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JUL 23 1920

STRAWBERRY PLANTS & THAT GROW

1914

C. E. WHITTEN'S NURSERIES
BRIDGMAN :: ▼ :: MICHIGAN

Everbearing Strawberries

The above represents the "Progressive" as photographed from plant growing in the field Sept. 26, 1913; the berries showing about two-thirds natural size.

Fall or Everbearing sorts are the latest thought in Strawberries and are sure enough croppers and not merely a "fad." With the right varieties any one can have this best of all fruits, the entire season from May till November.

The "Progressive," a new seedling originated by H. Rockhill, of Conrad, Iowa, is, I think, the best one yet offered, being of good color, fair size, very firm, and pleasant flavor; much like Senator Dunlap in manner of growth, being a very prolific plant maker, and best of all, bears fruit on nearly all of the first season's runners. By this, I mean that plants set in April will begin bearing in the late summer and early fall of the same season, thus making it a very heavy cropper.

The one failing which I have noted is that the mother plant will set too many berries and if all are allowed to ripen they will run too small; with this exception it seems to me to be the best of all the Fall-bearing sorts.

Mr. Rockhill controlled the entire stock last year and held the price at \$75.00 per thousand; but this year he has suggested the price which I am offering, \$1.90 per doz.; \$1.50 per twenty-five; \$5.00 per hundred; \$40.00 per thousand.

"Superb" is one of the best of the Fall-bearers; by some is considered the best. It is probably the largest berry of all, of very smooth and even shape, nearly round in form, color rather light red, but of very good quality. It bears only on the mother plants, or at least very seldom on the new runners the first season. Its blossoms and berries are for the most part covered with the foliage, this being an advantage in protection from frost; however, this is a great hindrance in picking as it requires hunting for the berries.

The second season this variety will bear a crop in June and another crop in the Fall. It must be grown on strong soil and should be given some extra fertilizer to help out the Fall crop.

Price for 1914: 75c per doz.; \$1.25 per twenty-five; \$4.00 per hundred.

One point that I have neglected in the foregoing description of these varieties is the fact that it is necessary to remove buds and blossoms from this class during the early summer if wanted to fruit in the Fall, as if left to themselves they will set fruit and ripen at the same season as the ordinary sorts, continuing to bear a limited amount of fruit through the entire season, though not enough to make it profitable during the Fall. This disbudding should be continued until the middle of July or first of August, after which they may be allowed to bloom at will.

Announcement

N AGAIN PRESENTING our Annual booklet to our friends I first wish to thank our many old customers for their patronage, and trust that we may merit a continuance of the same.

In passing, a word of introduction may be in order to those who may receive this catalogue for the first time. We commenced growing Strawberries for market in 1883 on our present location in the southwestern part of Michigan and close to the Lake, in the heart of what has been truthfully called the Great Fruit Belt, and have been at it ever since; **thirty years' experience** should count for something, although we find new conditions arising every year and realize that there is always a

chance to learn.

Since 1890 we have issued an annual catalog and have shipped plants to all parts of the United States and Canada.

That which we consider our greatest recommendation is the fact that many of our first customers are still buying of us. We are justly proud of our reputation for **Honesty** and **Square-dealing**, and hope to be able to live up to the **standard** as long as we continue in business.

While we make no claim for **great superiority** of our plants, we do claim that we can, and do, grow as **good plants** as any one can, and owing to the nature of our soil—a sandy loam—we are able to dig the plants without injury to the roots, which is an impossibility on very heavy or clay soil.

We take great pains to keep our stock **true to name** and **warrant** it to be such, and if any proves to be untrue we are ready to replace or refund the money paid.

We do not claim to be infallible; of course, where so many orders are filled there will be some blunders, and our field help do not always obey instructions. However, if our friends find anything wrong with their order and will write at once, we will make good, if possible; although we do not like to receive word that the "plants were received in good condition," and then in a few weeks receive word that "the plants are all dead" and be asked to replace them. We can not warrant plants to grow under all conditions.

Too many contingencies may arise; floods, frost, or drouth at planting time may seriously injure or kill outright, still we would not be at fault, yet we are sometimes asked to replace under just such conditions.

We do warrant our plants to be packed to carry safely and to be in good growing condition when delivered to the transportation companies, after which our liability ceases.

The year 1913 will go down in the annals of history as one of the most disastrous seasons of the century in so far as the farmer or fruit-grower is concerned.

Unprecedented floods followed by killing frosts in May and later followed by severe and protracted drouth with excessive heat have caused the nearest crop failure this country has experienced in many years.

The frost ruined all our chance for testing the newer varieties, as scarce anything escaped. Even the raspberries and blackberries were entirely destroyed on many plantations.

This section of country near Lake Michigan was favored with more moisture than most other sections, and while we have a heavy shortage of plants generally, we have a fair stock, of most varieties, and owing to the late fall with plenty of moisture, plants are going into the winter in fine shape.

Owing to the general scarcity it will stand our friends in hand to place their orders early if they desire to get just what they want.

Do not condemn a variety from one season's experience, as another year may show it very differently, also soil or location will sometimes change the quality, or the season of ripening will vary in different localities. We can only give general conditions and do not mean to misrepresent.

I have never urged my friends to set largely of untried "novelties," but rather to test the newer varieties in a small way at first. I have never listed any that I did not think had merit, although many sorts have been dropped from the list, not that they were really poor but that we had enough that were better and proved successful over a larger territory.

Our strawberry plants are all fresh dug at time of shipping, as we do not try to winter any in cellar.

I wish to emphasize this statement, as in the past some have claimed that my plants have been held over winter in cellar. Let me say here, that I never did this, nor have I ever seen others that practiced such methods.

In propagating strawberry plants for sale we always set from one-year-old beds which have not fruited. We also set different varieties in blocks of several rows each, thereby obviating the danger of mixture, liable where different sorts are set in alternate rows. In digging, we usually take up the entire row, discarding the original plants and such of the tip plants as are not well rooted, therefore, we have no exhausted stock to send out.

In digging strawberry plants our help work in the field when the weather is fit, lifting the plants with "potato hooks" when taking the plants from the soil, stripping off the surplus leaves and runners and tying in neat bunches of twenty-five (we always aim to put in twenty-six). After tying, the bunch is carefully heeled in until the required number of that variety is dug, thus the roots are not exposed to the air for any length of time.

Of course, sometimes our packages get broken in transit, through careless handling, and if found in such condition upon delivery, our patrons should refuse to accept and pay charges upon the same, notifying me at once; then we stand a chance of collecting damage from the transportation company; but if once accepted it is hard to collect damage. Also if plants have been delayed and have been an **unreasonable** length of time on the road, do not accept them, as they are quite liable to be injured, especially strawberry plants.

It will be a great help to me if my friends will speak a good word for my plants, if they have the opportunity, and it will be thoroughly appreciated.

If more than one catalog is received, please hand to some one whom you think will be interested in small fruits.

HOW TO SET AND GROW STRAWBERRIES

THE SOIL and location best adapted to strawberry culture will vary somewhat in different sections. In a general way we have said that any soil that would grow good crops of corn or potatoes would grow good strawberries, and while this seems to be a pretty safe rule, it is also true that in order to grow them to the best advantage it is necessary to have soil especially adapted. One of the first requisites of the ripening fruit is moisture, and care should be taken that this is provided. Hence a very dry or loose, sandy soil would not be a safe location, although in moist seasons a fair crop might be harvested. Neither is a stiff clay adapted to strawberry growth, as very early in season it cannot be worked without becoming cloddy, and later is apt to bake, and the plants will suffer more than on sandy soil. It would seem that a sandy loam or loam with slight mixture of clay should if properly handled give the best results.

Drainage—Having chosen a soil retentive of moisture, it next becomes necessary to prepare for proper drainage in case of excessive rainfall, unless the natural lay of the land is such that no water will stand upon the surface. Tile drains are the only practical ones to use. Open ditches will, perhaps, answer this purpose, but are unsatisfactory in many ways. They occupy too much land and are in the way of cultivation, while tile drains are much more convenient and fully as effective. In sandy soil I would advise using tile not smaller than four inches in diameter, and larger for mains, according to length and amount of water to carry. I have laid a good many three-inch tile and have had to take them up and replace with larger on account of their filling with sand. Of course, this was where we had only moderate fall.

Frost—In planning your strawberry field care should be taken to avoid frosty locations, such as very low land near marshes or lakes, also valley where there is no chance for circulation of air, as these localities are very liable to heavy frosts, when higher land or that more open to circulation would show very little, if any. A hard frost at blossoming time often ruins the entire crop, hence the desirability of choosing a situation as much exempt as possible.

Manuring—Where the soil is at all deficient in fertility, I would advise using well-rotted stable manure. If this can be applied to the soil the year previous and some cultivated or hoed crop grown, then the following season the land must be in the best possible condition for setting strawberries.

Some writers advocate the plowing under of a clover sod in preparation for this crop, but I am always doubtful of this method on account of the white grub, the larvae of the May beetle, which is quite apt to infest such soil. Perhaps if only recent seedings were so treated, this pest would not trouble, but I would warn all against plowing up an old sod to set

strawberries, as the grubs would be almost sure to destroy the greater portion of the plants set. Never plow under green or very coarse and strawey stable manure just before setting strawberry plants, as it would cause the soil to dry out very quickly and will also burn the roots, killing the plants wherever it comes in contact with them. This is important and should be avoided if possible.

Any good commercial fertilizer may be used. This should be sown broadcast on the land after plowing, and well harrowed into the soil.

Fitting the Soil—Having selected your site with reference to proper drainage and fertility of the soil, begin by plowing as late in the fall as possible before the ground freezes. This late plowing is beneficial in that the soil lays up loose and open, that frost may act upon it more readily, also leaving it in condition to absorb more moisture in the spring, which may be drawn upon later in the season in case of drouth. It also tends to kill a great many insects which live over winter in the soil, some of which are quite troublesome and injurious to strawberry growth. The white grub is undoubtedly the worst of these, but as they seldom, if ever, lay their eggs in freshly cultivated soil, if my previous suggestions regarding the preparation of the site have been followed there will be no danger.

I like to plow quite deep where there is good depth of soil, eight inches at least, unless this brings the subsoil to the surface, which should not be done under any circumstances. As soon in the spring as the season has fairly opened, just as early as the soil will work up mellow, we harrow the land with a springtooth harrow (any other implement that will do the work thoroughly will do as well).

I would then immediately follow with a heavy roller, or if you have no roller at hand, a plank drag (or "float," as we call it) heavily weighted will do as well. This firming of the soil is important as it is almost impossible to set plants properly if the soil is not reasonably level and firm at the surface.

Marking Out—This may be done in any manner that will give a very shallow, straight mark to set by. A light sled marker that will make three or four marks at once is very handy, and could be made by almost any one. The space of the rows will depend upon the method of growing chosen for your field.

If for Hill Culture, which consists of growing the single plants, cutting off all runners as fast as made, which causes the plants to "stool out" or grow additional "crowns" which will each produce fruit stems, the rows should be from two and one-half to three feet apart and sixteen to eighteen inches in the row. If to be cultivated both ways, or in checks, two or two and one-half feet would be right.

I would recommend this method to all those who wish to grow fancy berries and are willing to give the extra culture needed. This system requires a rich or fertile soil; it certainly would not pay on poor soil.

The Hedge Row is quite similar to hill culture. The rows should be from two and one-half to three feet, and twenty to thirty inches in the row; the freer runners the greater distance. The first runners are turned into the row and held in place with soil until they have struck root, generally about every six or eight inches in nearly a straight row, later all extra runners are kept cut off. There are different implements which are manufactured for this purpose, but I think a good sharp hoe in the hands of an active workman will be fully as satisfactory as the machines. Plants grown by either of these methods are claimed to remain healthy and fruitful for several seasons.

The Half Matted Row should be set about three and one-half feet apart and eighteen to twenty-four inches in the row. The runners are all kept off until about the middle of summer, then allowed to root until row is about one foot wide, after this all runners should be cut off. This gives a fine show for fruit.

The Matted Row is the system adopted by the greatest majority of fruit growers, although without doubt other methods would prove more profitable. The rows are set four to four and one-half feet apart, and plants from twenty to thirty inches in the row. The runners are all allowed to root, running the cultivator always in the same direction and narrowing it up as required. At times, if the season happens to be favorable to plant growth, and the soil is rich, almost the entire surface will be covered with plants. This method might be allowed on poor soil where fewer plants would be grown, or with varieties that make few plants ordinarily, but if Dunlap, Warfield or other heavy runners are allowed to grow in this manner, they will prove very disappointing from the fact that there will be many blank or barren plants. Varieties of this type would do better in half matted rows.

Setting Out—As to the manner of setting the plants, there are so many theories advanced which differ from mine, that I feel rather backward about giving my method. But as it is very simple and requires no special implement to work with, using instead a common spade for opening the holes and not requiring any very complicated movements in placing the plants in the soil, I will give what I consider the easiest as well as the best method.

The first operation is the opening of the holes, which is done just ahead of the setting, not leaving them to dry out. In doing this the operator proceeds along the row, thrusting the spade in the center of the mark already laid out, spacing equal distances according to methods chosen, quite close if to be grown in hills, and farther if for matted row.

This should be nearly the depth of the spade, and if the soil is properly prepared, this will not require much effort, but if the soil should be very solid, it will require some pressure of the foot to sink it to the proper depth.

The spade should be given a slight motion to right and then to left; when withdrawn, if the conditions are right, you will have a V-shaped opening which will readily receive the roots of the plant. Care should be taken not to weave the spade back and forth too much, as this tends to open too wide a space at the bottom of the hole, making it hard to close properly, and leaving a chance for air space, causing plants to dry out and die.

The greatest pains should be taken in getting the plants into the soil, and here is where you should place your most careful workmen; or better still, do this part yourself, if possible. Have the plants set in a shallow basket or other receptacle, with the roots moistened—if the roots are very long they should be

cut back to about three inches. The plant should be held by the upper part of the crown, and placed in the spade opening at about the same depth it grew, which should bring the crown even with the surface; now let the operator press the soil firmly against the plant with a good, strong pressure of the foot, being careful to see that the opening is entirely closed that air may not enter and dry out the roots.

Cultivation—As soon after setting as practicable, the surface soil should be stirred very shallow, being careful not to disturb the roots of the plants, also not to cover up the crown or heart of the plant; the latter will cause the plant to die, especially in damp weather, by rotting or smothering the crown. This early cultivation is essential for several reasons: First, to be sure that all the openings near the plant are filled, also to preserve moisture if the weather is dry, by arresting evaporation through capillary attraction. This shallow cultivation should be kept up through the season, never allowing the surface to crust. There are a great many makes of cultivators which will do this work all right.

However, it is necessary to do some hand work with hoe in order to loosen all the surface and keep down weeds. The latter is very important.

Perhaps I should qualify this claim for shallow cultivation a bit by saying to treat the soil in this way only in dry seasons, or on very light and dry soil, as if the season is wet, or the soil low and heavy, it becomes necessary to stir the soil deeper in order that it may dry out somewhat.

The blossoms should be pinched out of all spring-set plants, as it is not advisable to let them ripen fruit the first season, as it weakens the growth of the plants and is liable to kill them outright.

All runners should be cut off until the first of July, when if matted row is wanted, the runners may be allowed to root until the desired row is obtained, after which all runners should be kept trimmed off.

Mulching or Winter Covering—As soon as growth ceases in the fall, and before ground freezes hard, the surface of field should be well covered with some sort of mulching, either long straw, wild hay, corn stalks, or other litter, if free from foul weed seed, will answer the purpose. We have grown several acres of sowed corn on purpose for this covering, and find that it works quite well.

We find that this material "stays put" better than the wild hay, as we sometimes have very high winds and have had to replace the hay, and in some part of the field this second handling was worse than the first, on account of its having been rolled and twisted into all manner of shapes. For this reason I would advise spreading hay or straw when slightly damp, if possible, and place a little soil upon the top at short intervals, which will help to keep it in place in case of high wind.

Some advise using coarse stable manure as a covering, and if free from grass seed this might be advisable, as it would both fertilize and protect the vines from frost. However, I generally "fight shy" of stable manure on plants that I wish to fruit the second season or for longer period, as I have sometimes seen a good stand of clover and timothy on what was supposed to have been a strawberry field.

As soon as growth commences in the spring this covering should be taken nearly or entirely off the plants, but may be left between the rows as a mulch to preserve moisture, also to keep the fruit clean at picking time.

Fall or Everbearing

Fall or Ever-bearing Strawberries are an assured fact, and the sooner all lovers of this fruit accept it as such and test them for themselves, the sooner will they be able to enjoy this best of all berries for the entire season; as the newer varieties will lengthen the season well into the Fall, so one can have the fresh fruit from the last of May until the first of November, or perhaps later if the weather is mild.

Like many other growers, I was skeptical at first and "had to be shown", but after a fair trial this season I am a "convert" and a firm believer, for I have got the goods to show.

I set 1,000 plants of the Progressive variety last April, paying \$75.00 for the same, also 1,000 of Superb, for which I paid \$35.00, and I have shipped an average of two sixteen quart crates of berries from these plants each week, commencing August 25 and closing October 25, on which date we picked our last crate after we had had a three days storm of snow and rain, finishing with a hard freeze. We were forced to sell on the wholesale market of Chicago, not having enough to pay to hunt up a fancy trade; however, our berries sold for from \$3.00 to \$5.00 per crate at that.

The Progressive variety has given us most of the fruit, as this sort bears heavily on the first season's runners, while the Superb bears only on the mother plants the first year and for that reason does the best grown in hills.

I shall offer only the two varieties, Progressive and Superb, as I consider these the best ones yet introduced.

The Superb is the largest of all the Fall-bearers, of fine appearance and excellent quality; on the other hand, the Progressive will bear many times the amount of fruit the first season. The berries are somewhat smaller, but are fair size and of good quality. The mother plant is apt to set too many berries and if all are allowed to ripen they will run small, but the runner plants set fewer berries and these grow to fair size.

I have had only the one season's experience and am not able to say just how they will do the second year, but this I know, the Progressive will pay to grow for the one year's fruiting, even if you take up and dispose of the young plants the following season or set them in a new bed. In fact, I am not sure but this will be the best way to handle them, as it would do away with a lot of work removing blossoms the second season.

We give an illustration in the front of this catalogue of a cluster of fruit stems taken from plants of the Progressive growing in the open field on Sept. 26. This shows the fruit only about two-thirds natural size, as our page was not large enough to receive the photo life size.

While I do not want to urge any one to set largely of these plants until they have tested them for themselves. I would urge all who are growing for home use to set a few, enough to raise for your own table during late Summer and Fall. You can do it easily enough, for with the exception of removing the buds during early Summer no more care is required than to grow the June varieties.

The one best feature and the one wherein the Progressive leads other varieties is that plants set in April will bear the following August, continuing to make new plants and ripening fruit on these until freezing weather, thus giving you fruit in paying quantities the first year. This feature alone should recommend it for the home garden.

Mr. Rockhill, of Iowa, the originator of the Progressive, controlled the entire stock of plants last year and held the price at \$75.00 per thousand or \$12.00 per hundred.

This year he has suggested the price which we are offering: \$1.00 per dozen; \$1.50 per twenty-five; \$5.00 per hundred.

Our price on Superb is 75c per dozen; \$1.25 per twenty-five; \$4.00 per hundred.

Any one wanting a larger quantity please write for special prices.

STRAWBERRIES

Perfect Blossom.

All Strawberry blossoms are either staminate—also called perfect—or pistillate, generally called imperfect.

The Imperfect varieties, which are all marked (Imp.) in catalog, should have a perfect variety, marked (Per.) set every third or fourth row to properly pollinize the blossoms of the imperfect sorts.

There seems to be a mistaken idea with some that this mixing of varieties is necessary with the perfect as well as the imperfect sorts; but this is not so. The perfect sorts are self-pollenizing, and will bear as well as if set by themselves.

When the imperfect sorts are properly pollinized they are considered by some as more prolific. However this may be, there surely is no reason for any prejudice against them.

Success depends in a great measure upon getting healthy stock, true to name. This is the kind we always aim to send out.

If by mail, add 10 cents per 25, 25 cents per 100, for postage. At thousand rates, by express or freight.

Imperfect Blossom

Chesapeake

NEWER VARIETIES

I have no really new variety to offer this season, but under this head I have listed some of the newer sorts that have become standard.

Chesapeake

(Per.) — This comparatively new variety I have received from the introducer, W. F. Allen, of Maryland, whose description is as follows:

"This variety is as late as the Gandy, and more productive; furthermore, it will thrive and bear an elegant crop on soil entirely too light to produce good Gandy berries. It is equal to the Gandy in size, superior to it in firmness and shipping qualities, and in eating qualities the

Gandy is no comparison. In flavor it ranks with William Belt, Brunette and others of that class. Therefore, in the Chesapeake we have attained to a greater degree than in any other variety, three of the strongest points that go to make up a valuable commercial berry—these are firmness, quality and lateness. When these good points are

added to the fact that it is of uniformly large size, very attractive in appearance, and being one of the most healthy and vigorous growers, puts it nearer perfection than has yet been reached by any other

berry, and I can conscientiously say that if it succeeds in other sections as it does here, it is the best strawberry in the world today."

This has proven to be one of the very best late berries that I have ever tried, but as it makes only a few strong plants it is not profitable for the plant grower. We have succeeded this year in growing a fair stock of plants of this variety and will sell them while they last at the following very low price: Twenty-five, 25c; hundred, 75c; thousand, \$5.00.

Norwood (Per.)—This is a new variety introduced the season of 1908 by L. J. Farmer, of New York.

"The Norwood strawberry was named and given the first prize by the Massachusetts Horticultural Society at the exhibition of 1906. This strawberry is supposed to be a cross between the Marshall and Corsican, as it came up where the Marshall had been grown and near where Corsican was grown at the same time.

Although I have fruited this for several seasons I have not been able to get the results Mr. Farmer claims; however, it is a large and strong growing plant and quite prolific bearer of berries that are of good size and quality somewhat resembling the old Jessie. I would recommend it for the home garden. Twenty-five, 25c; hundred, 75c; thousand, \$5.00.

Ryckman (Per.)—This, a comparatively new variety that I first tried two years ago; I have copied part of my description.

"This variety is noted throughout the country for its immense size and productiveness. It produces an abundance of very large and vigorous plants, and tremendous crops of very large berries. Many extensive growers say that it produces larger crops the second year even than the first. It has also distinguished itself as a great variety for poor soils and fruiting continuously on the same ground for several years. It ripens in mid-season. Berries are of a bright scarlet color and excellent flavor."

I saw just enough of the fruit last season to satisfy me that it is practically the same as the old New York or Uncle Jim, being a very large and strong growing plant, while the berry is large and light colored; fine for local consumption, but inclined to be soft for long shipping.

Twenty-five, 15c; hundred, 50c; thousand, \$3.50.

The Famous Gibson

Gibson

(Per.)—This is not the old variety of that name which originated in Eastern New York several years ago, but it is a local berry of great promise and more nearly resembles the Pocomoke than any of the older sorts which I am acquainted with.

It commences to ripen with the second earlies and continues for a long season, making a heavy yield of fruit.

The fruit stems are large and strong, and the dark green foliage is an ample protection for the blossoms and fruit; having a strong staminate bloom, it makes a very good pollenizer for pistillate varieties.

The berry is large and regular in shape, holding its size well to the end of the season; its color is a deep, rich red all through from surface to center; its flavor is fine, being neither too sweet nor too sour, but just right for table or canning.

In manner of plant growth it very closely resembles Pocomoke, making a heavy row of very strong and healthy plants, its foliage being of a very dark and glossy green, not a speck of rust to be seen on our rows this season.

It is very hardy in bud and bloom, withstanding spring frosts that very nearly wiped out such varieties as Beder Wood and Warfield on adjoining rows.

I can not give the parentage of the Gibson, neither can I give its exact origin, but it seems to have originated in our county (Berrien), having been grown by a colony of German farmers who kept it to themselves for several seasons, making big money out of it. Finally it became known and other growers have been able to fruit it until at the present time it has become very popular with our market growers.

The above is our last year's description, and after watching it another season I feel quite sure that it is only an **Improved Pocomoke**. Many of our growers claim there is no difference. Be that as it may, certain it is that it is one of the **best sorts** we are growing today, and I would urge all to try it for themselves, and I feel sure that you will not miss it if you plant it largely for market or for home garden.

Twenty-five, 20 cts.; hundred, 60 cts.; thousand, \$4.00.

Son's Prolific

(Per.)—This is a comparatively new variety from Missouri and is said to excel the old variety Aroma, of which it is a seedling.

While I have grown this sort for several seasons, I have not been able to give it a fair fruiting test. The originator claims that it is larger, firmer, and of better color than Aroma, making an ideal late market variety. He also claims it to be able to withstand more frost than most sorts.

It is a very strong growing plant, setting just enough for a good fruiting row.

Twenty-five, 20 cts.; hundred, 60 cts.; thousand, \$3.50.

The Heritage (Per.)—This is a new seedling strawberry, originated by Mr. J. E. Heritage, Marlton, N. J., and this is his description of it: "The plant is very large; of extremely heavy texture. Deep rooted and extremely free in fruiting, beginning to ripen its fruit about early mid-season, and continuing to very late. The berry is dark, shiny crimson to the center. Has a perfect blossom. Carries an unusually heavy green calyx. Extremely large from the first picking to much above the average for the main crop, and continues large after the better known varieties are gone."

After watching this for several years I find that it very nearly fills the claims of the originator, and is really one of the largest berries that we grow; about the only fault I would find is that the fruit is a little rough, not making the handsome appearance that so large a berry should. Still, I think it worthy of continued trial and would advise all wanting a very large late berry to test the Heritage for themselves and feel quite sure that you will not be disappointed by so doing.

Twenty-five, 20 cts.; hundred, 60 cts.; thousand, \$3.50.

The Original Helen Davis

(Per.)—"One of the largest strawberries ever produced. Wonderful yielder and every berry smooth and well shaped. A grand strawberry. Plants are strong and healthy, a good plant maker; produce strong fruit stems and many of them. The fruit is a sight to see. We seldom find a strawberry, especially an early berry, having so many superior points as Helen Davis.

"The plant is a strong, vigorous grower, with tall, healthy foliage, and has never shown any sign of disease; the runner wires are large and strong and just the right length to layer properly without crowding. The fruit stalks are large, some growing as large as a lead pencil in diameter.

"The fruit is held up from the ground by the strong stems and is easily gathered. The fruit grows in clusters, some stems having as many as thirty berries on them, with as many as ten fruit stalks to the plant. I have had single plants that a bushel basket would not cover.

"One great feature of this plant is that there are never any blank plants, every plant, no matter how small, has a fruit stalk. I have never seen a plant equal it in this respect.

"The fruit is large and attractive and holds up well in size throughout the season. It commences to ripen with Dunlap and ends with Sample. Have picked berries from it as late as the 4th of July.

"It has a light crimson color which extends clear through, and has a flavor which cannot be excelled. The berry is sweet, and is a fine berry for canning. It is a heavy cropper, and will yield twice as many perfect berries as Glen Mary. It is a perfect flowering variety, and is a strong pollenizer for imperfect varieties.

"One strong point in favor of this variety is that every berry is perfect and smooth, no knotty berries. It will go through hard frosts and bear a good crop of fruit.

"Every one that likes strawberries should give Helen Davis a trial, and I am sure you will be pleased."

The above is the originator's description. We have a very fine block of plants grown from stock received direct from Mr. Davis last spring. While I have not fruited this variety I am well pleased with its manner of growth and would advise all to test it.

Twenty-five for 20 cts.; hundred, 60 cts.; thousand, \$4.00.

Fendall

(Imp.)—I will give the introducer's description:

"This splendid berry originated in our garden at Towson, Baltimore County, Maryland, in the spring of 1905. It is a seedling of the well-known William Belt. Its claims to public favor are as follows: First, great vigor of plant growth. Second, large size and delicious flavor. Third, great length of bearing season. Fourth, wonderful productiveness. Fifth, splendid root system. Sixth, beauty and symmetry of form. The plant is strong and vigorous, clean and healthy. The berries are as large, if not larger, than any other variety grown, and unlike most large varieties in that they are of delicious flavor. In length of season it is certainly remarkable. In 1907 we picked berries from it on the 25th of May and the last on the 10th of July. With the same care and under like conditions, it produced twice as many berries as the Senator Dunlap, Corsican, Glen Mary, William Belt, Marshall, and three times as many as the Gandy."

This comparatively new variety seems to have been quite successful as a "fancy berry," but like Chesapeake is a poor plant maker and we are unable to grow plants to fill our orders. However, this season we have grown a better stock than last and hope to be able to fill all orders without substitution.

Twenty-five, 20 cts.; hundred, 60 cts.; thousand, \$4.00.

**DO NOT FAIL TO ORDER A FEW OF
THE FALL-BEARING STRAWBERRIES**

A.B.M.C.

Fendall

EXTRA EARLY VARIETIES

The Luther

(Per.)—Luther, or August Luther, as some prefer to call it, was originated by Mr. A. Luther, of Missouri, and grown by him several seasons before it was offered for sale. I shall still place this variety at the head of the list of **extra earlies**, as I have found nothing yet that I consider better. It has a very pleasing appearance, being of a very bright red color and almost always of perfect shape, a slender, rather sharp pointed berry. It ripens evenly, no "green tips," and will ripen its full crop in a very short space of time, this feature making it a good market sort. It is also a very thrifty grower, making a full row of medium sized plants.

This season we have a good stock of well rooted plants, and I shall recommend it to all wanting a very early berry.

Twenty-five, 15c; hundred, 50c; thousand, \$2.50.

Excelsior (Per.)—An extra early berry. Has given us a good crop of berries. Berry is dark red, of good size, one of the best shippers. It is a good plant maker. Plant healthy, blossom perfect. It is claimed to be a seedling of the Wilson crossed with Hoffman. Originated in Arkansas.

Some growers claim this is the best early market variety, and where dark colored, tart berries are wanted, this sort will surely please you.

In direct contrast to the Luther, this variety is a long-season variety, and while it ripens its first berries at about the same season as Luther, it continues much longer in bearing.

Twenty-five, 15c; hundred, 50c; thousand, \$2.50.

Missionary (Per.)—This is a comparatively new variety from the South. I received plants from Hall, of Maryland, last spring and will give his description:

"Missionary hailed from the South. Plants vigorous, healthy and strong grower and a great plant maker. Plants medium large, and berries large and hold their size well through the season. Is early, but not quite as early as Excelsior and Hoffman. It is an enormous bearer, firm and a good shipper; it is planted here extensively for the market."

I have not seen it in fruit, but it seems a thrifty grower and I think it worthy of a test by those wanting an extra early sort.

Twenty-five, 15c; hundred, 50c; thousand, \$2.00.

SECOND EARLY VARIETIES

Bederwood

(Per.)—This is generally conceded to be one of the very best early varieties for home use or market. It is a splendid grower, making a large number of strong runners. It has a perfect blossom, and is **immensely productive**. Fruit of good size, light red, medium firmness and good quality. One of the best to plant with early blooming pistillate varieties.

While this sort could hardly be classed as a **firm or hard berry**, it has a peculiarly dry or spongy nature which enables shipping it long distances without injury. It is an excellent plant-maker, setting freely and rooting deep; thus being able to withstand drouth. I should like to emphasize what I have said in its favor and again recommend it as a paying market sort.

Twenty-five, 15c; hundred, 50c; thousand, \$2.25.

Splendid (Per.)—Originated at Sterling, Illinois. Plant a vigorous grower, equal to Warfield in this respect. Blossoms perfect. Berries are borne on tall fruit stalks, and are large, firm and of fine color. Ripens evenly all over, globular, very productive. Few, if any blanks. No mistake can be made in using this variety to pollinize Warfield, Crescent and other pistillates. Early to mid-season.

We have a good block of these for coming season, and I would recommend it as a first class variety for market where quantity is more of an object than quality.

Twenty-five, 15c; hundred, 50c; thousand, \$2.50.

Warfield (Imp.)—This variety is still very popular as a market sort, although the Senator Dunlap has practically unsurpassed its position at the head of the list, which it held before the advent of that very popular sort. The two together make a good team, and are quite similar in appearance when in the crate. However, Warfield is a richer berry and a little deeper red in color, thus making it one of the very best for canning; it also holds its color in the can, which is a very important point in its favor. In plant growth this variety is quite similar to Senator Dunlap, except it does not root so deep on light sandy or gravelly soils, and is more liable to suffer from drouth. While the individual plants are quite small and usually have

only one fruit stem, it is remarkable the number of quarts produced by a lightly matted row on good strong soil.

Twenty-five, 15c; hundred, 50c; thousand, \$2.50.

Lovett (Per.)—No person need hesitate to plant this variety for either home use or market, as it succeeds generally in any soil or locality. It is one of the tough, hardy varieties that will never disappoint the grower. It has a perfect blossom and bears heavily. The fruit is medium to large size, conical, firm and of good color and quality. One of the best to use as a pollinizer for pistillate sorts.

Twenty-five, 15c; hundred, 50c; thousand, \$2.50.

Crescent (Imp.)—This is an old reliable sort, often called the "lazy man's favorite," owing to its ability to take care of itself, and yet it is a variety not to be despised, as it always responds to fair treatment and can be relied on for a crop when many other kinds fail. It is especially adapted to sandy soil, as it is a great plant producer and on rich loam makes an over-crowded matted row. On such soils plants could be set farther apart in the row. We would advise as a pollinizer for this variety the Dunlap, Lovett's Early, or Splendid.

Twenty-five, 15c; hundred, 50c; thousand, \$2.25.

Senator Dunlap

(Per.)—In other years I have tried to describe this variety and have said that it might be called a perfect flowered Warfield. Although it is very distinct, it is quite similar in form and color of berry, also in manner of plant growth.

If grown on very strong and moist soil in matted row it will be disappointing, as it will set too many small plants, and the berries will be small and of poor quality; however, if kept in a narrow row, the fruit is large and of high quality.

I have tried for several years to get a good half tone of the Senator Dunlap, but have not been very well pleased with the result. Above is from a photo of a cluster of berries taken about the middle of the past season, too late to show the largest berries and when fruit was over-ripe. This illustration is true to life as showing type

of berry and productiveness. The introducer of this variety had this to say of it when first offering it:

"We have the greatest confidence in this variety and believe that it will in the near future take its place among the more prominent standard kinds. The plant is almost perfect in its way. We have several times called attention to its toughness and ability to endure hardships. It is small, slim, very deep-rooted, and as great a runner as the Warfield. With us it has always proven very productive. The fruit is generally large, never of the largest size, however; is conical in form, regular, never misshapen, bright or slightly dark red, very glossy, firm, a splendid keeper and shipper, most excellent in quality, and one of the best canning berries we have ever known. Its season is second early and it bears a long time."

The elapse of time has fulfilled his prophecy, for today there is no known variety that is so universally popular nor one that is so extensively grown as the Senator Dunlap.

Some one has said that this was the safest variety for the new beginner, as it would bear fruit in spite of neglect and ill treatment, and while this may be true in a degree, it is also true that it will well repay the most careful culture.

Another feature I wish to mention is its habit of deep-rooting. In this feature it has its superiority over the Warfield, which is a shallower rooted plant and is more easily injured by freezing or drouth, while the Senator Dunlap is able to withstand either in a great degree on account of its deep roots.

I have always recommended Senator Dunlap, for either market or home use, and I wish I were able to describe its merits more fully; however, no one can make a mistake in testing it, as it is one of the best, making an excellent pollenizer for second early sorts, or doing equally well planted alone.

While the season of ripening is given as second early, it in reality could be classed as a mid-season variety, as it has a very long fruiting season.

Twenty-five, 15 cts.; hundred, 50 cts.; thousand, \$2.50.

Haverland (Imp.)—This is one of the best early market sorts, and seems to do well in all sections. It makes a thrifty plant growth. Berries are large and of a peculiar longish shape, though very regular and even, holding out well to the end of the season. The color is rather light red, which may be considered a fault by some, but they make such a handsome appearance in box or basket that they nearly all sell for top price in market. About the only weak point that I have discovered in the Haverland is that the fruit stems are tall and unable to stand up under the weight of fruit as it ripens, consequently they should be mulched with straw to keep them from the dirt. This peculiarity of growth makes fine picking, as the berries lay out in sight, requiring no movement of the vines to find them.

Another good point in their favor is the ability to withstand frost at blooming time, often bearing a full crop of perfect fruit when other sorts are badly damaged. There is such a demand for plants of this variety that the supply nearly always fails.

There have been a great many spurious or mixed plants sent out from this section as Haverland; we warrant ours true to name. If you are unacquainted with this sort, try a few and see what a fine market berry they are. A little too soft for distant shipment, but they will stand picking before fully ripened and will color up in the crate after picking. If handled in this manner, Haverland will stand shipment as well as any of the larger varieties.

Twenty-five, 20 cts.; hundred, 60 cts.; thousand, \$3.50.

Senator Dunlap

MID-SEASON TO LATE VARIETIES

Glen Mary

(Per.)—This variety was originated in Chester Co., Pa., and introduced in 1896 by W. F. Allen, of Maryland, whose description I give below:

"I introduced this variety twelve years ago at \$10.00 per 100. Throughout New England and the West it is the leading berry of the list today. We sell more plants of it, year in and year out, than any variety that we grow. I do not recommend it for this peninsula, or for the South, but for New England, West and Northwest, I doubt if there is any variety that will equal it in every respect. It is only semi-staminate, but as its blossoms carry enough pollen to fruit its own berries, it is listed as a staminate variety, but I would not recommend it to plant with pistillate varieties as a pollinizer. They are big, dark red beauties, with prominent seeds of bright yellow; the meat is rich and juicy and crimson in color. They are of such high flavor that when once eaten more are wanted. As a good, firm shipper, it is very popular for fancy local market; there are few, if any, better. For this reason they are popular with both

Glen Mary

the large and small growers. It has no particular choice of soils, and does not require petting. The roots are long and well developed, providing plenty of moisture during a drouth. The foliage is large, upright in growth, dark green in color, leaves nearly round with dark, glossy surface, making a beautiful appearance in the field. The fruit stems, although large and strong, are weighted to the ground by the large clusters of berries; for this reason they should be well mulched to keep them clean. The berries are just the right size to make a fine appearance in the crate, and you do not have to be timid about asking a big price for them, as everyone will pay extra to get extra fine berries."

A few years ago I sold myself short of this variety, and bought plants of a neighbor for my spring setting, but I discovered later that I had something more nearly resembling Brandywine than any variety that I am acquainted with, and upon inquiry I found that a good many of our growers had this spurious sort instead of Glen Mary. When I decided this for a certainty, I dropped the variety from my list, and sent to Mr. Allen for a new start of the genuine article, and this season I have a nice stock of plants that I can warrant true to name, and would recommend it as a profitable market sort.

Twenty-five, 20 cts.; hundred, 60 cts.; thousand, \$3.75.

Pocomoke (Per.)—The originator says: "Originated near Pocomoke River; was found growing where there had been some Wilson and Sharpless strawberries dumped, and is supposed to be a seedling of the old Wilson, crossed by the Sharpless. The berry is round, conical, and resembles the old Wilson, but is much larger. One of the best varieties in existence, not only for its enormous productiveness, but on account of its beauty, adaptability to all soils, its foliage enduring the dry, hot weather (which quality is rare), its large size, its deep red color, its firmness, its high flavor. The plant is a strong, robust grower, with deep roots and lots of them, perfect blossoms and is an enormous yielder of large red berries. It ripens evenly and is one of the best shippers yet produced."

The above was taken from description given in previous issue of this catalogue and I only wish to emphasize what I have formerly said in favor of Pocomoke. I have already stated in my description of Gibson that I can see no apparent difference between that variety and Pocomoke. Under either name I consider it the best mid-season variety we are growing. I still have our blocks distinct and shall continue to list both until other authorities admit their sameness.

Twenty-five, 20c; hundred, 60c; thousand, \$3.50.

Bubach (Imp.)—Fruit large and handsome, roundish, conical, bright scarlet, moderately firm, of fair quality. Plant a strong grower, with a large, healthy foliage and very productive. Succeeds on light or heavy soil. Desirable for home use or near market. One of the best. Season early to medium. This is an old standby, and is deservedly popular. In plant growth it is vigorous, but does not throw out excess of runners, hence it is best grown in hedge or half-matted rows.

This variety is perhaps as well known and as widely disseminated as any grown, and while it is perhaps not as popular as it was several years ago, still we always run out of stock long before the close of the season. While it is hardly firm enough for long distance shipping, still it will hold up for ordinary marketing, and is one of the largest berries grown.

Twenty-five, 20c; hundred, 60c; thousand, \$4.00.

Wm. Belt (Per.)—"A native of southern Ohio, and named for its originator, now deceased. For fourteen years this has been before the public, and almost from the first it took rank as the best of all in flavor. It is also superior in beauty, size and productiveness. The color is bright red. The first berry to ripen on each stem is cockscomb, but the others are conical. The plant is grand, and the foliage abundant and healthy. There was a time when it was subject to rust in some localities, but we have heard nothing of it lately."

With us this has proven a valuable variety, giving heavy crops of fine fruit.

Twenty-five, 20c; hundred, 60c; thousand, \$3.50.

Marshall (Per.)—Readers of the Rural New Yorker will recognize this as the variety grown at "Hope Farm" and by Editor Collingwood considered the best. In quality it is really the standard of excellence, and if given a good soil and proper treatment will make a heavy yield of very large and handsome fruit.

It needs plenty of manure and thorough culture in order to do its best, as it does not thrive under neglect. We have only a limited number of plants to offer this season, and suggest that you place your order early if you desire to get this "best of all" strawberry.

Twenty-five, 25c; hundred, 75c; thousand, \$5.00.

LATE TO VERY LATE VARIETIES

The Profitable Aroma

(Per.)—While fruit is quite similar to Gandy, the growth is very different, making fewer plants and stronger ones. The berries are large to very large, and hold up well to end of season.

"It has been claimed to produce twice as much fruit as Gandy, but I would hardly think it probable, where both are grown under the same conditions. The quality of fruit is good, the color of berry is against it where dark colored fruit is the standard of excellence, as it is more like Gandy, inclined to be light. I can personally recommend this sort to any one wanting a late market berry."

If large, bright colored berries, late in season, are an object to you, then try Aroma, and you will be pleased.

Twenty-five, 20c; hundred, 60c; thousand, \$3.50.

Brandywine (Per.)—This has proved so satisfactory with all who have grown it that it is consequently in large demand. It is comparatively new and of great value by reason of its productiveness, large size, beauty and good quality, which renders it especially desirable for the home garden. The berries are glossy crimson, very handsome, firm and solid, excellent in quality, with fine aromatic flavor. The berries color all over evenly and retain a good size to the last, ripening in succession, and every berry maturing fully. Plant is remarkably vigorous, hardy and exceedingly productive and its foliage is long, clean and healthy. The amateur will delight in such a superb variety, which with his good soil and careful culture will give him magnificent returns. Midseason to late. It is also an excellent pollinizer for midseason to late pistillates.

Twenty-five, 20c; hundred, 60c; thousand, \$3.50.

Sample (Imp.)—The introducer says: "Large size and fine quality; quite firm; continues a long time in fruit. The berries are large to the last. For the market-man it is the best strawberry ever grown. I have nothing in my grounds that will begin to fruit like it. It will yield as many berries as the Haverland, and will average as large as the Bubach. Colors all over at once. A berry that will do that is the best one yet found. There is not a weak spot in it. Foliage perfect, fruit perfect."

I feel perfectly safe in recommending this sort to my friends for either home use or market, where a

late berry is desired. While we have a fair stock of plants I would advise ordering early as we always run short of Sample long before the close of the season.

Twenty-five, 20c; hundred, 60c; thousand, \$3.50.

Gandy (Per.)—Has always been popular as a late market variety; does not do well on light sandy soil, and is apt to be disappointing when planted in such location. I have no hesitation in recommending this to all as **one of the best** late sorts for home use or market. The only fault that I ever heard found with it was its "shy bearing" when planted on uncongenial soil.

Twenty-five, 20c; hundred, 60c; thousand, \$4.00.

Stevens' Late Champion (Per.)—This new late variety originated in New Jersey; seems to do well wherever tested. The originator describes it as follows:

"Very large, fine flavored, bright color, good shipper, a fine bed maker, a heavy yielder, fine foliage.

"It ripens later than the Gandy Prize, and lasts until the Fourth of July any season. It has never shown any sign of rust. The cap, which is double, has always kept green until the last of the season."

Above was taken from a previous description and I find that this variety is still considered one of the best market sorts by a good many growers and I would recommend it to those growing for market where quantity more than quality is desired.

Twenty-five, 20c; hundred, 60c; thousand, \$3.50.

Early King

Raspberries

Culture—Any soil that will produce good field crops is suitable for raspberries. Pulverize the ground thoroughly and manure liberally. The red or sucker variety should be planted in rows six feet apart, with the plants three feet apart in the rows, requiring 2,400 plants per acre. The cap varieties for field culture should be planted in rows seven feet apart, with the plants three feet six inches apart in rows; requiring 1,725 plants per acre. In garden culture plant four feet apart each way.

Cuthbert

(Queen of the Market.) A remarkably strong, hardy variety. Stands the northern winds and southern summers equal to any. Berry very large, sometimes measuring three inches around; conical, rich crimson, very handsome, and so firm they can be shipped hundreds of miles by rail in good condition. Flavor is rich, sweet and luscious. The leading market variety for main crop. No doubt the most popular red raspberry known to fruit growers today; it certainly leads all others in points of productiveness, quality and appearance, and by long odds in acreage grown.

Twenty-five, 30 cts.; hundred, 85 cts.; thousand, \$7.00.

Early King—This new variety is coming to the front rapidly. Among its many points of excellence are these: Extreme earliness, canes strong growing and hardy, never having winter killed since its introduction. Very prolific, bearer of large, firm and bright colored fruit. I would recommend it as best early red raspberry.

Twenty-five, 30 cts.; hundred, 85 cts.; thousand, \$7.00.

St. Regis Everbearing Red Raspberry

This was introduced several years ago by J. T. Lovett, of New Jersey, and at first I did not take any stock in it, for I thought it was impossible for plants set out in April to bear ripe fruit in June for an ordinary Red Raspberry bush will die back when transplanted in the spring, sending up new shoots from the roots. I have changed my mind since planting quite a lot last spring, for those set out in April had quite a show of fruit in early summer and continued bearing until killed by frosts; the later crop coming on the tips of the new growth.

St. Regis is a sure enough "everbearer" and quite distinct. The new canes do not die back after fruiting in the fall as second growth canes on ordinary varieties usually do, but keep green through the winter, bearing a full crop the following season. It is also very hardy, having withstood the severest winters.

Twenty-five, 75 cts.; hundred, \$2.50; thousand, \$20.00.

BLACK OR CAP VARIETIES

Plum Farmer

While this is not a brand new sort, having been grown in New York State for several years, it is not widely disseminated.

"This grand blackcap raspberry was found by us in a lot of blackcap plants received from Ohio some years ago. We have fruited it and sold plants from it for nearly fifteen years, and in all this time, while we have tried numerous varieties, we never have seen anything that could near approach it in value. The plants are fine growers, being more free from diseases of blackcaps than other varieties; are clean silvery bluish in appearance when ripened in the fall, and when loaded in fruit are a sight to behold. It ripens very early and most of the fruit is produced in one week. It will outyield any blackcap we have ever seen. The fruit is very large, thick meated and very firm, making a good berry to evaporate or ship to distant markets."—L. J. Farmer.

Above description is taken from a previous catalog. We had a chance to see this in fruit the past season and have no hesitancy in saying that it is easily the best blackcap we have growing today. Cane is healthy and strong growing, has many laterals, thus giving lots of bearing wood, insuring its heavy bearing, while the berry is very large and of fine quality.

Twenty-five, 40 cts.; hundred, \$1.50; thousand, \$12.00.

Cumberland—This has been named the "**Business Blackcap**" by the introducers, and has been loudly praised by all who have grown it. It is a very large berry of fine flavor, rich and sweet, and of jet black color with slight bloom. The cane is of extreme hardiness, very strong growing and free from anthracnose.

It is a mid-season variety following the early sorts, but ripening ahead of Gregg.

Without doubt this is the most popular Black Raspberry grown today, there being perhaps twice the acreage set to Cumberland in this locality of any other sort.

I do not mean to say that it has no failings, because I do not think we have reached "perfection" as yet in any one variety. The worst fault I find with Cumberland is that in a wet season it is apt to become water-soaked and of poor quality. It is the heaviest growing bush of any that I am acquainted with and stands up well with its immense loads of fruit. My friends will make no mistake in planting this for either home use or market.

Twenty-five, 35 cts.; hundred, \$1.25; thousand, \$9.00.

Gregg—My experience is that Gregg is quite hardy on well drained soil, but does not love wet feet and winter kills badly on wet ground. The berries are covered with a whitish blue bloom, which in its first dissemination was mistaken for mould or mildew and hindered the sale of fruit on the market; but since be-

coming better known, this sort is very popular in all sections, and I do not hesitate to class it as the **best late** market sort.

Twenty-five, 35 cts.; hundred, \$1.25; thousand, \$9.00.

Kansas—Strong, vigorous grower, standing extremes of drouth and cold and bearing immense crops. Early ripening, just after Palmer. Berries nearly the size of Gregg, of better color, jet black and almost free from bloom, firm, of best quality, present a handsome appearance, and bring highest price in market.

Twenty-five, 30 cts.; hundred, \$1.00; thousand, \$8.00.

Columbian (Purple)—The Columbian is a variety of the Shaffer type, of remarkable vigor and productiveness. It is hardy and propagates from tips. Fruit very large, often an inch in diameter, shape somewhat conical, color dark red, bordering on purple; adheres firmly to the stem and will dry on bush if not picked; seeds small and deeply imbedded in a rich, juicy pulp with a distinct flavor of its own, making it a most delicious table berry.

In my estimation this is the most valuable purple cap yet produced, as it is more hardy in cane and certainly more prolific, and fruit of larger size than any other sort I am acquainted with.

Twenty-five, 50 cts.; hundred, \$1.75; thousand, \$15.00.

Dewberries

There is great diversity in methods given for the cultivation of this fruit. Some say train to stakes or wires; others to let lie on ground and grow at will, while still others advise cutting off all the growth to the ground immediately after fruiting, then allowing the bush to form for the next season's crop. I have never tried this latter method, but the Lucretia is such a rampant grower (often running 12 to 15 feet) that I have no doubt it would make plenty of wood before the growing season ended. This would be the easiest way to grow, if successful, as it would be very little work to clean out a field after fruiting as compared with having to work amongst the new vines if they should be left from early spring. Of course, the ground would have to be kept cultivated well while this growth was being made, especially in dry location or season.

Lucretia—This is counted as the **standard** of all dewberries, is earlier than the earliest blackberry and as large as the largest of them. The canes are of great hardiness and exceedingly prolific, thriving everywhere, of slender, trailing habit and entirely free from disease and insect attacks. The fruit is large and handsome, jet black, rich and melting; ships well and keeps well. We picked these berries the past season with the raspberries, bringing \$2.00 to \$2.50 per sixteen-quart crate in Chicago market. I would advise my friends all to try at least a few of them in their gardens.

Twenty-five, 35 cts.; hundred, \$1.00; thousand, \$8.00.

Blackberries

Blackberries should be planted in rows six or seven feet apart and three to five feet in the rows. Keep the ground light and rich. Pinch the canes back when they have reached the height of from two to three feet.

Our blackberry plants are "sucker" plants. These "sucker" plants are dug from between fruiting rows, or where "root cutting" plants have been taken, leaving the broken roots in the ground which have thrown up shoots, or suckers, as we term them. When properly dug with cross roots, these make first class plants, and prove about as satisfactory as, and at a much lower cost than, "root cuttings."

Ward—Undoubtedly a seedling of the Kittatinny, which it resembles, having all of its good qualities and none of its defects. Healthy, strong grower with sturdy canes producing fine large fruit, black throughout, without core and of excellent quality. Has never suffered from winter injury in New Jersey. An exceedingly prolific sort, the bushes being covered with its fine fruit, producing as many bushels per acre as the Wilson in its prime.

This is a new variety that was listed last year for the first time, although I have fruited it several seasons. I find that it proves quite hardy in bud and cane, withstanding our winters without protection.

To those who remember the old Kittatinny, this will prove an acceptable variety, as it is much like that sort in manner of growth and in quality of berry, while it is not troubled with "orange rust," which has practically destroyed the Kittatinny.

My stock of this sort is limited and I will offer while they last at following prices:

Twenty-five, 40 cts.; hundred, \$1.50; thousand, \$12.00.

Eldorado—In other years I have headed our list with Eldorado, but this time I am going to give it second place as I think Ward is fully as good a berry in every way, and much more productive.

However, I do not mean to infer that Eldorado is not a first-class variety. For years it has been a standard of excellence in all points, with us; superior quality, large size, hardness of bud and cane, sells well in market as it is jet black and holds its color well, berry large and juicy, without core, entire freedom from **Orange Rust**, and a prolific bearer.

What more can we say? Try it for yourselves, giving it a good strong soil, full of humus; prune and cultivate properly and my word for it, you will be pleased.

Twenty-five, 40 cts.; hundred, \$1.50; thousand, \$12.50.

Grape Vines

The grape is one of the easiest fruits to grow and should be in all collections. When once well established, vines will continue in bearing a long time with very little care, other than the cutting back of the extra growth, which should be done in winter or very early spring (before sap starts to circulate). This pruning is essential to the healthy growth of the vine and its fruitfulness. The grape is fast becoming a leading fruit in our section of Michigan, and there is no reason why it should not be grown in many other sections of our country. With such hardy varieties as Concord, Worden and Niagara, no one need be without at least a few for the home use, as the vines can be taken off the trellis for the winter, and if covered lightly with some kind of mulch will stand the extremes of our northern climates. Owing to the very heavy demand and a material shortage of stock for this season, the prices are somewhat higher than in recent years. My vines are all New York grown, and will be first class, and of grade represented.

Niagara (White)—Vine hardy, an unusually strong grower; bunches very large and compact, sometimes shouldered; berries as large or larger than Concord; mostly round, light greenish white; semi-transparent, slightly amber in sun, skin thick, but tough, and does not crack; quality good; very little pulp, melting and sweet to the center.

First-class one year plants: Dozen, 75 cts.; hundred, \$4.00.

Concord—A large, purplish, black grape, ripening about the middle of September; vines remarkably vigorous and free from disease; the standard for productiveness and hardness all over the country.

One year, No. 1: Dozen, 50 cts.; hundred, \$2.50.

Worden—A splendid, large grape of the Concord type, but earlier, larger in bunch and berry, and of a decidedly better quality; vine harder than that old standby and every was as healthy. A very popular sort, planted largely for the market; next to Concord in number used.

Fine one year plants: Dozen, 60 cts.; hundred, \$3.50.

Moore's Early—A black grape. Bunch large, berry round, quality better than the Concord; vine exceedingly hardy. Its earliness makes it desirable for an early crop, and more particularly adapts it for New England and the northern portion of the United States, maturing as it does ten days before the Hartford and twenty days before the Concord. No. 1, one year: Doz., 75 cts.; hundred, \$4.00.

Brighton (Red)—Perhaps the best red grape in cultivation. Bunch large and compact, a strong grower and very productive; quality good. Fine one year plants. Dozen, 75 cts.; hundred, \$4.00.

Niagara

Currants

A cool, moist location is best for this fruit, and for this reason succeeds admirably when planted by a stone wall or fence; being benefited by partial shade. Plant in rows four feet apart, and the plants three feet apart in the rows. Keep the ground mellow and free from weeds and grass, using fertilizer copiously. Mulching is necessary for the best returns.

Perfection—This new currant was originated by C. G. Hooker, of New York State, by crossing the Fay's Prolific with the White Grape Currant. It has the large size of the Fay, with the extra good quality and great productiveness of the White Grape. The color is beautiful bright red, and is less acid and of better quality than any other large currant in cultivation. Perfectly healthy, and a vigorous grower, and in fact the best currant for home use or market purposes under cultivation today. In July, 1901, it was awarded the \$50.00 Barry gold medal by the Western New York Horticultural Society after a trial of three years. It also received the highest award given any new fruit at the Pan-American Exposition, and it also received the only gold medal awarded to any currant at the St. Louis Exposition. It has also received a great many testimonials from the highest sources in this country. We show a natural size cluster of this fruit reproduced from a photograph taken at the New York Experiment Station. I think all who want a fancy fruit of this sort will do well to try a few. Two-year plants.

Twelve, \$1.50; twenty-five, \$3.00; hundred, \$10.00.

Wilder—A remarkable variety, for which we predict great popularity, both for table and market. One of the strongest growers and most productive. Bunch and berries very large, bright attractive red color, even when dead ripe; hangs on bushes in fine condition for handling as late as any known variety. Compared with the celebrated Fays is equal in size, with longer bunch, better in quality, with much less acidity; ripens at same time, continues on bush much longer; fully as prolific, in some trials largely outyielding it. Recommended by our Experiment Station as the best red currant. Strong plants.

Dozen, 75 cts.; hundred, \$4.50.

London Market—Of English origin. As compared with Victoria, it is larger, more productive, much stronger grower, less infested with borers, and retains its foliage until frost comes. It has produced twice the amount of fruit the Victoria did under the same conditions; a very strong and upright grower. Strong plants.

Dozen, 75 cts.; hundred, \$4.50.

White Grape—Very large, yellowish white, sweet or very mild acid; excellent quality and valuable for the table. The finest of the white sorts. Dozen, 75 cts.; hundred, \$4.50.

Perfection

Gooseberries

The same soil and conditions best adapted to currants will be appropriate for gooseberry culture. The American varieties of gooseberries are among our hardiest plants. All of the standard sorts of the present day are cultivated forms of a native species natural to the upper Mississippi Valley, and in this region the cultivated sorts seem to reach their highest development. Clean culture should be given until the plants are well established, usually about the third year; after this they may be permanently mulched. As the best fruit is borne on the two and three-year-old wood, a certain amount of pruning will be necessary to encourage a strong growth of canes and in the removal of the older wood after bearing.

Downing—This is without doubt the best gooseberry for general cultivation that is offered today. It is an American or Native seedling, not an English sort. The latter are very hard to grow successfully in this climate on account of weak foliage which is very susceptible to mildew. When this disease attacks the gooseberry it causes the foliage to drop before the berries are fully grown and materially injures the crop. Downing is a yellowish-green sort, and of good size, being a strong growing bush and a very prolific bearer. Plants of all varieties of gooseberries are in light supply and in very good demand, and the price is high.

Dozen, \$1.50; twenty-five, \$2.50; hundred, \$8.00.

Houghton—An enormously productive and always reliable old sort; of vigorous, yet rather slender, spreading growth; not subject to mildew. Fruits of medium size, smooth, pale red; tender and good.

Dozen, \$1.25; twenty-five, \$2.00; hundred, \$7.00.

Downing

Asparagus Roots

When planting asparagus roots, set four to six inches deep, and about 12 inches apart in the row, covering with only three inches of soil at first, and filling in the trenches as the plants grow.

The asparagus bed is apt to be neglected in the early fall. Before the 1st of September the tops should be cut, and the bed or field cleared of weeds. It is highly important that all the seed should be taken off, as the greatest enemy the asparagus has in the way of weeds is asparagus, and it is almost impossible to get clear of superfluous plants, when once established. When this work is finished, cover the bed to the depth of three inches with coarse manure, which will not only enrich the soil, but it will keep out the frost, which is highly essential.

The first work in the spring should be to remove all the covering except the fine manure, which should be carefully forked in, so that the crowns will not be injured by the tines of the fork. Forking the beds should not be neglected, as the early admission of the sun and rain into the ground induces the plants to throw up shoots of superior size. Another step in the right direction is to keep the ground entirely free from weeds the entire season, as these take from the plants the strength required for their own growth and the asparagus needs it all.

Palmetto—A valuable new variety and is being planted very largely. It is nearly twice the size of Conover, fully as early, and as productive. The flavor is excellent.

Hundred, 75 cts.; thousand, \$4.00.

Giant Argenteuil—This variety is largely grown in France, but has become adapted to our soil and climate. Is noted for its earliness, productiveness and immense size of stalks. Remarkably healthy. Hundred, 75 cts.; thousand, \$4.00.

Rhubarb or Pie Plant

This deserves to be ranked among the best early products of the garden. It affords the earliest material for fine pies and fresh table sauce, continues long in use, and is valuable for canning. Make the ground rich and deep, as recommended for asparagus. Plants four feet each way.

Myatt's Linnaeus—Those who have never grown this variety, which is of superior quality, will hardly recognize the old "Pie Plant." It is an early, tender variety, without being in the least tough or stringy, with a mild, sub-acid flavor.

Good strong roots, 5 cts. each; dozen, 50 cts.; hundred, \$4.00.

Price List for 1914

Strawberry Plants

If by mail, add 10c per twenty-five, or 25c per hundred, for postage.

At thousand rates, by freight or express only. Fifty of one variety at hundred, or 300 of one variety at thousand rates.

Variety	25	100	1000	5000	Variety	25	100	1000	5000
Aroma	\$0.20	\$0.60	\$3.50	\$15.00	Luther	\$0.15	\$0.50	\$2.50	\$10.00
Bubach	.20	.60	4.00		Lovett	.15	.50	2.50	10.00
Beder Wood	.15	.50	2.25	9.00	Marshall	.25	.75	5.00	
Brandywine	.20	.60	3.50	15.00	Missionary	.15	.50	2.00	9.00
Chesapeake	.25	.75	5.00	20.00	Norwood	.25	.75	5.00	
Crescent	.15	.50	2.25	9.00	Pocomoke	.20	.60	3.50	15.00
Excelsior	.15	.50	2.50	10.00	Ryckman	.15	.50	3.50	
Fendall	.20	.60	4.00	17.50	Sen. Dunlap	.15	.50	2.50	10.00
Glen Mary	.20	.60	3.75	16.00	Splendid	.15	.50	2.50	10.00
Gandy	.20	.60	4.00		Sample	.20	.60	3.50	
Gibson	.20	.60	4.00	15.00	Son's Prolific	.20	.60	3.50	
Haverland	.20	.60	3.50	15.00	Steven's Late	.20	.60	3.50	15.00
Helen Davis	.20	.60	4.00	17.50	Wm. Belt	.20	.60	3.50	15.00
Heritage	.20	.60	3.50	15.00	Warfield	.15	.50	2.50	10.00

RASPBERRY PLANTS

By express or freight only, charges not paid.

Variety	25	100	1000
Cuthbert	\$0.30	\$0.85	\$7.00
Early King	.30	.85	7.00
St. Regis (Everbearing)	.75	2.50	20.00
Columbian	.50	1.75	15.00
Cumberland	.35	1.25	9.00
Gregg	.35	1.25	9.00
Plum Farmer	.40	1.50	12.00
Kansas	.30	1.00	8.00

BLACKBERRY PLANTS

Variety	25	100	1000
Eldorado	\$0.40	\$1.50	\$12.50
Ward	.40	1.50	12.00
Lucretia, Dew.	.30	1.00	8.00

CURRENTS

Variety	12	100
Perfection	\$1.50	\$10.00
Wildor	.75	4.50
London Market	.75	4.50
White Grape	.75	4.50

GOOSEBERRIES

Variety	12	100
Downing	\$1.50	\$ 8.00
Houghton	1.00	7.00

GRAPE VINES

Variety	12	100
Concord	\$0.50	\$ 2.50
Worden	.60	3.50
Moore's Early	.75	4.00
Brighton	.75	4.00
Niagara	.75	4.00

Instructions to Purchaser

My Location—I am located in Southwestern Michigan, about fifteen miles south of St. Joseph, near Lake Michigan, in what is known as the "Great Fruit Belt."

Railroad Connections are good. Our line of road, the Pere Marquette, runs mail and express trains direct to Chicago; time about three hours. Within fifty miles this line connects with the great trunk lines, east, west, north and south.

Telephone—Long distance telephone in our office.

Mail Orders—I can ship strawberry plants by mail when so desired, and on small amounts for long distance this is much the cheaper transportation, but not so safe as express, as the mode of packing is of necessity different; not having the chance for ventilation, plants are more likely to heat enroute.

The new Parcels Post law does not affect this class of goods, the rate remaining the same—one cent for each two ounces. However, the limit of weight is changed, allowing us to ship eleven pounds instead of four as formerly.

I much prefer express shipments, and must decline any large orders to be shipped by mail.

By Express—This is the safest way to ship live plants, as it makes fast time with the least liability of delay. Sometimes when transferred to another company the charges seem rather high, but when the nature of the service is considered it is really the cheapest in the end.

We have only the United States Express Company; however, we find little difficulty in reaching most of our customers by this company, and its connections.

All express companies now bill nursery stock at "General Special" rate, being a reduction of twenty per cent. from the merchandise rate, also making it a "Pound" rate with a minimum charge of thirty-five cents.

Freight—Early in the season I can ship by freight with comparative safety, but there is a possibility of delay and consequent loss. Parties ordering stock shipped by freight will have to take the risk, as I cannot be responsible for loss, if any, on stock shipped in this manner.

I do not undertake to guarantee safe arrival by any of these modes of transportation, as I have no control of stock after it leaves my hands; however, it is to my interest, as well as the interest of my customers, to have stock reach the purchaser in good condition, and I shall always endeavor to so pack and forward goods that they may prove satisfactory.

My Packing is done in the best possible manner and under my personal care. I use light crates or baskets with plenty of moss for packing strawberry plants, and barrels and boxes for other sorts, making no charge for the work or package. My long experience in this line gives me a decided advantage in the matter of **safe packing**. I also have experienced help who have worked with me several years. Of course, we do not claim infallibility, and are always ready to make reparation where at fault.

Shipping season begins about April 1st, or possibly last week in March, and continues until about 1st to 10th of May.

Terms—One-fourth cash with order, balance before stock is shipped. Or I will ship C. O. D. if one-half of the amount accompanies the order and purchaser will agree to pay the return charges on the money.

Remittances may be made either by New York or Chicago draft, postoffice or express order, or where none of these may be had, by registered letter.

Rates—Fifty plants of one variety at hundred rates; or three hundred plants of one variety at thousand rates. When an order amounts to \$10.00 or over, it may be counted at the thousand rate, regardless of number taken. No order booked for less than \$1.00.

My Prices are as a general thing very low, but on large lists we are sometimes able to give better rates and invite all wanting **large lots** to write for estimates.

By **large lots** I mean a quantity; ten to twenty thousand and up.

Order Blanks—Use the order blank enclosed when ordering, being careful to write your name **plainly**, giving Postoffice, County and State, and do this every time you write. Also keep a **copy** of your order yourself. Be particular to say how goods are to be sent, whether by mail, express or freight. All orders are acknowledged immediately upon receipt. If you do not receive an acknowledgement in a reasonable time, write again.

When to Order—Early, by all means. The rule generally is, "First come, first served," also the early orders find full stock, while later some varieties are liable to be exhausted. Orders are filled in rotation as received, except sometimes our southern patrons are ready to set in advance of those further north; these orders we usually crowd first, and get them out as soon as frost is out of the ground in spring.

Our customers will please remember that the time for filling orders is short, and it would facilitate our work greatly if orders were sent before the rush. This is also an advantage to our customers, for they get what they order, no varieties being sold out. To encourage these early orders I will make this offer:

Premium Offer—On all orders at catalog rates received during January and February with cash in full, I will allow a cash discount of 5 per cent, or for every dollar sent during these months you may order additional stock to the amount of ten cents. (See back cover of this catalog for other premium offers.)

Substitution—In ordering please state whether I shall substitute some other variety in case the kind ordered should be exhausted. If not forbidden I claim the right to substitute something of equal value, but always label true to name. I always aim to substitute sort similar in quality and season and always something listed at equal or higher rate.

Guarantee and Condition of Sale—While I take great pains to have stock true to name and hold myself ready upon proper proof to refund money or replace any that proves untrue, it is mutually agreed that I shall not be liable for a greater sum than the amounts paid for such stock.

Every order received for articles named in this catalog will be received and executed on the above conditions only, and with the distinct understanding and agreement on the part of the purchaser that I shall in no case be liable for a greater amount than the sum originally paid to me for the stock in question.

References—I refer to the United States Express Agent or Postmaster at Bridgman; Union Banking Company, St. Joseph; or Bradstreet's Commercial Reports, as to my standing and reliability. Parties writing any one of the above, please enclose stamp for reply.

Perennial Phlox

A HARDY FLOWERING PLANT much used for either background or border for lawn or home grounds, and is very easily grown, giving a profusion of bloom through midsummer and continues until killed by frost.

The above illustration gives a fair idea of its manner of growth, although it fails to show its full beauty as the colors are lacking.

Our plants are two years old and will bloom the first season. They are "Mixed" seedlings grown from seed saved from twelve named varieties, running through the different shades of red and including pure white. I can not furnish special colors, but will well assort each collection.

I am going to offer these as Premiums again—giving six plants with each \$2.00 order, or fifteen with a \$5.00 order.

Regular sale price, 5c each; 50c for 12; \$1.00 for 25.

Additional Premium Offers

We shall offer the **St. Regis Everbearing Red Raspberry** as a Premium, giving six plants with each \$2.00 order, or fifteen with an order for \$5.00.

With an order amounting to \$2.50 or more I will include six "Superb" Fall-bearing Strawberry plants, or with an order to \$5.00 or more I will include six "Progressive" Fall-bearing Strawberry plants.

With an order amounting to \$10.00 or more I will include one year's subscription to **The Garden Magazine**. As its name indicates it is devoted to the interests of

the garden and farm. Each issue has excellent articles from able writers, and is well worth the subscription price of \$1.50.

On all orders amounting to \$5.00 or more you may add 10 per cent in stock from the list.

Please notice: These Premium Offers must be mentioned when the order is sent; also that in either of these offers the amount must be figured at the Catalog price per thousand and not the five thousand rate, nor where a special price has been quoted; also only one premium with each order.