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1889.

SPRING CATALOGUE

—OF—

STRAWBERRY PLANTS,

GROWN AND FOR SALE BY

M. CRAWFORD & SON,

Cuyahoga Falls, O.

• ———— FREE TO ALL. ———— •

AKRON:
BEACON PUBLISHING CO., PRINTERS.

TO OUR PATRONS.

Like the good deacon who rose to speak in meeting, we want to say a few words before we begin. We request you to read this catalogue through carefully before asking any questions. You may save yourselves some postage and us some unnecessary correspondence by doing so.

We have gained our present custom by sending good plants, true to name, liberally counted, well packed, and warranted to reach their destination in safety. This year we have a finer stock than ever before. During the past season we have discovered what we consider to be perfection in packing plants to be sent by express. We pack them all in handle baskets lined with oiled paper, with plenty of moss, and a cloth cover sewed over all. About five hundred may be packed in a half bushel basket and weigh about twelve or fifteen pounds. We still warrant plants to reach their destination safely.

We grow no other stock except strawberry plants and grow them for the plants and not for fruit. In short, the growing of strawberry plants for sale at retail is our business, and we feel confident that we can give fully as good satisfaction as any growers who make them of secondary importance.

Although great care is taken to avoid errors, they will sometimes occur. Those who find anything wrong with their plants will confer a favor upon us by informing us at once, thus giving us an opportunity of rectifying the mistake, and not waiting several months and then complaining. We do our utmost to fill orders promptly, and must assure our friends that it is useless to write begging us to hurry.

Our shipping facilities are very good. The Adams, American, and Pittsburgh & Western Express Companies have offices here. We will consider it a favor if, in ordering plants to be sent by express, our customers will name the company by which they wish them shipped.

Money may be sent by American Express or Post Office money order, draft on New York, or registered letter. Sums of less than a dollar may be sent by postal note or in postage stamps at our risk. *Please do not send private checks.*

As we cannot fill very early orders from the South or very late ones from Canada, either to the satisfaction of our customers or ourselves, we would respectfully refer such parties to Rev. W. A. Mason, Crystal Springs, Miss., and Mr. John Little, Granton, Ont.

We frequently receive inquiries concerning the best place to purchase pots for potting plants. We can heartily recommend to all such Messrs. Clark & Limbert, Tallmadge, O. Their goods are first class and very cheap. Our dealings with them have been entirely satisfactory to us.

It is our present intention to follow our usual custom of publishing a summer report on strawberries to be sent free to our customers about 1st of July.

All who receive this catalogue are requested to send us the names of friends or neighbors who would be interested in it, that we may send them copies.

THE STRAWBERRY.

Of all the fruits which a bounteous Nature has provided for the use of man, none, we think, contains so many charms as the strawberry, none so nearly fills the requirements of a universal favorite. Coming at a time of the year when the human appetite is in its most capricious state, when the long months of absence of nearly all fresh fruit has created a peculiar craving for it, the strawberry fills a want which but for it would of necessity remain unsatisfied. Perhaps this want makes it more highly prized than otherwise it would be. Still, we cannot believe it would take a lower place if it came at any other season of the year. It is to fruits what the rose is to flowers, not so conspicuous as some, not so hard to grow as some, but still the queen. So beautiful in form and color as to be an ornament to any table, so fragrant as to please the most fastidious nostril, in flavor so delicious and in healthfulness so good as to appeal to the most capricious taste or delicate stomach, it comes as a welcome visitor to the housewife, epicure, and invalid, and grieves no one unless it be the doctor.

But not all its charms are in the eating of it. No branch of horticulture offers more inducements than the growing of strawberries. Thriving more or less on any soil, in any place from Newfoundland to California, it still repays high culture as well as any fruit grown in this latitude. Requiring neither much land, expensive tools, much capital nor much physical strength, its culture recommends itself at once to poor men who have small places, city men who long to break loose from the desk and delve in Mother Earth, old men, women, boys and girls, all indeed who love to till the soil, to watch the growth of plants, study their habits, supply their wants, and reap their fruits. Sure to grow, almost equally sure to sell at paying prices, exhausting neither to the land nor the grower, but leaving both richer than it found them, this fruit offers to those who raise it employment at once pleasant, easy, refining, and profitable and an opportunity for doing good by giving work to many a child and woman and by sending health and happiness wherever they send their berries.

The strawberry plant is a stemless, herbaceous perennial, consisting of the leaves, which are but a few inches high; the roots, which generally extend from six inches to a foot in depth, and an equal distance on either side; and the crown, where both the roots and leaves originate. As soon as the frost leaves the ground the plant begins to grow and continues to do so until fruiting time. Exhausted by bearing it grows but little until the cool, damp weather of the early autumn, when it sends out new leaves and roots above the old ones, which with the lower part of the crown die away and decay. Thus is the whole plant renewed each year. The new roots commence at once to lay up stores in the crown for next year's crop, and thus the process might go on from year to year if care were taken to raise the surface of the bed each year to keep pace with the upward movement of the crown. In practice, however, this is seldom done; and, as the result, the plants generally die in four or five years, unless destroyed before that time, as usually they are.

Success in strawberry culture depends almost entirely on the person and not on the soil, locality, climate, or other circumstances. If the grower the principal requisites are an intense interest, leading to the careful study of the strawberry and its wants, and a faithful and timely satisfying of these wants, even the smallest. While it will bear as much neglect as anything we cultivate, for fine fruit, satisfaction, and profit, it demands attention and care. For want of giving these, the great majority of people who attempt this work fail—just as they do in any other work. Every one gets his just measure of success. What one man, however, considers success, another considers failure. A friend in Wisconsin calls less than two hundred bushels per acre a failure, while many of

our acquaintances never have over one-half of that amount. Mr. John F. Beaver, of Dayton, O., would discard any variety that would not produce berries from six to nine inches in circumference, while very many experienced growers never produced a six inch berry. One of our correspondents in Georgia, a lady over sixty years of age, raised with her own hands a quarter of an acre of strawberries, which, although somewhat damaged by frost when in bloom, gave her in the season of 1887 one hundred and forty-six dollars' worth of fruit besides a quantity she gave away and used at home. Another customer of ours raised in '88 four hundred and fifty bushels on one and a half acres.

Poor land with the most ordinary care will produce a lot of small berries that will give neither pleasure nor profit, while the same piece of land with sufficient plant food and the best of culture will produce at the rate of three or four hundred bushels of the choicest fruit per acre. In the former case the grower, sour and unhappy, is at the mercy of his customers; in the latter, dealers will be striving with each other to secure the fine fruit at a high price and complimenting the grower on his success.

Believing that profit and satisfaction come from a small area well cared for rather than a large plantation somewhat neglected, we never encourage poor culture but give directions which, if followed, will bring about the best results, leaving each to be more or less thorough as he may think best.

Soil. The best is that which is deep, rich, and moist. The strawberry does not live on the soil, but on the plant food contained in it. In fact it serves as anchorage for the plant and as a reservoir for food and moisture. We have seen wonderful crops on muck so wet that tadpoles bred in the water that stood in the dead furrows. One of the finest crops ever seen was grown on muck that was constantly saturated with water from springs issuing from the sides of a steep bank. A friend in Wisconsin raised four hundred bushels from two acres of land on which no rain fell after May 5 and which was hot and so dry that one's hand could be put into the cracks that extended in every direction. Even on gravel, sand, or heavy clay the finest crops may be produced if the wants of the plant are supplied.

Preparation of the Soil. Where there is too much water provision must be made for carrying it off. This is best done by underdrains. A strawberry bed may be submerged for weeks in the winter without injury, but water standing among the roots in the growing season is fatal, as they will perish if the air is shut out. After removing surplus water, the soil must be stirred to a good depth, but without bringing much poor subsoil to the surface at one time. The common method is to plow and harrow once as for a corn crop. On some soils this may suffice, but on clay or heavy loam it is a good plan first to harrow thoroughly, plow shallow, harrow again, plow deeper, and then harrow again. The more thoroughly a heavy soil is stirred the better it will resist drouth.

Fertilizers. Unless the land be rich, plant food in some form must be added. If stable manure can be had, nothing else will be required. If the soil is heavy, fresh manure may be plowed in, but if light, that which is well rotted should be scattered on the surface. A good way is to plow a few furrows where the center of each land is to be, put the manure in piles on that, and, as soon as the plowing is done, spread and harrow it in. Where it cannot be had at planting time and the land is in fair condition, the planting may be done without any fertilizer. The next winter the bed may be covered with fresh stable manure, which will both enrich the soil and give the needed winter protection.

If one has to haul manure very far, it may pay better to rely on commercial fertilizers. The deficiencies of any soil may be supplied by unleached wood ashes and bone dust, if a good quality is used. That made from bones which have lain in the woods for years or from fresh ones from which the gelatin has been extracted, is deficient in nitrogen. A liberal quantity—half a ton to a ton per acre—should be used as it decomposes slowly and thus becomes available gradually. It may be drilled in or sown on the surface after plowing and harrowed in. From forty to eighty bushels of wood ashes may be applied in the latter way or sown on the surface after the plants begin to grow, when they will get worked in with the stirring of the soil.

From five to ten hundred pounds per acre of any complete fertilizer, applied like bone dust, will be sufficient.

Plants and Planting. After preparing the ground the next question is that of plants. In getting a start in the business or for the purpose of testing new varieties it is necessary to buy plants, but the market grower should, aside from that, always raise his own. He will then be sure of their purity and freedom from disease and will have them fresh, just when the ground is ready for their reception, and free from the cost of transportation.

Wherever the plants may be procured the utmost care should be taken to keep them in safety while out of the ground. They should neither be allowed to become dried in the wind nor should they be kept in a place so damp as to cause a blanched growth.

The question of varieties which would logically come here will be discussed later.

While the fall is the best time for planting small quantities of new varieties for testing, the main planting of strawberries should be done in the early spring, the earlier the better. When we consider that the plants are so many employees laying up stores for next year's crop of fruit, we can easily see how important it is that they be set to work early and under favorable circumstances.

In planting we are accustomed to shorten the roots to about three inches, place the plants in a pail with water enough to cover the roots, make a hole in the ground with the right hand, take a plant from the pail with the left and hold it against one bank of the hole with the crown even with the surface, while a little damp earth is pressed firmly against the roots with the right hand. The hole is then filled with loose earth. The soil adheres to the wet roots, thus causing but little check to growth and rendering watering unnecessary unless the planting has been put off until late in the season. If for any reason the ground is hard or lumpy, the holes may of course be made with a spade or trowel.

Cultivation should be thorough. The presence of air at the roots seems to be a necessity to growth which a frequent stirring of the soil alone can provide by breaking the crust. Cultivation, however, serves two other purposes, making the ground loose and killing weeds. A few inches of loose earth on the surface acts as a mulch and enables plants to go through a dry time with almost no check. As every rain helps to form a crust, the surface should be stirred immediately after it. This, however, might not be sufficient to prevent weeds from making their appearance; and, as it is by far the cheapest way to kill them before they come up, cultivation should be frequent. The grower must prevent two things, the forming of a crust and the growth of weeds.

Irrigation has been talked of, but it is rarely practicable. Many have been at great expense to set up wind mills and build tanks, but few of them ever make it profitable. It requires no less than 35,000 gallons of water per acre twice a week for a strawberry crop. Ten ordinary mills would not raise this amount. Stirring the surface and mulching will accomplish far more for the money.

Methods. Before planting it will be necessary to decide the method to be employed. The great bulk of this fruit is grown in matted rows about as follows: The rows are four feet apart, and the plants from one to three feet apart in the row according to the habits of the variety and the fertility of the soil. The blossoms which will appear must all be cut off at once, lest the plant exhaust itself by producing fruit before it has fully recovered from transplanting. It is advisable to cut off all runners until they commence to come out fast and strong. By doing this the plant is strengthened and cultivation is rendered easier. In the spring paths must be made for the pickers. The principal objection to this plan is that each plant is deprived by its neighbors of sufficient light, air, food, and moisture and is thus prevented from producing a full crop of good fruit. Some careful growers thin out their plants in October, leaving them six inches apart. This is a great improvement on the regular matted row system.

By the *hill culture* method the plants are set in rows three feet apart and a foot apart in the row, and all runners are cut off during the season. This is a

pleasant method of raising berries, as there are no runners in the way; but, although the best fruit is produced by it, there are but few who desire to set out so many plants and cut off so many runners. Nearly all the fine berries at Barnesville, O., are grown by this method. Where one is simply growing a supply for home use and doing the work by hand, he may set the plants much closer—say ten by thirty inches. An excellent plan is to set them thirty by thirty inches and let two or three runners root between each two plants about 1st of September, thus giving plenty of room all summer and still allowing time enough for the young plants to be established before winter.

Winter Protection. In this climate, it is always best to give the strawberry some winter protection, not so much to keep the plants warm as to shade the ground and prevent the freezing and thawing which heaves them out. A two inch covering of straw from which the chaff and loose grain have been shaken, is usual for this purpose. There are, however, many substitutes which may be used, viz : marsh hay, leaves, pine needles, potato tops, corn stalks, spent tan bark or nearly any kind of litter. Stable manure is particularly good. Where hill culture is followed, half an inch of earth may be placed on each plant. This covering should be done late in the fall when the ground freezes. The cover should be removed from immediately over the plants early in the spring. Late varieties may be made later by leaving it on for some time. The fatal effects of late frosts are sometimes averted in this way also.

SELECTIONS.

E. C. DAVIS, WINNER OF THE \$25 JESSIE STRAWBERRY PRIZE.

41 $\frac{3}{4}$ Pounds of Fruit from 12 Plants—Largest Berry 9 $\frac{1}{2}$ Inches in Size—Yielding at the Rate of 1,184 Bushels Per Acre.

Mr. E. C. Davis, of Northampton, Mass., is a noted civil engineer, who won the \$25 prize offered by Green's Fruit Grower. He simply works in his garden for recreation. He reports as follows :

My beds comprise forty-three varieties, from the earliest to the latest. Some of the beds are on a sandy, gravelly plain, with naturally very little soil excepting what is made. Others are on the alluvial meadows where the soil is naturally rich and deep. Some varieties fruit best on the former, others crave the strength and rich food of the latter for their best development. There is fun and satisfaction in fitting each variety to its proper place, and then developing its full powers. Some seem to want a full specification of conditions to be complied with before they are satisfied. Others seem to say, 'Give me half a chance and I will do my best for you.' Foremost among the latter is the Jessie. This is my second summer with it and I am entirely at a loss where to place it, as thus far it seems to do equally well on both plain and meadow land, making a larger growth of foliage on the latter, with 'honors easy' between the two as to fruit. All the plants lived and in three days after setting I could see the faint outlines of the word 'business' written on their leaves, growing plainer each day, and finally becoming fully developed and understood at fruiting time. It is simply wonderful and beats everything I have ever seen or dreamed of among strawberries. If there is any defect about it I have yet to discover it.

I never set out a plant of any kind without thoroughly preparing the soil for it, and for strawberries I work into the ground all it will hold of old, well rotted cow manure. Then I make the ground as mellow and fine as possible; the test which I apply to judge of its condition being to readily thrust my arm into it up to the elbow. When I can do this it is ready for plants.

The after culture, feeding and watering, is what tells on strawberries, particularly between the time of blooming and the ripe fruit. I treat my strawberry plants in this respect as I do my poultry and horses; feed and water them every

day, the feeding being largely with the Stockbridge Fertilizer, although I use wood ashes and bone meal freely. Then I find they can hardly be mulched too much, and especially is this true of light thin land, where the mulch retains the moisture. The strawberry plant delights in two baths every day, one of water and the other of the sun.

God might have made a better strawberry than the Jessie, but He never did. They are solid, meaty, and full from outside to center of the delicious, woody flavor and fragrance of the wild strawberry.

When as winter approaches I bid them good night, while covering with a blanket of fragrant pine boughs, and while they are resting and sleeping, I live over again in reading the periodicals on small fruit culture by my open wood fire in the winter evenings all the pleasures of my thirty summers in a fruit garden, and look forward in anticipation to the coming spring when mother nature opens wide her doors and again bids the vegetable, fruit and flower world to come forth from their winter's sleep and renew again the same friendly contest for supremacy. I uncover my strawberry beds and see the promise of the summer's fruitage in the tender leaves, and as I bade the plants good night when covering them in the late fall, so they in all the purity, freshness, loveliness and promise of their green leaves, rise up and welcome me with a glad good morning.

Northampton, Mass., Sept. 15, 1888.

MR. C. A. GREEN:—Your favor of the 6th, with check for \$25 for Jessie prize, at hand; also favor of 10th.

* * * * *

In reply to yours of the 10th, the weight given of the berries grown from 12 plants was just the plants themselves without any of the side plants or runners, as these were not allowed to grow at all from the 12 plants. An ordinary bushel basket would not cover one of the plants and fruit when in their prime.

Yours very truly,

E. C. DAVIS.

—*Green's Fruit Grower*, January, '89.

FRUIT GROWING FOR WOMEN.

A Massachusetts woman, having an hour or two each day to spare from housework, and wishing to earn a little money, decided to try raising strawberries for market. Her piece of land was fifty-seven feet long, and averaged fifty-seven feet wide. The plants were well taken care of through the season, and the last of October the bed received a final hoeing, and a little later the plants were mulched about two inches deep with pine needles. Before the picking season commenced, she bargained with a market man, a mile and a half distant, to take all her berries, by allowing him, as his share, four cents a basket for all berries sold for twenty cents and over, and three cents for those bringing less. In picking, she was careful to put in only sound fruit, to have as large berries at the bottom of the basket as on the top, and to have them heaped as high as the crate would allow. It being a poor year for strawberries, owing to the drouth, which did not affect her low ground, she received good prices. None were sold for less than fifteen cents a basket. The entire crop sold was 350 baskets, for which she received fifty-two dollars and eighty cents. Expenses were twenty-one dollars and fifty-five cents, leaving a net profit of thirty-one dollars and twenty-five cents.—*American Agriculturist*.

STRAWBERRIES.

Mr. David Kuehn, owner of the Highland Truck Farm, near Allentown, Pa., according to the *Democrat* of that place, picked and marketed 12,070 boxes of strawberries last year, from 1½ acres of land. The berries were all of prime quality and good size, or, as the *Democrat* puts it, 'the largest and best to be had.' The picking season commenced June 1, and lasted for six weeks. Mr. Kuehn gives the whole credit to the use of a high grade potassic fertilizer, which is something worth remembering.—*Green's Fruit Grower*, January, '89.

VARIETIES.

To one who would achieve the highest success a knowledge of varieties is indispensable. Some possess so little merit that no satisfaction can be had from them, even with the best of culture. Varieties that are best for one may be comparatively worthless for another who grows for a different purpose.

For exhibition, one wants size and beauty, leaving productiveness and quality out of the question.

For home use, the desirable characteristics are good quality and beauty. Firmness is not desirable except for canning.

For market, productiveness, size, bright color, and firmness are to be sought, preference being given to such qualities as are most desired. Where the best is appreciated, size and color may be even more desirable than productiveness. For a distant market firmness is indispensable.

In the following descriptions we have done our utmost to give the exact truth. It must be borne in mind, however, that fair descriptions are hard to get. Introducers, were they the fairest men on earth, are almost certain to see their pets with eyes slightly prejudiced. Moreover, neither they nor anybody else can tell what a variety will do under conditions of locality and climate different from their own. On this account it behooves everybody to buy new things somewhat cautiously. While it is generally best to test nearly every variety in a small way, it is by no means prudent to be carried away with flashy descriptions and buy high-priced plants in large quantities.

We have marked those varieties having perfect or hermaphrodite blossoms (H); those with pistillate blossoms (P). There should be *at least* one row of a perfect blossomed variety to every five of pistillate ones.

THE "CRAWFORD" STRAWBERRY.

This variety originated on our place and is so superior in every respect that we gave it the name of Crawford. It is being offered this spring by The Storrs & Harrison Co., of Painesville, O., and may be obtained in the fall from us. We take pleasure in recommending to our customers this company who will be found perfectly reliable and able to furnish almost anything desired in the way of trees, plants, and seeds. Send for their catalogue containing a full account of the CRAWFORD.

Cloud (P). This variety never enjoyed a boom, but became known and disseminated through a controversy between Messrs. Cloud and Strickland, of Louisiana, as to which of them was its discoverer and after whom it should be named. As we have never fruited it, we are largely dependent on gentlemen in the south for information regarding it. Rev. W. A. Mason of Mississippi claims on reliable testimony that it is earlier than the Crescent and twice as productive, and as large and fine as the Wilson. Of seventeen varieties on his grounds, it has the largest roots and finest foliage, and in February, '88, had twice as many blossoms as any other. Mr. D. Strickland says that it ripens uniformly, is the largest and one of the most prolific kinds ever known in Louisiana, having outyielded the Crescent by one-half, is a better shipper than either that variety or the Wilson, bringing from seventy-five cents to a dollar more per case of twelve quarts than the latter, and has been pronounced by some of the Chicago merchants the equal if not the superior of any other berry brought into that market.

With us it has made a splendid growth. The leaves are of a rather dark green and retain their freedom from rust until snow hides them from view. They have tall, strong, upright stems. The numerous runners are strong and thrifty and have that characteristic, prized by plant growers, of making the

plants as they go, thus keeping a solid row and preventing much waste in digging in the fall. The roots are wonderful. We have great confidence in the variety, as it has not yet shown a single weak point.

Warfield (P), which grows near the Cloud on our place, presents a striking difference of appearance. Its leaves are light colored, narrow, and free from rust. It sends out large numbers of rather small, red runners, which grow to the length of three or four feet before rooting more than one or two plants. All that we know concerning its fruit we have learned from other parties, mostly from Mr. Warfield himself, from whose catalogue, abounding in flattering testimonials, we quote as follows:

'After four years' trial, * * * I consider it the most valuable variety I know of, and I have been in the fruit business twenty years and have tried most of the leading varieties. * * * I grow no others now except as fertilizers. This plant was found near my barn in 1883. * * * The plant is a pistillate, a vigorous grower, with long, penetrating roots to resist drouth, blossoms with Crescent, and gets ripe at the same time; with tall leaves to protect the blossoms from spring frosts. Plants set in June previous had on a single stool 195 blossoms and berries. It equals the Wilson as a shipper, and is superior to that variety in every other respect, and superior to Crescent in every quality.'

The following from Bulletin No. 5, O. Ag. Exp. Sta., August, '88, explains itself:

'This variety made a good growth in 1887, in spite of the dry weather, and gave promise of a heavy crop in the spring. It was one of the first to succumb to the drought, however. The first and second pickings were about as early and equal in quantity to the Crescent, but after that there was a decided falling off, and no berries of any account remained after the fourth picking, while the Crescent held out much longer. The fruit is of good color and makes a fine appearance in the baskets. It is rather soft, of medium size and not of high quality, but will sell well. On the whole the Warfield is a promising variety, and is deserving of further trial. It will undoubtedly prove to be valuable in some localities.'

Pineapple (H). As of most of the other new varieties, our experience enables us to speak only of the plant and manner of growth of this variety. The leaves are large, dark colored, free from rust, and somewhat like those of the Sharpless. The plants as a whole are thick and stocky rather than tall. They are fair runners. Indeed, it has seldom been our privilege to see a finer grower. For all else that we know about it we are indebted to Mr. Albert H. Clark, of Maryland, from whose pen we quote an article which appeared in the *Vegetable and Fruit Grower* of the 10th of February, '88:

'My claim for the Pineapple is as follows: Averages larger, and is a better shipper and sells for more than Sharpless. Dark crimson color. Flavor the most delicious of any berry in cultivation. Late to very late. Outyields Crescent, planted side by side. Does not heave out by freezing and thawing like over varieties. Makes the largest plant of any variety I know of. * * * It has been tested alongside of forty varieties (all the old and new) and it surpassed them all in every respect.

'It cannot be too highly recommended and is bound to be the most valuable strawberry ever introduced, producing, under good culture, at the rate of 20,000 quarts per acre. When to this extraordinary production we add the further fact that this strawberry is of the richest crimson color, and is one of the latest to ripen, coming in when others are about gone, and bringing good prices.'

Pearl (H) was received by us last spring and, although planted late, made a wonderful growth and remained perfectly green until about the middle of August, when it was suddenly struck by rust and soon became quite brown. Up to that time we prized it quite highly and perhaps should not judge its behavior too harshly, as it was planted in a place that prevented its being cultivated as it should have been. Such testimony as the following should certainly not be disregarded:

It possesses more points of supreme excellence than any other strawberry in cultivation. It is the most productive of all berries, possessing the most uniformly large sized, symmetrical-shaped, and beautiful-colored berries. Its immensely strong, vigorous plants render it more productive upon poor land without fertilizer than others on good land with fertilizer. It is the only strawberry that surpasses the old Wilson in its adaptation to the rough and tumble treatment which has enabled that variety to stand up against all competition in the past. It is to 1888 what the Wilson was to 1860. Berries from one and a half acres from our grounds this season sold for \$743.87.—*Circular West Jersey Nursery Company.*

We had Jessie alongside with same care and fertilizing, and it did not do more than half as well as Pearl.—*Letter from S. B. Cole, Sec. W. J. N. Co., July 5, '88.*

Among the many promising new varieties of the strawberry in full bearing this year in matted row, the Pearl seems the most promising for Western culture. The plants stood the terrible heat and drought of the summer of 1887 as perfectly as the Green Prolific or Charles Downing, and the large, even-sized, smooth, firm-fleshed, and really good fruit has pleased all visitors who have tasted it. It now seems that the Pearl has come West to stay.—*Prof. J. L. Budd, Ames, Iowa, in Rural New Yorker, July 21, '88.*

This variety has fruited here but one season, and under adverse circumstances, but produced a crop that might be considered good in a favorable season, as it withstood the drought almost perfectly. The plants are healthy and productive, while the fruit, although not large, is above medium and very uniform in size and regular in outline, making a good appearance in the baskets. Further trial is necessary before speaking advisedly concerning it, but the indications are that it will be suitable for general planting. Commercial growers will do well to give it a trial.—*Bulletin No. 5, O. Ag. Exp. Sta., August, '88.*

Hampden (P). With us it has proven itself a good grower, making plants freely, but rusting slightly. For its fruiting qualities, we must refer our readers to the testimony of those who have had experience with it.

While new berries are multiplying, we are sure in offering the New Hampden we have one of great and lasting merit. Some of the claims we make for it over other well known varieties are: That it is very productive, has borne more fruit on same grounds, of larger size and better form, fine color, more firm and has superior flavor; berries double in size, easily harvested, as early as the Crescent, as late as the Cornelia. Its uniform size and color attracts buyers; and people of cultivated taste give it the preference over all others. Pronounced best by hundreds of fruit growers, and awarded the highest prize by The Hampden Horticultural Society, June 22, 1887.—*Introducers' Catalogue.*

Plant only moderately vigorous, very productive, fruit medium to large size, fine uniform shape, bright scarlet color, fine texture and good quality, and, being one of the earliest to ripen, it promises to be of great value either for home use or for market.—*J. H. Hule, in Conn. Courant, August 9, '88.*

Louise (H). We again quote the introducer: 'Originated by Nicholas Hallock, of New York, and introduced by W. Atlee Burpee & Co., last spring. In June, 1887, the Louise took first prize for best quality in competition with such favorite sorts as Belmont, Henderson, Sharpless, Longfellow, etc., also first prize for best new variety. It also took first prize for best quart of berries of any variety. The berries are of regular conical shape, with broad calyx; color, bright glossy crimson, and size large. It is medium late, with long continued season of bearing, and holds the large size of the berries throughout the season. It is immensely productive; has yielded, under ordinary field culture on the farm of the originator, four times as much as Sharpless. It has a rugged constitution, foliage plentiful and healthy, never rusts, and has borne for six years on both light and heavy soils, always yielding large crops. The large, handsome berries are carried in large clusters on long stalks. In superb quality and flavor Burpee's Louise is unsurpassed and scarcely equaled, as was testified by the first prizes won in such strong competition, in the very center of a famous strawberry district.'

We gave the plants every opportunity, but they would not run well. This is all right for fruit growers but not for plant growers. If it behaves in this manner another season we shall probably discard it.

Dutter (H) was received by us in the fall of '87. A very dry season prevented most of the plants from fruiting last year; but the few that did fruit showed it to be of the Sharpless style. With us the plant is healthy, producing a moderate number of runners. The originator says:

'It is a cross between Jersey Queen and Sharpless, but twice as large, better flavored, and more productive—the best of thirty varieties. I had two berries this season that weighed two ounces each. They are darker red than the Sharpless, generally more uniform in size. I have picked a quart at one picking on a three-year-old hill.'

Burt (H). This is a stray seedling which grew in a patch of Wilson and Col. Cheney on the farm of Miss Burt, of Scriba, N. Y. Attracting attention by its firmness in a very wet season, it was propagated, acquired a local reputation, and finally was quietly disseminated. One or two parties have attempted to boom it but have not succeeded as they had not complete control of the stock. It is held in high esteem by growers near its home, and is, to some extent, supplanting the Wilson and Creseent. A gentleman in Syracuse, for whose testimony we have the highest regard, says, 'All who know it praise it for productiveness, hardiness, lateness, and firmness. All, except one, who have fruited it say that it is extra good in flavor. The exceptional one acknowledges that it grew on low land partly covered with water in picking time. Shipped to New York and Philadelphia, it arrived in prime condition. It is of medium size, quite uniform, and of fine color,—in all these respects quite similar to Manchester. The foliage is the cleanest I have ever seen in strawberries, and of very dark color.' Writing Sept. 6, '88, the same gentleman says that it did not prove a good dry weather variety but ripened prematurely and bore small berries, and that it seems to do better on land of moderate fertility than upon that which is very rich.

The blossoms were cut off from our spring set plants three times and still some of them bore a few berries resembling Capt. Jack in form and appearance, but of excellent flavor. Indeed, with the exception of the flavor of the fruit, the Burt seems to be the counterpart of Capt. Jack.

Bomba (H) is a variety which on our place promises well. It is a strong grower although very moderate runner, has tall, green leaves, free from disease, and produces fine, stocky plants. It is a seedling of the Crimson Cluster. For some years Wm. Parry, of New Jersey, the introducer, has grown it as his most profitable variety, for three years past selling the entire crop at advanced prices to a conserve company for canning. He describes it as large, firm, round, conic, bright red throughout, of fine texture, of fair to good quality, a good shipper, specially desirable for canning, and earlier than Crescent or May King.

Mr. J. T. Lovett, of New Jersey, and Mr. W. J. Green, of Ohio, unite in saying that it requires rich soil and high culture.

Gold (P). In 1880 Messrs. P. M. Augar & Sons, the noted horticulturists of Connecticut, originated this variety from mixed seed of the Jersey Queen and Prince of Berries. In 1886 the Massachusetts Horticultural Society awarded the Gold the silver medal as the best new seedling exhibited at their strawberry show. From time to time it received favorable testimonials, until in the fall of '87 the originators saw fit to introduce it. In their circular of introduction, they give the following description, which we have borrowed:

'The Gold is a strawberry of the finest quality, excelling Jewell in this respect, nearly regular in form, * * * size averages large, firm in texture, keeping well for several days after being picked; color bright scarlet with golden seeds, season long, from medium to late, plants vigorous, making new plants rapidly, and is productive.'

Here is some more testimony concerning it:

Gold lacks in vigor and productiveness and except for its fairly good quality has nothing to recommend it.—*J. H. Hale, in Conn. Courant, Aug. 9, '88.*

Not so satisfactory as last season, as it was planted on less fertile soil. It requires high cultivation, which it will amply repay, but will fail on light soils where many other varieties succeed. In certain localities and in the hands of good cultivators it will doubtless prove profitable, but can hardly become a general favorite.—*Bulletin No. 5, O. Ag. Exp. Sta., August, '88.*

Gandy (H) is a good grower and is perfectly healthy. The fruit is of good size, fine form and color, and of fair quality. With us it was only moderately productive. Some statements from other parties will not be out of place here.

A very strong growing plant, moderately productive, fruit large, of uniform globular shape, bright color and good quality, ripens late, and promises to become one of the standard market sorts.—*J. H. Hale, in Conn. Courant, Aug. 9, '88.*

One of the best to withstand drought, of the late sorts, which was greatly in its favor the present season. In growth and healthfulness of foliage it is unsurpassed, although there is some doubt as to its productiveness. Should it prove to be sufficiently prolific it will surely take rank as a profitable market variety.—*Bulletin No. 5, O. Ag. Exp. Sta., August, '88.*

Haverland (P.) For large, healthy plants, vigorous growth, and great productiveness, this is not surpassed. From a row sixteen feet long and six inches wide we picked four and a half quarts at a single picking, after visitors had carried off some. The fruit is very large, long, conical, with a neck, never of bad form, bright red, ripens all over, moderately firm, of fair quality. It succeeds everywhere and has all the good points of Crescent with much larger size.

Monmouth (H) is a splendid grower resembling the Crescent. It makes great numbers of rather small, but strong, healthy plants. Last year it fruited over the country for the first time and made a very favorable impression. The fruit resembles well grown Wilsons, but is large, and is one of the first to ripen. It is a promising early variety.

Quite early and may prove to be desirable, but has not shown sufficient vigor and productiveness here.—*Bulletin No. 5, O. Ag. Exp. Sta., August, '88.*

Monmouth is a luxuriant growing plant, fruit closely resembles the old Wilson and ripens extremely early. This promises to be a valuable market variety.—*J. H. Hale, in Conn. Courant, Aug. 9, '88.*

Mammoth (H). With us it has been a very fair grower and gave reasonable satisfaction. It produces some very large berries, more of a moderate size, and some quite small. Reports from Connecticut, New Jersey, and Columbus, O., are adverse to it. The disseminator says that it rusted last summer and is worthless. One report from Iowa says it showed no signs of rust there in the latter part of July, 1887.

Mr. Geo. W. Trowbridge, of Glendale, O., considers it the most satisfactory of the new varieties tested on his grounds in '88.

It may be of value to amateurs, but is unsafe for general planting so far as we know.

Jessie (H). This is certainly one of the finest strawberries ever introduced. With us the plant is healthy, large, of a beautiful color, a good runner, indeed all that could be asked. The fruit is of fine form, large size, splendid quality and appearance, and there is an abundance of it. Unfortunately a number of adverse reports have come in, most of them complaining of the plants making a poor growth. We formerly placed it at the head of the list, but now put it second, not because it fell in our estimation but because the Bubach rose.

Bubach (P). This has fulfilled every promise made for it and is a very great favorite at this time. It succeeds perfectly on prairie soil, clay, or sand. The plant is large, dark green, and an enormous bearer. Fruit very large, bright red, and ripens all over, of roundish or conical form, sometimes uneven on the surface but never misshapen. We consider it one of the most reliable. It was the general sentiment expressed at the recent meeting of the Ohio Horti-

cultural Society that the Bubach and Jessie for fertilizer form the strongest team for market of any varieties which have been well tested.

Henderson (H). This is the best flavored berry with which we are acquainted, and that is its strong point. The plant is large, vigorous and healthy, but bears only moderately. The fruit is long, conical, with a neck, sometimes irregular, bright red, but generally uneven in ripening, being red on top and white below. It is not a market berry.

Summit (P). Largest of all every time. Rarely has any small ones. Misshapen specimens of Sharpless, Ontario, and Mammoth may sometimes exceed it, but the average size of the Summit is larger than that of any other. As a show berry it always stands at the head. It is obtusely conical and never misshapen, cockscombed, wedge shaped, or uneven on the surface. The color is light scarlet, lighter than Crescent and darker than Cumberland. It ripens all over and has no white tips. It is rather firm in texture, very heavy, and of good flavor. The season is medium. The plant is of medium size and makes splendid roots but is inclined to rust here and in some places rusts badly. Nevertheless it comes out in the spring and bears berries, sixteen of which filled a Disbrow quart basket more than level full one season. Its stronghold is as an exhibition berry.

Ohio (P). This is a vigorous grower and good runner, much like the Crescent, and seems to be none the worse for the rust which attacks it to some extent. As late in the season as the Kentucky, it bears a very large crop of roundish, bright red berries, uniform in size and shape, about as large as the Crescent, attractive and salable, but too sour to be called good.

Ontario (H) is the same as the Sharpless or a slight improvement on it. The plant is all that could be desired for health and vigor. It succeeds over a wide extent of territory, and generally produces good crops of fine fruit that brings the best prices. This is the great Barnesville berry and carries from there to Chicago. It should never be planted in low, frosty land, as the blossoms are tender and a late frost is liable to destroy a whole crop. The first berries are apt to be misshapen and ripen unevenly, but after one picking these bad points largely disappear.

Glendale (H) originated in this county some years ago. It is a very vigorous grower, is healthy and reliable everywhere, and bears well. It is very late, of good size, rather pyramidal form, and ordinary quality, bright red when picked but fading to a dull orange, and without gloss. Its unusual firmness and very large calyx enable it to be carried further than any other variety. Baskets should be well filled, as the berries settle more than others. Its rather acid flavor, red color throughout, and firmness, make it a splendid canning berry.

May King (H). It was sent out as earlier than Crescent, equally productive, of larger size, and better quality. From our own observations we find it to be about as early, scarcely as productive, rather larger and better, and less inclined to run small after the first picking. It is a good grower and succeeds almost everywhere, but is a little too pale for market.

Cumberland (H). Originated by Amos Miller, of Cumberland Co., Pa., from seed of Green Prolific. It has a magnificent plant, of great size and vigor, and green and healthy. On any soil it produces a fine crop of large fruit, always uniform in shape—just as if turned in a lathe—obtusely conical, orange scarlet, rather pale when grown in matted rows, but of darker color when not too thick, hardly firm enough for market, rather late, and very desirable. We placed it at the head of the list until Jessie and Bubach came out.

SCHEDULE OF PRICES.

	BY MAIL PREPAID.		BY EXPRESS NOT PREPAID.	
	Doz.	100.	Doz.	100.
Cloud (P)	.60	3.00	.55	2.75
Warfield (P).....	.60	3.00	.55	2.75
Pineapple (H).....	.60	3.00	.55	2.75
Pearl (H).....	.60	3.00	.55	2.75
Hampden (P).....	.60	3.00	.55	2.75
Louise (H).....	.60	3.00	.55	2.75
Dutter (H).....	.60	3.00	.55	2.75
Gold (P)	.60	3.00	.55	2.75
Bomba (H).....	.60	3.00	.55	2.75
Burt (H).....	.50	2.50	.45	2.25
Haverland (P).....	.50	2.50	.45	2.25
Gandy (H).....	.50	2.50	.45	2.25
Monmouth (H).....	.40	2.00	.35	1.75
Mammoth (H).....	.40	2.00	.35	1.75
Jessie (H).....	.30	1.50	.25	1.25
Bubach (P).....	.30	1.50	.25	1.25
Summit (P)	.30	1.50	.25	1.25
Henderson (H).....	.30	1.50	.25	1.25
Ontario (H).....	.20	1.00	.15	.75
Ohio (P).....	.20	1.00	.15	.75
Glendale (H).....	.20	1.00	.15	.75
May King (H).....	.20	1.00	.15	.75
Cumberland (H).....	.20	1.00	.15	.75

Fifty plants of one variety at hundred rates.

In order to induce people to give us a trial order, we will send by mail postpaid one-half dozen each of Pearl and Warfield for 25 cents.

Address all letters and make all drafts and money orders payable to

M. CRAWFORD & SON,
CUYAHOGA FALLS, OHIO.

TESTIMONIALS.

South Haven, Mich., May 9, 1888.
Plants in excellent condition and well grown. T. T. LYON.

Experiment Station, Athens, Ga., Dec. 14, 1888.
Your letter and plants received,—the latter in good condition though sent by mistake to Atlanta and forwarded to this place. W. L. JONES.

Halifax, N. S., May 15, 1888.
The strawberry plants received; and are in excellent condition, although after their arrival they remained in the customs appraiser's office two days (Sunday intervened). Your system of packing seems to fulfil its purpose most admirably. JOHN H. BURTON.

Liberal, Mo., Sept. 23, 1888.
I have to say this, that they were fine plants, were packed well and came through in good order. But how you must have forgotten your arithmetic! So many more than I sent for. JOS. OWRAM.

Dover, Ohio, May 10, 1880.
I received the plants the 8th all right. Am well pleased with them. I never saw as good roots. Thanks for the extra Bubach and your generous count. ASA L. WESTON.

Grand Bay, Ala., Dec. 15, 1888.
The plants arrived this eve. I must say they are the finest plants I ever saw, and such plants are well worthy the price you ask. Please accept thanks for the complimentary ten Burt plants. C. C. WARREN.

Aspen, Colo., Aug. 22, 1888.
Strawberry plants came nicely. MRS. D. R. C. BROWN.

Plattsville, Conn., May 12, 1888.
The strawberry plants arrived in good order and are now all alive and growing finely; especially the Haverlands. Thank you for sending such well rooted plants and liberal count. JOHN C. LOBDELL.

Ky. Ag. Exp. Station, Lexington, Ky., June 29, 1888.
All your plants did finely. M. A. SCOVELL, Director.

Richwood, Ohio, May 10, 1888.
The plants came all right and were extra fine. Thanks for your liberal count. O. HOLMES.

Melvin, Mich., Aug. 20, 1888.
The potted strawberry plants arrived in A No. 1 shape. The plants were the best I ever received. Thanks for the liberal count. Shall always remember where I am best served. MARCUS FIELDS.

Mt. Vernon, Ohio, May 12, 1888.
The plants came safely and in fine condition. Accept thanks for the extra plants. G. S. PENFIELD.

Ottumwa, Iowa, July 28, 1888.
Plants received in fine condition. I have been in the small fruit business over thirty years, received plants from various firms, but have never had sent me strawberry plants in such fine condition before—no such pains taken in the preparation for shipping—so I send you another small order. J. H. DUTTON.

East Trumbull, Ohio, May 14, 1888.
The plants arrived in due time and in good order. Thanks for the extras. O. C. PARKS.

Ashland City, Tenn., May 19, 1888.
Plants arrived O. K. after lying in P. O. four days. All grew finely. J. C. BANDY.

Kankakee, Ill., April 28, 1888.
The strawberry plants came to hand yesterday and they certainly are the finest lot of plants I ever had sent me. JOHN GREEN.

East Toledo, Ohio, Aug. 22, 1888.

Accept thanks for 100 Lida strawberry plants extra, received with 200 Jessie plants.
E. M. WARNER.

Patchin, N. Y., May 14, 1888.

The plants arrived last Saturday. They are splendid plants and in excellent condition. Accept thanks. Any loss is more than made good. Allow me to express my appreciation of the honorable manner in which you deal with your customers.
V. R. CARY.

Hicksville, Ohio, Sept. 25, 1888.

The plants I ordered came to hand to-day. I am well pleased with your prompt way of doing business.
JAS. W. HOLLINGER.

Muncie, Ind., Aug. 18, 1888.

Strawberry plants from you reached me in the best condition and were in every way most satisfactory. Many thanks for filling my small order so promptly and so well.
G. COWING.

Howard Center, Iowa, May 16, 1888.

Plants received; later than plants ordered at same time from ———; but your plants were finer, and packed in better shape, while the extras—Bubach and Summit—more than made up for the delay. Please accept thanks for your very liberal dealing.
BURDETTE HASSETT.

Moline, Ill., May 15, 1888.

Plants received yesterday in good shape. Plants, as usual, extra fine, extra count, and extra varieties, for which many thanks.
W. C. WILSON.

Crystal Springs, Miss., April 25, 1888.

The strawberry plants reached me O. K.
J. W. McNEIL.

Canal Dover, Ohio, Sept. 10, 1888.

The plants you send out are the finest sent out by any firm in this country. Not one died out of the 150 received from you. This I consider very good, perhaps better than any one else can say.
C. BETSCHER.

Clinton, N. Y., May 10, 1888.

Strawberries received. Admirable plants. What roots the Haverland has.
E. P. POWELL.

Rosedale, Kas., April 22, 1888.

Plants of Haverland received in splendid condition. Thanks for good count. Plants very fine.
G. S. ESPENLAUB.

Voorheesville, N. Y., April 2, 1888.

This is the third time I have had the satisfaction of dealing with you and am proud of your fair dealing, good packing, and liberal count.
E. E. WANDS.

Burlington, Iowa, May 23, 1888.

The strawberry plants came in splendid order and are the finest, strong, well rooted plants I about ever have seen.
HENRY AVERY.

Cambridge, Mo., April 23, 1888.

The Jessie plants received in fine condition. Thanks for your very liberal count.
T. HARRY HOPKINS.

Harmar, Ohio, April 21, 1888.

The strawberry plants came the 20th in nice shape. The plants are the best I ever saw. Thanks.
WM. STRECKER.

Brooklyn, N. Y., Oct. 2, 1888.

The plants came in perfect order, very good, and are growing well. You give very full count.
C. C. PARSONS.

Council Bluffs, Iowa, May 1, 1888.

The plants came in good order and I am well pleased with them. Many thanks for the Bubach and Jessie which you sent gratis.
L. O. WILLIAMS.

Harrisburg, Pa., Aug. 18, 1888.

The berry plants arrived in fine condition. Thanks for sending so many.
J. N. GRAY.