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1899

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New Twice
Bearing & French
Strawberry.

✓ "LOUIS
GAUTHIER."

The Gauthier is controlled in France by Messrs. Letellier Bros. The great firm of "Vilmorin, Andrieux & Co." of Paris, in a letter to me in 1897, would not grant all the claims made for it. I notice though in their spring (98) catalogue, that they have changed their front, and now quote the Gauthier at a higher price than any other large sort on their long list, and ask more for plants than I do, although it has been in cultivation for four years in France. This indicates its worth and demand.

Each year brings its new kinds, but few are good enough to take the place of those now in cultivation. From long experience and observation I think I may safely assert that the strawberry world would experience no loss if all sorts were destroyed except the following: Noble, Bedar Wood, and Creole (early); Bubach, Commander, and Mexican (2nd early); Gandy, Gauthier, and Aroma (late). There may be, according to individual taste, a few other sorts as good, but one of the nine named could take their place without any loss. For a combination of size, shape, color, flavor, and firmness, Laxton's "Noble" outclasses all others except "Gandy." The last named is not much praised by the nurserymen because it is now out of their hands. Nevertheless, no American berry can compare with it in general qualities. Indeed, I hold it in such high esteem as to have risked sending it to England four years ago. If there is another strawberry of ours which can command respect in the Covent Garden Market I have never seen, heard, or read of it. The "Louis Gauthier" deserves to be added to this short list, and will create a sensation among berry growers whenever its merits are known. I claim for it two distinct qualities not found in any other sort—enormous size, and a twice-bearing habit by means of its runners. After several failures, I obtained living plants of this variety in 1896. As far as I know there are no Louis Gauthier in this country except the plants sent out by myself during '97 and '98. There is no question as to its ability to succeed here, being vigorous in all directions. It has the right sort of foliage for resisting heat, and long, clean, straight roots to resist drouths. The staminate flowers are very large and beautiful, and borne on bold fruit stalks. The "Parker Earle" is shy on runners but without doubt our greatest crown and berry maker. The "Gauthier" has these two qualities just as well developed, and adds the ability to make runners freely. This combination is so unusual that I wish to call the attention of strawberry specialists to it. Last summer I had runners from the old plant to throw out two side runners at a time before the first had struck roots. Their tenacity to life, and ability to root quickly, adapt it well to propagation by cuttings.

To say that the Gauthier is faultless or that it is going to please everyone would be expecting too much. An ideal berry will never be found. I suppose when it comes under the fire of the critics its color will be aimed at. I did not like it myself from the descriptions, but having seen it, declare that I would not exchange its pinkish white color for any red or scarlet I ever saw. When fully ripe its white (inside and out) is not a yellowish or greenish white, but a clean, clear, snowy white, and the rose color is put over it thinly, as it were with a brush. Its distinct color makes it an ideal canning, drying, or preserving berry, and will identify it in the market. As yet no one has tested its fruit without preferring it to anything here. Its flavor and odor suggests the apricot. I recently gave one to our veteran horticulturist, Mr. Saunders, who said: "My! How good. It reminds me of old Napoleon III." The king berry, or first on each stem, is apt to be formed like the cut in my circular, the rest are round or globe shaped. Its fruit is easy to pick, each berry being on petiole about two inches long. They branch from a large, strongly stemmed truss lying well out from the stools. Let the runners remain attached to the parent plant if you want autumn fruit. Splendid for forcing. It has too much Alpine blood to do well the second year; so after fruiting take off runners for your next year's crop. For my own part I have yet to find a sort which can be fruited twice with best results, or any system which is as good as the single year.

Being near the city I have many visitors during the strawberry season, everyone of whom pronounced the Louis Gauthier the best berry to eat out of hand they ever tasted. One gentleman living nearby sent his invalid son over every day with instructions not to eat any but the French berry. In fact, all claims for the Louis Gauthier have been made

good, except its second fruiting, which in August and September was not as plentiful as I hoped for. As all of the old plants were in buds and fruit from March till the 20th of July, and all the first runners had to go to fill orders, a fair test has yet to be made. When weak points are developed I shall not be slow to expose them, for I do not intend any introduction of mine to sail under false colors. Observe that I name the bad as well as the good points of each sort on my list—that my patrons may know precisely what they are buying.

The *Revue Horticole* does not boom fakes, and its distinguished editor-in chief, M. Ed. Andre, says the following in the September, 1895, issue:

"The 'Louis Gauthier' originated with M. L. Gauthier, gardener to the Chateau de Greutheville (Calvados), France. It comes to maturity on the last of May. The growth habits of the plant are extremely vigorous. Early to start, leaf stems remarkably long, leaves medium size, velvety, very round, of a beautiful dark green above and light beneath, with profuse nerve webs. The flowers are large and perfect, extending well up to the summit, looking like a bouquet. The fruit is borne on a long stout fruit stalk. Calyx well developed, with many serrations extending well over the fruit which is large and cone shaped. Its color is light rose, flesh white, seeds pale yellow, standing out. Flavor acidulated, perfumed and juicy. This beautiful fruit has been grown for four years by M. Louis Gauthier, and is a cross between the Alpine perpetual, 'La Belle de Meaux,' and an unnamed variety resembling 'Lebreton's Marguerite.' Its dominant qualities are—1st, a vigor extraordinary; 2d, a production enormous, a hundred and sixty berries having been counted on the plant; 3d, a white rose color, which is rare among the large sorts; 4th, a large size, surpassing that of 'Doctor Morere.' A special commission was appointed by the central Horticultural Society of Calvados, which visited the Chateau de Greutheville and presented M. L. Gauthier with a silver medal. M. Walter, one of the visitors, signed a certificate stating that five selected berries weighed 570 grammes."

"ANDRE."

Extract from "Gardener's Chronicle," February 15, 1896:

"An apparently fine and valuable new strawberry under the above mentioned name, which was originally described by M. Andre in the Paris *Revue Horticole* for September 16, 1895, is now being sent out by the well known French fruit nurserymen, Messrs. Letellier & Fils, of Caen, who are also the introducers of the new spineless gooseberries raised by M. E. Lefort, of Meaux. M. Andre sums up the distinctive characteristics of this new strawberry under four heads: 1st, its extraordinary vigor of growth; 2d, its enormous production of fruits—as many as 160 fruits have been counted on a single plant; 3d, its white or blush white color, so rare among large sized strawberries; 4th, its considerable size, which exceeds that of the well known variety—'Dr. Morere.' Its first crop ripens about the last week in June, and five of the finest berries were then found to weigh 570 grammes, or about 19 ounces. The runners are produced early in the season, and quickly come to maturity, producing under favorable circumstances, a second crop of fruit, about the month of September, which is not quite so large in size as the fruit produced in June, are of equally fine flavor, and should prove most acceptable at that period of the year. Messrs. Letellier assert that this is absolutely the first large-sized strawberry from which two distinct crops can be gathered in the same year."

William Rushforth, of Leeds, England, and a high authority on Strawberries, writes under date of January 29, '97:

"'Louis Gauthier' bears well here, and I feel certain it will do well in America. The size of the fruit in first crop is far larger than Laxton's 'Noble' and much superior in flavor. Your runners will fruit this season—but do not separate them from the parent plants. The 'Louis Gauthier' I can and always have recommended with the greatest confidence."

Among Those Who Bought Gauthier Plants from me in 1897 are Messrs. Hale, Snyder, Ridgeway, and Blacknall. Their Valuable Opinions are Quoted Below.

Mr. M. H. Ridgeway, of Wabash, Ind., who bought single crown Louis Gauthier plants, April 19, 1897, writes to me on July 11, '97: "You would be surprised to see my Louis Gauthier. It would hustle you to drop a bushel basket over one of them without breaking down some of the foliage. I have already propagated more than one hundred from them, and nearly twice that number in sight. Each plant was permitted to ripen two (2) berries, and while I did not have five that would fill a quart, they were as large as they should be. I consider it a wonderful variety."

August 16, '97, Mr. Ridgeway writes again: "At present it looks as if I would have to buy Louis Gauthier instead of selling, as so many have written begging a plant or two at any price, that to accommodate them I am keeping plants cleaned up close—have sold runners as high as one dollar apiece. Will you be in shape to furnish me with plants next spring to supply my trade?"

Editor *Specialist*:—"Louis Gauthier" was fruited on summer set plants, and gave some remarkably choice fruit. The plant is robust, deep rooted, tough, leathery foliage, withstanding drought, wet weather and rust rather better than any kind out of ninety-seven varieties tested. Color of fruit is very distinct, a creamy pink, fairly deepened to red when exposed to sunlight, but pale in the shade, high sweet pineapple flavor, easily eaten without sugar, and large enough to bite pieces out of. While the color may not be desirable to some, the quality will create a demand after one trial, while the fault (if we can call it a fault) of color renders the berry so distinct that no other variety can be substituted for it. They were tested on the poorest spot of heavy land I have, with but one slight hoeing from planting to fruiting, mulched to prevent heaving out by frost, as they were in a low, wet place.—H. SNYDER, Easton, Md., to *Strawberry Specialist* of July 8, 1898.

The new French strawberry, Louis Gauthier, with its pink white surface and pure white flesh, is a vigorous plant and exceedingly productive of large sized berries, yet its color would probably be against its selling in the market at any price, except to those who are thoroughly acquainted with its texture and flavor. In this respect it is far superior to anything I have ever seen. The deliciousness of the little wild strawberry cannot compare with it in excellence.—J. H. HALE, in the Hartford Courant.

"Louis Gauthier"—something unique in the strawberry world. Berry very large, cream colored with pinkish blush. Flavor exquisite. Remains in bearing a long while. A great acquisition for the garden if the plant retains its vigor.—Editor of the *Strawberry Specialist* (Blacknall.)

New Strawberry, EARLY GIANT

This variety was raised from "Paxton," by "La Crosse."

"The accompanying illustration is the natural size of the largest fruits, some of which weighed three ounces each, and is claimed to be by far the largest yet raised; is of good flavor, rich color, very solid, and a free bearer. For exhibition it has no equal; the foliage is all that can be desired, strong and hardy, it retains its foliage in winter long after other varieties are cut down by frost. It is early, coming in out doors before "Paxton" "Royal Sovereign," "President," and others. A good market kind.

"On May 3d, 1897, fruits of this Strawberry grown in pots were gathered measuring $3\frac{1}{2}$ inches in diameter, and weighing 3 ounces each. On several occasions in May, '97, when gathering these strawberries from pots for Covent Garden, in the usual way it only required 9 fruits to weigh $16\frac{1}{2}$ ounces."

The above is the originator's description. The following is from the *Gardeners' Chronicle*: May 15th, 1897. "Mr. M. Russell, Hatfield, Mytchett, Farnborough, Hants, showed a new strawberry named "Early Giant" nine fruits of which weighed $16\frac{1}{2}$ ounces, and some have been gathered weighing more than 3 ounces each. It is a fine looking fruit."

"Early Giant" has not had time to get into many hands yet, and not so well advertised as Laxton Bros. and Leitch's berries, but a berry of such fine size, shape, and growth habits, will attract much attention this season and doubtless become like the Giant of the story books—a killer. I was able to save only a few of the Giant last spring as the importation was 24 days en voyage. stood the heat well, made strong runners and had a healthy foliage.

Was exceedingly pleased with the summer growth as they

NEW STRAWBERRY—VEITCH'S PERFECTION.

First Class Certificate, Royal Horticultural Society, July 14th, 1896.

The finest and most richly flavored that has yet been raised. It is the result of a cross between *British Queen*, well known as one of the best flavored of all Strawberries, and *Waterloo*, a superb late variety of large size and deep color.

In this new variety the best qualities of both parents are combined. The plant is hardy, grows freely with a compact habit and robust dark green foliage. It is a very prolific bearer; the flesh is juicy and luscious, of *British Queen* flavor slightly modified by the sweeter and more melting quality of *Waterloo*; whilst, as regards color, it is one of the handsomest Strawberries that can be placed on the dessert table. On account of the firmness of the flesh it will prove an excellent kind for traveling.

It is not recommended for early forcing, but it is an excellent second early kind for pot culture.

The following extract is from the official report of the meeting of the Fruit Committee at Chiswick, on June 29th 1896, as published in the *Journal of the Royal Horticultural Society*, vol. 20, p. lxxvi:

"Messrs. James Veitch & Son, of Chelsea, sent a box of fruit and some growing plants of a magnificent strawberry named *Veitch's Perfection*, a hybrid raised by Mr. Seden from *British Queen* and *Waterloo*. It was found to be of marvellous sweetness and flavor, the foliage and flavor being markedly of *British Queen* type and the color of the fruit almost as dark as *Waterloo*. It was unanimously resolved to recommend a First Class Certificate at the next Committee meeting at Westminster.

VEITCH'S PERFECTION

And in vol. 20, p. cxxxvii.

"First Class Certificate to Strawberry, 'Veitch's Perfection' (vote unanimous.) From Messrs. James Veitch & Sons, Chelsea.

Journal of Horticulture.—"The plant raised from a runner in September was of vigorous habit, carrying fifteen fruits, the majority of good dessert size. Having regard to the size, color and extraordinary richness of the fruit, we have no hesitation in predicting that this new Strawberry has come to stay, or rather to stray into gardens over the length and breadth of the land." July 2d, 1896,

Accompanying the illustration given in the issue of July 16, 1896, the Editor adds the following remarks:—"The name *Veitch's Perfection* is a good name, as it ought to be, for it applies to one of the most distinct and richest of Strawberries that have been raised during recent years. The sturdy fruit trusses and substantial leafage of the new variety suggests that it possesses a good constitution; and if this prove to be so we shall be surprised if *Veitch's Perfection Strawberry* does not remain a favorite in gardens so long as *Veitch's Perfection Pea* has done, which is now, we think, more than forty years.

The Garden.—"Fruits of *Veitch's Perfection Strawberry* were sent to Chiswick, and it was considered to be a very fine addition to the mid-season fruits. It is a firm fruit of great excellence.

Gardeners' Magazine.—"A particularly high flavored Strawberry, of handsome appearance and a free cropper. The fruits are large, roundish and of deep color, borne in heavy trusses.

GRAND NEW VARIETY
LAXTON'S "MONARCH,"
 OF RICHEST FLAVOR.

First class certificates from Royal Horticultural Society, June 11, 1895, Royal Botanic Society, June 12, 1895 and York Gala, June 19, 1895.

A most distinct, richly coloured, second early variety of enormous size; wedge shaped, and of a RICH, QUEENLIKE FLAVOR; a worthy companion to LEADER—ripening before that variety— and following closely on ROYAL SOVEREIGN.

Monarch is a great gain on all the Second Early Varieties at present in existence. The plant is of a most distinct and compact habit of growth; the foliage smooth, thick and leathery, resisting mildew thoroughly. The fruit is of the richest glowing crimson colour, with a wax like surface (in fact is only equalled by Captain—one of its parents—in the brilliancy of the colouring) of enormous wedge shape or flatly conical, many of the fruits average two ounces in weight; the flesh is particularly firm and white throughout; the seed are set well on the surface in shallow basins, this, combined with the wax like surface, causes the fruit to be a good traveler; and we regard MONARCH as a coming variety, either for the private or market grower, and likely to supersede many of the varieties now in existence. The variety was raised from Latest of All and Captain, and, as in the case of LEADER, combines the good points of both its parents, and we know of no variety producing such abundant and enormous trusses of fruit. We do not recommend this variety for forcing.

The magnificent boxes of fruit we exhibited at the York Gala in June, 1895, were greatly admired. Mr. John Wright the eminent pomologist, speaking at the luncheon at the great York Gala, said, "there was in the show two new varieties of strawberries that would take England by storm, MONARCH and Royal Sovereign, let them get them and grow them and they would then have some treasures in their gardens. It was worth while to come to York to learn their names.

RECENT PRESS NOTICES.

At the Grand Temple Show, held in London in May, 1897, we were the recipient of a Silver Banksian Medal for a grand exhibition of Strawberries in pots, and the following commendatory notices have appeared recently in the horticultural press:

The Gardeners' Magazine, June 5, 1897.—"The exhibition of strawberries in pots by Messrs. Laxton Bros., was staged just inside the first tent, and came in for a shower of exclamations of praise from every fresh group of visitors, the varieties were Laxton's *Leader* and Laxton's *Monarch*, the former being most enormous; it is a heavy cropper and produces quantities of splendid wedge shaped fruit of fine flavour, it is a precocious form and likely to become as popular as Royal Sovereign.

The Garden, May 29, 1897.—Messrs. Laxton, staged grand Strawberries—*Leader*, *Monarch* and Royal Sovereign—the fruit was large and richly coloured; they also sent a new Strawberry, named *Early Laxton*, said to be a cross between John Ruskin and Royal Sovereign and earlier than *Noble*.

The Journal of Horticulture, May 27, 1897.—"Messrs. Laxton Bros. had a massive bank of Strawberries in pots including heavily-footed *Leader*, *Monarch*, and Royal Sovereign; the fruits, especially of *Leader*, were very fine indeed."

The Garden, June 15, 1895 says:—Messrs. Laxton Brothers staged a fine lot of strawberries, in 6 varieties, among them a new fruit, a second early variety, very large, with firm flesh, rich crimson color, and prominent seeds; it was named *Monarch*, and was awarded a first-class certificate. The other varieties comprise the recently certificated *Leader*, which was very fine, and in good flavor; Royal Sovereign, remarkably fine, John Ruskin and Noble—a bronze Knightian awarded.

The Gardeners' Chronicle, of June 15, says:—Messrs. Laxton Brothers exhibited a fine box of fruit of their new variety, MONARCH—very large, of coxcomb shape, prominent seed, with a true pine-like flavor; the flesh is firm.

The Journal of Horticulture, June 11, 1896, says:—Messrs. Laxton Brothers sent boxes MONARCH Strawberries, very handsome fruits—the variety had previously been certificated.

The Gardeners' Magazine, June 27, 1896, says:—Messrs. Laxton Brothers sent two boxes of magnificent MONARCH Strawberries.

The Journal of Horticulture, July 29, 1897, says editorially:—Laxton's *Monarch* is perhaps the finest second early in existence, being enormous in size, and "Queen" like in flavor. The plant is of a compact habit of growth, and foliage thick and leathery. If only one variety can be grown, let it be "Monarch."

LAXTON'S "ROYAL SOVEREIGN."

An Earlier, Higher Quality, and Improved Sir J. Paxton. The Most Wonderful Strawberry for Size, Quality, Fertility, Hardiness, and Vigor of Plant Combined.

THREE SILVER MEDALS AND FIVE FIRST-CLASS CERTIFICATES AWARDED.

A Lilver Banksian Medal awarded by the Royal Horticultural Society, April 24th, 1894, for a group of Fruiting Plants in pots. First class Certificate from the Royal Horticultural Society, June 22d, 1892, and the only Strawberry certificated by the Society in 1893, after trial at Chiswick. Another First Class Certificate at the Gardening and Forestry Exhibition, Earls Court, 14th May, 1893; Certificate of Merit by the Royal Botanic Society, April 18th, 1894; and First Class Certificate from Manchester Botanic Society, May 11th, 1894.

"This fine Strawberry we consider by far the best early variety we have yet introduced, as it possesses all qualities required in a good Strawberry, either for open air cultivation or as a forcer. The fruit is of the largest size, conical and sometimes flattened in shape, the color all over is a glossy bright scarlet, the flesh exceedingly firm and white, and the seeds set in shallow basins projecting beyond the surface, enabling the fruit to carry well; the flavor is rich, vinous, and Queen-like. It ripens a few days after King of the Earlies, and here (at Bedford) in open the first fruits were ready with Noble. Plant is very prolific, carrying several trusses of large fruit which ripen well to extremity; it is also vigorous, hardy, and a good grower; the foliage very bold, and on long footstalks. The variety was raised from Noble, crossed with King of the Earlies, and it is best of several hundred seedlings from the cross, and we know of no Strawberry which combines so many good qualities as Royal Sovereign, although we have raised many thousands of seedlings and tried most of the known varieties. We look upon Royal Sovereign as the long sought early, high flavored and improved Sir Jos. Paxton, and just the fruit wanted to precede that popular Strawberry. We would call particular attention to its merits as a pot strawberry; as a forcing variety Royal Sovereign is unequalled for early work, even when hard forced it throws its flower spike well out, setting freely and swelling quickly to a large size. The testimonies of such excellent and reliable authorities as Mr. J. Smith, of Mentmore, Mr. Wythes, Syon House, and Mr. Norman, Hatfield, amply verify this. The success of this strawberry since its introduction has been probably unexampled in the annals of Horticulture. It has already been adopted by the largest market and private growers as their standard variety, both in this country and abroad. Millions of plants have been sold during the last few seasons to largest Kent and other fruit growers. Long commendatory articles have appeared weekly, almost continuously, in all the leading Horticultural journals as to the high merits of this grand variety, and we have received hundreds of letters from customers singing the praises of this famous fruit. Further comment is unnecessary."—LAXTON BROS.

"For size, form, flesh, brightness of color and nice flavor, 'Royal Sovereign' is a variety unsurpassed. Growing alongside of Noble it ripens at the same time and fruits are better in every respect." H. MARKHAM, Margah, England.

"Both here and in the surrounding district, Royal Sovereign cannot be equalled by any other variety of its season, either when forced or grown in the open border."—A. METCALFE, Burghley House, Stamford, Eng. (Gardeners' Chronicle)

"The Garden," of August 21, 1897, page 142, Editor says: "Many of our Royal Sovereign plants carried three, (3) pounds of fruit each." This would be close to three quarts to a plant.

"Royal Sovereign" was sent out in England two years in advance of "Leader" and "Monarch," and in no reports published in any British Journals has it been mentioned except as the best of all well tried sorts. The few plants set out by me last spring were in so weak a condition that they barely pulled through the summer, so I can give no account of their conduct in America. I have obtained more plants directly by express from Laxton Brothers, and hope to see its fruits this coming season. Unquestionably the best English berry.

Some sorts take two years to recover from the voyage and adjust their blooming to the change of season. I have not had a plant of this sort fit to send out till now. Plant received from two other nurseries last year to fill orders with were worse than my own. Ultimately it will take first place here as it has in England.

GRAND NEW VARIETY, LAXTON'S "LEADER."

The coming mid-season variety—either for forcing or outdoor growth

First-class Certificate from the Royal Horticultural Society, May 14, '95.

An Enormous Handsome Mid-season Strawberry of Rich Pine-Like Flavor.

This is undoubtedly the finest and largest mid season Strawberry we have yet had the pleasure of introducing. The fruit is of enormous size, wedged or bluntly conical in shape, of a bright crimson shade of colour, skin and flesh firm, and of a dark scarlet tint throughout, the seeds set in shallow basins projecting beyond the surface, enabling the fruit to travel well—flavour very rich and pine like, with a pleasant aroma—plant very compact in habit, and a robust grower, foliage smooth with very downy footstalks. The variety was raised from Latest of All, crossed by Noble, and inherits the good qualities of both its parents—combining the rich flavor and enormous size of Latest of All, with the prolific habit and vigour of Noble, and will undoubtedly make its mark as a handsome main crop variety. For forcing purposes LEADER is likely to be in very great request—for which use we recommend it to follow Royal Sovereign. It forces very freely, the trusses being thrown well out and setting well, with little if any artificial fertilization, and its compact habit is a great point in its favour. With us it has proved a remarkable forcer; as many as 20 large and handsome fruits have been from a single pot plant—for mid-season forcing we have great confidence that it will supercede varieties in use. Our exhibit of this variety at the Temple Show on May, 1897, fully verified us in this contention.

NATURAL SIZE.

The *Journal of Horticulture*, May 9, 1895, says:—"Messrs. Laxton Brothers have sent us samples of a new Strawberry of very great promise. It is the result of a cross between Noble and Latest of All, and named LEADER. The specimens certainly 'lead' Noble a long way in quality, firmness, and flavour, while not being behind it in size. The plants were taken from the ground and potted in September last, and the fruits ripened just after Royal Sovereign, under the same cultural conditions. We figure a typical example, but not the largest, which was 7½ inches in circumference."

Mr. Wythes of Syon House Gardens, writing in the *Gardeners' Magazine*, June 1, 1895, says:—"The new LEADER is a splendid looking fruit; firm, and of good shape; solid, and of a bright red colour; the fruit travels well. For early forcing it is not recommended, but as a mid season variety for April and later supplies, I feel sure we have in LEADER a fine variety. As to its value in the open we can hardly speak yet; the raisers give it every praise; and as they have so many new seedlings, and are careful not to bring one before the public until its merits are fully tested, I feel sure LEADER will be worth noting for autumn planting."

The *Garden*, May 9, 1896, says:—"Messrs. Laxton exhibited their new berry, LAXTON'S 'LEADER,' certificated last year, fruit very large of a bright red colour."

Mr. G. Reynolds, the Gardens, Gunnersbury Park Acton, writes: "I thank you very much for sending me your strawberry, LEADER, I like it very much, it traveled well. The fruits were excellent quality and very fine. In my opinion it will be very much sought after."

Mr. G. Molyneux, Swanmore Park Gardens, Bishop Waltham, writes:—"Thanks for sending me fruits of LEADER, the appearance and taste of which I like much. The flavour is decidedly in advance of either of its parents, while in shape it is superior to Noble."

Mr. J. W. Barns, Eaton Gardens, Chester, says:—"I am much obliged by your favouring me with fruits of your new strawberry 'Leader,' the fruit came to hand sound and but little the worse for the journey, I consider it a decided improvement on its parents—the flavour while I risk is very sweet, and for a forced strawberry has a pleasant and piquant aroma."

Laxton's Leader grows to an immense size and is of good flavor. The shape varies somewhat, but is generally good, and I know of no other berry that is its equal for cropping the first year after planting. It is a fine forcer, having little leaf growth.—JAMES H. SLADE, Exeter, England.

Journal of Horticulture, June 11, 1896:—"Messrs. Laxton Bros. had a fine exhibit of the Leader strawberry in pots, bearing noble fruit in great abundance."

Gardner's Magazine, June 20, 1896:—"Messrs. Laxton Bros. had a splendid exhibit of strawberries, staging about 30 pots of Leader, all wonderfully well fruited."

The *Gardeners' Chronicle*, besides figuring the illustration which appears on the back of this catalogue, in the issue of June 4th, 1896, says:—"Messrs. Laxton Bros. have been noted for many years past for the general excellence of the strawberries of their raising, and in the present instance they are sending out in Leader a variety of fine appearance, prolific and admirably adapted for forcing as a second early. They inform us that it is excellent for outside culture. Our illustration which shows the plant and fruit of less than half size, was taken from an example sent for our inspection on the 2d ulto."

Laxton's "Leader" must not be confused with an American sort of the same name, as it is superior in every way.

Other Foreign Strawberries.

LAXTON'S NOBLE.—Here we have an extra large early berry for a fancy market. How is it that so many are claimed to be the largest? Why, mainly because the originator or culturist makes a pet of one kind, or falls into its special needs. A novice buys twenty kinds, treats them all alike. Perhaps one or two kinds find his soil and his methods to their liking, and outdo the rest. In other hands they are not so well adapted, and counter claims are made. Thus we have twenty or thirty sorts all claimed to be the biggest and best. It frequently happens that the very best, not responding to common culture, are discarded as worthless. Now "Noble" is just such a sort. I read of its rejection by the very best strawberry culturist in this country, and yet a boy of twelve years, knowing its special requirement, can grow prize winners without any more cost or labor than he bestows upon "Belt or Clyde." I sent them to several parties in California three years ago, but they are just waking up to its merits, and last year it secured a great boom.

Last June there was a five o'clock tea at the country club quite near me. In going over, I stopped in my patch of "Nobles" and picked the largest berry I could find. Arriving at the club-house, I placed it on the tray, and a friend who was pouring tea, exclaimed: "Mr. Goldsborough, is that a strawberry?" I soon found that arrivals would lift it by its long stem, and then looked confused, many saying: "Oh you can't fool me, I knew it was artificial." Indeed, its size, perfect shape, and color suggested a hoax—especially as there was a dish of Crescents near it. One of the guest said to me: "I will give you, as long as the season lasts, one dollar per box for such berries." But I explained that a box like it, or even one more berry could not be had. On my return I picked another which weighed 2½ ounces. Perhaps you do not think this large, but I have had coxcomb d berries that could not be pulled through a three inch auger hole, which would not weigh half as much. Their color is a deep bright red, running well to the centre. Its flavor while not so good as many English sorts, is equal to that of Marshall, Bubach, or Haverland. Shape cannot be improved upon. It is also productive, weight considered. "Royal Sovereign" seems now to have the call in England, but Noble is still the standard for comparisons. The plants in the spring and fall make a good appearance, but suffer from the heat in our summers after fruiting. Their roots are plentiful and matted near the surface.

COMMANDER.—This has a larger berry and much better foliage than "Noble," but it is not so early. Sir Joseph Paxton, who is a great authority, says: "The Commander is an enormous fruit of good flavor. Probably the largest strawberry ever introduced in America or Europe." About five years ago I bought 3 of the then best Laxtons. Noble seemed the best and so gave up all my "Captains" and "Commanders." The few plants left did so well the following year that I determined to increase my stock again as soon as possible. The plant is larger and stronger than either Royal Sovereign or Noble, and the berries are larger and average better than the Nobles. Persons who believe that foreign berries are not suited to our climate will find out their error when they try "Commander." Fruit well-shaped, fine color, and an improvement upon Noble in flavor.

GUNTUN PARK.—Fruit extra large, varying in shape; dark crimson scarlet. A brisk pleasing flavor; flesh firm, of light color. It is a fine early kind, and bears in long succession. Very useful for forcing in England. First class certificate from the Royal Horticultural Society of London.

BRITISH QUEEN.—The standard for flavor in England. It was originated by Myatt sixty years ago, but is not considered as vigorous as some newer sorts. It has not done well with me, perhaps from not having strong plants to begin with, or being an old sort, it has not yet adjusted its habits to our climate. Last winter and this it tried to bloom in January. Plants medium size, fruit large, round, and well colored. Flavor the best.

SIR JOSEPH PAXTON.—In England the most appreciated and widely grown of all main crop sorts. Fruit very large, handsome, bright scarlet, flesh firm and richly flavored. Travels well, plant hardy, vigorous and prolific. Good for forcing. A standard, and a medal winner.

DOCTOR HOGG.—Fruit of the largest size and exquisitely flavored. A first class berry with true British Queen flavor, but more prolific and more healthy than the old stand by. It was named after a noted horticulturist in England, and has the place there that Gandy holds here. I am more than anxious to fruit it here.

FILBERT PINE.—Richly flavored, hardy, late, and prolific, berries of medium size. This is a race of strawberries rarely found in cultivation in this country, and should produce a good variety when crossed on native stock.

UNSER FRITZ.—A very large, handsome, bright dark crimson sort. Flesh solid, sweet, and highly flavored. Very popular in Germany as the best late strawberry. Plants sturdy growers and free bearer. Not fruited here yet.

CHILEAN.—A most distinct variety in both fruit and foliage. Its leaves are of a bluish green color, thick, tough, and have a glossy varnished look on their upper surface. Berries straw colored, with a rich sugary flavor, but not much like other strawberries. Fruit extra large. Plant very unhealthy in this country.

SAINT JOSEPH.—A new French everbearer. Originated in 1892 by M. Ed. Lefort, and introduced by M. Lefort, Vilmorin, Andrieux & Co., Paris. They claimed in a letter to myself that Letellier & Bro., of Caen, France, had no right to call Louis Gauthier a "remonlaut," because it did not fruit again except on its runners; and that St. Joseph was the only true everbearer among the large sorts. As a runner is an integral part of a plant, the question is a hair splitting one. Besides this contention there is really no competition, as the Gauthier is fully twice as large and of far better flavor. Vilmorin's agents were active here last year and placed the St. Joseph in quite a number of hands. If properly fed it continues to crown up, and the fresh crowns fruit as they make. The fruit is well flavored, sweet, and about as large as the average Crescent. Plants rather small.

LA CONSTANTE SECONDE.—Originated by M. Edward Lefort in 1897, and a perpetual much like St. Joseph.

JEANNE D' ARC.—The latest perpetual originated by M. Lefort in 1897-98. He claims that it is a better berry than his St. Joseph, as it is more prolific and of better size. Neither the Constant Second or Jeannne D' Arc have been fruited here.

EDWARD LEFORT.—Large and early, sweet and juicy, with strong strawberry aroma. New, and attracting some notice in England and France.

LA MONTRUEUSE (Enormous)—This is another French berry of merit. The foliage is light green. Leaf stems long. Plant tall, and makes good runners. Plant stools up very much like Parker Earle. Fruit not plentiful, but very large.

STEVENS' WONDER.—This berry received a first class certificate from the Royal Hort. Society in 1897. It is large, somewhat variable in shape. Light red in color. Flesh solid, highly perfumed, and of good flavor. The fact that it is being sold under several names is a proof of its merit. It has a healthy growth here.

"ALPINE PERPETUALS."

People should advertise strawberry plants under their proper names. There is no everbearing sorts except the "Alpines." I notice in two catalogues sent me "——— New Everybearing Strawberry." In both cases the size of the fruit was purposely omitted, otherwise the "Alpine" would have betrayed itself. One writer said he had faith in —— and paid him \$6 00 per hundred for plants. I think I could duplicate his plants for \$2.00 per hundred and probably furnish a newer and better sort. All of the "Alpine" family are small, the bush or runnerless being the smallest. The rest range from the size of a wild mulberry to that of a good size blackberry. They are all soft and not of so high a flavor as the "Scarlet," "Pine" and "Wood" families. They are very acceptable, though, after the large sorts have gone. There is no doubt as to their ability to bear from May until a killing frost without the skip of one week. They are rampant runner-makers, and their runners frequently show buds and flowers even before taking root. The seed from "Alpines" comes true to name; and seedlings produce larger and better flavored fruit than when runners are used. Treated as annuals the seed with me is always sown in shallow window boxes in February. The little plants, when transferred to rich ground, grown so rapidly that they ripen fruit in five months—just after the large sorts have gone. (See my article on "Everbearing Strawberries" in Noy. 1898 issue *Culturist* Salisbury, Md.) In setting out Alpines put two plants in each hill.

Quatre Saisons "La Belle de Maux." Best known sort.

The four seasons "Berger." Larger and longer than the above.

The four seasons "Janus." Much like the "Berger."

The four seasons "Ameliore." Very long, frequently 1½ inches.

The "Bush" or "Runnerless Alpine." Small and soft.

Other Foreign Sorts Worthy of Cultivation But not So Valuable as Those Described.

Auguste Nicaise, Cardinal, Bieton Pine, Elton Pine, Helene Glode, James Vietch, King of the Earlies, La Grosse Sucre, Latest of All, Lord Napier, Lucas, President, Royal Hautbois, Scarlet Queen, Sensation, Sir Charles Napier, The Countess, Waterloo.

FOREIGN BERRIES.

"After leaving London I noticed boys and girls at the stations selling tourists strawberries in little horn shaped paper packages. On our cars apples, peaches and grapes are sold; why not berries? The reason is easily seen—We persist in growing sorts as sour as pickles. After being picked a few hours none of our fruit is fit to eat out of hand. About one third of our wealthy people dare not eat strawberries; another third eat them sparingly. I am not writing this to boom the Louis Gauthier, but wish to predict that where that berry is generally grown it will increase largely the consumption of berries and be sold at station and in the cars just as oranges and bananas are now. All for the simple reason, that you do not have to make a face after eating one without sugar!

England and France beat us in soft fruits. Why should they? I have picked there currents hanging as high as my head, off bushes looking like trees. I have seen hampers filled with gooseberries, not one of which was less than an inch and a half long and people eating them like plums. I once shared with others in the belief that they had the better climate; am sure now that the difference is due mainly to ignorance on our part; ignorance as to best cultivation, ignorance as to our ability to grow their sorts.

Mr. De La Mare, editor *American Gardening*, wrote me on March 3: "I agree with you, that foreign varieties of fruits are more often rendered unsatisfactory from insufficient cultivation than from the fact of variation in climate."

Some smart Alec told our grandfathers that foreign sorts were not healthy here. I suppose after many weeks's voyage a few half dead plants reached our shores, and not responding to our neglectful methods, were condemned. The prejudice has been handed down. Now I venture to assert that there is no fruit of any sort grown in England, which, if given the same care and intelligent study and culture, but can be produced as fine here. We will have to wait first for the incentive made by demand and competition to spur us on. How is it over there?

Take gooseberries for instance. As far back as 1819 over 150 sorts of gooseberries were shown at the "Lancashire Gooseberry Show." The "Manchester Gooseberry Book" of that date speaks of 185 meetings. Prizes, ranging from ten shillings to ten pounds, were awarded yearly. These prize berries were grown on single stems as high as six to eight feet. No fruit is allowed to grow on these prize growing bushes till the fourth year, and none after the fifth. In order to maintain moisture, saucers filled with water are fixed under each berry.

In that one country are hundreds contesting for these prizes. Is it a wonder that they have reduced its culture to a science? What stimulant to effort have we here? If there is one man in this land lying awake of nights thinking how he might grow a gooseberry as big as a goose egg, let him send his name to the *Specialist*. The same enterprise is afoot in the strawberry fields. What stimulant or compensation have we here for high culture? O. S. Gandy, of New Jersey, was the originator of the "Gandy" yet no recognition has been given him to my knowledge. Why does not the Horticultural Society of Massachusetts, for instance, confer a gold medal upon the only man, who so far, has been able to give us a berry which combines size, shape and flavor. (B.)

To go back a bit. It is not their greater moisture, we can give that; nor deep rich soil—we can make this. It is their skill, their knowledge in adapting sorts to best conditions. We have persisted until lately in growing little gooseberries which are combinations of acid, thorns and seed, when if we had known it, we could have grown large, sweet sorts like "Crown Bob," "Industry," and their crosses upon our sorts. I have them right now, twenty of which would fill a quart cup. We have no berry, not even the "Gandy" to show alongside Laxton's "Noble," size, shape and color considered. Theirs is not superior to ours. If it blights some with us it is probably our fault. Their Victoria currant, trained to a single stem and given same preparation of soil, pruning, thinning etc., will show as good results. As yet we hardly have any books of reference worth reading except for beginners. If a man got out a book such as "Wright's Small Fruits" he could not sell a dozen copies here outside the big libraries. (B.)

Our gardeners lack the time, education and means to study horticultural questions. Few gardeners except at New Port get as much as \$100 per month, while in England a good educated head gardener commands \$2,000 dollars a year, with a house, carriage and boy etc., thrown in. He is required to be informed on science relating to his profession and allowed travelling expenses to other estates to learn new methods. (See London Encyclopedia page 1232.)

Besides national institutions there are two or three of the richest noblemen in England who have given up their estates, fortunes and their time to experimental work without any governmental aid at all. When it comes to field work, we are not markers to them. The firm of Laxton Bros. grow four acres of seedling strawberries every year and use one hundred thousand thumb pots for layering purposes. It is not to be wondered at then that they beat us to death in the production of small fruit. We have imported their horses, cattle, sheep, dogs and poultry and improved upon some them, but a foolish prejudice still exists against their fruits. Get their best varieties. They are not all healthy (neither are ours) with observation and study we can soon learn how to cultivate them and produce 3 or 4 ounce berries too. At present a 2 ounce berry is a curiosity at home, and never seen in our markets. (Extract from an article on "Foreign Fruits" by A. T. Goldsborough.)

Extract from a letter received from the Editor of *American Gardening*, March 3d, 1897: "I omitted to say in my last that I agreed with you, that foreign varieties of fruits, etc., were more often rendered unsatisfactory from insufficient cultivation than from the fact of variation of climate." Yours very truly,
A. T. DE LE MARE.

American Sorts.

GANDY.—Originated by O. S. Gandy, Esq., of Cumberland county, New Jersey. It is no easy matter to give the merits of any popular sort, because they consist of little things. For instance, Gandy's habit of late blooming gives it a big lead over sorts having its other good points. Its bloom has never been hurt by Spring frosts. It is thought by some that Dr. Hogg and Aroma may take the place held by Gandy. We doubtless do need another late bearer, yet unless a berry can be had with its precise flavor there is little danger of driving it out. At present it has a flavor all its own. People begin to eat berries here early in April. By the time our local early berries are ripe (May 20) many are tired of strawberries, but their jaded appetite seems to revive when Gandys appear. Some complaint has been made by Gandy growers that some of Gandy's runners are sterile or blind. This degeneracy is due to the habit of setting out "tail enders" and "internodes." Use only first runners from strong parents and the trouble will soon cease. Gandy makes extra strong disease-resisting plants. Leaves dark green, mounted on long stout stems. No strawberry as far as my knowledge goes has as strong a constitution. Plant tall with an open growth. Strong runners with long arms. Unlike "Gauthier" the late runners of this variety often fail to make fruit. Productive in measure if not in number of berries. Berries large to extra large, shaped considered. A very large calyx extending well over the top gives berries a fresh appearance. Flavor unapproached by any other American sort. Being firm, it is a good traveller, and our markets are well supplied by distant growers. It does not ripen until the other large sorts are at their worst, and though not bringing as much per quart as earlier sorts at their best, holds the market when it comes, and quoted at a price above all others it meets in competition. Gandy beds can be fruited profitably for two or three years—other sorts have not proven profitable with me except as annuals. The reason for this I think lies in the fact that Gandies in matted rows do not crowd each other out by excessive runner making, for after the second year they hardly make any. Being a strong-rooted upright grower, they shade and choke out the weeds. Defects: Some say that the fruit is dull in color; others, ever hard to please, say it is a shy bearer, and so it is. But why grow sorts which require thinning out to get good berries when you here have a sort which Nature thins for you?

BUBACH.—Is the quiet "tip" with market gardeners near city. It is beyond all question the best known and most popular mid season variety of American origin. It was my favorite ten years ago, and time has not lessened its worth. It has plenty of imperfections. Some other sorts have larger berries, firmer, better flavored and better fruit stalks. Yet none of them has its combination of good points. Its foliage is ample, clean, and free from all diseases. Few runners are thrown out and they make as they go, are strong and root quickly. Its very best quality is its ability to stand high feeding without resentment. Its fruit is increased in number and size, and foliage is not hurt. Lime, salty manure just from the stable, nitrates, nothing makes its foliage increase at the expense of its fruit or health. Marshall, Belt, Sharpless and many others yield one large "king berry" and the rest are small. Here we have a sort that gives a lay out of four or five "kings," all ripening at the same time. There are several Bubach's. Be sure you have No. 5.

BEDAR WOOD.—This is the best of all the first earlies tried by me. If there are any earlier it is at the expense of size and flavor. Practically no sort can be earlier owing to frost. Plant healthy, moderately large, making runners freely, of good color, and productive. It is in every respect superior to the old standard Crescent.

MARSHALL.—Has been a prize winner, but will never be a bread winner, as it is too unproductive for extensive cultivation. As a fancy berry it is worth planting, being large to extra large, of fine color, flavor, and shape. Yet even for fancy growers it is not in the race with Laxton's Noble, Royal Sovereign, or Commander. I have until last season regarded its running mate, Wm. Belt, its superior; but Belt is too apt to rust.

DIAGOON.—From Oregon, and no report has been made on it from any Eastern grower to my knowledge. Has a rather low sprawling growth, yielding large, solid, roundish berries, of a bright cherry color; plenty of them and of excellent quality. Its root system is like the Mexican and the reverse of the Gauthier, being compact and felted with hair roots. Is a good traveller and fine for hill culture. Its name is very catching and there is quite a brisk demand for the plants. Plant habits not the best.

PARKER EARLE.—In spite of defects the Earle is going to get into the hands of every market gardener who has any regard for dollars and cents. For hill culture it is unrivaled. Plant growth strong. It stools up faster than any sort except the "Gauthier." Those who dislike the bother of runners will find it just the thing. Fruit medium to large, of good regular shape, with a slight neck, making picking easy. Color scarlet crimson. Fairly firm. Its fruiting period is quite long, ripening with the second earlies and lasting as long as the Gandy. Enormously productive. Some growers state that it fails to ripen all the fruit it sets. This is a fault in the culture, and not in the plant. For eight years I have obtained a berry for every bloom. Defects: Berries larger than Bedar Wood and many other sorts, yet too small for fancy trade. They lack in flavor, and are too acid. The plants rust badly after cropping.

BRANDYWINE.—Has secured quite a boom during the last three years, and though not so good a variety as Bubach, is worthy of a place in any large collection. Plant healthy and vigorous. Berries of fine conical form, color bright red, firm, but flavor rather acid. A large calyx makes the berries attractive when freshly picked, but when it is dry and rusty detracts from their appearance. Like Marshall and Belt it cannot retain its hold upon popular favor, for it has no distinct quality not found in the better sorts.

NICK OHMER.—Here is another berry without any distinct merit and only comes to prove that a berry without such, or without a combination of good qualities, is short lived in popular favor. It belongs to the Marshall and Belt class, and not so good as either.

GLEN MARY.—Originated with Mr. J. A. Ingram, and belongs to the Sharpless type. Has been well advertised and listed by nearly all nurserymen. While having no quality superior to Sharpless except color it is much inferior to it in flavor. In growing seedlings twenty per cent are of this class, and although I have fruited hundreds, have never thought of giving one a name. The day of misshapen berries is over.

MARGARET.—Three years ago I imported the French berry "Marguerite" which though of weak growth and poor flavor is unquestionably the largest berry grown in France. But in deference to my friendship for Mr. Crawford who made Margaret his banner berry in 1897, I concluded not to list it and add confusion as to names and claims. I am now discarding Marguerite in favor of La Montraeuse which corrects some of its faults and will not have to overcome the bad record which Margaret has made. A strawberry may win prizes in the hands of a specialist, but prove worthless with the general culturist. Margaret is one of these. Mr. E. C. Davis of Massachusetts seems to have a method which suits it. In other hands it has proved of little or no account.

CREOLE.—A good early sort and a favorite in the South west. If it does as well next year, I shall discard Bedar Wood, as Creole is stronger in plant habit and bears a much larger berry. Its foliage is remarkably free from spots and rust. Is a maker of fine strong early runners and when the first are transplanted will form a good matted row before hard frosts. This commends it to single year culturists. Berries large, regular in shape. Firm and of a deep red color. Flavor sweet and good. Ripens with the first and long in bearing. I am more than pleased with its behavior.

CLYDE.—Productiveness is the great claim made for this sort. In other directions it is only second class. Only fair in color, flavor and average size. Its king berries are not larger than Bubach but of better shape. Plants are only fairly healthy. For best results it should be fruited only once and soil kept moist to allow it to ripen up the large amount of fruit it sets. It is an acquisition and will keep in favor much longer than some of its contemporaries.

LADY THOMPSON.—The great vitality of this berry, and its ability to resist droughts which kill other sorts is pushing it to the front in the far south which has been looking for a good shipper and money maker. There seems to be a difference of opinion as to its yield. Some claiming great productiveness and others calling it a shy bearer. It is healthy and of tall growth. Fruits early and a good pest resister. Berries fairly large, of fine shape and good flavor. Is found to be popular in dry seasons and the first berry to gain favor in the South. Some complaint as to color.

AROMA.—This berry never had a boom like Brandywine, Glen Mary, Marshall, Belt, Jessie, Mary and Trimbell but is still in the race and will stay long after they are forgotten because of its real merit and because while not the best is a failure with no one, and suits any state or soil. Its one distinct habit is to bear good berries till the last. This feat it performs by blooming in long succession. Some 'king buds' break late and coming along gives the impression that it holds its size till the last; When Gandy ripens, Aroma still shows large fruit, which is more than can be said of any other berry which begins so early. It has good shape flavor and color. Plant are strong, but not so good as Gandy and Bubach.

RIDGEWAY.—I am favorably impressed with this new berry. Its combination of good points places it ahead of Glen Mary, Clyde or Brandywine. The berries are almost as good as the Mexican; color first class, shape always good. It does not keep its size as well as Bubach. Its originator Mr. M. H. Ridgway thinks it will supercede it but Bubach fills a place all its own. In the matter of runners for instance Bubach has not a peer and this counts with the gardener, if not on the sale bench. Ridgway is a rampant runner maker. This is a serious fault, yet single year culturist can turn this to good account. Its runners are made early, strike quickly, leave a long thick root much like Louis Gauthier and if taken off in July and set out after a rain they will throw off enough second and thirds to make a good narrow matted row for next crop. The first berry of this variety is not quite so heavy as Bubach, but better shape.

MEXICAN.—For private gardens there are no sorts equalling Mexican and Gauthier. It has required six years to make the California growers catch on to Laxton Noble and the same time to educate us up to their Mexican. S. L. Watkins thinks Mexican should be dropped for Noble. I have not succeeded in my efforts to boom Noble as there are quite a number of our first culturist who have failed to grow it to perfection. I think that the wave of popularity now sweeping the "slope" will work eastward, as Noble only succeeds under single year culture, a great many will be disappointed so I am rather disposed to substitute Mexican. Its table qualities are far better than any American sort. The berries are almost as shuckless as raspberries, a man can pick four times more quarts than a child of ten years, because it cannot pinch the stem without mashing the berry or using both hands, with shuckless berries it is different. When visitors arrive on short notice and everything is hurried up it is a gain to send out a little "tot" and have berries brought in without stems and requiring little or no sugar. Mexican and Ridgway can be put in the same crates without showing any difference except that Mexicans are somewhat sweeter. The king berry is a size larger than the Ridgway first, after they are picked the average is about the same. Mexican is also more prolific. The plants are medium size and have a dark green foliage very similar to Gauthier. It makes runners like Bubach, few but strong. Roots thickly matted the reverse of Gauthier and Ridgway which are fleshy and long. Closely felt roots keeping near surface suffer more from heat and drouth but are the best for forcing and special work because you have the roots where you can better feed them. Fruit a bright crimson. Flavor very best, being sweet, rich and fragrant. Some of its runners bear fruit as soon as they strike, a trait of Gauthiers but not quite so well developed. For a gentlemen's garden or near by market Mexican is the very best domestic kind. There being little trouble from runners Mexican is a fine hold over variety and bears well for 3 or 4 years.

NOTE.—I only describe what I consider the very best, but have many other American varieties which can be supplied. I claim to have the largest collection of choice Foreign and Domestic Strawberries in America. Plants not sold by the thousand as I cannot compete with growers who lift runners from matted rows. All my plants are transplanted, or grown on the cutting plan.

Price-List of Strawberries.

FOREIGN VARIETIES.

	Each.	Dozen.	Hundred.
Louis Gauthier.....	\$0 15	\$1 00	\$6 00
Early Giant.....	20	2 00	10 00
Leader (Laxton's).....	20	2 00	10 00
Monarch (Laxton's).....	20	2 00	10 00
Royal Sovereign (Laxton's)..	15	1 00	6 00
Laxton's Noble.....	10	40	2 00
Laxton's Commander.....	10	40	2 00
Veitch's Perfection.....	20	2 00	10 00
Huntton Park.....	15	1 00	6 00
British Queen.....	15	1 00	6 00
Sir Joseph Paxton	15	1 00	6 00
Dr. Hogg.....	15	1 00	6 00
Filbert Pine.....	15	1 00	6 00
Unser Fritz.....	15	1 00	6 00
Chilean.....	15	1 00	6 00
Saint Joseph.....	15	1 00	6 00
La Constant Secunde.....	15	1 00	6 00
Jeanne d' Arc.....	15	1 00	6 00
Edward Lefort.....	15	1 00	6 00
La Montruese.....	15	1 00	6 00
Stevens' Wonder.....	15	1 00	6 00
ALPINES.....	5	25	1 00

AMERICAN VARIETIES.

	Each.	Dozen.	Hundred.
Aroma.....	\$0 10	\$0 30	\$1 00
Bubach (P).....	10	30	1 00
Bedar Wood.....	10	30	1 00
Brandywine.....	10	30	2 00
Clyde.....	10	30	1 00
Glen Mary.....	10	30	2 00
Gandy.....	10	30	1 00
Marshall.....	10	30	1 00
Magoon.....	15	50	3 00
Mexican.....	15	50	3 00
Nick Ohmer.....	15	50	3 00
Parker Earle.....	10	30	1 00
Ridgeway.....	15	50	2 00
Creole.....	15	50	2 00
Lady Thompson.....	15	50	2 00
Margaret.....	10	30	1 00
Eastern Shore.....	under trial.		
Phil Crates.....			
Austin-Mayes Dewberry....	10	75	3 00
Shafer's Col. Raspberry....	10	50	2 00
Loudon's Raspberry	20	2 00	8 00
Letellier's Thornless Rasp.	1 00		
Texas Thornless Raspberry	15		
Duplication Gooseberry.....	20	2 00	8 00

*Strawberry Seed from selected berries of leading sorts
at 15 cents per packet of 2000 seeds.*

I was, as far as I am aware, the first shipper to use old tin cans for mailing strawberry plants. I have mailed them to every State and to France, and had them to arrive safely. All orders for fifty plants or less are sent in this way. For long distances plants are received in better condition than when expressed in boxes or baskets. I shall only quote a few letters on this point:

S. Glastonbury, Conn., August 16, 1897:—"Replying to yours of the 14th, the mailed package of Louis Gauthier plants you addressed to Hartford, Conn., but it turned up here one day late, but wishing to test it I left it unopened for five days, and when opened, found the plants in perfect condition, with no trace of heating in any way, seeming to indicate that your sealing process was just the thing for transportation of green plants in summer weather."—J. H. HALE.

St. Georges, Bermuda, February 28, 1897. "Gauthier plants came in prime condition, and are doing splendidly. I am delighted."—N. H. McCALLUM.

Dickson, Wayne Co., W. Va.:—Strawberry plants received today in fine condition. Not a leaf wilted nor a root died. Thanks for extra count and promptness.—LEE S. DICK.

Manche, France:—My strawberry plants received this a. m. Gandy and Mexican have leaves as fresh and green as when dug.—M. GAMBILLON.

Milford, Delaware, Nursery:—Strawberry plants came promptly to hand in most excellent condition and are strong and handsome. Thanks for extras. Your method of forwarding is surely new and cannot fail to please your customers.—ALEXANDER PULLEN.

Union Fruit Co., Mountain Grove, Mo.:—If I lose any of my plants I won't blame you, for not one of them has even wilted.—H. GUGEL.

Arkadelphia, Ark.:—Plants received, and I must say in better condition than any I ever received from either a short or long distance.—JOHN R. BODDIE.

Strawberry plants received. Thanks to the can in which you sent them. They reached me looking as green and as fresh as though just out of the soil. Thanks for liberality.—A. M. PETICOLAS, Victoria, Texas.

Bayou Labat, Ala.:—The strawberry plants came to me in the finest condition imaginable. Looks as if just from the bed. Kindest thanks for extras.—C. M. INGERSOLL.

No order too small to fill; and filled any month in the year.

SHALLOW VS. DEEP CULTURE IN TREATMENT OF THE STRAWBERRY.

"Error once rooted in the popular mind, is not removed by anything less than a surgical operation. Arguments and facts do not quickly prevail against usage and prejudice, yet I trust that some of you readers, wishing large berries, will have the fairness to give shallow cultivation a trial, ere they say of me, 'I expect he grows his berries on paper.' I do not believe that roots sink deep for any purpose except to get support and water. The roots which gather food for root and top growth, lie close to the surface in fact they lie just under and in the leaf mould so as to catch the rain fall before it evaporates. By mulching with soil or loose material we can reproduce the natural environments of trees and plants. Rain, manure and the shade from, and decay of crops, enrich the top soil, and permit the rich microbes to multiply their kind and keep down the poor ones. As soon as this rich strata forms, along comes the plough, and turns it under and brings up a cold acid strata, for crops to grow in. By the time this new top soil; from the action of shade rain and frost is ready for plant life; after the finer clays have filtered down and formed another subsoil like the first; along comes the deep plough again, turning the uncongenial subsoil up. This process is repeated ad infinitum.

Now 99 out of every 100 fruit growers believe in a deep, loose, rich soil whilst the opposite conditions are indicated with me. During the past fifteen years I often read of some culturist who claimed big berries from deeply stirred, rich soil. I would say to myself, can I be mistaken as to this matter? and then would be given another trial of this method with the same old result—Berries no larger, fewer, lighter in color and weight; hollow centres and lacking in sugar and flavor. A few years ago Mr. Davis of Massachusetts described his plan for growing the Jesse. He made his soil as mellow as an ash heap and did not "think it fit for the plant unless he could thrust his arm into it up to the elbow." At that time I had a bed of Jessie cuttings, strong in top and roots. In setting out a 200 feet row, I trenched 200 feet 18 inches deep and filled with rich potting soil. To say the truth I was doubtful, and therefore not surprised to find that although the foliage was ranker, I got more and better berries on the 100 feet of row left untrenched. I refuse to believe that the difference might have been in the soil. If those gentlemen who practice deep culture, would adapt the best shallow methods, they would never go back to the labor and cost of deep ploughing. I, for one, am tired of testing *their* system, and shall not try it again till some one can give me good reasons for its benefit. Surely no one will contend that deep culture is more preservative of moisture! If roots penetrate deeper into it; it is because they instinctively fly from the light and heat a loose soil lets in. Many entertain the idea that root growth cost the plant or tree nothing. It is not true, for it costs as much plant energy to grow roots as it does limbs and foliage; the two terms branches and roots being almost synonymous. Consult any standard work on botany and learn that branches are only roots above ground, and roots are only branches or limbs, under ground. We have all seen Irish potatoes growing on the vines, and I read of an apple tree in a beer garden which was up rooted and planted top down. In time the roots sent out leaves, and what is more, blossomed and bore apples. Now we suppose the strawberry plant to be endowed with instinct of preservation and certain energies. Man studies and directs them and his knowledge enables him to produce the monstrosities which we have in the vegetable world. The plant says, here! I have a deep rich loose soil for root growth, and no danger of being crowded out by others. So why should I cast seed while I have a safer way of multiplying; and out goes spring runners. Man should imitate nature's economies and direct the strawberries energies to seed formation and in order to do so he must indicate by treatment whether he needs fruit or runners.

He can restrain root formation by making difficult conditions. He gives a hard, shallow soil or runs a knife down and severs some of the deep roots. Nature does no guessing. She sees the cause and remedy, and says, My hope of perpetuation (the animating instinct of all organic life) by means of runners and crowns is denied me, so I will bend all my efforts towards perfecting seed [fruit]. When florist want bloom they do not place a plant into a large pot but gives it a small one and ram the soil down hard with a mallet. When a fruit tree can revel in root growth, it bears sparingly. Cut off some of its roots and its fruit increases. I have for many years exchanged horticultural ideas with Matthew Crawford, Esq. In answer to my views on this subject he wrote on Nov. 21, 1898. "My faith in a firm soil increases every year. Last spring I had no ploughing done, except when I wish to bury rubbish or manure. My best fall set plants are on unploughed ground." The editor of the "London Gardeners Chronicle" in June issue says. "All the finest examples of the strawberry I have yet seen have been grown on warm, shallow and rather poor soil." Instead of letting the roots run down to China bring them to the surface by a light mulch of any sort. After the fruit is set, you can feed as you would a coop of chickens, a little at a time, but often."—Article in Colman's Rural World; also comments of editor.

ARTHUR T. GOLDSBOROUGH.

Why Strawberries Degenerate.

There are about one hundred kinds of strawberries catalogued in this country, and about 20 kinds are generally known. Most of them are of recent date. Two or three are dropped every year, and as many new sorts added to it. There seems to be a necessity for these introductions, because many new sorts prove failures, and old ones decline in productiveness and size. At the same time there should be no excuse for sending out a seedling which is not better in its class than those already in cultivation. Those who do not know the sorts we already have can be pardoned—and they are many. The Elberta peach was the only one saved out of 10,000 seedlings because the originator knew what he had to go up against. In 1895 I fruited 400 seedling strawberries—none were named. In 1896, same number—same result. In 1897 I fruited 600, which had been selected out of a seed bed the spring of 1896, set in two long rows, and made such fine growth that the rows were well matted from end to end. When in fruit, there were few smaller than Crescent, while the largest would have duplicated almost every kind I had on the place. They crated up so well that I began to think that it would pay to rely on seedlings for my main crop. Although there were many as good as some of the existing sorts, none were better, and only one was named and yet under trial. This year I also fruited about 300 seedlings, and some were better than Bedar Wood or Glen Mary, but none tip top. I shall continue to sow seed, for it is the finest bit of horticultural madness I know of, and when I do offer a berry of my own no one need be afraid to handle it. Now, why should not other culturists be as careful of their reputation. Sending out good seedlings helps the strawberry cause. It puts energy and life in the business. The introducer of inferior sorts like Oregon Everbearing, Timbrell, Shuckless, Great Pacific, Eureka, Annie Laurie, Mary, Warfield, and others, hurts the trade by making the buyers shy at everything new. As I said above, there seems to be a necessity for new varieties, for the old ones are being discarded, no one being interested enough in fruit culture to keep the Sharpless, Downing, and Wilson up to their standard. They do things differently in England where there are many sorts more than fifty years old. Myatt introduced his British Queen over sixty years ago. Although from the start it was weak in growth habits, it is as fine as ever and still the standard in its class. Are we to permit such sterling sorts as Gandy and Bubach to go to the wall when, as yet, we have none as good to fill their places? This question brings us back to our theme and makes us consider the special and general causes of degeneracy. Take the Gandy; one man writes that the Gandy has "played out" with him. Inquiry reveals that finding some of his plants without bloom, he took up enough to make a new bed, thinking to get something fine from unfruited plants. One or two years of such practice left him with a bed of almost sterile Gandys. Small wonder. Brother Snyder would call this working the selection theory tail end foremost. We all know that there are sorts which will throw off layers to the fourth and fifth generation and the last and smallest will fruit in the spring. Not so with the Gandy, and this special failing must be recognized. Save only the first or the early spring layers and then work away, and not towards degeneracy. Many others claim of this Gandy failing. Let sterile plants, which are apt to look the strongest, and tail-enders be avoided and then look for the general causes of decline. What are they? It ought not to be necessary to caution against taking off layers from plants exhausted by bearing. The strawberry reproduces itself in two ways—by seed and off shoots. Defeat its purpose in one way and a greater effort is made to perpetuate its kind in the other way. After casting seed it has not the strength nor need of making runners. So by cutting off runners we get more and better fruit (seed.) If berries are kept off better runners are made. A great many introducers hurt a new sort by selling small and immature plants, for it takes some nerve to throw away tail-enders when one can get 25 cents each for them. If Louis Gauthier had sent out layers from those plants only which showed the second fruiting habit, there would now be more uniformity in the Gauthier's twice bearing. I observed this morning that some of my Gauthiers had no layers in bloom. Presently I came across one having all its layers in fruit or bloom. Now I see a chance of building up this habit and have put all its layers off to themselves and will see what a year or two of selection will do. There are other causes, and some peculiar to each sort. Big berries can be made on rather poor and hard soil, but the reverse of these conditions are required for strong layers. Avoid too much shade. If grown too thickly together, small weak hearts or crowns result. Choose plants of course as free as possible from spot rust or blight. I come now to a potent cause, not mentioned in print to my knowledge, and one that makes deterioration of a sort very rapid. I allude to the careless practice of using internodes (*inter*-between, *nodos* joint). I have been to some trouble in proving that they carry out the proverb "once a runt always a runt." We frequently see plants with short stems, small leaves, many crowns, and a tendency to bloom in and out of season. It is dollars to cents that they are the product of internodal propagation. Use only those layers coming direct from the parent plant, or tips from true joints—the little "fifth toes," as I call them, starting between the joints, or growing sidewise from the runner string are internodes. They are really the first layers since they are the nearest to the old plant and first tips or layers on the string. In cutting off runners, sever them as close up as possible. Many cut off the head or tip of the runners and the internodes flourish to the detriment of the fruit and welfare of the stock. Avoid working about the roots of strawberries when the soil is wet, as it induces spot and rust. Many sorts have these diseases fixed upon them, and are at an end, while they are free from them in careful hands. In conclusion I will say keep a few unfruited plants for stock purposes. Use the cutting method for renewing. Never fruit a plant more than once. Use plenty of water and the hoe and no sort will go back on you. The small grower will perfect and maintain the strawberry. The ten-acre men add little but low prices to the cause."—ARTHUR T. GOLDSBOROUGH, Washington, D. C.

[Mr. Goldsborough, who, all things considered, is doubtless the ablest and best equipped writer on the strawberry in America, by no means overrates the effect of degeneracy on the strawberry under the sloven culture generally followed in this country. We have for years practiced the breeding up of varieties by selecting plants prominent for vigor, productive of fine berries, etc. This selection is made at the earliest moment in which this superiority is indicated and not waiting for any berry to mature seed, which is conceded to be the process that exhausts. Such plants have all blooms at

once removed and are promptly transferred (with the largest practicable clod of earth adhering to the roots) to moist, rich soil kept and prepared specially for the purpose. From these selected plants are grown plants to set over fields and from such the best are in turn selected by the same process and so on indefinitely. No plant intended to propagate from is allowed to set berries except some of the most vigorous from which the selection is to be made as above. The good effect of preservice in this selecting process has long been manifested by the superiority of varieties which we have had for five years or more.]—Editor of *Strawberry Specialist*.

NEW TREATMENT OF RASPBERRIES AND DEWBERRIES.

(By Authur T. Goldsborough, Washington, D. C.)

What the soft fruit growers need in this country is cheap culture and quick returns. Waiting a year or more for crops, is giving a mortgage on our time and labor, and a process too slow for any up to date, enterprising horticulturist.

Why should he set out Raspberry canes or roots now (October). Keep out grass and weeds all next summer and spring of 1900 and no compensation till July of that year. If slips had been drawn and set last May just as big a crop could be expected in July 1899. These slips or suckers can be set in rows as straight as a string, and the soil being loose and clean, it can be kept so with little or no hand work, while fall set roots or canes are troublesome owing to straggling growth of suckers and a packed soil. Last year *Greens Fruit Grower* devoted nearly all of one issue to Raspberry culture and yet no mention whatever was made of the single year system. As I have seen no mention of it elsewhere I deem it best to go into all the details of a method which treats strawberries, Dewberries and Raspberries as annuals. About May first suckers of the Red Raspberry are usually one foot high and on their own roots.

Selecting a wet day they are lifted with a trowel and soil shaken off. Their stem and roots being very tender allow no wind or sun to strike them. Place carefully in a basket, sprinkling their roots and get them set as soon as possible, for just here depends success. Set with a trowel as you would tomatoes and water at once—even if it is at the end of a six days rain. If careful in these little details your slips will receive no check to growth but stand up like soldiers and the loss will not be one in a hundred. I come now to consider the cause of failure with those who have tried single year culture—the curse of too much space. I read over and over again letters from culturist saying that the first year's fruit does not pay for culture, and they conclude from this that single cropping theories are foolish—and say so. It does not seem to occur to them that fruit plants intended as perennials are set one way, and annuals another. They clip a bird's wings and blame it because it cannot fly. Their reason for setting onions, melons, cabbage twice too far apart is, because everybody does it that way. Well, if universal assent had been the guide for every one and no free thinking allowed, we would be to day running around naked and living in caves. Illustrating the folly of wide spacing and continuous cropping, I will mention the method of a near by market gardener. His strawberry rows were $3\frac{1}{2}$ feet asunder and newly set plants 18 inches apart. Looking at his half acre he said "there will be a patch to tell about." When? said I. "Next spring a year. In the meantime I will keep off all runners and next fall each plant will stool up with five or six crowns." Yes, I said 9 out of 10 of all the berry growers believe in this system, and I think of them with the greatest commiseration, for none but the rich can waste time, land and labor in this way. Now my friend, continued I, you have thousands of good plants in that old bed, full of chick weed, sorrel and timothy. No marketable berry can be picked next June without a foolish outlay for weeding and spacing. The timothy crop, which you would trample down is worth more than the berries, or you could turn under this old bed next spring and make a good crop of anything. Now instead of pulling weeds from the strawberries why not pull the strawberries from the weeds. After shaking out the soil, chick weed seed, and unseen enemies, set in rows 2 feet apart spaced 3 inches and get berries you can sell. He at once fell into the common error. "That would be cheaper, but plants wouldn't have room for their roots." I took out a pencil and reasoned with him in this fashion.

You claim that in June 1900 each of these plants will have formed a stool having six fruiting crowns more or less. The stools standing on practically exhausted soil each crown crowding its neighbor. Suppose next fall you tear these stools apart and each crown spaced 3 inches apart down the row. Each crown touching elbow, would have unlimited (laterally) in two directions and really be less crowded than if left in clumps, or stools. Now listen to my contention. I claim then, that these very stools next fall, if divided into crowns by root division would produce more and better berries than if left to fruit in stools. "Yes," he said "I would have the same number of fruiting crowns and could save manure and land by making rows closer." Precisely. But why wait and labor a year for these plants to make you six crowns (plants) when you have them now "to burn" in that old patch which transplanted any time before X-mas will fruit next June. The old plants are just as good as the runners if they have thrown new white roots. Some of them would have two crowns and your fruiting stock would be larger than by your stooling system. If bent upon fruiting twice, let them stand for a 1900 crop. No weeds could grow in the thickly shaded row, and being straight and narrow a wheel hoe could keep it in order all next summer.

For some reason fall set plants thus treated throw off few runners and those in good position for early removal. Now the same argument holds with Raspberry culture. Shortened canes are set out in the fall. No berries picked following spring. Each cane (5 feet by 4) is permitted to mature from 4 to 6 suckers—say 5. If set out 1898, the fruiting stock July 1900, on a 100 yard row, would consist of 75 hills or 375 canes. Suppose last May you had set slips down this 100 yard row, spacing the slips 8 inches apart, you would have 450 canes or 1-3 more than with the hill plan, and get your crop off next July instead of July a year. No staking or tying to wires is necessary, there being no need for a cultivator next spring for after getting out your suckers for year 1900 and picking fruit you will mow down canes and plough.

OTHER SOFT FRUITS.

AUSTIN'S DEWBERRY—Austin's or Maye's Improved Dewberry is of Texas origin and stands drouthy seasons well. Berries have a splendid glossy black color, and a week earlier than the "Lucretia;" larger and in every way better. When the vines are shortened to about 2½ feet, and their tips tied to a stake, there is a beautiful display of fruit. It has been highly praised by Northern Experiment Stations and costs no more to mulch than strawberries, where protection is necessary. Those who have given up the Lucretia for the tall growing blackberries will go back to the creepers again when they know the Austin.

RASPBERRIES.

LOUDON—Is an improvement upon the standard "Cuthbert" and that is praise enough. It has a strong cane with large leaves shading the ground. Endures cold weather, never crumbles, of good flavor, with bright, red color.

SHAFFER'S COLOSSAL—Berries extra large with a dull purplish color, rather soft, but of a rich luscious flavor. Without an equal for near market and family use, and very best for canning, drying and preserving. Canes are of wonderful vigor and size. Hardy and enormously productive. It has the growth habits of the black caps, which it will in time displace. Says the Ohio Experiment Station; "The average weight of the Shaffer per 100 berries was nine ounces, average diameter $\frac{3}{8}$ of an inch, which weight and size surpass that of any of the 24 sorts tested."

FIRST AND BEST—Great claims are being made for this raspberry by California growers. Considered earlier than other kinds. Canes vigorous, hardy and extra prolific. Berries large and extremely well flavored. I find this neither first nor best yet has merits of its own, being of very fine flavor. Canes not so strong as Loudon. A good bearer.

FRENCH EVERBEARING RASPBERRY—This is a fine Red Raspberry and fruits on suckers of the current season. I do not take much stock in everbearing raspberries but this is far more satisfactory than any I ever tried. Hardy and prolific. Canes strong. 20 cents each, \$1.50 dozen

GOOSEBERRIES.

LETELLIER'S THORNLESS—I imported this Gooseberry direct from the originator in France in '96 at a cost of \$2 each. The advantages of a thornless sort need no pointing out, for the spines of gooseberries are not only dangerous to pickers but careless pruners often get barefooted children into fatal trouble. The fruit of this kind is equal to the best English sort in size, flavor and color. Am very sorry to state that my bushes lack vigor and consequently suffer from mildew. Price \$1 each.

TEXAS THORNLESS—Grows vigorously in tall bush form like the Crandall current. The foliage is quite like this current. Its fruit being small, it is a question as to whether it is a currant or a gooseberry. It is productive to a high degree, the bushes bending down from weight of fruit, even in the driest climates. The berries are stripped off by the handful and are fine for all cooking purposes. Price 15c each.

DUPLICATION—In 1890 I sowed some cross fertilized gooseberry seed and got quite a good stand of seedlings. A majority suffered from mildew. Some were free of it and showed fruit in 1895-'96 superior to pure American sorts, and two of them almost identical to some well known English-American kinds. In '96 I destroyed all the seedlings but one and by grafts and cuttings have quite a stock on hand. The question is what can I do with them? If I send them out as the Columbus, experts may see some difference and pronounce them untrue to name. If sold under a new name, experts may see no difference between them and several other sorts and cry fraud. Still I have no intention of losing my labor and pains, and will send them out under the name of "Duplication" even if it does expose me to the fire of the critics. The fact is, a cross between the English and American sorts is apt to result in many duplications and will lead to endless confusion as to names. Practically there is little difference between "Columbus," "Carman," "Triumph," "Gracilla" and "Duplication." At least a grower who has any one of them, has no excuse for buying any of the others. "Duplication" this past season was a little larger than Columbus, 27 berries of which weighed as much as 20 of the latter. They also hang on the bush much longer. These differences tho' may have been the result of treatment or location. As I stated above, if you already have any one of the sorts named, you do not need the "Duplication," but if you only grow the "Downing," "Houghton" or "Pearl," by all means send for even a plant or two of the "Duplication" and see what a good gooseberry looks like. Bushes vigorous, upright and healthy. Leaves deep green and absolutely free from mildew. Fruit as large as English sorts, of excellent quality and of a fresh greenish yellow. The ground must be mulched or branches tied up. The big berries as large as pigeon eggs touch each other all along the branches.

INDUSTRY—The prejudice against foreign strawberries and gooseberries is not so strong as formerly and many English gooseberries can be grown here. Industry is as healthy here as in England and has been grown in nearly all of the states. It does not propagate by cuttings as easily as American sorts and takes two years instead of one to get good plants by layering. Fruit of the largest size, dark red, best quality and vigorous; requires little or no sugar. Price, 20c. each; \$1.50 per dozen.

KEEPSAKE—Another British kind. Healthy strong grower, bears every year and very productive. Fruit earlier than Industry, of splendid flavor, very large and greenish yellow. Price, 25 cents; \$2 per dozen.

RED JACKET—Of doubtful origin. Free from mildew, very strong vigorous growth, a great cropper. Fruit smooth, red in color, fair quality and of large size. Price, 20 cents each; \$1.50 per dozen.

STRAWBERRIES FROM SEED.

Many of my patrons ask for information as to Strawberry Seed; so I describe methods of germination which have never failed to bring me a full stand. Make a small box or flat say one foot square and three inches deep. Place in it two inches of fine sand. Level the surface, wet the sand and place over it a piece of thick blotting paper; wet this also and then spread the little seeds thickly on top. Cover seed with two or three sheets or blotting paper and wet them also. Now keep the sand and blotters always moist. cover box with a piece of oil cloth or glass to retain moisture. Place box in a kitchen or warm sitting room. In ten days the seed will show sprouts and then the blotters can be taken out the seeds brushed off into a pan containing some moist soil. This prevents the sprouted seed from drying and enables you to sow it more evenly. Sow either broadcast or in narrow drills in a hot bed, window box or cold frame, if the latter is in a warm sheltered situation. Put enough soil on to barely cover the few seeds which may be showing and then press gently with a piece of board. Keep the bed moist, not wet, and the plants will show in five or six days. Do not let the beds get dry and protect against the noon sun. When the leaves are as large as a dime, transplant to a rich light soil, or set plants in small pots. Seeds can also be sown as you would lettuce seed, but frequent waterings bake the surface soil and weeds get the start of them.

Alpine seed sown say Feb. 1 make fruiting plants this summer. Seeds of the large sorts make strong plants which throw out strong runners this summer, but do not bear fruit till June 1900. Alpines come as a rule, true to name but seed from the large sorts never do. I believe a bushel of seed would not produce two seedling strawberries precisely alike. I save seed only from large selected berries.

TREATMENT OF STRAWBERRY PLANTS.

Buyers receiving plants by post or express, often ask for transplanting directions. I have catalogues and articles directing them to dip plants in water as soon as received. One man wrote that his plants died altho' he had been "careful to place them in water all night before setting." No treatment could be worse; for dry roots absorb too much water, and the plants having few leaves to conduct it off, crown and root rot sets in. The best method is to dip the roots at once into a thick clay muck. In fact strawberry roots should never be washed, even by the shipper, unless dipped at once into some mixture which will coat them over. Some receivers write that I have forgotten to punch a hole in the tin, so as to admit air. To save writing I wish to assert here that neither plants nor fruit need air while traveling. (I have gone to endless study and experiment to prove it). Having your ground ready and marked off by a sled marker, make a shallow furrow down each row. Take up a hand full of soil (from a basket of prepared soil if you wish to be over nice) place it in the furrow, making a little mound, and spreading the roots place them saddle like over the mounds. Put soil on top of roots, and press it down firmly, give a generous watering and cover with enough earth to fill up the furrows. Don't allow surface to bake, mulch or keep the top always loose for $\frac{1}{2}$ inch or so. Don't work about strawberries when ground is wet as this induces rust. Don't let young layers root around the parent plants; but cut off runners above the internodes as soon as its tips show roots $\frac{1}{2}$ inch long. Root the tips in a moist shaded bed. If you do layer by the side of parent plants, don't take them off all at once, because the loss of leaves and stems is felt by the parent plant, which is unable to assimilate the sap and moisture, sent up by the roots and a congestive condition ensues and it becomes a prey to every known disease. Freshly set plants require shade till the roots are well established. Save the largest runners from the largest plants and with care and selection, any sort can be kept up to its standard. I doubt though if a sort can be improved by selection, as a step forward must be made by means of seed. As I advocate the single year culture, most of my plants are set out between August and November. One fancy priced plant, bought in the fall and wintered over in a cold frame, grows a little all the winter, gets an early start in the spring and at transplanting time is worth two or more spring dug plants. The above refers to garden and not to field culture. Catalogues mailed to any names you may kindly send.

Digging up suckers does not interfere with fruiting as some root pruning is beneficial. I grow my Raspberries and Dewberries in long, single rows, here and there planting strawberries or vegetables between. Blackberries may do best as perennials, as they send up suckers later and they are slow in getting on their own roots. Yet I am so averse to the hold over system that I am going to discard them in favor of Mays Dewberry whose fruit more nearly resembles Blackberries than Dewberries.

Tipping Raspberries and Dewberries are treated in the same way; the single year method suiting them even more easily than Red Raspberries. Their tips are left intact till the spring as the grounding of both ends of a vine seems to keep up sap circulation, a cure against winter killing and helps to steady them during wind storms. Besides in the spring the leaves are off and the tips more easily found. In March or April I dress the vines, severing them from the roots tips and leave about six vines or creepers to each hill which is only 4 feet from its neighbor. These six creepers can be tied to six wires (old hay bale) running like banjo strings over stakes 15 inches above ground with a cross piece (T) two feet long nailed on top and of course at right angles to the rows. Last summer I had a row of Austin Mayes thus trained. Under the vines a thick mulch of long manure was put and watered heavily after blooming was over. As each creeper was a wreath of white bloom the flat top of the row looked as if covered with snow. There was a fruit stem, bearing each 5 berries two inches apart along each vine, making about 180 berries to the running foot. It was a display of fruit worth seeing. I had another row trained to stakes 4 feet high. The vines were shortened to about 5 feet. Before tying their tips to the top of stakes, wooden hoops from nail kegs, or made of wire, were set half way down and over the stakes and the vines (6) tied to the hoops where they crossed over it. The vines hold the hoops up, and the hoop keeps the vines spaced and prevents crowding.

As soon as the vines are tied, tips are dug and the ground about the vines put in order. The tips are set at once for the next years crop. After tying and properly working no work will be required till picking time. If you are wedded to twice cropping, after picking set fire to the mulch under the wires, or around the hoop hills, clear off wires and rubbish and work land. Fine suckers will spring up from the old stools and make strong stock for next spring. This I call the two year system. In taking up tips lift as much soil as the roots will hold. Set them in clean mellow land 4 feet by 4, and when their sucker buds show, be sure to cut off the bit of tip (old vine) as its laterals make vines that break off easily at their base from winds and make some fruit which weakens the sucker vines.

Three years ago I practiced another and cheaper culture for Dewberries, but it is objectionable with the one year system because it yields poor tips. As soon as your fall or spring set tips show suckers two feet long stop them by cutting out central buds. This causes them to throw out a heavy lateral growth which needs no stakes nor wire. In the spring prune out a little and put a mulch around each clump or bush for the vines will bend with weight of berries and get soiled. Mayes Dewberry is fully ten days earlier than Lucretia, and when we get a late Dewberry fruiting after Mayes is gone, Blackberries will be, as far as I am concerned, relegated to old fields and fence rows. I wish to return to the Reds and say, that if the slips are set in rainy or cloudy weather, they will not even wilt, but grow right along till frost. If setting is delayed till hot weather and after the slips have reached a growth of say two feet, they barely struggle through the summer. Experience with overgrown slips or dry weather setting has probably led people to think that at a more tender age transplanting would be more fatal. So it is almost impossible to make growers believe that a tender sucker can be made to do its best removed from its parent root. This is error, for with intelligent care, not one in a hundred will show any bad effects from the change, and spaced 8 inches apart in good soil will make canes $\frac{1}{2}$ inch in diameter and six feet high. I use strong growers like Loudon and Cuthbert. They bend down in the fall and never winter kill if a little soil is placed on their tops to keep them from blowing about. Shorten the canes in the spring and they need no props. If you prefer a hedge of canes, span the slips 8 inches apart and work after setting out pinch out the central buds. Don't put off heading back till the canes are several feet high, for this causes a bunchy growth of laterals at their tops making them top heavy. In the spring shorten the laterals and get a productive row of extra large berries.

A. T. GOLDSBOROUGH,

Wesley Heights, Washington, D. C.