very sweet and rich, with thick, firm flesh, and they ripen toward the end of the berry season. The fine appearance and flavor always sell them quickly. They hold together through canning, and present a fine appearance on the table, either fresh or put up. As an indication of their quality, I often have noticed people eating these berries from boxes or from the bushes where they had a chance to pick red, black and golden kinds, just as they preferred. After testing all of them, they would come back to the Golden Queen.
The bush is a strong grower, and is doing well everywhere. It stands Michigan winters without damage, and seems to do just as well in the South. The plants are not very tall and sucker little. There are many stiff side branches from the main canes. From the several strains of Golden Queen, I have selected, by experiment, one which is the best of the lot.

The Dewberries you sent me were simply perfect-such roots! I fear they will not like their new home, for we do not have nice sand like you have. I set them out myself by hand with the utmost care, and feel that I have done my best and trust that God will do the rest.-(Mrs.) Ernest S. Garrett, Artesia, New Mexico, May II, I912.

The plants arrived in good condition and I am pleased with them.-E. W. Sills, Mt. Kisco, N. Y., April 23, 1912.

I vote you a square man. You may and you may not have "traveled east," but I'll take delight in recommending you, just the same.-Capt. G. S. White, Vinita, Okla.
I have the pleasure of acknowledging receipt of very fine Himalaya Berry plants, and they are so strongly rooted that I do not doubt getting good results.-Chas. S. Haskin, Glencoe, Ill., June 27, Ig12.

My Himalaya plants made a fine growth, and I am looking for some fruit the coming season.-J. A. Waggett, Mesa, Wash., November 28, 1911.

## Currants

What makes Currant-growing so satisfactory and profitable is the fact that Currants need less care than any other cane-fruit. The growth is such that little or no wood needs to be pruned away, and the plants are strong enough to outgrow weeds to a considerable extent. Currant plants continue in the best of condition for fifteen or twenty years. They are frost-proof, and you are pretty sure of a crop every year. They have a few enemies, mostly insects that eat the leaves, and spraying is neessary for the best results.

The fruit is easy to pick, and comes off the bushes very clean. All kinds of Currants are recommended for planting between orchard trees, as well as in "Currant orchards," alone. The bushes will bear an average of a quart each in one year. The average price received is around $\$ 3$ per crate of 16 quarts. Plant them 6 by 6 feet, or about I, ooo to the acre, when set alone.

## Perfection

This is a standard variety which probably is more generally planted than any other. In Currantgrowing sections you can find thousands of acres of it. The berries are medium to large, bright red, and come in big, thick clusters which have long stems. This makes crops large and picking easy. The flesh of the berries is pulpy, meaty and rich. Flavor is subacid, with no musty taste, even right off the bush. With sugar and cream the berries taste like sweet cherries. For preserves, jelly or jam, Perfection Currants are splendid. As the flesh is firm, the skin tough, and the keeping quality of the best, they can be shipped anywhere to arrive in a condition approaching "perfection." Berries should be thinned to make them reach their largest size. Bushes are healthy and large. No special soil or fertilizer is needed, and they bear a crop every year.

This variety has won more prizes and medals than any other red Currant. We have two-year plants with single stems and bushy tops, of a very superior strain that has been developed here at Holland.

## Boskoop Giant

The leader among black Currants. The berries are half an inch in diameter when the plants grow in rich soil, and are very sweet and rich. The best point about them is that all the berries ripen at once; one picking is all that you need to get the whole crop. The berries reach their full size and color early, but hang on the bushes a long time without deteriorating. The bushes yield a crop of uniformly large and fine berries every season, whether there is rain or not, or whether the soil is poor or fertile. In poor soil the plants are smaller, but the berries seem to be as fine as anywhere. On


What my Currant field looked like last July-finest plants you ever saw


One of my sturdy one-year Gooseberry plants. All the plants grown at Berrydale are as good as this one

BOSKOOP GIANT CURRANT, continued
account of their attractive color and their firm, pulpy flesh, these Currants are exceptionally well adapted to shipping and canning. We have a great many plants fruiting here at Berrydale, and find a big demand for all the Currants we can grow. Around Chicago and Rochester, large plantings of Boskoop Giant have been made, and all have given the best of satisfaction.

Cherry. Very large red berries, a strong grower, and should have fertile soil and good cultivation.

Fay's Prolific. A standard red variety, with very large berries of mild flavor, and long stems. Comes into heavy bearing early. Excellent commercial sort.

Northern Star. Red berries; bunches 4 inches long; flavor mild.

Pomona. Sometimes called Knight's Improved. Is credited with the highest acre-yield on record, and is valuable chiefly as a commercial variety for large plantings. Berries red; hang in fine condition for a long time.

Red Dutch. Deep red berries, tart or acid. Productive.

White Dutch. The same as Red Dutch, except in color of berries. An old standard variety.

Black Champion. Similar to Boskoop Giant; smaller berries.

Black Naples. Very large, black berries; good sort.

Black Victoria. Excellent and productive, but berries small.

## Gooseberries

This small fruit never has reached the position it deserves in America. In Europe Gooseberries are eaten both raw and cooked, almost as freely as we eat strawberries; and they are almost as good in flavor. The improved varieties are so much better than the common and wild varieties that those who do not know them have to get acquainted with what to them will be a new fruit, in size and color and flavor.

There are good reasons why every garden should contain a strawberry bed, but better ones why every garden should have Gooseberry bushes. A dozen plants will produce a good supply of fruit for use at home. The plants will bear about two quarts each when they are one year old, and the yield will increase two quarts each year for four or five years. The growing of Gooseberries for shipping to canneries by carload lots is a highly profitable business. Investigate it. If you want to know about men who have succeeded and are in the work now, ask us for details. Plant Gooseberries 5 by 5 feet, or about 1,750 to the acre. Commercial plantings never should be smaller than an acre, because a large amount of fruit will bring buyers to your plantation and get half again as much per quart as you can get when you have to hunt a market for small crops. This applies to all berries grown on a commercial scale. Never plant less than an acre.


Boskoop Giant Currant (much reduced)


Whinhams Gooseberry

## Mitting's Whinhams

This is a red Gooseberry when fully ripe, though it is cream-colored when green. The berries are extra large; we have had them more than an inch in diameter. The flavor is rich, something like that of a grape, and they are sweet and full of juice. They are fine for eating raw, extra good in pies and jam, and are excellent to can. This is one of the best allround Gooseberries. Our plants were most showy when laden with their 1912 crop. In commercial plantings the berries that are picked for early market should be just tinged with red and be mostly the cream-color. We have two-year plants, single stems with bushy tops and lots of fine roots, just as shown in full natural colors on the inside of the back cover.

Last spring I bought from you several Himalaya Berry plants. Although they were ordered about the middle of May, yet they flourished and did splendidly. Some of the shoots have attained a length of 25 or 30 feet and promise to cover a pergola. Should they be cut back rather severely, or do you recommend letting them remain as they are? Many of my neighbors are very much interested.-FRED Wonser, 1418 Tribune Bldg., Chicago, Ill., Nov. 14, 1911.

## Mitting's Golden-Drop Gooseberry

One of the handsomest of all small fruits, on the bush and in baskets or boxes. The berries have a thin skin, so nearly transparent that you can see the seeds plainly when the berries are fully ripe. They are about the size of Early Richmond cherries. They begin to ripen in Michigan about the middle of June, though this year they did not get ripe until July 4. This was before red raspberries began to ripen.

This Gooseberry is not suitable for canning or shipping, but is just that much better for home use. The flesh and texture is very tender, and the flavor is rich, delicious and sweet. The bushes are not large, but are thick, and mature early. Mildew does not attack the foliage when plants are located where the sun strikes them the first thing in the morning, and where they get full air-drainage and wind. It is impossible to get enough plants in this country, either by growing them or buying them from other growers here, so we have to import many thousand from England every year. Over there they consider these Gooseberries to be finer than strawberries for eating right from bushes or with sugar and cream, and many are grown in greenhouses. (Picture of plant in full natural colors on inside of front cover).

## Downing Best Standard

Berries pale green, splendid quality; bush vigorous and exceedingly productive. Good for both home and market.

## Pearl

Superior in size, quality and productiveness. Pale green berries. Of recent introduction.

## Transparent

+ Another clear red Gooseberry, similar to Whinhams, but not quite so fine flavored. It is excellent for shipping to large cities.


An acre of Gooseberries at Big Rapids, Mich., planted by a mechanic who has his eye on the future


This is the way we grow Grapes in Michigan (see page 25 for prices)

## Strawberries

Fruit-growers in many large sections depend almost entirely on Strawberries for their income. On the Eastern Shore of Maryland and Delaware, Strawberries are regarded in the same light as wheat is regarded in the Dakotas, while in many of the Middle Western States Strawberries are grown on thousands of acres and produce four times as much profit as any of the grain-crops grown on neighboring farms. Every home should have a small Strawberry bed to produce berries for table use; and if your farm is located right, and your soil is adapted to Strawberry culture, you should have from one to five acres as a regular crop. I recommend King Edward for the Middle West; but all of the other varieties I list have been thoroughly tested and found satisfactory. "Per." or "Imp." following the name of the variety indicates whether that variety has perfect or imperfect blossoms.

## King Edward (Per.)

Mr. D. J. Miller, of Millersburg, Ohio, says: "It is the finest thing on my place, beyond a doubt, and my careful and deliberate judgment is that it is the most beautiful and the grandest Strawberry on the globe. This is true of it wherever Strawberries are successfully grown. The foliage seems to resist disease and insects, with no blighting or killing."

The Ohio Agricultural Experiment Station Bulletin described King Edward as follows: "Large, conical, blunt, very slightly necked, regular;
brightly colored, fresh, glossy crimson; attractive. Flesh light in color, firm, fine-grained, mild, sweet, and good; blossoms perfect. First blooms May 7, full bloom May 2I; first fruit ripe June 9; period of the heaviest fruiting June 15 to 23 . Last picking June 26. This was at Wooster, Ohio. Plants large, vigorous, light green, making a beautiful row. A very promising variety, originating in Holmes County, Ohio, where it is reported to have done exceedingly well."


Strawberries are the most profitable crop you can grow between trees. This orchard near Bangor, Mich., is a very good example

## Brandywine Strawberry (Per.)

Big plants with tall fruit-stalks; very productive. Berries medium red with large yellow seeds on the surface. Best on heavy loam or clay.

## Senator Dunlap (Per.)

This variety has been growing in popularity ever since it was introduced in 1900. It seems to succeed equally well in every locality, and is perfectly satisfactory in the Middle Western States. Berries ripen over a long season, are medium to large and conical. Can be regarded as a standard commercial sort.

## Warfield (Imp.)

Berries very dark and attractive when grown in good soil. Fine for canning, and a great plant-maker.

Gandy Strawberry (Per.)
Standard late variety. Plants are strong, grow very thick and make lots of runners. Berries always large, and is one of the best shipping kinds known. Needs light, warm soil, and succeeds best in more southerly locations.

## Glen Mary (Per.)

Berries very large and fine looking. Does best in light, warm soil facing south. Although the blossoms are perfect, it generally needs fertilizing. Very successful in the North, especially on clay land.

## Pride of Michigan (Per.)

Originated in Michigan, and is perfectly adapted to Michigan conditions. Berry glossy, large, oblong and firm. Valuable variety for the North.


Columbia Asparagus

## Asparagus

A vegetable that is grown most easily, and is very profitable when properly handled. We know of one bed of seven-eighths of an acre, in New Jersey, which has brought in $\$ \mathrm{I}, 200$ during the last nine years. Almost anyone located within reach of a town could add several hundred dollars a year to his income by growing Asparagus on an acre or two; and the work this would take would be no more than a couple of hours a week during the growing season. Cultivate the same as other garden vegetables, cutting and marketing tips each day, and mowing the old stalks each fall.

Conover's Colossal. Has very large, tender shoots. Well known among market-gardeners and buyers on the market.

Columbia. Shoots of mammoth size, remarkable for the clear whiteness of the skin.

Linnæus. Medium size, early and tender. Hardier than

My new unnamed Bean
 the preceding, but not so productive nor of so good quality.
Victoria and Queen. Old standard varieties which need no introduction.

Wagner's Hardy Giant Crimson. A cross between Victoria and Burbank's Giant Crimson Winter, which I have found to be very hardy. It has almost all the good qualities of the fine Crimson Winter, with a flavor resembling that of red raspberries.

## A New Bean. Not Yet Named

This is a cross between White Lima and Scarlet Runner. The beans are an inch long. I made the cross and developed the first plants, but am not introducing it. If you want further details, write me. My experimenting and trials are producing good kinds of berries and vegetables all the time.

## How I Prefer to Do Business

GUARANTEE. Every plant that leaves my nursery is a thrifty, lusty specimen; but plants are perishable things, and I have to set limits to my guarantee. I guarantee that all plants will arrive at your station or post office in satisfactory condition, and also that they are true to name. If you do not find them satisfactory when they come, immediately pack and return them to me, and your money will be refunded. I can not assume responsibility for plants living, because that depends largely on the care you give them and the climatic conditions at the time of planting.
THE PRICES given here are net, Cash with Order. I will quote special prices on quantities larger than are listed. Make all remittances payable to A. Mitting, Proprietor, Berrydale Experiment Gardens.

SHIPMENTS will be made as soon as the order is received, weather permitting, or will be held until spring if desired. I ship by express or freight, whichever is best, unless other-
wise stated in your letter, my letters, or in this book. So seldom do I receive complaints about plants or packing that I hardly know what they look like. About seven was the number for 1911-12. I often pack plants so that they require five cents postage, when many other growers are cutting them back, root and branch, and packing them so lightly that they require only one cent postage. Heavier shipments are packed just as well. Plants can be shipped anywhere. I fill orders for Europe, Mexico, Australia, Japan, etc.
SAMPLES of ripe fruit of any of my berries will be sent in season to any applicant. The charge is 10 cents for each kind, or 30 cents a quart. Berries will be put up in alcohol for demonstration at $\$ 2.50$ for each sample. I must have the orders for these samples not later than the first of May.

NOTE. No order for less than $\mathrm{x}, \mathrm{o} 0$ plants of any one variety will be accepted from China, Japan, Australia, India, or Europe.

## THESE PRICES CANGEL ALL PREVIOUS QUOTATIONS-1913



## Canners

You can get 50 per cent more for your entire crop of berries, large fruit or vegetables, by canning them than by selling them fresh, if you have a half-acre or more in anything perishable. You don't get wonderful prices for canned stuff, but you do get good big market prices regularly and dependably. Take apples, for instance. Canned apples sell for about $\$$ i per dozen cans, and a bushel makes twenty cans. That is about $\$ 1.75$ a bushel. The cost for labor and material is 40 cents or less, giving you a net price of at least $\$ 1.35$.

An ordinary pot will boil water, but when you drop cold cans into it you cool the water, and lose the first essential in successful canning, instant heating. The difference between a pot and a canning boiler is in heating surface and shape. You seal up the cans air-tight when cold-then sterilize them or "process" them. Fruits for home canning can be left on plants or trees until dead ripe and the full flavor developed.
BOOK OF INSTRUCTIONS with each canner will enable you to become an expert canner very soon. It contains full instructions about every point of canning.

## Description of Canners

These canners are of heavy galvanized steel, with oval-shaped tubes projecting down from the bottom. These projections are entirely surrounded by fire, and the water in them circulates directly to the can chamber, which is provided with notched bars to hold baskets of cans at right height. The baskets are of tin, with projections that slip into notches in boiler and hold basket properly. They have convenient handles for lifting. The entire canner is constructed for the greatest ease, comfort, speed and efficiency in using. Anyone can operate it without previous experience. The outfits shown here have a furnace, because most canning is done right out in the field, and the canner should be moved about to save hauling of the fruit; but they will work on a cook-stove or on a furnace built of stones or bricks, or even over a campfire. The furnaces we supply use poles-you don't need to cut and split the wood if you don't want to. These sizes are the most popular and the handiest, but both smaller and larger outfits are made.

## No. 2 Outfit

Complete portable equipment that will put up 400 cans of fruit or 200 cans of vegetables a day. By using several of these boilers you can duplicate the production to any amount. Boiler is $19 \times 91 / 2$ $\mathrm{x}_{12}$ inches, and the baskets hold two tiers each of eight $3-\mathrm{lb}$. or quart cans. This makes a capacity of 16 -quart cans at once. The furnace is of sheetiron, built large so wood needs little cutting. The canner is separate from the furnace, and can be lifted off and the foul water emptied easily.

We ship complete equipment, including a pair of soldering coppers, a fire-pot for heating them, a pair of can tongs, and an instruction book. Outfit weighs i4 pounds net, and it usually is best to ship by express. Price complete, $\$ 10$ Complete without furnace, $\$ 7.50$.

## No. 3 Outit

Boiler $19 \times 38 \times 12$ inches. Has four baskets that will hold 64 quart-tins at once. We include one capping steel, a pair of soldering coppers and fire-pot for heating them, pair of can tongs and instruction book. Net weight 30 pounds.

Capacity 1,000 to 2,000 cans a day. Canners ready for work. Other details not mentioned are same as No. 2. If preferred, four No. 2 canners (boilers) can be used on furnace instead of the one No. 3. This really is the more desirable outfit. Price complete, $\$ 25$. Complete without furnace, $\$ 20$. No. 3 furnace and four No. 2 canners, $\$ 35$.


## Sprayers

In all my work of growing berries, as well as growing large fruit and vegetables, I find that spraying not only pays but is an absolute necessity for getting any kind of respectable profits. Proper spraying with the right materials kills insects of all kinds that chew or suck at your plants and fruit, and prevents the young from hatching. It prevents blight and all rots by controlling the fungi that cause them. Sprayed leaves and bark keep healthy and green long after unsprayed leaves drop.


Works with compressed air and gives a spray continuously, not just when you work handle; holds a quart; has tin barrel, tin or galvanized iron tank, and removable brass valve. Large enough for using on a dozen plants, rose bushes, etc., or on cattle or small chicken-pens. Price, 50 cts.


## Atomizer Sprayer No. 3

Same as No. r, except has tank placed crosswise instead of lengthwise. You have choice of brass tank also. Price, tin, 75 c .; brass,\$I.

## Kant-Klog, Style G

A most reliable, very well fitted little sprayer. Fine for trees, small fruits and vegetables on half an acre or less, for applying fly-killer to stock, for whitewashing, etc. Body is made of heavy brass or galvanized steel, tested to double working pressure. A few seconds of working pump charges sprayer with air, then you can spray for several minutes without pumping. Fitted with Kant-Klog nozzle that will, by adjustment, throw two round and one flat sprays, and two sizes of solid streams. Also hose, cock, base, carrier strap and safety valve. Price, galvanized steel, $\$ 5$; polished brass, $\$ 6.50$.

Jr. No. 5


## Junior No. 5

Looks like a plain pump, but will do many different kinds of work. Set it in the bung-hole of a barrel and spray two acres of trees a day, or five acres of plants. Will pump from bucket, spring, boat or anything. Needs no fastenings. Has automatic mixer, regular hose and Kant-Klog nozzle. Weight 4 lbs. Price complete, $\$ 3.50$.

## Four-Row Attachment

Adjustable for rows 2 to 6 feet apart. Used with Barrel Sprayer, and can be attached to any wagon or cart, any height. Four nozzles, and four extra nozzle caps. Price, $\$ 6$.

TWO-ROW ATTACHMENT. Same as four-row, but only 3 feet long. Price, \$I.50.



## Pruning Tools

Good pruning tools save you time and enable you to get the right kind of pruning done in its proper season. I use the tools listed here, and I heartily recommend them to the "man who does the snipping." Every bit of metal used in these Pruners is forged steel or cold-rolled steel. The blades are forged from a special tool steel. There isn't one casting used. These tools are not cheap, nor are they built for cheap trade.


## No. 888. Hand Pruner

This is the best pruning shear that I have been able to find. It is good, heavy and strong, blades open very wide with a smaller movement of the hand than most shears, gets a good grip in cutting large canes or branches, and cuts through easily on account of the leverage. It is second to none in workmanship. Price, \$I. 60 .

## No. 787. Two-Hand Pruner

In removing large blackberry and Himalaya canes and in pruning trees that have been neglected, the hand pruners are too short and too small for easy and effective work, and you can make good use of a two-hand pruner. The one I sell here is built a little differently and a little better than any other I ever used. The blade is on the side that you operate with your right hand. When you cut, the blade closes in and cuts through the limb, while the hook merely supports the pressure against the limb, without bruising and tearing the bark as do the two-hand pruners that have their blade on the other side, and which force the limb over against the blade. The shape of the blade is such that the limb will positively not be pushed out, for the cut really is a draw back toward the pivot. The blade works close to the hook, but positively will not cut into it. 26 -inch handles. Price, $\$ 2$.

## No. 707. Two-Hand Pruner

24-inch handles, plain finish, without locknut, otherwise same as No. 777. Price, $\$_{1.35 .}$


## No. 18. Hand Pruning Saw

A great many fruit-growers prefer a saw to a two-hand pruner, and a saw is a necessity for many limbs over an inch in diameter, or where it is necessary to get up into the trees. But much depends on the construction of the saw, I have found, and this saw comes pretty close to my idea of what it should be. The picture shows how it is made. It is very light weight, the blade is on pivots and the cut can be made at any angle from the frame with little danger of buckling the saw. It cuts very fast and clean. Price, $\$$ I.75. Extra blades, 25 cts. each.

## No. 1. Extension Tree Trimmer

Here is a very practical tool for pruning from the ground trees from 7 to 20 feet high. Many fruit-growers imagine
 that these long-handled pruners are playthings, or that they are so slow in operation as to be impractical, but you can use them just as easily and just as fast as you can the two-hand shorthandled pruners and, of course, with the additional advantage of being able to reach up high while you are standing on the ground. This extension trimmer is made differently from any other. The cutting head has what is called a compound lever, a double action that gives you twice the power on the cutting blade. It is calculated for heavy work and will cut a limb up to $\mathrm{I} 1 / 4$ inches in diameter. Instead of the little connecting rod running down one side of the shaft, it crosses over and puts as much strain on one side of the shaft as on the other. This stiffens up the rod and allows a lighter weight to be used. The strength, durability, ease and speed of working of these trimmers will make a hit in your orchard. Price, 6- and 8 -foot poles, \$3; ro- and 12 -foot poles, $\$ 3.25$; 14- and I6-foot poles, $\$ 3.5$.

## No. 3 <br> Extension Trimmer

The same as No. I except that it has a simple cutting head, with just one lever. The picture shows the difference. A very durable tool. In a field of Himalaya or blackberries that have been neglected these tools will save you many scratches. Price, 6 - and 8 -foot poles, $\$ 2$; ro- and I 2 -foot poles, $\$ 2.25$; 14 - and 16--foot poles, $\$ 2.50$.


It affords me pleasure to write you concerning those Giant Himalaya Berry plants I got from you. One year ago I got a few plants that made surprising growth. One branch had a few berries on, but this winter they froze. Three of the five came forth again and are making a fine growth, and have some fine berries on. Think if I had pinched them back they would have come more woody and resisted the hard winter. This spring I set out quite a few. Just about half of them grew, due to cold and then dry weather. Those that survived are doing fine. In order to satisfy myself that they were true to name, I took a trip to Holland, to see your berries. I could readily convince myself that they were true to name, and as you represented.-Samuel H. Bolton, McComb, Ohio, August io, 1912.
The Himalayas are doing fine, some over 12 inches high, stalks already. Grapes doing nicely. Currants also. Gooseberries bearing a large quantity. This coming fall I may place another small order for plants.-Ernest Reinburg, Bridgeport, Conn.

## Books That May Help You to Make Money

Small Fruit Culturist. On propagating, cultivating and marketing; well illustrated. By Andrew S. Fuller, 298 pages, $5 \times 7$ inches, cloth. Price $\$ 1$.

Beginner's Guide to Fruit Growing. Gives fundamentals as well as late developments. A dozen pictures. i 20 pages, $5 \times 7$ inches, cloth. By F. A. Waugh. Price 75 cts.

The Fruit Garden. Illustrated. 516 pages, $5 \times 7$ inches, cloth. By P. Barry. Price \$r.50.

Strawberry Culturist. Complete. Thoroughly illustrated. 5 $x 7$ inches, flexible cloth. By Andrew S. Fuller. Price, 25 c.

New Rhubarb Culture. Complete guide to both field culture and dark forcing. By J. E. Morse, the Michigan rhubarb man, and G. B. Fiske. Many pictures, 130 pages, $5 \times 7$ inches, cloth. Price 50 cts .

American Grape Growing and Wine Making. A revised edition. Illustrated, 269 pages, $5 \times 7$ inches, cloth. Price \$I.50.

Successful Fruit Culture. Written to help practical growers. By Samuel T. Maynard. Illustrated, 274 pages, $5 \times 7$ inches, cloth. Price $\$$ r.

American Fruit Culturist. Propagation and culture of all fruits adapted to the United States. Nearly 800 pictures, 758 pages. Price $\$ 2.50$.

Peach Culture. Illustrated, 204 pages, cloth. Price $\$$ r.
Pear Culture for Profit. Complete and practical. Illustrated, I36 pages, cloth. Price \$r.

Plum Culture. Complete manual. By Prof. F. A. Waugh. Illustrated, 39 I pages, cloth. Price \$1.50.

Quince Culture. Completely illustrated hand-book on quinces. 180 pages, cloth. Price $\$ \mathrm{I}$.

American Apple Orchard. Modern commercial methods are given attention in this book. Illustrated, 226 pages, cloth. By F. A. Waugh. Price \$I.

Gardening for Profit. By Peter Henderson, whom everybody knows. Many pictures, 376 pages, cloth. Price $\$$ r. 50 .

Gardening for Pleasure. For those who keep gardens for pleasure, with attention to greenhouse, conservatory and window-garden work. Finely illustrated, 404 pages, cloth. By Peter Henderson. Price \$1.50.
Practical Floriculture. Complete directions for cultivation of all flowers. By Peter Henderson. 325 pages, cloth. Price $\$ \mathrm{~F} .50$.

Vegetable Gardening. Every phase of vegetable growing. Hundreds of pictures, 550 pages, cloth. Price $\$ 1.75$.
Market Gardening and Farm Notes. Many pictures, 3 I5 pages, cloth. Price $\$ \mathrm{I}$.

Southern Gardeners' Practical Manual. Tells how to have fresh vegetables every day in the year. Many pictures, 220 pages, cloth. Price \$I.

Asparagus. Exclusively devoted to this vegetable. Many pictures, I74 pages, cloth. Price 50 cts .
Fertilizers and Crops. Explains why each and every material should be used. 500 pages, cloth. Price $\$ 2.50$.
Farmer's Cyclopedia of Agriculture. Takes the subjects as in a dictionary, and gives facts about six to seven thousand different topics. 700 pages, 500 pictures, cloth. Price $\$ 3.50$. In half morocco, price $\$ 4.50$.

The Farmer's Manual of Law. In plain, common-sense language. 470 pages, cloth. Price $\$ 2$.

Our Farm of Four Acres and the Money We Made On It. A story written by a woman, interesting as though it wasn't true, and gives many suggestions which you may follow with profit. I26 pages, paper cover. Price 30 cts .

Play and Profit in my Garden. Practical book by the minister who wrote "Opening a Chestnut Burr," and "A Knight of the Nineteenth Century. 350 pages, cloth. Price \$I.

Ten Acres Enough. A very small farm can keep a very large family. The author tells how he worked things. 220 pages, cloth. Price $\$ \mathrm{I}$.

I bought three plants of you and three of another party, and only three of the six lived. I cannot say which-I think one of yours and two of the others. I made a substantial frame, 7 feet high and 21 feet long, and trained canes until they ran over frame, when I cut them back. I find one cane I can follow plainly that measures 34 feet. I think several made longer growth, and my frame $7 \times 21$ feet was covered by the growth of two plants.-Edward Price, Little Rock, Ark., February 17, IgI2.

Last year I set out on my ranch near Coulee City, Washington, a dozen or more of your young Himalaya plants on trial. They made a bigger growth than I ever imagined a plant could make.-A. E. Post, Waverly, Wash.

I have left the farm and am taking up berry-growing on the edge of town, and my specialty will be the red raspberry and Himalaya Berries. You have my order for 200 of the Himalaya, and I set out one acre of the raspberries last fall. I'm glad that I have made your acquaintance. I like the way you introduce yourself. I want some one to call upon now and then till I get started. You have saved me some money already.-Wm. Blackburn, Box 95, Dorchester, Saline Co., Nebr., February 24, 1912.

I want to get some Himalaya plants. I got three last spring; they did well; I had vines 18 feet long. If you have the true berry plants, quote best prices.-C. J. Byler, New Bedford, Pa., January I, I912.

THIS CERTIFICATE IS TO COVER STOCK GROWN AT HOLLAND, MICH.

# $\mathfrak{C}$ ertifitate of 月ursery $\mathfrak{I n s p e c t i o n ~}$ 

No. 1278
$\mathbb{C h i s ~ i s ~ t o ~}^{\text {Certify that I have examined the nurseny stock of Berrydale Experiment }}$ Gardens, Holland, Mich., and find it apparently free from dangerous insects and dangerously contagious tree and plant diseases. This certificate to be void after July 31, 1913.

L. R. Taft

Agricultural College, Mich., Sept. 11, 1912.
State Inspector of Nurseries and Orchards

## A Little of My 44 Years' Experience

As I travel all over the United States, I often come across people who are sick of being mere "runners on the road." Many a lawyer, judge, merchant and professional man wishes he had a place in the country, and knew what to plant, and how to go about it so that he could make an independent living there. These people are tired of city life and realize that there is something better for them on the green and brown hills beyond the ends of the streets.

The people who are willing to help themselves are the ones I want to help. As the years pass, I see more and more plainly that the Lord gave us our hands to work with, and our brains to think. He did not mean that we should use one only. We should think of the simple things. We should live the easiest way. But we don't seem to want to do this, and we keep looking for secrets that will make the way easier. There is where the trouble lies, for there are no secrets and everything is easy in this world, if we only open our eyes to it.

When a man is rich and making lots of money he has many friends. But when he is poor, the first of these friends may give him a loaf of bread, but I doubt that the second will. So it's up to you to be a judge of your own affairs, to do your own thinking, and to put yourself in such a position that you will be in no danger of starving some day, physically, morally or mentally. Get a business you can be proud of; make your business your hobby; and you will make money and be happy. I do these things, and I know how it works.

Each year we bring to this country from across the water over three million dollars' worth of nursery stock. This, with the millions of dollars' worth that is grown at home, is planted, and most of it made to produce fruit in a few months or years. There is an enormous growing demand for fine fruit all over the world, while the production is actually no more than holding its own. If, instead of farm boys and men going to cities and mills, they would go to a nursery or orchard and learn the business, they would soon be able to start for themselves, and become independently rich a good deal quicker than they possibly could in any other work. And if, instead of struggling on in a city with an income that is too small, people would buy a place in the country, and grow fruits, they would find life easier, healthier and happier, and would be able to provide good homes for themselves.

The best soil a grower of fruits can have is a sandy loam. Here is how I would go about picking my location. Find an eastern or southwest slope, and go about half-way up. If you get too high, you will lack moisture, if too low the ground will be damp, and spring frosts will catch the blossoms. Air-drainage is necessary for a successful fruitfarm. An exception to the general rule is that peaches do well on hill-

A. Mitting
tops. New land is the best of all, and, when you find it, walk over it and look for brakes, or bracken. (Some call them ferns, but this is not correct.) Brakes will grow only on rich, sandy loam, which is exactly what you want, and the more brakes the better the soil is likely to be. When I first came to Holland and bought Berrydale, people said it was the poorest, sandiest soil around. Now they ask: "How did you do it, Mr. Mitting?"

If the ground is new, clean off brush during winter and have it ready to plow as soon as spring opens up. If you have selected cultivated land, plow it the fall before and let it lie rough over winter. Do not plant your fruit this first spring. Keep the ground in as nice shape as possible-deeply and thoroughly mixed, packed so there are no air-spaces, very fine and smooth.

Plant no less than five acres of one variety of berry if you want to go into it commercially. By having five acres of one kind, you can bring the buyer to your door, where if you have small, mixed plantings of several kinds, you will have to hunt the buyer. If you wish to peddle your product, get at least five acres of ground. Plant three acres in berries and use two acres for buildings and stock lots. You can make a good living from such a place. If you want to know how it is done, I will tell you what to plant and help you all I can. Do not use any fertilizer when you plant fruits. Wait until the following year, then sow a ton of air-slaked lime to the acre. Lime is needed to sweeten land, or correct acidity, to destroy insects, and as a fertilizer to a certain extent. If your soil is sour and full of poisons, it is unfriendly to roots, and in it no plants or trees will thrive or bear fine fruit. Other fertilizers can be added as needed, in the cheapest and easiest form to apply.

When trees and plants come, unpack them and put the roots in water, unless they are frozen, then they should be gradually thawed out in a cold cellar. If not ready to plant, heel-in, roots, tops and all. When starting to plant, see that roots are so wet that soil will cling to them. Trees should go an inch deeper than the graft mark, plants the same depth they were before, which can easily be told. Plant in as long rows as possible, to make cultivation and working easier. Keep the newly planted ground cultivated clean from early spring till frost comes. No matter whether you have weeds or not-keep stirring the soil. Hoe along each side of berry rows, dig around trees. Do this early in spring and later also. After hoeing, get a hand-rake and rake each side of the rows. Use a slant-toothed harrow or a drag between the rows. Keep this treatment up all summer, going over the ground every ten days as near as you can, unless it rains and afterwards bakes a crust on the surface, when you must go over it sooner. Do not let a weed get two inches high. Remember that you are pre-


How clusters of Himalayas look
paring the plants or trees for next year's crop, as well as finishing up this crop. In berry-picking season, better get extra pickers and let the regular help go on cultivating.

Moisture is the great need of nearly all fruit plants, and the grower's problem is to get enough of it. Irrigation is practised in many sections, but it is expensive and, furthermore, is not needed except in a few of the Western States. Proper cultivation will keep moisture in the soil to an extent few appreciate. The sun and the dry air draw moisture from the ground whenever a crust is allowed to form on the surface. But if you break up this crust, and keep a two- or three-inch layer of dry dust on the surface, the moisture cannot escape. It is the same where there is a board or a stone on the ground-there is damp earth underneath. Get this dust-mulch on the surface early in May, and keep it there all summer. Harrow as soon after a rain as the ground begins to dry and keep the water for the use of the trees and plants. Forget about weeds and think of moisture, and you can raise a big crop if there is no rain from spring to fall.

Always cut out all branches which have borne fruit, right after harvest. Insects lay their eggs in the fruiting wood, which dies and is of no more use to the plant. If you let the old canes stand till spring, the eggs will hatch; but, if this wood is burned, the eggs will be destroyed. If you allow no dead wood or trash to stand or lie about your place, you will not be bothered very much with insects, providing you plant healthy stock.

People should go to nature for lessons on pruning. Notice that a tree in its wild state, when growing out in the open where it gets lots of air and sunlight, has limbs right down to the ground. Then why should we trim fruit trees 5 or 6 feet high? The sun should never directly strike the stem of a tree, or the bark anywhere,
during the growing season. This would interfere with the flow of sap, as well as with other things. Leaves are meant to shield the bark, to absorb light and food from the air. They feed the tree just the same as roots do, and they keep the branches cool. A good, rich crop of foliage is necessary if the tree is to thrive and grow, and produce fruit that is worth while.

Plant one-year trees only. Those that have an upright habit of growth should be cut down to no higher than a foot or fifteen inches. Cut on a slant which faces the north, as the sap flows more on that side of the stem, and the wound will heal quicker than if the cut was on the other side of the stem. This cutting back should be done about a month after planting, or just as the sap begins to flow. Plan the head of the tree right there and then. Leave only three or four branches, growing in the right direction, and prune to form a hollow center, or open head. Cut out all cross limbs each season. (Note: Weeping growers, such as Burbank's plum, should have a 3 - to 4 -foot stem left.) Peaches should have half of each year's growth cut back in the spring, as well as all dead twigs cut out.

Study the habits of growth of the trees you plant. Ask the nurseryman what they will do and how to handle them. Thousands of trees all over the country would be alive today, and bringing the owners great profits, if they had been properly pruned and cultivated and sprayed. Instead of this, the orchardists forgot or ignored the spraying, pruned them wrongly or not at all, and made a pasture of the orchard. The cattle or horses, to keep flies off and to find a cool place, gathered under the trees, tramping the soil so hard that it would crack in the summer. I have seen these cracks so wide that you could put your hand in them. Think what the effect of this is on the trees!


Himalayas in my branch nursery in Northern Michigan. Fruit, blossoms and new plants by the thousands

## Severe Cold Does Not Kill Plants so Often as Sleet́

On examining some of the plants which I thought had "winter-killed" in the zero weather last winter, I found something I had never thought of before, but which is very important. The bark on many plants was pounded off several inches up and down, about a foot above the ground. Even the wood was worn away in some places. A little reflection told me that it was done by sleet, ice and snow driven before the wind, on top of a crust of snow. I followed up this idea, and sure enough, found that wherever the plants were protected from the direct drive of the wind along the surface of the crust, they did not "winter-kill" one-tenth as much. I should like my friends and customers to investigate,


Himalaya plant just loaded with berries igi2. Notice long canes

## If You Can Your Berries, You Will Realize 50 per cent More from Them

When there are small crops of fruit, it is possible to sell all the berries you could raise on a thousand acres, in one community, for very high prices. But when there is a heavy crop, so many wild berries and carelessly grown cultivated ones are marketed everywhere that for a few weeks there is a low-priced market for the best of berries. Then is the time for you to make your money. Later in the winter the prices will be high enough to suit anyone, and all you have to do is to get a home canning outfit, and put your berries up in tin or glass. I know that it pays enough to return the cost of the work and material, and fifty per cent more than average prices for fresh berries.

There are canning outfits on the market for any price you are able and willing to pay, from $\$$ Io up to $\$ 5,000$. With them you can get the same results as the big commercial canning factories, and your canned fruit will be of a superior quality. The work may be done by your own family, or by hired men and girls, and is no more
troublesome or difficult than any ordinary farm workno harder than making butter. There isn't any more danger of an overproduction of canned berries than there is of an overproduction of sugar or flour. During 1911 there were $720,000,000$ cans of peas, corn and tomatoes alone canned-and consumed.

Every can of this stuff brought a good, stiff price that paid the canners well. The demand for such food is increasing all the time, because everyone is learning to appreciate the convenience, economy, purity and palatability of this source of supply. It is all right to sell early products and crops in good years, when they are fresh; but don't depend on the fresh market for your profits. The middlemen will get the biggest part of your profits if you do, taking the average year after year. But if you can your crops, or your surplus, you will be independent, and will be on the high road to prosperity. I shall be glad to help you get a canning equipment, or tell you how to use one, if you write me.

Last spring I set out 500 Giant Himalaya tips, and wish to tell you they are nearly all alive and growing fine. I went out today and measured some of them, and they have grown from 8 to 12 feet already. This looks good to me. I was at your place in Holland two weeks ago, and was pleased with your place-the gardens especially,-with your irrigating water-supply, and with the outlook for a good crop of Giant Himalaya Berries, and also with the new berry, Macatawa, you have developed. I think they are the largest berries I ever saw, and of the best flavor. I predict a great demand for them, and hope to get some of them for my garden. All your plants look well. You are certainly doing a great work. Wishing you great success in all your undertakings, I beg to remain, Lee Towelson, Galesburg, Mich., August 5, 1912.

I wish you would send me your "Berry Book." I have half a dozen Himalaya Berry bushes that are growing very fast, and have some fruit on this season. The Blackberry bushes in this section are badly infested with rust. I wish to put out Himalaya instead. Will you kindly advise me as to the care of these bushes; also your large Gooseberries.-H. H. Sessions, Lakeside, Mich., August 10, 1912.

Ernest DeRoo Mitting in a field of Himalaya, newly set. He likely will manage Berrydale some day
and protect their berry fields whenever possible. One of my patches was sheltered by a windbreak of trees, and it was not damaged.

Last spring I bought from you three Himalaya Berry plants, which grew at least 15 feet.-C. J. Groennold, 16i7 E. 2ist St., Cleveland, Ohio.

I received my order of berry plants, and found them all in good condition. I am especially pleased with the Currant bushes.-Joseph Anderson, Lehi, Utah, April 24, 1912.



WHY is it that in America so few farmers Even strawberries right off the plants are syrupy with sugar and cream. An ordivarieties with the large berries will yield from a use, by eating them fresh and putting them up You, therefore, shouid plant a dozen or more of fences or buildings where they get the full sun sun, the sweeter will be the flavor of the
know how good Gooseberries are to eat fresh? not so good, and no other berry is so rich and nary thrifty Gooseberry bush of these improved peck to a half bushel. An average family can in cans and preserves, from two to three bushels. Gooseberry bushes. Put them on the south side and air. The richer the soil and the warmer the berries and the more of them.



[^0]:    I think so much of Himalaya Berry that I am planting out 22 more acres of it for fruit on a pla bought for this purpose near Holland

[^1]:    The prosperity of a community depends upon its commercial interests, and the representative men of a town are those who are foremost in promoting its business affairs. Their

[^2]:    As I have visited your place several times, and have been growing the Giant Himalaya Berry two years, I honestly believe them to be the best black berry that is grown. There are loads of berries, and they are casily picked, no thorns to bother you in picking. If the other fruit-growers had seen as much of them as I have, they would certainly get a start. From young plants set out last spring I have as many as a dozen tips already, and there will be as many more. The second year is when they do their most wonderful growth. One can hardly believe it, unless one see them every day as I do. I shall plant out ten acres more this fall. For one, I am going to boost the Giant Himalaya Berry.-Arthur W. Dean, Bangor, Mich., August io, 1912.

